



An Agenda to Strengthen Our Right to Know

Empowering Citizens with Environmental, Health, and Safety Information

Environmental Information Initiative

List of Endorsers

We, the undersigned, strongly support this report's overall goals of creating government policies and procedures that strengthen the public's right to know about environmental and public health concerns and better engage members of the public.

Overall, the recommendations in this report represent a significant step toward creating a nation whose residents have ready access to the information needed to protect the environment, themselves, their families, coworkers, and communities, and to hold government and industry accountable while being provided with sufficient opportunities to participate constructively in public policy decisions.

U.S.-BASED ENDORSERS

The Access Initiative USA Washington, DC	Beyond Pesticides Washington, DC
Air Alliance Houston Houston, TX	Black Warrior Riverkeeper Birmingham, AL
Alabama Rivers Alliance Birmingham, AL	Breast Cancer Fund San Francisco, CA
Alaska Community Action on Toxics Anchorage, AK	Calvert Investments, Inc. Bethesda, MD
Alliance for the Great Lakes Chicago, IL	Center for Biological Diversity Tucson, AZ
Alliance of Nurses for Healthy Environments Baltimore, MD	Center for Environmental Health Oakland, CA
American Library Association Washington, DC	Center for Food Safety San Francisco, CA
American Rivers Washington, DC	Center for Health, Environment and Justice Falls Church, VA
Arkansas Chapter of the Sierra Club Little Rock, AR	Center for International Environmental Law (CIEL) Washington, DC

Citizens Campaign for the Environment
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Clean New York
Albany, NY

Clean Water Action
Washington, DC

Clean Water Fund
Washington, DC

Climate Science Watch
Washington, DC

Communications Workers of America
Washington, DC

Community Coalition for Environmental
Justice
Seattle, WA

Community Food Security Coalition
Washington, DC

Cook Inletkeeper
Homer, AK

Delaware Riverkeeper Network
Bristol, PA

Don't Waste Arizona
Phoenix, AZ

Earthjustice
Oakland, CA

Earthworks
Washington, DC

Ecology Center
Berkeley, CA

Effective Assets
Berkeley, CA

Environment America
Washington, DC

Environmental Community Action
Atlanta, GA

Environmental Health Fund
Boston, MA

Environmental Health Strategy Center
Bangor, ME

Environmental Health Watch
Cleveland, OH

Environmental Integrity Project
Washington, DC

Environmental Justice Resource Center
Atlanta, GA

Environmental Working Group
Washington, DC

Farmworker Association of Florida
Apopka, FL

Farmworker Justice
Washington, DC

Friends of the Earth
Washington, DC

Fund for Constitutional Government
Washington, DC

Galveston Baykeeper
Seabrook, TX

Government Accountability Project
Washington, DC

Great Neck Breast Cancer Coalition
Great Neck, NY

Green Delaware	Port Penn, DE	Lower Mississippi Riverkeeper	Baton Rouge, LA
Greenpeace	Washington, DC	Michigan Environmental Council	Lansing, MI
Hampshire Research Institute	Washington, DC	Midwest Environmental Advocates	Madison, WI
Health Care Without Harm	Reston, VA	Midwest Environmental Justice Organization	Madison, WI
Healthy Building Network	Washington, DC	Nanotechnology Citizen Engagement Organization	Madison, WI
Indiana Toxics Action	Gary, IN	Natural Investments, LLC	San Luis Obispo, CA
INND (Institute of Neurotoxicology & Neurological Disorders)	Seattle, WA	Natural Resources Defense Council	New York, NY
Institute for Agriculture and Trade Policy	Minneapolis, MN	Newground Social Investment	Seattle, WA
International Union, United Automobile, Aerospace and Agricultural Implement Workers of America, UAW	Detroit, MI	New Jersey Work Environment Council	Trenton, NJ
Joyce Moore Financial Services	Macungie, PA	Northern Plains Resource Council	Billings, MT
Kentucky Environmental Foundation	Berea, KY	Northwest Center for Alternatives to Pesticides (NCAP)	Eugene, OR
League of Conservation Voters	Washington, DC	Northwest Environmental Advocates	Portland, OR
Louisiana Bucket Brigade	New Orleans, LA	NYCOSH	New York, NY
Louisiana Environmental Action Network	Baton Rouge, LA	Oceana	Washington, DC

OMB Watch
Washington, DC

Oregon Toxics Alliance
Eugene, OR

Physicians for Social Responsibility
Washington, DC

Powder River Basin Resource Council
Clark, WY

Program for Environmental and Regional
Equity
Los Angeles, CA

Progressive Asset Management, Inc.
Oakland, CA

Project on Scientific Knowledge and Public
Policy (SKAPP)
Washington, DC

Public Citizen
Washington, DC

Public Employees for Environmental
Responsibility
Washington, DC

Responsible Endowments Coalition
Brooklyn, NY

Sabine Riverkeeper
Merryville, LA

Science & Environmental Health Network
Ames, IA

Sierra Club
Washington, DC

SkyTruth
Shepherdstown, WV

Spring Water Asset Management
Milwaukee, WI

Subra Company
New Iberia, LA

Sunlight Foundation
Washington, DC

United Nations Association of Greater Seattle
Seattle, WA

United Steel, Paper and Forestry, Rubber,
Manufacturing, Energy, Allied Industrial and
Service Workers International Union, USW
Pittsburgh, PA

Upper Green River Alliance
Pinedale, WY

U.S. Public Interest Research Group
Boston, MA

Wasatch Clean Air Coalition
Salt Lake City, UT

Western Colorado Congress
Grand Junction, CO

WildEarth Guardians
Denver, CO

Women's Voices for the Earth
Missoula, MT

Wyoming Outdoor Council
Lander, WY

Zevin Asset Management, LLC
Boston, MA

INTERNATIONAL ENDORSERS

Association for Defense of Nature
La Paz, Bolivia

Association Nationale d'Actions
Environnementales
Antananarivo, Madagascar

Centre for Research & Action on Developing
Locales, Regions & the Environment, The
African Institute for Sustainable
Development
South LGA, Cross River State, Nigeria

Coope SoliDar, R.L.
San José, Costa Rica

Great Lakes United
Ontario, Canada

Peruvian Society for Environmental Law
Lima, Perú

Pro Public
Kathmandu, Nepal

The Public Interest Law Foundation
Colombo, Sri Lanka

Zimbabwe Environmental Law Association
Harare, Zimbabwe

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Introduction

Public engagement and access to environmental and public health information are vital democratic tools. A lack of government openness impairs everything from preventing – and cleaning up – oil spills to protecting children from toxic chemicals. The need to break down information barriers and bring the public back into the policymaking process is greater than ever. A lack of access to quality information – and to policymakers – hurts people and the landscapes we cherish and depend on.

Today, individuals and governments at all levels are facing various environmental and public health dilemmas. Dealing with these issues requires open and accountable government processes; expanded and improved data collection, analysis, and distribution; and greater public engagement. Such improvements are needed in order to tackle the full spectrum of threats, from identifying the health hazards of the tens of thousands of chemicals in commerce, to improved monitoring of pollution, to filling the huge data gaps in our climate policies.

Consumer product labels fail to inform buyers about harmful ingredients. Residents cannot learn about threats to their drinking water from industrial activities such as the development of natural gas. Workers are shut out of systems that should be protecting their health and safety. Public meetings fail to actually engage the public and leave little indication that the public's voice was even heard. The hazards and risks of thousands of chemicals permeating our economy are unknown or kept secret by indifferent corporations. Companies escape accountability as their environmental offenses are sheltered from public scrutiny. Low-income communities suffer under disproportionate burdens of toxic filth while their voices are kept muffled by policies geared toward the powerful and politically connected.

These are just some of the types of adversities and quandaries faced by communities nationwide every day because they do not have the information needed to make the decisions that will protect their families' health or their coworkers' safety. They do not have the information needed, or the opportunity to take action, to hold government and industry accountable and limit the unnecessary destruction of biodiversity and our shared natural resources. These are the problems that cannot be solved without strengthening people's right to know about the threats they face and their right to play a meaningful role in democratic processes. Citizens have long shown that advances in environmental protections are possible with a more open and accountable government, better information, and greater public engagement. The policy recommendations outlined in this report are concrete steps policymakers can take to begin to fix these issues.

The current administration has taken several steps to improve the transparency and accountability of the government's environmental protection efforts. A significant, high-profile

step was President Obama's Open Government Directive (OGD)¹ and the agency openness plans sparked by that directive. In December 2009, the White House's Office of Management and Budget (OMB) issued the OGD to the heads of executive agencies and departments, requiring a series of "steps toward the goal of creating a more open government." The directive established steps for implementing three principles the president said would serve as the cornerstone of his administration: transparency, participation, and collaboration. Agencies were required to produce Open Government Plans detailing how each agency would incorporate the president's principles of openness into their operations. These plans began a widespread conversation across and throughout the federal government on improving access to information, improving information quality, and engaging the public. Environmental right-to-know concerns were catapulted to the forefront of the minds of agency personnel.

Agencies launched several notable projects as part of their open government plans and other efforts.

- The U.S. Environmental Protection Agency (EPA) proposed plans to push out to the public information about environmental impacts on urban waterways; air and water test results; the pollution permitting process; and the rulemaking process.
- EPA also plans to create mobile phone applications that provide human health advisories and product information.
- An EPA working group will identify ways to inform and engage communities that lack electronic access to information.
- The Health and Environmental Research Online (HERO) database was launched to provide access to the more than 300,000 scientific studies used in making key regulatory decisions.
- During the 40th anniversary of the National Environmental Policy Act (NEPA), the White House Council on Environmental Quality issued new draft guidance that called for greater openness and transparency during the environmental review process. The guidance addresses creating transparent monitoring plans for mitigation activities, emphasizes "proactive disclosure" of NEPA documents, and calls for clear documentation of mitigation commitments.

Much more remains to be done, and much must be accomplished to ensure we do not slip backward and lose the gains in transparency already achieved. Now is the time for comprehensive and wide-ranging actions to expand and enhance the information available to the public, information vital to protecting public health and the environment. The Obama administration has made transparency a higher priority than any other administration in recent history. These actions have provided the opportunity and the momentum to drive a proactive

¹ See <http://www.whitehouse.gov/open/documents/open-government-directive>.

agenda to advance the federal policies and processes needed to improve public access to information, giving communities a strong voice in the decision making process.

There are many challenges that impede our progress toward connecting citizens to the information and the policymakers who can make decisions that will keep Americans and their families, coworkers, and environment healthy. Much of the information available is in formats or locations that make it difficult or impossible for people to find and access. Once accessed, the information might be valuable but inscrutable to community members who do not have the necessary training to put highly technical information to use. Often, the information is not of high quality, rendering it less useful than it could be. Data may also be out of date, rife with errors, or lacking definitions that place them in a usable context.

In many more cases, the information needed does not even exist. Moreover, even with access to the information and a firm understanding of its significance and what must be done, there are additional barriers to accessing and influencing the people making the decisions that will impact many millions of people. Whether it's the pollution permitting process, the inspection of a factory's emissions, the chance to know what is in the food offered to schoolchildren, or many other issues, regular people are too often shut out of the system.

There is no question that the United States has one of the most open public information systems in the world, with multiple avenues for acquisition of facts and figures. It is not an exaggeration to say that many millions of documents are accessible through the Internet, and even more reside in public document repositories and specialized libraries and offices.

Yet quantity of information does not always indicate or assure quality of information. Both citizens and government recognize the potential for "information overload," where the enormous quantity of data becomes unmanageable. At the same time, however, there are still significant holes in our knowledge that must be filled.

After more than a year of work, a broad coalition of groups and individuals active in protecting human and environmental health have taken a major step on the path toward greater government transparency and public participation. These public interest advocates have produced a comprehensive list of policy recommendations that would greatly strengthen our right to know and increase the government's level of community engagement. The recommendations outlined in this document are an action plan for the federal government; a plan that is bold yet feasible, ambitious yet realistic. Now the opportunity to advance this proactive agenda is upon us. We call on our leaders and decision makers to take up this call to action and ensure that every person in the country has access to the information needed to make decisions that enable all of us to live, work, play, and learn within a healthy environment.

Key Principles

Throughout the recommendations, key principles on access to information and community engagement are clearly evident.

1. **Presumption of openness** – Foremost is the need for government agencies at all levels to operate under the presumption that government-held information should be freely available to the public in a timely manner. The Freedom of Information Act (FOIA) should become a mechanism of last resort.
2. **Engage communities** – Government decisions are improved by the involvement of the public. Agencies must identify impacted stakeholders and provide them the information and the forums needed to ensure just and healthy decisions are made.
3. **Form is as important as content** – The use of electronic, online technologies must be exploited fully by agencies in order to collect, analyze, and communicate information crucial to protecting environmental and public health. At the same time, agencies must identify and use all means available, including offline methods. Consumer labels, for example, are a proven and effective means of informing the public about potential risks.
4. **Openness pays many dividends** – The benefits of enhanced environmental right to know include a resurgent trust in the government and the systems that are designed to protect the public, as well as more efficient and effective government programs. As a result, people may become more involved in decision making because they feel that their voices will be heard and their efforts can make a difference.

Priority Themes

Three priority themes also emerge from among the numerous recommendations developed by the participants in this process.

1. **Environmental justice must always be considered.**

Minority and low-income communities have historically borne a far greater proportion of environmental harm than other communities, a situation that persists despite a welcome increase in discussions about this problem at high levels of government. The cause of environmental justice appears consistently throughout the following recommendations and should be regarded as a priority by all levels of government. Several recommendations address the need to improve the scope of equity-based data collection, identify sources and methods for obtaining and analyzing environmental justice data, and widely disseminate these data and their sources.

2. **Health risks from chemicals need to be better tracked and communicated to the public.**

This topic covers many areas, from identifying the fate and impacts of pesticides in the environment to assessing safer and more secure technologies that eliminate or reduce the risk of harm. There is a great need for more and better data on potential impacts to vulnerable populations such as pregnant women and children. Among the obstacles to

gathering and disclosing such information is the overuse and abuse of trade secrets protections. Reforming what information is protected by the trade secrets privilege and how access is achieved features prominently in this report.

3. **Public participation has to start with the government.**

While there are many communities, organizations, and individuals across the country who are interested and concerned about environmental issues, the first steps to getting those people to engage must come from the government. Agencies have much to do to foster conditions where meaningful public participation can thrive. Greater outreach to impacted communities is sorely needed. Empowering communities with tools and information can alleviate some of the strain on regulatory agencies caused by limited resources. Actively bringing citizens into the processes of protecting the environment is a promising strategy.

First Steps

The recommendations within this report offer opportunities for immediate action by the federal government, as well as steps that would require longer time frames. Maintaining the achievements realized through implementation of these policy recommendations will require constant monitoring and vigilance by both the agencies and the public. To begin to address the priority themes listed above, certain policy recommendations should be considered immediately.

- **Increase the collection and distribution of environmental justice data:** To improve the conditions of those living in disproportionately impacted communities, more racial, ethnic, and socioeconomic data are needed to inform policies at all levels of government. The recommendations in Section S would begin the process of collecting relevant data and distributing the information to all stakeholders.
- **Fill data gaps on the harm from chemicals, as well as address information shortfalls on safer alternatives:** Agencies engaged in the assessment and regulation of chemicals must take action to gather more information on the potential harm from the thousands of new and existing chemicals in commerce, as well as what safer alternatives and processes exist. The recommendations in Section R of this report include first steps that would improve public access to existing chemical data while expanding our understanding of chemical hazards, disclose the identities of chemicals used in oil and gas development, and build up our shared knowledge of safer and more secure chemicals, materials, and processes.
- **Ensure product labels disclose all ingredients and their associated risks:** Far too often, people purchase products, from cosmetics to cleaning supplies, with no information on the chemicals contained in the products or used to manufacture them. As recommended in Section L, relevant agencies must institute requirements that effectively disclose

ingredient and hazard information on product labels while also using websites to communicate the chemical hazards that are currently hidden from consumers.

- **Forge the Toxics Release Inventory into a more powerful disclosure tool:** Many of the recommendations found in Section J would upgrade the long-running Toxics Release Inventory (TRI) program into a tool for broader disclosure. Many of these steps could be set in motion rapidly. For example, the EPA could use TRI data in new initiatives to drive pollution prevention activities. Such a program is within existing agency authority, so there are no legal barriers to be overcome before action can take place.
- **Develop a unified facility reporting system:** In conjunction with the above efforts, regulatory agencies should work together to develop a single system for facility and corporate reporting that would provide profiles of reporting entities in a single online location. Such a tool, outlined in Recommendation H3, would greatly benefit the public as citizens work to hold companies accountable for harmful practices while identifying positive examples for others to emulate.
- **Provide for worker and public participation:** For the government to begin to meet its obligation to engage communities, several immediate steps must be taken. Section AA outlines actions that would guide government employees on best practices for meaningful public participation. New standards for worker health and safety, described in Section BB, should provide for employee involvement, thereby drawing on a wealth of information and perspectives to drive improvements that benefit everyone's health and protect the environment.

Adoption and implementation of the recommendations cited above would represent significant progress by the federal government toward greater transparency, participation, and collaboration. The recommendations above and those found throughout this report would build on recent efforts to improve government openness, using the momentum generated to propel our government into a world where the public has the information needed to play a meaningful and vital role in protecting our health and our planet.

Organization of Report

The recommendations in this document are divided into five chapters that correspond to the needs of the public. Within each chapter, specific recommendations are organized under subtopics. Many of the recommendations are detailed proposals calling for specific changes to how a certain agency performs a particular function. Others are more general recommendations calling on the federal government to implement broad cultural changes to reverse years of growing secrecy and increasing isolation from the public. Most recommendations fall in between these levels of detail. All the recommendations, if adopted and implemented properly, would serve the public and our government well, aiding efficiency, informing our decisions, and giving

all community members a voice. Several key themes appear throughout the document and arise as similar or repeated recommendations in different sections. This seeming redundancy serves to emphasize these important themes while ensuring that chapters can be reviewed independently.

Chapter I. Improving Access to Information: comprises policy recommendations that would improve public access to existing government-held data. The recommendations would drive progress toward removing barriers to access.

Chapter II. Improving Existing Information Sources: identifies priority areas where enhancements to existing information and data sources would greatly improve the usefulness of the information. The recommended improvements would increase the efficiency of government operations, save the taxpayers money, and make reaching our environmental, health, and safety goals much easier.

Chapter III. What New Information Is Needed: explores the unfortunately vast range of gaps in our information about a long list of environmental threats. These threats cannot be adequately dealt with without timely, comprehensive data on the health of ecosystems and species, the air and water quality of our homes and workplaces, and what chemicals people are exposed to.

Chapter IV. Environmental Justice: seeks to improve the access to information and the opportunities for participating in decision making for environmental justice communities. The issuance of Executive Order 12898 and its focus on environmental justice, along with provisions in the Civil Rights Act of 1964, offer some of the many opportunities described here to improve the social imbalances impacting many of our neighborhoods.

Chapter V. Empowering Communities: delineates the steps needed to equip community members with the tools and opportunities they need to make a substantial and positive difference in neighborhoods across the country. Government must communicate with citizens in language they can understand and that avoids overly technical, scientific, or bureaucratic terminology. At the same time, communities need to be empowered to handle the technical facets of the threats they face.

Environmental Information Initiative

The *Environmental Information Initiative* was launched in early 2010 to bring together a broad range of public interest advocates who would identify the obstacles confronting our right to know and craft policy changes that would improve public access to information and participation in policy decisions. The *Initiative* was a year-long project coordinated by OMB Watch to improve government transparency by pushing for greater access to environmental and public health information and greater community engagement in the federal environmental policymaking process.

During the project, OMB Watch engaged individuals and organizations across the country working to protect various aspects of environmental and human health. The process has engaged workers and labor groups, nurses, academics, journalists, scientists, community organizers, policy experts, lawyers, volunteers, parents and grandparents, several philanthropists, and many others. Participants were asked what types of information they need to accomplish their organizational or community goals, what obstacles they have encountered accessing, understanding, and putting to use that information, and what changes to policy they would like to see made to eliminate those obstacles. Participants were also asked what steps agencies should take to better engage communities and incorporate the public's concerns and ideas into policymaking.

Outreach to these advocates was conducted using multiple methods. In-person meetings were used to kick off the entire process and to gather information from public interest advocates on the West Coast. Online listening sessions were used to hear the concerns and ideas of activists in the Great Lakes region and the Mountain West states. Individual telephone conversations accumulated yet more ideas and perspectives from organizations representing numerous other states, as well as national organizations located in the District of Columbia. An online survey provided one more opportunity to gather input on the status and shortcomings of our environmental right to know.

The vast amount of ideas, complaints, concerns, and stories related to information access and public participation was compiled and crafted into a series of initial policy recommendations. A Recommendations Panel was established to assist with refining the initial proposals into an ordered, coherent draft document. The Recommendations Panel comprised representatives from public interest organizations throughout the U.S. who have years of experience and expertise seeking and using environmental and public health information to demand stronger policies and protections. This Panel reviewed the responses collected by OMB Watch, discussing how best to synthesize and focus the recommendations and to determine logical organization structures.

During the next phase of the project, close to 100 activists and experts convened for a three-day intensive working conference in Washington, DC. The conference attendees reviewed the draft materials, introduced many new ideas, corrected errors and redirected misguided recommendations, and clarified major themes. The weeks following the conference focused on further revision and expansion of the draft policy recommendations based on the input of the conference participants.

These are the ideas of hard-working advocates from across the United States, fighting to protect the health, safety, and well being of everyone – our friends, neighbors, coworkers, and political adversaries – along with the health of the ecosystems that support us all, from our physical health to the health of our economy and our democracy. The recommendations address real needs that participants have experienced and propose policy changes that would go a great distance toward meeting those needs.

I. Improving Access to Information

A healthy democracy demands that citizens and communities have unfettered access to public information held by our government. Combined with effective regulatory authorities, information is an essential public policy tool for protecting citizens and the ecosystems on which we depend. The government has a duty to identify and provide, in understandable and affordable ways, high-quality information needed by the public to make decisions affecting our lives, families, communities, and nation. The following recommendations address several priority areas where improvements to information access would greatly assist efforts to protect people and ecosystems.

A. Access to Permit and Mineral Lease Records

Access to permit and lease records empowers citizens to track performance and hold agencies and facilities accountable. A wide variety of industrial activities must receive government-issued permits, leases, or other types of approvals that may contain certain restrictions on proposed activities. These activities include metal mining, grazing livestock on public lands, harvesting ocean fish, operating chemical plants, drilling for oil, logging, building roads or strip malls, coal mining, filling wetlands, and numerous other actions that impact our shared natural resources. The combination and scale of these activities have exacted an enormous toll on environmental and public health. The checks and balances on these activities provided by the nation's environmental laws depend on transparency. The public must have full access to permits and permit applications under all environmental and public health statutes, from the Clean Water Act, Safe Drinking Water Act, and Clean Air Act to the Endangered Species Act and the Mineral Leasing Act, as required by law and executive order. These permits and leases, applications, and all related records must be easy to find, searchable, and downloadable from agency websites, obviating the need to submit Freedom of Information Act (FOIA) requests. The Jan. 18, 2011, presidential regulatory compliance memo, which calls for disclosure of "regulatory compliance and enforcement activities," provides an excellent vehicle for access to permit and lease records.²

A1. Release Permit Documents in a Timely Manner

Permitting agencies, such as the Environmental Protection Agency, Interior Department, Department of Agriculture, and others, must make permit information, including applications, scientific analyses, and all supporting documents, along with copies of related communications, available to the public. These disclosures must occur at the time the permit application is submitted to the agency or at the time of the communication between applicant and agency, including prior to submittal of the application.

² See <http://www.whitehouse.gov/the-press-office/2011/01/18/presidential-memoranda-regulatory-compliance>.

When an agency delegates programs to states and counties, it must require standardized language in that delegation agreement that requires full disclosure of all records in a timely manner, or else the process for the proposed permit (air, water, hazardous waste, etc.) is suspended until full compliance is restored. As permits are renewed or amended, agencies will maintain an archive of all previous versions of permits to allow researchers to track changes over time.

A2. Disclose All Relevant Permit Information

Permitting agencies must develop clear policies requiring the disclosure of all relevant records related to permits and permit applications. Documents must be available and easily searchable on agency websites. This includes:

- Correspondence between state and federal regulators and scientists, including all data, must be disclosed with the permit application and with the issuance of final permits.
- Data on facility accidents and enforcement actions, violations, fees, and other administrative actions against a facility must be linked to the permit database, allowing the public to readily compare applicants' permits with compliance records and accident histories. The identities of applicants, applicants' agents, and permit and lease holders must be disclosed (e.g., public lands management agencies should disclose the names and addresses of livestock grazing permit holders).
- Mitigation plans (e.g., wetlands mitigation under the Clean Water Act, Section 404³) must be disclosed along with audits, reports, and other records monitoring mitigation progress.
- Information on the types of monitoring and pollution control equipment and methods (e.g., scrubbers, air monitors) outlined in the permit and qualitative and quantitative descriptions of their effectiveness at reducing pollution or mitigating the permitted activity should be included in permit records and made publicly available.
- Changes to permits during the renewal process and other proposed changes, including the scientific rationale and supporting data behind any changes, must be disclosed.

A3. Identify Stakeholders and Vulnerable Populations

Agencies must make concerted efforts to identify and engage impacted community stakeholders during all stages of the permitting process and throughout the duration of the permit and any subsequent activities (e.g., clean ups, site remediations). Special efforts must be made to identify and reach out to potentially impacted members of environmental justice communities. Agencies should require a list of susceptible populations affected by the permitted activity to be included in the permits. Permitting agencies should make use of

³ See http://water.epa.gov/lawsregs/guidance/wetlands/wetlandsmitigation_index.cfm.

existing value-added data sets, such as EPA's National-Scale Air Toxics Assessment (NATA), Risk Screening Environmental Indicators (RSEI), and Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT), as tools to identify communities that may be impacted by the permitted activity.

A4. Permits Must Assess Cumulative Impacts and Impacts to Environmental Justice Communities

During the permitting phase of any project, a determination must be made as to what constitutes the limit of cumulative impacts allowed in a specific area. Cumulative impacts are the incremental accumulation of direct, indirect, or secondary effects on the environment or ecosystem, including social and economic effects, by a project or projects within a defined area during the present life of the project, past impacts to the area, and possible impacts in the foreseeable future. Potential cumulative impacts must be listed in the permit, employing easy-to-understand language. Permitting agencies must conduct an environmental justice analysis to identify any disproportionate adverse impacts that may result from the proposed activity. Mitigation plans should include actions to avoid, minimize, or mitigate the adverse environmental justice impacts.

A5. Provide Accurate Summaries of Permits and Applications

Permitting agencies must provide explanatory information, summaries, and visual aids to help the public understand the technical aspects of permits and to place the information into useful contexts. Permits may be hundreds of pages in length and include detailed, highly technical information that is difficult for even trained experts to fully understand, leaving the general public and community organizations unable to evaluate thoroughly permits and permit applications. The requirement for a plain-language summary would be an important step forward in achieving greater public involvement. Geographic information, including locations of surface waters, drinking water wells, stock wells, stock tanks, and irrigation ditches, and detailed maps must be included in the summaries to provide additional context and to allow for linking and overlaying geographic and other data from multiple sources. Additionally, summaries should include compliance and enforcement histories for relevant companies.

A6. Improve Transparency of Mineral Leases

Land and resource management agencies such as the USDA Forest Service, Bureau of Land Management (BLM), and others agencies must develop agency-wide policies ensuring consistent access to leases and lease sale information for the development of minerals, such as coal, uranium, oil, natural gas, trona, as well as timber. Inconsistent and contradictory public access policies across agencies have resulted in greatly reduced transparency of leasing activities. Agencies must conduct regular and frequent audits of their information collection and dissemination practices, including all notices of violations, and identify and disclose areas in need of improvement and what actions are being taken. Documents and records should be available and easily searchable on agency websites.

The Bureau of Land Management (BLM) must promptly implement recommendations made by the Government Accountability Office (GAO)⁴ regarding access to oil and gas lease sale information. Those are:

- Determine and implement an improved approach for tracking protest information agency-wide that is complete, consistent, and available to the public.
- Improve the transparency of leasing information available to the public, including explanations of agency decisions on particular parcels and the role, if any, of protests.

B. Public Affairs – Media Relations

Excessive message control over agency staff and restricted access to government experts have hindered the public’s right to know. The media often acts as an intermediary or messenger between the government and the public, who often do not have the time to sift through government documents and websites, even for issues they care about. Journalists have complained of being paired with “minders” from public affairs offices during media interviews, constricting the free exchange of information. The vulnerability of the media was shockingly illustrated during the months-long BP oil spill in the Gulf of Mexico. Journalists encountered numerous obstacles to covering the catastrophe, including being denied physical access to impacted areas, police detention, threats of arrest and fines, and intimidation. Access to government experts must be improved in order to inform and engage citizens about environmental issues. These recommendations are consistent with the Dec. 17, 2010, memo from Office of Science and Technology Policy Director John Holdren on scientific integrity and the presidential March 9, 2009, memo on the same subject.

B1. Create New Public Affairs Office Policies

Agencies must develop or enhance existing policies governing media communications including advisories, press releases, statements, interviews, news conferences, and other related media tools.⁵ The new policies should:

- Define the role of the Public Affairs Office, emphasizing the responsibility to coordinate and facilitate contact between journalists and requested agency staff, but not acting as “gatekeepers” of information.

⁴ Onshore Oil and Gas: BLM’s Management of Public Protests to Its Lease Sales Needs Improvement, GAO-10-670, <http://www.gao.gov/products/GAO-10-670>.

⁵ See Union of Concerned Scientists’ model media policy, http://www.ucsusa.org/scientific_integrity/solutions/big_picture_solutions/model-media-policy-ucs-and.html.

- Describe the Public Affairs Office’s responsibility to respond to media inquiries in a timely, complete manner.
- Outline a plan for disseminating the media policy to agency scientists and researchers and conduct trainings in effective media communication that emphasize scientific openness.
- Include severe penalties against public affairs officers who deliberately obfuscate, misstate, distort, or lie to members of the media or the public.

B2. Develop Communications Policies for Agency Experts

Agencies must develop, with public involvement, a comprehensive policy governing how agency scientists and experts can interact with members of the public, including, but not limited to, media professionals. Many agency scientists report that they are not able to speak freely about their research. Increasing online access to data is only a first step. The public frequently requires expository information provided by experts. As one advocate states, “Placing data sets on the website only gets us part of the way to government transparency. The next big step will involve changing the culture of the department and allowing its experts to provide for context and interpretation of those data sets.”⁶

A communications policy should be implemented consistently throughout all agency offices, regions, and programs, and should incorporate these principles:

- Scientists and researchers may freely express their personal views, under certain conditions analogous to the freedoms and limitations established for teachers by academia.⁷ Government scientists, researchers, and other experts are entitled to freely discuss the areas of their expertise, but they should be certain to express that they are not speaking for the agency or the U.S. government unless so authorized. Government scientists and researchers should be free to publish dissenting views in final reports, similar to the publication of dissenting views in U.S. Supreme Court decisions.
- A scientist or researcher has the right to review, amend, and comment publicly on the final version of any document or publication that significantly relies on his or her research, identifies him or her as an author or contributor, or purports to represent his or her scientific opinion.
- Agency employees should have clearly defined responsibilities in working with impacted people, the public, and the media.

⁶ Timothy Donaghy, “Allow DOI experts to speak freely to the public,” <https://openinterior.ideascale.com/a/dtd/Allow-DOI-experts-to-speak-freely-to-the-public/31791-7034>.

⁷ “1940 Statement of Principles on Academic Freedom and Tenure,” American Association of University Professors and the Association of American Colleges, <http://www.aaup.org/AAUP/pubsres/policydocs/contents/1940statement.htm>.

B3. Create a Directory of Scientific, Technical, and Bureaucratic Experts

To foster easy access to technical and policy expertise both in government and elsewhere, agencies should create a directory to serve as a searchable database of experts who can be contacted by the public. Agencies should include on their websites a comprehensive, user-friendly, searchable directory allowing the public to easily locate and contact specific agency employees based on their job duties and/or areas of subject-matter expertise. The directory would include contact information and the types of expertise held by agency staff scientists. This directory could possibly include nongovernmental members of advisory committees and volunteers from the private sector, as well. The directory should be as comprehensive as possible and include as many staff experts as possible. Agency experts who wish to be included should have the ability to add their names and relevant data.

The directory would provide citizens in need of technical, scientific, and regulatory advice a way to connect with experts, including chemists, medical doctors, geologists, toxicologists, ecologists, and biologists, as well as experts on the legal and regulatory requirements of statutes such as Clean Air Act, Endangered Species Act, Occupational Safety and Health Act, and the proposed rulemakings under such statutes. The data must be audited regularly to ensure up-to-date, accurate listings.

C. Confidential Business Information (CBI)

Much of the information held by government agencies comes directly from private companies. Companies are allowed to claim that information submitted to the government should be considered confidential business information, meaning the public disclosure of the information would likely harm the business' competitive position. Under certain circumstances, agencies would then protect the alleged CBI and not disclose it to the public. Although there certainly are types of information that can receive the protections CBI status confers without endangering the public, the use of the CBI label has been thoroughly abused and overused for many years. Companies have been labeling all manner of information as CBI, even when disclosure of such information is necessary to protect human and environmental health. The government has refused to challenge most CBI claims to confirm their legitimacy. The result has been to wrongfully deny crucial environmental health and safety information to impacted people and the general public.

Although the use of the CBI label and its protections has been most egregiously used to conceal information about chemicals, CBI status is available to many other types of information under a long list of environmental statutes. The EPA has begun recently to address the acknowledged overuse and abuse of CBI protections under the Toxic Substances Control Act (TSCA) by taking steps to limit what information can be claimed as CBI and to ensure that only legitimate claims are granted CBI protections. Such actions are welcome, but more must be done, and the

recommendations below would continue the momentum at EPA while addressing CBI problems at other agencies, as well.

By reining in excessive and harmful CBI protections, we can expect a better-informed public to drive industry changes, eliminating or greatly reducing the manufacture and use of dangerous substances in favor of safer alternatives. Increased information will feed a marketplace that seeks to meet consumer demand for cleaner products. We can also expect greater accountability and compliance with environmental and public health rules by regulated companies as the public is made aware of company behaviors and actions that previously had been concealed.

C1. Strengthen and Enforce Procedures for Evaluating and Disclosing Alleged CBI

Regulatory agencies, including various offices within the Department of the Interior, EPA, and the U.S. Department of Agriculture, must create and enforce clear policies describing what types of information companies may request CBI protections for, what the procedures for evaluating CBI claims are, and how the agency will monitor and enforce these policies. CBI policies must include the following features:

- Electronic Reporting. Agencies must require company-submitted data, including health, safety, production, and use information of chemicals, to be submitted electronically, in formats that allow easy searching and linkages to related databases. Electronic reporting reduces reporting burden, improves the accuracy and timeliness of data, and eases public access to the information.
- Upfront Substantiations. CBI claims must include upfront written substantiations, submitted along with the claims. CBI claims must be certified by a senior company official. Submitters must specify exactly what information for which the CBI status is requested and submit both a copy of the materials with alleged CBI redacted, and also a full, non-redacted version. If the CBI claim is approved, only the specified information should be protected by the agency, and all other information should be immediately made publicly available online. If information is already publically available, such as on the public portion of the TSCA Inventory, company websites, or through other state, federal, or foreign programs, then the information cannot be claimed as CBI. The absence of information cannot be claimed as a trade secret. The fact that a company does not possess or cannot access certain information should not in itself be considered or claimed to be CBI.
- Sunsets. CBI protections must not be allowed to exist indefinitely. Upon submission of alleged CBI to an agency, the submitter must propose and justify a time period after which the information would no longer be CBI. The reviewing agency must review the proposed time frame and determine the official time period, which may be shorter than that proposed by the submitter but not longer. Approved CBI should receive a maximum of five years' protection. After the approved time period (the sunset), the information automatically loses its CBI status and is disclosed. Companies may apply to have the protections extended. Such

requests for extended protections must meet the same procedural requirements that applied to the original submission of CBI.

- Review of Every CBI Claim. Agencies must review all CBI claims and disclose rejected claims. Reasonable opportunities for company appeals of agency decisions may be provided. Alleged CBI submitted with such appeals and their related documents must also be evaluated by the agency along the same lines as any other alleged CBI.
- Fees for CBI Processing. Agencies must require submitters of alleged CBI to pay a fee to cover the costs of processing CBI claims.
- Establish Penalties for Illegitimate CBI Claims. Agencies must establish and thoroughly apply fines or other administrative penalties against submitters of illegitimate CBI claims. EPA's current standards for evaluating CBI allegations are publicly available to submitters and spelled out in the Code of Federal Regulations.⁸ It is the responsibility of submitters to be familiar with these requirements and evaluate all CBI claims thoroughly for compliance before the information is submitted to the agency. Failures to do so should result in administrative penalties, fines, the denial of the CBI claim, and disclosure of the information.

C2. Define the Limits of CBI and Who May Always Receive CBI

In addition to establishing procedures for evaluating CBI claims by industry, agencies must take steps to identify and list the types of information that are never eligible for CBI protections. Agencies may also create a limited list of types of information that generally may be approved for CBI protections. Alleged CBI that is not among the types of information on such a list will be publicly disclosed unless an acceptable justification for its protection as CBI is submitted and approved. The clarity provided by such definitions will reduce the burden on agency staff who must review all CBI claims. Additionally, agencies must clarify entities and individuals who always have access to CBI. The above steps may be accomplished through the following processes:

- Class Determinations for CBI Exclusions. Agency officials, such as EPA's General Counsel, should clarify agency policies by creating class determinations that restrict whole types of information, such as specific chemical identity, health and safety data, and air emissions data, from classification as CBI.
- No CBI Protections for Any Data Needed to Evaluate the Safety of a Product or Process. This feature includes disclosing the specific chemical identity and chemical health and safety information, especially as it relates to children and the potential exposure of children, which should never be considered or claimed to be CBI. Further, if the information is needed to

⁸ CFR Title 40, Part 2, Subpart B – Confidentiality of Business Information, <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=682387535cc230b1f054108ab76c9e5e&rgn=div5&view=text&node=40:1.0.1.1.2&idno=40>.

evaluate a substance's health and safety risks, then production, processing, and use data may not receive CBI protections.

- Disclosure of Known and Reasonably Obtainable Information. Companies must not be allowed to claim as CBI information that they have not taken reasonable steps to protect; that is readily discoverable through reverse engineering and other techniques; or that can be readily observed through existing public sources.⁹
- Worker Access to CBI. Workers risking exposure to chemicals are entitled to and must have ready access to all chemical information, including CBI.
- Disclosure to Health and Emergency Workers. Health professionals, such as emergency medical technicians, nurses, and doctors, must also have complete access to the identity of chemicals in products – including CBI – to which their patients may have been exposed in order to accurately assess and treat signs and symptoms, care for injuries, and protect themselves.
- Government Access to CBI. Foreign, state, tribal, and local governments must have ready access to CBI, provided adequate steps are agreed to for protection of the information. Such agreed-to protections should not be stricter than federal CBI protections. Procedures should be developed for the easy yet protected sharing of CBI within and among federal agencies.
- Opportunity to Protect Company Identification. In order to protect legitimate CBI during a company's development of new processes and products, if the identity of a company's new product (e.g., a new chemical substance) has been deemed by the agency to be eligible for confidential treatment, then the identity of the product may be disclosed in a manner that does not link the new product to the manufacturer or processor of the new product. As mentioned above, the identity of a product must be disclosed in association with any health and safety study.

C3. Disclose “Confidential” Fisheries Data

The Commerce Department must revise its regulations to require the regular aggregation and disclosure of fisheries observer data. The Magnuson-Stevens Fishery Conservation and Management Act,¹⁰ the primary statute governing the nation's fisheries, provides for observers aboard fishing vessels to collect and analyze data needed for the conservation and management of fisheries. The information these government-funded, at-sea observers collect is crucial to monitoring whether federally authorized fisheries practices are complying with conservation requirements to protect species listed under the Endangered Species Act and to avoid

⁹ See, for example, EPA's rules regarding criteria for determining legitimate CBI: 40 CFR, Part 2, Subpart B, Section 2.208, <http://www.epa.gov/epafoia1/2208.htm>.

¹⁰ See <http://www.nmfs.noaa.gov/sfa/magact/>.

overfishing. Although the law classifies this information as “confidential,” the Secretary of Commerce retains broad authority to issue regulations requiring the release of such information so long as it is in an aggregate or summary form that does not disclose the identity or business of any person who submits the information.¹¹ This information is critical to devising new conservation measures, because observer information can be used to identify times and areas where there are conservation issues (such as catch of endangered species), can be used to identify the extent of fisheries impacts, and can be used to devise solutions to conservation problems. It is essential that such information be available to the public in fisheries rulemakings and in the associated NEPA analyses.

The administration should update its regulations to require that such information is routinely aggregated and/or summarized at a sufficient level of detail to make it useful for the public and organizations who wish to participate in fisheries management, and made available in a timely way on the web, as well as in relevant rulemaking and NEPA documents. Furthermore, the administration should adopt a policy of aggregating or summarizing and disclosing such information in response to FOIA requests and in the context of administrative records, even if the government has not previously aggregated or summarized the information.

D. National Environmental Policy Act (NEPA)

The 40-year-old National Environmental Policy Act (NEPA) creates a process whereby federal agencies must review the environmental impacts of their actions and evaluate alternatives while working to include public participation in the process. In 1997, the Clinton White House released a report examining the effectiveness of NEPA. Among its conclusions, the report states that:

“The success of a NEPA process heavily depends on whether an agency has systematically reached out to those who will be most affected by a proposal, gathered information and ideas from them, and responded to the input by modifying or adding alternatives, throughout the entire course of a planning process.”¹²

Over recent years, NEPA has come under increasing attack by the previous White House administration, Congress, and even the courts. On top of these assaults, federal agencies often

¹¹ Magnuson-Stevens Act, Title IV, Section 402(b): “[T]he Secretary may release or make public any such information in any aggregate or summary form which does not directly or indirectly disclose the identity or business of any person who submits such information,” <http://www.nmfs.noaa.gov/sfa/magact/mag4.html#s403>.

¹² Council on Environmental Quality, *The National Environmental Policy Act: A Study of Its Effectiveness after Twenty-five Years*, <http://ceq.hss.doe.gov/nepa/nepa25fn.pdf>.

perform their obligations under the statute poorly.¹³ Although NEPA authorizes the White Houses' Council on Environmental Quality (CEQ) to coordinate federal implementation of the statute, each agency has its own policies for observing the requirements to undertake certain types of environmental review of its proposed actions. CEQ issued new draft guidance on NEPA implementation in February 2010¹⁴ and final guidance regarding Categorical Exclusions (CEs) in November 2010.¹⁵ Although the draft guidance makes valuable strides toward strengthening transparency and community involvement in the environmental review process, additional steps are needed.

D1. Expand Opportunities for Public Input throughout the Environmental Review Process

Federal agencies must create additional opportunities for public involvement and expand the means for communicating information about environmental reviews. Currently, most federal agencies only begin the public process after an Environmental Assessment (EA) is issued that does not conclude a Finding of No Significant Impact (FONSI). Public notification and participation should be conducted much sooner. Agencies should:

- Use new and traditional communications technologies. Agencies must develop guidance to clarify the appropriate role of communication and information dissemination technologies to enhance public involvement, using current technologies such as document sharing, listservs, teleconferences and webinars, and dedicated websites. Agencies should expand the definition of authorized media outlets that can publish public notices to include local newspapers and websites. Agencies should develop centralized websites for the public to easily search by office, geographic area, subject matter, and project name NEPA-related documents.¹⁶ One such online resource that could serve as a model is the National Park Service's Planning, Environment, and Public Comment (PEPC) website.¹⁷ The guidance should also stress the continuing importance of traditional, non-electronic communications, especially with rural, low-income, and tribal stakeholders.

¹³ Public comments analyzed in a 2002 report by the NEPA Task Force identified problems with the quality of reviews, failures to consider alternatives, poor research, and frequent disregarding of public concerns. See <http://ceq.hss.doe.gov/ntf/report/pdf/toc.html>.

¹⁴ Council on Environmental Quality, "New Proposed NEPA Guidance and Steps to Modernize and Reinvigorate NEPA," <http://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa>.

¹⁵ Council on Environmental Quality, "Establishing, Applying and Revising Categorical Exclusions under the NEPA," <http://www.whitehouse.gov/sites/default/files/microsites/ceq/NEPA%20Categorical%20Exclusion%20Guidance%2023-11-2010.pdf>.

¹⁶ Additional ideas specific to the Interior Department's NEPA process are available at: "Public Involvement with NEPA Projects," <http://openinterior.ideascale.com/a/dtd/32553-7034>, and "Results from NEPA Public Involvement Study," <http://web.mit.edu/dusp/epp/music/pdf/NEPA06.pdf>.

¹⁷ See <http://parkplanning.nps.gov/>.

- Conduct NEPA reviews before decisions are made. Agencies should conduct and complete their NEPA evaluations prior to taking significant steps in the decision making process so that the NEPA analysis is used to inform agency decisions and to allow public input into those decisions, rather than being used to justify a decision already made. If the agency uses an advisory panel in its decision making, such as a regional fishery management council, the agency should allow the panel to contribute to scoping but should not allow the panel to control the alternatives it chooses to evaluate. Moreover, the agency should not allow the panel to take significant steps toward arriving at a recommendation until the panel has had an opportunity to review a final NEPA analysis. Longer public comment periods are needed at all stages of environmental review. Agencies must also evaluate and regularly report on the manner and extent that public comments are incorporated into final NEPA decisions.
- Identify stakeholders. Agencies should develop systematic methods for identifying stakeholders and establishing communications, focusing on those groups that traditionally have low participation rates, such as low-income, minority, disabled, potentially impacted, and other communities.
- Expand NEPA staff training. More training in mediation, meeting facilitation, and innovative forms of public involvement is necessary to improve agency communications with the public. Training curricula should include the new draft guidance from CEQ intended to increase public involvement [See Section AA. Community Engagement]. Contractors involved in NEPA reviews must also receive this training.

D2. Expand the Types of NEPA-related Documents Available to the Public

The entire administrative record for an agency review under the NEPA process, including EAs, Environmental Impact Statements (EISs), CEs, and, in the case of BLM, “Determinations of NEPA Adequacy,” must be available on the Internet, in a unified, easily searchable database. Agencies should disclose agreements and planning documents generated by non-federal entities and public-private partnerships concerning the planning of relevant agency actions. Details of design-build contracts should be available to public access.

D3. Provide Accurate Summaries of Environmental Review Documents

Agencies should provide explanatory information, summaries, and visual aids to help the public understand the technical aspects of EAs, EISs, CEs, and other key documents related to the environmental review process. The summaries should include geographic information and detailed maps to provide additional context and to allow for linking and overlaying geographic and other data from multiple sources.

NEPA documents up for renewal or review should contain highlighted differences from the current permit including changes in monitoring requirements, sample locations and analytical methodology, and rationales for making the change. Fact sheets, including background

information on the relevant companies, compliance histories, and baseline studies conducted prior to development should be included.

D4. Analyze the Cumulative Impacts of Proposed Actions

The preparation of environmental reviews must include assessments of cumulative adverse impacts of the proposed action and the alternatives. The assessment of cumulative impacts is required in NEPA documents by the CEQ regulations. However, the implementation of this requirement is often poor, and communities and policymakers are not provided a full picture of the environmental impacts of a proposed action.

According to CEQ regulations, cumulative impact is:

“the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”¹⁸

It is crucial that the CEQ’s definition of cumulative impacts be expanded to include adverse social and economic effects by a project or projects within a defined area during the present life of the project, past impacts to the area, and possible impacts in the foreseeable future. Adverse consequences may be avoided by evaluating and modifying alternatives in light of prospective cumulative impacts. Moreover, considering cumulative impacts is “essential to developing appropriate mitigation and monitoring its effectiveness.”¹⁹

D5. Prioritize Environmental Justice Impacts in Environmental Review Process

The CEQ should amend NEPA regulations to include environmental justice effects.²⁰ At the earliest stages of the environmental review process, lead agencies must conduct an environmental justice analysis to identify any disproportionate adverse impacts that may result from the proposed activity and alternatives.

The CEQ should also amend the regulations, specifically 40 CFR 1505.2 and 1505.3, or issue new guidance requiring agencies to establish an enforceable mitigation monitoring plan for any

¹⁸ 40 CFR, Sec. 1508.7, <http://ceq.hss.doe.gov/nepa/regs/ceq/1508.htm#1508.7>.

¹⁹ Council on Environmental Quality, “Considering Cumulative Effects under the National Environmental Policy Act,” January 1997, <http://ceq.hss.doe.gov/nepa/ccenepa/exec.pdf>.

²⁰ For example, in 40 CFR 1508.8. See <http://ceq.hss.doe.gov/nepa/regs/ceq/1508.htm>.

mitigation measure in a NEPA compliance document that reduces environmental justice impacts.²¹

D6. Congress Should Authorize Citizen Suits under NEPA

Congress should consider strengthening NEPA to include a citizen suit provision. Currently, challenges to agency decisions must be brought under the Administrative Procedure Act and must demonstrate not only that the agency failed to comply with NEPA, but also that the decision was arbitrary and capricious. There currently is no provision for litigants to recoup attorneys' fees, except through the Equal Access to Justice Act, which imposes burdensome requirements on litigants.

E. Freedom of Information Act (FOIA)

The Freedom of Information Act (FOIA) is a key mechanism used by environmental and public health advocates around the country to get information ranging from government-collected data to policy development to specific facilities. The FOIA process is an attractive option for those seeking information because the overall framework appears simple and straightforward – request records, and after a review, the agency will release the appropriate information. Environmental, health, and safety issues often revolve around and depend on information – scientific studies or monitoring data or communications with industry – so the ability to simply request copies of these documents is especially attractive. However, despite the importance and promise of FOIA, its implementation remains inconsistent and rife with obstacles. Citizens continue to find the process burdensome, expensive, confusing, slow, and often fruitless. Although Attorney General Eric Holder issued important new FOIA guidance²² pushing agencies to disclose more, many believe that implementation at several environment- and health-focused agencies, as well as many regional offices, seems to be lagging. A stronger and more concerted effort from the Department of Justice (DOJ) and leadership from environmental and health agencies is required to push the FOIA reforms down into all offices and across the country.

Many recommendations for improving FOIA policy have already been developed by open government advocates. Several policy recommendations outlined in a November 2008 report, *Moving toward a 21st Century Right-to-Know Agenda*,²³ have yet to be fully implemented and remain important and needed changes. Environmental and public health advocates have

²¹ For additional details, see policy recommendations proposed by the Lawyers' Committee for Civil Rights Under Law in "Now Is the Time: Environmental Injustice in the U.S. and Recommendations for Eliminating Disparities," <http://www.lawyerscommittee.org/admin/site/documents/files/Final-Environmental-Justice-Report-6-9-10.pdf>.

²² See <http://www.justice.gov/ag/foia-memo-march2009.pdf>.

²³ See <http://www.ombwatch.org/files/21strtkreccs.pdf>.

identified several reforms that would especially benefit their efforts to access information crucial to protecting the health of people, workplaces, and ecosystems.

E1. Provide More Training for Agency FOIA Staff on Presumption of Disclosure, Use of Exemptions

Agency FOIA officers should receive required comprehensive training that thoroughly explains when records may be exempted and emphasizes a presumption of disclosure. Among the most common complaints by environment and health groups using FOIA is that agency staff interpret exemptions inconsistently from one request to another, and all too often, the interpretations seem broader than they should. Special attention should be paid to reducing the use and misuse of the b(5) (privileged interagency or intra-agency memoranda or letters), b(2) (internal agency rules), and b(1) (national security information concerning the national defense or foreign policy) exemptions, as these are more discretionary. Agencies may take advantage of cost-saving technologies such as webinars and video conferencing to provide interactive training opportunities to FOIA offices across the country.

Where possible, collaboration with third-party independent experts from the nonprofit public interest sector should be encouraged as a way of strengthening the training program. Adequate resources should be devoted to these training efforts.

E2. Agencies Should Randomly Audit FOIA Responses

FOIA staff must regularly undergo performance reviews and audits of decisions, preferably by Inspectors General offices. In order to review to what extent FOIA officers are adhering to the presumption of disclosure and to track the extent and characteristics of the use of exemptions, agencies should conduct regular audits of responses to FOIA requests. These audits need to look at more than the amount of time taken to process a request, but also examine trends in the use of particular exemptions by specific offices or regions and identify where openness has suffered. Requesters often complain that similar information requests may be treated very differently depending on which office responds. Inconsistent application of FOIA policies has frustrated countless searches for government-held information. Implementation of FOIA policies across agency offices, regions, and programs must be consistent. Audit results should be used to promote consistency and to inform the process for creating incentives for greater openness described in the next recommendation.

E3. Create Staff Incentives for Openness, Penalties for Secrecy

The *21st Century Right-to-Know* report cited above includes several valuable recommendations for creating incentives for disclosure. For example, agencies should add transparency as a factor in federal employee performance evaluations; agencies should be scored regularly on their transparency efforts by the Office of Management and Budget (OMB); and transparency awards should be regularly given to outstanding federal employees. Such incentives could be particularly useful in environmental and health agencies, where many employees are strongly committed to the agencies' missions of protecting public health and the environment. Unfortunately, agency

employees are often confronted with severe disincentives toward openness. Staff who disclose certain types of information can face dismissal or other adverse employment actions, as well as fines and even jail time. Agencies should eliminate criminal penalties for disclosure of non-classified information.

In addition to these recommended incentives, the creation and enforcement of strong disincentives to secrecy are needed. Agencies should establish meaningful penalties against FOIA offices for failing to meet response deadlines. The president should encourage Congress to establish a criminal penalty for willful concealment or destruction of non-exempt agency records requested under FOIA.

E4. Government Contractor Data Should Not Be Exempt from FOIA

Private companies often deny public access to information that belongs to the public. Contractors are frequently used by agencies in environmental and health work, from clean ups to collection of data. Federal contractors that perform government functions or that work on behalf of government agencies should be subject to the same openness laws that apply to the agency that would otherwise be performing that service or function.

The president should direct agencies that when they outsource any of their duties, not limited to records management duties, the contracts should contain provisions specifying that the records produced by the contractor in its function as a government surrogate belong to the agency and are releasable as agency records under FOIA. Agencies must take possession of all records compiled and relied upon by government contractors.

E5. Enforce the E-FOIA Amendments by Disclosing Repeatedly Requested Records

On Oct. 2, 1996, President Bill Clinton signed the Electronic Freedom of Information Act (E-FOIA) Amendments into law. Among other requirements, the E-FOIA amendments require agencies to make an index of all previously released records – both those recently created that are available electronically and those that may be only in paper format – that have been or are likely to be the subject of additional requests. The 1996 amendments also mandate that “Repeatedly Requested” records that have been processed and released in response to a FOIA request that “the agency determines have become or are likely to become the subject of subsequent requests for substantially the same records” must be made available online. Agencies must recommit to placing online and indexing any memoranda, reports, studies, lists, tables, correspondence, and other information that is of sufficient interest to the public to spark two or more FOIA requests.

E6. Facilitate Fee Waivers for Public Interest Requests

Agencies should consistently and liberally grant fee waivers to individuals and nonprofit organizations seeking information for the public interest. The fees charged by agencies for searching and copying requested documents too often make FOIA requests prohibitively

expensive, especially for small community-based organizations and individuals. The law allows agencies to grant fee waivers to requesters seeking information to benefit the public interest.²⁴ The denial of fee waivers should not be used to as a way to refuse disclosure, thereby undermining the 2009 FOIA directive from the Attorney General.

F. Administrative Records in Litigation

In 1999, the Department of Justice (DOJ) issued guidance to federal agencies that emphasized the importance of producing to courts and the parties to a lawsuit a complete administrative record in litigation challenging agency decisions.²⁵ Although the 1999 Guidance did not go far enough in emphasizing a presumption in favor of disclosure, it provided a basis from which agencies could build. The 1999 Guidance clarified what documents and materials agencies should include in an administrative record. The disclosure of complete administrative records is vital to citizen enforcement of environmental laws.

Since the 1999 guidance came out, however, there has been a steady erosion of these requirements and principles of disclosure. This has occurred both formally – through the issuance of subsequent guidance during the Bush administration – and informally, as agencies assert more aggressive claims of privilege to protect from disclosure material contrary to the agency’s decision and to sanitize the record. For example, in the waning days of the Bush administration, Ronald Tenpas of DOJ issued a memo to federal agencies devaluing the 1999 guidance.²⁶ As the “Tenpas Memo” noted, DOJ had “defended in litigation the legal position that [documents withheld under a claim of deliberative process privilege] are not generally required in an administrative record, and thus has also defended the position that in such circumstances no privilege log reflecting such documents would need to be prepared.” The overbroad application of this privilege (compounded by a failure to even disclose its use) is especially harmful and unwarranted in record review cases under the Administrative Procedure Act, where evaluating the process by which the decision was made is a court’s primary task.

These practices are anathema not only to effective judicial review, but also to the Obama administration’s policies and commitments to greater openness and transparency in government decision making.

²⁴ “A requester is entitled to a waiver or reduction of fees where ‘disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester,’” Federal Open Government Guide, 10th edition, Reporters Committee for Freedom of the Press, <http://www.rcfp.org/fogg/index.php?i=pt2>.

²⁵ U.S. Department of Justice, “Guidance to Federal Agencies on Compiling the Administrative Record,” January 1999, <http://www.fws.gov/policy/library/m0063.html>.

²⁶ Memorandum to Selected Agency Counsel, Dec. 23, 2008.

F1. The Justice Department Should Strengthen and Reassert Presumption of Disclosure

The DOJ should strengthen and reassert the 1999 Guidance²⁷ and rescind all subsequent actions that weakened disclosure of administrative records such as the “Tenpas Memo.” DOJ must ensure that agencies compile and produce the full administrative record and apply privileges sparingly to allow effective judicial review of challenges to final agency actions.

F2. Eliminate Restrictive Policies on Administrative Records Disclosure

OMB should solicit input from the public and lead a government-wide review of federal agency practices to ensure that directives and policies that undermine disclosure of administrative records are rescinded. For example, in 2005, NOAA’s National Marine Fisheries Service (NMFS) issued a directive contradicting the 1999 DOJ guidance that directed agency employees to include in an administrative record a carefully culled and restricted subset of materials produced during the agency’s decision making process.²⁸ The administration should rescind this directive and others like it.

G. Minimum Levels of State Transparency

The implementation of information access policies is inconsistent across agencies at the state, tribal, and local level, as well as across federal agencies. The federal government should serve as a leader on information access issues and actively push states to improve transparency and community engagement. Increased government openness can save states money as well as increase public trust in government.²⁹ At a minimum, national environmental and public health programs that are administered by state or local governments must be implemented with a level of transparency equal to or exceeding that of federal agencies. Federal agencies must develop clearly articulated and enforceable strategies for addressing recalcitrant state agencies unwilling to implement information access policies and must offer capacity-building resources to states unable to comply.

G1. Use Restrictions on Federal Funds to States to Compel Greater Information Access

Compliance with information access policies should be institutionalized as one of the key criteria in federal funding decisions at all levels. Agencies should also retain statutory authority to compel state compliance with information access policies. States with delegated authorities to enforce federal laws (primacy) should be required to meet minimum levels of transparency,

²⁷ *Ibid.* 24.

²⁸ National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Guidelines for Agency Administrative Records, March 2005.

²⁹ Aliya Sternstein, “Study links online transparency efforts, trust in government,” *NextGov*, Feb. 16, 2010, http://www.nextgov.com/nextgov/ng_20100216_1403.php.

uniform data standards, and public participation to maintain their state authority. Regular reporting on the progress of information access improvements at state agencies should be required. This report should include assessments of the progress to implement initiatives, identifying areas where progress is lagging and what the barriers are to meeting the objectives, and recommendations to address problems.

G2. Use Federal Resources to Build Information Capacity at State Agencies

The federal government should work with state agencies to develop capacity to expand electronic reporting, document digitization, and other data access improvements. As federal agencies develop programming platforms for reporting, disclosure, and participation, these electronic tools should be shared freely with the states to provide them with similar benefits without requiring them to reinvent the wheel. Similarly, federal agencies should offer training and best practices advice to state-level counterparts.

II. Improving Existing Information Sources

Citizens now rely on enormous amounts of data held by the federal government. Whether the information concerns toxic releases by companies, maps of public forests, or soil conservation practices, the public and policymakers depend on government-held information to guide their decisions. The data exist in numerous formats; some are downloadable and searchable databases, others are written documents scattered among file cabinets throughout the country, and others are held by corporations and only disclosed to government officials under certain circumstances.

Numerous improvements to these sets of data are needed to make the information more accurate, complete, and useful to the public. Enhancing the quality, quantity, and usability of existing sources of information strengthens the ability of the government and the public to drive the changes needed to protect health and clean the environment. The following recommendations identify existing data sources and ways to make the information more useful to the public.

H. Environmental Databases – Awareness and Access

Information is useless if the public cannot find it. Overall, the federal government must do a better job of making information available online. Beyond online availability, the information must be indexable, easily searchable, downloadable, and, where possible, formatted to be combined easily with other types of data. Agency online resources must be searchable by major public search engines and available in open formats. The vast amount of government data can only be taken advantage of insofar as it is usefully available, well managed, properly maintained, and contains meaningful metadata.³⁰ Considering that in some circumstances, access to communication technology is unavailable or difficult, agencies must also communicate information through other effective channels.

H1. Establish a National Data Management Advisory Committee

One of the most cited obstacles to public access to information is the difficulty knowing what the government has and where to find it. Information may be housed across numerous programs in different offices and in different agencies. The White House should coordinate the creation of an advisory committee to develop a strategy and process for communicating environmental and public health information, including creating a National Registry of significant environmental and public health databases (see also Recommendation H2).³¹ This committee would include

³⁰ Additional recommendations on improving metadata standards and database interoperability may be found in the report, *Moving Toward a 21st Century Right-to-Know Agenda*, by the Right-to-Know Community, <http://www.ombwatch.org/files/21strtkreccs.pdf>.

³¹ Adapted from National Conversation on Public Health and Chemical Exposures, draft Scientific Understanding Work Group report, <http://resolv.org/site-nationalconversation/>.

expert representatives from government, industry, academia, impacted people, public interest groups, and the general public. The committee would create a process for identifying and characterizing relevant information sources and their respective usability, including data from outside the federal government, and working with agency data managers to address technological obstacles.

H2. Create National Registry of Databases

Based on the work of the Data Management Advisory Committee and others, federal agencies should collaborate to create a National Registry of significant databases on environmental and public health information.³² The database would provide the public with a single, searchable clearinghouse providing access to a broad range of databases, studies, reports, and other documents. The registry should provide sufficient metadata – information describing the databases – to allow users to easily identify the databases most relevant to their needs. The registry should encompass federal, state, and nongovernmental sources, as well as Canadian, European, and other international sources.

The executive branch’s Data.gov website could serve as a beginning framework for such an effort. This site works “to increase public access to high value, machine readable datasets generated by the Executive Branch of the Federal Government.”³³ A registry of environmental, health, and safety databases should provide access to information currently not available on Data.gov, such as scientific studies and permits. The new Data.gov/Law community, which provides a registry of agency legal documents, is a model of how this might work.

H3. Create Facility-Specific Profiles and Common Corporate Identifiers

The White House, working with regulatory agencies, should develop a unified facility reporting system that provides a profile of a facility in a single online location. The program would extract information from numerous environmental, health, and safety reports submitted by facilities under various statutes and programs. With such integrated facility data, regulators could do their jobs more quickly, efficiently, and accurately while better identifying emerging risks, setting priorities, and targeting specific companies for increased monitoring. Public access to this information would enhance agency accountability and effectiveness.

Agencies should consult with public stakeholders on the design of such a system and what reporting elements would be most valuable to have in a consolidated facility report. Such a system would also streamline and simplify the reporting process for facilities. During the late 1990s, EPA and the Texas Natural Resource Conservation Commission launched a pilot program called the Consolidated Uniform Report for the Environment (CURE) that provided the public

³² Modified recommendation from the National Conversation on Public Health and Chemical Exposures, draft Scientific Understanding Work Group report, <http://resolv.org/site-nationalconversation/>.

³³ See <http://www.data.gov/about>.

with a single, simplified facility report. This discontinued pilot project may be a useful model for a national effort.

To facilitate creation of facility- and company-specific profiles, data such as regulatory compliance records, pollution data, permit information, and manufacturing data should be available and searchable by the public using common corporate and facility identifiers. Numeric identifiers are the best way to achieve a high degree of accuracy with facility-parent linkages. However, the government currently lacks a suitable, non-proprietary system for tracking facilities and their corporate parents both within and across agencies. Creating such a non-proprietary system should be a top priority.

In the absence of such identifiers, agencies should work to ensure that facilities are reporting their parent companies in ways that prevent confusion and allow for accurate analyses.

A significant amount of research on this issue, along with several sound recommendations for the EPA, was conducted by the Environmental Information Consortium (EIC), administered and supported by the National Academy of Public Administration (NAPA), and released in 2005.³⁴ The EIC developed eight recommendations for the EPA, most of which focus on the creation and implementation of a “Master File” system for all core facility identification data. These recommendations largely remain relevant for the EPA today. However, EPA must coordinate its activities with other federal agencies to effectively integrate facility data from databases government wide.

I. Improving Environmental Data Quality and Usability

The old adage “garbage in, garbage out” is more relevant than ever in our information age. If government information is not accurate, timely, and available in easily usable formats, then it will not be utilized. Federal agencies can make significant progress in improving the public’s ability to use environmental and public health information by establishing certain technical standards for how the data are defined and what technologies are used to collect and disseminate the information. The lack of any uniform data collection or reporting standards can often impede analysis of the data. For example, if numerous facilities report discharges to a particular body of water but each uses a different name or spelling for the water body, the public and the agencies have a difficult time assessing how water quality is impacted. The form in which some government information currently is collected and stored often makes it difficult to access, search, and find.

³⁴ Environmental Information Consortium, “An Integrated Facility Identification System: Key to Effective Management of Environmental Information at the Environmental Protection Agency,” June 2005, <http://www.epa.gov/oei/imwg/finaleicreportwithappend.pdf>.

II. Set Data Standards to Improve Quality and Usability

Creating uniform, widely adopted data standards will facilitate the interpretation of data and strengthen policies that rely on the data. For example, if one agency office collects water samples or tests water quality in a manner different than another office, then it is difficult to reconcile the data sets. Likewise, if programs employ differing methods for collecting emissions data for greenhouse gases, the calculations may not match up, causing difficulties for any current or future programs to measure and regulate facilities' emissions.

- Develop standards for monitoring data collection and encourage states and tribes to adopt the same. To ensure that information can be collected, exchanged, and interpreted by all interested parties, the White House, in coordination with the agencies conducting environmental and public health surveillance and monitoring activities, must develop uniform data definitions, formats, and standards for data collection methods. Agencies such as EPA, the Centers for Disease Control and Prevention (CDC), and others conducting ongoing surveillance and monitoring programs should develop a clearinghouse of standardized methods for data collection and interpretation.³⁵ The standards must also be implemented by state, tribal, and local agencies involved in data collection.
- Establish government-wide metadata standards. The experiences of the developers of CDC's Environmental Public Health Tracking Network (EPHT) demonstrated that there is a real need for descriptive metadata for public health datasets. Metadata standards help public health professionals find the right data among vast and widespread data sources.³⁶ The key purpose of metadata is to facilitate and improve the retrieval of information, making it easier for the public to access the information. OMB, the General Services Administration, or another similar body should undertake a review of metadata standards throughout government and issue recommendations for standards development and coordination. At a minimum, metadata should answer who, what, when, where, why, and how about every facet of the data that is being documented.³⁷
- Consult public stakeholders when developing data standards. Agencies should engage public stakeholders and experts throughout the scientific community to gather best practices and ideas for standards. Employing interactive online technologies such as wikis and listservs would enable a broader and more efficient exchange of ideas. For example, the National Institute of Standards and Technology (NIST) and the National Cancer Institute (NCI)

³⁵ For additional background, see National Conversation on Public Health and Chemical Exposures, draft Monitoring Work Group report, <http://resolv.org/site-nationalconversation/>.

³⁶ Describing Environmental Public Health Data: Implementing a Descriptive Metadata Standard on the Environmental Public Health Tracking Network, http://journals.lww.com/jphmp/Fulltext/2008/11000/Describing_Environmental_Public_Health_Data_3.aspx#.

³⁷ *Ibid.* 29.

proposed using such a collaborative wiki to connect experts around the world to develop standards for characterizing and testing nanomaterials.³⁸

I2. Use Current Technologies to Improve Data Reporting

Public access to data and the opportunities to analyze data and use them to protect public and environmental health can be improved by exploiting up-to-date information technologies.

- Require regulated entities to report data electronically. Agencies should require regulated entities to submit data electronically through secure online systems. In the 21st century, agencies that still use paper forms are unnecessarily burdening agency staff and regulated parties. Electronic data submissions reduce paperwork burdens, reduce data entry and transcription errors, improve data quality checks, and assist in making the information searchable and publicly available in multiple formats and in a timely manner. Where these information systems are lacking or missing, agencies should develop systems to allow regulated entities to submit data electronically. The EPA's Central Data Exchange (CDX)³⁹ is such a system, allowing states, tribes, local governments, and reporting facilities to submit data under a variety of programs to a centralized system. EPA should continue to expand its use of the CDX, and other agencies should create and require the use of similar systems.
- Facilitate correction of data errors. Although electronic reporting offers the best method for catching and correcting data errors, agencies should install a backup system, similar to EPA's Integrated Error Correction System,⁴⁰ which allows the public to report errors in agency databases, providing additional quality assurance.
- Agencies should move to link diverse datasets to expand the usefulness of the data. Information is most useful when placed into a broader context. For example, the public and policymakers are better able to evaluate an industrial permit application if data on local air or water quality are linked to data on public health in the area, as well as enforcement and compliance data. Agencies should work with public stakeholders to identify what types of linkages among datasets are priorities and what technical obstacles must be overcome to make the linkages and develop web interfaces that allow the data to be explored online. All datasets that contain location information should be geocoded to be easily used with GIS software programs.
- Apply the Polluter Pays principle for information technology. Congress and agencies should consider imposing fees on regulated entities to finance improvements to information

³⁸ The National Institute of Standards and Technology, "NCI and NIST Propose Online Community To Speed Up Development of Nanotech Standards," http://www.nist.gov/mml/ceramics/online_community.cfm.

³⁹ See <http://www.epa.gov/cdx/>.

⁴⁰ See http://oaspub.epa.gov/enviro/ets_grab_error.smart_form.

technology infrastructure at the federal level and to provide grants for IT enhancements at state agencies. Enhancements might include digitization of documents, enhanced website features, improved searchability of records, and installation of systems for electronic reporting.

J. Toxics Release Inventory (TRI)

The TRI program has for almost a quarter century provided the public with detailed information on releases and transfers of toxic chemicals from thousands of facilities nationwide. This information, required of facilities in dozens of industries, has been used countless times by states, municipalities, citizens' groups, and others to drive reductions in pollution. TRI is a major component, along with emergency planning and the reporting of hazardous materials information, of the Emergency Planning and Community Right-to-Know Act (EPCRA).

Recent EPA actions have brought new life to this bedrock right-to-know program. The list of TRI-related enhancements includes new online tools such as MyRTK, TRI.NET, TRI-CHIP, and a new mobile application; the proposed addition of 16 National Toxicology Program carcinogens; a pending new reporting rule for the metal mining industry; and the use of online forums to collect public comments. In addition, Congress restored the reporting thresholds that had been raised by the Bush administration. Yet, after a decade of limited action, much more needs to be done to maintain this keystone right-to-know program as a relevant, useful tool for protecting public health and the environment.

J1. Expand the TRI Program

In November 2010, the TRI program added 16 new chemicals, the first expansion since 1999, despite thousands of chemicals being added to commerce since that time. The program has not added a new industry sector since seven industries were added in 1997. Such stagnancy seriously undermines the value of the database as new chemical threats that are identified every year escape the public scrutiny provided by TRI. Therefore, at a minimum, EPA should undertake the following actions:

- Regularly add chemicals. Create a system to review and select chemicals for addition to TRI on a regular basis.⁴¹ The system should be integrated across EPA offices to take advantage of expertise across programs. Potential sources for candidate chemicals include scientific peer-reviewed literature; other federal chemical laws such as the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act; and chemical evaluations undertaken by, among other authoritative bodies, the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), the National Institute for

⁴¹ For additional comments, see OMB Watch comments to EPA, <http://www.ombwatch.org/files/info/tricomments060710.pdf>.

Occupational Safety and Health (NIOSH), California's Proposition 65,⁴² and international programs that identify high-risk chemicals for policy measures. EPA should also consider the results of biomonitoring studies, such as those conducted by the CDC's National Biomonitoring Program.⁴³ EPA should evaluate chemicals based on all of the criteria set forth in statute.⁴⁴ EPA should also add the "criteria" pollutants⁴⁵ that are not currently covered: carbon monoxide, nitrogen dioxide, and sulfur dioxide. Releases that would be considered particulate matter (10 micrometers in diameter or smaller) must be identified as such. Given the high number of chemicals for possible evaluation and EPA's resource constraints, the agency should work with public stakeholders to develop a system for prioritizing specific chemicals or classes of chemicals for review.

- Regularly add new reporting industries. Create a system to review and select industry sectors and specific facilities for addition to TRI on a regular basis. Currently, major polluting industries such as oil and gas extraction and sewage treatment plants are not required to report to TRI. Prior to the addition of seven industry sectors in 1997, EPA designed and executed a screening process to identify industries that potentially should be covered.⁴⁶ EPA reviewed other agency databases such as the Biennial Report System and the Permit Compliance System for relevant industry information. The agency compiled "industry profiles" and ranked the sectors before making its decision. EPA should undertake a similar review and incorporate it as a regular part of the TRI program. The review should include significant public outreach to gather information and collect public comments.
- Require full materials accounting. Expand reporting to TRI to include full materials accounting, thus better tracking the total amount of toxics passing through a facility. In 1995, EPA held public meetings to consider expanding the reporting requirements to include

⁴² Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986) is administered by California's Office of Environmental Health Hazard Assessment (OEHHA), <http://oehha.ca.gov/prop65.html>.

⁴³ See <http://www.cdc.gov/biomonitoring/index.html>.

⁴⁴ By statute, the EPA may add a chemical to TRI if it is known to cause or may be reasonably anticipated to cause cancer, birth defects, reproductive dysfunctions, neurological disorders, heritable genetic mutations, or other chronic health effects. The EPA may also add a chemical if it is known to cause or reasonably anticipated to cause a significant adverse effect on the environment because of the chemical's toxicity. EPA need only demonstrate that a chemical meets just one of these criteria to be considered for addition to the TRI list.

⁴⁵ The six common air pollutants known as criteria pollutants are particle pollution (often referred to as particulate matter), ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. See <http://www.epa.gov/air/urbanair/> for more information.

⁴⁶ U.S. Environmental Protection Agency, "Addition of Facilities in Certain Industry Sectors; Revised Interpretation of Otherwise Use; Toxic Release Inventory Reporting; Community Right-to-Know," *Federal Register*, <http://www.epa.gov/fedrgstr/EPA-TRI/1997/May/Day-01/tri11154.htm>.

chemical use data.⁴⁷ The meetings accompanied an Advance Notice of Proposed Rulemaking on the issue⁴⁸ as well as an agency issue paper.⁴⁹ It is past time for the EPA to take up this issue again.

- **Lower reporting thresholds.** Lower reporting thresholds, especially for very hazardous chemicals, such as persistent, bioaccumulative toxins (PBTs) and chemicals identified as known or potential endocrine system disruptors.

J2. Improve the Quality of TRI Data and the Public's Ability to Use the Data

Constant changes in industrial technologies, new scientific findings, and expanding Internet capabilities require the TRI program to adapt and evolve. The EPA should exploit new methods for analyzing, manipulating, and adding value to TRI data.

- **Review methods for estimating releases and require electronic reporting.** EPA should conduct scientific and technical reviews of the methods it provides facilities to estimate their toxic releases (e.g., emissions factors). As TRI's authorizing statute does not require facilities to directly measure their pollution, reporting facilities rely on formulas to estimate releases. Many environmental advocates have raised questions about the accuracy of these estimates. EPA must require companies to submit TRI forms electronically. Electronic reporting improves the accuracy of data and eases public access to the information.
- **EPA should conduct regular, transparent audits of TRI reports.** EPA should screen facility reports (e.g., by using the RSEI⁵⁰ or other methods) to identify potential reporting errors and falsifications. EPA should then employ targeted air, water, and soil testing to gather data regarding specific facilities and compare reported data to actual release data. This "ground truthing" will help identify pollution hot spots and potential reporting violations.
- **Eliminate range reporting.** Facilities are currently given the option to report releases under 1,000 pounds of chemicals that are not persistent, bioaccumulative, and toxic (PBT) using

⁴⁷ U.S. Environmental Protection Agency, "Toxics Release Inventory Phase 3; Chemical Use; Notice of Public Meeting; Change of Meeting Date," *Federal Register*, <http://www.epa.gov/fedrgstr/EPA-TRI/1995/September/Day-11/pr-24.html>.

⁴⁸ U.S. Environmental Protection Agency, "Fact Sheet on the ANPR to Expand TRI Program to Increase Information Available to the Public on Chemical Use," http://www.epa.gov/tri/archive/dialogues/natdiagphase1_oct02/triphase3/trip3fa2.htm.

⁴⁹ See http://www.epa.gov/tri/archive/dialogues/natdiagphase1_oct02/triphase3/p3ip94.htm. Additional EPA information on the issue of chemical use data can be found at http://www.epa.gov/tri/archive/dialogues/natdiagphase1_oct02/triphase3/p3-ip2.htm.

⁵⁰ EPA's Risk-Screening Environmental Indicators (RSEI) is "a computer-based screening tool developed by EPA that analyzes risk factors to put Toxics Release Inventory (TRI) release data into a chronic health context." See <http://www.epa.gov/opptintr/rsei/>.

three range codes, 1-10 pounds, 11-499 pounds, and 500-999 pounds. EPA then converts a range code to the midpoint of the range. This conversion can create confusion when a facility's releases are significantly lower (or higher) than the midpoint. The inaccuracy may be especially important for highly toxic chemicals for which a few pounds represent significant changes in potential health risks. This problem can be resolved by eliminating the range reporting option. This change would not add to reporting burdens since facilities already must calculate the number in order to report the relevant range.

- Require reporting of chemical species. Certain chemicals have more than one common form, or species. One species might be significantly more toxic than another common species. Currently, facilities are not required to report the species separately, except for dioxin. For example, there are two common forms of chromium, chromium(VI) – hexavalent, and chromium(III) – trivalent. Hexavalent chromium is a considerably more dangerous substance than the trivalent form, yet both are reported only as “chromium” or “chromium compounds.” EPA should require facilities to report separately each form of a chemical that has more than one common form.
- Require clear reporting of location of releases. EPA must collect from reporting facilities clear descriptions of the locations of underground injections, landfills, and other on-site disposals and releases. For example, reporters should identify specific wells, tailing piles, or mines receiving wastes. Additionally, the names of receiving water bodies must be standardized to allow for easy calculations of total releases into specific water bodies and watersheds.
- Connect TRI data to other databases. EPA should continue efforts to connect TRI data to information found in other environmental databases, including databases at other federal and state agencies. For example, TRI data should be linked to the new greenhouse gas registry so users may easily learn a facility's toxic pollution profile as well as its greenhouse gas pollution profile.

J3. Start New TRI Initiatives to Prevent Pollution and Reduce Releases

Although TRI is far from unused by the public, it is the EPA itself that must do more with the valuable information it collects. In the 1990s, EPA initiated the “33/50 Program,” a voluntary program that worked with selected industries to reduce releases of 17 chemicals.⁵¹ The program's goals were to reduce releases and transfers 33 percent by 1992 and 50 percent by 1995. These goals were reached and even surpassed. The 33/50 program leveraged TRI data and, using existing authority, met specific pollution reduction goals. EPA should identify opportunities to replicate this strategy.

EPA should work with regional EPA offices and communities to identify priority areas, chemicals, or industries and set aggressive goals for pollution reduction and prevention. EPA

⁵¹ See http://www.epa.gov/tri/archive/othertriprog/33_50other_federal.htm.

should mount an aggressive community outreach and education program to teach the public about the purpose, capabilities, and use of TRI and the EPCRA emergency planning reporting programs. EPA has long maintained active industry outreach programs for regulated facilities. Similar efforts at outreach to communities would greatly increase the value of all EPCRA reporting tools. Outreach should place an emphasis on engaging environmental justice communities. To assist these efforts, EPA should provide richer analyses of TRI data that tell the public what they want and need to know in formats and language that are clear and easy to understand. The agency might also experiment with real-time monitoring of air or water in vulnerable neighborhoods and regions [see Recommendation N3] and linking that with TRI data from nearby facilities.

J4. Improve Online Access to Pollution Prevention Data

The Pollution Prevention Act of 1990 (PPA)⁵² added source reduction reporting requirements to the TRI program (Section 8 of TRI Form R). Information submitted under the PPA should be accessible online in the same manner and with the same ease as other reported data. EPA should amend the reporting Form R to include total non-product output as a measure and incentive for pollution prevention planning. This total is the sum of reported releases, disposal, energy recovery, recycling, and treatment (i.e., the sum of current reporting elements 8.1 through 8.7 on the Form R). In addition, facilities reporting to TRI must also prepare a pollution prevention plan under the PPA. These plans should be accessible and searchable along with the facilities' TRI data.

K. Emergency Response Plans

The nation needs better disclosure and dissemination of emergency response plans for industrial facilities. The BP oil spill in the Gulf of Mexico – and many other such industrial catastrophes – has underscored the inadequacy of disaster response plans. Improving access to plans will allow greater public scrutiny to drive improvements to the plans and identify ways to eliminate unnecessary risks in the first place. Enhanced rules are needed to clarify what parties are responsible for development, maintenance, dissemination, and implementation of all portions of emergency response plans and emergency management (preparedness) plans. Responsibility for the accuracy and sufficiency of plans should be a facility owner's; responsibility cannot be abdicated to subcontractors, consultants, or subsidiaries.

K1. Set Minimum Standards for Facility Emergency Management and Response Plans

The Department of the Interior, Department of Labor, EPA, and other regulatory agencies must develop and vigorously enforce minimum standards for the quality of facility emergency

⁵² See <http://www.epa.gov/p2/pubs/p2policy/act1990.htm>.

management and response plans developed under all relevant statutes.⁵³ Agencies must also create and enforce standards for the types of information to be included in the plans and the processes for engaging community members during plan development.

- Agencies should ensure emergency plans are sufficient. Working with public stakeholders, including impacted people, community and labor groups, and environmental and public health advocates, agencies should review existing procedures and develop strong standards that ensure emergency management and response plans: i) identify and model the potential offsite consequences of releases of harmful substances from covered facilities, including worst-case scenarios, using readily available emergency management software and mapping tools; ii) develop realistic procedures for assuring the safety and survival of facility workers and the public; iii) maintain appropriate, effective measures for notification of response agencies and the public; and iv) provide the means for disseminating the types of data needed by emergency responders, such as floor and roof plans and locations of chemical hazards. Facilities must include in their emergency response plans a provision for directly informing the public (or nearby community) in the event of mishaps that endanger health and safety, in addition to notifying government points of contact in the event of releases.
- Emergency plans should be filed electronically. Emergency management and response plans should be required to be filed electronically by all reporting facilities and local and state agencies. The state of California has already implemented such a requirement, called the California Environmental Reporting System,⁵⁴ which extends beyond emergency information, including facility data regarding hazardous material regulatory activities, chemical inventories, underground and aboveground storage tanks, hazardous waste generation, and inspections and enforcement actions. The EPA and affiliated agencies should consider expanding the use of the Integrated Contingency Plan,⁵⁵ known as the “One Plan,” which combines data elements from numerous emergency response plans into one document. This system gives first responders access to vital data in one location.
- Plans must be disclosed to the public. Emergency management and response plans must be publicly accessible online and easily searchable. EPA and other regulatory agencies must ensure that regional offices and state agencies and Local Emergency Planning Committees (LEPCs) provide consistent disclosure practices.⁵⁶ Facilities should be required to mail emergency plans (or summaries of plans and instructions for obtaining complete plans),

⁵³ For example, EPCRA – Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), Clean Air Act Section 112(r), Mine Improvement and New Emergency Response Act of 2006, and other statutes.

⁵⁴ See <http://www.calepa.ca.gov/cupa/ereporting/>.

⁵⁵ See <http://www.epa.gov/region1/enforcement/epcra/oneplan.html>.

⁵⁶ LEPCs must develop emergency response plans and provide information about chemicals in the community to citizens. See <http://yosemite.epa.gov/oswer/lepddb.nsf/HomePage>.

updates, notices of public meetings, and other relevant information to the residents and businesses within the facility's vulnerability zones.

- Emergencies must immediately be reported to multiple public sources. Emergency response plans must include procedures for rapidly notifying the public in the event of emergencies. Facilities should use multiple and redundant means of communication and seek to reach as many potentially impacted community members as possible.
- Disclose all information on chemicals and processes used in emergency responses and clean ups. Claims of confidentiality hampered decision making about dispersants used in response to the BP oil spill. Under pressure to identify dispersants that were less toxic, even BP claimed it could not fully evaluate the effectiveness and toxicity of alternative chemical products because of claims that the ingredients were proprietary. There should be full disclosure regarding the toxicity of dispersants and all chemical and biological agents used in responding to emergencies to prevent uncertainty and to ensure full information to impacted communities.
- Emergency plans should include an assessment of safer alternatives. Several reports have analyzed the unnecessary risk to millions of community members living near facilities that use hazardous substances.⁵⁷ Safer and more secure technologies exist and have been successfully adopted by thousands of facilities. Yet, without deliberately assessing the safer alternatives that might be available, most facilities fail to identify and adopt these technologies, even though such moves could save them money. By requiring an alternatives assessment during the emergency planning process, the threat to countless communities could be greatly reduced or even eliminated as facilities discover and convert to safer technologies that other facilities are already using.

K2. Require More Disclosure in Plan Development

The operations of numerous industries vital to the nation's infrastructure present significant health and environmental risks from accidents, negligence, corruption, and even intentional acts of destruction. These industries are regulated under a number of statutes implemented by a variety of agencies. Key pieces of regulatory and enforcement data are not easily accessible. Greater transparency will serve to strengthen the quality of the plans, reduce risks, and protect lives should there be an emergency. The relevant regulatory agencies should take the following actions regarding certain areas of high concern.

⁵⁷ Namely, three reports produced by the Center for American Progress evaluate the risks of catastrophic chemical releases by industrial facilities and the safer and more secure technologies that are already available to reduce or entirely eliminate these risks. See *Preventing Toxic Terrorism* (http://www.americanprogress.org/issues/2006/04/b681085_ct2556757.html), *Toxic Trains and the Terrorist Threat* (http://www.americanprogress.org/issues/2007/04/chemical_security_report.html), and *Chemical Security 101*, (http://www.americanprogress.org/issues/2008/11/chemical_security.html).

- Oil Spill Response Plans. The Bureau of Ocean Energy, Management, Regulation, and Enforcement (BOEMRE) must develop rigorous, enhanced procedures for public notice and comment on Oil Spill Prevention Plans and make all plans available to the public in an indexed and easily searchable electronic format. The current approval process for Oil Spill Response Plans lacks transparency and fails to include either a process for interagency consultations or public review.
- Pipeline Safety. The Pipeline and Hazardous Materials Safety Administration (PHMSA) must retain electronic copies of emergency response plans related to oil and natural gas pipelines and provide easy, online public access to them. PHMSA should develop an online system that includes basic inspection information and mapping features for specific pipelines. Inspection information should include dates and locations of inspections, type of inspection, who performed the inspection, what was found, and what actions were taken. Inspection transparency should increase the public's trust in the checks and balances in place to make pipelines safe and make clear inadequacies that need to be addressed.⁵⁸
- National Inventory of Dams. The U.S. Army Corps of Engineers should provide online public access to the National Inventory of Dams that is searchable and includes geographic information and mapping capabilities, as well as all 60 data fields now available to government users.⁵⁹
- Risk Management Program. Under Section 112(r) of the Clean Air Act, facilities that pose a significant risk of harm from chemical accidents must develop a risk management program to manage the risks of chemical accidents. The EPA should develop new procedures to improve online public access to facility-level Risk Management Program information, including facility risk management plans and public contact information. Offline access to sensitive information, including Off-Site Consequences Analyses (OCA) data, should also be improved.

K3. Expand Opportunities for Public Engagement on Emergency Plan Development

Greater transparency and engagement with communities will, among other benefits, generate solutions and improve our ability to identify and remedy weaknesses in emergency plans at specific facilities. Certainly, an informed public is an engaged and vigilant public. As the chair of the Nuclear Regulatory Commission recently explained regarding emergency preparedness, “[B]y conducting proactive public and stakeholder outreach, a regulator can make them active

⁵⁸ For more information, see Testimony of Rick Kessler, Vice President, Pipeline Safety Trust, Sept. 28, 2010, before the Senate Subcommittee on Surface Transportation and Merchant Marine, Infrastructure, Safety, and Security, Committee on Energy and Commerce, Science, & Transportation, http://commerce.senate.gov/public/?a=Files.Serve&File_id=6b174190-c30f-430e-856a-ca0f915d6da3.

⁵⁹ See <http://geo.usace.army.mil/pgis/f?p=397:1:3659500107504826>.

participants in the decision making process, address their potential concerns or suggestions in that process, and help build public confidence in the final decisions that are reached.”⁶⁰

- Regulatory agencies must engage the public continually. Although communities must be included in the development of emergency plans from the start, the completion of an emergency plan does not represent the end of community engagement. As conditions, technologies, and laws change, so must emergency plans evolve. Agencies must engage a broad range of public stakeholders in a sustained dialogue to achieve the best results.
- Agencies need standards for addressing needs of all community members. Regulatory agencies, led by the EPA, must collaborate to produce national standards for including in emergency plans considerations for the needs of vulnerable communities, such as those with disabilities, the elderly, non-English speakers, and low-income or minority community members.
- Routing of Hazardous Materials by Rail. The transport routes of railcars carrying hazardous materials should be disclosed to members of the Local Emergency Planning Committees (LEPCs) of every jurisdiction through which the rail cars will be traveling. LEPCs must be included in the evaluation and selection process of the safest routes through their jurisdictions.
- LEPCs must adequately represent communities. EPA must enforce the requirement that the membership of LEPCs, as established under EPCRA,⁶¹ must include, at a minimum:
 - Elected state and local officials
 - Police, fire, civil defense, and public health professionals
 - Environment, transportation, and hospital officials
 - Facility representatives
 - Representatives from community groups and the media. This should include representatives from impacted communities.

⁶⁰ Gregory B. Jaczko, Chairman, U.S. Nuclear Regulatory Commission, “Stakeholders and the Public: An Integral Part of Effective Regulation,” Oct. 12, 2010, <http://www.nrc.gov/reading-rm/doc-collections/commission/speeches/2010/s-10-039.pdf>.

⁶¹ See http://www.epa.gov/emergencies/content/epcra/epcra_plan.htm#LEPC.

L. Product Labels and Label Websites

People are well accustomed to reading labels on food, cosmetics, pesticides, household cleaning products, and numerous other consumer goods. Product labels are universally viewed as convenient, reliable means for communicating the most important facts about a product, and labels enable consumers to make informed decisions about products used in and around the home and workplace. Informative labeling can also encourage manufacturers to develop and market safer products. Thus, labels should honor consumers' right to know about each chemical or bioengineered ingredient in a product and its health and environmental hazards.

Unfortunately, such disclosure is uncommon.

L1. List All Chemicals and their Health and Safety Risks

Federal agencies, most notably the Food and Drug Administration (FDA), EPA, and the Consumer Product Safety Commission (CPSC), should require all consumer products, as well as household and industrial pesticides, to list all chemical ingredients in the product on the label. Such labeling could fall under the authority of the Fair Packaging and Labeling Act⁶², which states, "Packages and their labels should enable consumers to obtain accurate information as to the quantity of the contents and should facilitate value comparisons."

- Labels must identify chemical ingredients. The disclosure of ingredient identities must, at the very least, appear on the product label, and include the specific chemical name for each ingredient. A standardized nomenclature system like the International Union of Pure and Applied Chemistry (IUPAC) should be used to identify chemical ingredients. If an IUPAC name does not exist, then a default system should be used, such as the Chemical Abstracts Service (CAS) name or common chemical name. Disclosure mandates must include identifying and listing so-called inert ingredients in pesticides and all the ingredients in cosmetic products, children's products, and household cleaners, including dyes, fragrances, and preservatives.
- Labels must include necessary warnings. Beyond including the identities of ingredients, product labels should alert consumers to potential health and environmental hazards of the ingredients. The state of California, for example, requires a prescribed warning – or some variant of – to appear on certain product labels, reading, "This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm." Where appropriate, such warnings should be expanded to include other health endpoints.
- Health data must be easily available. For products containing harmful substances, product labels, packaging inserts, or product websites should include health data from authoritative sources such as the National Toxicology Program or the Integrated Risk Information System.

⁶² See <http://www.ftc.gov/os/statutes/fpla/fplact.html>.

- Labels must be easy to read. Product labels should identify health and environmental hazards of ingredients using effective, concise, easy-to-understand symbolism conveying hazard information to the general public. The text of labels should be in a font and style that are easily legible. The standards set forth by regulation for food labels provide a useful example.⁶³

L2. Product Information Should Be Easily Available Online

In addition to appearing on product labels and package inserts, health and safety information – including detailed explanations of hazards and links to scientific studies – should be available online. There are two possible approaches to providing such information. One option is for regulatory agencies to create central websites, populated with data submitted by manufacturers. With a single online location for all information, members of the public would not have to sift through multiple corporate websites. An agency website would allow the public to conduct direct comparisons of products – both within one manufacturer’s product lines and among brands. A second option is to have manufacturers develop websites with all product ingredient and health and safety data. Agencies should create the standards for product ingredient reporting to ensure consistent content and accessibility, whether the information is provided through websites maintained by agencies or manufacturers. Agencies should incorporate the most advanced interactive web technologies to maximize websites’ usability and usefulness.

- Health and safety information should be presented in simple, easy-to-understand formats. For example, the Environmental Working Group’s (EWG) Skin Deep website provides color-coded and numeric hazard ratings for cosmetic products and their ingredients, with green representing the lowest hazard, yellow a moderate hazard, and red the highest hazard, and “N/A” appears when insufficient data are available to make a hazard determination.⁶⁴
- Use standard formats for data. Information should be produced by manufacturers and importers using one standard form to ensure comparability of data.
- List chemical ID numbers. Chemical Abstracts Service (CAS) Registry Numbers for each chemical ingredient should be disclosed on the website.
- Link to additional information. Product information websites, which should be available in English, Spanish, and any other appropriate languages, should provide links to more detailed data on each chemical, such as the chemical profiles and related data available from the Agency for Toxic Substances and Disease Registry (ATSDR), Occupational Safety and Health Administration (OSHA), the Integrated Risk Information System (IRIS), and the National

⁶³ See 21 CFR part 101 section 101.9, <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div8&view=text&node=21:2.0.1.1.2.1.1.6&idno=21>.

⁶⁴ Environmental Working Group, Skin Deep Cosmetic Safety Database, <http://www.cosmeticsdatabase.com/>.

Pesticide Information Center (NPIC). The address of product websites should be printed on product labels.⁶⁵

L3. Pass Legislation to Authorize Labeling Requirements

In situations where regulatory agencies do not have clear legal authority to issue the additional label requirements and product information collections, Congress should provide such statutory authority.

- Consumer Right-to-Know Legislation. Congress should amend consumer protection laws to require dissemination of information on potentially hazardous chemicals contained in consumer products. CPSC is responsible for regulating consumer products, in particular children's products, under the Consumer Products Safety Act (CPSA). While CPSC is tasked with evaluating the safety of products and setting limits, it does is not currently authorized to require labels to list the primary components of products.⁶⁶
- Cleaning Products Disclosure Legislation. Congress should reintroduce and pass legislation to require household cleaning products to bear labels that include a full list of ingredients.⁶⁷ Cleaning products used in institutional settings (schools, office buildings, sporting facilities, libraries, etc.) must be included to protect workers' right to know about hazardous chemicals in cleaning products. Full disclosure of ingredients used in institutional cleaners must be required.⁶⁸
- Cosmetics Ingredient Disclosure. Congress must reintroduce and pass legislation to require cosmetic products sold in salons to bear labels listing all ingredients (currently salon products do not have to be labeled, unlike products sold in retail stores). The legislation must also require that within one year of enactment, all product labels include the name of each ingredient in descending order of prominence, including the ingredients that make up fragrance.⁶⁹

⁶⁵ Adapted from public comments submitted to EPA by OMB Watch, April 23, 2010, <http://www.ombwatch.org/files/info/inertpesticideingredcomments042310.pdf>.

⁶⁶ National Conversation on Public Health and Chemical Exposures, final Policies and Practices Work Group report, <http://resolv.org/site-nationalconversation/>.

⁶⁷ The Household Products Labeling Act (S. 1697 and H.R. 3057) of the 111th Congress would have accomplished this.

⁶⁸ For additional information, see <http://www.womensvoices.org/our-work/safe-cleaning-products/impact-laws/household-products-labeling-act/>.

⁶⁹ The Safe Cosmetics Act (H.R. 5786) of the 111th Congress would have accomplished this. See <http://www.opencongress.org/bill/111-h5786/text> for the full text of the bill.

M. Material Safety Data Sheets

Material Safety Data Sheets (MSDSs) as required under OSHA's Hazard Communication Standard (29 CFR 1910.1200) are the main source of information for workers about the chemicals to which they are being exposed. Unfortunately, in addition to containing conflicting and incorrect information, these data sheets are sorely lacking important, basic information, thereby making it difficult for workers and the general public to determine the proper identity of a chemical, as well as what to do following exposure.⁷⁰ Even when MSDSs do contain appropriate information, technical language and inconsistent formatting can hinder worker comprehension. MSDSs vary widely in their format, quality, readability, and usefulness.

In 2004, the U.S. Chemical Safety and Hazard Investigation Board (CSB), an independent federal agency that investigates major industrial chemical accidents, found that deficient MSDSs were a cause or contributing factor in 10 of 19 major accidents the board had investigated.⁷¹ The then-head of the CSB, Carolyn Merritt, testified before the Senate, "Deficiencies in hazard communication and Material Safety Data Sheets are among the common causes of major chemical accidents that result in loss of life, serious injuries, and damage to property and the environment."⁷²

In September 2009, OSHA published a proposed rulemaking to align its Hazard Communication standard with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), an international system for classifying hazards and specifying information to be included on labels and safety data sheets.⁷³ The regulation's requirements for safety data sheets would address several shortcomings in today's MSDSs. Information on safety data sheets would be organized under a standardized series of headings, which would include hazard statements, toxicological information, exposure controls/personal protection, and measures to be taken for first aid, fire fighting, and in the case of accidental release.

M1. Require Key Data Elements

OSHA should adopt the regulation it has proposed to align its Hazard Communication standard with the GHS. The proposed OSHA regulation would require many needed data elements, and these should be kept in the final version of the rule. If the agency does not finalize the rule or eliminates these requirements, it should revise the MSDSs separately to include the following requirements:

⁷⁰ Some examples of the weaknesses of MSDSs are found in "Limitations of Information about Health Effects of Chemicals," <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1495173/>.

⁷¹ United States Chemical Safety and Hazard Investigation Board, "CSB Chairman Carolyn Merritt Says Fatalities and Injuries Are Being Caused by Deficiencies in Communication of Workplace Hazards, Calls for Improvements in Material Safety Data Sheets," March 25, 2004, <http://list.uvm.edu/cgi-bin/wa?A2=ind0403d&L=safety&P=48706>.

⁷² See http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_senate_hearings&docid=92-926.

⁷³ See <http://www.osha.gov/dsg/hazcom/global.html>.

- Chemical name and CAS number: Many chemicals are recognized by a variety of synonyms, and some, with very different properties, including toxicity, have similar names (e.g., 1,1,1 trichloroethane and 1,1,2, trichloroethane). Requiring Chemical Abstracts Service (CAS) numbers to appear on each MSDS would prevent confusion about the identity of chemicals to which people are being exposed. Manufacturer concerns regarding alleged confidential business information should not prevent the disclosure of specific chemical names and CAS numbers.
- Statement of limitations and absence of information: In addition to including information on the hazards and health effects of particular chemicals, MSDSs should also clearly indicate the limitations of existing health and safety data (e.g., when exposure limits are based only on single, rather than multiple, chemical exposures), and when there is an absence of known information about a chemical's health impacts.
- Information for diagnosis and treatment of exposures: MSDSs seldom provide information regarding medical tests to be administered after chemical exposure. Most physicians are not familiar with chemical exposures, and because many chemicals leave the body or are transformed into other chemicals in the body, physicians must be advised on how to evaluate exposures, including diagnostic tests, and proper treatment for patients experiencing chemical exposures.
- Response information: MSDSs also lack proper procedures to follow in the event of a chemical release to the environment, including discharges to air, water, and sewer systems, particularly when a release may result in community exposures. MSDSs should include information on proper response, monitoring, and reporting requirements, including appropriate personal protective equipment for those at risk of exposure.
- Accessibility: MSDSs should be made publicly available in an easily accessible, free, transparent, and understandable format, including in multiple downloadable formats through searchable agency websites. MSDSs should ensure that hazard information and safety procedures are communicated in the languages understood by workers and include easy-to-understand symbols to help convey information.

OSHA should also require that facilities maintain an archive of complete MSDSs, even after the facility is no longer using or storing the chemical.

M2. Provide Technical Assistance for Developing MSDSs

Whether or not OSHA's proposal to align its Hazard Communication standard with the GHS is finalized, the agency, in coordination with other relevant agencies, should provide technical assistance to help in the development of MSDSs that meet a standard of completeness that includes the elements listed above. OSHA may want to create an independent MSDS technical review panel with diverse representation that would be tasked with reviewing whether MSDSs

meet standards of completeness. As new information is generated regarding the health and safety of a particular substance, the corresponding MSDS would need to be updated.

III. What New Information Is Needed

Despite concerns that in this “information age,” citizens and government alike could face an information overload where the enormous quantity of data becomes unmanageable, there are still significant gaps in our knowledge that must be filled. Data gaps may be categorized as information that the government has failed to collect or information the government has not aggregated or disclosed from datasets it already possesses but that are in different locations or not accessible by the public.

Agencies should strive to collect data at local levels of detail. Generally, communities depend on information that is relevant to their local region, whether that refers to a local watershed, a neighborhood, a particular factory, or a local beach. Inclusion of fine-scaled geographic data and facility and parent company identifiers allow data users to engage in many more types of analyses than large-scale aggregations of data, such as statewide data or data aggregated by NAICS code.

N. Environmental Monitoring

A full understanding of the threats to ecosystems and human health cannot be attained without timely, comprehensive monitoring of the air, water, soil, and wildlife in key regions. For example, monitoring what chemicals are present in air, water, soil, or food is crucial to determining to which chemicals people are exposed and how exposure might occur. By linking data on numerous indicators, a fuller picture emerges with which policymakers, regulators, and citizens can identify hazards, track progress, make new scientific discoveries, and hold public and private actors accountable for damages.

N1. Collect Baseline Air, Water, and Cumulative Impacts Data before Permitting Industrial Activities

Baseline air and water testing is crucial to identifying the air and water quality impacts of industrial activities like oil and gas drilling, road building, and industrial agriculture. Agencies that oversee industries that potentially could harm air quality, water quantity or quality, or public health should develop protocols for gathering baseline air quality data and water quality data for area wells, aquifers, and surface waters prior to the proposed activity.

Because industrial practices vary from one industry to the next, and various ecosystems are impacted by these activities in different ways, regulatory agencies such as the EPA must clearly identify the parameters and criteria for baseline air, water, and soil testing. If agencies choose to accept baseline data that are collected and submitted by companies seeking permits, the data must be certified by a high-ranking company official and independently verified.

- Expand water monitoring network. The USGS and the National Marine Fisheries Service should expand the number of water monitoring systems and update the types of

contaminants they test for to include growing threats such as pesticides and gas drilling chemicals.

- Groundwater resources survey. The quantity of water in the aquifers of the United States is currently a mystery. The USGS should undertake a groundwater inventory to measure the amount of water in our aquifers, estimate the rate of decline or recharge, and provide geographic information so that the public and land use planners know the condition of underground water resources and where they are located. Additional needed information includes the connectivity between ground and surface waters to inform decision making by land-use planners and permitting agencies.
- Analyze cumulative environmental impacts. Prior to permitting or leasing decisions, agencies must gather, analyze, and disclose information describing potential and likely cumulative adverse impacts resulting from a proposed activity. Cumulative impacts are the incremental accumulation of direct, indirect, or secondary effects on the environment or workplace, including social and economic effects of a project or projects within a defined area during the present life of the project, past impacts to the area, and possible impacts in the foreseeable future. These impacts may be felt most acutely and disproportionately among members of poor or minority communities. Gathering data on potential cumulative adverse impacts should be a prerequisite for evaluating proposed activities' effects on environmental justice.

N2. Coordinate Monitoring

In order to increase collaboration and coordination across agencies and with public stakeholders in the planning and implementation of routine surveys of threatened species, environmental quality, and human exposures, relevant agencies should use existing interagency work groups or form new work groups to coordinate monitoring surveys across agencies and with states.⁷⁴ Work groups should include members representing impacted or potentially impacted communities.

To develop the methods used to investigate the public health impacts of industrial activities, chemical contaminants in products, and contaminated sites, relevant agencies should establish independent review panels to identify improved public health and environmental monitoring approaches. The independent panels should include a diverse range of experts, including those from community and public interest groups and the impacted public. The panels' deliberations and meetings must be open and transparent. Agencies should adopt the panels' recommended monitoring methods and develop training programs for staff to teach the new and enhanced methods. Independent panels and the interagency work groups should, among other tasks:

- Set information collection priorities. The amount of information that we know we need is vast. Public and private resources should be targeted to fill priority data gaps. Agencies

⁷⁴ Significant portions of the following recommendations were developed by the National Conversation on Public Health and Chemical Exposures draft Monitoring Work Group report, <http://resolv.org/site-nationalconversation/>.

should collaborate with each other and with community stakeholders to develop criteria for prioritizing such data collection activities. For example, in 2009, following press coverage that raised concerns over the air quality near American schools, EPA responded by deploying air monitors to track levels of certain air contaminants at selected schools and posted the data online.⁷⁵

- Establish panel to review contaminated sites. ATSDR should establish an independent panel to review the approaches used by ATSDR and other public health agencies to investigate the public health impacts of contaminated sites. The panel should then identify and report on best practices. The ATSDR Public Health Assessment (PHA) manual should be revised and a new protocol for disease cluster investigations should be developed.⁷⁶
- Coordinate endangered and threatened species data. The government is required to manage endangered and threatened species for survival and recovery and in so doing to monitor their population sizes and trends and human impacts on these species. Relevant agencies, such as the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and others, must establish a central coordinated database for such information, which is currently held by multiple different agencies in numerous files, so that the government and the public can have a clear picture of the state of protected wildlife populations and the success of government conservation and permitting programs [see Recommendation H2].

N3. Expand and Improve Environmental Monitoring Methods

The federal government, state and local governments, and citizens need accurate environmental monitoring data to know the quantity and identity of pollutants released by industrial sources, including industrial agriculture. This information is needed to determine whether facilities are complying with their pollution permits, to enforce emissions and effluent standards, to protect the safety of our food, and to ensure workplaces are safe. Regulatory agencies should use existing authority to levy fees upon regulated companies to fund monitoring efforts, and, where applicable, such monitoring should be a required part of a company's permit. Additionally, agencies should take fullest advantage of community organizations and community volunteers willing and able to share the responsibility of monitoring activities [see Recommendation Z3].

- Identify new monitoring technologies. New, innovative, low-cost, and low-burden environmental and public health monitoring methods need to be developed. New technologies will help to make environmental monitoring more comprehensive and suitable for assessing and predicting human exposures. EPA's Alternative Test Procedure needs to be

⁷⁵ The initial air monitoring occurred at 63 schools and tested for at least 16 key pollutants such as benzene, lead, and arsenic. See <http://www.epa.gov/schoolair/>.

⁷⁶ National Conversation on Public Health and Chemical Exposures, draft Scientific Understanding Work Group report, <http://resolv.org/site-nationalconversation/>.

modified to allow promulgation of “devices” (technology) and not just methodologies. New technologies and methodologies should not go directly to EPA subcontractors for approval. Subcontractors should not be allowed to set, or profit from, high fees assessed to promulgate new technologies.

- Require advanced monitoring equipment at facilities. EPA should require more advanced emissions and effluent monitoring technologies be installed by facilities – technologies that ensure accurate, unadulterated monitoring data. EPA should use its considerable discretionary rulemaking authority to issue a general requirement that sources subject to emissions standards for pollutants that can be monitored with continuous emissions monitoring devices (CEMs), install these devices, report their CEM monitoring results to EPA on a regular basis (no less than quarterly), and use those results to demonstrate compliance with emission standards.
- Disclose monitoring data. The raw data collected by facility emissions and effluent monitoring must be made easily accessible by the public in a timely manner and in usable formats. Agencies should provide clear descriptions of each data field and the methods by which the data were collected (metadata).
- Use community member monitors. Agencies should take advantage of residents and other private citizens with the time and interest to collect air and water samples, track wildlife, and undertake other information gathering activities [see Recommendation Z3].

O. Biomonitoring

Biomonitoring data allow regulators and the public to prioritize which harmful chemicals demand more attention and help determine what the sources of pollution are. Programs such as the Centers for Disease Control and Prevention’s (CDC) National Biomonitoring Program⁷⁷ have for many years been tracking certain environmental chemicals that people have been exposed to and how much of those chemicals actually gets into their bodies. For example, biomonitoring data from CDC (ATSDR) were used by public interest groups in Louisiana to identify the sources of dioxin that was found in hundreds of residents in the small town of Mossville, Louisiana.⁷⁸ The biomonitoring data were combined with emissions data from the Toxics Release Inventory to pinpoint the source of the dioxin – empowering local citizens to demand tighter pollution controls. However, most biomonitoring data from CDC do not allow

⁷⁷ See <http://www.cdc.gov/biomonitoring/>.

⁷⁸ Mossville Environmental Action Now, Inc., Wilma Subra, and Advocates for Environmental Human Rights, *Industrial Sources of Dioxin Poisoning in Mossville, Louisiana: A Report Based on the Government’s Own Data*, <http://www.loe.org/images/100423/mossville.pdf>.

for analyses at the state, local, or community level, which is where the data can be most effective at driving public health protections.

O1. Create a Task Force to Coordinate Biomonitoring Activities

The CDC, along with EPA and OSHA, should establish an interagency task force to coordinate federal biomonitoring efforts. State and federal public health and regulatory agencies must collaborate on generating, analyzing, interpreting, and disclosing the data. Input should be sought from communities and nongovernmental experts and public interest advocates. Agencies must use biomonitoring data as a tool to develop policies and coordinate interagency efforts to reduce the level of harmful environmental chemicals identified in people, food, and the environment.⁷⁹ Biomonitoring data must be connected to public health data (such as with the aforementioned Mossville study). The interagency task force must prioritize finding connections between exposures and health outcomes.

O2. Expand Biomonitoring

The Government Accountability Office (GAO) has identified several limitations to the use of biomonitoring data by regulatory and research agencies, namely the nonexistence of data pertaining to thousands of chemicals and vulnerable populations, especially children.⁸⁰ Drawing on the work of the interagency task force, agencies should work with experts in and outside of government, including experts from community and public interest organizations, to expand biomonitoring. Government efforts to expand biomonitoring programs should prioritize the following:⁸¹

- Development of new biomonitoring methods to detect emerging hazards. Manufacturers of chemicals should be required to develop methods for detecting the presence and fate of chemicals in human tissue. These methods and technologies must be made freely available to government agencies and the public.
- Focus on community “hot spots.” Expansion of biomonitoring programs should focus on community-level data collected from workers and residents in “hotspots,” such as regions with high concentrations of polluting facilities and environmental justice communities where members have been disproportionately exposed to harmful substances. Conversely, all biomonitoring data collections must include geographic information to identify exposure clusters and aid in discovering sources of exposure.

⁷⁹ For additional proposals and more detail, see National Conversation on Public Health and Chemical Exposures, Policies and Practices Work Group draft report, <http://resolv.org/site-nationalconversation/>.

⁸⁰ Government Accountability Office, *EPA Could Make Better Use of Biomonitoring Data*, GAO-10-419T, Feb. 4, 2010, <http://www.gao.gov/new.items/d10419t.pdf>.

⁸¹ For additional proposals and more detail, see National Conversation on Public Health and Chemical Exposures, Monitoring Work Group draft report, <http://resolv.org/site-nationalconversation/>.

- Standardize data elements. Biomonitoring efforts should collect key information in addition to the presence of chemicals, including but not limited to: geographic information and race, ethnicity, and age of participants. Biomonitoring data should also be analyzed according to type of employment (farm worker, refinery worker, nurse, etc.) and by jobs and activities that increase chances of exposure.
- Build sample banks. Agencies should build carefully designed and well managed human sample banks (e.g., blood, milk) and environmental sample banks (fish, tree bark, etc.). Such sample banks would help identify pollutants, pollution time frames, pollution sources, and scientific analyses.
- Access to personal data. Biomonitoring study participants should be offered the opportunity to receive the results of their personal biomonitoring and analyses of any physical samples collected from their property. These data should be accompanied by clear, easy-to-understand explanations that provide context for the exposure measurements and ways to get additional information.
- Integrate biomonitoring data into risk assessment. Biomonitoring data may be very useful during agency risk assessments. Biomonitoring data can provide information on who and how many people have been exposed to particular toxins, which is crucial information for the risk assessment process.⁸²

P. Public Health Monitoring

Improved tracking of environmental health trends and human exposures will help to provide a fuller picture of the environmental health threats facing vulnerable sub-populations and communities. There is a growing scientific literature regarding the risks associated with hazardous chemicals in our air, water, soil, food, and products. For example, air pollution is associated with risks for cardiovascular diseases, depression, as well as respiratory problems. Biological contaminants in water are associated with gastrointestinal diseases. Heavy metal and pesticide residues in soot and soil create neurological (particularly for children), reproductive, and other health risks. Antibiotics that are unnecessarily added to animal feed increase the risk of antibiotic resistant infections in both animals and humans. The popular media reminds us regularly about the potentially hazardous chemicals that are in our baby products, toys, and cosmetics. Furthermore, those workers who are making the myriad products that we use are exposed on a daily basis to a wide range of toxic chemicals.

⁸² See EPA's "The 4-Step Risk Assessment Process," <http://www.epa.gov/ncea/risk/exposure.htm>.

There is currently no tracking system that takes into account this range of exposures. As a result, we are inadequately prepared to develop educational and prevention programs, surveillance programs, and improved environmental health policies.

There are, however, mechanisms to capture exposures from individual media. Although the existing data can certainly be improved, the problem from a public health perspective is that the data do not “talk” to each other. We have air pollution data, but community members cannot see how the quality of the air affects asthma or chronic lung diseases. We have drinking water data, but the public cannot connect this information to increases in gastrointestinal outbreaks within their communities. Furthermore, we cannot look at multiple exposures in any given public data source. It must be noted that exposure data is only half of the equation; there is a need for better health outcome data, as well.

To fill the remaining gaps, federal agencies must coordinate to improve the quantity, quality, and understanding of public health outcomes and provide this information to the public in easy-to-understand ways that emphasize methods to reduce or eliminate these environmental health threats.⁸³

Because so many federal agencies are responsible for pieces of environmental exposure data, such as EPA, FDA, USDA, DOE, and HHS, to mention a few, an interagency approach will be needed.

State and local health departments are not in an economic position to step in at this point, and therefore, they must receive financial and technical assistance from the federal government. While states can be excellent laboratories for data collection, their lessons learned must be incorporated into standardized national data collection.

P1. Expand Environmental Public Health Tracking

The CDC’s National Environmental Public Health Tracking (EPHT) Program⁸⁴ is a positive step toward informing the public about health trends. However, the data are scant and are collected at too large a geographic scale. CDC’s EPHT should be expanded to include all 50 states. Public health data should be tracked at the census tract level to allow researchers to better identify local causal factors – although proper consideration must be given to personal confidentiality, especially regarding conditions with low incidence or low prevalence rates.

Data should be centrally located in a publicly accessible online database. The public should have easy, online and searchable access to complete “raw” data sets (obviously with personal identifiers redacted for privacy). Data should be geocoded to allow researchers to easily map the

⁸³ For additional recommendations, see National Conversation on Public Health and Chemical Exposures, Monitoring Work Group draft report, <http://www.resolv.org/site-nationalconversation/work-group-reports/monitoring/>.

⁸⁴ See <http://www.cdc.gov/nceh/tracking/default.htm>.

data. Special attention must be devoted to tracking the health conditions of workers, such as farm workers, factory workers, oil and gas workers, and health care providers.

A work group should be established to devise strategies for federal and state agencies to track more health conditions. The Council of State and Territorial Epidemiologists (CSTE), an organization of member states and territories representing public health epidemiologists, defines and recommends which diseases and conditions are reportable within states and to CDC. A work group of CSTE environmental epidemiologists, federal epidemiologists, and other experts drawn from the public interest community should be created to review current reporting procedures and identify gaps, especially concerning known environmental exposure data and potential health outcomes.

Additional funding from Congress will be needed in order to achieve this recommendation, with special attention placed on ascertaining and addressing exposures to pregnant women and young children.

P2. Connect Human Exposures to Health Outcomes in Health Care Reform

There is an increased emphasis on prevention in new health care reform initiatives, but integration of environmental health is still largely invisible. Two key issues are responsible: 1) Many health care professionals are not trained to assess or address environmentally related symptoms or diseases, and 2) there is no explicit reimbursement mechanism to add a significant environmental health assessment or to include the time for anticipatory guidance about reducing potentially toxic individual exposures. Both of these issues must be addressed or we will continue to miss opportunities to make the connection between exposures and human health effects.

Agencies such as the National Institute of Environmental Health Sciences (NIEHS), NIOSH, and the National Center for Environmental Health at CDC should collaborate to identify ways to better provide occupational and environmental health preparation for all primary care providers. The Bureau of Health Professionals within the Health Resources Service Administration (HRSA) of the Department of Health and Human Services should prioritize grant funding for the integration of environmental health into basic health professional education, as well as continuing professional education for those already in practice.

P3. Develop Environmental Health Standards for Electronic Health Records

The nascent integration of electronic health records (EHR) into health care facilities is providing us with an unprecedented opportunity to educate health professionals and collect environmental

exposure data. Access to this information promises improved monitoring of community health and improved community health outcomes.⁸⁵

Federal agencies that administer health programs such as the Centers for Medicare & Medicaid Services and the Veterans Administration should lead an effort to set comprehensive environmental health data standards for EHR. A set of questions should be integrated into the individual EHR that would help characterize environmental exposure history. The collected exposure data must then be connected to health outcomes data and aggregated at the community or larger scale.

Q. Industrial Agriculture and Aquaculture Data

The threats to environmental and public health posed by the processes and practices of modern, large-scale industrial agriculture are well documented.⁸⁶ The rapidly growing aquaculture sector also presents a risk to ecosystems and public health originating from, among other threats, concentrated animal wastes, introduction of pharmaceuticals into marine habitats, introduction of invasive species, and food safety concerns. However, significant data gaps regarding these operations and their impacts continue to hinder communities from taking action to protect families, workers, economies, and ecosystems. Appropriate federal agencies must take action to fill the data gaps identified below.

Q1. Require Greater Reporting and Disclosure from Concentrated Animal Feeding Operations (CAFOs)

The U.S. Department of Agriculture (USDA) and the EPA must collect and disclose basic data on industrial animal facilities. The public needs to know how many CAFOs are operating, of what size and type, and where. These basic data regarding a major industry are not available to the public and are unknown even by the government agencies in charge of regulating such facilities.

- CAFO pollution must be regularly reported. Emissions from manure management and other polluting processes, as well as releases to waterways, should be monitored and reported regularly and the results verified and publicly disclosed. EPA should also consider improvements to and clarifications of the continuous release reporting system (under

⁸⁵ P. Elison-Bowers, Uwe Reischl, Jaime Sand, and Linda Osgood, “Electronic health record: the impact on public health.” *Northwest Public Health*, 2010, <http://www.nwpublichealth.org/archives/s2010/changes-in-information-management-technologies-the-impact-on-public-health>.

⁸⁶ See, for example, Environmental Integrity Project, *Raising a Stink: Air Emissions from Factory Farms*, http://www.environmentalintegrity.org/news_reports/Report_Raising_Stink.php and Pew Commission on Industrial Farm Animal Production, *Putting Meat on the Table: Industrial Farm Animal Production in America*, http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Industrial_Agriculture/PCIFAP_FINAL.pdf.

CERCAL and EPCRA)⁸⁷ as it applies to CAFO emissions, including i) criteria for establishing that releases from CAFOs are continuous, ii) centralization of CAFO release reports in a publicly accessible online database, iii) a requirement that any CAFO taking advantage of the reduced reporting burden applicable to continuous releases submit an annual emissions report to be posted on the online database, and iv) a requirement that all continuous release reports, including notices of statistically significant increases, be submitted to EPA.

- Chemical use in livestock should be disclosed. Data on the use of antibiotics, hormones, and other pharmaceuticals at CAFOs should be reported and disclosed, along with the type and quantity of pharmaceuticals and the presence of residues in food products (meat, eggs, dairy) and manure.
- Disclose Nutrient Management Plans. The EPA should provide timely, searchable, online access to all National Pollutant Discharge Elimination System (NPDES) permits and the required Nutrient Management Plans submitted by CAFOs. Nearly all CAFOs are required to have a NPDES permit from EPA in order to operate. As part of this permitting process, CAFOs must produce a Nutrient Management Plan (NMP) that outlines the practices that will be implemented to meet specific discharge limits and waste management requirements. According to EPA rules, “Permitting authorities are required to review the NMPs and provide the public with an opportunity for meaningful public review and comment.”⁸⁸ Thus far, it has been very difficult for nonprofit organizations, researchers, and others to access these nutrient management plans to see what they contain and to assess their effectiveness.

Q2. Improve Tracking and Disclosure of Food Safety Data

The USDA, FDA, EPA, and other relevant agencies should develop a comprehensive system to track food and food products, including where products were sold and delivered in order to track tainted food and prevent illnesses. One possible system could be modeled on the “grinder log”⁸⁹ – currently required for ground meat products – and should include tracking numbers related to a log of country and company of origin, date received, and other data. The data should be available to the public in as close to real-time availability as possible on an agency website that provides easy searchability.

USDA is in the process of implementing its Public Health Information System (PHIS), designed to support a data-driven approach to the inspection of meat, poultry, and eggs. According to USDA, PHIS will “revolutionize the Agency’s ability to utilize data in real time to inform all

⁸⁷ U.S. Environmental Protection Agency, “Continuous Release Reporting Process,” <http://www.epa.gov/oem/content/reporting/crelproc.htm>.

⁸⁸ See http://www.epa.gov/npdes/regulations/cafo_final_rule_preamble2008.pdf.

⁸⁹ See FSIS at USDA (9 CFR 320; 381.175), <http://www.marlerblog.com/uploads/file/8080.1Rev4.pdf>.

aspects of its domestic inspection, import inspection, and export activities.”⁹⁰ This system must be operated as transparently as possible and provide for comprehensive public access to its data.

Q3. Expand GMO Labeling and Research on Health and Safety

The use of genetically modified organisms (GMO) has grown tremendously over the last decade, yet many data gaps remain regarding the ecological and public health impact of GMOs, and the public is largely in the dark about where the products are grown and what products contain GMOs. Consequently, relevant agencies such as the USDA, FDA, and EPA must take action to fill the data gaps surrounding GMOs. Relevant agencies must require food and pharmaceutical products that contain GMOs to be labeled as such and list where more information on health and safety may be found. Manufacturers and growers of products that do not contain GMOs must be allowed to label their products as free of GMOs.

Additional research on the ecological, economic, and public health impacts of GMOs should be conducted to establish their potential risks. All scientific studies and methodologies considered by government agencies to must be fully disclosed to the public. The Risk Management Agency (RMA) of the USDA must solicit and review academic and other peer-reviewed research on the negative and positive impacts of the GMO products it is considering for Biotechnology Endorsements. The RMA must disclose and make available on its website all scientific data and analyses, including research data submitted by industry, used by the agency when considering Biotechnology Endorsements for GMOs, and before decisions are made.

Q4. Require Reporting and Disclosure of Pesticide Use and Illnesses

California is currently the only state that gathers and makes publicly available comprehensive data on the quantities, types, and locations of use of agricultural pesticides.⁹¹

- Track farm pesticide applications. USDA should work with EPA and states to require reporting by farms of their use of pesticides. Such reports must include geographic data so that researchers may evaluate the potential impacts on nearby water bodies, aquifers, schools and playgrounds, wildlife and habitats, organic farm fields, homes, and other areas that could be harmed by pesticide drift, residues, and metabolites. Detailed information on the chemical identity – including the identity of all so-called inert ingredients – quantity, and manner of application should also be reported. Such data are vital to monitoring the health impacts of pesticide exposure to farm workers, their families, and nearby communities.
- Track the fate and health impacts of pesticide use. Field research and monitoring should be expanded to explore the fate of pesticides and their metabolites, the extent of pesticide drift

⁹⁰ See http://www.fsis.usda.gov/Fact_Sheets/FSIS_PHIS_Improving_the_Safety_of_Imports_&_Exports/index.asp.

⁹¹ California Department of Pesticide Regulation, Pesticide Use Reporting (PUR), <http://www.cdpr.ca.gov/docs/pur/purmain.htm>.

and the areas affected (especially homes and schools), the amount of residue on foods and the risk it poses, impacts on sensitive wildlife such as amphibians and birds, among other questions, and more. Monitoring efforts conducted by community members should be encouraged and the data collected integrated into government research (see Recommendation Z3). Pesticide-related illnesses, poisonings, and accidents must also be tracked and disclosed (see, for example, the multi-state program at CDC's NIOSH, the Sentinel Event Notification System for Occupational Risk (SENSOR)⁹²). Physicians should be required to report pesticide-related illnesses, poisonings, and accidents to relevant agencies, and those agencies should compile the reports and make them publicly available.

Q5. Require Reporting and Disclosure of Federal Farm Spending

Key data are missing from USDA programs, including the Commodity Programs and the Conservation Reserve Program (CRP). USDA should collect from program beneficiaries and publicly disclose the watershed impacts of the subsidized practices, including impacts on erosion, biodiversity, and water quality. USDA should identify recipients of federal funds, including names of farm operators and the locations and characteristics of farms. Special attention should be given to outcome-based measurement and reporting.

R. Chemical Safety Data

Information on chemical safety represents one of the largest data gaps identified by public interest advocates. With more than 84,000 chemicals in commerce in the United States,⁹³ the health impacts of each chemical may never be known. The EPA regulates chemicals under the Toxic Substances Control Act (TSCA), the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and other laws. Numerous federal agencies evaluate and regulate the safety of chemicals. For the vast majority of chemicals, regulators and the public have very little information to characterize their hazards. The lead regulatory agency for chemicals, the EPA, is highly constrained by the flawed TSCA, with little authority to require chemical testing. The expansion of chemical-dependent industries and the relentless development of new chemical substances, as well as the daughter products that result from the mixing of chemicals in the environment, exacerbate the threat posed by having so little knowledge available to the public.

R1. Evaluate and Disclose Health Risks of Chemicals

Although current statutes impose many restrictions on the ability of federal agencies to collect data, agencies still possess, create, or have access to a large amount of scientific data regarding the health and safety of many chemicals. This scientific research must also be easily accessed by members of the public. Providing broad access to chemical health and safety information would

⁹² See <http://www.cdc.gov/niosh/topics/pesticides/overview.html>.

⁹³ TSCA Inventory. <http://www.epa.gov/oppt/newchemicals/pubs/inventory.htm>.

enable numerous stakeholders to act independent of any regulatory action initiated by government. Businesses could use the data to choose safer substitutes or alternatives to harmful chemicals. As one advocates for safer chemicals asserts, “Better access to information may also drive markets to demand more information and to migrate away from chemicals known or suspected of being risky.”⁹⁴ Certainly, potentially impacted people, the general public, community organizations, and public interest groups have a right to know what the government knows about the potential hazards and risks associated with the thousands of chemicals moving through our economy and environment every day.

- Disclose all chemical health and safety data. Using existing agency authority, EPA, the National Toxicology Program, FDA, and other agencies must work to disclose all health and safety studies of chemicals, as well as the sources of funding and the methodologies of the studies. Such information should be provided through, among other media, searchable agency websites. EPA’s Health and Environmental Research Online (HERO) database is a strong example of one type of public access to health and safety data.⁹⁵ The HERO database, containing more than 300,000 scientific articles, is free, searchable, and open to the public. However, as much as is possible, the public should have access to the quantitative “raw” scientific data produced by the studies, in addition to the abstracts currently available.
- Agencies should create a targeted dataset for chemical health and safety. EPA and other regulatory agencies, in consultation with the public, should identify a targeted dataset for all chemicals, with which informed assessments may be conducted. The targeted dataset should include toxicological, epidemiological, clinical, chemical use, chemical transport, and exposure data adequate to allow determinations that new and existing chemicals in commerce do not endanger the public or the environment. Chemical production and processing information must also be included. The targeted data set should be reviewed periodically and adjusted by EPA and other regulatory agencies to incorporate new scientific understanding of data necessary to assess critical health endpoints.⁹⁶
- Agencies should develop a prioritization method for chemicals of concern. Agencies should consult with public stakeholders to develop a prioritization method focused on chemical safety and health, with special emphasis on sensitive populations. Agencies must prioritize assessments of chemicals that are disproportionately impacting environmental justice communities. Based on the prioritization method, agencies should identify those chemicals

⁹⁴ Richard A. Denison, “Ten Essential Elements in TSCA Reform,” *Environmental Law Reporter*, 2009, http://www.edf.org/documents/9279_Denison_10_Elements_TSCA_Reform.pdf.

⁹⁵ See <http://cfpub.epa.gov/ncea/hero/index.cfm?action=content.home>.

⁹⁶ For additional background and recommendations, see National Conversation on Public Health and Chemical Exposures, Scientific Understanding Work Group draft report, <http://resolv.org/site-nationalconversation/>.

posing the greatest potential hazards and risks and conduct further analyses, including seeking potentially safer substitutes.

- Agencies must reassess chemical health and safety assessments as more information is discovered. All stages of a chemical health and safety assessment must be conducted in a transparent manner that seeks out and responds to perspectives from experts in the public interest community. EPA's Community-Focused Exposure and Risk Screening Tool (C-FERST) is one tool for communicating chemical risks to communities.⁹⁷ Regulators should also monitor chemical production and use data and respond to major increases for particular chemicals by reassessing their health and safety standards.

R2. Include Nanomaterials in Information Collection and Disclosure Activities

The nanotechnology industry has expanded far faster than our understanding of the potential risks to worker safety and public and environmental health presented by nanomaterials. The public also lacks a clear picture of who is manufacturing nanomaterials, what products contain such materials, and where those products end up.

- Assess the health and safety of nanomaterials. Safety testing of nanomaterials is way overdue. Thousands of products containing nanomaterials are already on the market and are being used by consumers worldwide, most often without awareness that the products contain nanomaterials. Nanomaterials must be included among the substances being assessed as called for in the previous section.
- Label products with nanomaterials and disclose production data. The EPA should require manufactures to report the quantities and types of nanomaterials they are manufacturing and the fate of these products. These data should be publicly available and searchable on an agency website. EPA should require the labels on products containing nanomaterials, identifying the type of nanomaterials, potential health risks, and where more information on health and safety may be found [see Section L. Product Labels and Label Websites].
- Increase transparency of the National Nanotechnology Initiative (NNI).⁹⁸ The NNI coordinates the nanotechnology research activities of 25 federal agencies.⁹⁹ Greater disclosure and access to health and safety research and grant activity undertaken by the NNI is needed.

⁹⁷ EPA's Community-Focused Exposure and Risk Screening Tool (C-FERST) is in development in the EPA's Office of Research and Development as part of the Community Action for a Renewed Environment (CARE) program. According to EPA, "The C-FERST tool will be used to assess multiple chemical risks and, eventually, non-chemical risks such as socioeconomic status. These cumulative risk assessments take into account many factors that can impact exposure and toxicity in a community." See http://epa.gov/ord/sciencenews/scinews_c-ferst.htm.

⁹⁸ See http://www.nano.gov/html/about/home_about.html.

⁹⁹ See <http://www.nano.gov/>.

In testimony before a House committee overseeing the NNI, one scientist stated that the existing lack of transparency so hindered the safe development of nanotechnologies that “[he] would suggest any assessment of [environmental health and safety] research investment, relevance or direction that is *not backed up by publicly accessible project-specific data* is worthless” [italics in original].¹⁰⁰

R3. Require Disclosure of Oil and Gas Development Chemicals

Numerous incidences of air and water contamination as the result of oil and gas extraction activities have occurred. However, the chemicals used in the various stages of oil and gas development, from exploration to drilling, well stimulation, production, and transport, are frequently concealed from public knowledge. All appropriate agencies should require reporting and disclosure of the specific identities of all chemicals used throughout the entire lifecycle of oil and gas exploration and development. The locations (such as specific well sites and fluid mixing facilities) and quantities of chemicals used and stored should be disclosed so people who live nearby know what chemicals could be in their air, soil, groundwater, and drinking water.

The standards promulgated by the state of Wyoming serve as a useful starting point for federal disclosure rules.¹⁰¹ Key features of such federal disclosure rules must include the following:

- Companies must disclose specific chemical data. Companies engaged in oil and gas exploration and development must be required to publicly disclose the specific identity and CAS # of each chemical used during extraction, including drilling and stimulation activities, the concentration of the chemicals (e.g., pounds per gallon), the final quantity of chemicals used, and any additional technical information needed to analyze the fate of the chemicals. The disclosure must occur both before drilling activities begin and also upon completion. Disclosure prior to activities allows government regulators and community members the opportunity to review in advance what chemicals companies plan to use. A report subsequent to drilling would disclose what chemicals were actually used, in case unforeseen circumstances had forced the company to alter the mix of chemicals originally disclosed. The chemical constituents of any waste materials produced by the oil and gas development activities must also be disclosed, along with the location of any disposal facilities used. This information is essential to any attempt to investigate potential contamination of water, air, and soil.
- Companies must publicly disclose through multiple formats. Agencies should require companies responsible for oil and gas development activities to disclose chemical identity,

¹⁰⁰ Testimony of Andrew Maynard, House Committee on Science and Technology, April 16, 2008, http://www.nanotechproject.org/process/assets/files/6689/maynard_written_april08.pdf.

¹⁰¹ See the Wyoming Oil and Gas Conservation Commission’s Current Rules and Regulations, Chapter 3, <http://soswy.state.wy.us/Rules/RULES/7928.pdf>.

location and date of use, and other data elements on publicly accessible websites that are easy for community members to search. In addition, companies must provide notices in local newspapers and direct mailings to residents and businesses in areas potentially impacted by their activities, both prior to commencement and at their conclusion.

R4. Create an Information Clearinghouse for Safer Chemicals, Materials, and Processes

Relevant agencies should coordinate the development of a publicly accessible and searchable information clearinghouse for data on alternatives to industrial chemicals, materials, and processes that pose less of a hazard or no hazard to human and ecological health. A chemical policy approach emphasizing primary prevention depends upon the availability of safer alternatives to existing chemicals and industrial processes. Research into safer alternatives is being conducted by industry, nonprofit research organizations, and government laboratories. The expansion and widespread dissemination of information on both research and processes already in use would encourage the adoption of safer chemicals, thereby preventing pollution, protecting worker health, and reducing the risks of industrial accidents.

- Agencies should develop best practices for evaluating alternatives. Relevant agencies such as the EPA, National Toxicology Program, NIOSH, and the ATSDR should coordinate an evaluation of existing methodologies for conducting alternatives assessments and identify best practices and provide easy public access to this information. The agencies should prioritize alternatives that can be readily adopted by industry and the public at low cost.
- Regulatory agencies should develop sources of data and build databases of safer chemicals and industrial processes. Federal agencies should collaborate on the creation of a publicly accessible website featuring a comprehensive database (or databases) of chemicals and their known or suspected risks, as well as a list of safer substitutes and their characteristics. The website also should provide searchable access to safer and more secure industrial processes and source reduction methods available for specific industries. To populate the databases, agencies should draw on the vast expertise within private sector industries, among other sources. Alternatives assessments should be integrated into routine reporting by regulated facilities.

R5. Create a Right-to-Know Regime for Energy Customers

Similar to the drinking water right-to-know notices that water utilities are required to mail to customers,¹⁰² EPA and other relevant agencies should develop a public notice system to notify energy utility customers about key environmental and health data related to energy production. Notices, available on utility websites and through direct mailings, should include data on the sources of energy generation, the emissions and other wastes (such as coal ash) associated with the energy production, and other related environmental and public health data.

¹⁰² The “Drinking Water Right to Know” provisions of the 1996 Safe Drinking Water Act amendments created an innovative new model for informing and engaging water consumers. The resulting annual Consumer Confidence Reports provided by most water suppliers are supposed to provide information on water sources, potential threats to water quality, contaminants detected in the water, and potential health affects. An evaluation of that program’s effectiveness and recommendations for how the program might be further strengthened are beyond the scope of this report. A more in-depth look at this groundbreaking program could prove invaluable and might suggest ways that the model could be improved and replicated in other areas. See <http://water.epa.gov/drink/local/index.cfm>.

IV. Environmental Justice

Despite promising advances by the federal government during the 1990s to address and reduce the disproportionate harm from environmental degradation afflicting indigenous, low-income, and minority communities, very little progress has been made in more recent years. A recent report by the Lawyers' Committee for Civil Rights Under Law describes an "environmental justice crisis."¹⁰³ Numerous federal agencies play a role in addressing these problems, and improved transparency and public participation should be a key feature of these efforts.

The EPA has begun several initiatives aimed at improving implementation of the President Clinton's executive order on environmental justice¹⁰⁴ and improving the agency's interactions with environmental justice (EJ) communities. EPA's Environmental Justice Office recently released interim guidance on incorporating environmental justice into the agency's process for developing regulations,¹⁰⁵ which is now open for public comment.¹⁰⁶ Additionally, EPA recently released *EJ 2014*, a strategy for integrating EJ considerations throughout agency actions.¹⁰⁷ These new measures must be evaluated in light of the concerns of community groups outlined below.

S. Define Environmental Justice Concepts and Collect Data

Despite environmental justice being a federal issue for years, there is a surprising lack of clarity on key concepts. Environmental justice stakeholders both inside and outside of government are constrained in their engagement with agencies on this issue when there are no clear and consistent explanations of how agencies designate an environmental justice (EJ) community, including geographic boundaries and population characteristics. If agencies defined the meaning, vision, goals, and strategies of environmental justice, it would enable greater participation by interested individuals and organizations.

¹⁰³ Lawyers' Committee for Civil Rights Under Law, *Now is the Time: Environmental Injustice in the U.S. and Recommendations for Eliminating Disparities*, June 2010, <http://www.lawyerscommittee.org/admin/site/documents/files/Final-Environmental-Justice-Report-6-9-10.pdf>.

¹⁰⁴ Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 1994, http://www.epa.gov/environmentaljustice/resources/policy/exec_order_12898.pdf.

¹⁰⁵ EPA's Action Development Process, Interim Guidance on Considering Environmental Justice during the Development of an Action, <http://www.epa.gov/environmentaljustice/resources/policy/considering-ej-in-rulemaking-guide-07-2010.pdf>.

¹⁰⁶ See <http://www.epa.gov/compliance/environmentaljustice/resources/policy/ej-rulemaking.html>.

¹⁰⁷ See <http://www.epa.gov/compliance/environmentaljustice/resources/policy/plan-ej-2014.html>.

Moreover, too few data about vulnerable populations are available for policymakers or the public to understand the scope and breadth of environmental injustices. The collection and disclosure of key data elements, not limited to racial, ethnic, and socioeconomic data, are required to adequately evaluate who is being harmed disproportionately by adverse impacts of government-funded or government-permitted activities. For example, according to the Government Accountability Office (GAO), “EPA apparently does not have sufficient data and modeling techniques to be able to distinguish localized adverse impacts for a specific community.”¹⁰⁸ This finding showed that the agency could not adequately analyze the economic impacts of Clean Air Act rulemakings.

S1. Define Criteria for Assessing Environmental Justice Impacts

Agencies should develop criteria for identifying the need for and scope of EJ impacts from different types of governmental and industrial activities. The criteria should be applied to identify potential disproportionate and adverse impacts resulting from agency decisions. For example, when determining water quality standards, EPA should consider higher-than-average subsistence fish consumption rates by tribal populations in particular regions of the country. Such considerations would prevent exposing citizens to unsafe levels of contaminants.¹⁰⁹ Agencies should also include as a criterion the cumulative adverse impacts of any proposed agency action. Assessments of cumulative impacts should consider exposures to hazardous materials, public health and environmental effects from combined emissions and discharges from all sources of pollution within the impacted geographic area, as well as the impacts on sensitive populations and other socioeconomic factors.

S2. Identify and Collect Relevant Data to Address Environmental Justice Concerns

To inform agency EJ efforts, agencies whose actions may impact EJ communities must identify sources and methods for obtaining and analyzing relevant data and widely disseminate these data and their sources. Relevant agency actions include issuing permits, enforcing laws and regulations, conducting public meetings, providing grants and loans, and other activities. This requirement extends beyond the EPA and includes the FDA, CPSC, USDA, and others. Analysis shows that the nation’s various racial and ethnic communities experience differences in the prevalence and severity of disease and exposure to toxic sources. Therefore, data collection standards should include data on race, ethnicity, and socioeconomic characteristics to assess and address disparities. Collection of racial and ethnic data should be universal and standardized.

¹⁰⁸ Government Accountability Office, *EPA Should Devote More Attention to Environmental Justice When Developing Clean Air Rules*, GAO-05-289, July 2005, <http://www.gao.gov/new.items/d05289.pdf>.

¹⁰⁹ National Environmental Justice Advisory Council, *Fish Consumption and Environmental Justice*, November 2002 (revised), http://www.epa.gov/compliance/ej/resources/publications/nejac/fish-consump-report_1102.pdf.

T. Executive Order 12898

Issued by President Bill Clinton in 1994, Executive Order (E.O.) 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations – focuses federal attention on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities. The executive order directs federal agencies “to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations” and to “develop a strategy for implementing environmental justice.”¹¹⁰ The executive order includes provisions for access to information and public participation by minority and low-income communities. Agencies are required to evaluate their programs, policies, planning, and public participation processes, enforcement, and rulemakings. These federal activities govern the actions of thousands of industrial facilities and numerous state and local government initiatives, as well. The implementation of the executive order has seen few successes, and the goals of the order are far from being reached.

T1. Recommit to Full Implementation of E.O. 12898

The White House and agencies should issue official statements recommitting the entire administration to full and vigorous implementation of the executive order. All federal agencies should commit to regularly reviewing and reporting on their activities furthering implementation of E.O. 12898.

T2. Expand the Coverage of E.O. 12898

President Obama should encourage agencies not specifically mentioned in E.O. 12898 to voluntarily abide by the directives of the order.¹¹¹ Several agencies with high potential for environmental justice impacts are currently not covered by the E.O. For example, the Federal Energy Regulatory Commission and the Nuclear Regulatory Commission, as independent agencies, are merely “requested to comply.” The administration should consider producing an additional executive order to accomplish this goal.

T3. Issue Model for Agency Implementation of E.O. 12898

Very few agencies have issued a Secretary-level Order implementing E.O. 12898.¹¹² The Department of Justice (DOJ) should issue a model order that could be adapted by other agencies. In addition to ensuring that the “adverse impacts” addressed in the E.O. are defined broadly, and

¹¹⁰ See <http://www.epa.gov/lawsregs/laws/eo12898.html>.

¹¹¹ *Ibid.* 102.

¹¹² The Department of Transportation issued an implementation order in April 1997. (http://www.fhwa.dot.gov/environment/ejustice/dot_ord.htm). As mentioned earlier, the EPA issued its “Interim Guidance on Considering Environmental Justice during the Development of an Action” in July 2010 (<http://www.epa.gov/environmentaljustice/resources/policy/considering-ej-in-rulemaking-guide-07-2010.pdf>).

that federal fund recipients are subject to the requirement that they analyze equity impacts, this model order should also include provisions for executive agencies to report at regular intervals on their activities furthering E.O. 12898.

U. Enforcement Data for Title VI, Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964¹¹³ prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. When the harmful impacts of pollution and other forms of environmental degradation fall disproportionately on racial and ethnic minorities, they constitute violations of civil rights. Publicly available data are critical to making informed policy decisions and enforcing the civil rights of minority and low-income populations. Access to enforcement information would aid efforts to hold agencies publicly accountable for their performance in enforcing Title VI and for ensuring nondiscrimination in the programs they fund.

U1. Improve Public Disclosure of Civil Rights Complaints

The DOJ currently requires that federal agencies maintain a log of complaints.¹¹⁴ While complaint backlogs are a significant problem in Title VI oversight, it is difficult for the public to access and review information on complaint processing. Annual publication of complaint logs, both online and off, would help to focus attention on agencies that have backlogs and encourage those agencies to improve their enforcement records. When available, data should be disaggregated by race, ethnicity, income, geographic location, and other socioeconomic factors.

U2. Ensure Sufficient Data Are Collected to Ensure Title VI Compliance

The DOJ should also work with agencies to ensure that applicants to federally assisted programs and funding recipients collect and report data sufficient to establish and maintain an effective program of compliance reviews. These practices include the public reporting of demographic data, discrimination complaints, descriptions of public notification and participation practices, access to services by people with limited English proficiency, and other relevant information. Funding recipients should produce and make available evaluations of the burdens and benefits of federally funded programs and activities on minority populations, as well as describing procedures used to ensure non-discrimination.

¹¹³ See <http://www.justice.gov/crt/cor/coord/titlevi.php>.

¹¹⁴ Pursuant to the Coordination Regulations, 28 C.F.R. § 42.408(d). <http://cfr.vlex.com/vid/42-408-complaint-procedures-19675907>.

V. Environmental Justice Guidance for Agency Staff

There is little doubt that government personnel across federal agencies addressing public health, environment, and safety intend to be fair and helpful in their actions. However, without proper guidance, training, and tools, the best of intentions can go awry. The reality is that EJ concerns touch on every aspect of agency rulemakings (from preliminary scoping through all the stages leading to promulgation and implementation), permitting decisions, and data collection efforts. However, EJ training and guidance often seem to be restricted to an office specialist meant to address EJ problems when they arise, often in isolation. Agencies need to fully integrate EJ considerations into the entire fabric of their activities to identify and avoid EJ issues before they become problems.

Guidance should require that agency staff and work groups meaningfully engage with and consider the impacts on minority, low-income, and indigenous populations. The EPA is developing a plan, *Plan EJ 2014*, to integrate environmental justice considerations throughout all agency activities.¹¹⁵ Reproducing similar guidance within other relevant agencies and achieving full implementation should be a priority.

V1. Develop Comprehensive Guidance on Environmental Justice

Agency environmental justice guidance should include a description of E.O. 12898 and its requirements. Guidance should address, at a minimum, how to incorporate EJ considerations into all rulemaking, permitting, and compliance and enforcement activities. EJ communities are frequently impacted as a result of non-compliance activities at industrial facilities. Regulatory agencies should consider impacts on EJ communities when issuing notices of violations and address impacts to EJ communities when issuing enforcement notices and compliance orders. Agencies should require environmental justice analyses to determine whether significant disproportionate adverse effects would be caused by an agency action. Training for agency staff and contractors to help them identify potential environmental justice problems should be provided. Agencies should include mechanisms for continuous community engagement and requirements to demonstrate how public recommendations and concerns are considered and integrated into final agency outcomes.

V2. Engage the Public in Development of Environmental Justice Guidance

Agencies should implement new and consistent opportunities for EJ communities to provide input into the development of agency guidance, as well as mechanisms to receive feedback from agency staff and contractors. Sufficient agency resources should be dedicated to the development and dissemination of the guidance and for providing answers to staff questions as necessary. Best practices and successful projects should be identified and shared with the public, stakeholders, and across government, including state and local agencies.

¹¹⁵ See <http://www.epa.gov/environmentaljustice/resources/policy/plan-ej-2014.html>.

V3. Address Environmental Justice Impacts in NEPA Guidance

The White House Council on Environmental Quality (CEQ) coordinates agency compliance with the National Environmental Policy Act (NEPA). The CEQ's current guidance regarding consideration of EJ during NEPA reviews was adopted in 1997.¹¹⁶ Agencies should review their compliance with CEQ's EJ guidance under NEPA and report regularly on their performance and specific plans for improving compliance. The CEQ should amend its NEPA regulations to expressly identify environmental justice as an issue in NEPA compliance documents.¹¹⁷

V4. Coordinate Environmental Justice Strategies throughout Government

Improved coordination and collaboration among multiple levels of government is needed to respond to the concerns of EJ communities. Federal, state, local, tribal, and territorial governments need an integrated system for identifying EJ issues and directing agency resources and attention to their resolution. For example, the EPA's Office of Environmental Justice and the CDC's National Center for Environmental Health should collaborate to create meaningful processes by which community comments regarding public health concerns can impact the pollution permitting process.¹¹⁸ Agencies should develop and conduct national and regional environmental justice trainings that address agency-specific needs and focus on interagency cooperation. The recent revival of the Interagency Working Group on Environmental Justice¹¹⁹ and White House coordinating actions¹²⁰ are positive steps, but much remains to be done.

W. Identifying and Engaging EJ Communities

Environmental justice community members are often not adequately represented at government-run events and meetings. Federal agencies must make a special effort to identify community stakeholders and reach out to them. The data collection efforts called for in Recommendations S2 and U2 above would provide the information needed by federal agencies to help identify community members who are disproportionately impacted by environmental degradation. Yet simply identifying community stakeholders is not adequate. In order to build

¹¹⁶ See <http://www.doi.gov/oepec/EJ%20under%20NEPA.pdf>.

¹¹⁷ *Ibid.* 102.

¹¹⁸ National Conversation on Public Health and Chemical Exposures, Serving Communities Work Group draft report, <http://resolv.org/site-nationalconversation/>.

¹¹⁹ See <http://www.epa.gov/environmentaljustice/interagency/index.html>.

¹²⁰ U.S. Environmental Protection Agency, "Obama Administration Convenes Environmental Leaders at Historic White House Environmental Justice Forum Featuring Five Cabinet Secretaries," Dec. 15, 2010, <http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/d85d6575a572e913852577fa007bd1f3!OpenDocument>.

the trust of communities, serious, concerted, repeated efforts to reach out to, communicate with, and thoroughly engage community members are needed.

W1. Make Special Efforts to Identify Environmental Justice Communities

Agencies should develop methods for characterizing and identifying the EJ communities relevant to a particular action, identifying EJ stakeholders and their interests. Agencies should also work with non-environmental groups, community-based organizations, faith groups, and others to better reach EJ community members.

Government agencies must place additional emphasis on identifying tribal stakeholders and ensuring that relevant communications reach those who may be in remote regions and may not have reliable Internet access. Agencies should encourage states to deal with federally recognized native tribes on a government-to-government basis.

W2. Continually Engage Environmental Justice Communities

Agencies should develop methods for effectively engaging relevant stakeholders, adopting methods that go far beyond the minimum of “public notice and comment.”

- Use a diverse set of methods to interact with and engage the public. These methods should include community workshops, trainings, surveys, posters, and civic and community-based organization activities [see Recommendation AA3 and others in Chapter V].
- Establish a central point of contact to assist EJ community members. The agency point person will help with information access and will serve as a visible and accessible advocate of the public’s right to know about issues that affect health or the environment.
- Recognize and be sensitive to cultural characteristics of EJ communities. EJ communities need access to information in their languages and technical assistance to use the information to address their concerns. Agencies should provide document translations and translators at public meetings when necessary. Agencies must develop communication methods that are sensitive to cultural differences in EJ communities.

X. Capacity Building for Environmental Justice Communities

Often, the barrier to greater participation by EJ communities and individuals is not a lack of interest but a lack of capacity, either perceived or actual. Federal agencies should recognize EJ communities’ unique need for assistance accessing, understanding, and using environmental and public health information to achieve protection for their families, neighborhoods, workplaces, and ecosystems. Communities are also in need of expanded opportunities to participate in the decision making processes. Until agencies recognize and address these hurdles, EJ community participation will continue to languish.

X1. Provide Funding and Training to Build Capacity in EJ Communities

Agencies should determine to what extent EJ communities have the capacity to monitor federal actions, such as site clean ups, and provide capacity-building assistance where necessary.¹²¹

Agencies often struggle to gather local-level knowledge and learn what EJ communities need. Additional grant resources to allow EJ community groups to travel to and participate in meetings and advisory panels would help community members share ideas with policymakers.

X2. Prioritize Environmental Justice Communities to Receive Supplemental Environmental Programs Benefits

Enforcement settlements between EPA and violators of environmental laws may include Supplemental Environmental Programs (SEPs).¹²² SEPs are “actions taken by an individual or company that are in addition to what is required to return to compliance with environmental laws... They offer a unique opportunity to further our Nation’s goals of ensuring clean air and water, safe food, better waste management, and expanding the public’s right to know about their environment.”¹²³ Environmental justice communities should be priority recipients of SEP benefits and funding, but not in lieu of actual enforcement actions and civil and criminal penalties.

The development of SEPs should be used as an opportunity for greater community engagement. According to EPA’s SEP policy, “In appropriate cases, EPA should make special efforts to seek input on project proposals from the local community that may have been adversely impacted by the violations. Soliciting community input into the SEP development process can: result in SEPs that better address the needs of the impacted community; promote environmental justice; produce better community understanding of EPA enforcement; and improve relations between the community and the violating facility.”¹²⁴

X3. Expand and Provide Access to the Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT)

The Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT) is a draft tool being developed at EPA to identify areas with potentially disproportionately high and adverse environmental and public health burdens, using “18 select federally-recognized or managed

¹²¹ Excerpted from U.S. Environmental Protection Agency, *Environmental Justice and Federal Facilities: Recommendations for Improving Stakeholder Relations between Federal Facilities and Environmental Justice Communities*, October 2004, <http://www.epa.gov/compliance/ej/resources/publications/nejac/ffwg-final-rpt-102504.pdf>.

¹²² See <http://www.epa.gov/oecaerth/civil/seps/>.

¹²³ U.S. Environmental Protection Agency, *Beyond Compliance: Supplemental Environmental Projects*, <http://www.epa.gov/oecaerth/resources/publications/civil/programs/sebrochure.pdf>.

¹²⁴ See <http://www.epa.gov/oecaerth/resources/policies/civil/seps/fnl-sup-hermn-mem.pdf>.

databases and a simple algorithm to identify such areas.”¹²⁵ EJSEAT employs four indicator categories of datasets: 1) environmental, 2) human health, 3) compliance, and 4) social demographics.

EPA should allow the public to access and use this screening tool. Public use and feedback will help the development of the tool. In addition, EPA and other agencies should adopt the recommendations submitted by the National Environmental Justice Advisory Council (NEJAC) in the May 2010 report, *Nationally Consistent Environmental Justice Screening Approaches*, which relate to the future development of EJSEAT.¹²⁶

¹²⁵ See <http://www.epa.gov/compliance/ej/resources/policy/ej-seat.html>.

¹²⁶ See <http://www.epa.gov/compliance/ej/resources/publications/nejac/ej-screening-approaches-rpt-2010.pdf>.

V. Empowering Communities

Providing high-quality environmental information to the public is a crucial first step toward a more open and accountable government. However, access to information goes beyond just posting databases online. Another key component is the provision of tools and opportunities that equip community members to play an active role in protecting environmental and public health. This includes providing access to planning and scoping meetings, holding informational hearings and public listening sessions, and providing training to build the capacity of community groups to effectively use government data.

For their own benefit, agencies must engage the public at all stages of policymaking and continually involve public stakeholders throughout the course of their regulatory processes. As the National Research Council discovered in a 2008 study, “When done correctly, public participation improves the quality of federal agencies’ decisions about the environment.”¹²⁷ Active public engagement in the policymaking process can improve policy outcomes while building trust in government – two consequences that make government more effective, efficient, and hopefully more rewarding for our public servants.

Y. Plain-Language Communications

The people of the United States are a diverse group, comprised of individuals with a broad range of educational backgrounds and experiences. However, threats to public health, workplaces, and ecosystems affect us all. It is crucial that the information we need to protect ourselves and the opportunities to petition government officials are clearly communicated to and understood by everyone, no matter what their background. One should not need a law degree to access government records, a Ph.D. in toxicology to understand the health threat of the cement plant across the river, or be an expert in public policy to know how to comment on an environmental impact statement.

Government systems and procedures often are complex and inscrutable to ordinary people, whereas regulated industries and political insiders often have the resources and expertise needed to navigate environmental policymaking processes. This disadvantage against everyday people can effectively shut out large sections of the public from the democratic processes that should be readily available to them.

Numerous intermediaries have arisen to help aggregate, disseminate, and interpret government data for community members. These individuals and organizations provide a crucial role, connecting people to the information they need in formats they can use. To continue to enable

¹²⁷ The National Research Council, “Public Participation in Environmental Assessment and Decision Making,” <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12434>.

these intermediaries, agencies must provide information along a full spectrum of formats, from complete, “raw” data sets in downloadable formats to brief summaries of agency proposals in the plain-language format described in this subsection, and various levels of detail between the two. All formats are needed and actively used by the public. Simple summaries and plain-language communications should not be viewed as a substitute for disclosing information in detailed, complete formats.

Y1. Provide Environmental and Public Health Information in Easy-to-Understand Language

Agencies should provide information in plain, easy-to-understand language that concisely interprets scientific, technological, legal, and bureaucratic language. Agencies should consider creating work groups to develop standards for plain-language communications so that all communities’ information needs are met. Such standards should include, but not be limited to, the following:

- Information should be presented in a context that explains what the information is, why it is important, and how it may be used.
- Agencies should clearly present information in a relevant context, explain how it affects the public, and suggest steps the public might take to protect public and environmental health.
- Summaries of documents should indicate where in the document key pieces of information may be found.

As agencies collaborate to develop standards and methods for easy-to-understand communications, special attention must be given to poor and minority communities who suffer disproportionately from environmental threats. Environmental justice community members should be consulted to help inform the process of identifying culturally appropriate communication styles. Moreover, attention must be given to cases where languages other than English should be used to communicate with the public. One good example is EPA’s use of Spanish and Vietnamese translations on the agency’s Gulf oil spill response website, reflecting the large Vietnamese-speaking and Spanish-speaking populations in the Gulf of Mexico who need the information.¹²⁸ Agencies must ensure that people with impaired vision or hearing have easy access to information, as well.

Plain-language communications are especially needed in the following cases:

- Permits. Permits allowing industrial activities are often hundreds of pages long and contain highly technical material. Public interest advocates confront these obstacles when trying to evaluate proposed permits and comment within the short time that agencies provide. Agencies must provide easy-to-understand summaries of permits that clearly explain what

¹²⁸ See <http://www.epa.gov/bpspill/>.

the proposed activity is, what the ecological and public health impacts might be, and what mitigation plans, if any, are proposed [see Recommendation A2].

- **Risk and hazard communication.** Agencies must clearly explain topics of concern, such as risks from particular chemicals found in communities or what a measurement in “parts per billion” should mean to an average community member seeking guidance [see Recommendations L2, M1, and R1].
- **Worker safety.** All workers should have access to health and safety data in formats that they can easily understand, allowing them to make the decisions to protect their own health and that of their families. Non-English translations are needed for many workers, such as farm workers [see Recommendation M1].
- **Information for patients and health care professionals.** Doctors, nurses, and other health care providers have a unique and often urgent need for easy-to-understand information. Agencies should provide simple language fact sheets that describe chemical and workplace health hazards and what preventive and cautionary steps should be taken, especially by vulnerable populations such as children, the elderly, pregnant and nursing mothers, and immunocompromised individuals.
- **Emergency response instructions.** Emergency responders, many of whom are volunteers, must have clear, easy-to-understand instructions for dealing with emergencies [see Recommendation K1].

Y2. Explain Government Operations and Statutes

Agencies should be sure that, in addition to scientific and technological data, information on how agencies operate and the laws that govern their actions are explained in simple and accurate language so all people may be armed with the knowledge of how the wheels of government turn and what opportunities for involvement are available. Additional recommendations for communicating complex bureaucratic procedures are provided in the following section [see Section Z. Training Community Members].

Y3. Deliver Information through Diverse Modes

Agencies should consider how to get information to people where they live, work, learn, shop, play, and pray, using means that do not necessarily require Internet access. Information reaches people through a wide range of media. Government agencies should use as many avenues for communication as possible. During the aftermath of Hurricane Katrina, many homeowners lost personal computers or other access to the Internet. Federal agencies had information that they wanted to convey to homeowners regarding how to safely gut houses that had been flooded and could be growing harmful molds. Without computer access, important health and safety information was not available. Agencies should consider providing information through alternate means such as radio and television, printed posters and pamphlets, telephone hotlines, face-to-face meetings, and information kiosks.

Z. Training Community Members

Government data are of less use to communities that do not have enough capacity to process and use the data. Although numerous public interest organizations have painstakingly cultivated the knowledge and skills to exploit data, tools, and government systems, many smaller organizations and community members are stymied. Complicated bureaucratic procedures and highly technical subject matter can dissuade citizens from exercising their right to know and participating in our democracy. To make effective use of government resources, some capacity building is needed to train citizens and activists how to use these resources.

Funding for much of the activities outlined below will be difficult to secure considering current budget constraints. Where agencies have the authority, the regulated industry should be compelled to fund these accountability measures through fees levied during the permitting and leasing processes and during compliance enforcement actions.

Z1. Provide Training on Environmental Databases

As the government makes progress increasing the quantity and quality of databases available to the public, the need for training on how to access, process, and understand the data grows.

- Consult the public to identify priority databases for training. Agencies, in consultation with public stakeholder groups, should identify priority data sets for which community members would benefit most from training. Beyond instructions on how to access the database and conduct searches, community trainings should explain the significance of the information, the significance of the data in terms of public health and ecosystems, and how to interpret potential health and safety risks.
- Use a wide range of tools to conduct trainings. The use of online tools such as webinars, listservs, and wikis are excellent opportunities to efficiently instruct interested stakeholders at low cost. Tutorials using video or computer graphics can also get users started on their own analyses of government data. A database that lacks such instructions on how to use and understand the data can be unusable for segments of the public.
- Make GIS software and training widely available. To facilitate public use of data, agencies should provide Geographic Information Systems (GIS) software and data layers free to the public, especially to schools and libraries, as well as training in the use of GIS.

Z2. Provide Training to the Public on FOIA Process

Instructions for citizens seeking to submit Freedom of Information Act (FOIA) requests should be easy to access on agency websites and should clearly explain the requirements and procedures involved. Information on the process for requesting a FOIA fee waiver should be readily available and simple to understand. Submitting a FOIA request and requesting a fee waiver should be a straightforward and easy task, accomplishable by any interested citizen. Any response to a FOIA request must include specific information on how the records search was conducted, i.e., who

conducted the search, where, and for how long. Responses must also clearly explain options for appealing a denial [see Section E. Freedom of Information Act (FOIA)].

Z3. Enable Community Monitoring of Ecosystems, Workplaces, and Public Health

As federal and local budgets continue to suffer in the aftermath of the economic crisis, adequate resources for monitoring the quality of air, drinking water, and soil, as well as workplaces and public health, are uncertain. Exploiting the cadres of dedicated citizens wanting to track the health of their local ecosystems would make strides toward filling crucial data gaps. Many community groups around the nation have trained volunteers to take air and water samples, monitor wildlife, and even take human hair and tissue samples for biomonitoring. These concerned community members are seeking baseline data and data to measure the decline or progress of drinking water wells, streams, the air outside refineries, and numerous other systems.

- Train volunteer monitors and validate community science. Federal and state agencies should provide the training, funding, and certification of results needed to ensure the information gathered by these volunteers meets rigorous scientific standards. Where applicable, monitoring equipment and supplies should be provided at low or no cost to volunteer monitors, along with training in their proper use and how to post monitoring data online. The data collected by volunteer monitors can then be trusted and used to track pollution levels, the impact of environmental remediation projects, changes in wildlife populations, and countless other environmental and public health trends.
- Use traditional knowledge as an information resource. Native peoples and other groups maintain generations' worth of often detailed data concerning environmental quality and the dynamics of ecosystems. Federal agencies could benefit greatly from drawing on this knowledge as a resource.
- Use Community-Based Participatory Research (CBPR). CBPR is “an approach to health and environmental research meant to increase the value of studies for both researchers and the community being studied.”¹²⁹ Agencies should use such research models to fill important data gaps regarding disproportionate adverse environmental and public health impacts on environmental justice communities and other vulnerable populations while serving to engage and educate communities and strengthen collaborations among communities, agencies, and academics.
- Agencies should leverage NGO capacity. Agencies should expand the use of Memoranda of Understanding (MOUs) between government entities and NGOs, labor groups, or

¹²⁹ RTI–University of North Carolina (for the U.S. Department of Health and Human Services), *Community-Based Participatory Research: Assessing the Evidence*, July 2004, <http://www.ahrq.gov/downloads/pub/evidence/pdf/cbpr/cbpr.pdf>.

community-based organizations for the purpose of collecting data in exchange for watershed or habitat protections or other community benefits.

- Community monitoring should inform permitting and lease processes. Pollution permits and resource extraction permits and leases should incorporate the use of community-designed and/or community-operated monitoring systems.

Z4. Expand Grants for Technical Assistance and Training

Grants provide funding for communities to analyze scientific and technical data, allowing them to fully participate in policy discussions or to train others on technical issues. One example of a technical assistance and training grant is included in EPA's Superfund program.¹³⁰ Agencies should:

- Prioritize technical assistance and training grants during budget planning. Agencies should make funding for community training and technical assistance grant programs a priority and seek additional revenues for such programs. Agencies should evaluate opportunities to levy fees on regulated industries to fund capacity building at NGOs and community-based organizations (i.e., the Polluter Pays principle)
- Identify areas for expanded grants. Agencies that provide community capacity building grants should place an emphasis on identifying stakeholders in environmental justice communities most disproportionately impacted by pollution. Input from community groups should be weighted heavily when identifying grant priorities.
- Improve access to grants by smaller community-based organizations. Many small NGOs and community-based organizations do not have the resources or capacity to apply for highly competitive federal grants. As a result, many worthy but small organizations find themselves shut out of these valuable funding opportunities. Agencies should identify ways to simplify and streamline the application and grant disbursement processes. New uniform federal standards for awarding grants should ensure that such organizations, which often enjoy direct ties to impacted communities, can successfully compete for grant funding.

¹³⁰ See <http://www.epa.gov/superfund/community/tag/>. Also, EPA's Community Action for a Renewed Environment (CARE) Program has been mentioned as an example of successful community engagement, providing support to the community, especially when dealing with local officials on brownfields redevelopment. This is a competitive grant program providing technical assistance and money for collaborations to reduce toxics exposures. See <http://www.epa.gov/care/> for more information. See also the C-FERST community risk assessment tool mentioned earlier in this report.

Z5. Provide Educational Materials about Government Operations

A lack of knowledge about agency functions and their authorizing environmental and health statutes interferes with the ability of the public to engage the government and seek solutions to environmental and public health problems.

- Provide training on how to negotiate government systems. Training should cover how to engage with political and regulatory decision makers, work with government agencies to obtain environmental and public health information, and build partnerships with government, academia, and public health officials.¹³¹ Similar to compliance assistance offered to the regulated community, agencies should have an advocate on staff for community groups and the general public who will assist them, or, at the least, provide a curriculum that can be accessed online and downloaded. [see Recommendation Y2]

AA. Community Engagement

The recommendations above dealing with plain-language communications and training community members could improve communications between government and the public and build the capacity of citizens to play an active role solving environmental and public health problems. To make the most of an informed, capable public, agencies must engage communities by providing forums and tools for meaningful public participation in policymaking. As one federal regulator aptly describes, “By providing the opportunity for stakeholders to provide information, raise concerns, and suggest improvements, a regulator can strengthen its policymaking process and reach better, more well-informed decisions.”¹³² Although the recommendations in this subsection are directed at federal agencies, because state and local governments are frequently the entities administering environmental and public health programs, federal agencies should require these policies, partnerships, and standards be adopted and implemented by state and local governments as part of memoranda of understanding or delegations of authority [see Recommendation G1].

AA1. Establish Formal Policies and Mechanisms for Community Engagement

Agencies should establish policies that formalize mechanisms for substantive community engagement in government decision making, beginning at the earliest possible stages and continuing throughout environmental policymaking processes. Government agencies should develop and document a community engagement plan and evaluate agency progress yearly. The plan should provide guidance on outreach to the broadest range of impacted community

¹³¹ *Ibid.* 117.

¹³² Gregory B. Jaczko, Chairman, U.S. Nuclear Regulatory Commission, “Stakeholders and the Public: An Integral Part of Effective Regulation,” Oct. 12, 2010, <http://www.nrc.gov/reading-rm/doc-collections/commission/speeches/2010/s-10-039.pdf>.

members. In addition to the information access and capacity-building policies described throughout this report, an effective community engagement plan should include access to dispute resolution processes and consider diverse cultural issues among communities such as language differences and distinctions among socioeconomic groups. Agencies should incorporate into the plan communications systems to regularly collect feedback from communities and address the feedback in subsequent revisions to the engagement plan.¹³³

Agencies should develop internal guidance for implementing community engagement plans and for improving community partnerships. Guidance should stress how greater transparency and public participation can help the office reach its goals more effectively and efficiently. The benefits of early community engagement outweigh the initial costs. Such benefits include preventing lawsuits and community anger and distrust; preventing bad policy; and reducing inefficiencies and unintended consequences that would otherwise result from a less informed policy. EPA's recent Community Engagement Initiative¹³⁴ from the Office of Solid Waste and Emergency Response offers a number of valuable ideas.

- Develop community engagement training programs. A trained staff can better understand the needs and perspectives of community members and can more effectively communicate with stakeholders. Training and resources for agency personnel, contractors, and especially field staff and others who work directly with the public should include:¹³⁵
 - Translations of technical and scientific materials into formats that are easy for laypeople to understand
 - Methods for identifying stakeholders and techniques for public outreach and communication
 - Techniques for facilitating meetings and managing dialogue
 - Dispute resolution techniques
- Address intra- and interagency communications. Agency guidance should identify ways to bridge the various roles of agency staff, improving interoffice communication. Citizens have often encountered obstacles working with government agencies as a result of one office not being aware of what another office was doing.
- Develop guidance on communicating with EJ communities. Agencies should coordinate to identify successful methods of outreach to environmental justice communities. Guidance for agency staff should emphasize the value of building trust with community stakeholders and

¹³³ *Ibid.* 117.

¹³⁴ See http://www.epa.gov/oswer/docs/cei_imp_plan_0510.pdf.

¹³⁵ Marina Psaros and Lindsay Campbell, *Results from NEPA Public Involvement Study*, June 2, 2006, <http://web.mit.edu/dusp/epp/music/pdf/NEPA06.pdf>.

highlight cases where cultural misunderstandings have been overcome, allowing improved communication and collaboration [see Chapter IV: Environmental Justice].

AA2. Engage NGOs and Community-Based Organizations (CBOs) through Partnerships

Agencies should identify partner nonprofit public interest organizations that have the capacity to provide valuable services to all members of the public, especially services that agencies are unable to provide for budgetary reasons or other logistical obstacles. NGOs and CBOs have long served as intermediaries between government and the public, providing such services as searchable access to environmental databases,¹³⁶ clear descriptions of health hazards in consumer goods,¹³⁷ and interpretations of complex policies.¹³⁸

Agencies should work to establish NGO and CBO partnerships that bring together community organizations around particular issues, such as setting pesticide tolerance standards, or regional interests, such as natural gas drilling in the Marcellus Shale. Agencies should facilitate communication and collaboration among these public interest groups and the public, connecting people to NGOs and CBOs that can provide services that government cannot provide. EPA's Community Action for a Renewed Environment (CARE) program is well respected and could serve as a model for other offices and agencies.¹³⁹

Partners should meet regularly, have frequent communications, and agree to clear timetables, objectives, and goals. Such groups would nurture strong and complementary relationships between government and public stakeholders. The interactions between the agency and the NGOs and CBOs should be transparent, with meetings, minutes, and reports readily available to the public.

AA3. Set Minimum Standards for Public Participation in Meetings

Agencies should develop clear standards for accommodating public participation in public hearings, meetings, forums, listening sessions, and other events. Such standards should address how and when events are held so that community members have ample opportunities to attend. The standards should include mechanisms for including public input on meeting agendas, goals, objectives, and the scheduling of follow-up meetings, as well as mechanisms for making supporting materials and data accessible to participants. Accommodations should be made to

¹³⁶ The Right-to-Know Network, <http://www.rtknet.org/>.

¹³⁷ *Ibid.* 63.

¹³⁸ Reporters Committee for Freedom of the Press, Federal Open Government Guide, <http://www.rcfp.org/fogg/index.php?i=pt1>.

¹³⁹ The CARE program is a competitive grant program providing money and technical assistance to community partnerships interested in reducing toxic pollution in their local areas. See Note 129.

ensure that materials and translators are available for the languages spoken by affected communities.¹⁴⁰

- Communicate beyond “Public Notice and Comment.” Agency communications with the public should include but extend beyond the traditional notice in the *Federal Register*. Outreach efforts should be expanded to include local print media and websites and draw on the communications abilities of local organizations that maintain their own memberships, listservs, websites, newsletters, and social networks. All public comments delivered at meetings should be transcribed and posted in the docket and made accessible to those without computer access through written transcripts available at local libraries. Records and documents generated from previous, related public meetings should also be provided to participants.
- Identify stakeholders. Agencies should identify and reach out to stakeholders and community members, including environmental, health, labor, religious, political, community-based, and other organizations, as well as students, youth, and groups and individuals who may not have historically participated in decision making processes. Notices of public meetings and other communications should be sent via multiple modes to all residents and businesses potentially impacted by an action. Impacted areas may be defined by geographic boundaries, geological or hydrological boundaries (such as aquifers), socioeconomic criteria, or other criteria. The agencies should disclose what efforts were taken to reach out to communities and to which communities and stakeholder groups.
- Hold public meetings at accessible locations and times. Venues for public hearings, meetings, listening sessions, and other events should be accessible to community members. Meeting schedules should consider travel times, shift-work schedules, and schedule conflicts such as holidays and agricultural harvests/plantings. Agencies should schedule enough meetings to accommodate the largest feasible number of community members. Agencies should webcast events or at least record meetings and make video and audio recordings accessible immediately following the event.
- Use online technologies to increase participation. Greater use of interactive online technologies such as webcasts, webinars, and wikis will help level the playing field for participation by stakeholders who cannot afford or manage to travel to meetings.

¹⁴⁰ Some ideas in this section draw from the National Conversation on Public Health and Chemical Exposures, Monitoring Work Group draft report, <http://resolv.org/site-nationalconversation/>.

BB. Workers' Right to Participate

Workers frequently endure the greatest potential risk of chemical exposure and other environmental hazards given their proximity to hazards and their exposure over protracted periods. Workers have a clear interest in and right to participate in a variety of government functions related to health and safety at workplaces – from refineries to factories, from farm fields to hospitals. Workers provide unique perspectives and expertise often not available from the general public. By ensuring full worker participation during environmental health and safety planning and inspections, these unique and invaluable perspectives can drive improvements and efficiencies that otherwise may never happen.

BB1. Identify Opportunities for Worker Participation in Inspections and Planning

The EPA's recent move to enforce the long-neglected requirement for worker participation in Clean Air Act inspections at facilities required to undertake Risk Management Planning is a step in the right direction.¹⁴¹ Agencies that regulate workplaces, such as the EPA and OSHA, should identify additional opportunities where labor participation is possible, for both union and non-union workers.

BB2. Issue a Comprehensive Health and Safety Program Standard That Includes Employee Involvement

This new standard should require management to find and fix workplace hazards, even in the absence of conditions regulated by specific OSHA standards. The highest level of management should certify these plans. Plans should prohibit management practices that discourage reporting of injuries, illnesses, hazards (including releases to the environment), and “near-misses.” The standard should include employee training to address potential hazards, including those specific and unique to particular workplaces. The standard should require an annual training plan, with training provided in languages understood by employees. Other means for meaningful employee participation should also be adopted, which could include active joint labor/management safety and health committees as one means to ensure such worker involvement. Violation of the Program Standard would result in citations and penalties.

BB3. Improve Access to and Quality of Safety Data

The reporting of workplace illnesses and nonfatal injuries and incidents in private industry is rife with underreporting problems. Reports are often erroneous, incomplete, or distorted. Moreover, the widespread existence of incentive and discipline programs discourages workers from reporting injuries and illnesses. Unfortunately, OSHA inspections are triggered by these data and consequently, OSHA may never visit a facility with an inaccurately low injury and illness rate.

¹⁴¹ New Jersey Work Environmental Council and the BlueGreen Alliance, “Workers to Help EPA Prevent Chemical Accidents,” June 23, 2010, http://www.njwec.org/PDF/Press/6.23.10_EPA_Policy_PRelease_Final.pdf.

- Issue citations for underreporting workplace injuries. OSHA should seek to identify and investigate underreporting of workplace issues, aggressively issuing citations and levying substantial penalties to those employers found to be intentionally underreporting. Policy changes are needed that encourage, rather than discourage, workers to report injuries and illnesses, as well as unsafe working conditions.
- Improve access to investigation and violation data. Currently, the OSHA website allows users to access only “open” cases regarding investigations and violations. Once a case is “closed” (settled), all details about the investigation – including the violations – become unavailable. This system does not allow workers or the general public to know the historical compliance record of a facility, nor does it allow the user to determine whether there is a pattern of noncompliance for the same violations. Currently, workers have access to copies of OSHA 300 logs,¹⁴² (including 300a and 301 logs). The general public should also have access to this information, with personal information redacted.

CC. Ombudsman Offices and Complaint Hotlines

Agencies would benefit from active and well resourced ombudsman offices to receive complaints from public stakeholders and investigate agency actions. The GAO concluded that ombudsmen who handle concerns and inquiries from the public “help agencies be more responsive to the public through impartial and independent investigation of citizens’ complaints, including those of people who believe their concerns have not been dealt with fairly and fully through normal channels.”¹⁴³ Despite these benefits, the EPA’s ombudsman¹⁴⁴ was eliminated in 2002.¹⁴⁵

CC1. Create or Strengthen Ombudsman Offices

An ombudsman office should respond to all complaints in a timely manner, explaining what subsequent actions will be taken and how the complainant may follow up with the office. The office should assist the public in gaining access to agency documents and data and establish procedures by which a community can petition an agency to commence an enforcement action. The office should regularly report on the agency’s progress addressing public complaints and resolving legitimate concerns.

¹⁴² OSHA Forms for Recording Work-Related Injuries and Illnesses, <http://www.osha.gov/recordkeeping/new-osh300form1-1-04.pdf>.

¹⁴³ U.S. Department of Agriculture Recommendations and Options Available to the New Administration and Congress to Address Long-Standing Civil Rights Issues, <http://www.gao.gov/new.items/d09650t.pdf>.

¹⁴⁴ EPA Ombudsman Office Background, <http://www.pogo.org/pogo-files/alerts/natural-resources/nr-epa-20010101.html>.

¹⁴⁵ Environment News Service, “Whistleblower Seeks Restoration of Independent EPA Ombudsman,” Jan. 8, 2008, <http://www.ens-newswire.com/ens/jan2008/2008-01-08-095.html>.

Ombudsman offices must be impartial and autonomous and have operational and administrative independence. The ombudsman should only be terminated “for-cause” and should not be subject to at-will employment. The ombudsman should receive complaints directly without intermediaries. When requested, reasonable efforts must be taken to assure the anonymity of people seeking the ombudsman’s assistance. The ombudsman must have access to all information necessary for responsible resolution of the disputed issue.

CC2. Provide Public Enforcement Hotlines

In addition to an ombudsman office, agencies should provide toll-free hotlines and websites to receive complaints regarding violations of environmental statutes, such as the Endangered Species Act and the Federal Land Policy and Management Act. All messages received should be recorded and documented in a publicly available, searchable database. Any follow up actions and results of investigations regarding the complaint must also be disclosed via the same searchable website, along with the identities and locations of alleged incidents and violations. Complaints may be submitted anonymously. If the caller chooses to provide a mailing address, e-mail address, or phone number, the agency must provide a response that the complaint was received, a contact name for further questions, and a follow-up message announcing the status of the investigation.

DD. Whistleblower Protections

Whistleblowers have played vital roles in protecting environmental and public health by exposing waste, fraud, or abuse within the government and at industrial facilities. Whistleblowers have defended agency science from political distortions, raised alarms over pesticide safety, disclosed shoddy inspections of oil rigs, and revealed numerous other activities that threaten health and the environment. The Whistleblower Protection Act of 1989, which was enacted to protect federal employees against reprisals for the exposure of government inadequacies, has been weakened by judicial decisions and administrative policies. Although new legislation is needed to permanently establish increased protections and new whistleblower rights, such as a right to jury trials, much can also be done administratively.¹⁴⁶

DD1. Make Whistleblower Protections a Priority

The administration should issue new directives to clarify to all agencies the expectation that whistleblowers be robustly defended from reprisals, that whistleblower claims be dealt with quickly and fairly, and that there will be zero tolerance for whistleblower harassment. Punitive processes for managers who retaliate against whistleblowers in their performance reviews should be established. Moreover, the Labor Department should improve its communication to local and

¹⁴⁶ For additional details, see *Moving Toward a 21st Century Right-to-Know Agenda*, <http://www.ombwatch.org/files/21strtkreccs.pdf>.

state governments – and the private sector – on worker rights provided under current whistleblower statutes.

DD2. Restore and Modernize the Whistleblower Protection Act

Congress should pass legislation that grants whistleblowers the right to a jury trial in federal court; strengthens whistleblower protections for federal contractors; provides whistleblowers the right to be made whole, including compensatory damages; and strengthens due process rights.

DD3. Establish a Separate Office in Labor Department for Whistleblower Protections

The OSHA Office of Whistleblower Protection Programs (OWPP) administers first-stage investigations and initial rulings for whistleblower protections included in at least 17 statutes. However, the Department of Labor’s Inspector General found in a 2010 report that “OSHA could not provide assurance that complainants were protected as intended under the various whistleblower protection statutes.”¹⁴⁷ The Secretary of Labor should establish an independent office within the Department of Labor and separate from OSHA to handle implementation of the whistleblower protections for private-sector workers contained in numerous statutes.

¹⁴⁷ U.S. Department of Labor Office of Inspector General, *Complainants Did Not Always Receive Appropriate Investigations under the Whistleblower Protection Program*, Sept. 30, 2010, <http://www.oig.dol.gov/public/reports/oa/2010/02-10-202-10-105.pdf>.

Appendix. Contributors to the Environmental Information Initiative

The individuals below have contributed their time, expertise, and stories to this project. Affiliations are listed for identification purposes only and may have changed since the individual contributed to this project. Any omissions or errors are unintentional.

Brenda Afzal, University of Maryland School of Nursing

Cathy Carlson, Earthworks

Mathilde Allard, Air Alliance Houston

Nelson Carrasquillo, El Comité de Apoyo a los Trabajadores Agrícolas (CATA)

Guy Archibald, Southeast Alaska Conservation Council

Brownie Carson, Natural Resource Council of Maine

Michael Ash, Political Economy Research Institute

Lin Kaatz Chary, Great Lakes Green Chemistry Network

Justin Augustine, Center for Biological Diversity

John Chelen, Hampshire Research Institute

Katherine Baer, American Rivers

James Clift, Michigan Environmental Council

Bruce Baizel, Oil and Gas Accountability Project

Eboni Neal Cochran, Rubbertown Emergency ACTION (REACT)

Linda Baker, Upper Green River Valley Coalition

Aimee Code, Northwest Coalition for Alternatives to Pesticides

Caitlin Balch-Burnett, Defenders of Wildlife

Theo Colborn, The Endocrine Disruptor Exchange

Gary Bass, OMB Watch

Ken Cook, Environmental Working Group

Patricia Bauman, Bauman Foundation

Caroline Cox, Center for Environmental Health

Herbert Bedolfe, Marisla Foundation

Elizabeth Crowe, Kentucky Environmental Foundation

Michael Belliveau, Environmental Health Strategy Center

Piper Crowell, Environment America

Jonathan Betz-Zall, Community Coalition for Environmental Justice

Kathy Curtis, Clean New York

Liz Borkowski, Department of Environmental & Occupational Health, GW University

Sarah Damian, Government Accountability Project

Jose Bravo, Just Transition Alliance

Carol Dansereau, Farm Worker's Pesticides Project

Steve Brittle, Don't Waste Arizona

Sheila Davis, Silicon Valley Toxics Coalition

Charlotte Brody, Blue-Green Alliance

Joseph Davis, Society of Environmental Journalists

Nelson Brooke, Black Warrior Riverkeeper

John Dawes, Environmental Integrity Project

Robert D. Bullard, Environmental Justice Resource Center

Fe de Leon, Canadian Environmental Law Association

Allison Burket, Community Food Security Coalition

Richard Denison, Environmental Defense Fund

Liz Butler, 1 Sky

Giovanna Di Chiro, Nuestras Raices

Bridget DiCosmo, Risk Policy Report

Daryl Ditz, Center for International Environmental Law

Tracey Easthope, Ecology Center

Rick Engler, New Jersey Work Environment Council

Melissa English, Ohio Citizen Action

Carole Excell, World Resources Institute

Anna Fahey, Sightline Institute

Leslie Fields, Sierra Club, Environmental Justice Program

Rebecca Fischer, Northern Plains Resource Council

Andy Fisher, Community Food Security Coalition

Greg Fogel, National Sustainable Agriculture Coalition

Joe Foti, World Resources Institute

Kathryn Foxhall, Journalist

Jules Frieder, Calvert Investments

Mari Anne Gest, Oregon Center for Environmental Health

Lois Gibbs, Center for Health, Environment & Justice

Deborah Goldberg, Earthjustice

Patti Goldman, Earthjustice

James Goodwin, Center for Progressive Reform

Michael Green, Center for Environmental Health

Stuart Greenberg, Environmental Health Watch

Noah Greenwald, Center for Biological Diversity

Francesca Grifo, Union of Concerned Scientists

Joseph Guth, Science and Environmental Health Network / Berkeley Center for Green Chemistry

Anna Gilmore Hall, Practice Greenhealth

Chris Hamby, Center for Public Integrity

Monique Harden, Advocates for Environmental Human Rights

Susan Harley, Clean Water Action

Nichelle Harriott, Beyond Pesticides

Diane Heminway, United Steelworkers

Tom Hilbink, Open Society Institute

Liz Hitchcock, U.S. PIRG

Amanda Hitt, Government Accountability Project

John Horning, WildEarth Guardians

Marc Hudon, Nature Quebec, Great Lakes/St-Lawrence Program

Amy Huff, Huff Water & Land Law, LLC

Kimberly Irish, Breast Cancer Action

John Jackson, Great Lakes United

Frank James, Dakota Rural Action

Steve Jones, Wyoming Outdoor Council

Josh Joswick, San Juan Citizens Alliance

Sara Kendall, Western Organization of Resource Councils

Joel Kupferman, NY Environmental Law & Justice Project

Gwen Lachelt, Oil and Gas Accountability Project

Marianne Engelman Lado, Earthjustice

Benjamin Leger, Louisiana Bucket Brigade

Dave LeGrande, Communications Workers of America

Thea Levkovits, Duwamish River Cleanup Coalition

Sanford Lewis, Strategic Council on Corporate Reliability

Richard Liroff, Investor Environmental Health Network

Megan Lott, Community Food Security Coalition

Patty Lovera, Food and Water Watch

Cindy Lowry, Alabama Rivers Alliance

Sharon Mader, National Parks Conservation Association

Darryl Malek-Wiley, Sierra Club, Environmental Justice Program

Amy Mall, Natural Resources Defense Council

Anne Marsh, Heinz Center for Science, Economics, & the Environment

Joyce Martin, American Association on Intellectual and Developmental Disabilities

Conrad Martin, Stewart R. Mott Charitable Trust

Mo McBroom, Washington Environmental Council

Robert McClure, Investigate West

Patrice McDermott, OpenTheGovernment.org

Rebecca Meuninck, Michigan Network for Children's Environmental Health

Sarah Miller, Canadian Environmental Law Association

Mark Mitchell, Connecticut Coalition for Environmental Justice

Monica Moore, CS Fund

Jim Morris, Center for Public Integrity

Sean Moulton, OMB Watch

Max Muller, Environment Illinois

Alan Muller, Green Delaware

Mike Murphy, Tulane Environmental Law Clinic

Anita Nager, Consultant

Jeremy Nichols, WildEarth Guardians

Yomi Noibi, Environmental Community Action, Inc.

Marylee Orr, Louisiana Environmental Action Network / Lower Mississippi Riverkeeper

Paul Orum, Consultant

Michael Page, Public Citizen Litigation Group

Lauren Pagel, Earthworks

Juan Parras, Texas Environmental Justice Advocacy Services

Michael Pell, Center for Public Integrity

Bruce Pendery, Wyoming Outdoor Council

Jennifer Peterson, Environmental Integrity Project

Lisa Pohlmann, Natural Resource Council of Maine

David Pringle, Clean Water Action / NJ Environmental Federation

Anne Rabe, Center for Health, Environment & Justice

Carolyn Raffensperger, Science and Environmental Health Network

Jason Rano, Environmental Working Group

Jeanne Rizzo, Breast Cancer Fund

Michele Roberts, Advocates for Environmental Human Rights

Adina Rosenbaum, Public Citizen

Laura Rubin, Huron River Watershed Council

Jeff Ruch, Public Employees for Environmental Responsibility

Running-Grass, US EPA, Region 10

Reece Rushing, Center for American Progress

Ivy Sager-Rosenthal, Washington Toxics Coalition

Barbara Sattler, Environmental Health Education Center - University of Maryland School of Nursing

Eric Schaeffer, Environmental Integrity Project

Kristin Schafer, Pesticide Action Network

Darlene Schanfald, Olympic Environmental Council Coalition

Ben Schreiber, Friends of the Earth

Jon Scott, Clean Water Fund/ Clean Water Action

Annie Shattuck, Food First

Morgan Sherburne, The Nature Conservancy

Matt Shudtz, Center for Progressive Reform

Joel Shufro, NYCOSH

Heather Shute, Environment Washington

Kimberlee Wright, Midwest Environmental Advocates

Ben Shute, Rockefeller Brothers Fund

Jamie Silberberger, Women's Voices for the Earth

Tiernan Sittenfeld, League of Conservation Voters

Robin Smith, Citizens for a Healthy Community

Frank Smith, Western Colorado Congress

Kevin Stewart, American Lung Association

Wilma Subra, Subra Company

Greta Swanson, Oceana

Deb Thomas, Powder River Basin Resource Coalition

Joel Tickner, Lowell Center for Sustainable Production

Heidi Tischbein, Western Colorado Congress

Heather Trim, People For Puget Sound

Brian Turnbaugh, OMB Watch

Kathy Van Dame, Wasatch Clean Air Coalition

Shelley Vinyard, Environment America

Bill Walsh, Healthy Building Network

John Weisheit, Living Rivers - Colorado Riverkeeper

Lyman Welch, Alliance for the Great Lakes, Chicago

Kristen Welker-Hood, Physicians for Social Responsibility

Charlotte Wells, Galveston Baykeeper

Dana West, King County Wastewater Treatment Division

Celia Wexler, Union of Concerned Scientists

Bobbi Chase Wilding, Clean New York

Donele Wilkins, Detroiters Working for Environmental Justice

Rebecca Wolfe, Sierra Club

John Wonderlich, Sunlight Foundation

OMB Watch

1742 Connecticut Avenue, NW

Washington, DC 20009

web www.ombwatch.org

phone 202-234-8494

fax 202-234-8584

email ombwatch@ombwatch.org

 [@ombwatch](https://twitter.com/ombwatch)

 facebook.com/ombwatch