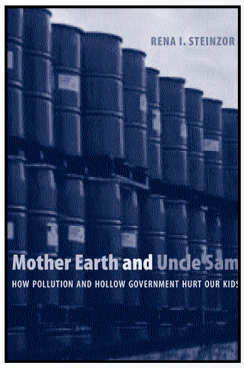

Mother Earth and Uncle Sam:

How Pollution and Hollow Government Hurt Our Kids

By Rena Steinzor

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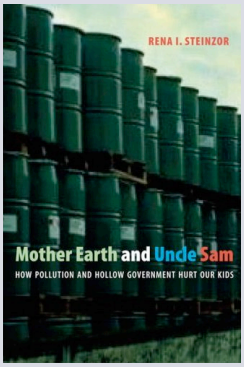

This Center for Progressive Reform white paper is a summary of the book *Mother Earth and Uncle Sam: How Pollution and Hollow Government Hurt Our Kids*, written by CPR President Rena Steinzor. The book is available for purchase from the University of Texas Press, www.utexas.edu/utpress or Amazon.com.

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The Future at Risk

One in four Americans, about 73.5 million people in all, are children 17 and younger; one in 14 are four and younger. Their parents would likely feel great agitation if they were confronted with evidence that pollution threatens their children and the children of people they know. If such a case were made, it might shatter our relative complacency about the severity and immediacy of the environmental problems we face. Yet the evidence supporting this case is all around us, however scattered and partially hidden from view. Some disconnect prevents us from recognizing these threats to children, which parents would not tolerate if they realized the truth.

Five ideas are at the heart of this book. First, as a society, we are neglecting our children's health to an extent we would find unthinkable as individual parents. Second, the primary reason for this unacceptable outcome is the erosion of the government's role in protecting public health and the environment. Third, this outcome is not where most Americans believe we should be heading. Fourth, as matters stand now, our children and their children will not inherit the legacy that we owe them: a healthy, sustainable planet. Fifth, we can arrest these developments, but only if a critical mass of Americans becomes convinced that these problems are urgent and the solutions near at hand.

The adverse health effects caused by children's exposure to toxic chemicals are subtle. Often, they do not kill outright but instead undermine their victims' quality of life. Neurological damage, diminished intelligence, chronic respiratory illness, hormone disruption, birth defects, and infertility take a great, if often hidden, toll. The damage we do to our children and their children's future is especially discouraging because we have made great progress in improving environmental quality. But those hard-fought achievements are slipping from our grasp.

By any ethical code, sense of morals, or religious belief, we have no right to impose such risks on our children. Nor do we have a moral right to consume natural resources to the point that they are not available for future generations. And yet, as we will see, the mode of analysis for all such momentous decisions is based on traditional economics, a discipline that does not effectively acknowledge present, much less future, harm. Even the damage toxic chemicals cause to children gets short shrift in such obsessive analysis, with its effects either ignored or steeply discounted.

The United States entered the 21st century on top of the world. We had the most successful democratic government, the strongest economy, and a national defense second to none. We were universally acknowledged as the most powerful, if not the most popular, nation on earth. And we got that way by combining hard work, unprecedented civil liberties, and extraordinary fortune in the natural resources that endow the country. Many of us rail against the country and its culture. Few would live any other place.

Adverse health effects caused by children's exposure to toxic chemicals include neurological damage, diminished intelligence, chronic respiratory illness, hormone disruption, birth defects and infertility.

Yet just as a new millennium of prosperity got underway, we suffered the most spectacular and terrifying attack by a foreign enemy in six decades. The events of September 11, 2001 affected our national politics in ways we have only begun to comprehend. Preoccupation with the newly named "War on Terror" swamped the public's attention, and the decision to invade Iraq ensured that we will remain distracted for years to come by a conflict that is both intractable and costly.

At this close historical distance, it is difficult to underestimate the impact of these events on the collective American consciousness. Lack of focus has gradually evolved into chronic neglect, which is exacerbated by an alarmingly weak economy. From health care to social welfare, from education to energy policy to pollution control, we find government dysfunction on a grand scale. The more dysfunctional those institutions become, and the more alienated people feel, the higher the risk that government will simply stop doing the things we cannot live without. In the privacy of our own minds, every well-informed person knows that the pressure to advance industrialization in the developing world is overwhelming. Conversely, we know that if we do not begin to do things differently, our children will inherit a planet that is in bad trouble.

Fifteen percent of American women of child-bearing age have blood mercury levels greater than what is safe. Fish consumption is the primary pathway of exposure to mercury.

Clean Food, Clean Water and Clean Air

Three, high-profile controversies substantiate this analysis, documenting the ways in which government has failed to protect children and giving us clues about how to get protection back on track.

Methylmercury in Fish

The primary pathway of human exposure to methylmercury is the human food chain, specifically fish that have absorbed this most persistent and dangerous form of the pollutant from water bodies contaminated by industrial sources. About 30 percent of mercury emissions occur naturally as a result of such events as volcanic eruptions. Anthropogenic (man-made) sources – chemical plants and coal-burning power plants, chief among them, produce the remainder.

Prenatal exposure to methylmercury at very low doses causes neurological and other developmental damage, even if the mother herself does not appear to suffer any ill effects. Fifteen percent of American women of child-bearing age have blood mercury levels greater than what is considered safe; the percentage is twice as high among Native American women living near the Great Lakes, which are heavily contaminated by this most toxic of metals. As many as 637,000 babies born annually in the United States have blood mercury levels that are considered unsafe. Such pollution is so widespread in 44 states that people are warned not to consume specific species caught in waters posted with "fish advisories."

Despite this startling evidence, the federal government's efforts to compel large chemical and power plants to use more effective pollution control technology have stalled for the foreseeable future. EPA adopted the weakest possible controls for outmoded chemical plants that are the leading domestic source of mercury pollution. The next biggest source – power plants that burn off the mercury present in coal, sending it up the smokestack and into the atmosphere – also got a pass.

Instead of requiring the installation of technology that could capture such emissions before they went into the environment, EPA insisted on allowing electric utilities to buy and sell pieces of paper that allow them to emit mercury, producing very gradual overall reductions that would not even begin until 2018. That weak rule was recently overturned by a panel of judges, and the Agency was sent back to the drawing board, further postponing national action, although several states have adopted their own, far more stringent requirements.

Perchlorate from Rocket Fuel

At 600 square kilometers, Lake Meade is one of the world's largest man-made reservoirs, providing potable water to Las Vegas and feeding the Colorado River, which in turn serves as the primary drinking water source for Los Angeles. When a new testing methodology was developed in 1997, local officials discovered that this vital resource was contaminated by perchlorate, a component of rocket fuel provided to the U.S. military by a Kerr-McGee plant in Henderson, Nevada. Similar instances of contamination have been discovered throughout the nation, wherever chemical plants made perchlorate or military bases undertook weapons testing and training. (Perchlorate is also used in explosives.) Estimates are that as many as 20 million people drink water contaminated by the chemical. Perchlorate also seeps into crops like lettuce, which are irrigated by contaminated water supplies, and the milk of cows grazing on grass grown in similar conditions.

Perchlorate interferes with the uptake of iodide by the thyroid, disrupting thyroid hormone levels and causing developmental problems in fetuses, babies, and young children. Babies in utero do not store iodide, making them vulnerable to such thyroid disruption, especially when their mothers also have iodine deficiencies that make them unable to supplement their babies' thyroid hormones. Two National Health and Nutrition Examination Surveys (NHANES) indicate that 14.9 percent of women of childbearing age and 6.7 percent of pregnant women have low urine iodide concentrations, indicating that they suffer from an iodide deficiency and may not be able to supplement their babies' supply. The wrong dose of perchlorate at the wrong moment can throw the developing child's delicate thyroid system into upheaval, interfering with normal neurological development and causing microcephaly (small head), paraplegia, quadriplegia, and other movement disorders in extreme cases.

With its own back-of-the-envelope estimates of cleanup costs coming in at levels of multiple billions of dollars, the Department of Defense (DOD) elbowed its way into the "inter-agency working group" of scientists formed to develop a scientific research agenda that

As many as 20 million Americans drink water contaminated by perchlorate, a component of rocket fuel.

would address this emerging threat. The working group's quest for reliable science was effectively sabotaged by the military, which had no business joining an expert panel designed to be impartial.

Facing stalemate within the working group, EPA and the military decided to refer the controversy to the National Research Council, part of the National Academies of Science (NAS), the country's premier scientific institution founded to give informed advice to policymakers. A blue-ribbon panel of experts convened and opened hearings on the science underlying the controversy. Among the witnesses offering testimony was an Army Colonel Dan Rodgers, a lawyer by trade, who told scientists in no uncertain terms that they would jeopardize the nation's security if their conclusions reflected too much concern for public health. In a related vein, the *Wall Street Journal* reported that the Bush administration deflected pressure for a stricter standard by issuing a gag order barring government scientists from commenting publicly on a study showing dangerous levels of perchlorate in lettuce grown in California's Imperial Valley and consumed throughout the country.

Ultimately, the NAS panel concluded that perchlorate exposure should not exceed 0.0007 micrograms per kilogram of body weight per day for babies and fetuses – a very small number in absolute terms. Meanwhile, the battle has shifted back to EPA, which faces the daunting task of translating the NAS conclusions into tangible and practical cleanup protocols, despite continued opposition by the military and its contractors. No one expects a decision any time soon.

In 2005, EPA unilaterally extended cleanup deadlines for states with pollution exceeding Clean Air Act maximums.

Ozone

Families in a dozen of the nation's largest cities are warned to keep their children inside on "Code Red" days, especially children who are among the 6.5 million Americans between the ages of five and seventeen afflicted by asthma. Childhood asthma rates have skyrocketed over the last 20 years; 85 out of every 1,000 children have the disease. Compelling scientific research shows that air pollution makes the disease worse. Ground-level ozone, or smog, is among the primary culprits. It forms when emissions of nitrogen oxides and volatile organic compounds mix with oxygen in the presence of sunlight; these chemicals are known as ozone "precursors." The main sources of these emissions are large power plants, factories, and motor vehicles of all varieties.

Congress has made several abortive efforts to place the states on a schedule to ramp down the "ambient" (outside air) levels of the most common and harmful pollutants by putting regulatory controls on the sources that emit them. The driving force to accomplish these reductions is the listing of polluted cities and their surrounding suburbs as "non-attainment areas" under the Clean Air Act. In theory, if a state fails to meet those targets, a series of stringent penalties are to be imposed until air quality improves, including withholding federal highway construction grants from state governments responsible for achieving attainment. But in practice, the states with the worst problems have run right up to the

deadlines without coming close to these public health goals. Each time a deadline looms, Congress has flinched, granting extensions as many as three times in some places. Early in 2005, as the fourth set of deadlines came due, EPA decided to simply abolish these requirements administratively, without asking Congress, replacing them with new deadlines that will not expire in many places for a few more years.

Cognitive and Political Dissonance

How did we get to the point where we accept as routine the bizarre injunction that children should not go outside on certain days? And why are we resigned to the notion that pregnant women should stop having tuna fish sandwiches for lunch? Would we be outraged if it was widely known that expectant mothers should also avoid eating salad or breastfeeding their babies? Has this troubling information been drowned out by the cacophony of other issues and preoccupations? Do people really not know anything about the risks that preoccupy environmentalists? And if, as seems likely, a critical mass of Americans is aware of at least some of the basic facts about these significant hazards to their children, why do they remain so quiet about it?

If we know about these threats – in the big picture if not in detail – do we simply accept them as unalterable facts of modern life? Or do we recognize them, feel upset, but perceive that we are powerless to respond? Or, and this is the most discouraging alternative, do we know about them and yet feel no responsibility to future generations, figuring that our kids will just have to fend for themselves?

A fourth and more likely alternative is that we know on some level that we are in trouble, but cannot come to grips with the realization because we have lost any sense of what to do. Psychologists define "cognitive dissonance" as a conflict between two cognitions, including knowledge, attitude, emotion, belief, or behavior. Such conflicts mean that people can be troubled and angry, have difficulty maintaining these mental states, and revert to denial. An analogous dissonance exists in politics: people's concerns are directly contradicted by what the government actually does and yet the public does not retaliate for such discrepancies at the polls. While public opinion and policymaking in a government as large and complex as ours have always suffered from these discrepancies, environmental threats to children compel us to confront a new strain of what could be called "political dissonance," one that is highly resistant to the checks and balances established by the U.S. Constitution, including freedom of the press.

Polling shows consistently large majorities of people both support strong environmental protection and believe that the government is not doing enough to safeguard our natural resources. Yet the country has a president, as well as dependable majorities in both houses of Congress, who are willing to ignore such sentiments. Most people deem fatal pediatric asthma and irreversible damage to babies' neurological development unacceptable. And

most people suspect that these outcomes exist and that they are linked to pollution. But the public has yet to send a message to politicians that it wants these problems fixed.

Whatever the polls say about what people think now, though, my goal here is to convince readers that conservatives are wrong in at least one crucial, overriding sense. If people knew what pollution could mean for children, and if they could see a path to a solution, they would compel the government to shift course dramatically, beginning real efforts to repay our debt to the future.

In large measure, the paradoxical gap between public support for environmental protection and government dysfunction is the inevitable byproduct of how difficult it is to fully understand the causes, scope, and severity of environmental problems. Problems that seem obvious – you can see smog in the air and feel breathless if you jog on a bad ozone day – have multiple sources and affect different people in different ways. Policymakers analyze them from every angle, avoiding responsibility for taking action through this "complexification" of the diagnosis and cure.

Policymaking Netherworld

Most Americans do not follow the intricate details of policymaking in Congress, much less the bureaucracy, on a daily basis. Yet American democracy works because citizens assume what Professor Michael Schudson calls a "monitorial role," staying enough in touch with the broad outlines of what government is doing to correct its course as necessary. By far the most important implication of complexification is its devastating effects on the public's ability to play this monitorial role. The result is the creation of a policymaking netherworld where decisions are made on the basis of principles, values, and rules that are far below the level at which the public is able to pay attention.

"Cost-benefit analysis" is the preeminent example of such invisible policymaking. On its face, this approach makes a lot of sense: We need to figure out how much money we will need to pay to clean up pollution – the "cost" side of the equation – and then make sure that the "benefits" we will gain are worth it. Each day, all of us make numerous analogous decisions: How much does it cost to heat our houses and how high should we turn the thermostat? Should we purchase less, high-quality food or more, less nutritional food? Will it cost more to drive than to take public transportation and what is the additional cost worth in terms of time saved and convenience?

But shift the questions a bit, and the supposedly simple calculation becomes much more difficult. A child gasps for breath in a hospital emergency room while a power plant a 1,000 miles away sends a letter to its congressional representatives urging them to vote against legislation that would require the installation of smokestack scrubbers. If the legislation passes, the power plant executives warn, the cost of electricity will rise enough that the elderly poor in

a nearby inner city won't be able to keep their air conditioning operating during the worst days of summer. A pregnant factory worker sits down to a fish dinner caught by her husband in a nearby lake; years later, her child has learning disabilities that block her progress in school. But the owners of the mercury cell, chlor-alkali factory down the road explain patiently to government that if they converted to a cleaner technology, it might raise the cost of laundry bleach. One person's "costs" are literally another person's "benefits," and translating, much less weighing, the crosscurrents of ethical responsibility raised by these scenarios cannot be easy.

Proponents of cost-benefit analysis claim with remarkable temerity that they have all these questions worked out. In cost-benefit analysis everything has a price tag, at least in theory, and justice is served by balancing the two sets of numbers against one another. Economists begin by quantifying – or translating into monetary terms – the amount it will cost polluting firms to prevent or reduce their emissions, usually on the basis of industry estimates. In areas where no readily marketable technology exists to accomplish those reductions, these estimates typically over-estimate actual costs by large margins.

Having tallied inflated costs, the economists turn to the benefits side of the equation, quantifying in monetary terms (or "monetizing") the value of the lives harmed by pollution or, conversely, the monetary value of the lives that would be saved if the pollution at issue is reduced. The going rate of a human life in the environmental context is about $6 million. But the economists do not leave the process of monetization there. Six million dollars is what a life would be worth if the person drops dead on the spot. But what if people suffer from illnesses, like cancer, that do not become apparent for 20 or 30 years or more? The economists argue that in the case of "long latency diseases" (diseases that take many years to emerge after exposure), we should ask how much money we would have to invest today to come up with $6 million in 20 or 30 years. This mathematical strategy, commonly referred to as "discounting," reduces the value of human life to a fraction of the 6 million in current dollars, making it far more difficult for life to compete with costs in the neat equations that emerge from such analyses.

While they have little trouble working out the value-of-life-in-comparison-to-death figure, economists struggle with the value of a decreased quality of life that falls short of death, such as the loss of a few IQ points by children exposed to toxics in utero. The going rate for a single IQ point is about $8,800. Or, in other words, the monetary value of the injury suffered by a child who lost five IQ points as a result of lead mercury poisoning would be less than the down-payment on the average small house in many major cities. Low-balling the "price" of such short-term health effects usually means taking no action because the benefits side of the equation comes up short in comparison to industry cost projections.

Admittedly, we cannot afford to ignore the costs of taking action. We may be the richest country on earth, but resources are finite and many expensive problems confront us. But acknowledging these realities means we have to find a better way to discuss these difficult trade-offs, not resort to a deceptively precise methodology so obscure that only a few thousand people understand it.

In cost-benefit analysis, everthing has a price tag. The going rate of a human life is about $6 million, before discounting for illness and age. For children, an IQ point is worth about $8,800.

Even when we decide as a society that something must be done about serious environmental problems, the institution available to do the work, the EPA, has no credibility.

Hollow Government and the 'Tragedy of Distrust' Syndrome

Ongoing, increasingly effective conservative arguments against "big government" as the ultimate enemy of the people have compounded the trend toward inaction. The election of President Ronald Reagan was a triumph for the conservative vision of an enlightened republic: the national government should limit its role to defending the country's interests abroad and ensuring a stable climate for business, with its intervention into daily domestic affairs sharply limited. Conservatives argue that the Great Depression was triggered by misguided government interference with the banking system. The Great Depression's legacy, the New Deal, started the country down the road to damnation, and the New Deal's successor, the Great Society, hastened this decline. Conservatives believe we must restore the founding fathers' constitutional vision of strong states and a small federal bureaucracy. The portion of the Republican coalition that is by far the most invested in environmental issues is big business, which has skillfully lost itself in the crowd of a more broadly based conservative movement, obstructing environmental protection far more effectively than it could ever hope to accomplish on its own.

Ironically, the left-wing end of the political spectrum is as enamored of condemning government as their counterparts on the right, albeit for distinctly different reasons. Beginning with the New Left in the 1960s, government was demeaned as a "military industrial complex" that was as corrupt as it was hypocritical. While it is certainly true that the Left strongly supported the birth of EPA, as well as the expansion of federal health and safety regulatory authority over food and drug safety, consumer and worker rights, and the preservation of natural resources, deep distrust of government compromised these creations almost as soon as they were initiated.

Decried by the right wing as unnecessary and the left wing as untrustworthy, the federal civil service today is increasingly dysfunctional. Professor Richard Lazarus has written eloquently about the "tragedy of distrust" that undermines EPA at every turn. Its most important implication is that even when we decide as a society that something must be done about serious environmental problems, the institution available to do the work has no credibility. We will be hard pressed to find a shortcut to the goal of renewing the people's faith in government. Yet nothing less is likely to generate reliable and permanent change.

'Devolution'

Conservatives contend that centralized federal decision-making is not what the Constitution's framers had in mind, in large measure because it is affirmatively undemocratic. They castigate the "irresponsible" behavior of Congress, which writes elaborate laws that impose unfunded mandates on state and local governments and then washes its hands of the expenses that arise during implementation. When unfunded

programs prove a failure, federal lawmakers largely escape accountability. Conservatives add that the most effective way to guarantee "public choice," or full democracy, is to devolve most domestic decisions to the state and local level, where voters can understand problems more easily and evaluate the trade-offs involved in taking action.

It should come as no surprise that all states are not created equal, with some far more capable and eager than others to stand in for the federal government in protecting their most vulnerable citizens. But we have allowed EPA to become so weak that it has no good alternatives in forcing the worst states to do a better job. The result is grossly disparate levels of protection depending on geography, as opposed to health. To address these obstacles, EPA must not only be resurrected, but must have enough resources and credibility to get recalcitrant states back into line.

'Free Market' Alternatives

On the rare occasions when rigid cost-benefit analysis justifies intervention and the science is sufficiently clear, decision-makers must select the appropriate approach to reducing pollution. Conservative arguments are similarly well-prepared for that turn in the road. With great effectiveness, they have maintained that the government is going about protecting public health and the environment all wrong. Rather than browbeating American industry into compliance by forcing every plant in an industrial category to install pollution control equipment, say these critics, we should concentrate on harnessing the technological brilliance of corporate America to deliver better results for much less. Awarding industrial sources the opportunity to freely trade rights to emit pollution, they contend, is always a better approach than requiring them to install scrubbers on their smokestacks regardless of cost.

In such a trading system, every plant is awarded a set number of pollution "credits" or "allowances," generally based on the amount of their past emissions. So, for example, a plant that emitted 100 tons of pollution in the year 2000 would get 100 tons of credits or allowances annually under a trading plan. If the plant chooses to install pollution control equipment and reduce its annual emissions to 50 tons, it can sell the "extra" 50 tons to cover emissions at a plant that does not have such technology. However, the fatal flaw of trading systems is that plants can buy extra credits, increasing the pollution they emit, regardless of what is going on around them. In areas where public health is vulnerable to the increased pollution load, the formation of such "hot spots" is a powerful argument against trading, especially in the case of toxic substances like mercury.

A Question of Values

In the winter and spring of 2004, I did a series of talk radio interviews about *A New Progressive Agenda for Public Health and the Environment,* a book that I wrote with my colleagues at the Center for Progressive Reform. There I was, saying similar things to what I have said in these pages, confronted by right-wing hosts and listeners who quickly lost patience with me. The following quotation is taken *verbatim* from an electronic mail message I received from one listener who was so enraged by what he heard that he took the time to tell me off in writing.

> Your logic makes me sick to my stomach. We should, you say, want to make the world safer and healthier for our children. Did our parents do this for us? . . . I am one of those people who you derided, who has more cars than drivers. I have five vehicles. And you know what, I earned them. They are all paid for by my hard work and sweat. And no one is going to tell me I cannot have them or should not have them because of the environment. The fact is that if my children are faced with problems that may very well be good for them. It will enable them to work them out and become better people, just as I have become a better person by working on problems and solving them. . . . I am sick and tired of people like you who are trying to make the world such a safe place that there is no room for a hangnail. Get a life and grow up.

I offer the message here not in an effort to shock the reader (although I was pretty surprised on first reading), but rather because I think it expresses a non-technocratic, mercifully blunt view that is the exact opposite of mine. My correspondent does not beg the question of whether a problem exists, nor does he apologize for his lifestyle. He assumes that his ownership of five cars will cause environmental problems for his children, but puts his needs first. Most important, he refuses to take cover behind quibbling about the details of which problems might be serious, whether we need more science to evaluate these problems, what it would cost to address them, etc. Instead, he stands at the opposite end of the rhetorical battlefield: I say things are bad and that we are betraying our ethical obligations to our children, and he says that there may be problems but each generation should use technology to fend for itself.

The public debate rarely frames the issues so clearly. Instead, it spins out in seemingly endless spirals of vague generalities about the importance of a clean environment, whether or not we have made adequate progress in achieving that goal, government missteps in protecting natural resources, and, in its most distasteful incarnation, how excessive regulation will hurt the disadvantaged among us by compelling them to choose between reasonably priced electricity and smog-free summer days. Or the debate evolves into intricate, invariably tedious discussions of why, where, when, and how we should decide to spend

large sums for indefinite benefits, leaving the average person in the dust and causing even expert participants to lose track of the real issues. Unraveling this mess requires new beginnings on two planes: a recommitment to central values widely shared throughout American culture and a series of essential reforms to change the way government works.

Shared Ideals

The ethical and religious foundations of American society include the conviction that all people are created equal and that no life is worth more than another. Everyone has the right to equal opportunity and equal protection under the rule of law. After equal opportunity is secured, though, people are on their own. Government provides an increasingly tattered, shrinking safety net to prevent extreme hardship and, as a practical matter, to keep at least some of the desperately poor off the streets. But we believe that able-bodied adults who do not work hard deserve what they get so long as they begin life with equal opportunity. This finely calibrated mixture of egalitarianism and hard-nosed "prosperity-for-the-fittest" has served the country very well, along with our extraordinary access to some of the planet's richest natural resources and the oceans that lie between us and many of the worst wars between factions of the human race.

The best translation of these values as applied in an environmental context is the harsh question I have heard on two memorable occasions in my 30 years of practicing and teaching law. Both instances involved working class neighborhoods beleaguered by pollution to an absolutely unacceptable extreme. In each case, I was serving as a lawyer representing the community and was sitting with a mixed group of corporate executives, government officials, environmental activists, and neighborhood residents, listening to first-person accounts of how people were affected by these problems. As the sessions broke up and people walked away in small groups shaking their heads, first an oil company executive and second a high-ranking municipal fire department official asked me in an exasperated tone: "Why don't they just move?"

I had no ready answer. I could have said "because they are not middle class and don't have enough money, unlike you and me." Or I could have replied "because there is no familiar or accessible place for them to go." Either answer might have continued the conversation in a productive direction, although we might not have gotten very far in our mutual understanding of root causes and the appropriate social response.

Instead of giving any of these answers, however, I took what seemed to me to be the easiest way out of these polite but loaded confrontations. Like a good advocate, I did not challenge my interlocutors' view of race, class, social mobility, the work ethic, corporate power, or even mindless municipal zoning. Instead, I said "there are dozens of kids living there – regardless of what their parents do, should they be left behind?" The conversations stopped dead in their tracks.

Unraveling this mess requires new beginnings on two planes: a recommitment to central values widely shared throughout American culture and a series of essential reforms to change the way government works.

I have no real idea what these two people thought as they walked away. On some level, both men undoubtedly found the entire situation, up to and including my answer, infuriating. Comfortable in their personal lives and optimistic about what lies for their children, the meetings had confronted them with very troubling, demonstrably true stories about suffering that should not be possible within the borders of the richest country on earth. They would never stay in such circumstances, especially with a family, and they could not fathom why any other able-bodied adults, especially with families, would remain behind. Like an impatient pedestrian walking past a panhandler, they perceived the two communities as intruding on their personal space. "I gave at the office," both thought, "what do you expect me to do about all this?"

Blaming the victims and leaving them to fend for themselves, outmatched by the overwhelming power of the free market, is not the way to go.

If I had them both in front of me today and had a second chance to give a more effective answer, I am not sure exactly what I would say, but it would be some variation of the appeals made throughout Mo*ther Earth and Uncle Sam*. "In the end," I might respond, "no one has a personal airspace and everyone lives downstream from someone else. We cannot afford to indulge in compassion fatigue and turn our backs on these people's environmental misery. If we do not change, there will come a time when much of the commons disappear, and we will be left hoping we do not live long in such a day."

Then, I might say, "We can preserve liberty and individual autonomy without tolerating the destruction of the environmental commons – our air, water, and earth, and those who argue otherwise have their own – and not society's – overall interests in mind. If we want to ensure that all children have equal opportunity to have a good life, and we want our children's children to have the same opportunities, we have got to change the way we make decisions, beginning with the way the government conceives of its role in these kinds of situations. Blaming the victims and leaving them to fend for themselves, outmatched by the overwhelming power of the free market, is not the way to go."

"OK," I imagine my questioner retorting – and now I have really departed from anything that has ever happened to me, "I see your point. But what would environmental policy look like if you were in charge. And how would it differ from the way it looks today?"

Competing Visions of the Future

Traditional conservatives and the wide range of industry-based special interest groups that are introduced in these pages believe that the cornerstone of America's astounding success as a nation is the capitalist – or "free market" – system. Not only do they cherish the great value of the free market, they fear it is fragile and easily perturbed by ham-fisted government intervention. Because capitalism must be free to function and, if it is, will provide the best possible quality of life for the most people, conservatives impose a heavy presumption against regulation.

This presumption not only is very difficult to overcome, it can only be overcome in *economic* terms. Conservatives acknowledge that there are intangible values crucial to American society, including equal opportunity, but they believe regulation is the wrong way to preserve those intangibles and that the free market is a far preferable route. Proponents of regulation must demonstrate "market failure" before government intervention is allowed and, even then, it should be as minimal as possible. Conservatives think that market failure is very rare and is caused by disparity in information and unequal bargaining power among parties. Those intermittent problems are easily resolved with relatively modest requirements that the necessary information be disclosed. The fact that one party gets a bad deal is not proof of failure; it could just as easily mean that the market is working properly.

Conservatives acknowledge that it is sometimes distasteful to translate into money lives lost and the suffering caused by disease, but categorically reject the idea that we should shirk this challenge. They are willing to commit very significant resources to the pursuit of such calculations. They assume that people voluntarily place themselves in the path of risks large and small everyday, making implicit economic decisions about how much they are willing to pay to avoid potential harm. Conservatives do not believe that the children of adults at risk should be considered separately from their parents. Nor do they accept the argument that we owe any debt to future generations who will almost certainly be richer than we are.

Progressives also accept capitalism and the free market as the central organizing structure of the American economy and, ultimately, our society, for better or worse. However, progressives reject the notion that the market we have in this country is "free" in any objective sense of the word. Government-sanctioned monopolies, tax preferences and loopholes, agricultural subsidies, below-market sale of grazing, mineral, and water rights, and similar add-ons have compromised the market's freedom at least as much as regulation.

Progressives do not assume that the market will correct itself if left alone. Rather than starting with market failure as the quid pro quo for action, progressives focus on the occurrence of harm to children as a result of the activities of corporate or other public and private sector entities. Progressives would consider regulation any time it appears that the public health is placed at risk by pollution that could be avoided. Pollution should be the factor presumed invalid, not interference with the marketplace. By putting the burden on the source of the risk to justify why it cannot cease the harmful behavior, progressives would stack the deck in favor of regulation, although – we would argue – no more than conservatives stack the deck against it.

Progressives believe that government exists for the purpose of helping people who are abandoned by the "free" market to have a better life. Our most important goal is the moderation of the capitalist free-for-all to take into account racial inequities, disparities in educational opportunities, the demoralizing impact of poverty and disease, needs of new immigrants, the growing gulf between the rich and the poor, and – above all – the imperative of giving all children equal opportunity regardless of their status at birth. All

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children deserve equal opportunity, regardless of race, class, ethnicity, or – most important of all – the sloth of their parents.

Rather than struggling to find market failure and prove that the benefits of action outstrip the costs, government's threshold presumption should be that children deserve protection from industrial pollution. The people's agents – in Congress, on the bench, and in government agencies – are responsible for ensuring that this presumption is overcome only in carefully defined circumstances, when we have no reasonably available technology to protect people or when the activity is sufficiently valuable to society as a whole that it would be wrong to help the few and end up sacrificing the many. Overcoming this presumption should be the responsibility of the entity that causes the harm, and the burden of proof should be heavy. Government should categorically reject arguments that it would be better to spend money on bicycle helmets or vaccinations, as if there is an invisible and very limited budget for safeguarding children's welfare.

Progressives believe that the urgency of a fundamental change in America's approach to environmental policy is underscored by the effects of poverty on American children. According to the U.S. Census Bureau, 37 million people, or 12.7 percent of the U.S. population, were poor in 2004, up from 31.6 million and 11.3 percent in 2000. Roughly 33 percent were children under 18, representing a poverty rate in that age group of 17.8 percent, compared to a rate of 11.3 percent for people aged 18 to 64 and 9.8 percent of people over 65.

The implications of these discouraging statistics are obvious. Poor children suffer significantly higher incidence of poor health, chronic health conditions, and serious physical disabilities. They suffer more from bad nutrition and deteriorating housing. About 11.2 percent of all children do not have health insurance; this rate climbs to 18.9 percent for children living in poverty, again under the very conservative definition of the poverty line used by the Census Bureau. Consequently, poor children who get ill at rates significantly higher than the general population often do not have access to medical care to make them well.

New Government

With the full backing of the White House, single-minded focus, and a thick skin, an EPA Administrator could accomplish far-reaching, meaningful, and effective reforms. With the participation of a critical mass of the Agency's key constituencies, and skillful negotiating, many of those reforms could happen within a relatively short period of time – say, two to four years. If Congress was able to participate in the dawning of this new day, the changes could be even more profound and wide-ranging, although they might take longer to accomplish. And once reforms took hold, changing the way EPA conducts business, the Agency might again be able to attract the best and the brightest of committed scientists, lawyers, and economists, gradually winning back its self-respect and the deference it should receive from the courts and congressional oversight committees.

Mother Earth and Uncle Sam Proposes Six Basic Reforms:

- **Independent Priority-Setting.** EPA should be given significantly expanded authority to set priorities among the pollution problems that Congress has assigned it to address, placing at the top of the list the threats that pollution (especially persistent toxics) pose to the very young.
- **More Money.** The budget for government environmental protection programs should be enlarged significantly.
- **Precaution.** Risk assessments should be based on protective – or precautionary – assumptions because the central goal of environmental laws is to prevent harm rather than compensate the injured. Remedies that involve instructing the victims of pollution to avoid the risk – for example, the exhortation that children should be kept inside on Code Red days – should never be adopted on a permanent basis and instead should be used only as an interim measure until the risk can be controlled.
- **Best Available Solutions.** Remedies that involve selecting the best available pollution control technology should be used whenever possible.
- **Monetization of Costs, Not Benefits.** The value of human life should never be monetized. Costs should be analyzed carefully before, during, and after protective rules go into effect.
- **Judicial Deference.** The courts should defer to EPA's scientific judgment and policy decisions in all but egregious cases where the Agency has clearly ignored an explicit statutory mandate or done a demonstrably poor job of gathering information to support is decision.

Reviving the Civil Service

The core premise of these proposals is that EPA must be given more money, more authority, more autonomy, and then be allowed to do its job. Everyone, from the most conservative ideologue to the most liberal pundit, from diehard environmentalists to vehement corporate representatives, from agitated members of Congress to overly confident federal appellate court judges, must back off and give a self-directed bureaucracy an opportunity to regroup. Congress should defer to its interim decisions and priority-setting efforts; friends and enemies should holster their weapons in the running battles that afflict every controversy that lands in EPA's lap; think tanks should stop issuing exposés; and politically opportunistic investigations of malfeasance should be suspended. Not until EPA has amassed an adequate track record in an area – for example, childhood exposures to toxics through drinking water or chronic air pollution that exacerbates childhood respiratory disease – should its performance be examined from a harshly critical point of view.

Professional experts, working full-time in the public sector and remaining focused on specific issues for years at a time, are the best choice to lead us out of the mess we have created. The bureaucracy has several advantages over any other institution that might be considered as an alternative. The vast majority of bureaucrats are career civil servants. In EPA's case they include professionals in a range of disciplines, including scientists, engineers, economists, communications specialists, lawyers, and other technical experts, all of whom were chosen because they have the right training to analyze the complex challenges that stand between them and effective solutions. These professionals are paid to find the best solution from the public's point of view and they are capable of shouldering the responsibility for developing better solutions to chronic, apparently intractable environmental problems.

These recommendations do not mean that EPA will be left free to run amok. The Agency will still be compelled to exist in a political fish bowl, sustaining media and public scrutiny, coping with vigorous advocacy in every rulemaking, and answering to focused congressional oversight. What will be different is that decisions will be made and we will have an opportunity to see if they work, as opposed to spending all our resources on fights designed to derail decisionmaking and implementation.

People of all political persuasions will not cease their efforts to pressure government spontaneously. Environmentalists will never believe that big business will withdraw and vice versa. Both ends of the political spectrum will expect to lose everything they hold dear if they are foolish enough to disarm before the other side. Yet we should not underestimate the power of a turn in public opinion and strong leadership by the President to accomplish a détente that could give civil servants the breathing space they need to begin.

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Setting Priorities

EPA has far too much to do. The Agency does not have nearly enough resources, but it would have great difficulty managing its existing mandates even if Congress and the President gave it as much money as it could spend wisely in the near-term. The result is an agency so dysfunctional that it has lost its sense of how to tackle the worst problems first and has not even spent much time in the last two decades figuring out what the worst problems might be. It desperately needs to get traction on a few major tasks in order to rebuild its institutional credibility, and setting priorities is the condition precedent for that effort.

The only solution to this debilitating state of affairs is to give EPA the freedom it needs to evaluate its agenda and establish priorities that can be accomplished with its available budget, whatever that amount turns out to be. The Agency political leadership could seize the initiative, but it would be far better for this grant of freedom to be ratified by Congress, through passage of a free-standing law, or by the President, through issuance of a presidential

Executive Order. Any of these alternatives should establish general criteria for making these choices, and those criteria should elevate problems that harm or threaten children to the top of the list.

A firestorm of opposition will erupt at the very idea of allowing the government to do officially what it already does in a far more haphazard, less accountable, and less transparent manner. The cacophony of voices pleading for their own pet programs will be deafening and whoever leads the effort on behalf of the Agency will need a strong stomach and powerful will. The most serious argument against this idea is that setting priorities will tempt Congress to further de-fund environmental programs. Once priorities are set, other important initiatives that do not make the list will be put on the back burner and money for their implementation will disappear forever. No honest observer of the existing system can possibly argue, however, that doing a totally inadequate job on a larger universe of issues is a clearly better alternative. Making choices explicit also has the advantage of forcing the hand of politicians and others who support programs to work to see them get the resources they need, rather than merely claiming credit for their existence.

More Money

EPA and the states need massive increases in their annual budgets just to stay even with existing mandates, much less forge ahead. The size of the federal deficit, and inescapable commitments abroad, make it seem as if we could not possibly afford significant increases in any kind of domestic spending. The steady drumbeat of criticism regarding the government's overall performance, and EPA's performance specifically, make it easy to rationalize this neglect. The strongest response to all of this rhetoric is that, one way or another, society ends up shouldering the costs of pollution left unaddressed.

Consider the social costs of depriving EPA of the resources it needs to enforce the ozone National Ambient Air Quality Standard. Only one of many results of this neglect is the expenditure of an estimated at $3.2 billion annually to treat asthma in people younger than eighteen. Children afflicted by asthma miss an estimated 14 million days of school; adults miss 14.5 million workdays. Overall, the U.S. spends $11.5 billion annually, more than 150 percent of the EPA budget, on health care costs for those who have the disease. Obviously, not all asthma is attributable to air pollution. On the other hand, pollution that exacerbates asthma is only one, relatively small part of EPA's workload. The fact is that the costs of that care do not vaporize because conservative economists wish they would, but rather is distributed back through the economy. The money it would take to make EPA effective in this specific area should look like a big bargain.

One clear alternative to supporting environmental programs through general taxpayer revenues is to impose costs directly on polluting industries, either through the assessment of permit fees or targeted taxes. The equities of asking specific industries to pay for regulation

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must be evaluated, especially in the case of small business, but as the best right-wing economists would point out in other contexts, compelling the industries that caused the problems to internalize the costs of ameliorating them is not just fair, but economically efficient.

Precaution

Our willingness to address environmental threats will always be related to our understanding of what will happen if the risk evolves into reality. We cannot afford to chase every phantom of risk. Nor can we afford to ignore risks until we have definitive proof the harm has occurred. Any environmental scientist will tell you that uncertainty plagues environmental research more than many other areas of empirical study. Environmental toxicology (the study of poisons in the air, water, and soil) has only existed as a research field for three decades or so. We simply have not had the time or the technology to discover all the things we must know. Adding to these challenges is a central characteristic of the culture of science: great hesitance to draw conclusions until hypotheses have been proven true.

The precautionary principle is applied in two distinct phases: deciding when to take action and determining which levels of exposure are acceptable. Mercury and perchlorate are examples of problems at both stages. The decision whether to do anything about mercury took 15 years to resolve; a large chunk of this time was consumed by arguments over what the reference dose for determining the stringency of regulation should be. In the case of perchlorate, we have not yet decided whether to take action. Yet it is possible to count on one hand the number of times we have discovered that a chemical is less harmful than we thought. We must learn to tolerate uncertainty for the sake of our children's health.

Doing Our Best

EPA's most successful programs require sources to install the best available pollution control equipment. This "technology-based" regulatory approach has proven more effective than "health-based" regulatory programs that depend on the assessment of risks posed by toxic exposures. To prescribe technology-based controls, EPA must undertake three straightforward and manageable tasks. First, it must find technologies that are feasible to use (not too expensive, not too complicated, tested and proven in the field). Second, it must determine the amount of emissions the equipment can eliminate in order to determine the level of emissions that would be left if the equipment were installed. Third, it must require regulated parties to meet that level of performance, giving them the choice of either installing the technology identified by EPA or finding another, equally effective technology capable of producing the same results.

Technology-based controls should be the first option considered under every statute that permits such an approach, and Congress should consider amending specific provisions of the law to authorize this approach. If there is equipment, work practices, and other technologies available to prevent, neutralize, or reduce pollution, they should be implemented. The law should do its best to inspire the development of such technology, pushing scientists and engineers to seek it by creating markets through regulation. We should press the envelope of innovation, asking for improvements even before we are absolutely sure they are feasible, and canceling these requests at the last possible moment.

Monetize Costs, Not Benefits

Slave owners violated every precept of fundamental morality, buying and selling human beings at will, but they did not go so far as to slaughter their slaves for profit. Lawyers began monetizing lives as a way to recover damages for their clients, and the modern life insurance industry developed as a close corollary to this application. Yet modern economists estimate how much money a life will be worth in the future and, if it is not enough, write the life off with impunity.

Slavery in the United States is a shameful memory. No one can pay any amount for the privilege of killing someone else. And no living person is allowed to auction their or anyone else's body parts, much less their children, to the highest bidder. To pretend that it is possible to assign market value to such "commodities" as illness or the very existence of life conflicts with these values, which are essential not only to our constitutional democracy, but to the coherence and integrity of American culture.

Refusing to monetize life does not mean ignoring how many lives are changed by exposure to pollution and how these lives could be improved if pollution were prevented. To gather the best available evidence regarding the number of people who might become ill is critical, not only to decide if regulation is necessary or affordable, but to target remedies in the best way possible. Counting in this way makes as much sense as bartering the value of lives does not.

Costs are a different matter, however. They will always be a central consideration in decisions about what the government does, and it would be fruitless to propose any alternative. In the environmental arena, it is especially important, however, that costs estimated before a rule goes into effect take into account the likelihood that technologies will become less expensive as a market for them develops, lowering the costs predicted at the outset.

Our Legacy

Environmental risks to our children are real, have unacceptable consequences and are increasing. The nation has stopped making progress, even though these are all problems that can be solved with a modest investment of money and will.

The right-wing gadfly and popular author P.J. O'Rourke once described environmental protection as a "luxury good," available only to those who are able to pay for it. So outrageous is this statement that it is difficult to imagine a public spokesperson for any organized entity – from Dow Chemical Company to the Heritage Foundation – ever embracing it. Yet far below the "water line" that demarcates national news, the criteria used to make decisions have the result of restricting the benefits of a clean environment to those either lucky enough or rich enough to live in the few remaining areas of the country that are relatively pollution-free.

While the content of government decision-making for the most part is not secret, crucial details rarely emerge in the popular media and therefore remain obscure to most people. The public has little idea that such decisions are being made, much less the arguments offered to validate them. Decision-makers are increasingly isolated and their thinking in-bred, offering justifications that might well prove unpopular, even embarrassing, if brought into public view.

Mother Earth and Uncle Sam argues that the environmental risks to our children are real, have unacceptable consequences, and are increasing. These problems harm children of all races, ethnic groups, and class backgrounds, no matter where they live. For the most part, the nation has stopped making progress on these problems and, if we do not take action soon, we will fall further behind. Most maddening is that unlike world hunger or peace in the Middle East, these are all problems that can be solved with a modest investment of money and political will.

Despite unprecedented affluence, the World Wide Web and other technological breakthroughs, the elimination of diseases that ravaged earlier populations, and progress on dozens of other fronts that make life more convenient and interesting, it is hard to envy the next generation of American children. They face challenges that would make their most intrepid forefathers blanch, not the least of which is coping with an environment increasingly overwhelmed by the unforeseen ramifications of human consumption. When I teach environmental law, I often see my students' faces change from expectant to dismayed. "It will be up to your generation to solve this problem," I say brightly, and I am relieved when they do not tune me out completely. Of course, this is the easy way out, as tempting as it seems to those of us who have been immersed in environmental controversies for too many years. As the generations that are still in power, we cannot shirk our own responsibility to start working our way out of these dilemmas. People we know will thank us, or curse us. In the final analysis, which one is up to us.

About the Center for Progressive Reform

Founded in 2002, the Center for Progressive Reform is a 501(c)(3) nonprofit research and educational organization dedicated to protecting health, safety, and the environment through analysis and commentary. CPR believes sensible safeguards in these areas serve important shared values, including doing the best we can to prevent harm to people and the environment, distributing environmental harms and benefits fairly, and protecting the earth for future generations. CPR rejects the view that the economic efficiency of private markets should be the only value used to guide government action. Rather, CPR supports thoughtful government action and reform to advance the well-being of human life and the environment. Additionally, CPR believes people play a crucial role in ensuring both private and public sector decisions that result in improved protection of consumers, public health and safety, and the environment. Accordingly, CPR supports ready public access to the courts, enhanced public participation and improved public access to information. The Center for Progressive Reform is grateful to the Bauman Foundation, the Beldon Fund, the Deer Creek Foundation and the Open Society Institute for their generous support of its work.

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