

# **Reinvigorating Protection of Health, Safety, and the Environment**

## **The Choices Facing Cass Sunstein**

by CPR Member Scholars

John S. Applegate, Robert L. Glicksman,  
Tom O. McGarity, Sidney A. Shapiro, Amy Sinden,  
Rena I. Steinzor, and Robert R.M. Verchick,  
and CPR Policy Analyst James A. Goodwin



CPR White Paper #901  
January 2009

## ***Reinvigorating Protection of Health, Safety, and the Environment: The Choices Facing Cass Sunstein***

President Obama's presumptive selection of Cass Sunstein to serve as the "regulatory czar" for his administration surprised most observers. The business community has generally greeted the announcement with satisfaction. Progressives have expressed concern because Professor Sunstein's long track record on regulatory issues is decidedly conservative. As long-time colleagues of Professor Sunstein who have debated him numerous times in a variety of settings, we write this paper to explain those concerns, in the hope that if and when he is confirmed, we will be able to continue this debate and work with Professor Sunstein and OIRA in practical ways during the Obama Administration.

The U.S. regulatory system—over which OIRA has a uniquely far-reaching influence—is at a critical juncture. Following years of neglect and, more recently, outright hostility from the George W. Bush Administration, the system is in disrepair. Laws intended to protect public health, safety, the environment—laws enforced by the Occupational Safety and Health Administration (OSHA), the National Highway Traffic Safety Administration (NHTSA), the Environmental Protection Agency (EPA), the Consumer Product Safety Commission (CPSC), and the Food and Drug Administration (FDA)—have been weakened by half-hearted regulations, neglectful enforcement, and severe funding shortfalls.

OIRA has played an instrumental role in creating this circumstance, weakening and delaying proposed regulations by a variety of methods. The central methodology employed by OIRA to weaken the regulatory system has been cost-benefit analysis. Under the direction of a series of Executive Orders dating back to the early Reagan Administration, OIRA has been employing cost-benefit analysis as part of a comprehensive review process for many federal regulations, including those intended to protect public health, safety, and the environment. Through cost-benefit analysis, OIRA attempts to project and measure all of the costs and benefits that would result from a proposed regulation. According to its proponents, the goal of cost-benefit analysis is to promote economically efficient regulations—that is, regulations for which the costs are equal to the benefits.

The problem with OIRA's reliance on cost-benefit analysis as a form of regulatory review is that cost-benefit analysis is neither sound in theory nor useful in practice. Cost-benefit analysis, as practiced by the vast majority of economists, applies a patina of mathematical precision to an inherently distorted process. This problematic methodology relies on overstated cost estimates (often from industry sources), and drastically understated estimates of regulatory benefits. Indeed, some benefits defy monetization altogether and are simply dropped from the equation, yielding results that are incomplete and distorted.

To repair the badly broken regulatory system, the next OIRA Administrator will need to re-imagine OIRA's role to ensure that this little known but powerful office is part of the solution, rather than part of the problem. First and foremost, we advocate that OIRA cease performing centralized review of regulations. Instead, the role of OIRA should be reduced to the more modest, but very important task of coordinating activities among regulatory agencies, so as to avoid unnecessary duplication or inconsistencies. As a corollary to this coordinating role, OIRA

would also help to resolve interagency conflicts when they arise. This summer, we, along with a number of other Member Scholars at the Center for Progressive Reform, will produce a document outlining in much greater detail what the role of a reformed OIRA should be.

Second, we advocate that cost-benefit analysis as a form of regulatory review be abolished except in the very rare instances in which an agency is promulgating a rule pursuant to a statute in which Congress has clearly mandated a cost-benefit standard. Even though we advocate that centralized regulatory review be terminated, we still recognize a need for individual agencies to conduct regulatory review on their proposed rules. Instead of applying cost-benefit analysis, however, we recommend that agencies conduct regulatory impact analyses in accordance with the philosophical principles of pragmatism. Two Member Scholars with the Center for Progressive Reform, Sidney A. Shapiro, University Distinguished Professor of Law, Wake Forest University, and Christopher H. Schroeder, Murphy Professor of Law and Professor of Public Policy Studies, Duke University, have recently published an article in the *Harvard Environmental Law Review*<sup>1</sup> in which they describe what a pragmatic regulatory impact analysis would look like and how it is superior to cost-benefit analysis, both in theory and in practice. Most importantly, the use of a pragmatic form of analysis would actually allow for a regulatory review that accords with the specific language of the statutes under which the regulations are promulgated (cost-benefit analysis, by contrast, is completely divorced from the language for most regulatory statutes). A number of Member Scholars will work with the staff of the Center for Progressive Reform to promote this alternative form of regulatory impact analysis over the coming year.

Unfortunately, Professor Sunstein is not likely to bring about the kinds of changes at OIRA that we advocate. In particular, his writings and public statements embrace the practice of centralized regulatory review by OIRA and the use of cost-benefit analysis as the preferred methodology for conducting regulatory review. Indeed, his lengthy track record reveals that he even endorses many of the controversial approaches deployed by the George W. Bush Administration in the area of centralized regulatory review and in cost-benefit analysis. In short, as OIRA Administrator, Professor Sunstein would seem to represent “more of the same,” when the last 30 years of regulatory dysfunction—largely caused by OIRA’s centralized review and by adherence to cost-benefit analysis—demonstrate that OIRA and regulatory review need to head in a new, progressive direction.

### ***Issue 1: The Usefulness of Cost-Benefit Analysis for Regulatory Review***

***Professor Sunstein’s Views.*** Scholars, including at times Professor Sunstein himself, have criticized cost-benefit analysis for its insistence upon assigning monetary values to such diverse “goods” as human life and pristine wilderness, despite the fundamental incommensurability between these diverse goods and a single monetary metric.<sup>2</sup> Nevertheless, Professor Sunstein defends this methodology as an imprecise but still useful tool for approximating the consequences of regulation (though, unlike the most fervent supports of cost-

<sup>1</sup> Sidney A. Shapiro & Christopher H. Schroeder, *Beyond Cost-Benefit Analysis: A Pragmatic Reorientation*, 32 HARV. ENVTL. L. REV. 433 (2008), available at [http://www.law.harvard.edu/students/orgs/elr/vol32\\_2/Shapiro%20Final%20Final.pdf](http://www.law.harvard.edu/students/orgs/elr/vol32_2/Shapiro%20Final%20Final.pdf).

<sup>2</sup> See, e.g., Cass R. Sunstein, *Incommensurability and Valuation in Law*, 92 MICH. L. REV. 841 (1994).

benefit analysis, Professor Sunstein does not believe that cost-benefit analysis offers some magic formula for deriving truths about the world). His pragmatic justification for cost-benefit analysis has two prongs. First, in the face of “cognitive distortions” that cause ordinary people to evaluate risk inaccurately, Professor Sunstein contends that cost-benefit analysis holds out the promise of rationalizing government decisionmaking and reducing undue influence by interest groups that exploit the irrationality of the public’s assessment of risks. Second, by forcing regulators to evaluate and describe the full array of consequences from a proposed regulation, Professor Sunstein writes, the methodology will increase transparency and public accountability, thereby serving democratic goals.<sup>3</sup>

***Our Response.*** As practiced in the real world, cost-benefit analysis has proved hopelessly indeterminate—that is, cost-benefit analysis has proved incapable of eliminating those ambiguities and uncertainties that are of such a magnitude that they render it impossible to calculate the costs and/or benefits of a proposed regulation with sufficient specificity to allow any meaningful comparison. These flaws open up government decisionmaking to manipulation by interest groups, rather than rationalizing the process. Similarly, rather than promoting the democratic goals of transparency and public accountability, cost-benefit analysis obscures the inevitable policy choices and value judgments that underlie government decisionmaking behind a veil of numbers, and renders the decisionmaking process inaccessible to all those who lack advanced training in economics, as anyone who glances at the cost-benefit reports prepared by agencies will quickly conclude.

The indeterminacy of the methodology is caused by many factors. One of the most important sources of indeterminacy relates to the inability of cost-benefit analysis to measure the benefits produced by regulatory action. For example, cost-benefit analysts seek to divine people’s “willingness to pay” for regulatory protections. But this effort is notoriously imprecise when the benefit in question is a non-market good—one that does not come with a specific price tag—the value of a child’s health or clean drinking water, for example. Some monetization of benefits can often be attempted—avoided emergency room visits due to air pollution, for example, or tourist dollars generated by a wilderness area—but not all such benefits lend themselves to dollars-and-cents evaluations.

Moreover, willingness-to-pay is at least partly a function of a person’s wealth, for the simple reason that wealthy people are able to pay more to attain a certain benefit or avoid a certain risk. That may not mean that the benefit is more valuable to them than to a poor person, just that they can afford it. By comparison, if regulatory benefits were monetized according to “willingness to sell”—how much money people would charge to be exposed to additional safety or health risks—the value of regulatory benefits would undoubtedly be higher since this measure is not bounded by a person’s wealth. So, for example, if we asked whether people were willing for their children to contract asthma for a certain amount of money, we would be applying a comparable calculation to the economists’ preferred willingness-to-pay. But this approach would highlight how bizarre this kind of monetization would seem to the average person, and is rejected by most economists.

---

<sup>3</sup> CASS R. SUNSTEIN, *THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY PROTECTION* 22, 25-28 (2002) [hereinafter *SUNSTEIN, HE COST-BENEFIT STATE*]; CASS R. SUNSTEIN, *RISK & REASON: SAFETY, LAW, AND THE ENVIRONMENT* 107-108 (2002) [hereinafter *SUNSTEIN, RISK & REASON*].

Another important source of indeterminacy is the absence of adequate data for calculating regulatory benefits. Even assuming that it was possible to place a monetary value on such non-market goods as lives saved or endangered species protected, it is rarely possible to predict in advance how many benefits will be achieved by a particular regulatory intervention. For example, it might be impossible to tell in advance how many lives will be saved by a particular pollution control measure. Thus, the lack of adequate data concerning regulatory benefits, in conjunction with the inability to place an accurate measure on the monetary value on those regulatory benefits, serves only to pile indeterminacy upon indeterminacy, rendering the estimation of the monetary value of regulatory benefits to be a truly futile undertaking.

Still another source of indeterminacy is the use of discount rates to measure in current dollars the value of benefits that will not be realized until sometime in the future. For market goods, the use of a discount rate can be tricky enough, given that reasonable people can disagree about future projections of inflation and interest rates. But another layer of uncertainty is added when the discounting technique is applied to non-market goods like human life and pristine wilderness. Further, if we apply a 3- or 7-percent discount rate (as recommended by OMB) to the future benefits of, say, arresting climate change, benefits that will occur far in the future would virtually disappear. Rather than viewing the planet's well-being as a heritage we owe our children, this approach, taken to its logical conclusion, would justify consuming those resources until virtually nothing is left.

Professor Sunstein has produced perhaps the best demonstration to date of the effect that this indeterminacy has on estimating the benefits of a regulation: a rule promulgated by the Environmental Protection Agency (EPA) to reduce the amount of arsenic in drinking water. After reviewing two calculations conducted on the rule—one by EPA and one by the AEI-Brookings Joint Center for Regulatory Studies—Professor Sunstein conducts his own careful analysis of the various assumptions underlying the data and ultimately arrives at the astonishing conclusion that by employing reasonable assumptions, one could come up with benefits as low as \$13 million (way below the estimated costs of the proposed regulation) or as high as \$3.4 billion (way above the estimated costs of the proposed regulation).<sup>4</sup> Significantly, after conducting that review and identifying the extraordinary margin of error, Professor Sunstein's faith in cost-benefit analysis appears to remain unshaken. He concludes, on the basis of this case study, that “[a]n analysis of benefits and costs cannot resolve the ultimate judgment, but it can certainly inform it.”<sup>5</sup> We agree with Professor Holly Doremus, who has pointed out, “[i]t is difficult to see how estimates with uncertainty ranges as high as 10 orders of magnitude add anything to the simple recognition that arsenic might or might not pose a significant human health risk.”<sup>6</sup> After the substantial resources that were poured into producing the arsenic cost-benefit analysis, we would hope that it would provide better information about the desirability of the regulation than Professor Sunstein was able to uncover.

---

<sup>4</sup> SUNSTEIN, *RISK & REASON*, *supra* note 3, at 175, 177.

<sup>5</sup> *Id.* at 190.

<sup>6</sup> Holly Doremus, *Of Salmon, the Sound, and the Shifting Sands of Environmental Law—A National Perspective*, 82 WASH. L. REV. 547, 564 (2007);

## ***Issue 2: The Manipulability of Cost-Benefit Analysis***

***Professor Sunstein's Views.*** Professor Sunstein candidly acknowledges that those wishing to overstate or understate net benefits of regulatory interventions can easily manipulate cost-benefit analysis. He writes: “We are now in a position to see the multiple possible challenges to any agency decision that involves cost-benefit balancing.... We can see how creative citizens and lawyers, representing water systems or environmentalists, might be able to mount reasonable challenges to EPA’s decision, regardless (almost) of the content of those decisions.” He then goes on to provide a kind of “how-to” manual for lawyers wishing to challenge—that is, manipulate—different versions of the methodology as applied. Professor Sunstein’s advice includes suggestions on how to challenge willingness-to-pay measurements and methods for arguing in favor a lower or higher discount rate (whichever supports the lawyer’s particular case).<sup>7</sup>

***Our Response.*** To be sure, Professor Sunstein makes it clear that he does not “endorse” the use of such cost-benefit analysis-related shenanigans.<sup>8</sup> But, the manipulability of cost-benefit analysis severely undercuts the justification for its use—namely, that by providing a rational standard for decisionmaking, cost-benefit analysis reduces the undue influence of interest groups. In fact, its susceptibility to manipulation leads to increased instances of litigation and transaction costs for the promulgation of new regulations. Accordingly, regulatory agencies will spend more time in courtrooms defending their regulations and more time drafting elaborate defenses of their regulations in an effort to forestall such challenges. The end result is that these agencies will have less time and fewer resources to develop new regulations to protect people and the environment or to improve old regulations. This is precisely the result anti-regulatory forces desire.

## ***Issue 3: Applying Discount Rates in Cost-Benefit Analysis***

***Professor Sunstein's Views.*** Over the last few decades discounting has become a common feature of cost-benefit analysis. The practice of discounting regulatory benefits rests on the notion that a dollar today is worth more than a dollar in the future.<sup>9</sup> Proponents of discounting, including Professor Sunstein, contend that it is especially necessary for accurately analyzing the costs and benefits of a regulation that will impose costs in the short term, but which will not produce benefits until some time in the long term. Current OMB guidelines recommend that agencies apply both a 3-percent and 7-percent discount rate when conducting cost-benefit analysis.<sup>10</sup>

Economic analysts are so committed to the technique that they apply it to the number of lives that a regulation is expected to save. Thus, for example, applying a discount rate of five-

<sup>7</sup> Cass R. Sunstein, *The Arithmetic of Arsenic*, 90 GEO. L.J. 2255, 2290-93 (2002) [hereinafter Sunstein, *Arithmetic of Arsenic*].

<sup>8</sup> *Id.* at 2290.

<sup>9</sup> Cass R. Sunstein & Arden Rowell, *On Discounting Regulatory Benefits: Risk, Money, and Intergenerational Equity*, 74 U. CHI. L. REV. 171, 171-72.

<sup>10</sup> OFFICE OF MANAGEMENT AND BUDGET, CIRCULAR A-4, REGULATORY ANALYSIS 33-34 (2003), available at <http://www.whitehouse.gov/omb/circulars/a004/a-4.pdf> (last visited Jan. 14, 2009).

percent to the death of a billion people 500 years from now yields the conclusion that such an event is less harmful (or costly) than the death of one person today.<sup>11</sup> On first glance, these results might strike most observers as absurd. As Professor Richard Parker explains, “death does not recognize human accounting conventions and death does not discount. As a result, if 1,000,000 people are exposed to a toxic chemical that produces a 1:10,000 probability of fatal cancer among those exposed, then the odds are quite high that approximately 100 people (not 37...) will lose their lives to cancer.”<sup>12</sup> Professor Sunstein acknowledges that “[p]hilosophers have raised serious doubts about the idea that a future death or illness should be discounted in the same way as money,”<sup>13</sup> but this has not stopped him from citing studies that use this technique to support his criticisms of regulation.

Professor Sunstein supports discounting of monetary benefits on the ground that such regulatory benefits are really economic projects to be invested in. If the rate of return on the life-saving project is less than the going interest rate in, for example, the stock or bonds market, then the present generation does a great disservice to the future by investing in the life-saving project rather than in the higher return investment. After all, this latter investment will leave future generations wealthier than would the life-saving project, since it would result in a legacy that is worth more than the regulatory benefits. In theory, future generations could use this legacy to purchase whatever life-saving interventions they would need, and they would still have money left over. This is why Professor Sunstein contends that we should think twice about investing in reducing greenhouse gas emissions to address global climate change. He writes: “The best way for the current generation to help posterity might be through reducing emissions; but it might be through other methods, including approaches that make posterity richer and better able to adapt.”<sup>14</sup>

***Our response.*** Progressives make at least two arguments against discounting over long periods of time. First, if the discount rate is applied for a long enough time horizon, then any regulatory benefit, no matter how large, can be shrunk to virtually nothing. Thus, cost-benefit discounting discourages regulatory action to prevent cancer because the costs of the regulation occur in the near future and the benefits occur 20 or 30 years later. Discounting is particularly troubling when it is applied to issues like global climate change, since, by definition, the present generation must undertake massive and potentially costly greenhouse gas reductions now in order to avoid catastrophic consequences over the next century or two. Professor Sunstein is of course aware of this problem with discounting. Rather than jettisoning the use of discounting when evaluating regulations for addressing climate change, however, Professor Sunstein instead recommends that the current generation “adjust overall savings and investment rates”—that is, to attempt to leave a larger legacy for future generations in terms of savings and investments to compensate them for the inconvenience that attends to living in a world devastated by climate change.<sup>15</sup>

---

<sup>11</sup> See DEREK PARFIT, *REASONS AND PERSONS* 357 (Clarendon Press, 1984).

<sup>12</sup> Richard W. Parker, *Grading the Government*, 70 U. CHI. L. REV. 1345, 1374 (2003).

<sup>13</sup> Sunstein & Rowell, *supra* note 9, at 175.

<sup>14</sup> DAVID WEISBACH & CASS R. SUNSTEIN, *CLIMATE CHANGE AND DISCOUNTING THE FUTURE: A GUIDE FOR THE PERPLEXED* 5-6 (Reg-Markets Center Working Paper No. 08-19, 2008).

<sup>15</sup> *Id.* at 4-6.

This response does not address our second objection to discounting over long periods of time, which is based on the recognition that the individuals comprising future generations are not the same as the individuals comprising the present generation. As such, “[n]o one individual will experience both the beginning and the end of the transaction; no one is able to make the personal judgment that the trade-off is, or is not, worthwhile.”<sup>16</sup>

The reason we reject the use of discounting for non-market goods relates to our more fundamental objection to cost-benefit analysis: it ignores the essential incommensurability between a single monetary metric and the diversity of values represented by non-market goods. Indeed, if the present generation leaves future generations with a world that is almost completely devoid of potable water and functioning, diverse ecosystems, no amount of money will be able to compensate for the “inconvenience.”

#### ***Issue 4: The Senior Death Discount***

***Professor Sunstein’s Views.*** Professor Sunstein has embraced what has come to be known as the “senior death discount,” which results from the application of the “value of a statistical life-year” (VSLY) approach to cost-benefit analysis. According to Professor Sunstein, the mark of a successful regulation should be not how many lives it saves, but rather how many additional life years it is able to preserve.<sup>17</sup> Sunstein writes, “[o]ther things being equal, a program that protects young people seems far better than one that protects old people, because it delivers greater benefits.”<sup>18</sup> Professor Sunstein maintains that there is nothing discriminatory about the senior death discount, however. Instead, it is merely a reflection of the fact that the elderly presumptively have fewer life years left, and therefore receive less benefits from regulations. Thus, when predicting the anticipated benefits of a proposed regulation, Professor Sunstein recommends that one consider who is the likely beneficiary of the regulation. If it is the elderly, then the regulation will produce on balance smaller regulatory benefits. This in turn means that the costs of the regulation—and thus its relative stringency—must be reduced accordingly so that the regulation maximizes economic efficiency.

***Our response.*** The problem with the senior death discount is that it treats people differently in significant ways, because of an attribute—age—that they cannot control, thus violating fundamental principles of equity. Moreover, the senior death discount, like the whole enterprise of cost-benefit analysis, denies the intrinsic value of individual lives. Undoubtedly, most Americans regard the “value” of their lives as more than the monetized “price” of the sum of their expected remaining life years. Regulatory processes that premise decisions on a cramped conception of individuals as mere repositories of residual life-years deny the plain reality that Americans value life itself, no matter how old they are, no matter how much money they’ve earned or will earn, no matter what their employment choices lead a government statistician or economist to conclude about their tolerance of serious risk. We recognize that society cannot spend an infinite amount of money making the world a less risky place. But

---

<sup>16</sup> FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING 185-86 (2004)

<sup>17</sup> Cass R. Sunstein, *Lives, Life-Years, and Willingness to Pay*, 104 COLUM. L. REV. 205, 208 (2004) [hereinafter Sunstein, *Lives, Life-Years, and Willingness to Pay*].

<sup>18</sup> *Id.* at 206.

current systems of regulation respect the intrinsic value of life by committing us to do the best we can to save lives and prevent injuries. Congress has done this by requiring agencies to maximize protection up to the point that it causes serious economic disruption.

### ***Issue 5: The Precautionary Principle***

***Professor Sunstein's Views.*** Professor Sunstein is one of the strongest critics of the precautionary principle among scholarly legal circles. The precautionary principle embodies a “better safe than sorry” approach to environmental, health, and safety risks when there is uncertainty about the causes or effects of those risks. It directs policymakers to err on the side of caution when uncertainty makes it impossible to know exactly how to respond to a perceived risk. Rather than waiting until all uncertainties have been resolved and the risks have actually caused harmful effects, the precautionary principle mandates that uncertainties about a potential risk should not alone be used as a reason for not taking reasonable proactive measures to forestall the harmful effects of that risk. The precautionary principle has become an integral part of modern environmental, public health, and safety regulatory strategy, having been codified in statutes like the Clean Air Act, which directs EPA to issue standards that protect health with an “adequate margin” of safety.

Professor Sunstein’s primary objection to the precautionary principle is that he finds it to be fundamentally unhelpful as a guide to thinking about how to respond to environmental, health, and safety risks. He observes that regulation to address a particular risk must invariably produce other, new risks that would otherwise not have occurred.<sup>19</sup> To illustrate this phenomenon, many regulatory opponents contend that regulations to improve fuel efficiency standards for motor vehicles have undermined safety features in motor vehicles, thereby leading to greater motor vehicle-related fatalities. Because of this phenomenon, Professor Sunstein contends that “regulation sometimes violates the precautionary principle because it gives rise to other risks, in the form of hazards that materialize, or are increased, as a result of regulation.”<sup>20</sup> Indeed, Professor Sunstein continues, if the precautionary principle is taken to its logical conclusion, then “extensive regulatory requirements are both required and forbidden.”<sup>21</sup> As such, the precautionary principle can become paralyzing, providing no guidance to policymakers whatsoever on how to address potential risks.

***Our response.*** All of the major health, safety, and environmental laws embrace the precautionary principle and make it the centerpiece of the nation’s policymaking. The principle provides the best means for avoiding unreasonable and irreversible harm. It is particularly important when the stakes are high, as it is on global climate change, which threatens to cause irreversible damage to the Earth and its ecosystems, damage no amount of money will undo. The precautionary principle creates an incentive to find out more information about potential risks, because it essentially shifts the burden of proof—from those who worry that an action will cause harm to those who want to undertake the potentially harmful action. If that entity—often a

---

<sup>19</sup> ROBERT W. HAHN & CASS R. SUNSTEIN, THE PRECAUTIONARY PRINCIPLE AS A BASIS FOR DECISION MAKING 3 (AEI-Brookings Joint Center for Regulatory Studies Working Paper 05-05, April 2005) [hereinafter HAHN & SUNSTEIN, THE PRECAUTIONARY PRINCIPLE].

<sup>20</sup> *Id.* at 4.

<sup>21</sup> *Id.*

business entity—is convinced that the action is still worthwhile, notwithstanding the potential risk, then it will undertake the expense and effort to demonstrate the safety of the action.<sup>22</sup> Finally, the precautionary principle is fully justified by history. It is difficult to think of a single public health or environmental threat that with the benefit of additional research has not proven even more dangerous over time.

Contrary to Professor Sunstein’s criticisms, the precautionary principle does not produce the kind of paralyzing effects that he claims. As implemented here and in Europe, the precautionary principle has not resulted in “knee-jerk” bans on all activities suspected of creating risks. Instead, the precautionary principle has come to embody a systematic methodology for assessing and responding to risks in the face of uncertainty. First, it calls on risk assessors to evaluate the initial degree and certainty of a future potential risk. It directs risk assessors to consider both the seriousness of the anticipated harm and the quantity and quality of the information on the basis on which the harm is foreseen. Second, the precautionary principle calls on risk assessors to understand the timing of the potential risk—that is, the temporal relationship between the original understanding of the risk (i.e. its seriousness and the quantity and quality of the information on which this understanding is based) and the taking of a regulatory response. This temporal relationship is used to inform regulators on how to manage the potential risk, and it is designed to permit regulators to take proactive action to prevent risk, rather than forcing them to wait and respond to risks once the bodies start piling up. Third, the precautionary principle directs regulators to contemplate a wide range of regulatory responses for a potential risk. Contrary to its critic’s claims, the precautionary principle does not mandate bans, but instead directs regulators to base the proper regulatory response on a variety of factors, including the severity of the potential risk, costs of responding, and potential risk trade-offs that might result from responding to the risk. Fourth, because the precautionary principle justifies taking action in the face of uncertainty, it also directs regulators to respond to risks in an iterative fashion. As such, the precautionary principle anticipates and endorses that a regulatory response be altered appropriately as more knowledge about a potential risk becomes available.<sup>23</sup>

### ***Issue 6: The Centralization of Regulatory Authority***

***Professor Sunstein’s Views.*** Professor Sunstein has long advocated for greater centralization of regulatory authority within the Executive Branch, particularly within OIRA. Professor Sunstein has written that the primary problem with the regulatory system is that it “has hardly come into compliance with the principles of cost-benefit balancing.”<sup>24</sup> The result of this non-compliance allegedly is excessively costly regulation and poor priority-setting for regulatory action. To resolve this problem, Professor Sunstein has endorsed a number of policies that would both expand the use of cost-benefit analysis and strengthen the role of OIRA.

<sup>22</sup> Ctr. for Progressive Reform, *CPR Perspective: The Precautionary Principle*, <http://www.progressivereform.org/perspPrecaution.cfm> (last visited Jan. 14, 2009).

<sup>23</sup> John S. Applegate, *The Taming of the Precautionary Principle*, 27 WM. & MARY ENVTL. L. & POL’Y REV. 13, 17-20 (2002).

<sup>24</sup> ROBERT W. HAHN & CASS R. SUNSTEIN, A NEW EXECUTIVE ORDER FOR IMPROVING FEDERAL REGULATION? DEEPER AND WIDER COST-BENEFIT ANALYSIS I (AEI-Brookings Joint Center for Regulatory Studies Working Paper 02-4, March 2002) [hereinafter HAHN & SUNSTEIN, COST-BENEFIT ANALYSIS].

Professor Sunstein proposes that the use of cost-benefit analysis be extended to *independent* regulatory agencies, such as the Federal Trade Commission. Presently, these agencies are not subject to the two Executive Orders mandating agency use of cost-benefit analysis: Executive Order 12866 and Executive Order 13422. Indeed, these agencies have traditionally operated with little interference by the White House. Though he recognizes that asserting this much presidential control over independent regulatory agencies raises significant constitutional questions, Professor Sunstein believes that this proposal is justified on the grounds that independent regulatory agencies undertake important regulatory functions that ought to be governed by considerations of economic efficiency.<sup>25</sup>

Professor Sunstein also proposes a number of measures to ensure that the role of cost-benefit analysis is strengthened within the various regulatory agencies. Currently, under Executive Order 12866, all regulatory agencies are required to conduct cost-benefit analyses for regulations defined by the Order as major (*i.e.*, regulations that have some specified large impact on the economy), but apparently Professor Sunstein does not think this requirement has encouraged these agencies to integrate fully cost-benefit analysis principles into their daily operations. Accordingly, he recommends establishing a general “presumption” that agencies should “act only when the benefits exceed the costs,” a requirement not typically set forth in the statutes that direct agencies to develop regulations to enforce the law. His proposal, in fact, closely parallels the cost-benefit “supermandate” that radical deregulators in the “Gingrich Congress” attempted to enact in 1995 over the strong objections of the Clinton Administration and progressive public interest groups. Significantly, the OIRA Administrator would have the final authority to determine whether or not a proposed regulation has passed a cost-benefit test. If a proposed regulation does not pass a cost-benefit test, then Professor Sunstein would require the proposing agency to provide a rationale for why the regulation should still be promulgated, even though it is not justified by cost-benefit analysis.<sup>26</sup> Although Professor Sunstein has not made this point clear, the OIRA Administrator would presumably also have final authority to determine whether or not the agency’s proffered rationale is satisfactory.

Finally, Professor Sunstein has proposed that each executive agency develop annual regulatory plans. These plans would be developed in consultation with OIRA. The goal of this annual planning process is to ensure that both cost-benefit analysis and OIRA are factored into regulatory decisionmaking “at an early stage.” Each year, the planning process would begin with every agency producing a summary of its planned rules, which they would then forward to OIRA for review. Significantly, the requirement that agencies develop annual regulatory plans in consultation with OIRA was later codified in Executive Order 13422, which was issued by President George W. Bush a few years after Professor Sunstein first proposed the idea.<sup>27</sup>

***Our response.*** We have grave misgivings about the centralization of regulatory authority within the executive branch, particularly when these efforts have involved (1) expanding or reinforcing the influence of cost-benefit analysis in regulatory decisionmaking or (2) providing OIRA with greater regulatory oversight and priority-setting authority. The expansion of OIRA’s influence allows a small group of economists in OIRA to displace the expertise of agency

---

<sup>25</sup> *Id.* at 7.

<sup>26</sup> *Id.* at 8, 34-35.

<sup>27</sup> Exec. Order No. 13422, 72 Fed. Reg. 2763 (Jan. 18, 2007).

personnel on a wide variety of complex regulatory issues, ranging from air pollution to workplace safety.

We are similarly troubled by the proposal to expand the influence of OIRA over regulatory oversight and priority-setting. Because of its centralized oversight authority, OIRA has acquired a direct and profound influence over all the regulations promulgated by executive agencies. While OIRA's authority is theoretically limited to ensuring that proposed regulations comply with nominally procedural requirements, such as Professor Sunstein's proposed cost-benefit guidelines, this authority gives OIRA significant authority over the substance of regulations as well. We acknowledge that there is some need for a centralized body in the executive branch to help with regulatory coordination, in order to avoid inconsistency and unnecessary duplication and to help sort out any interagency conflicts. This, however, is a much more limited role for OIRA than the one envisioned by Professor Sunstein. Most importantly, it leaves the discretion over the substance of important regulatory decisions where it belongs, namely, with the regulatory agency personnel that have expertise over these matters. Indeed, the statutes under which regulatory agencies operate vest policymaking authority in the agencies themselves, not in OIRA. Thus, to the extent that OIRA interferes with this policymaking authority by conducting regulatory oversight and priority-setting, it is operating unlawfully.

### ***Issue 7: The Occupational Safety and Health Act***

***Professor Sunstein's Views.*** One of Professor Sunstein's most controversial papers, published in 2008, concludes that the Occupational Safety and Health Act (OSH Act)—the single most important regulatory statute for protecting U.S. workers' health and safety while on the job—could plausibly be found unconstitutional. In particular, he explains how the OSH Act might violate the non-delegation doctrine, a constitutional requirement that Congress may not enact statutes that give regulatory agencies too much discretion. The non-delegation doctrine rests on the principle of separation of powers. The Constitution places the responsibility for "legislation" in the Congress, and the Supreme Court has held that Congress may not delegate law-making power to agencies in the form of statutes that are so vaguely worded that the courts cannot tell what the limits are of the authority that Congress has delegated.

Although the U.S. Supreme Court has been extremely reluctant to strike down a statute on non-delegation grounds (indeed, it has not happened in more than 70 years), Professor Sunstein argues that the OSH Act represents "one of the few settings in federal law in which [the non-delegation] problem is genuinely acute under existing law."<sup>28</sup> The key provision of OSH Act authorizes the Secretary of Labor to issue any "occupational safety and health standard[s]" that are "reasonably necessary or appropriate to provide safe or healthful employment or places of employment." For Professor Sunstein, this provision raises a real non-delegation "problem," since a federal court might reasonably conclude that this provision does not adequately limit the exercise of agency discretion.

---

<sup>28</sup> CASS R. SUNSTEIN, IS OSHA UNCONSTITUTIONAL? 1-4 (John M. Olin Law & Economics Working Paper No. 307, March 2008) [hereinafter SUNSTEIN, IS OSHA UNCONSTITUTIONAL?].

Professor Sunstein is of course careful to observe that striking down OSH Act is not the only way that a federal court could deal with the Act's non-delegation "problem." While this approach would be the "most aggressive" of the three potential responses he evaluates, Professor Sunstein finds advantages to this approach that give it "real attraction,"<sup>29</sup> namely "it would inevitably trigger a democratic debate about the proper content of occupational safety and health policy—a debate that would in all likelihood be more sophisticated and constructive than the crude discussion, over thirty years ago, that initially produced [OSH Act]."<sup>30</sup> Professor Sunstein also recognizes that this approach would have some disadvantages as well, in that "[a] decision to invalidate [OSH Act] would send shock waves through the federal regulatory state."<sup>31</sup>

One other approach that Professor Sunstein considers—one that he conceives of as a middle approach that is "in some ways the most attractive"—is to interpret OSH Act's "'reasonably necessary or appropriate' language to mandate some form of cost-benefit balancing."<sup>32</sup> Professor Sunstein finds that this is "probably the best response to the nondelegation challenge, and it would also have the important virtue of promoting both transparency and coherence in occupational safety policy."<sup>33</sup> He is careful to note that "any kind of cost-benefit balancing would raise serious questions about the application of cost-benefit principles to the distinctive context of occupational safety, where those principles might not readily apply, at least not in their standard form."<sup>34</sup>

***Our response.*** Far from being an agency that is running amok, drunk with power, and operating beyond its statutory mandate, the Occupational Safety and Health Administration (OSHA)—the bureau within the Department of Labor charged with implementing OSH Act—is one of the most dysfunctional agencies in the regulatory system. Throughout the Bush Administration, OSHA has been stripped of its resources and forced to contend with an ever-expanding universe of procedural requirements. The sad results of this process are plain for all to see: in the past decade, OSHA has promulgated only two regulations concerning workplace toxics. Challenging OSH Act on non-delegation grounds is not going to solve any of these problems at OSHA; if anything, it will serve to distract people from what really needs to be done to revitalize this crucial regulatory agency.

Raising the question about OSH Act's constitutionality was bad enough (particularly since the U.S. Supreme Court has already rejected this argument before<sup>35</sup>), but Professor Sunstein's suggestions for dealing with the non-delegation problem add further insult to this injury. Because OSHA is in such a hobbled state, millions of U.S. workers have been left unprotected from workplace hazards. As Professor Sunstein even notes, "[o]ver 5,000 Americans die each year in the work place, and more than four million are injured or sickened by the conditions of their employment. Surely steps could be taken to reduce these deaths, injuries,

---

<sup>29</sup> *Id.* at 4.

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

<sup>32</sup> *Id.* at 5.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.*

<sup>35</sup> See *Indus. Union Dep't, AFL-CIO v. Am. Petroleum Inst. [The Benzene Case]*, 448 U.S. 607 (1980).

and illnesses.”<sup>36</sup> We could not agree more. The steps we would advocate would be to free OSHA from unnecessary procedural requirements and to provide it with adequate resources so that it can undertake the important work of promulgating new and better regulations to protect workers. This will not happen, however, if OSH Act is struck down, and Congress is forced to go back to the drawing board and have a “more sophisticated and constructive” “debate about the proper content of occupational safety and health policy.”

### ***Issue 8: How the United States Should Respond to Climate Change***

***Professor Sunstein’s Views.*** Professor Sunstein’s views on how the United States should respond to climate change begin with his observation that considerations of self-interest do not justify much in the way of emissions reductions by the United States. This is because, on the one hand, significant emissions reductions will be very costly for the United States, and, on the other hand, the United States stands to lose relatively little from global climate change. Thus, Professor Sunstein concludes that “to the extent that the United States anticipates that it is likely to lose little, on net, from climate change, its incentive to agree to expensive emissions reductions will not be very high.”<sup>37</sup> Professor Sunstein recognizes that “a strong consensus supports the view that the world would benefit from significant steps to control greenhouse gas emissions.”<sup>38</sup> But in his view, the self-interest of the United States justifies only minimal reductions in domestic greenhouse gas emissions, reductions that would be far less than what is necessary to achieve the amount of global greenhouse gas emission reductions that are demanded by the self-interest of the rest of the world.

Given the disparity between the self-interest of the United States and that of the rest of the world over the issue of climate change, Professor Sunstein asks if the United States has any moral obligation to undertake emissions reductions that exceed its self-interest, but which are in the interest of the rest of the world.<sup>39</sup> In particular, Professor Sunstein considers two forms of justice that might require the United States to undertake emissions reductions that are in the self-interest of the world but not in its own self-interest, and then rejects both of them. First, Professor Sunstein considers whether notions of distributive justice—or the form of justice that demands a remedy for fundamentally unfair distributions of wealth or resources—justifies extraordinary action by the United States. The distributive justice argument might begin by noting that “the United States has the highest Gross Domestic Product in the world.” Thus, the argument continues, the wealth of the United States “might suggest that it has a special duty to help to reduce the damage associated with climate change.”<sup>40</sup> While accepting the distributive justice argument in principle, Professor Sunstein ultimately concludes that it does not justify extraordinary emissions reductions by the United States. Professor Sunstein sees such extraordinary emissions reductions as a form of wealth redistribution. He objects that this form of wealth redistribution is far less efficient than straightforward cash transfers. As Professor Sunstein writes, “as an instrument of redistribution, emission reductions on the part of the United

---

<sup>36</sup> SUNSTEIN, IS OSHA UNCONSTITUTIONAL?, *supra* note 28, at 3.

<sup>37</sup> ERIC A. POSNER & CASS R. SUNSTEIN, CLIMATE CHANGE JUSTICE 14 (John M. Olin Law & Economics Working Paper No. 354, August 2007).

<sup>38</sup> *Id.* at 7.

<sup>39</sup> *Id.* at 14.

<sup>40</sup> *Id.* at 2.

States are quite crude.”<sup>41</sup> Thus, rather than relying on emissions reductions to achieve distributive justice goals, Professor Sunstein would advocate that wealthy nations like the United States give cash transfers to poor nations, “so that poor nations can use the money as they see fit.”<sup>42</sup>

Second, Professor Sunstein considers whether notions of corrective justice—or the form of justice that demands retribution for past bad behavior—requires the United States to undertake extraordinary emissions reductions. The corrective justice argument posits that because the United States has been historically responsible for a substantial majority of the greenhouse gases released into the atmosphere, then the United States should therefore devote substantial resources to remedy the problem of climate change. Professor Sunstein rejects the corrective justice argument, however, because the United States is a country, rather than a person, and therefore cannot be properly treated as a moral agent for purposes of achieving corrective justice. As Professor Sunstein notes, “talk of corrective justice between states can only be a metaphor.”<sup>43</sup> In other words, the principles of corrective justice simply do not apply to collectivities like nation-states.

***Our Response.*** We recognize that climate change has the potential to be the single most destructive act that humankind has ever visited upon itself and upon the planet on which humankind depends. We are convinced, as are the vast majority of the world’s scientists, that the individuals and the environment that will suffer irreparable harm as a result of even modest climate change effects have an extraordinary value that cannot be reduced to dollars and cents.

Bearing this in mind, we have a hard time understanding what Professor Sunstein means when he suggests that the United States will “lose” relatively little as a result of climate change. First of all, we believe that this conclusion fundamentally ignores the way the world and science work. For example, because of the interdependence of ecosystems around the world, catastrophic damage to ecosystems outside of U.S. borders will almost certainly have a negative effect on those ecosystems located primarily or entirely within U.S. borders. Similarly, the consequences of climate change will also likely contribute to great social and economic upheaval abroad. Such upheaval, of course, would harm U.S. economic interests as they relate to international trade. It is not clear whether Professor Sunstein takes these indirect consequences of climate change into effect when he measures the “losses” that the United States would likely suffer as a result of climate change. Second of all, many of the losses that the United States would likely suffer cannot readily be converted in monetary terms. For example, U.S. ecosystems embody a number of different kinds of values—many of which defy monetization. Thus, it would be impossible to measure the costs that result from damage to U.S. ecosystems. Similarly, if, as described above, the consequences of global climate change lead to social and economic upheaval, this may cause social dislocation and political instability around the world. Such social dislocation and political instability in turn creates a distinct threat to U.S. national security interests. It is impossible to put a monetary value on the costs that arise from these national security threats, however. Accordingly, many of the losses for the United States that

---

<sup>41</sup> *Id.* at 18.

<sup>42</sup> *Id.* at 16.

<sup>43</sup> *Id.* at 20.

may result from global climate change will be difficult to measure in monetary terms, but they are by no means inconsequential.

More fundamentally, however, we disagree with Professor Sunstein that the U.S. response to global climate change should be understood in terms of U.S. self-interest. Instead of seeing the U.S. response to climate change as strictly an issue of self-interest, we believe it is necessary to undertake efforts to reduce greenhouse gas emissions—even if these measures are costly—because we wish to preserve the extraordinary value of the individuals and the natural environment that might otherwise be damaged by global climate change.

Moreover, focusing on the U.S. response to climate change as an issue of self-interest ignores intergenerational equity concerns. In essence, intergenerational equity concerns require the present generation to evaluate how its activities affect future generations. This is especially important when considering how the activities of the present generation affect the environment. How the United States responds to global climate change today will have a profound affect on future generations. Ultimately, we are not persuaded by Professor Sunstein's response to this issue. As noted above, on the issue of how the United States should respond to global climate change, Professor Sunstein has written the following: "The best way for the current generation to help posterity might be through reducing emissions; but it might be through other methods, including approaches that make posterity richer and better able to adapt."<sup>44</sup> Professor Sunstein's approach is predicated on the belief that monetary value is commensurable with all the values that might be lost through the consequences of global climate change. We reject this belief. Thus, we believe that intergenerational equity concerns demands that we actually try to reduce greenhouse gas emissions as part of an earnest effort to avoid the worst consequences of global climate change.

In the event that Congress succeeds in passing climate change legislation, the regulations for promulgating that legislation would almost certainly come before OIRA soon thereafter. If this is the case, then we believe that these regulations should be evaluated in terms of how well they protect the environment, public health, and safety—rather than in terms of whether or not they serve the self-interest of the United States.

---

<sup>44</sup> WEISBACH & SUNSTEIN, *supra* note 14, at 5-6.

## **Bibliography**

- Frank Ackerman, *Can We Afford the Future? Economics for a Warming World* (Zed Books, 2009).
- Frank Ackerman, *Poisoned for Pennies: The Economics of Toxics and Precaution* (Island Press, 2008).
- Frank Ackerman, *The Economics of Atrazine*, 13 (4) Int'l J. Occupational & Env'tl. Health 441 (2007).
- Frank Ackerman, *The Unbearable Lightness of Regulatory Costs*, 33 Fordham Urb. L.J. 1071 (2006).
- Frank Ackerman, *Morality, Cost-Benefit, and the Price of Life*, The Env'tl. Forum, Sept./Oct. 2004, at 44.
- Frank Ackerman & Kevin Gallagher, *Getting the Prices Wrong: The Limits of Market-Based Environmental Policy*, in *Taking Sides: Clashing Views on Controversial Economic Issues* (Thomas R. Swartz and Frank J. Bonello eds., McGraw Hill, 2001).
- Frank Ackerman & Lisa Heinzerling, *Law and Economics for a Warming World*, 1 Harv. L. & Pol'y Rev. 331 (2007).
- Frank Ackerman & Lisa Heinzerling, *Wasting Away in Paretoville: A Reply to Cass Sunstein*, 1 Harv. L. & Pol'y Rev. 363 (2007).
- Frank Ackerman & Lisa Heinzerling, *Priceless: On Knowing the Price of Everything and the Value of Nothing* (The New Press, 2004).
- Frank Ackerman & Lisa Heinzerling, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection*, 150 U. Pa. L. Rev. 1553 (2002).
- Frank Ackerman, Lisa Heinzerling, & Rachel I. Massey, *Wrong in Retrospect: Cost-Benefit Analysis of Past Successes*, in *Frontiers in Ecological Economic Theory and Application* (Jon D. Erickson and John M. Gowdy eds., Edward Elgar, 2007).
- Frank Ackerman, Lisa Heinzerling, & Rachel Massey, *Applying Cost-Benefit to Past Decisions: Was Environmental Protection Ever a Good Idea?*, 57 Admin. L. Rev. 155 (2005).
- John S. Applegate, *The Taming of the Precautionary Principle*, 27 Wm. & Mary Env'tl. L. & Pol'y Rev. 13 (2002).
- William W. Buzbee, *Regulatory Reform or Statutory Muddle: The 'Legislative Mirage' of Single Statute Regulatory Reform*, 5 N.Y.U. Env'tl. L. J. 298 (1996)
- David M. Driesen, *Is Cost-Benefit Analysis Neutral?*, 77 Colo. L. Rev. 335 (2006).
- David M. Driesen, *Regulatory Reform: The New Lochnerism?*, 36 Env'tl. L. 603 (2006).
- David M. Driesen, *Distributing the Costs of Environmental, Health and Safety Protection: The Feasibility Principle, Cost-Benefit Analysis, and Regulatory Reform*, 32 B.C. Env'tl. Aff. L. Rev. 1 (2005).
- David M. Driesen, *Getting Our Priorities Straight: One Strand of the Regulatory Reform Debate*, 31 Env'tl. L. Rep. (Env'tl. L. Inst.) 10003 (2001).
- David M. Driesen, *The Societal Cost of Environmental Regulation: Beyond Administrative Cost-Benefit Analysis*, 24 Ecology L.Q. 545 (1997).
- Daniel A. Farber, *Rethinking the Role of Cost-Benefit Analysis* (forthcoming 2009 University of Chicago Law Review), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1324388](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1324388).
- Daniel A. Farber, *From Here to Eternity: Environmental Law and Future Generations*, 2003 U. Ill. L. Rev. 289 (2003).

- Daniel A. Farber, *Eco-Pragmatism: Making Sensible Environmental Decisions in an Uncertain World* (Univ. of Chicago Press, 1999).
- Daniel A. Farber & Paul Hemmersbaugh, *The Shadow of the Future: Discount Rates, Later Generations, and the Environment*, 46 Vand. L. Rev. 267 (1993)
- Victor B. Flatt, *The “Benefits” of Non-Delegation: Using the Non-delegation doctrine to bring Rigor to Benefit-Cost Analysis*, 15 Wm. & Mary Bill Rts. J. 1087 (2007).
- Lisa Heinzerling, *Markets for Arsenic*, 90 Geo. L.J. 2311 (2002).
- Lisa Heinzerling, *Discounting Our Future*, 34 Wyo. Land & Water L. Rev. 39 (1999).
- Lisa Heinzerling, *Regulatory Costs of Mythic Proportions*, Yale L.J. 107 (1998).
- Douglas A. Kysar, *Discounting... On Stilts*, 74 U. Chi. L. Rev. 119 (2007).
- Douglas A. Kysar, *It Might Have Been: Risk, Precaution, and Opportunity Costs*, 22 J. Land Use & Envtl. L. 1 (2006).
- Thomas O. McGarity, *The Goals of Environmental Legislation*, 31 B.C. Env. Aff. L. Rev. 529 (2004).
- Thomas O. McGarity, *Professor Sunstein's Fuzzy Math*, 90 Geo. L. J. 2341 (2002).
- Thomas O. McGarity, *A Cost-Benefit State*, 50 Ad. L. Rev. 7 (1998).
- Thomas O. McGarity, *Reinventing Rationality* (Cambridge Univ. Press 1991).
- Thomas O. McGarity, *Regulatory Analysis and Regulatory Reform*, 65 Tex. L. Rev. 1243 (1987).
- Thomas O. McGarity, *Media Quality, Technology and Cost-Benefit Balancing Strategies for Health and Environmental Regulation*, 46 Law & Contemp. Prob. 159 (1983).
- Thomas O. McGarity & Ruth Ruttenberg, *Counting the Cost of Health, Safety and Environmental Regulation*, 80 Tex. L. Rev. 1997 (2002).
- Thomas O. McGarity, Sidney A. Shapiro, & David Bollier, *Sophisticated Sabotage* (Envtl. L. Inst., 2004).
- Thomas O. McGarity & David C. Vladeck, *Paralysis by Analysis*, *The American Prospect*, Summer 1995, at 78.
- Catherine A. O’Neill, *The Mathematics of Mercury*, in *Alternative Approaches to Regulatory Impact Analysis* (Lisa Heinzerling & Richard Morgenstern eds., Resources for the Future, 2009) (forthcoming).
- Sidney A. Shapiro & Robert L. Glicksman, *Risk Regulation at Risk: Restoring a Pragmatic Approach* (Stanford Univ. Press 2003).
- Amy Sinden, *In Defense of Absolutes: Combating the Politics of Power in Environmental Law*, 90 Iowa L. Rev. 1405 (2005).
- Amy Sinden, *Cass Sunstein’s Cost-Benefit Lite: Economics for Liberals*, 29 Colum. J. Envtl. L. 191 (2004).
- Amy Sinden, *The Economics of Endangered Species: Why Less is More in the Economic Analysis of Critical Habitat Designations*, 28 Harv. Envtl. L. Rev. 129 (2004).
- Rena I. Steinzor, *Mother Earth and Uncle Sam: How Pollution and Hollow Government Hurt Our Kids* (Univ. of Texas 2007).
- Robert R.M. Verchick, *The Case Against Cost-Benefit Analysis*, 32 Ecology L. Q. 101 (2005).

## *About the Center for Progressive Reform*

Founded in 2002, the Center for Progressive Reform is a 501(c)(3) nonprofit research and educational organization comprising a network of scholars across the nation 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 Public Welfare Foundation and the Deer Creek Foundation for their generous support of CPR's work on regulatory issues.

### **The Center for Progressive Reform**

104 Colony Crossing  
Edgewater, MD 21037  
202.747.0698

[info@progressivereform.org](mailto:info@progressivereform.org)

Direct media inquiries to Matthew Freeman, 202.747.0698, x2, or  
[mfreeman@progressivereform.org](mailto:mfreeman@progressivereform.org).

Visit CPR on the web at [www.progressivereform.org](http://www.progressivereform.org).

### **Acknowledgements**

This white paper is a collaborative effort of the following CPR Member Scholars and staff:

- **John S. Applegate** is the Walter W. Foskett Professor of Law at the Indiana University Maurer School of Law – Bloomington, and is a member of the Board of Directors for the Center for Progressive Reform.
- **Robert L. Glicksman** holds the Robert W. Wagstaff Chair at the University of Kansas Law School, and is a member of the Board of Directors for the Center for Progressive Reform.
- **Thomas O. McGarity** holds the Joe R. and Teresa Lozano Long Endowed Chair in Administrative Law at the University of Texas in Austin, is a member of the Board of Directors for the Center for Progressive Reform, and the immediate past president of the organization.
- **Sidney A. Shapiro** holds the University Distinguished Chair in Law and serves as Associate Dean for Research and Development at the Wake Forest University School of Law, and is a member of the Board of Directors for the Center for Progressive Reform.
- **Amy Sinden** is an Associate Professor of Law at the Temple University Beasley School of Law, and is a member of the Board of Directors for the Center for Progressive Reform.
- **Rena I. Steinzor** is the Jacob A. France Research Professor of Law at the University of Maryland School of Law, and is the President of and a member of the Board of Directors for the Center for Progressive Reform.
- **Robert R.M. Verchick** holds the Gauthier-St. Martin Eminent Scholar Chair in Environmental Law at Loyola University New Orleans College of Law, and is a member of the Board of Directors of the Center for Progressive Reform.
- **James Goodwin, J.D., M.P.P.**, is a Policy Analyst at the Center for Progressive Reform.