

**United States Senate Committee on Environment and Public Works
Subcommittee on Superfund, Waste Management, and Regulatory Oversight
Hearing entitled “Oversight of Regulatory Impact Analysis for U.S. Environmental
Protection Agency Regulations”**

October 21, 2015

Responses to Questions for the Record to William Kovacs

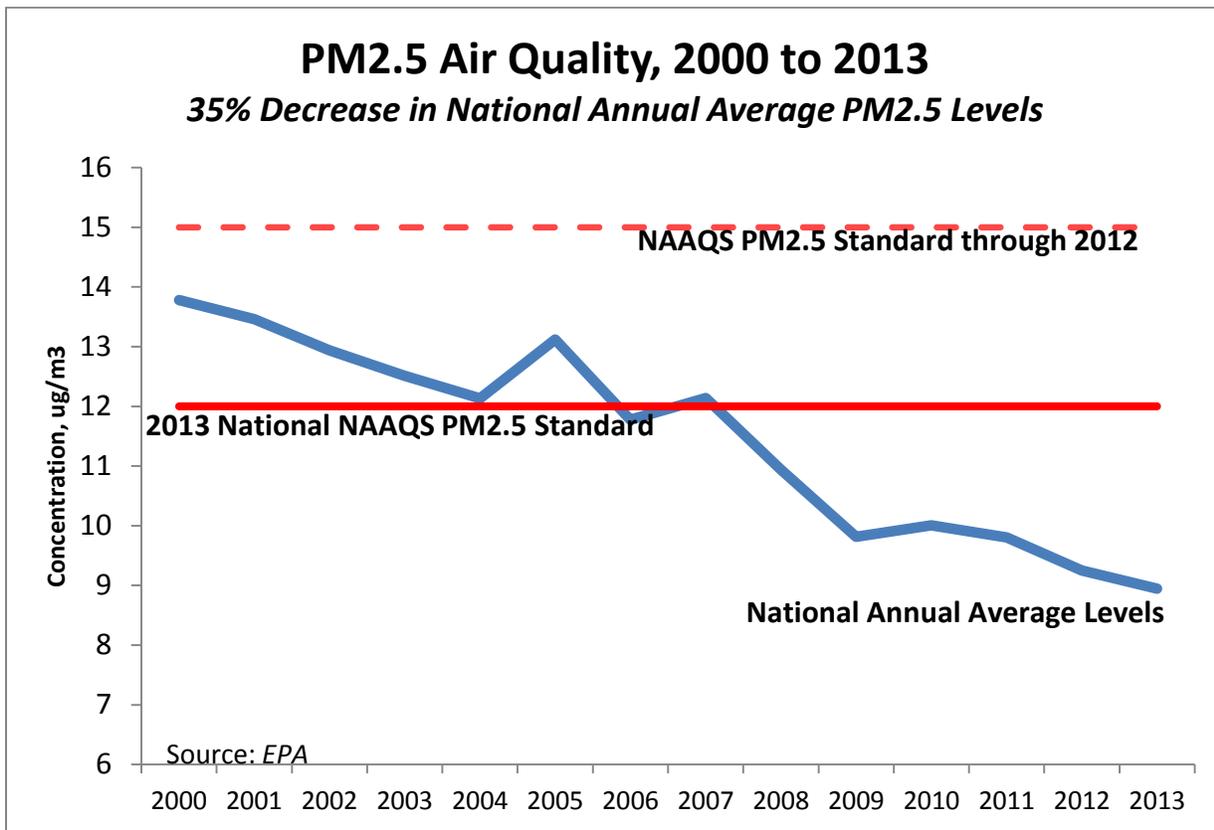
Questions from Chairman Inhofe:

1. *During the hearing, Senator Markey asked Ms. Steinzor whether it is accurate to say that guidance for Regulatory Impact Analysis (RIA) directs federal agencies to count the additional “co-benefits” of regulations and accounting for co-benefits has been the longstanding practice under several administrations. Ms. Steinzor said that this was accurate. Ms. Steinzor further agreed with Senator Markey’s statement that “if there is a rule that says a company has to reduce the amount of mercury it is sending up into the atmosphere, and simultaneously that rule also has the simultaneous benefit of reducing the amount of smog that is going up in the air or soot that is going up into the air that could wind up in the lungs of children and cause harm, the EPA could count that, and both Democratic and Republican administrations have counted that as a co-benefit.” However, in the recent Michigan v. EPA Supreme Court case, the Court specifically questioned EPA’s near total reliance on fine particulate matter (PM2.5) reduction co-benefits to justify the Mercury Air Toxics Rule.*
 - a. *If broadly counting co-benefits is such a widely-accepted practice in RIAs as Senator Markey and Ms. Steinzor assert, why did the Supreme Court specifically question EPA’s use of PM2.5 co-benefits in the MATS rule?*

Although Senator Markey and Professor Steinzor are correct that guidance issued by the Office of Management and Budget in 2003 does encourage agencies conducting an RIA to “consider any important ancillary benefits and countervailing risks,”¹ these co-benefits clearly cannot comprise virtually *all* of the benefits of a rule that is written to accomplish an unrelated objective. As OMB’s guidance states, “[a]n ancillary benefit is a favorable impact of a rule that is typically *unrelated or secondary to the statutory purpose of the rulemaking*.”² In the case of the MATS rule, the statutory purpose of the rule is to reduce mercury emissions. EPA estimated under its RIA that mercury reductions under the rule have benefits of no more than \$4 million to \$6 million per year. However, virtually *all* of the \$9.6 billion in cost of the rule is for unrelated PM2.5 reductions and the co-benefits they create, despite the fact that PM2.5 is well-controlled by its own standard, the PM2.5 National Ambient Air Quality Standard (NAAQS), as illustrated by the following chart:

¹ OMB Circular A-4, “Regulatory Analysis” (September 17, 2003).

² *Id.* at 26.



If the statutory objective of the MATS rule was to reduce mercury emissions, why did EPA actually write such a costly rule to reduce PM2.5 with only relatively marginal mercury benefits? Couldn't the agency have selected a regulatory alternative that reduces mercury but that imposes much less cost? EPA could have directly taken action to reduce PM2.5 under the PM2.5 NAAQS, but chose not to do so. Did EPA even consider such an alternative approach? It is virtually impossible to tell if the agency did so under the RIA that EPA prepared for the rule.

By highlighting that the public is paying almost exclusively for PM2.5 reductions in the MATS rule, not mercury reductions, it becomes obvious that the “co-benefits” the rule relies on to justify its excessive costs are not legitimate. The Supreme Court noted that “[t]he costs to power plants were thus between 1,600 and 2,400 times as great as the quantifiable benefits for reduced emissions of hazardous air pollutants. The Agency continued that its regulations would have ancillary benefits—including cutting power plants’ emissions of particulate matter and sulfur dioxide, *substances that are not covered by the hazardous-air-pollutants program*.”³ While the Court ultimately found that EPA had not relied on its RIA to decide whether to regulate, it clearly questioned whether such co-benefits are legitimate in the virtual absence of any direct benefits, “[e]ven if the Agency *could* have considered ancillary benefits when deciding whether regulation is appropriate and necessary—a point we need not address—it plainly did not do so here.”⁴

³ *Michigan v. EPA*, ___ U.S. ___ (2015), slip op. at 4 (emphasis added).

⁴ *Id.* at 14-15 (emphasis in original).

The Court's focus on, and clear preference for, direct benefits over ancillary benefits gets to the essential question of why a rulemaking is appropriate in the first place: the direct benefits of a regulatory action should exceed its costs. When an agency has to justify a costly rulemaking by relying nearly exclusively on ancillary, indirect benefits unrelated to the statutory purpose of the regulatory program, those ancillary benefits should be heavily discounted.

2. *The Supreme Court in Michigan v. EPA overturned EPA's mercury rule because EPA failed to consider cost as a factor when deciding to promulgate the rule. Notably, the rule was supposed to address mercury, but EPA justified it by claiming co-benefits from reductions in particulate matter (PM), a substance already regulated under the National Ambient Air Quality Standards (NAAQS). During oral arguments, the justices questioned EPA's use of PM co-benefits, with Chief Justice Roberts noting EPA's approach seems to be a way "to get at the criteria pollutants that you otherwise would have to go through a much more difficult process to regulate [i.e., the NAAQS]."*

a. *Do you agree with Chief Justice Roberts' comment?*

Yes. It is a serious concern that EPA chooses to structure its non-PM regulations to focus on ever-more costly reductions in PM_{2.5}. From an RIA standpoint, it is particularly frustrating that the agency is permitted to portray rules such as the MATS rule and the Portland Cement MACT rule as critical tools to reduce hazardous air pollutants (HAPs), when in fact virtually none of their benefits actually come from reducing HAPs. EPA and advocacy groups widely promote the environmental benefits of these rules, knowing that those benefits are ancillary benefits that the public might not be as eager to support (e.g., further PM_{2.5} reductions rather than further mercury reductions). Because PM_{2.5} levels have already fallen by some 35% since 2000, the agency has a much easier time maintaining support for HAP rules that claim big health benefits (even if they are really just PM_{2.5} benefits) than having to sell people on further tightening the PM_{2.5} NAAQS standard itself.

b. *Do you think EPA's use of PM co-benefits is a way to circumvent the NAAQS process?*

Yes. EPA may also prefer to try to achieve PM_{2.5} reductions outside of the statutory process for revising the NAAQS because of the inherent difficulty of revising the nationwide standards. This is a lengthy and sometimes difficult process for the agency to navigate, as illustrated by the current EPA revision of the Ozone NAAQS. In 2011, the agency was able to assure stakeholders that the revised PM_{2.5} NAAQS would not be costly or onerous to meet because PM emissions had already fallen so much due to other rules (e.g., on-road and non-road diesel engine/fuel rules, marine diesel engine rule, etc.). The agency was to a great extent able to avoid a protracted legal fight with industry. Although EPA may prefer to deal with PM_{2.5} this way, the Clean Air Act requires EPA to set and revise a PM NAAQS to regulate the pollutant, with a prescribed process for the agency to follow.

3. *In press reports following the Supreme Court's decision in Michigan v. EPA, associate professor of law at Stanford University Michael Wara said "If the Supreme Court were to question the co-benefits in Michigan v. EPA, why not question the inclusion of international climate benefits and U.S. co-benefits for [the Clean Power Plan] that creates a tiny climate benefit for U.S. taxpayers, especially when compared to the costs of producing it?"*

- a. *Do you agree with the professor's remarks?*

Professor Wara has perhaps unintentionally highlighted a real problem with the benefits justification of the Clean Power Plan (CPP). The CPP relies for its calculated climate benefits on the so-called "social cost of carbon," developed by an Interagency Working Group within the Obama administration. The "social cost of carbon" concept is itself grounded upon multiple assumptions of distant future global events that cannot be validated within many decades. This is problematic because it is extraordinarily difficult to know whether the assumed benefits of the CPP will actually ever happen as projected. Also, the benefits of avoided future climate changes are aggregated globally, so that it is impossible to separate the benefits of U.S. actions such as the CPP from global benefits that would accrue to everyone on Earth. This approach is counter to the scope of analysis and distributional effects requirements of OMB Circular A-4⁵ and is inappropriate.

- b. *Can you elaborate on how the Clean Power Plan relies on international climate benefits and co-benefits?*

The carbon reduction benefits that EPA relies on in the CPP rely on the social cost of carbon (SCC) model. The SCC analysis is by design a global estimate. It estimates impacts on global GDP under simulated temperature rises and simulated damages caused by the various predicted effects of temperature rise. Circular A-4 states, however, that a regulatory analysis should identify "benefits and costs *"that accrue to citizens of the United States."*⁶ If an agency conducting benefit-cost analysis chooses to estimate global cost or benefit impacts, Circular A-4 states that "these effects should be reported separately." Unfortunately, the SCC models do not allow one to identify which future simulated damages from global temperature rise will happen where, and then separate those that accrue to the U.S. In other words, while all of the costs of the CPP are borne by U.S. citizens, most of the benefits accrue globally. There is no way to verify that we are actually getting the climate benefits that EPA promises.

Also, the CPP partially relies on incidental estimated reductions in PM2.5 and sulphur dioxide for additional claimed health co-benefits. These criterial pollutant co-benefits are modest, but the key question is that if the CPP really does deliver only "tiny climate benefits" as Professor Wara suggests, why should the American public be willing to spend billions of dollars only just to get some additional criteria pollutant co-benefits?

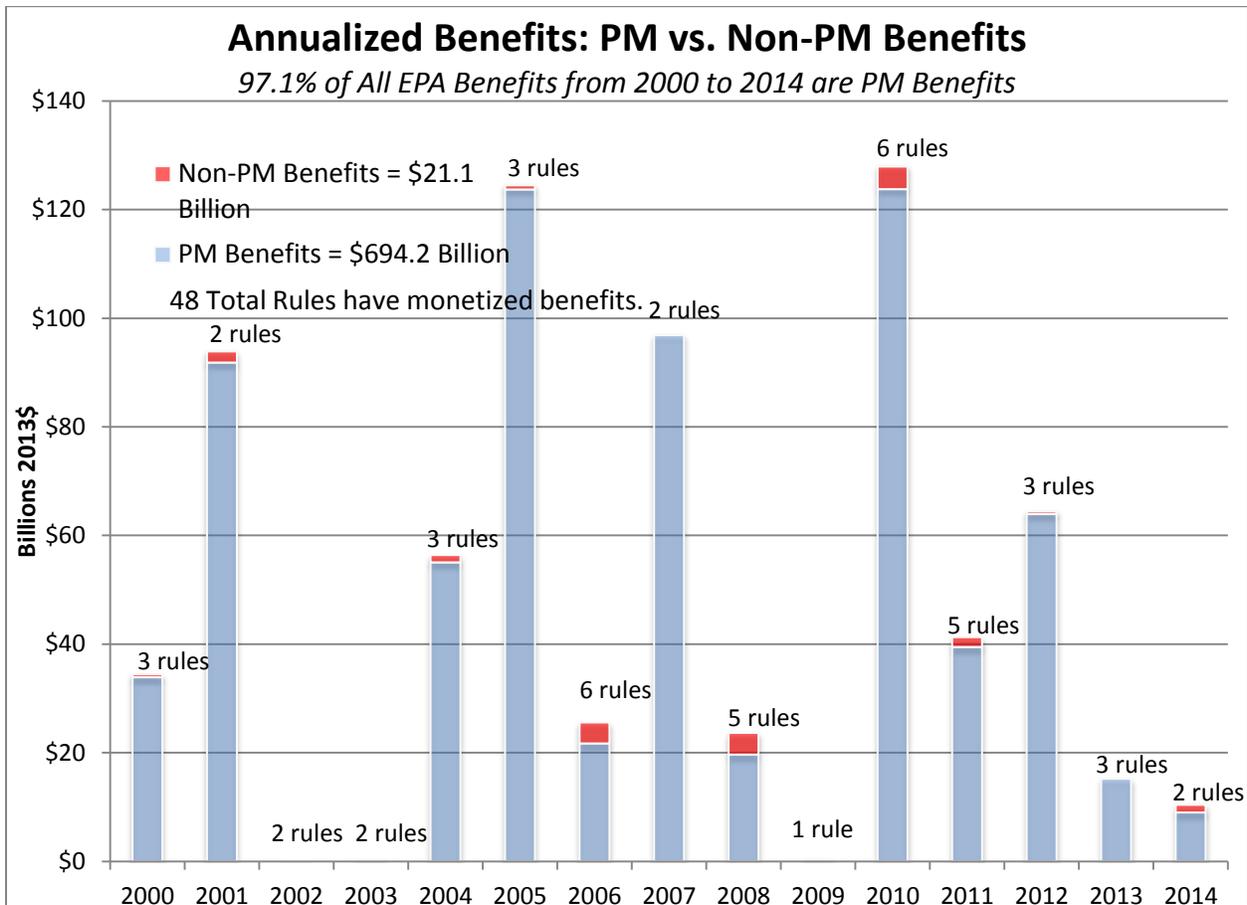
⁵ Circular A-4 at 14-15.

⁶ *Id.* at 15.

4. Your testimony described several concerns surrounding EPA’s reliance on particulate matter (PM) co-health benefits in air regulations.

a. What recommendations do you have for making EPA benefits more transparent?

EPA relied upon PM2.5 health co-benefits for 97.1% of **all** of the agency’s monetized benefits, including from regulations protecting water and land. (See chart below for breakdown of PM2.5 benefits.)



Because of EPA’s near total reliance of PM2.5 benefits to justify virtually all of its rules under a wide array of Clean Air Act (CAA) programs, the agency should be held to a high standard in providing the public with the necessary information to judge the quality and accuracy of these benefits claims. Currently, EPA does not do this. Instead, the agency relies on speculative scientific analyses to certify its use of PM2.5 benefits that the public cannot, even if they wanted to, assess freely and replicate. The long series of studies that EPA claims are definitive evidence of the validity of PM2.5 benefits are conducted by a select group of researchers, many of whom are funded by EPA and/or serve or have served on EPA’s Clean Air Science Advisory Committee (CASAC).

Further, the data used in these studies has long been held in close confidence by EPA and the select group of researchers, leaving the public that is responsible for paying the hundreds of

billions of dollars in annual compliance costs shut out of the process and unable to review the evidence or replicate these analyses for themselves. EPA claims that the studies are all published and therefore reliable and that the public needs to know nothing further and should trust the agency. However, recent failures to replicate⁷ similar “observational analyses” as EPA relies solely upon to quantify PM2.5 co-benefits should call into question the validity of the agency’s approach.

EPA’s preferred methodology, to adequately demonstrate a meaningful relationship between PM2.5 exposure and health effects—“observational studies”—was recently questioned in an article co-authored by former Obama Administration OMB Office of Information and Regulatory Affairs (OIRA) Director Cass Sunstein and former Obama Administration Council of Economic Advisors member Michael Greenstone, along with one of the world’s leading researchers in biostatistics, Harvard University Professor Francesca Dominici.⁸ In the article, the authors contend that the methodology used to inform all of EPA’s estimates is fatally flawed, that researchers have known this since the 1970s when research in this field began, and that there is superior research methodology available for use (indeed, some of the authors have employed it) which delivers very different estimates of the health effects of PM that are more statistically valid and reliable.

Despite repeatedly being made aware of the flaws in this research methodology, EPA has chosen to double down on claiming PM2.5 co-benefits to justify ever more stringent regulations. In 2009 EPA published a revised Integrated Science Assessment for Particulate Matter in which it changed its long-standing methodology for calculating the benefits from PM2.5 reductions.⁹ That same year it proposed the revised Portland Cement MACT standard and issued an RIA in support of the rule using the drastically increased PM2.5 health benefits from its science assessment. These inflated benefits have been used in every significant subsequent CAA rulemaking since.

In the Portland Cement RIA, EPA used the dramatically revised methodology to calculate PM2.5 health benefits by assuming that benefits from PM2.5 exist all the way down to 1 $\mu\text{g}/\text{m}^3$ rather than the 10 $\mu\text{g}/\text{m}^3$ it had been using as the lower limit for claiming benefits in all rulemakings prior to 2009. This change in methodology was not based on any new scientific evidence or data, but was instead a sudden reappraisal of existing evidence that had the effect of nearly quadrupling the estimated health benefits of each ton of PM2.5 removed from the air.¹⁰ Thus EPA no longer considers any ambient level of PM2.5 (above 1 $\mu\text{g}/\text{m}^3$ at least) without risk and ascribes benefits to reductions virtually down to zero.

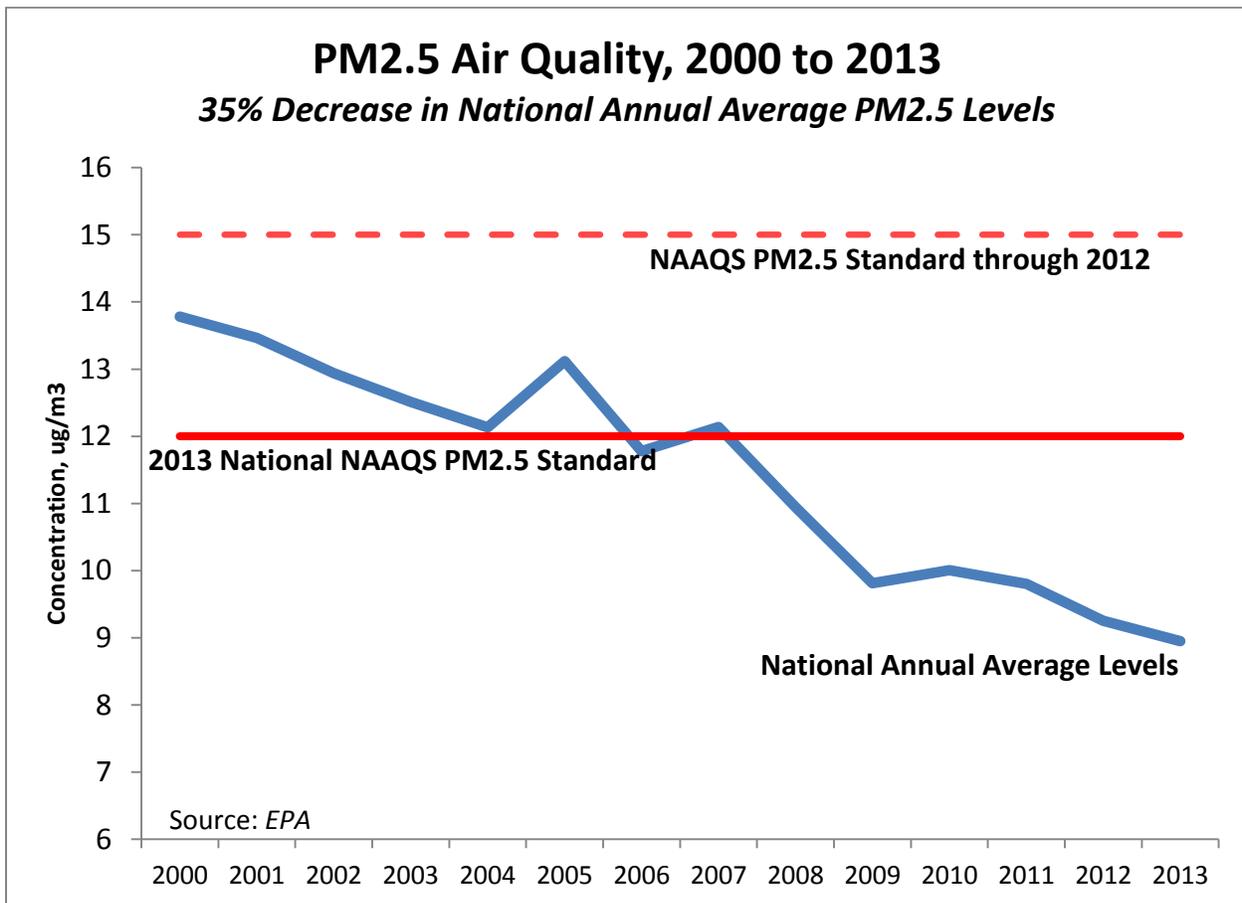
While EPA has been driving up estimated PM2.5 benefits, ambient levels of PM2.5 have been falling dramatically, to levels well below what EPA has deemed protective of human health and welfare required by the statutory language governing the establishment of NAAQS standards for the pollutant.

⁷ See, for example, <http://www.usnews.com/opinion/blogs/policy-dose/2015/09/01/the-problem-and-the-promise-of-replicating-science-results> or <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0020124> .

⁸ “Particulate Matter Matters,” *Science*, Vol. 344 (April 18, 2014) at 257-59.

⁹ U.S. EPA (2009) *Integrated Science Assessment for Particulate Matter* (Final Report) National Center for Environmental Assessment—RTP Division. See <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=216546>.

¹⁰ See Smith, Anne E. (2011) *An Evaluation of the OPM2.5 Health Benefits Estimates in Regulatory Impact Analyses for Recent Air Regulations*, NERA Economic Consulting at 24.



The lack of transparency in EPA’s actions goes beyond the scientific lack of transparency behind the calculation of monetized PM2.5 benefits and extends to the agency’s policy choices in addressing PM pollution in general. In a recent publication, *Truth in Regulating: Restoring Transparency to EPA Rulemaking*,¹¹ the Chamber argues that EPA consistently circumvents the intentions of the CAA by setting NAAQS standards for PM2.5 that adequately protect health and welfare and then continuing to reduce PM emissions via regulations promulgated under sections of the CAA intended to reduce other pollutants. In the report, the Chamber highlights one of the most egregious examples of EPA’s lack of transparency, the MATS rule, wherein the EPA used a section of the CAA intended to regulate mercury and other toxic pollutants as a vehicle to achieve PM2.5 reductions. In the RIA, the co-benefits from PM2.5 reductions accounted for over 99% of all benefits used to justify the rule’s massive cost.

The Chamber recommends passage of the Regulatory Accountability Act (RAA)¹² to curtail EPA’s lack of transparency and restore truth in regulating at the agency. The RAA would establish the right of the public to become involved in agency rulemakings early in the process, when data and analysis to support policy decisions are being assembled. Further, it would

¹¹ <https://www.uschamber.com/report/truth-regulating-restoring-transparency-epa-rulemaking>

¹² H.R. 185, the “Regulatory Accountability Act of 2015” 114th Congress, 1st Session, which passed the House on January 13, 2015 would address this deficiency. The Senate version of this legislation, S. 2006, the “Regulatory Accountability Act of 2015,” 114th Congress, 1st Session, was introduced on August 6, 2015.

require agencies to disclose all data and analyses used to support regulation, stopping the EPA from playing the “hide the ball” with the information that informs 97.1% of all of the regulatory benefits it uses to justify hundreds of billions of dollars of annual regulatory costs borne by the public. The Chamber believes that the public has a right to participate in the rulemaking process and that regulations will be improved by public participation in the assembly of data and analysis to inform regulation.

b. What recommendations do you have to ensure benefits of EPA regulations are based on direct benefits rather than co-benefits?

In *Truth In Regulating: Restoring Transparency to EPA Rulemaking*¹³, the Chamber highlighted the problems with EPA’s reliance on co-benefits rather than direct benefits to justify its regulations. As discussed above in part *a*, this issue emerges from the EPA’s lack of transparency overall in handling monetized health benefits from its rules, and upon its growing reliance upon PM2.5 as the source of all benefits used to justify its rulemakings. Simply put, without PM2.5 co-benefits, the EPA would not be able to justify regulating any other pollutant under its current practices.

The EPA must discontinue its reliance on co-benefits to drive its rulemakings. The public needs to be certain that the agency formulates smart regulations justified by science and driven by a need for the rule that is grounded in honest cost-benefit analysis. In other words, the agency needs to start undertaking rulemakings wherein it actually focuses its rules on addressing the pollutants named in the regulatory action and identified in the section of the CAA that governs the rule’s creation. The EPA must stop designing regulations solely for the purpose of reducing PM2.5 while telling the public that they are tackling the emissions of other pollutants, such as mercury. The agency should continue to address PM2.5 emissions as it deems necessary under the appropriate mechanism in the CAA, the NAAQS program, so that the public can see in a transparent way what the agency intends and why it is necessary.

Finally, Congress should pass the Regulatory Accountability Act (RAA)¹⁴ to ensure that the public has the right to challenge agencies such as the EPA when they undertake rulemakings that lack transparency and accountability. By allowing the public to challenge agency assumptions about costs and benefits by reviewing the data and models employed and proposing alternative solutions, the RAA creates a record of open dialog on important and unsettled issues that helps to ensure that agencies are using the best data, science, and methods available when creating new regulations.

c. Does EPA equally consider the co-costs of its regulations?

Because OMB Circular A-4 treats incidental effects of regulation, whether costs or benefits, on equal terms, co-costs should in theory be as ubiquitous as co-benefits. Nevertheless, to the Chamber’s knowledge EPA has never considered co-costs in any of its rulemakings, despite using the co-benefits of a single pollutant, PM2.5, as the source of virtually *all* of its regulatory actions.

¹³ <https://www.uschamber.com/report/truth-regulating-restoring-transparency-epa-rulemaking>

¹⁴ See footnote 12, *supra*.

Nevertheless, one important co-cost, or “unintended consequence,” that EPA has been urged to consider but which it has refused to acknowledge is the adverse health impact of joblessness imposed by regulation. As discussed in the Chamber’s response to Question 5, the growing body of the evidence from the economics literature supports the contention that EPA regulations not only kill jobs, but also reduce productivity and economic growth and lead to lower lifetime wages for workers. The result of these impacts is prolonged unemployment workers in regulated industries, especially those in small towns and rural areas where other employment opportunities are fewer.

There is a large and growing body of literature on the health effects of unemployment, often caused not only by lack of income, but also by subsequent health effects of substance abuse. Recent Nobel laureate in economics Angus Deaton and Princeton economist Anne Case’s recent headline-grabbing study of CDC data on cause of death among Americans found that lower income middle-aged white Americans faced, for the first time since these data have been recorded, increased mortality rates. In an interview, Professor Deaton said that “half a million people are dead who should not be dead,” referring to premature deaths among 45-54 year old lesser-educated white Americans.¹⁵ While the Deaton and Case study does not, and cannot, lay the blame squarely at the feet of regulation, it does place the blame on the ills of joblessness, namely substance abuse and suicide, among a group of Americans who in recent years have faced historically high unemployment rates, with many members of this group having permanently left the labor force due to inability to find employment.

In light of the chilling effects of unemployment on health, effects which may even swamp EPA’s claims of health benefits from PM2.5 reductions, more emphasis should be placed on examining the adverse effects of regulation. At the very least, if EPA continues to insist on using co-benefits to justify mega-rules that put the jobs of millions of Americans at stake, it should at the very least be required to conduct a full and even-handed analysis of the rule’s impacts. Those impacts include jobs put at risk and the potential health impacts triggered by unemployment. Ignoring serious potential consequences of a regulation while focusing on co-benefits is dishonest and tilts the table in favor of more regulation than is needed or warranted.

A start for EPA would be undertaking its statutory obligation under section 321(a) of the Clean Air Act¹⁶ (“321(a)”) to perform job impact analyses for its air regulations. This requirement has been on the books for forty years, yet the agency has never conducted a 321(a) analysis.¹⁷ Congress should hold the agency’s feet to the fire and require it to provide this information, which is necessary for effective oversight of the agency’s regulatory actions. If U.S. citizens are being put out of work and potentially suffering serious health effects because of the actions of regulatory agencies, the public needs to know this so that balance can be restored to agency decisionmaking.

¹⁵ https://www.washingtonpost.com/national/health-science/a-group-of-middle-aged-american-whites-is-dying-at-a-startling-rate/2015/11/02/47a63098-8172-11e5-8ba6-cec48b74b2a7_story.html

¹⁶ 42 U.S.C. § 7621 (a).

¹⁷ Letter to William Kovacs, U.S. Chamber of Commerce, from Jim DeMocker, EPA Acting Director, Office of Policy Analysis and Review, “RE: Freedom of Information Request No. EPA-HQ-2012-001352,” (June 14, 2013) (after completing searches of EPA records, no documents were found on any section 321(a) employment reports and/or evaluations conducted by EPA.).

5. *In her written testimony, Professor Steinzor cites several studies that claim environmental regulations lead to a net increase in employment.*

a. *Do you agree with Professor Steinzor?*

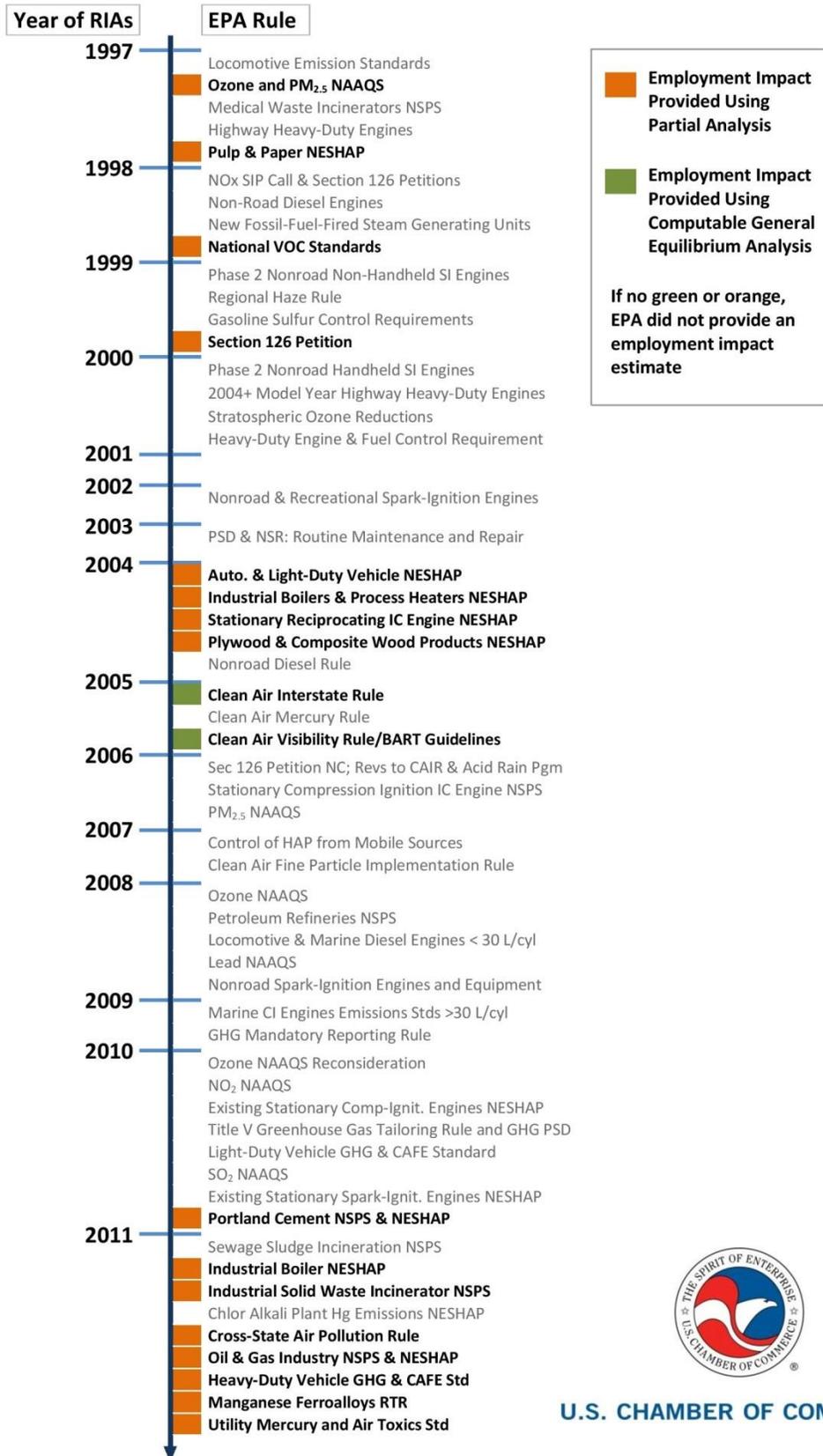
Professor Steinzor misrepresents the findings of economists on the employment impacts of regulations. As with many issues, tracking a single cause of changes in real economic variables, like employment, is fraught with methodological difficulty, and therefore papers are published with a wide variety of results that vary with the industry examined and the regulation under scrutiny. However, if one examines the whole weight of the evidence on this issue, there can be little doubt that regulations are a serious cause of negative employment impacts that are lasting and difficult for affected workers to ever recover from. To claim otherwise would necessarily rely on cherry-picked studies chosen to support one's own biases while simultaneously ignoring the bulk of the important work on this issue.

When she claims that regulations actually create jobs, Professor Steinzor may be referring to past claims by the EPA to that effect. For many years, the agency relied on one flawed study¹⁸ for which the agency used unacceptable methodology to extrapolate results from for the broader economy. In 2013 the Chamber released a study on regulatory job loss analysis conducted by the EPA to set the record straight.¹⁹ First, it is important to note that EPA rarely performs a more comprehensive analysis using a whole economy model of jobs impacts in its rulemakings, doing so on only 2 out of 56 cases examined (*see chart on next page*). In all other cases EPA performed job loss analysis using only a limited model and a job creation formula clearly inappropriate for most of the rules where EPA used it. Congress tasked the agency to perform ongoing analyses of job displacement in 321(a) and provide that information to Congress. To date, the agency has *never* performed its duties under 321(a).

¹⁸ Richard D. Morgenstern, William A. Pizer, and Jhih-Shyang Shih, *Journal of Environmental Economics and Management*, (May 2002) Vol. 43, no. 3, 412-436.

¹⁹ U.S. Chamber of Commerce, *Impacts of Regulations on Employment: Examining EPA's Oft-Repeated Claims that Regulations Create Jobs*, 2013. See <https://www.uschamber.com/report/impacts-regulations-employment-examining-epa-s-oft-repeated-claims-regulations-create-jobs>.

Timeline of Air Regulatory Impact Analyses Found to Contain Employment Impact Estimates



Employment Impact Provided Using Partial Analysis

Employment Impact Provided Using Computable General Equilibrium Analysis

If no green or orange, EPA did not provide an employment impact estimate



U.S. CHAMBER OF COMMERCE

Secondly, the Chamber study of job impact analyses demonstrated exactly why EPA's claims that regulations create jobs are incorrect. In performing job impact analyses the few times it did, EPA used an inappropriate modeling framework, looking only at a limited sample of impacts and ignoring impacts on other sectors of the economy. This type of model is referred to as a "partial economy model", in contrast with a whole economy model, which attempts to model the entire economy and account for impacts across all industries, such as electric power utilities, the mining of fuel for electricity generation, manufacturing, transportation, and retail and wholesale sales. The benchmark case that the report uses to demonstrate how different the job impact results can be when a more comprehensive and appropriate whole economy model is used estimates job losses from the Mercury and Air Toxics Standard (MATS). EPA estimated that the costly, \$10 billion per year rule would create a net 8,000 jobs in 2015, while estimation using a whole economy model that examines all of the impacts of the regulation showed that compliance with the rule would cause 180,000 job losses in 2015.²⁰

In addition to the Chamber study highlighting EPA's flawed jobs impact analyses, the academic literature on the issue broadly supports the negative impacts of regulations on jobs. The gold standard study on the topic is the research study by Michael Greenstone (2002),²¹ which finds that nonattainment areas due to the NAAQS program from 1972 to 1987 saw job losses of 590,000 relative to what would have occurred in those areas without the regulations. Importantly, Greenstone found that ozone NAAQS rules were the worst offender for job losses among EPA regulations. Note that Greenstone's study period ends in 1987, and since that time ozone NAAQS standards have been ratcheted downwards three times to levels far more restrictive than what he examined. The job impacts on the vastly expanded number of nonattainment areas since 1987, coupled with an economy significantly larger than in 1987, likely means that the job losses from the ozone NAAQS program alone are much larger than the 590,000 estimated by Greenstone.

Economic impacts of regulation are not limited only to employment losses, but also extend to reduced productivity and lower earnings for workers in affected industries. Using detailed production data from nearly 1.2 million plant observations drawn from the 1972-1993 Annual Survey of Manufactures, Greenstone, John List, and Chad Syverson estimated the effects of air quality regulations on the productivity of the manufacturing sector.²² They concluded that regulations governing ozone have particularly large negative effects on productivity, though effects are also evident among emitters of particulates and sulfur dioxide. They estimated a decline in total factor productivity (TFP) for regulated facilities, which corresponded to an annual economic cost of roughly \$21 billion, which represented **nearly nine percent** of manufacturing sector profits during this period.

The impact of the Clean Air Act extends to other countries as well, suggesting that multinational firms escape some U.S. regulation by shifting production to other countries where regulation is

²⁰ *Id.* at 29.

²¹ Greenstone, Michael. 2002. "The impacts of environmental regulations on industrial activity: Evidence from the 1970 and 1977 clean air act amendments and the census of manufactures." *Journal of Political Economy*, 110(6).

²² Michael Greenstone, John A. List, and Chad Syverson. 2012. The effects of environmental regulation on the competitiveness of U.S. manufacturing. NBER Working Paper 18392. MIT Department of Economics Working Paper No. 12-24.

less costly. Rema Hanna estimated that U.S.-based multinational firms increased their foreign production by 9% and their foreign assets by 5% in response to tougher regulation under the Clean Air Act Amendments of 1990.²³

Last year, in testimony before the Joint Economic Committee, Greenstone summarized the results of his academic work on this topic. “Some of my recent research finds that an important set of Clean Air Act rules has raised polluting industries’ costs of production by roughly 2.6%,” he said. “This has reduced firms’ profits and led to higher prices for consumers. Further, it has caused regulated firms to scale back their operations, which led to employment losses at those firms.”²⁴

This last point, about the devastating effect regulatory-induced unemployment has on workers, has also been the subject of economic research. For example, Reed Walker studied the impact of the Clean Air Act on unemployment.²⁵ Workers in newly regulated plants experienced more than \$9 billion in foregone earnings for the years after the change in policy. Most of these impacts are driven by non-employment and lower earnings in future employment, while the compensation of workers who remain with their firm did not change.

In another study, Walker followed displaced workers over time using confidential data from the Longitudinal Employer Household Dynamics (LEHD) data set from the U.S. Census Bureau.²⁶ He found that following a non-attainment designation, “the average worker in a newly regulated plant experiences a present discounted **earnings loss of 20% compared to their pre-regulatory earnings**. In the aggregate, this equates to almost \$5.4 billion in forgone earnings.”

b. What impacts have recent EPA regulations had on employment?

It is far too early to ascertain all the impacts of EPA’s three most recent rules, The Clean Power Plan (CPP), Waters of the United States (WOTUS), and the recent Ozone NAAQS rule will have on employment. However, if history is any guide, the job impacts will truly be significant. As noted above, ozone NAAQS designations of “nonattainment” have relegated many areas of the U.S. to lower economic growth, job losses, and low productivity, employment, and wage growth for over 40 years. The recent new ozone standard adds potentially hundreds of new counties across the U.S. to the ranks of those in nonattainment, endangering jobs and economic well-being in virtually every state. The CPP and WOTUS rules further diminish the states’ ability to grow and create new jobs. By raising energy costs and creating additional uncertainty and delays in permitting new investments and expansions of facilities these rules risk the livelihoods of millions of Americans. The mere fact that so many states are joining in lawsuits to try and

²³ R. Hanna. 2010. US environmental regulation and FDI: evidence from a panel of US-based multinational firms. *American Economic Journal: Applied Economics*, 2(3): 158-189.

²⁴ Michael Greenstone, Hearing before the Joint Economic Committee, “Eliminating Unnecessary Red Tape through Smarter Regulation” (June 26, 2013).

²⁵ Reed Walker. 2012. The Transitional Costs of Sectoral Reallocation: Evidence from the Clean Air Act and the Workforce. US Census Bureau Center for Economic Studies Paper No. CES-WP- 12-02. Available at SSRN: <http://ssrn.com/abstract=2000069> or <http://dx.doi.org/10.2139/ssrn.2000069>

²⁶ W. R. Walker. The transitional costs of sectoral reallocation: evidence from the Clean Air Act and the workforce, *The Quarterly Journal of Economics*, 1787-1835. Available at: http://faculty.haas.berkeley.edu/rwalker/research/walker_transitional_costs_CAA.pdf.

prevent the EPA from implementing these regulations shows the negative jobs and economic growth impacts they will have.

6. *Your written testimony cites a finding that since 1993, 98 percent of EPA regulations under the major Clean Air Act programs (NAAQS, NESHAP, NSPS) missed their statutory deadlines, by an average of 5½ years.*

a. *How many non-discretionary deadlines are in the Clean Air Act?*

While the Chamber has not catalogued all of the non-discretionary deadlines under the Clean Air Act, there are many recurring deadlines: under the NAAQS program for review of criteria pollutant national standards, under the NESHAP program for each of the many listed categories of hazardous air pollutants, and under the NSPS for industrial categories emitting criteria pollutants. EPA is also constantly under deadlines to take other actions such as approving State Implementation Plans (SIPs), Regional Haze Plans, and permits under the Prevention of Significant Deterioration/New Source Review permit program and the Title V operating permit program. Together, EPA is constantly hit with these non-discretionary deadlines, and the agency is consistently unable to meet them.

b. *Is there any publicly available resource that monitors EPA compliance with statutory deadlines? What about judicially imposed deadlines?*

To the best knowledge of the Chamber, there is no publicly available resource that continuously monitors EPA's compliance with statutory deadlines. The public has no systematic notification of the current status of EPA's deadline compliance.

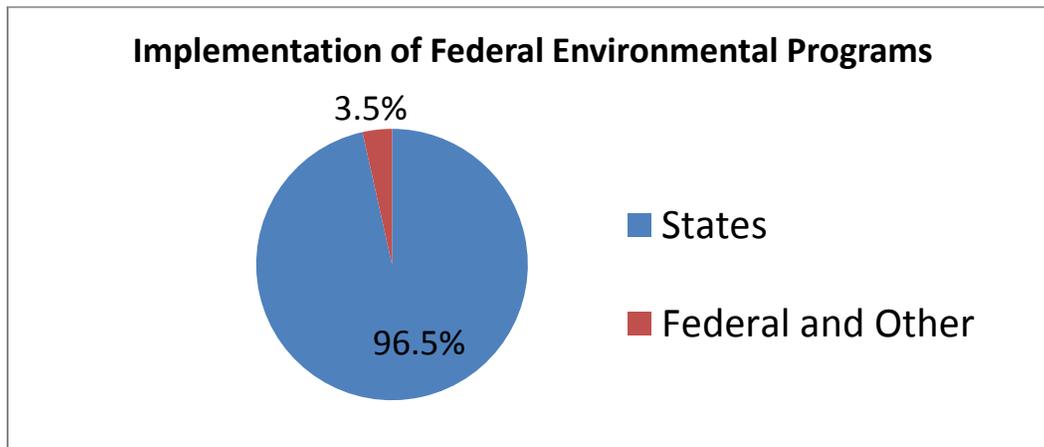
c. *Since EPA is essentially out of compliance with all of its deadlines, does this mean that any court deadline affects how EPA must use its resources?*

Clearly, yes. When an agency falls behind on all of its deadlines, a court order that enforces an unreasonable deadline for one rule draws resources from other regulations that may also be under deadlines. Resulting delays will invite advocacy groups to reorder an agency's priorities further when they sue to enforce the other rules' deadlines. This is illustrated clearly by sue and settle agreements entered into between advocacy groups and the U.S. Fish and Wildlife Service (FWS). FWS agreed in May and July 2011 to two consent decrees with an environmental advocacy group requiring the agency to propose adding more than 720 new candidates to the list of endangered species under the ESA. Agreeing to propose listing this many species all at once imposes an overwhelming new burden on the agency, which requires redirecting resources away from other—often more pressing—priorities in order to meet agreed deadlines. According to the Director of the FWS, in FY 2011 the FWS was allocated \$20.9 million for endangered species listing and critical habitat designation; the agency was required to spend more than 75% of this allocation (\$15.8 million) undertaking the substantive actions required by court orders or

settlement agreements resulting from litigation.²⁷ In other words, sue and settle cases and other lawsuits are now driving the regulatory agenda of the Endangered Species Act program at FWS.

- d. *Given that Congress expressly stipulated that environmental policymaking under the Clean Air Act be performed with the States through principles of cooperative federalism, is it appropriate for the Agency to establish its priorities with environmental groups in settlement negotiations that exclude the input of state, local officials and representatives?*

It is clearly not appropriate, and runs counter to the traditions of public transparency and accountability in the Administrative Procedure Act. Additionally, sue and settle agreements wherein a federal agency commits states to take specific actions that commit state and local resources also ignore the Unfunded Mandates Reform Act,²⁸ as well as an Executive Order on federalism.²⁹ The real victims of sue and settle agreements are often the states. States implement approximately **96.5%** of the federal environmental programs, as shown in the chart below.³⁰



Source: ECOS

As a result, the success of the EPA often depends on the states, who are increasingly burdened with new responsibilities stemming from sue and settle agreements they were not allowed to participate in. These agreements leave states saddled with major new obligations without receiving any new resources from EPA.

²⁷ Testimony of Hon. Dan Ashe, Director, U.S. Fish and Wildlife Service before the House Natural Resources Committee (December 6, 2011)).

²⁸ The Unfunded Mandates Reform Act, 12 U.S.C. §§ 1531 – 1538, requires federal agencies to assess the effects of the rule on state and local governments and the private sector before imposing mandates on them of \$100 million or more per year without providing federal funding for state and local governments to implement the mandate. In essence, UMRA is intended to prevent federal agencies from shifting the costs of federal programs to the states.

²⁹ See Executive Order 13,132, "Federalism" (August 4, 1999).

³⁰ Environmental Council of the States (ECOS), available at (https://www.dropbox.com/s/jgdbu4rq129oexh/EEnterprise%20One%20Pager%205_21%20FINAL.docx).

- e. *Are unrealistic Clean Air Act deadlines providing leverage for environmental groups to sue EPA for missed deadlines then set EPA's regulatory priorities through sue and settle?*

Yes, absolutely. Groups that rely on the sue and settle process argue that these lawsuits are solely about missed deadlines, and that the settlements are only about when the agency must do its nondiscretionary duty. They contend that because agencies only agree to do by a specific date what Congress instructed them to do earlier, involving other stakeholders in settlement negotiations is pointless. This argument ignores several critical facts, however.

First, EPA is subject to numerous statutory deadlines for regulatory action, particularly deadlines under the 1990 Clean Air Act Amendments. EPA nearly always fails to meet these deadlines. As noted above, since 1993, **98%** of EPA regulations (196 out of 200) under the major Clean Air Act programs (NAAQS, NESHAP, NSPS) were tardy, by an average of **5½ years** past their deadlines.³¹ If EPA misses almost all of its Clean Air Act deadlines, and the agency acts in good faith, then the agency clearly has been given responsibilities by Congress that it cannot meet.

Second, by being able to sue and influence agencies to take actions on specific regulatory programs, advocacy groups use sue and settle to dictate the policy and budgetary agendas of an agency. Instead of agencies being able to use their discretion as to how best utilize their limited resources, they are forced to shift these resources away from critical duties in order to satisfy the narrow demands of outside groups. Through the appropriations process, Congress has the authority to control EPA's budget and resource priorities, but advocacy groups and an agency like EPA uses the sue and settle process to circumvent the appropriations process.

Third, when advocacy groups and agencies negotiate deadlines and schedules for new rules through the sue and settle process, the ensuing rulemaking is often rushed and flawed. By agreeing to deadlines that are unrealistic and often unachievable, the agency lays the foundation for rushed, sloppy rulemaking that delays or defeats the objective the agency is seeking to achieve.³² These hurried rulemakings typically require correction through technical corrections, subsequent reconsiderations or court-ordered remands to the agency. Ironically, the process of issuing rushed, poorly-developed rules and then having to spend months or years to correct them defeats the advocacy group's objective of forcing a rulemaking on a tight schedule.

By setting accelerated deadlines, agencies very often give themselves insufficient time to comply with the important analytic requirements that Congress enacted to ensure sound policymaking. These requirements include the Regulatory Flexibility Act (RFA)³³ and the Unfunded Mandates Reform Act.³⁴ In addition to undermining the protections of these statutory requirements, rushed

³¹ Competitive Enterprise Institute, *EPA's Shocking Record of Failure on Statutory Deadlines Raises Serious Questions: Since 1993, Only 2 Percent of Clean Air Act Regulations Promulgated On Time* (July 10, 2013).

³² In the Boiler MACT rulemaking, for example, EPA asked the court for an additional 16 months to properly consider comments it had received and finalize a legally defensible rule. In the face of opposition from the advocacy group, the court only granted an additional month, however, and EPA was forced to immediately reconsider the rule to buy itself more time.

³³ Regulatory Flexibility Act of 1980, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. §§ 601-612.

³⁴ Unfunded Mandates Reform Act of 1995, 2 U.S.C. §§ 1531-1538.

deadlines can limit the review of regulations under the Office of Management and Budget’s regulatory review under executive orders,³⁵ among other laws. This short-circuited process deprives the public (and the agency itself) of critical information about the true impact of its rule.

Fourth, through sue and settle, advocacy groups can also significantly affect the regulatory environment by compelling an agency to issue substantive requirements that are not required by law.³⁶ Even when a regulation is required, agencies can use the terms of sue and settle agreements as a legal basis for allowing special interests to dictate the discretionary terms of the regulations.³⁷ Third parties have a very difficult time challenging the agency’s surrender of its discretionary power, because they typically cannot intervene and the courts often simply want the case to be settled quickly.

Finally, one of the primary reasons that advocacy groups favor sue and settle agreements approved by a court is that the court retains long-term jurisdiction over the settlement and the plaintiff group can readily enforce perceived noncompliance with the agreement by the agency. For its part, the agency cannot change any of the terms of the settlement (e.g., an agreed deadline for a rulemaking) without the consent of the advocacy group. Thus, even when an agency subsequently discovers problems in complying with a settlement agreement, the advocacy group typically can force the agency to fulfill its promise in the consent decree, regardless of the consequences for the agency or regulated parties.

For all these reasons, “sue and settle” violates the principle that if an agency is going to write a rule, the goal should be to develop the most effective, well-tailored regulation. Instead, rulemakings that are the product of sue and settle agreements are most often rushed, sloppy, and poorly thought-out. These flawed rules often take a great deal of time and effort to correct. It would have been better—and ultimately faster—to take the necessary time to develop the rule properly in the first place.

7. *Your written testimony explains that “30, 60, or 90 day comment periods are too short to allow stakeholders to develop detailed comments about complex or opaque proposed rules.” The Clean Air Act provides the public 30 days to comment on a proposed settlement agreement.*

a. *Does 30 days provide the public a meaningful opportunity to comment on proposed settlement agreements?*

In most cases, no. Settlement notices in the *Federal Register* provide only a cursory description of the issues at stake in the lawsuit in question, and do not discuss the potential impacts on stakeholders who would be affected by the subsequent agency action that is the subject of the

³⁵ See, e.g., Executive Order 12,866, “Regulatory Planning and Review” (September 30, 1993); Executive Order 13132, “Federalism” (August 4, 1999); Executive Order 13,211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (May 18, 2001); Executive Order 13,563 “Improving Regulation and Regulatory Review” (January 18, 2011).

³⁶ For example, EPA’s imposition of TMDL and stormwater requirements on the Chesapeake Bay was not mandated by federal law.

³⁷ Agreed deadlines commit an agency to make one specific rulemaking a priority, ahead of all other rules.

settlement. An affected party who reads the notice would have to obtain a copy of the actual proposed settlement, as well as the original complaint, to fully comprehend the issues at stake and the potential long-term effect the settlement is likely to have. Even if a stakeholder is able to submit a comment on a draft consent decree, EPA is unlikely to grant the comment.³⁸

b. Is there any opportunity for the public to comment on a revised settlement agreement?

None that the Chamber is aware of. While section 113(g) of the Clean Air Act³⁹ provides for notice and the opportunity for public comment on proposed consent decrees, it does not require EPA to provide notice to the public and the opportunity to comment on revised settlement agreements. Also, it is not clear to what extent EPA communicates with the court that has been asked to sign the settlement agreement precisely how the agreement will affect stakeholders not allowed to participate in the settlement, or the merits of comment letters received on the draft settlement. There needs to be clearer indication that EPA fully apprises a court of the consequences of the draft settlement agreement on subsequent rulemaking procedures, the authority of the agency to bind itself to specific actions, and the regulatory consequences of the settlement agreement.

c. Are there other environmental statutes that at least provide an opportunity to comment on a proposed settlement agreement?

To the best of the Chamber's knowledge and pursuant to our research, the Clean Air Act is the only environmental statute that requires EPA to provide notice and the opportunity to comment on proposed settlement agreements. Thus, for many types of settlements, states and other stakeholders who are obligated by the settlement agreement to take specific action may be completely unaware of the agreement until it has become legally binding.⁴⁰

d. Is there any requirement EPA respond to comments?

Again, none that the Chamber is aware of. While section 113(g) of the Clean Air Act⁴¹ provides for notice and the opportunity for public comment on proposed consent decrees, it does not specifically require EPA to respond to public comments. Again, it is not clear to what extent EPA communicates with the court that has been asked to sign the settlement agreement precisely how the agreement will affect stakeholders not allowed to participate in the settlement, or the merits of comment letters received on the draft settlement.

³⁸ See *American Lung Ass'n v. EPA*, Nos. 1:12-cv-00243, 1:12-cv-00531, Declaration of Regina McCarthy (D.D.C. May 4, 2012) at ¶ 15 (in PM2.5 NAAQS deadline settlement agreement, the timetable for final rulemaking action remained unchanged despite industry comments insisting that the agency needed more time to properly complete the rulemaking. Even though *EPA itself* agreed that more time was needed, the rulemaking deadline in the settlement agreement was not modified.).

³⁹ 42. U.S.C. § 7413(g).

⁴⁰ See U.S. Chamber of Commerce, *EPA's New Regulatory Front: Regional Haze and the Takeover of State Programs* (July 2012) available at https://www.uschamber.com/sites/default/files/documents/files/1207_ETRA_HazeReport_lr_0.pdf

⁴¹ 42. U.S.C. § 7413(g).

8. *In your testimony you touched on the cumulative impact of federal rules, specifically you said, “Federal agencies frequently fail to grasp the impact that a large new regulation—added to prior rules and those of other agencies—has on business, communities, and the economy as a whole?”*
- a. *Can you please elaborate on what it is like for a business to comply with multiple major rules that could affect one another?*

A good example of this problem is the duplicative background check requirements from the Department of Transportation (DOT) and the Transportation Safety Administration (TSA) that affect commercial truck drivers. TSA requires commercial truck drivers who hold a valid Transportation Worker Identification Credential (TWIC) from DOT to undergo a duplicate safety background check when they apply for a hazardous materials endorsement. The duplicative background check requirement adds as much as \$28 million in costs truckers must pay each year, with no commensurate increase in safety.⁴² Besides the cost of having to pay for the same credential twice, there is the time lost in having to go through a duplicate background check and wait for the results.

- b. *What are some major inconsistencies or incompatible impacts of recently finalized EPA rules?*

Within the past seven months, EPA elected to issue three mega-rules on a compressed timetable: the Waters of the U.S. rule, the Clean Power Plan rule, and the revised Ozone NAAQS standard. EPA ignored or downplayed several statutory and administrative requirements to carefully consider the cumulative impacts of these rules, along with relevant rules the agency previously issued. Before taking the unprecedented step of issuing three such sweeping and complex new programs within months of one another, the agency should have taken the time to fully understand how each of these rules would complement—or conflict with—the others.

If EPA had not chosen to ignore the vast array of analytical requirements under the Regulatory Flexibility Act,⁴³ the Unfunded Mandates Reform Act,⁴⁴ Clean Air Act section 321(a), as well as Executive Orders 12,866 and 13,563, it would have discovered serious inconsistencies and conflicts between its three rules: Here are just a few examples:

- The massive new infrastructure requirements that are at the heart of the Clean Power Plan will be complicated and delayed by the expanded number of Clean Water Act permits under the WOTUS rule. In addition to the cost of applying for federal permits, infrastructure developers will have to pay mitigation costs, which often approach or exceed all other project costs. The likely delay in obtaining these permits will greatly complicate the process of modifying or re-siting power plants to comply with the CPP.

⁴² See U.S. Small Business Administration, Office of Advocacy, *Annual Report on the Regulatory Flexibility Act*, FY 2009 at 45.

⁴³ 5 U.S.C. §§ 601-612.

⁴⁴ 12 U.S.C. §§ 1531-1538.

- EPA completely ignored probable shifts in criteria pollutant levels resulting from the Clean Power Plan when it estimated the non-attainment area impact of the Ozone NAAQS. Because the CPP requires such a massive reorganization of the nation's electric generation infrastructure, the reshuffling of the deck will dramatically shift the current map of criteria pollutant concentrations as power companies site new generation facilities away from existing sites. In particular, this could undermine the ability of many air districts to meet the current standards, let alone the tightened Ozone NAAQS standards EPA will be finalizing around the same time as the CPP.
 - In its economic analysis of the WOTUS rule, EPA based its conclusion that the rule would only increase the amount of federal jurisdictional waters under the CWA by 2.84% to 3.65% on a *very* small sample of negative determinations from two preceding years, essentially using just a tiny slice of pre-WOTUS determinations. EPA ignored conflicting evidence from federal and state authorities that the rule could impose anywhere from a 300% to 800% increase in federal jurisdictional waters. Any project intended to be built in these newly jurisdictional areas could face major environmental reviews and permitting requirements.
9. *Your written testimony discusses how EPA failed to utilize the Information Quality Act (IQA).*

a. Why are agencies not fully complying with the IQA?

Unfortunately, federal agencies have taken the position that they need not comply with IQA because they argue that there is no private right of action to enforce the statute.⁴⁵ If vigorously enforced, the Information Quality Act (IQA) would be one of the most effective tools to ensure that agencies produce high quality, transparent analyses supported by the best science and economic models.⁴⁶ It requires:

- Compliance with OMB's information quality guidelines that mandate transparency, full disclosure of all data and reports used to justify or formulate an agency position on a given topic, and full disclosure of all uncertainties or error sources so that a member of the public may evaluate and reproduce the results of an agency analysis or study.
- Use of the best available, peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices and data collected by accepted methods or best available methods.
- For claims, statements or policies regarding human health or environmental risks, the agency must specify (1) each population addressed by any estimate of public health effects; (2) the expected risk or central estimate of risk for the specific populations; (3) each appropriate upper-bound or lower-bound estimate of risk; (4) each significant

⁴⁵ *Harnoken v. Dep't of Justice*, No. C 12-629 CW, 2012 U.S. Dist. LEXIS 17145, at *24 (N.D. Cal. Dec. 3, 2012) (ruling on the DOJ and OMB's assertion that IQA does not provide a private right of action or judicial review).

⁴⁶ 44 U.S.C. §§ 3504(d)(1), 3516.

uncertainty identified in the process of the assessment of public health effects and studies that would assist in resolving the uncertainty; and (5) peer-reviewed studies that support, are directly relevant to, or fail to support any estimate of public health effects and the methodology used to reconcile inconsistencies in the scientific data.⁴⁷

- A procedure to allow affected persons to “seek and obtain” correction or disclosure of information that fails OMB information quality requirements.

b. What recommendations do you have for improving agency compliance with the IQA?

As stated previously, the lack of a private right of action for enforcement of the statute makes it difficult to pursue remedies to agency analytical shortcomings under the IQA via legal action. Congress should amend the IQA to include a private right of action for enforcement and to codify OMB’s IQA guidance into permanent law.

Better compliance with the statute should ideally start at the agency level, which would require the appointment of agency leadership that is committed to changing internal procedures such that agency actions require adherence to the statutory requirements as outlined in OMB’s guidance. Furthermore, OMB should step up its oversight of agency compliance and actively push back on agencies that deliver for clearance RIAs that rely upon data, models, methods, and documentation that does not clearly and objectively meet the OMB data quality guidelines.

Congress should more actively engage in oversight of agency compliance with the IQA and require agencies to provide evidence that their processes and materials conform to statutory requirements. Finally, Congress should pass the Regulatory Accountability Act,⁴⁸ which contains several safeguards to ensure that the information used by federal agencies is of a high quality and reliability.

10. Your testimony highlighted several shortcomings with how EPA has carried out its obligations under the Regulatory Flexibility Act (RFA).

a. What recommendations do you have to clarify the terminology?

Several critical terms in the Regulatory Flexibility Act are not defined in the statute, which has led to confusion and disagreement about the scope of the law. The lack of a congressional definition of the terms “significant” and “substantial” in the key analysis—“*significant* economic impact on a *substantial* number of small entities” leaves each agency with wiggle room to interpret what those terms mean on a case-by-case basis. And while agencies like EPA have developed internal agency guidance on what these terms mean, they sometimes ignore guidance when it suits their needs. Three other key terms—“direct,” “indirect,” and “cumulative”—do not even appear in the RFA in association with the evaluation of impacts on regulated small entities. The courts have interpreted the RFA to apply only to the direct impacts a federal action will have on specific regulated entities. Thus, the indirect and cumulative impacts a revision of a NAAQS

⁴⁷ Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies; Republication, 67 Fed. Reg. 8452, 8457-58 (Feb. 22, 2002).

⁴⁸ See footnote 12, *supra*.

standard—implemented by states through State Implementation Plans—will have on small entities is not subject to the RFA under case law on the theory that **the states** are imposing the requirement, **not EPA**.⁴⁹

To eliminate this confusion, Congress should define the terms “significant” as it relates to impacts, “substantial” as it relates to the number of affected small entities, and “direct,” “indirect,” and “cumulative,” as they relates to the zone of analysis of impacts a proposed rule will have on regulated and affected entities. This clarification would help to prevent agencies like EPA from gaming the system to avoid complying with the RFA whenever they find it convenient.

b. What recommendations do you have to improve EPA’s consideration for small entities?

Perhaps the most critical improvement with respect to the RFA is to ensure that agencies have adequate time to fully comply with the law’s analytical requirements for relevant rulemakings. Too often, federal agencies voluntarily agree to bind themselves to deadlines for rulemaking action that do not allow sufficient time to complete RFA analyses. This has been particularly true of EPA, which has the additional statutory obligation to conduct Small Business Advocacy Review (SBAR) Panels for any rulemaking that is likely to have a “significant economic impact on a substantial number of small entities. In recent years, EPA has either conducted hurried, deficient SBAR Panels for important rulemakings,⁵⁰ or has chosen to avoid doing a Panel altogether.⁵¹ The agency should not be able to claim that a court-ordered deadline prevents it from complying with the law. Instead, EPA must be held accountable for failing to fully comply with the RFA’s statutory requirements.

11. The EPA’s Science Advisory Board is currently reviewing the use of economy-wide modeling in economic analyses.

a. How can economy-wide modeling improve EPA RIAs?

EPA’s Clean Air Act (CAA) regulations regularly fail to include important economic impacts that should be estimated by the agency, particularly when it is proposing significant new

⁴⁹ See, e.g., *Mid-Tex Elec. Coop. v. FERC*, 775 F.2d 327 (D.C. Cir. 1985), *American Trucking Ass’n v. EPA*, 175 F.3d 1027, 1044 (D.C. Cir. 1999), *aff’d in part and rev’d in part on other grounds*, *Whitman v. American Trucking Ass’n*, 531 U.S. 457 (2001).

⁵⁰ See Letter from Claudia Rodgers, Acting Chief Counsel for Advocacy to EPA Administrator Gina McCarthy (May 8, 2015) (Office of Advocacy criticizes EPA for convening SBAR Panel on “Federal Plan Requirements for Greenhouse Gas Emissions from Electric Utility Generating Units” in the absence of any information about the potential impacts of the rule on small entities or information about potential alternatives.).

⁵¹ See Letter from Susan Walthall, Acting Chief Counsel for Advocacy, to Lisa Jackson, Administrator, EPA, on “Prevention of Significant Deterioration and Title V Greenhouse Tailoring Rule,” (December 23, 2009) (Office of Advocacy publicly advised EPA that it improperly certified the greenhouse gas rule proposals under the RFA); Letter from Winslow Sargeant, Chief Counsel for Advocacy, to Gina McCarthy, Administrator, EPA and General John Peabody, Deputy Commanding General, Corps of Engineers, on “Definition of “Waters of the United States” Under the Clean Water Act” (October 1, 2014) at 4 (Office of Advocacy publicly advised EPA and the Corps that they improperly certified the WOTUS proposal under the RFA.).

regulations with high costs and broad economic impacts. The Chamber takes the position that economy-wide modeling should be the standard modeling tool for EPA CAA regulations in order to more fully and accurately portray the effects of these far-reaching regulatory actions. The Chamber has previously noted that the EPA has too often relied upon partial economy, or partial equilibrium analysis, in its modeling of the economic impacts of CAA regulations.⁵² Research has demonstrated that the costs and labor market impacts of rules are far greater when the effects of regulation outside the directly regulated market are considered.

This is especially important to note in light of the significant impact that regulations, especially high cost CAA rules, can have on employment, as discussed in Question 5. Further, because EPA has never conducted any 321(a) analysis of jobs impacts for its regulations, as required by the CAA,⁵³ it is illustrative to examine what third party analysis of EPA's rules using economy-wide models has found. NERA Economic Consulting found in a review of EPA's methods of estimating employment impacts that properly applying an economy-wide model rather than relying on partial economy analysis and outdated, inappropriately applied empirical studies resulted in a consistent shift in estimated impacts across examined regulations. For instance, EPA in its Regulatory Impact Analysis (RIA) estimated that the 2012 Mercury and Air Toxics Standard (MATS) rule would create 46,000 temporary construction jobs and 8,000 net new permanent jobs, while application of an economy-wide, multi-sector model found that in fact the rule would actually have negative employment impacts equivalent to 180,000 to 215,000 lost jobs in 2015 tapering to 50,000 to 85,000 annual jobs annually.⁵⁴ Obviously, properly applied economy-wide modeling can make a *significant* difference in the scope of impacts estimated as well as the accuracy of those impact estimates.

The EPA recently convened the Science Advisory Board (SAB) Panel on economy-wide modeling to formulate a report with recommendations to the Administrator about implementation of economy-wide modeling in the agency's regulatory cost-benefit analyses. The Chamber made the following recommendations to the SAB Panel:⁵⁵

1) Economy-wide models should include significant industry sector detail

Any model used for assessing the broad impacts of CAA regulation on the economy should include sufficient detail by industry sector to enable detailed views of both direct and indirect industry impacts. When assessing regulation, the distribution of impacts is as important as the overall impact. While it is important for cost-benefit modeling to

⁵² NERA Economic Consulting, "Estimating Employment Impacts of Regulations: A Review of EPA's Methods for Its Air Rules," at 14-16.

⁵³ Letter to William Kovacs, U.S. Chamber of Commerce, from Jim DeMocker, EPA Acting Director, Office of Policy Analysis and Review, "RE: Freedom of Information Request No. EPA-HQ-2012-001352," (June 14, 2013) (after completing searches of EPA records, no documents were found on any section 321(a) employment reports and/or evaluations conducted by EPA.).

⁵⁴ See footnote 52, *supra* at 26-29.

⁵⁵ Letter to EPA Science Advisory Board Staff Office from U.S. Chamber of Commerce, American Chemistry Council, American Forest & Paper Association, American Petroleum Institute, and American Wood Council, "Recommendations for First In-Person Meeting of Economy-wide Modeling Science Advisory Board Panel" on October 22-23, 2015 (October 13, 2015) available at: [http://yosemite.epa.gov/sab/SABPRODUCT.NSF/7A9A0AD95AAEAACC85257EDE007062F1/\\$File/CoC-ACC-AF&PA-AWC-API+Comment+10-1-4-15.pdf](http://yosemite.epa.gov/sab/SABPRODUCT.NSF/7A9A0AD95AAEAACC85257EDE007062F1/$File/CoC-ACC-AF&PA-AWC-API+Comment+10-1-4-15.pdf)

capture economy-wide impacts, it should not be accomplished at the expense of reducing the level of modeling detail, such as employment losses and plant shutdowns, regarding highly-impacted industries. The Chamber recommends adopting a model with as much detail as possible in terms of both industry sector and labor occupational differentiation, so that transitional adjustment costs can be inferred from the comparison of base case versus post regulation equilibria.

2) Economy-wide models should include significant regional detail

Any adopted model used for assessing economy wide impacts should include sufficient regional detail to identify changes in the regional distribution of output and employment, which may imply relocation adjustment costs imposed on labor and capital.

3) Economy-wide models should include international trade flows

The SAB panel should investigate the inclusion of trade flows to estimate the effects of regulatory costs on U.S. tradable sectors. It is important to note the impacts of regulation on U.S. competitiveness, a key element missing in virtually all partial equilibrium estimates of regulatory impacts and in many general equilibrium impacts estimates. Many industries are more susceptible to employment and production displacements due to fierce foreign competition; when this is the case the magnitude of regulatory compliance costs alone is insufficient to judge the true impact of a regulation.

4) Economy-wide models should employ dynamic analysis of adjustments

The SAB panel should investigate the appropriate dynamic analyses appropriate for examining the short-, medium-, and long-term adjustments required in capital and labor markets when regulations are imposed. Because most whole economy models are equilibrium models, they tend to provide snapshot results of the economy before and after regulatory impacts are fully incorporated into the simulated markets. While instructive, this often glosses over important adjustment effects that may move relevant markets away from equilibrium for extended periods of time. These effects are important to understand and should be an integral part of CAA economy-wide modeling.

5) Economy-wide models should be frequently and consistently validated

The SAB panel should investigate and consider recommending that EPA engage in an ongoing testing and validation exercise for whole economy modeling that includes public comment and participation. Because of the complexity of the models discussed in EPA's analytical blueprint, and their sensitivity to parameterization, ongoing testing and validation should be used to enhance model calibration over time. Additionally, whole economy models should be subjected to thorough sensitivity analysis in order to understand and quantify model robustness with respect to parameterization and specification.

6) Economy-wide models should be reviewed for validity of inputs, especially with respect to benefits

The SAB panel should carefully evaluate EPA's attempts to add benefits estimates that revolve around non-market impacts into economic models that evaluate the effects of policy on market transactions. Much of EPA's discussion in its analytical blueprint and draft charge questions revolves around incorporating benefits estimates into models, with the agency noting the magnitude of effects in previous model runs. The SAB should carefully investigate the mechanisms by which EPA proposes to include benefits, many of which affect non-market transactions or accrue to individuals through non-traded channels. It is imperative that the channels of transmission for estimates of price and quantity impacts of benefits claims be thoroughly and carefully vetted to ensure that "phantom" benefits do not inflate estimates and thereby short circuit the usefulness of economy-wide models for addressing the appropriateness of policy choices. It would be misleading if, for instance, EPA claimed economic benefits via labor market effects for benefits that would actually accrue only to retired individuals no longer in the labor force. Careful attention to detail in terms of the expected timing of costs and benefits is important to avoid such misleading results.

7) Economy-wide models should be reviewed to ensure that all relevant impacts be included

On a related note to point 7 above, any inclusion of changes to the status quo should be evaluated for effects on both costs and benefits – for example, if avoided medical expenses for premature morbidity and mortality are incorporated into a model as a benefit appropriately valued in a market-based model, then it is incumbent upon the agency to include the full value of changes over the lifecycle of individuals to which the benefits accrue.⁵⁶

12. *EPA relies on ICF International's Integrated Planning Model (IPM) for its regulations under the Clean Air Act.*

a) *How transparent is the IPM?*

The IPM is not transparent to the general public at all. EPA regularly employs this model for its biggest rulemakings under the Clean Air Act (CAA), yet the public has little information about the critical assumptions that underpin the model. The use of the IPM is yet another failure by the EPA to produce Regulatory Impact Analyses (RIAs) that meet the standards for transparency, accountability, and reproducibility called for in OMB's Circular A-4 guidance for regulatory cost-benefit analysis. It is often extremely difficult for the public to make an informed decision

⁵⁶ For example, if benefits accrue to individuals with compromised health, it is inappropriate to model benefits as if a delay in premature morbidity or mortality saves all relevant medical expenditures. Rather the savings arise from pushing medical expenditures further into the future where at some point expenditures will be realized (possibly more or less than the modeled savings). Incorporating this wrinkle in the modeling of savings to medical expenditures exposes the thorny nature and extreme assumptions that must be made in order to claim these benefits as realized savings in a market-based model.

based on IPM results about whether or not the agency is being forthright in its analysis, or whether the agency is tilting the scales in favor of its preferred policy.

The IPM also fails to meet the standard of high quality data required under the Information Quality Act (IQA).⁵⁷ The IQA was designed to impose greater transparency and improve the quality of agency information, especially with respect to non-regulatory information disseminated by administrative agencies with respect to scientific and statistical matters—including the IPM model. EPA should be required use of the best available, peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices and data collected by accepted methods or best available methods.⁵⁸ When EPA fails to comply with the IQA, a procedure exists to allow affected persons to “seek and obtain” correction or disclosure of information that fails OMB information quality requirements.

Moreover, the Regulatory Accountability Act (RAA),⁵⁹ would address the failure of the EPA and other rulemaking agencies to produce transparent analysis of their regulations by requiring agencies to seek public input earlier in the regulatory process. Further, the RAA would require agencies to disclose all data and models used to inform regulatory decisions with the public prior to the commencement of the rulemaking process. Only by doing so can the public be assured that the agency is using the best data and methodology to assess regulatory costs and benefits. Under the RAA, the public would have the right to comment upon the agency’s use of data and economic models and be allowed to enter into the record alternatives in an open, transparent process. Without such public participation in the process of assessing regulatory impacts the EPA and other agency’s will continue to use black box impact models and produce non-transparent analyses of their regulations that the public has no way to comment upon in an informed manner.

b) Without understanding the inner-workings of the model, how can the public have confidence in the model’s outputs?

Simply put, it is difficult for the public to have confidence in the analyses produced by the EPA under the current approach to federal rulemaking. Currently the public only has the ability to comment on the RIA at the proposed rule stage, after the agency has already selected data and models, run the analysis, and chosen its preferred policy alternative. Thus, the public can only raise objections to the data and models used *after* the agency has proposed a rule, and, under the Administrative Procedure Act (APA), the agency need only cite the public’s objection and answer it in a cursory manner in order to continue with the rulemaking unimpeded. Absent the right of the public to participate in the process of conducting the regulatory analysis in the early stages when an agency is still selecting data and models to best inform the process, any participation the public engages in is empty.

The RAA⁶⁰ would remedy this procedural deficiency by requiring agencies to disclose the data and models it plans to use to inform a rulemaking with the public and take comments that

⁵⁷44 U.S.C. §§ 3504(d)(1), 3516.

⁵⁸ Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies; Republication, 67 Fed. Reg. 8452, 8457-58 (Feb. 22, 2002).

⁵⁹.See footnote 12, *supra*.

⁶⁰ *Id.*

become part of the rulemaking record. The agency would also be required to give the public ample time to assess its data and models and produce informed comments. Only under the RAA can the public rest assured that the agency acted in its best interests and used the best data, science, and economic analysis available to come to a decision about how to regulate.

13. Your testimony touches on areas where the agency does not have enough information to fully understand the impact of a rulemaking.

a. What recommendations do you have to improve EPA's regulatory decisions in instances where it may be difficult to monetize certain costs and benefits?

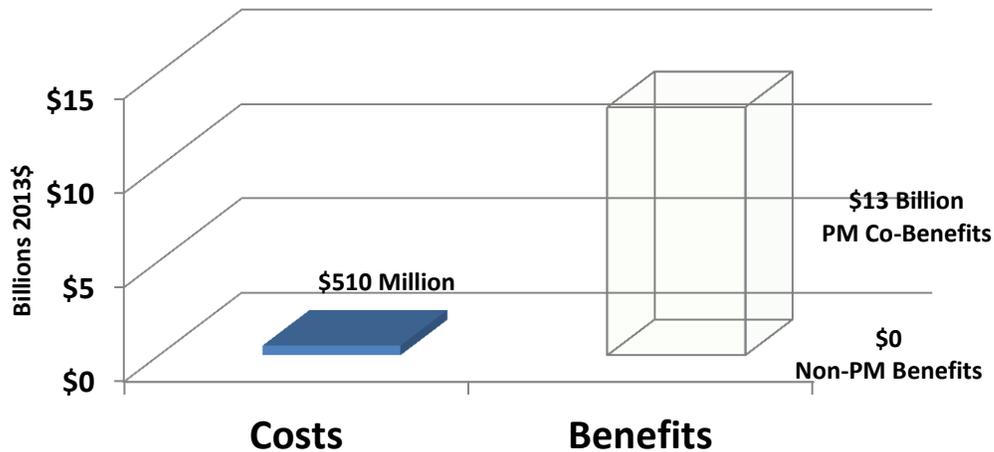
In many instances regulatory agencies do have a difficult time estimating and monetizing all of the costs and benefits of their regulations. In its 2015 Draft Report to Congress, the Office of Information and Regulatory Affairs (OIRA) stated in its review of regulations that are deemed major rules that of the 19 non-transfer regulations it reviewed during the year, in only 13 had the agency estimated and monetized both costs and benefits.⁶¹ OMB's Circular A-4 Guidance instructs agencies to estimate and monetize the costs and benefits in their RIAs whenever possible, but states that, "[w]hen important costs and benefits cannot be expressed in monetary units [benefit-cost analysis] is less useful, and it can even be misleading."⁶² While EPA is charged with quantifying all of the various costs and benefits from its proposed regulations, it often strongly emphasizes the co-benefits of PM2.5 far out of proportion to the alleged benefits of any other pollutants. The agency does this because the estimated benefits of PM2.5 reductions it can claim are so large that they overshadow even the multibillion dollar cost of a new mega-rule.

For instance, in the 2010 Portland Cement NESHAP rule, promulgated under section 112 of the CAA and intended to address specifically-identified hazardous air pollutants (HAPs), EPA justified the rule's \$510 million per year price tag by claiming that it produced about \$13 billion each in year in PM2.5 co-benefits. However, these co-benefits were the *only* benefits EPA made any effort to estimate and monetize, while making no effort to calculate the direct benefits of the HAP reductions the rule was ostensibly designed to address, as shown in the figure below:

⁶¹ Office of Management and Budget, Office of Information and Regulatory Affairs, "2015 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act," page 2 at https://www.whitehouse.gov/sites/default/files/omb/inforeg/2015_cb/draft_2015_cost_benefit_report.pdf.

⁶² Office of Management and Budget, Office of Information and Regulatory Affairs, Circular A-4, September 17, 2003, page 10 at https://www.whitehouse.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf.

Portland Cement NESHAP (2010): Annual Costs vs. Benefits



EPA's failure to disclose the actual direct benefits of the pollutants regulated by the rule runs counter to the requirements of Executive Order 12,866⁶³ and Circular A-4.⁶⁴ The RIA actually undercuts the transparency of the rulemaking, rather than demonstrating that the regulation was justified by objective scientific and economic consideration. Because of EPA's failure to estimate the impacts of the HAP pollutants, the public has no idea whether or not the \$510 million annual price of the rule is worthwhile, since the value of targeted HAP reductions is not disclosed.

In *Truth In Regulating: Restoring Transparency to EPA Rulemaking*,⁶⁵ the Chamber highlighted the problems with EPA's reliance on co-benefits rather than direct benefits to justify its regulations. This issue emerges from the EPA's lack of transparency overall in handling monetized health benefits from its rules, its reluctance to clearly explain all of the regulatory alternatives it considered, and what factors persuaded the agency to choose the regulatory approach that it ultimately did. To the extent that EPA relies on non-monetized costs and benefits in its RIAs, the agency must be careful to explain this to the public, along with any assumptions it made about valuation methodologies (e.g., stated preference or contingent valuation methods).⁶⁶

⁶³ See footnote 35, *supra*.

⁶⁴ See OMB Circular A-4.

⁶⁵ <https://www.uschamber.com/report/truth-regulating-restoring-transparency-epa-rulemaking>

⁶⁶ See OMB Circular A-4 at page 22.

14. Your written testimony includes four recommendations for how EPA can accomplish the needed transparency and accountability in its regulatory decision-making.

a. In what ways can Congress ensure EPA makes these improvements?

In order to restore the needed transparency and accountability, EPA needs to amend its rule development and RIA process in the following ways:

- Return to its former policy of telling the public exactly what pollutants are being targeted by each regulation;
- Return to its former policy of telling the public how much the reductions in those targeted pollutants will cost;
- Informing the public how much the targeted pollutant(s) will actually be reduced, and how those specific reductions will benefit the public; and
- Move away from relying on inflated benefits estimates for purely incidental “co-benefits” like PM2.5 reductions.

While EPA’s lack of transparency harms the public by preventing more meaningful involvement in the regulatory process, it also hampers Congress’ ability to properly oversee the agency’s actions to ensure that EPA uses the broad authority granted it in the interest of Americans rather than to achieve the goals of advocacy groups. The Chamber recommends a number of specific reforms to address the deficiencies with the regulatory process as currently practiced by EPA and other agencies.

- 1) Congress should pass the Regulatory Accountability Act (RAA).⁶⁷ The RAA directly addresses EPA’s lack of analytical transparency by enhancing the ability of the public to engage the agency on the scientific and economic analysis used to justify its rulemakings. As noted previously, the EPA currently bases its RIAs on scientific studies based on data the public cannot verify and economic analyses grounded in non-transparent models, methodologies, and assumptions that skew the analysis in favor of the agency’s policy priorities as well as the priorities of advocacy groups.
- 2) Congress should pass the Sunshine for Regulatory Decrees and Settlements Act.⁶⁸ Currently, EPA’s policy agenda is too often dictated by advocacy groups, which use their unique standing to pressure the agency into rulemakings based on the priorities of the advocacy group rather than of the agency. The bill would (1) require agencies to give notice when they receive notices of intent to sue from private parties, (2) afford affected parties an opportunity to intervene *prior to the filing* of the consent decree or settlement with a court, and (3) publish notice of a proposed decree or settlement in the *Federal Register* and take (and respond to) public comments at least 60 days prior to the filing of the decree or settlement. The bill also would require agencies to do a better job showing that a proposed agreement is consistent with the law and in the public interest.

⁶⁷.See footnote 12, *supra*.

⁶⁸ H.R. 712, S. 378.

- 3) Congress should require EPA to conduct analyses of employment impacts of its rules as mandated by Congress in section 321(a) of the CAA. The employment impacts of EPA's regulations are detrimental to American workers (see response to Question 5), yet EPA has consistently refused to acknowledge the negative impacts its regulations have on jobs. Congress needs the information that a 321(a) analysis would provide in order to conduct proper oversight of EPA CAA regulations and the agency should be required to provide this crucial information for understanding the full impacts of its rules.
- 4) Congress should amend the Information Quality Act (IQA) to allow for a private right of action for enforcement of the act. Without a private right of action, it is all too easy for agencies to simply offer assurances that their RIAs and use of scientific information meet IQA standards with no negative consequences when those claims turn out to be false.
- 5) Congress should require the EPA to comply with the Unfunded Mandates Reform Act (UMRA). All too often, EPA uses boilerplate language to claim that its regulations impose no unfunded mandates on state and local governments. Yet it is the states who do the lion's share of the work in implementing federal environmental standards developed by the EPA, implementing 96.5% of environmental regulation programs. Meanwhile, states receive only 26% to 29% of the funding to carry out implementation from federal funds.
- 6) Finally, Congress should amend the Regulatory Flexibility Act (RFA) to ensure that EPA cannot simply assert that its regulations do not affect small entities and therefore avoid the necessity of undertaking a Small Business Advocacy Review (SBAR) Panel, as it did recently with the Clean Power Plan and Waters of the U.S. Rules.

Question from Senator Sullivan:

1. *As you note in your testimony, the EPA and Corps certified that the WOTUS rule "does not contain any unfunded mandates" as defined in the Unfunded Mandates Reform Act of 1995 and "does not significantly or uniquely affect small governments." Considering the number of states who have sued on this rule, and the lack of support from communities, how do you think the EPA can make these dismissive claims?*

It is unfathomable to the Chamber that EPA and the Corps could take the position that the WOTUS rule would have no impact on states or small governments. Even if the two agencies initially believed that the WOTUS rule would have no direct impacts on any regulated entity, they learned in subsequent congressional hearings, local meetings, and a roundtable sponsored by the Small Business Administration's Office of Advocacy that small governmental authorities—such as water districts—would be profoundly affected by the WOTUS rule.

Specifically, they learned that:

- States are responsible for developing and issuing tens of thousands—maybe hundreds of thousands-- of new and revised NPDES point source permits to sources under section 402;
- States must establish water quality standards under section 303 of the Clean Water Act for all newly regulated waters—including potentially 4.6 million miles of “ephemeral” tributaries, and innumerable small wetlands and ponds. The states will be required to certify that Federal actions meet those standards under section 401 of the CWA;
- The expansion of jurisdictional waters will result in a greater number of “impaired” federal waters under section 303 of the CWA, with additional burdens on States to evaluate and list these waters, and assign Total Maximum Daily Load (TMDL) pollutant caps to these waters; and
- States must implement their own TMDLs, or EPA-issued TMDLs, to achieve water quality standards for each newly regulated feature.

All of these new responsibilities require significant commitments of scarce state resources to accomplish. With no new sources of funding coming from the federal government, these responsibilities are clearly unfunded mandates.

Likewise, the WOTUS rule will impose a particularly heavy regulatory burden on counties and local government jurisdictions. Much of this burden would come in the form of new permits and approvals being required to conduct routine infrastructure maintenance. According to the National Association of Counties, the nation’s counties are responsible for building and maintaining 45% of the roads in 43 states. Section 404 dredge and fill permitting impacts on county maintenance of roads, ditches, culverts, etc., are themselves more than sufficient to demonstrate that the proposed rule would have an enormous adverse impact on state and local budgets. The thousands of projects undertaken in counties across the country that will be subject to federal dredge and fill permitting for the first time would cripple local efforts to deliver the basic services businesses and their surrounding communities depend on. This expanded permitting requirement would also delay or kill municipal projects to build or renovate schools, hospitals, community centers, local transit, parks, and other civic infrastructure in areas that most people would consider to be dry “land,” but under the WOTUS rule are legally classified as a “water of the United States.”