EPA REGULATORY REFORM FEDERAL REGISTER NOTICE: COMMENTS

ENVIRONMENTAL PROTECTION NETWORK (May 15, 2017)

The U.S. Environmental Protection Agency (EPA) is seeking comment on existing regulations that may be appropriate for repeal, replacement or modification **(Docket ID No. EPA-HQ-OA-2017-0190**). EPA is especially interested in existing regulations that:
(i) Eliminate jobs, or inhibit job creation;
(ii) are outdated, unnecessary, or ineffective;
(iii) impose costs that exceed benefits;
(iv) create inconsistency or interfere with regulatory reform initiatives;
(v) rely on data, information, or methods that are not publicly available or insufficiently transparent to be reproduced; or
(vi) implement Executive Orders or other Presidential directives that have been subsequently rescinded.

The Environmental Protection Network (EPN), a nonprofit network comprised of former EPA officials and employees with significant expertise in the regulatory process under both political parties, has these comments.

Summary of Comments

EPN urges careful analysis to ensure that public health and environmental protection are not compromised, and that the full range of benefits and costs are considered, before proposing to repeal, replace or modify any individual existing EPA rule. This is necessary in order to meet the requirements of the law as well as to assure the American public that EPA is meeting its mandate to protect public health and the environment to serve all Americans.

Each established regulation has already undergone a rigorous, extensive and open process that includes economic analysis. A reassessment of any particular regulation may have merit--to consider relevant new information, or to focus on new opportunities to streamline compliance without hampering enforceability. But a reassessment of any individual rule requires following this full process, and a reanalysis of the full range of social benefits to the American public as well as compliance costs to particular entities may result in a stronger,

not weaker, regulation. Short-term employment impacts on a specific industry or location must be balanced by assessing the broader impacts on and shifts in overall employment. Rule-making decisions made only on "publicly available" and "reproducible" information would result in poorer quality rules.

Any legitimate, legally defensible and analytically rigorous process to reconsider a particular rule must be grounded not only in Executive Order, but also in statutory authority, administrative law practice, scientific integrity and net social welfare-based regulatory economics. Given decades of significant and sustained progress in improving environmental quality and public health, based on cost-effective science driven EPA regulations, and the very large net benefits of many EPA regulations over time, it is difficult to understand why regulatory reform would be a priority project for an EPA that is clearly resource-constrained.

Our comments address the purpose of environmental regulation, the regulatory process to date, the role of this Federal Register notice, cost and benefit analysis, revisiting costs and benefits, job creation, publicly available or reproducible data, and Executive Orders. Throughout we use existing EPA rules as examples.

Purpose of Environmental Regulation

EPA, established in 1970 during the Administration of Richard M. Nixon, administers the nation's environmental statutes to protect public health and the natural environment of the US. In order to achieve the goals of these statutes, EPA develops, promulgates and implements rules and regulations in an open process, one which assures that the rationale for the rule and its scientific, economic and other support have been fully vetted with the American public. The responsibility for implementation is shared with the States. This puts a heavy burden on any effort to repeal or modify any legally established rule.

Environmental regulation is one of the most powerful and successful legal and economic innovations of the 20th Century. Since EPA is required to calculate and consider the economic impacts of any rule it adopts, we know that EPA regulations in aggregate, administered in partnership with the states, generate wide and diverse benefits for the American public that vastly exceed costs to particular regulated entities--benefits ranging from millions of saved lives, avoided sick days and lost worker productivity to trillions of dollars in net social benefits (i.e., economic wellbeing).

In its annual accounting to Congress, OMB found that benefits of major rules EPA officially adopted from 2005-2015 exceed their costs by up to 13 times (OMB 2016). A 2011 peer-reviewed EPA assessment of the long term benefits and costs of the Clean Air Act and its implementing regulations found that its middle estimate of annual benefits exceeds costs by 30 to one. In dollars and cents, that's $2 trillion in net benefits vs. $65 billion in costs.

The Regulatory Process to Date

Each major rule adopted by EPA has already undergone an extensive development process, including detailed analysis that considers the costs, benefits, employment impacts, relevant science, legal foundation, and public comment and Tribal consultation. Any proposed revision to an existing specific regulation must undergo the same extensive process, including an opportunity for public comment and Tribal consultation, with an equivalent level of analytical rigor, in order to meet the requirements of the law as well as to assure the American public that EPA is meeting its mandate to protect public health and the environment for all Americans.

EPA is already required to calculate and consider the economic impacts of any rule it adopts, as part of a regulatory impact analysis (RIA) or its equivalent, required by administrative directives such as Executive Orders 12866 or 13563, or specific authorizing statute. A RIA includes identifying the consequences of regulatory alternatives, quantifying and monetizing benefits and costs, evaluating those benefits and costs that cannot be quantified, making clear the uncertainties in the benefit and costs estimates, and providing a range of net benefits.

The most conservatively estimated annualized net benefits (benefits minus costs), for example, for the **Mercury Air Toxics Standards (MATS)** (40 CFR Parts 60 and 63), range from $24 billion to $71 billion, not including the benefits that could not be quantified.

EPA's economic analyses are rigorous. In a recent study of the RIAs prepared for 130 "prescriptive regulations" issued between 2008 and 2013 (Ellig 2016), EPA rules ranked fourth highest in RIA quality among 15 agencies; EPA-DOT rules such as those for fuel economy ranked highest.

This EPA Request for Comment

Previous Administrations have undertaken both more general regulatory reform reviews of the regulatory process, as well as retrospective assessments of specific regulations. A retrospective assessment of any particular regulation may have merit--to consider relevant new information, or to focus on new opportunities to streamline implementation without hampering enforceability.

However, what this Administration offers in this Federal Register notice is not general regulatory reform, nor is it a retrospective assessment of a specific regulation. This Federal Register notice is not a substitute for a rule-specific regulatory process that would propose to repeal, eliminate or modify a specific rule. EPA must make a clear commitment to an open and transparent rule-specific regulatory process, based on peer-reviewed science and economics. Otherwise, this process will become simply an opportunity for the regulated community to seek to roll back specific regulations that impose costs on them, without considering public health and environmental benefits, although the opportunity to identify those specific impacts was available to them as part of the original rule making process.

Costs and Benefit Analysis

Benefits matter. An important part of assessing a proposed rule is not just the overall costs and benefits to the nation as a whole, but who bears the costs and who receives the benefits, and where those benefits and costs are located. This is true both during a rule making process, and in any subsequent consideration of revising that rule.

The **Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category** (40 CFR Part 423) illustrates this. Estimated compliance costs for removing toxic metals in their wastewater fall on some 1,000 regulated entities. But the estimated benefits will be shared by Americans much more broadly, through improved surface water quality, reduced health risks, and resulting increased economic productivity. This rule is based on technology improvements in the affected industry over the past few decades; revisiting the costs may result in estimates of less, not more, costs to affected parties.

Any regulatory requirement has costs and benefits. Often the costs are borne by different parties than those who experience the benefits. Any cost increment can be characterized by some affected party as grossly burdensome to them. Particular parties bear the costs of compliance because they are also the source of the pollutants that are burdens for our society as a whole, and benefit economically from that pollution which reduces others' economic productivity, makes people sick, and shortens lives. EPA's obligation is to look at the entire picture, not just any small part of it.

Revisiting the net benefits of a regulation, particularly by making it less stringent, may simply shift the health burdens and associated costs to a different affected group, possibly those who can least afford to bear such burdens. In estimating regulatory costs and their distribution, it is most important to avoid the "naïve theory of cost" (Freeman, Herriges, and Kling 2014), and instead use the analytical tools available to estimate the effects on producers and on consumers, including producer and consumer behavior, supply and demand, and labor market effects.

Public health impacts, which are somewhat more difficult to quantify, are nonetheless just as important as compliance costs to particular industries. EPA must consider not only the compliance costs to industry but also how the requirements of the rules will improve the health and environmental safety of the men, women and children affected.

In the **Mercury Air Toxics Standards (MATS)** RIA example above, the analysis identified but could not quantify all neurological effects, such as developmental delays and behavioral impacts on infants and children, as well as effects on the cardiovascular and immune systems of all ages, from exposure to methyl mercury. EPA's well-established method is to set the standard to reflect the average emissions of the best performing 12 percent of sources, measured over a 30-day period. In some instances, in response to industry concerns, EPA has made adjustments to that calculation that have worked well in enabling regulated sources to meet the standard efficiently. Reconsidering such standards, especially for hazardous air pollutants, may reveal that the costs are less and/or the benefits are more significant than projected. If that is the case, some rules should be tightened to do **more** to protect public health and the environment, rather than weakened or repealed.

The **Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units** (Clean Power Plan) (80 *Fed. Reg.* 64661) provides another example. Supporting studies show estimated annual quantifiable health benefits totaling billions of dollars ($12-34 billion) each year from reducing exposure to fine particulates and ozone pollution. Significant analysis concluded that the rule would yield an estimated $4 worth of health benefits for every dollar spent on it (R.L. Revesz et al), even though the rule's primary focus is to address greenhouse gases.

Public health specialists from Harvard, Syracuse and Boston Universities studied the Clean Power Plan's public health "co-benefits." They found that the rule yields these estimated health co-benefits in the U.S. in 2020 compared to the business-as-usual reference case:

- 3,500 premature deaths avoided each year (equivalent to 9 premature deaths avoided every day).
- 1,000 hospital admissions avoided from heart and lung disease each year.
- 220 heart attacks prevented each year, along with additional health benefits not quantified, including reduced asthma symptoms and other health benefits for children, the elderly, and vulnerable adults.

The study further points out that the geographic distribution of health co-benefits in the most likely implementation scenario is widespread with all lower 48 states receiving some benefit. The 12 states with the greatest estimated number of premature deaths avoided have a large number of exposed people and the most air quality improvement. They are (in order): PA, OH, TX, IL, MI, NY, NC, GA, MO, VA, TN, and IN. The 12 states with the greatest estimated percent increase in premature deaths avoided are (in order): PA, OH, WV, MO, MI, KY, MD, DC, IL, DE, IN, and AR. (Schwartz, et al, 2014)

In yet another example, the protections offered for our nation's wetlands and their associated ground water by the **Clean Water Rule: Definition of 'Waters of the United States** (80 Fed. Reg. 37054) result in many valuable benefits as a result of a cleaner and healthier water environment (ecological services); these benefits are hard to quantify but very real. This rule contributes to significant health benefits by shielding the drinking water for some 117 million people across the US

from pollutants, as well as reducing more readily quantifiable drinking water treatment costs.

These valuable ecological services, as well as health related benefits many Americans enjoy, also are produced by other clean water rules, such as the collection of stormwater regulations that produce cleaner, ecologically healthier rivers, streams, rivers, lakes, and coastal water bodies (National Pollutant Discharge Elimination System - Regulations for Revision of the Water Pollution Control Program Addressing **Stormwater Discharges: Phase II Final Rule** (December 08, 1999), **Phase 1 Final Rule** (November 16, 1990), and recent **Municipal Storm Sewer Systems** (**MS4) permit revisions** (40 CFR Part 122).

Benefits of a rule often are distributed geographically much more widely than the costs borne by individual facilities. In many cases pollution travels across state lines, emphasizing the need for federal regulatory action and just how widespread the benefits can be. Just one of many examples is the **Standards for the Management of Coal Combustion Residuals by Commercial Electric Power Producers**, which sets standards for nearly 150 million tons of coal ash, containing high concentrations of arsenic, lead and mercury, generated annually as a byproduct of burning coal to make electricity. Massive volumes of coal ash are stored on site at these facilities, often immediately adjacent to rivers and water bodies. In many instances coal ash is stored upstream of drinking water intakes for municipal drinking water systems, often in downstream states. Without careful management, the toxic components of coal ash can find their way in to the water that Americans drink and use. The responsibility to manage these risks is inherently federal in nature because these pollutants do not respect state boundaries, and often are crossing state boundaries and degrading both ground and surface waters of the United States.

This pattern continues throughout large and small industry sectors. For example, lead exposure has dropped dramatically due in part to regulation of large industrial sources, the transportation sector, small and large drinking water systems, down to individual homes with lead paint. At every point, benefits greatly exceed costs. For instance, the **Lead Renovation, Repair, and Painting (RRP) Program Rule** (40 CFR Part 745) provides annualized net benefits of $300 million to $1.3 billion per year, considering only avoided incidence of IQ loss of

children under age 6 (but not other associated neurodevelopmental health issues).

Revisiting Costs and Benefits

Retrospective evaluation of a specific regulation may be worthwhile if new scientific and economic information can be brought to bear. In fact, the potential exists that a revised net benefits analysis can result in more stringent regulation, not less. This is particularly the case where analysis indicates benefits of the original rule significantly exceed costs.

Precise cost impacts to particular affected parties are difficult to estimate in advance, and are often overstated. Extensive literature supports the notion that the original cost estimates of promulgated rules can significantly exceed those that actually accrue to firms and communities in adapting to the rule (Bell, 2010). A Resources For the Future (RFF) 2010 update of a 2000 study on regulatory cost estimates confirms that frequently, the accuracy of previous regulatory cost estimates has overstated the costs to those directly affected. A 2015 Pew Foundation paper found that historically, compliance costs have been less and benefits greater than industry predictions and the actual costs of compliance.

Statutes or rules which direct the agency to issue regulations that maximize net social benefits would very likely lead to more stringent controls, and any new review process should stipulate this principle and adhere to it. In some cases, the possibility exists that a revisited rule probably should do more to protect public health and the environment, not less.

While it is occasionally possible that costs exceed those estimated at the time of rulemaking, it is far more likely that new benefits have been identified and/or monetized since promulgation. For instance, for the **Lead Renovation, Repair, and Painting (RRP) Program Rule** (40 CFR Part 745) mentioned above, costs may be somewhat higher than originally estimated. But since the rule was promulgated, the health benefits have increased – the Centers for Disease Control have lowered their target blood lead level, and research continues to document adverse health effects from lead far beyond IQ loss to include other damage to the juvenile brain and nervous system, slowed growth and development, other learning and behavior problems (e.g., ADHD, juvenile delinquency, and criminal behavior), and hearing and speech problems. These additional benefits would be

even more significant with an older rulemaking such as the 1991 **Lead and Copper Rule** for addressing lead in drinking water.

It is also important to subtract out the number of affected entities that have already implemented requirements under the rule and their costs, as well as the new costs that they may accrue or the income they may lose from an unequal implementation if the rule is relaxed. The **Effluent Limitations Guidelines and Standards for the Dental Category** (40 CFR parts 403 and 401) concerning mercury in wastewater is an example of a rule with widespread compliance among affected parties. Weakening the rule at this point will not benefit, and may penalize, those who have already complied, while allowing those who resisted compliance to continue to profit.

Job Creation

The word "jobs" is a powerful political expression but not a meaningful economic metric; the relevant measure in economic terms is "employment."

While an adopted rule may have short term employment impacts on a specific industry or location in the short term, the broader impacts on employment must also be considered. Just as cost/benefit analyses assess the net effects of a rule, so should employment analyses. There's substantial potential for total employment expansion, as business sectors shift and adapt to environmental and clean energy-related rules.

Industry specific compliance costs may have less long term employment impact than feared. For example, one landmark economic analysis found that the costs of compliance with EPA rules in four regulated industries (pulp and paper, refining, iron and steel, and plastics) did not generally cause a significant change in employment (Morgenstern et al 2002).

Regulation can also create new economic opportunities and employment, through development of needed new services and new technologies to solve environmental problems. The employment generated by growth in the US environmental technologies and services industry is significant. Some 119,000 companies in this sector support 1.7 million jobs, $300 billion in revenues, and exported goods and services worth $44 billion in 2008 (ITC 2011).

This shift is readily apparent, for instance, in the energy sector. Regulations that lead to more investment in energy efficiency and renewable energies as an alternative to traditional fuels can spark a shift in employment, not a net loss. This includes the **Clean Power Plan** (80 *Fed. Reg.* 64661), **carbon dioxide emissions from power plants** (80 *Fed. Reg.* 64509), and **NOx and SOx limitations on power plants** (under CFR part 60).

There are almost as many jobs in non-traditional areas as in traditional areas of the energy sector, and non-traditional job areas are growing. In 2016, 55 percent, or 1.1 million, of energy sector employees worked in traditional coal, oil, and gas, while almost 800,000 workers were employed in non-traditional low carbon emission generation technologies (including renewables, nuclear, and advanced/low emission natural gas). Energy efficiency jobs, not included in the above numbers, increased by 133,000 in a single year, reaching a total of 2.2 million. Solar industry employment jumped 25%, and wind industry employment 32% (DOE 2017). These numbers do not include additional jobs in related industries, such as manufacture of turbines, hybrid and electric vehicles, that could be stimulated by specific regulations. Implementing just a few current state energy efficiency polices nationwide could generate 600,000 new jobs (ACEEE 2016).

The positive impact of clean water regulations implementing Clean Water Act provisions on the growing outdoor recreation industry, and the potential cost to that industry of rolling back these protections, is another example of positive economic and employment impacts. Annual outdoor recreation spending in the US generates 7.6 million jobs; 1.5 million for fishing and water sports alone (Outdoor Recreation Industry 2017).

This could extend to clean water protections afforded by such varied regulations as the **Standards for Coal Combustion Residuals by Commercial Electric Power Producers; Clean Water Rule** (80 Fed. Reg. 37054); and the collection of **stormwater regulations** (National Pollutant Discharge Elimination System - Regulations for Revision of the Water Pollution Control Program Addressing Stormwater Discharges; **Phase II Final Rule** (December 08, 1999), **Phase 1 Final Rule** (November 16, 1990), and recent **Municipal Storm Sewer Systems (MS4) permit revisions** (40 CFR Part 122).

Publicly Available or Reproducible Data

Major EPA regulations are already based on the best available, peer reviewed science at the time of the rule making.

Requiring that rule making decisions be made only on publicly available and reproducible information would result in poorer quality rules. A recent Environmental Data and Governance Initiative analysis explains how these kinds of restrictions would block the EPA from using the data it needs to fulfill its mission of protecting public health and the environment (EDGI, March 2017).

There are legal prohibitions against release of many kinds of scientific information to the general public, such as private sector proprietary data that a firm may not want made public. Even in the instructions for comment on this FR notice, businesses are cautioned that any information they submit will be publicly available and may be posted. Yet EPA's ability to consider this information is critical to developing rules that are suitable for industry and more easily implemented by them.

In addition, many kinds of scientific information that are critical to environmental decision making (e.g., longitudinal datasets collected over decades, assessments of chronic effects of exposure to toxic substances, and studies based on natural hazards) are not reproducible by their very nature.

Presidential Orders and Directives

There must be a sound legal foundation for reconsidering a rule, beyond a Presidential order suggesting a revised rule making. Any legitimate, legally defensible and analytically rigorous process must be grounded in statutory authority, administrative law practice, scientific integrity and net social welfare-based regulatory economics. The fact that many rules have been reviewed and upheld by the courts adds to the challenge of reconsidering them.

Entering into a rigorous process for each individual rule EPA may propose to repeal, replace or modify is time consuming and expensive for all parties, including affected industries and communities, and largely duplicative of the original rule making process. Absent any new and directly relevant information, this process may not in fact result in change.

Our nation has benefited from decades of significant and sustained progress in improving environmental quality and public health, based on cost-effective, science-driven EPA regulatory actions. Given the very large net benefits of many EPA regulations over time, it is difficult to understand why this would be a priority project for an Agency that is clearly resource-constrained.

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