ONE HUNDRED FIFTEENTH CONGRESS

## Congress of the United States House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

> Majority (202) 225-2927 Minority (202) 225-3641

## **MEMORANDUM**

February 14, 2017

To: Subcommittee on Environment Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on "Modernizing Environmental Laws: Challenges and Opportunities for Expanding Infrastructure and Promoting Development and Manufacturing"

On Thursday, February 16, 2017, at 10:00 a.m. in room 2123 of the Rayburn House Office Building, the Subcommittee on Environment will hold a hearing entitled "Modernizing Environmental Laws: Challenges and Opportunities for Expanding Infrastructure and Promoting Development and Manufacturing." As described below, a primary mechanism for promoting infrastructure falling under the jurisdiction of the Subcommittee on Environment is the Safe Drinking Water Act State Revolving Fund.

# I. THE BENEFITS OF ENVIRONMENTAL REGULATIONS GREATLY OUTWEIGH THEIR COSTS

In a recent report to Congress, the Office of Management and Budget (OMB) found that the Environmental Protection Agency's (EPA) major rules promulgated between 2004 and 2014, yielded more benefits than major rules promulgated by any other agency over that same period. In the aggregate, the 32 major rules promulgated by EPA generated benefits between \$160 billion and \$788 billion, compared to costs of just \$38 billion to \$45 billion. Rules promulgated by EPA in FY 2014 alone resulted in an estimated \$13 billion worth of benefits, far exceeding

<sup>&</sup>lt;sup>1</sup> U.S. Office of Management and Budget (OMB), 2015 Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act (Mar. 10,

<sup>2016).(</sup>obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/2015\_cb/2015-cost-benefit-report.pdf).

the \$1.6 billion in estimated costs.<sup>2</sup> By 2020, the economic benefit of reducing air pollution is estimated at almost \$2 trillion dollars, exceeding the costs by 30 to 1.<sup>3</sup>

Regulations under the Clean Air Act (CAA) illustrate this trend. Since its enactment in 1970, the CAA has reduced key air pollutants by roughly 70 percent, while the economy has more than tripled in size. In 2010 alone, the CAA prevented over 160,000 premature deaths, 130,000 cases of heart disease, and 1.7 million asthma attacks, as well as 86,000 hospital admissions and millions of respiratory illnesses. This law has also dramatically enhanced economic and academic productivity by preventing 13 million lost work-days, and 3 million lost school-days. Please see the attached appendix for further information on the benefits of major air rules promulgated since January 2009.

## II. DRINKING WATER INFRASTRUCTURE NEEDS AND FUNDING

Our nation's public drinking water systems serve over 300 million people. According to EPA's most recent needs survey, these systems are facing infrastructure bills of approximately \$384 billion over the next 20 years as existing infrastructure ages.<sup>6</sup> Aging and failing infrastructure threatens access to safe drinking water in a variety of ways, including disruptions in service, the leaching of lead and copper, and the introduction of bacteria and other contaminants.

The Drinking Water State Revolving Fund (SRF) was created by the Safe Drinking Water Act (SDWA) Amendments of 1996 to finance projects necessary for protecting public health and compliance with drinking water standards.<sup>7</sup> The Drinking Water SRF provides loans and grants to states to use for water infrastructure, source water protection, and management of public water systems. Funds from the SRF are allotted to the states based on need, with no state

 $<sup>^{2}</sup>$  Id.

<sup>&</sup>lt;sup>3</sup> U.S. Environmental Protection Agency (EPA), Office of Air and Radiation, *The Benefits and Costs of the Clean Air Act from 1990 to 2020: Summary Report*, at 2 (Mar. 1, 2011) (www.epa.gov/sites/production/files/2015-07/documents/summaryreport.pdf).

<sup>&</sup>lt;sup>4</sup> U.S. EPA, *Progress Cleaning the Air and Improving People's Health* (Mar. 29, 2016) (www.epa.gov/clean-air-act-overview/progress-cleaning-air-and-improving-peoples-health).

<sup>&</sup>lt;sup>5</sup> U.S. EPA, Office of Air and Radiation, *The Benefits and Costs of the Clean Air Act from 1990 to 2020: Summary Report*, at 14 (Mar. 1, 2011) (www.epa.gov/sites/production/files/2015-07/documents/summaryreport.pdf).

<sup>&</sup>lt;sup>6</sup> U.S. EPA, *Background on Drinking Water Standards in the Safe Drinking Water Act (SDWA)* (accessed Feb. 13, 2017) (www.epa.gov/dwstandardsregulations/background-drinking-water-standards-safe-drinking-water-act-sdwa); U.S. EPA, *Drinking Water Infrastructure Needs Survey and Assessment: Fifth Report to Congress* (Apr. 2013) (www.epa.gov/sites/production/files/2015-07/documents/epa816r13006.pdf).

<sup>&</sup>lt;sup>7</sup> Safe Drinking Water Act Amendments of 1996, Pub. L. No. 104-182 (1996).

receiving less than one percent of the fund. $^{8}$  Each state then administers its fund according to an approved intended use plan.

The priorities for these funds are addressing the most serious risks to human health, ensuring compliance with SDWA requirements, and assisting systems most in need on a perhousehold basis. States can also provide additional assistance through the SRF for disadvantaged communities.

The SRF has not been reauthorized since it expired in 2003. Two Democratic bills referred to this subcommittee - the Assistance, Quality, and Affordability Act of 2017 introduced by Ranking Member Pallone and the Safe Drinking Water Act Amendments of 2017 introduced by Ranking Member Tonko - include provisions to reauthorize and improve the SRF. These bills are successors to H.R. 6116 and H.R. 4653 from the 114<sup>th</sup> Congress, respectively. These proposals would increase funding, increase assistance for disadvantaged communities, encourage good management of water systems, and prioritize sustainability in water infrastructure projects.

## III. WITNESSES

The following witnesses have been invited to testify:

## Ross E. Eisenberg

Vice President, Energy and Resources Policy National Association of Manufacturers

## **Emily Hammond**

Professor of Law George Washington University Law School On behalf of the Center for Progressive Reform

## Melissa Mays

Founder, Water You Fighting For? Flint, Michigan

## Jonathan F. Mitchell

Mayor New Bedford, Massachusetts

## Thomas M. Sullivan

Vice President, Small Business Policy U.S. Chamber of Commerce

## **Kevin Sunday**

Director, Government Affairs Pennsylvania Chamber of Business and Industry

<sup>&</sup>lt;sup>8</sup> Safe Drinking Water Act §1452, 42 U.S.C. 300j-12.

## **Appendix: Benefits of Obama Administration EPA Rules**

Rule	Affected Entities	Requirements	Benefits		
Power Plants					
Cross-State Air Pollution Rule (CSAPR) Finalized July 6, 2011 <sup>1</sup>	Power plants in eastern, central, and southern states that cause air quality problems in other states. Phase 1 implementation began in 2015. Phase 2 began in January 2017.	To reduce power plant emissions that cause air quality problems in other states, CSAPR establishes state emissions budgets and sets up SO <sub>2</sub> and NOx trading programs for covered power plants.	The CSAPR rule is expected to yield net benefits of up to \$278 billion annually.		
Mercury and Air Toxics Standards (MATS) Finalized December 16, 2011 <sup>2</sup>	Existing coal- and oil- fired electric generating units had until April 2015 to comply, with an optional extension until April 2016.	MATS set Maximum Achievable Control Technology standards for power plant emissions of mercury and other toxic air pollution.	MATS will prevent 90 percent of the mercury in coal burned at power plants from being released. The final rule is expected to yield net benefits of up to \$80 billion annually.		
Clean Power Plan (Carbon Pollution Standards for Existing Power Plants) Finalized August 3, 2015 <sup>3</sup>	Existing fossil-fuel fired electric generating units.	Starting in 2022, states have to meet specific pollution reduction goals to control CO <sub>2</sub> emissions from existing fossil-fuel fired electric generating units. However, states have considerable flexibility in deciding how to best achieve their overall pollution reduction goals.	Carbon pollution from the power sector will be reduced by 32 percent compared to 2005 levels, the rule is expected to result in up to \$54 billion in climate and public health benefits in 2030 alone (up to \$45 billion in net benefits).		
Carbon Pollution Standards for New, Modified and Reconstructed Power Plants	New coal-fired electric generating units, and natural gas-fired stationary combustion turbines.	The rule sets CO <sub>2</sub> emissions standards for new, modified and reconstructed coal and natural gas units, based on achievable reductions	Even in the absence of the final rule, few, if any, new fossil fuel-fired electric generating units will be built in the foreseeable future. Therefore, the final		

<sup>&</sup>lt;sup>1</sup> Final Rule 76 Fed. Reg. 48208; EPA Fact Sheet: CSAPR. The D.C. Circuit stayed implementation of the rule, and subsequently vacated the standards in August 2012. On April 29, 2014, the U.S. Supreme Court overturned the D.C. Circuit ruling, and stay was lifted.

<sup>&</sup>lt;sup>2</sup> Legislative Requirement: Clean Air Act section 112 requires EPA to promulgate regulations to control toxic air emissions from power plants, due to a finding made in 1998. <u>Final Rule 77 Fed. Reg. 9304</u>; <u>EPA Fact Sheet: MATS</u>; <u>EPA Fact Sheet: Benefits and Costs</u>. The MATS rule remains in effect, despite subsequent court challenges that required EPA to revise their appropriate and necessary finding, to include a consideration of costs (see <u>EPA Fact Sheet: Final Consideration Of Cost</u>).
<sup>3</sup> <u>Final Rule 80 Fed. Reg. 64662</u>; <u>EPA Fact Sheet: Clean Power Plan By The Numbers</u>; <u>EPA Fact Sheet: Clean Power Plan Benefits</u> of a Cleaner, More <u>Efficient Power Sector</u>. The U.S. Supreme Court issued a stay on February 9, 2016.

Finalized August 3, 2015 <sup>4</sup> Cross-State Air Pollution Rule (CSAPR) Update for 2008 Ozone NAAQS Finalized September 7, 2016 <sup>5</sup>	Power plants in eastern, central, and southern states that cause air quality problems in other states. Emissions budgets will begin with the 2017 ozone season.	using the best system on emission reduction.  The rule updates CSAPR with respect to the 2008 ozone NAAQS, to help reduce interstate emissions transport.	rule is estimated to result in negligible quantified changes in CO <sub>2</sub> emissions, benefits or costs by 2022.  The CSAPR Update is expected to yield net benefits of up to \$810 million in 2017 alone.		
P	National Ambient Air	Quality Standards (NAAC	QS) <sup>6</sup>		
Sulfur Dioxide (SO₂) Finalized June 2, 2010 <sup>7</sup>	Fossil fuel-fired power plants and other industrial facilities.	The 2010 rule strengthens the primary SO <sub>2</sub> NAAQS to a level of 75 parts per billion (ppb). Principal effects would be to require additional controls on fossil fuel-fired power plants.	The revised primary SO <sub>2</sub> NAAQS is expected to yield net benefits of up to \$31.5 billion in 2020.		
Particulate Matter (PM) Finalized December 14, 20128	PM standards affect a wide range of mobile and stationary sources because they address all kinds of particles and aerosols in the atmosphere.	The rule strengthened the annual NAAQS for fine particles (PM <sub>2.5</sub> ) to 12 micrograms per cubic meter.	The revised PM <sub>2.5</sub> NAAQS is expected to yield net benefits of up to \$8.75 billion in 2020.		
<b>Ozone</b> Finalized October 1, 2015 <sup>9</sup>	The 2015 ozone NAAQS does not directly limit ozone emissions from sources, but setting a new standard requires the designation of nonattainment areas.	The 2015 rule strengthens the ozone NAAQS to a level of 70 parts per billion (ppb). Large emitters located in nonattainment areas are subject to various pollution reduction requirements.	The standard of 70 ppb is expected to yield net benefits of up to \$4.5 billion in 2025 alone.		
Oil and Gas					
Oil and Natural Gas Air Pollution Standards	New, reconstructed, and modified oil and	The standards are the first national air emission	The rule is expected to reduce VOC emissions		

<sup>&</sup>lt;sup>4</sup> Final Rule 80 Fed. Reg. 64510; EPA Fact Sheet: Carbon Pollution Standards.

<sup>&</sup>lt;sup>5</sup> Final Rule 81 Fed. Reg. 74504; EPA Fact Sheet: CSAPR Update for the 2008 NAAQS

<sup>&</sup>lt;sup>6</sup> A NAAQS is set at a level adequate to protect public health, including the health of sensitive groups.

<sup>&</sup>lt;sup>7</sup> D.C. Circuit remanded the SO<sub>2</sub> standard to EPA in 1998; EPA acted under a consent decree. <u>Final Rule 75 Fed. Reg. 35520</u>; <u>EPA Fact Sheet: Revisions to the Primary NAAQS for SO<sub>2</sub></u>

<sup>&</sup>lt;sup>8</sup> Final Rule 78 Fed. Reg. 3086; EPA Fact Sheet: Air Quality Standards for PM.

<sup>&</sup>lt;sup>9</sup> EPA missed its March 2013 statutory deadline for reviewing the 2008 ozone NAAQS, and was required to sign a final rule by October 1, 2015. <u>Final Rule 80 Fed. Reg. 65292</u>; <u>EPA Fact Sheet: Ozone By the Numbers</u>.

Finalized April 17, 2012 <sup>10</sup>	natural gas production, transmission and distribution sources.	standards for hydraulically fractured wells. Companies are required to capture natural gas and volatile organic compounds (VOCs) that escape from gas wells.	from hydraulically fractured natural gas wells by 95 percent annually. The rules will also yield up to \$19 million in cost savings for the industry.
Methane Emission Standards for New and Modified Sources in the Oil and Gas Industry Finalized May 12, 2016 <sup>11</sup>	New, reconstructed, and modified oil and gas production, transmission and distribution sources.	Updates the 2012 standards to add greenhouse gas reduction requirements. The rule will curb emissions of methane, VOCs and toxic air pollutants from new, reconstructed, and modified oil and gas sources.	The rule is expected to yield net benefits of \$170 million in 2025.
	Oth	ner Rules	
MACT to Control Air Toxics from Boilers (Boiler MACT) Finalized February 21, 2011, and updated December 20, 2012. <sup>12</sup>	Boilers and process heaters at a broad array of industrial, commercial, and institutional facilities. Roughly 86 percent of boilers are not covered by these rules.	New and existing boilers and process heaters located at major source facilities are required to meet emissions limits for certain pollutants, and less-polluting sources, such as natural gas-fired boilers and small coal-fired boilers only need to comply with work practice standards, which require tune-ups every year or every other year.	The final rule is expected to yield net benefits of up to \$65 billion annually, with Americans getting up to \$29 in benefits for every dollar spent to meet the final standards.
Portland Cement Manufacturing MACT and NSPS (Cement MACT) Finalized August 9, 2010, updated December 20, 2012 <sup>13</sup>	New and existing Portland cement kilns.	The rule significantly reduces emissions of mercury and other air toxics and particle-forming pollutants from new and existing Portland cement kilns.	When fully implemented, the Cement MACT cuts 93 percent of mercury pollution from cement kilns, compared to 2010 levels. The final rule is expected to yield net

<sup>&</sup>lt;sup>10</sup> Required by a consent agreement to revise existing NSPS and hazardous pollutant rules. <u>Final Rule 77 Fed. Reg. 49490</u>; <u>EPA Fact Sheet: Air Regs for Oil and Gas.</u>

<sup>&</sup>lt;sup>11</sup> Final Rule 81 Fed. Reg. 35824; EPA Fact Sheet: Methane Emissions from Oil and Gas.

<sup>&</sup>lt;sup>12</sup> Court Requirement: D.C. Circuit vacated the rule in 2007. D.C. District Court set deadline of February 21, 2011 for promulgation. <u>Final Rule (2011) 76 Fed. Reg. 15608</u>; <u>Final Rule (2012) 78 Fed. Reg. 7138</u>; <u>EPA Fact Sheet: Boiler MACT Summary Overview</u>; <u>EPA Fact Sheet: Boiler MACT Technical Overview</u>.

<sup>&</sup>lt;sup>13</sup> <u>Final Rule 75 Fed. Reg. 54970</u>; Portions of the rule were remanded to the agency, and EPA finalized changes to the standard on December 12, 2012 <u>Final Rule 78 Fed. Reg. 10006</u>; <u>EPA Fact Sheet: Cement MACT</u>.

			benefits of up to \$17 billion annually.
Brick and Clay Product MACT Finalized September 24, 2015 <sup>14</sup>	Brick and structural clay product manufacturers, and clay ceramics manufacturers.	The rule requires brick and clay product manufacturers to control emissions of hazardous air pollutants. The rule sets health based standards for controlling acid gases, and technology based standards for mercury that is emitted during the brick manufacturing process.	The rule is expected to yield net benefits of up to \$150 million annually.
Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act Finalized December 21, 2016 <sup>15</sup>	Facilities that use or distribute hazardous chemicals. Approximately 12,500 facilities have filed current risk management plans (RMP) with EPA.	These amendments seek to improve chemical process safety, assist local emergency authorities in planning for and responding to accidents, and improve public awareness of chemical hazards at regulated sources.	The RMP rule will help protect local first responders, community members and workers from death or injury due to chemical facility accidents. In the last 10 years, there have been more than 1,500 reportable accidents, 1/3 of which had offsite impacts. These accidents were responsible for 58 deaths, over 17,000 people injured, almost 500,000 people evacuated or sheltered-in-place, and over \$2 billion in property damages.

<sup>14</sup> In response to a consent decree. <u>Final Rule 80 Fed. Reg. 65470</u>; <u>EPA Fact Sheet: Brick MACT</u>. EPA has agreed to <u>reconsider the Clay Ceramics portion of the rule</u>.
 <sup>15</sup> Required under <u>EO 13650</u>. <u>Final Rule 82 Fed. Reg. 4594</u>; <u>EPA Fact Sheet: Risk Management Program Final Rule</u>.