

Barack Obama's Path to Progress in 2015-16: Thirteen Essential Regulatory Actions

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Introduction

How will history judge the legacy of President Barack Obama? As he waited for his first inauguration, the newly elected president summoned presidential historians to his Senate office to help him conceive of a framework for that legacy, daring to dream about the unique and exceptional contribution he would make to the quality of life of most Americans. Six years later, despite significant achievements, several of the most important components of his stated agenda seem to be beyond his reach. But the President still has a lot he can do, as well as a significant amount of time left for these accomplishments. He won't leave office for two years yet, and he wields enormous power over the myriad policy matters within the purview of the Executive Branch, unrestrained by congressional gridlock.

In his 2013 and 2014 State of the Union addresses, the President declared his intention to use his executive authority more aggressively, particularly in areas where Congress has demonstrated repeatedly that it will not act. The President has ample legal authority to pivot toward such affirmative steps, regardless of attempted congressional interference, and his determination to take such steps is both crucial and smart. The more policies and rules the President is able to get on the books now, the harder it will be for his opponents to unravel his contributions later.

In no area are the opportunities greater than with respect to protecting public health, safeguarding worker and consumer safety, and preserving the environment. Distracted by the increasingly hysterical drumbeat of conservative rhetoric about a supposed "tsunami" of regulations, the White House has barely scratched the surface of what regulatory actions could do to deliver on the promise made in the President's second inaugural to "care for the vulnerable, and protect [our] people from life's worst hazards."

The American people are in dire need of such care, and federal agencies have already expended thousands of hours compiling the evidence needed to deliver them. What has been missing, and what needs now to come into play, is a sense of urgency and the political will—the President's, in particular.

This Issue Alert identifies 13 essential regulatory actions that agencies are working on right now, all of which can and should be done before the President leaves office. These rules come out of the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the Department of Labor, and the Department of Transportation. All are now years overdue, particularly considering the very serious health, safety, and environmental effects they address. Each day, people get ill and too many die because earlier Administrations dragged their feet on these problems. If President Obama wants a legacy that delivers on the core domestic policy promises of that second inaugural address, he should carry these overdue proposals across the finish line, not at the very last minute but in time to avoid their further delay or potential undoing by a succeeding administration that may be hostile to protective safeguards.

Unfortunately, legacies are made real not by inspiring speeches but by concerted, well-organized, and hard-driving action, characteristics that, in the regulatory arena, have not been evident for many years. In fairness, when President Obama took office, the agencies we depend upon to protect the most vulnerable were already hobbled by eight long years of abuse and neglect during the George W. Bush Administration. Yet the Obama Administration has too often left them hanging, without the resources they need to accomplish their rule-writing and enforcement missions. The President has allowed White House political operatives to overrule his senior agency heads, presumably so as to avoid inflaming political opposition from industry. Now that the President's last mid-term election has come and gone, a window of opportunity has opened, offering barely enough time to put new regulatory safeguards in place that will make it difficult for a new president to destroy these vital components of a lasting Obama legacy.

Because time is short and so much work remains to be done, we recommend that the President appoint a senior White House advisor to be the point person to organize and ride herd over the considerable effort that will be required to make these and other rules final by no later than June 30, 2016. That person should be someone who has plenty of White House experience, and whose voice will command the respect of the agencies and the Office of Information and Regulatory Affairs, which often serves as a choke point for regulations. We choose that June 2016 date because it effectively immunizes the rules from repeal by a new president under the time frames set forth in the Congressional Review Act, should the Republican Party take control of the White House and hold both houses of Congress in the following November elections.

The President should direct the affected agencies to assign whatever staff is necessary to drive these rules forward to conclusion. All should be elevated to the same status as the climate change rules: do or die priorities for the President. For many of these regulatory actions, Congress will attempt to attach "riders" to any legislation moving through both houses that are

Obama Administration from completing the rulemaking process. The riders might accomplish this goal by repealing necessary legal authority, instituting impossible-to-meet rulemaking requirements, or prohibiting an agency from using its appropriated funds for working on the rule. In every instance, the President must commit to vetoing any legislation that contains an antiregulatory rider that would block any of these actions.

designed to prevent the

	OBAMA REGULATORY TO DO LIST
EPA	GREENHOUSE GAS NATIONAL PERFORMANCE ON TIME
FDA	PREVENTIVE CONTROLS FOR PROCESSED DELAYED
FDA	PRODUCE SAFETY DELAYED
FDA	IMPORTED FOOD SAFETY DELAYED
OSHA	SILICA STANDARD DELAYED
EPA	OZONE NATIONAL AMBIENT AIR QUALITY DELAYED
EPA	"MATERS OF THE UNITED STATES" DELAYED
DOL	CHILD FARM-LABOR SAFETY RULES IN DANGER
DOT	CRUDE-BY-RAIL SAFETY STANDARDS ON TIME
EPA	NATIONAL STORMWATER POLLUTION IN DANGER
EPA	COAL ASH WASTE DISPOSAL DELAYED
EPA	CONCENTRATED ANIMAL FEEDING OPERATION WATER POLLUTION THOUGHT
EPA	PERMIT "EREPORTING" FOR THE NATIONAL DELAYED POLLUTANT DISCHARGE ELIMINATION SYSTEM DELAYED

The "Essential 13" regulatory actions highlighted in the pages that follow include:

- National Performance Standards to Limit Greenhouse Gas Emissions from Fossil-Fueled Power Plants. EPA rules that would reduce climate disrupting greenhouse gas emissions from new and existing fossil-fueled power plants by about 730 million metric tonnes, while annually preventing up to 6,600 premature deaths, 3,300 non-fatal heart attacks, 150,000 asthma attacks in children, and 490,000 missed school and work days by limiting other common air pollutants. The President has already committed to this rule, and so far it is on track, but along with the other actions explained here, the Administration should finish it in plenty of time, and not at the last possible minute.
- Preventive Controls for Processed Human and Animal Foods. FDA rules that would seek to prevent catastrophic foodborne illness outbreaks, such as the recent Salmonellatainted peanut butter outbreak that killed nine people and sickened at least 714 others, by requiring foods processors to proactively identify and address hazards in the manufacturing process.
- **Produce Safety**. An FDA rule that would seek to prevent catastrophic foodborne illness outbreaks, such as the recent *Listeria*-tainted cantaloupe that killed 33 people and sickened at least 147 more, by establishing new minimum health and safety standards for farming practices that can cause produce contamination.
- Imported Food Safety. With imports making up 15 percent of the food consumed in the United States, and with fewer than 2 percent of imported foods undergoing inspection, these FDA rules would help to prevent catastrophic foodborne illness outbreaks by requiring U.S.-based importers and foreign-based suppliers to ensure their products are meeting the same high safety standards that apply to U.S.-based facilities.
- Silica Standard. An OSHA rule to better protect the nearly 2 million U.S. workers exposed to dangerous levels of silica dust in the workplace that would require employers to implement silica dust controls, monitor their workers' exposures, and provide improved employee training and medical surveillance.
- National Ozone Air Pollution Standard. An EPA rule that would annually prevent up to up to 12,000 premature deaths, 5,300 nonfatal heart attacks, 58,000 cases of aggravated asthma, and 2.5 million missed school and work days by reducing the maximum allowable amount of ozone air pollution.
- 'Waters of the United States' Regulatory Definition. With wetlands and smaller water bodies providing habitat one-third of U.S. endangered or threatened species and supporting a seafood industry annually worth \$15 billion, this EPA rule would ensure these waters are better protected by clarifying that they are covered by the Clean Water Act's provisions.
- Child Farm-Labor Safety Rules. To better protect vulnerable child agriculture workers, one of whom dies in a farming-related incident roughly every three days, these EPA and Department of Labor safeguards would prohibit children from taking on particularly dangerous farm work tasks and offer stronger protections against harmful pesticides.
- Crude-by-Rail Safety Standards. A Department of Transportation rule that would seek to prevent catastrophic train crashes involving any of the more than 415,000 rail-carloads

- of flammable crude oil traveling across the United States each year by requiring stronger tank cars, safer train routes for oil trains, and enhanced emergency response practices.
- National Stormwater Pollution Controls. An EPA rule that would seek to prevent harm caused by polluted stormwater, which is responsible for nearly 11 percent of all impaired rivers and streams across the United States, by requiring municipalities and the owners of industrial sites to take steps to manage runoff that flows from their lands into nearby water bodies and by extending these requirements to a greater number of municipalities and covered industrial sites.
- Coal Ash Waste Disposal Standards. With most coal ash waste being dumped in old and poorly engineered impoundments across the country, this EPA rule would require power plants to better manage the more than 129 million tons of coal ash they produce annually in order to prevent contamination of adjacent ground and surface waters as well as catastrophic releases, such as the 1.1 billion-gallon coal ash spill in Kingston, Tennessee, which inundated 300 acres of land in a layer four to five feet deep, uprooted trees, destroyed three homes, and damaged dozens of others.
- Concentrated Animal Feeding Operation Water Pollution Standards. With large-scale animal farms generating 500 million tons of manure each year, and with fewer than 43 percent of the facilities operating under Clean Water Act permits because of regulatory exemptions and insufficient state oversight, this EPA rule would better protect nearby water bodies from these operations by requiring them to follow necessary permitting requirements and adopt rigorous management practices for handling and storing their wastes.
- Permit 'eReporting' for the National Pollutant Discharge Elimination System. An EPA rule that would strengthen the agency's ability to respond to water pollution violations and annually save states and regulated industries almost \$30 million combined by requiring Clean Water Act permit holders to submit relevant reports in electronic—as opposed to paper—format.

To be clear, the choices of regulatory actions in this document reflect the reality that the Obama Administration has not seized the opportunity to challenge the fundamentally false assumptions that underlie the campaign to deregulate, except episodically and in the most rhetorical manner. This lack of vision has cost the President's legacy and the American people dearly. So, for example, when conservatives shout that more rules have been produced by the Obama Administration than ever before, the White House counters with a set of tepid calculations that prove the meaningless fact that the Bush or Clinton Administrations made as many regulatory decisions. The White House apparently lacks the courage or the vision to explain that the rules that have been put in place will protect people and the environment from frightening harms. Because these benefits are never explained, because the issue is never really joined, the White House sacrifices the essential opportunity to explain why people need government and why protective regulations serve people and the economy, leaving some of the most important accomplishments of this presidency—most notably Obamacare—similarly lacking an organizing principle.

Because of these constraints and lack of vision, we find ourselves six years into the Obama Administration with a sharply constrained list of the possible. The best example is worker safety and health. Quite literally, President Obama could not have won the office without the strong support of organized labor, which no doubt lent its support in the expectation that the President would move aggressively in areas where his predecessor had not. And yet the possibility also exists that the Administration will close out eight years without producing a single important new rule to protect worker health and safety, instead waiting far too long to usher the lone contender—controls on silica dust—across the finish line. A far more ambitious agenda would have made both policy and political sense in 2009, but the passage of time has narrowed the horizon of possibility.

We can only hope that when he confronts this and similar instances of neglect, the President will deliver on his government's power—as he said in his State of the Union speeches and on the campaign trail—to help people when they cannot help themselves.

This Issue Alert will examine each of the essential 13 regulatory actions individually, describing (1) why the regulatory actions are needed for protecting people and the environment, (2) the ongoing delays that have blocked their progress to this point, (3) what the final rules should say, and (4) the remaining steps that need to be taken to complete the rules. This examination will make clear that all of the rules will deliver important protections for public health, safety, and the environment and that completing the rules will be a relatively easy lift for the Obama Administration, provided that it brings to bear the necessary political will.

National Performance Standards to Limit Greenhouse Gas Emissions from Fossil-Fueled Power Plants

What's at Stake?

Scientists estimate that we've already locked in a 1.4-degree-Fahrenheit increase in average global temperatures since the beginning of the Industrial Revolution, which is more than enough to create long-lasting, if not irreparable damage to the planet. September was the 355th consecutive month in which the global average temperature exceeded the 20th century average—a streak that has now reached nearly 30 years. The average concentration of carbon dioxide in the atmosphere exceeded 400 parts per million (ppm) every day in April, a level that hasn't been reached in at least the 800,000 years.

We are already suffering the consequences of these drastic changes to Earth's fragile atmosphere. Researchers estimate that the total area damaged by massive wildfires increased at a rate of 90,000 acres per year between 1984 and 2011, due in part to higher temperatures and worsening drought conditions brought about by global climate disruption.³ Researchers project that the annual total area of wildfire damage could increase by a further 100 percent by 2050, with just the climate change-induced wildfires alone costing the United States as much \$60 billion every year by 2050.⁴ Over the last few years, large parts of the country have endured some of the worst droughts in decades, and scientists agree that the higher temperatures brought about by climate disruption have worsened their effects, including through massive declines in winter mountain snowpack—which are essential for sustaining rivers and reservoirs—and decreased soil moisture levels.⁵ Researchers estimate that these drought effects will cost California farmers \$2.2 billion and 17,100 jobs in 2014 alone.⁶

Global average sea level has risen by eight inches since the 19th century, which is already wreaking havoc for Americans living in coastal areas. The beach at Chincoteague National Wildlife Refuge in Virginia has been washing away at a rate of 10 to 20 feet every year, while Miami Beach, Florida has resorted to building a complex pumping system at a cost of \$400 million to tackle the increasingly common floods the city faces. The rising air and sea temperatures are also aiding the spread of harmful invasive species, enabling them to displace native species and disrupt entire ecosystems across the United States and its surrounding waters. For example, the lionfish, normally a tropical species, has spread as far north as the North Carolina coast, destroying parts of the fragile Atlantic reef system along the way. Similarly, global climate disruption is enabling dangerous infectious diseases—such as Valley Fever and Naegleria fowleri, the so-called "brain-eating amoeba"—to expand throughout the United States.

Things will likely get worse, even if the global community does somehow make good on the agreement it reached at the 2009 United Nations climate summit in Copenhagen to limit global temperature rise to the artificial target of 3.6 degrees Fahrenheit. More and more, climate experts agree that meeting this target will not achieve the global community's stated goal of avoiding "dangerous" global climate disruption; they argue that the world has passed too many tipping points, making dangerous global climate disruption essentially a foregone conclusion. Instead, meeting the Copenhagen target may be what is necessary for avoiding "very dangerous"

global climate disruption.¹¹ But, we are not even close to being on the right path for meeting that target. The international accounting firm PricewaterhouseCoopers recently reported that the world is instead on course to see average global temperatures rise by 7.2 degrees Fahrenheit by 2100. The report also projects that at this rate the world will have exhausted its "carbon budget"—that is, the maximum amount of carbon dioxide emissions it can release before the end of the century—by the year 2034.¹²

To have any hope of averting the most catastrophic effects of global climate disruption, the United States will need to significantly "decarbonize" its power sector—that is, we will need to minimize the country's reliance on fossil-fueled power generation so that each unit of electricity that is produced results in drastically lower carbon dioxide pollution emissions. The Environmental Protection Agency's (EPA) pending national performance standards for both new and existing fossil-fueled power plants offers the most realistic opportunity for achieving this goal—especially in the face of continued Republican intransigence on enacting comprehensive legislation to address global climate disruption. Because fossil-fueled power plants are the largest single U.S. source of greenhouse emissions—accounting for nearly a third of all such emissions—these rules would go a long way toward promoting a greener economy. 13 Developing the technology to build a climate-friendly power sector would also create important economic opportunities, as the U.S.-based companies would be well positioned to export their innovations to markets in other countries working to tackle global climate disruption. By serving as a world leader, the United States would also enjoy greater diplomatic leverage to negotiate meaningful agreements with its international partners to ensure they are taking adequately ambitious steps to reduce their own greenhouse gas emissions.

As proposed, the EPA's national performance standards for power plants would deliver significant public health and environmental benefits once fully implemented. The rules would reduce power plant emissions of carbon dioxide by about 730 million metric tonnes, which is roughly equivalent to the emissions produced by two-thirds of the country's automobiles. As an important bonus, the agency also estimates that the rules would annually prevent up to 6,600 premature deaths, 3,300 non-fatal heart attacks, 150,000 asthma attacks in children, and 490,000 missed school and work days. These critical public health co-benefits would be achieved as the rules would encourage greater reliance on clean energy sources, such as solar and wind, as a replacement for dirty coal-fired power plants, which are not only responsible for large amounts of greenhouse gas emissions, but also other air pollutants—including ozone and particulate matter—that are harmful to human health.

What's the Holdup?

The EPA's pending national performance standards to limit greenhouse gas emissions from fossil-fueled power plants have been met with intense opposition from a wide variety of business groups, including the coal mining industry and much of the power sector. These groups have already launched a series of specious lawsuits aimed at blocking the pending rules, despite the fact that longstanding administrative law principles generally forbid such legal challenges until after a rule has been finalized. Although the cases have little chance of succeeding on the merits and are procedurally flawed, these suits nonetheless serve as an intimidation tactic that industry can deploy to discourage the EPA from working as expeditiously as possible on the rules.

These industry groups have also worked with allied conservative think tanks and other outside influence groups to push anti-regulatory Members of Congress to oppose the rules. Their efforts have been rewarded with a series of bills that would block the specific rules or otherwise prevent the EPA from taking any actions to limit greenhouse gas emissions from power plants and other industrial sources. ¹⁶ They have also succeeded in attaching "policy riders" to must-pass appropriations bills that would prohibit the EPA from using any appropriated funds to support development of the pending national performance standards.¹⁷ While many of these bills and policy riders have passed the Republican-controlled House of Representatives, so far none have cleared the Senate. Beyond these legislative actions, anti-regulatory Members of Congress have held several hearings aimed at undermining support for the EPA's greenhouse gas rules. These hearings have provided these members and industry opponents with high profile opportunities to cite and recite their same fallacious talking points against the rules: the EPA lacks the legal authority to issue them; the rules would not make any meaningful contribution toward limiting greenhouse gases or yield any other public health or environmental benefits; and global climate disruption is a hoax. 18 Business groups and their conservative allies have also sought to block meaningful action by pushing a years-long campaign aimed at sowing doubt among the American public about whether global climate disruption is real or whether it is caused by human activities.

While the Obama Administration has publicly committed to completing these rules as expeditiously as possible, the efforts by industry groups and their conservative allies to make the EPA's national performance standards for fossil-fueled power plants controversial appears to be having some effect. For example, the Obama Administration just agreed to extend the already abnormally long comment period for the rule on existing power plants by an additional 45 days. The Administration claims that despite this delay it still expects to complete the rule by its self-imposed deadline of June 2015. It remains to be seen whether the Administration's claim will hold true.

What Should the Rules Do?

For future power plants, the EPA should issue a rule that sets ambitious limits on greenhouse gas emissions for coal- and natural gas-fired power plants, respectively. The EPA's proposal would restrict coal-fired power plants' emissions to 1100 pounds of carbon dioxide per megawatt-hour and gas-fired power plants to 1000 pounds per megawatt-hour. The standard for gas-fired plants should be stronger, though; in the final rule, the EPA should lower the limit to no more than 800 pounds per megawatt-hour.

For existing power plants, the EPA is developing a program under the Clean Air Act that would require states to develop implementation plans for meeting emissions targets, each of which are tailored to the state's unique circumstances. The program would grant states significant flexibility in designing their implementation plans, such as developing cap-and-trade programs with fellow states and relying on "outside the fence" approaches for cutting emissions including energy efficiency programs and switching to renewable energy sources. This flexibility will ensure that states' implementation plans are cost-effective and feasible. As proposed, the EPA's program for existing power plants seeks to cut their greenhouse gas emission by 30 percent below 2005 emissions levels by the year 2030. Given all the flexibility the program

would afford to states, the EPA should finalize a rule that sets even more ambitious reduction targets, though. For example, an analysis by the Natural Resources Defense Council finds that a rule similar to the EPA's proposal could reduce greenhouse gas emissions by 35 percent below 2005 emissions levels by 2020 without imposing excessive costs. ²⁰ In addition, the final rule should maintain ambitious interim targets leading up to the year 2030 to ensure that the states' plans are making adequate progress.

What's Next?

The EPA released the proposed national performance standards for future power plants in September 2013 and the proposed national performance for existing power plants in June 2014. The comment period for the future power plants standard has closed, and now the agency is working toward a final rule, which it projects to issue in January 2015. The comment period for the existing power plants standard, which was recently extended, is set to close on December 1, 2014. The EPA still predicts that it will issue the final national performance standard for existing power plants by June 2015, which would require states to submit for approval their implementation plans by June 2016. The Administration should strictly adhere to this timeline, since any unnecessary delays could jeopardize the effective implementation of these rules. In particular, the state implementation plans are vital to the successful implementation of the national performance standards for existing power plants. The EPA should complete this rule on schedule to ensure adequate time for states to submit their implementation plans before the close of the Obama Administration.

Recommended Timeline for Completing the Rulemakings:				
	Greenhous	e Gas Emissions	Standards	
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
Future plants rule:	✓	√	by November 2014	by January 2015
Existing plants rule:	✓	by December 2014	by May 2015	by June 2015

Preventive Controls for Processed Human and Animal Foods

What's at Stake?

From frozen meals and spices to nut butters and cheeses, processed foods are a nearly ubiquitous part of the American diet. They also account for a growing number of foodborne illness outbreaks, which in today's modern industrialized food system can be breathtaking in scale and devastating in impact. In early 2013, for example, various Farm Rich frozen products infected with a virulent strain of *E. coli*, sickened at least 35 people across 19 states. In all, about 10 million products, including the company's Mozzarella Bites and Mini Quesadillas, were recalled in response to the outbreak. Roughly 300,000 pounds of the recalled products had been purchased by schools, and the overwhelming majority of those affected by the tainted food were children. More recently, *Listeria*-tainted cheese products produced by Roos Foods led to at least one death while causing at least seven reported cases of illnesses, including three cases in infants. The number of people actually harmed in these and other food illness outbreaks is likely much larger as the vast majority of cases often go undiagnosed or unreported. The Centers for Disease Control, for instance, estimate that for every reported case of *Salmonella* poisoning, another 38 go unreported.

The most infamous food illness outbreak related to processed foods in recent years was the massive *Salmonella* outbreak caused by peanut butter and peanut paste products manufactured by the now-defunct Peanut Corporation of America. Throughout 2007 and 2008, the company—then among the largest peanut-processing plants in the country—began shipping out products it knew were contaminated with *Salmonella*. These shipments triggered a 48-state outbreak, killing nine people and sickening at least 714 others, half of whom were children. The outbreak led to the largest food recall in U.S. history, involving hundreds of companies and thousands of products. Following the outbreak, federal food safety investigators found deplorable conditions at the Peanut Corporation of America's processing plants, including leaking roofs, widespread mold contamination, standing water, and even dead rodents. It was well known among many industry insiders that these conditions had existed at the company's facilities for decades. Since then, top executives from Peanut Corporation of America, including the owner Stewart Parnell, have been convicted of various federal crimes for their role in the outbreak.

Beyond the immediate health impacts, outbreaks can be economically damaging for the entire industry involved. For example, companies that sourced peanut products from the Peanut Corporation of America had to undertake costly recalls of their own. The owner of one small business estimated that her company suffered around \$1 million in losses related to the recall. Even companies that were not involved suffered substantial losses, as many consumers were scared off from buying all brands of peanut butter, resulting in decreased sales of roughly 25 percent. Beginning the peanut butter, resulting in decreased sales of roughly 25 percent.

Bacteria and other pathogens are not the only threats posed by processed foods; the processing system also introduces the risk of contaminating foods with common allergens such as dairy products, tree nuts, or peanuts. Typically, food items that contain these common allergens must carry a label declaring their presence, so that individuals with allergies can avoid

becoming unwittingly exposed. Processed foods that have been accidentally contaminated with these allergens would likely lack such a label, which could endanger the health of individuals with allergies. In fact, the presence of so-called "undeclared" allergens arising from the manufacturing process has become the most common reason for initiating recalls of processed foods—and the health risks they pose can be severe. According to one Food and Drug Administration (FDA) study, 520 recalls were undertaken between 2005 and 2010 due to undeclared allergens; roughly 10 to 15 percent of the victims of the tainted food experienced anaphylaxis, the most severe—and potentially fatal—form of allergic reaction. According to the context of the victims of the tainted food experienced anaphylaxis, the most severe—and potentially fatal—form of allergic reaction.

Processed animal foods can also be a dangerous source of outbreaks, endangering not only the animals that consume the foods but also the humans that live or work with them. In 2012, for example, Diamond Pets Foods initiated a large recall of its products that had been contaminated by *Salmonella* during the manufacturing process. Several dogs became ill or died as a result, and at least 14 people were also sickened through contact with the food or the infected dogs.³⁵

To better address these risks, the FDA is working on separate preventive controls rules for the manufacture of processed human and animal foods. These two rulemakings are part of the agency's efforts to implement the 2011 Food Safety Modernization Act (FSMA), a law designed to overhaul the U.S. food safety system so that it focuses on preventing foodborne illness rather than reacting to outbreaks after they have already begun.

What's the Holdup?

The FDA's development of preventive controls for human and animal foods is already years behind schedule. The FSMA mandated that the FDA issue its final rule on preventive controls for human food no later than July 2012; for the preventive controls for animal food, the FDA was supposed to have issued a proposed rule by October 2011 and the final rule within nine months of the end of the comment period on the proposal. The agency blew past all of these deadlines. The proposal for human food was not issued until January 2013 and the proposal for animal food was not issued until October 2013. Since then, the FDA has fallen even further behind schedule, announcing in December 2013 that it would undertake the unusual step of issuing re-proposals to address some of the early comments it received on the initial proposals. The agency only recently issued those re-proposals, in September 2014. Rather than go through the unnecessary delay caused by issuing these re-proposals, the agency should have simply incorporated any relevant changes made in response to the public comments as it developed the final rules.

Industry opposition has contributed to the FDA's slow development of the initial proposals as well as the later decision to re-propose each of the preventive controls rules. While at the Office of Information and Regulatory Affairs (OIRA)—where the initial proposals languished for well over a year, causing the FDA to miss a statutory deadline—White House economists significantly weakened both rules by removing several key monitoring and training requirements. Since then, powerful industry trade groups, including the Grocery Manufacturers Association and the Food Marketing Institute, have sought to prevent the FDA from fixing those holes as it worked toward a final rule.³⁸ The trade associations' efforts have apparently

succeeded, as the agency has dedicated much of the re-proposals to addressing their arguments and justifying its ability to reinstate the provisions excised by OIRA.

What Should the Rules Do?

The rules will require covered food processors to develop and implement a Hazard Analysis and Risk-Based Preventive Controls (HARPC) system. The HARPC system is, in essence, self-regulation because food manufacturers are responsible for identifying the potential hazards in their processes and then implementing controls to minimize or prevent those hazards. The FDA's role is limited to reviewing some companies' HARPC plans to ensure they meet basic standards. This kind of self-regulation is risky, but many food safety advocates consider its proactive and preventive approach an improvement over the current system, which is almost entirely reactive to outbreaks.

Combined, the initial proposals and later re-proposals offer a good start on improving the safety of processed human and animal foods as compared to the status quo, but they can be strengthened in important ways. The rules should require that processors develop HARPC systems that employ the best available methods for preventing food-safety hazards—including those related to pathogens and allergens—that are justified by current science and that address the risks presented by their operations. The controls rule for human foods should be amended to require: reviews of consumer complaints; environmental monitoring for pathogens reasonably likely to occur; finished product testing; supplier approval and verification programs; and reviews of the records associated with these activities. The FDA should also narrow the exemptions in the rules. For human foods, only processors with less than \$250,000 in annual sales should be exempt from the requirement to develop HARPC plans. For animal foods, only processors with less than \$500,000 in annual sales should be exempt. As drafted, the proposals' current exemptions allow room for unnecessary exposures to risk from companies that can afford safe procedures.

The rules will also seek to modernize the current good manufacturing practices (CGMP) regulations that apply to processed human foods, while extending these CGMP requirements to animal food processors for the first time. The CGMP requirements can be strengthened by establishing additional requirements covering basic sanitation and training.

What's Next?

The FDA released the initial proposals for the human food and animal food preventive controls in January 2013 and October 2013, respectively, and followed up with the re-proposals for both rules in September 2014. The comment period on the initial proposals has already closed, and the comment period for the re-proposals concludes in December 2014. During this current comment period, the FDA is accepting feedback on the substantive issues raised in the re-proposals only and will not accept additional feedback on the initial proposals. The FDA should then work toward issuing the final preventive control rules, which it is under judicial order to do by no later than August 2015. Even under this timeline, the rules will be years past the original statutory deadline. These delays have no doubt resulted in numerous foodborne illnesses, wasted money, and possibly even preventable deaths. The FDA should issue the final preventive controls rules by the August 2015 judicial deadline, if not sooner.

Recommended Timeline for Completing the Rulemakings: Preventive Controls for Processed Foods				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
Human food rule:	√	by December 2014	by May 2015	by August 2015 (judicial deadline)
Animal food rule:	✓	by December 2014	by May 2015	by August 2015 (judicial deadline)

Produce Safety

What's at Stake?

In late summer 2011, Michelle Wakley went into labor three months before her due date. She had eaten a cantaloupe tainted with *Listeria* and fallen ill. Her newborn daughter Kendall, weighing in at just 3 pounds, 11 ounces, and suffering from a related infection, lived in an incubator for weeks and had to be fed through a stomach tube for more than a year. Kendall may face lifelong physical and mental disabilities. Michelle and Kendall were, in a sense, among the lucky ones. At least 33 people died after eating dirty cantaloupes traced back to the same company: Jensen Farms of Holly, Colorado. The outbreak also sickened 147 people in 28 different states. It was one of the most widespread outbreaks in history and followed closely on the heels of several other major food safety disasters involving contaminated produce, including separate incidents caused by tainted spinach and jalapeño peppers.

The cumulative impact of foodborne illness is difficult to measure because only the most severe cases lead to hospital visits and get reported to government agencies capable of tracking the big picture. The Centers for Disease Control (CDC)—the main and best source of information, given its role in tracking and investigating major outbreaks—estimate that foodborne disease causes 48 million illnesses each year in the United States. Such widespread suffering is reason enough to demand improvements to food safety systems, but the costs to industry are also worth mentioning. Following the 2006 *E. coli* outbreak in bagged spinach, which sickened more than 200 people in 26 states and killed three others, researchers observed a massive decline in spinach sales across the country, resulting in millions of dollars of losses for innocent producers.

Congress passed the Food Safety Modernization Act (FSMA) in 2011 in an effort to improve food safety regulations. Under the new law, the Food and Drug Administration (FDA) was tasked with developing a host of new rules—and to accomplish the task on a short timeline. The combination of two of the rules that Congress specified—the "Produce Safety" rule and the "Preventive Controls for Human Foods" rule—will likely have the biggest impact on foodborne illness outbreaks. The preventive controls rule applies only to non-farm activities such as turning carrots into "baby carrots" or slicing and bagging apples. The Produce Safety rule identifies key farming practices (irrigation, fertilization using manure and biosolids, equipment choice, worker training) that are vulnerable to pathogenic contamination if not carried out properly.

What's the Holdup?

The Produce Safety rule has been a long time coming. After President Obama signed the law into effect in January 2011, the FDA got to work on the required rules, completed the proposal, and sent the drafts to the White House Office of Information and Regulatory Affairs (OIRA) for review by Thanksgiving of that year. Even though such reviews are generally required to last no longer than four months, the proposals sat there in limbo for more than a year, likely victims of the 2012 elections. Following a lawsuit by public interest advocates aimed at breaking the rules free from White House review, the FDA published the Produce Safety rule for public comment in January 2013. The FDA later extended the public comment deadline three

times and hastily organized a series of stakeholder meetings to hear out concerned farmers and food safety advocates. Such backpedaling not only shows a lack of confidence in the rulemaking package as it was published, but also gives opponents extra time to organize a broad base of advocates who can leverage congressional allies and the media to further delay the rulemaking process. The FDA even published a "supplemental" proposal in September 2014, which introduced significant changes to the original proposal. By the time the comment period on the supplemental NPRM closes in December 2014, the Produce Safety Rule will have been out for comment for nearly two years—far longer than usual for most other public health rules.

The farm lobby, channeling the fierce independence of many farmers and the antiregulatory bent of Big Ag, has cloaked its objections to the Produce Safety rule largely in histrionics. Writing in *Food Safety News*, for instance, the owner of a seed company in California declared the Produce Safety rule (and the companion Preventive Controls and Foreign Supplier Verification regulations proposed by the FDA) to be a "War on Farmers."⁴²

From the farm lobby's and food safety advocates' perspectives, the four critical issues are the types of crops and farming activities covered by the rule, available exemptions to the rule, the proposed testing standards for irrigation water, and the provisions governing the use of manure and other "biological soil amendments."

On the water and soil front, the FDA's goal is to ensure that the irrigation water and manure used to nurture produce do not contaminate the food supply with bacteria such as *E. coli* and *Salmonella*, the leading causes of foodborne illness. In the FDA's estimation, the best way to do that is to test the water regularly (treating the water or delaying harvest if it is too contaminated) and to establish waiting periods between manure application and harvest.

The coverage questions are more complex. A common concern is whether a farmer should be subject to more stringent rules because she occasionally takes produce from neighbors and packages it with her own in order to meet the demands of wholesalers, restaurants, and other "mid-stream" customers. Such post-harvest activities present real risks of spreading contamination, but the FDA is reluctant to apply the same rules to small farmers as it does to major agroprocessors. Another issue is how the FDA should implement the "Tester Amendment," which exempts certain small farmers from the rules if their total sales fall below a \$500,000 per year threshold and a majority of their sales are made directly to consumers or local restaurants or other retail food establishments.

What Should the Rule Do?

The recently published supplemental proposal needs improvement. For example, with regard to the rule's coverage, the FDA retained the exemption for food "rarely consumed raw." That exemption allows farmers to use lax practices on such items such as kale and figs, which are frequently consumed raw. Moreover, it puts the burden on consumers to eliminate pathogens, rather than promoting good agricultural practices. The FDA should simply eliminate this exemption.

On the soil amendments issue, the agency has abandoned its proposed nine-month waiting period between raw manure application and produce harvest. Instead, the FDA proposes

to conduct additional and "extensive" research to determine an appropriate risk-based waiting period. And in the meantime, the FDA has given tacit approval for farmers to utilize the waiting periods set forth in the Department of Agriculture's National Organic Program standards. Those changes make sense. But in the final rule the FDA should also ban the use of sewage sludge in produce-farming operations covered by the rule, given the many contaminants that pass through public sewage treatment plants (*e.g.*, PBDE flame retardants, pharmaceuticals, heavy metals, and other toxins). 44

The FDA's proposal strikes a fair balance on irrigation water testing, minimizing contamination risks posed by domestic and wild animals, cleaning tools and other materials, worker training, and procedures for implementing the Tester Amendment. However, recordkeeping rules could be improved by requiring farmers to keep track of which packers and processors handle their produce when those activities occur off the farm.

What's Next?

Congress set deadlines for the FDA to complete this rulemaking, but those deadlines had loopholes and FDA has taken full advantage. The critical deadline was that the final rule should be published one year after the close of comments on the proposal. ⁴⁵ By extending the comment period on the original proposal numerous times, then publishing a supplemental proposal, the FDA has been able to move the goalposts. Public interest advocates are fighting to keep the Produce Safety and related food safety rules moving and have secured a court-ordered deadline for the final rules to be published by October 2015.

Recommended Timeline for Completing the Rulemaking:				
		Produce Safety		
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
✓	✓	by December 2014	by August 2015	by October 2015 (judicial deadline)

Imported Food Safety

What's at Stake?

About 15 percent of the food consumed in the United States is imported. Imports make up 91 percent of our seafood, 60 percent of our fruits and vegetables, and 61 percent of our honey. Many of these imported foods come from countries that lack effective health and safety regulation. For example, Chinese food producers have been caught spraying cabbage with formaldehyde and trying to sell baby formula tainted with the mercury, a potent neurotoxin. Yet, that country still supplies approximately 50 percent of our apple juice, 80 percent of our tilapia, and 31 percent of our garlic. Vietnamese farmers have been caught sending shrimp to the United States packed in ice made from bacteria-infested water. Many farm owners in Mexico provide their workers with only filthy bathrooms and no place to wash their hands before gathering such produce as onions or grape tomatoes for export.

Despite the obvious risks of adulteration and contamination, the resource-strapped Food and Drug Administration (FDA) inspected only 2 percent of food imports and just 0.4 percent of foreign food facilities in 2011. Meanwhile, import-related outbreaks—such as the 84 people sickened by *Salmonella*-infected Mexican cucumbers in 2013—have become even more frequent.⁴⁹

The foodborne pathogens that make it to our tables pose a significant threat to children, the elderly, and those with compromised immune systems. The tragic story of 67-year-old Raul Rivera is a case in point. In 2008, after undergoing chemotherapy and radiation, he was told by his oncologist that he would likely survive non-Hodgkin's lymphoma. Rivera celebrated the positive prognosis by taking his family out for dinner. During the meal, he ate a salsa made with jalapeños, which were later discovered to have been imported from a Mexican farm that had used *Salmonella*-tainted water for irrigation. He died two weeks later, not of cancer but of salmonellosis.⁵⁰

In part to address this growing threat of contaminated food imports, Congress passed the Food Safety Modernization Act (FSMA). Congress sought to overhaul the U.S. food safety system to focus on preventing foodborne illness outbreaks rather than reacting to them after the fact. The law directs the FDA to issue two key regulations to improve the safety of imported foods: the Foreign Supplier Verification Program and the Accreditation of Third Parties to Conduct Food Safety Audits. The first rule would require food importers to verify that their foreign suppliers have adequate measures in place to prevent adulteration and contamination, while the second would create an independent auditing system through which foreign food facilities could become "certified" as complying with U.S. food safety standards.

What's the Holdup?

The FSMA instructed the FDA to issue the final Foreign Supplier Verification Program and the Accreditation of Third Parties rules by January 2012 and July 2012, respectively, yet both rules are still a long ways from completion. Despite these deadlines, the FDA failed to issue even the proposals for the rules until July 2013, a full year after they were supposed to be

finalized. To make matters worse, the FDA issued in September 2014 a revised proposal of the Foreign Supplier Verification Program rule.⁵¹ The FDA appears to be treating the two as companion rules, so this revised proposal step will likely result in significant additional delays for the Accreditation of Third Parties rule as well as the Foreign Supplier Verification Program rule.

Interference from economists and political operatives at the White House Office of Information and Regulatory Affairs (OIRA) helped to delay the FDA's issuance of the initial proposals. The Foreign Supplier Verification Program rule languished at the White House for 20 months, and the Accreditation of Third Parties rule for eight months—both well beyond the maximum four months allowed for OIRA reviews of rules.⁵² Remarkably, OIRA refused to release the rules even after the statutory deadlines for the FDA to issue the final rules had long since passed, causing the agency to violate the clear commands of the FSMA.

What Should the Rules Do?

The FDA should require U.S. companies that purchase food products made overseas to ensure that the foreign suppliers have adequate measures in place to prevent adulteration and contamination. Specifically, the Foreign Supplier Verification rule should direct those companies to inspect foreign supplier facilities, periodically test their shipments, and evaluate their written safety plans. Any company that imports food without an adequate verification program in place should face penalties.

The revised proposal appears to have strengthened many key provisions of the rule, including requiring a more comprehensive analysis of the potential risks posed by imported foods. Some of the provisions in the revised proposal would actually weaken protections as compared to the original proposal, so they should be fixed in the final rule. For example, the revised proposal no longer requires food importers to conduct on-site audits of its foreign suppliers of certain kinds of high-risk foods. (The FDA has yet to assemble a definitive list of foods that fall into this category, but the list will include any foods that pose known safety risks and that are likely to result in severe foodborne illness due to contamination.) Instead, importers would have broad discretion on whether to perform these audits. In the final rule, the FDA should restore the original requirement for conducting on-site audits so that it is mandatory in all cases involving high-hazard foods. The revised proposal also exempts too many "very small importers" and "very small foreign suppliers" because it only applies to firms with annual sales exceeding \$1 million. The final rule should only exempt truly small firms, using a cut-off of \$500,000 or less.

To be effective, the Accreditation of Third Parties rule should include strict, enforceable standards by which third-party auditors would be judged. Under the rule, foreign food suppliers would hire auditors to inspect their facilities and operations and certify that the suppliers are taking certain minimum steps to ensure the safety of their foods. These certifications would play a key role in the FDA's new approach to imported food safety under the FSMA: (1) food from certified facilities will qualify for expedited entry into the United States; (2) the FDA may require high-risk foods to be certified before importation; and (3) the FDA will use third-party audit reports to decide which facilities to inspect or which foods to test at the border. Under its proposal, the FDA would also recognize certain accreditation bodies that would give a seal of

approval to the private firms, individuals, and government bodies that will serve as foreign-based food safety auditors. In addition to strict standards for evaluating auditors, the Accreditation rules will also need to provide for ongoing and rigorous oversight of both the accrediting bodies and the third-party auditors to ensure that the auditing process does not degrade into a "rubber stamp" for certifying foreign food suppliers.

What's Next?

The FDA originally proposed the Foreign Supplier Verification Program and Accreditation of Third Parties rules in July 2013. The comment period for those proposals ended in January 2014. More recently, in September 2014, the FDA issued its revised proposal for the Foreign Supplier Verification Program and the comment period for that continues through December 2014. At that point, the FDA will then work toward developing the final versions of both rules, which it is under a judicial order to complete by no later than October 2015. Considering that the rules would be more than two years past their statutory deadlines at that point, the FDA should not allow the timeline for completing these crucial safeguards to slip any more. Any further delays will only increase the already high costs—measured in premature deaths, debilitating illnesses, and wasted money—that have already accrued as a result of not having an effective regulatory program in place to address the risks posed by dangerous food imports.

Recommended Timeline for Completing the Rulemakings:						
	Im	ported Food Saf	ety			
Agency Submits Draft Proposal to OIRA	Draft Proposal to Review; Agency Taking Public Draft Final Rule to Review; Agency					
Verification rule:	✓	by December 2014	by August 2015	by October 2015 (judicial deadline)		
Accreditation rule:	✓	by December 2014	by August 2015	by October 2015 (judicial deadline)		

Silica Standard

What's at Stake?

Silica dust is a slow, silent killer. Workers who cut concrete, brick, or tile, who put the finishing touches on drywall, or who mine sand or attend to fracking operations inhale its tiny crystalline particles throughout the day. Roughly 2 million U.S. workers in dozens of different industries toil in workplaces with silica levels high enough to threaten their health. As the dust swirls through workers' lungs, it causes lung tissue to swell and become inflamed. Workers experience difficulty breathing and, over time, develop scarring and stiffening of the lungs. The resulting condition, called silicosis, is debilitating, and the lung damage that comes with it can increase a person's risk of tuberculosis and lung cancer. The Occupational Safety and Health Administration (OSHA) estimates that thousands of workers die every year because of silica exposures that are within current legal limits.⁵⁴

Those limits were set more than 40 years ago and were deemed inadequate almost immediately thereafter. Since 1974, the National Institute for Occupational Safety and Health (NIOSH), a government research agency with no regulatory authority, has urged OSHA, which does have regulatory authority, to lower the permissible exposure limit (PEL) for silica by roughly one-half. In September 2013, after decades of research and 17 years of administrative wrangling, OSHA proposed to do just that. The proposal would update OSHA's outdated exposure limits for crystalline silica with a comprehensive rule that would require employers to limit their workers' exposure to silica dust and provide other protections including exposure monitoring and free medical exams when workers are exposed to dangerous levels of the dust. Now it us up to President Obama to ensure that the final rule is published quickly.

What's the Holdup?

OSHA's efforts to update its silica standards have dragged on for so long largely because of a ponderous culture among rulemaking staff, who engage in excessively thoroughgoing economic and technical analysis. That culture is an overreaction to Supreme Court decisions and Executive Order requirements. Much of OSHA's scientific and economic research on silica was complete by February 2011, when OSHA sent its draft proposal to the White House Office of Information and Regulatory Affairs (OIRA) for Executive Order 12866 review. Even though reviews are supposed to last no longer than four months, the proposal languished there for more than two and a half years, a striking delay for a rule that is expected to save thousands of lives each year.

OSHA finally got clearance from the White House and published the proposed new silica standards in September 2013. Since then, workers' advocates have been pressing OSHA to strengthen its proposal, while industry lobbyists have expressed everything from qualified support to outright hostility. In the past year, OSHA has opened the docket for four months of public comment, hosted a three-week hearing at which any interested party could present testimony and cross-examine other parties, and re-opened the docket for another four months of public comment.

OSHA has endured withering criticism throughout the rulemaking process from the usual suspects in the business community—the U.S. Chamber of Commerce, National Association of Homebuilders, American Chemistry Council, and the Construction Industry Safety Coalition—all of whom complain about the costs of the rule while denying its clear benefits to workers. Even the Small Business Administration's (SBA) Office of Advocacy, which despite its SBA affiliation has increasingly acted at the behest of big industry, weighed in to encourage further delay in publishing the rule.

Industry groups have also been working their connections in Congress in hopes of further delaying the rule. After OSHA released the rule in late 2013, industry lobbyists rallied 70 Members of Congress (54 on the House side and 16 Senators) to sign letters to OSHA demanding additional delays in the rulemaking process. As OSHA gets closer to publishing a final rule, the affected industries will no doubt turn to their congressional allies again to pressure the agency. Such high-level political pressure is best answered by the White House, so President Obama should intervene to keep the agency's deliberations on track.

What Should the Rule Do?

OSHA's proposal is close to what silica-exposed workers need. It goes well beyond the current protections, which are limited to an inadequate PEL and basic protections afforded by other generic standards. Instead, the new rule establishes a strong PEL (50 micrograms per cubic meter) and backs it up with specific requirements about exposure monitoring, employee training, medical surveillance, and eliminating silica exposures through engineering and work-practice controls rather than respirators and facemasks.

OSHA should still do a few things to strengthen the rule. First, the rule needs medical removal protection for workers. When workers are exposed to dangerous levels of silica dust and show signs of potential chronic injury, they should be given the option of taking jobs that are less hazardous, without loss of pay or seniority. OSHA has required such accommodations in numerous rules governing workers' exposures to other toxic chemicals.

The rule's medical surveillance requirements should also be expanded. As is required in other OSHA health standards, employers should be required to make medical surveillance (*e.g.*, exams, x-rays, etc.) available to workers at an "action level" set at one-half of the PEL (*i.e.*, 25 micrograms per cubic meter).

OSHA should also clarify that host employers and staffing agencies are jointly liable for training and other protections. Companies often hire workers on a temporary or "contingent" basis so that they can shift workers' compensation premiums, payroll taxes, unemployment insurance, and other costs to another employer. If OSHA clarifies that both host employers and the staffing agencies they use to hire workers are jointly liable for compliance with silica regulations, workers will be better protected.

What's Next?

The docket for the silica proposal closed on August 18, 2014, nearly a year after the proposal finally left OIRA. OSHA is in the process of reviewing comments, the hearing

transcript, and new evidence submitted to the record during the 11 months of open debate on the proposal. To the dismay of worker advocates, OSHA has a history of stalled rulemakings at this stage in the process. For instance, two rules waiting in limbo right now are:

- Confined spaces in construction record closed October 2008;⁵⁵ and,
- Slip/trip/fall prevention hearing ended January 2011. 56

Having the sad distinction of being the only agency that ever lost a rule to Congressional Review Act "veto"—its comprehensive plan to reduce ergonomic injuries in the workplace—OSHA should be far more focused on getting the silica rule finished in time than its ponderous approach to the rulemaking process indicates. Accordingly, OSHA needs to complete its review of the docket and send the draft final rule to OIRA as soon as possible. For its part, the Obama Administration should ensure that OIRA completes its review of the draft final rule within the period spelled out in the executive order granting it authority to review—four months, at most.

Recommended Timeline for Completing the Rulemaking: Silica Standard				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
✓	√	✓	by March 2015	by June 2015

National Ozone Air Pollution Standard

What's at Stake?

Clean Air Act regulations to limit dangerous ground-level ozone pollution rank among this country's most successful environmental policies. These rules help prevent around 4,300 premature deaths, 86,000 emergency room visits, and 3.2 million lost school days every year. The Environmental Protection Agency (EPA) estimates that by 2020 these rules will deliver even greater benefits, helping prevent as many as 7,000 premature deaths, 120,000 emergency room visits, and 5.4 million lost school days every year. Ozone pollution-control rules have also strengthened the U.S. economy by promoting the health of the agriculture and forestry sectors. The EPA estimates that in 2010 the rules prevented \$5.5 billion worth of crops and forest products being lost to ozone-related damage; by 2020, the EPA predicts that they will annually prevent losses of crops and forest products worth \$10.7 billion.

But more can and should be done. According to the American Lung Association, nearly half of all Americans—more than 140 million people in all—continue to live in areas with harmful levels of ozone pollution.⁵⁸ A 2011 analysis by the Natural Resources Defense Council found that U.S. communities had issued more than 2,000 Code Orange and Code Red ozone alerts in just the first seven months of that year alone.⁵⁹ The poor and racial minorities are disproportionately harmed since the highest pollution levels are typically found in urban and economically distressed communities. For example, a 2012 study by the Connecticut Department of Public Health found that asthma-related hospitalization rates were roughly twice as high for the state's most urban areas as compared to their neighboring suburbs, which the report in part attributes to disparities in relative air quality.⁶⁰ Rising temperatures brought about by global climate disruption threaten to make matters even worse. In a recent study, the National Center for Atmospheric Research projects that climate disruption-related impacts could cause the number of unhealthy ozone pollution level days to increase 70 percent by 2050.⁶¹

To further protect people and the environment, the EPA should strengthen the ozone National Ambient Air Quality Standard (NAAQS). A NAAQS is a regulatory program under the Clean Air Act that sets maximum allowable levels for common air pollutants that are necessary for safeguarding even the most vulnerable people—such as the elderly and those with poor health—as well as the environment. The law requires the EPA to review each pollutant's NAAQS, including the one for ozone, at least once every five years and lower it if new science shows that the existing limits are not adequately protecting people and the environment. Numerous scientific studies show that even very low levels of ozone—measured in parts per billions (ppb) of the air we breathe—can trigger asthma attacks and aggravate lung diseases such as bronchitis, leading to missed work and school days, emergency room visits, and even death. Scientists have known for a long time that the current NAAQS for ozone of 75 ppb, which was set in 2008, is far too weak. Instead, the EPA's elite Clean Air Science Advisory Committee (CASAC) recommends that the NAAQS should be set as low as 60 ppb. The EPA has estimated that restricting ozone pollution to this level would annually prevent up to up to 12,000 premature deaths, 5,300 nonfatal heart attacks, 58,000 cases of aggravated asthma, and 2.5 million missed school and work days.⁶²

What's the Holdup?

The oil and gas industry, manufacturers, and the business community in general have launched a full-scale assault against the EPA's efforts to update the ozone NAAQS, prompting the agency to develop the rule at an unduly slow pace. Corporate interests have sought to make the rule controversial by spreading bogus claims about its economic impacts. For example, the National Association of Manufacturers (NAM) paid for a highly flawed study that purports to find that the rule will harm the economy and costs jobs, though the study's grossly inflated estimates bear little relationship to reality. Industry allies in Congress, such as Sen. David Vitter (R-La.), have similarly sought to exaggerate the rule's impacts. Over the years, such dire predictions have been as predictable as they are wrong. Every time that the EPA has sought to strengthen the ozone NAAQS in the past, opponents of strong clean air rules have made such outlandish claims, but the predicted economic disruption and massive job losses have never come to pass. In addition to attacking the rule's costs, industry groups have also attempted to sow doubt about the rule's benefits, sponsoring studies that purport to find that low levels of ozone pollution do not cause premature deaths or have any other adverse health impacts.

Corporate interests successfully deployed these attacks the last time that the EPA sought to strengthen the ozone NAAQS in 2011. Industry lobbyists even scored a meeting with high-ranking White House officials and, according to media accounts, persuaded them that the rules would have severe negative economic impacts in states that would be vital to President Obama's fast-approaching reelection campaign.⁶⁷ Less than two months after the meeting, the White House ordered the EPA to postpone its efforts to update the ozone NAAQS.⁶⁸

The ozone NAAQS update is also facing stiff resistance from anti-regulatory Members of Congress. In September, members of the Senate and the House of Representatives separately introduced companion legislation to block the EPA from finalizing the rule until most of the country has come into compliance with the current 75-ppb standard. The bill would also require the EPA to ignore public health and science and instead set future ozone NAAQS based on whether industry compliance with a more protective standard would be "feasible." ⁶⁹

What Should the Rule Do?

The EPA should settle for nothing less than a NAAQS set at 60 ppb. This standard is necessary to meet the Clean Air Act's requirement that the ozone NAAQS be set at a level "requisite to protect the public health" with "an adequate margin of safety." The U.S. Supreme Court held in 2001 that the law requires the standard be based on public health considerations only, and that forbids the EPA is prohibited from considering costs. Consistent with this requirement, CASAC—a group of independent experts formed to advise the EPA on scientific matters related to its clean air regulations—unanimously recommended in June 2014 that the agency significantly revise the NAAQS downward to within the range of 60 to 70 ppb. Based on its review of the most up-to-date science on ozone's harmful health effects, CASAC further advised that the EPA set the standard toward the lower end of its recommended range, noting that "the recommended lower bound of 60 ppb would certainly offer more public health protection than levels of 70 ppb or 65 ppb and would provide an adequate margin of safety." In August, EPA staff echoed CASAC's recommendations in its final Policy Assessment report,

providing further support for a NAAQS set at 60 ppb. The EPA should also follow CASAC's advice in setting a unique "secondary" NAAQS necessary for protecting plants and trees.

What's Next?

The EPA has yet to release a proposal, but is under a judicial order to do so by no later than December 1, 2014, with a final rule required by no later than October 1, 2015. Now that the EPA has been armed with the advice of CASAC and that of its staff on how to set the ozone NAAQS, the agency should work quickly toward developing and releasing a notice of proposed rulemaking. This proposal should adopt a NAAQS level of no higher than 60 ppb and a strong secondary NAAQS level for protecting plants and trees that is consistent with CASAC's advice. After receiving public comments on the proposal, the EPA should meet its legal obligation and issue a final ozone NAAQS by October 1, 2015.

Recommended Timeline for Completing the Rulemaking: Ozone Standard				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
✓	by December 2014 (judicial deadline)	by February 2015	by August 2015	by October 2015 (judicial deadline)

'Waters of the United States' Regulatory Definition

What's at Stake?

The United States lost a total of more than 62,000 acres of coastal wetlands between 2004 and 2009. The state of Louisiana alone loses an area of wetland the size of a football field every hour. In total, the lower 48 states have lost roughly half of the 220 million acres of wetlands estimated to have been in existence in the 1600s, before the introduction of modern industry and agriculture.

Wetlands are crucial for both humans and the environment, controlling flooding, filtering pollutants from water, and serving as important habitat and breeding grounds for aquatic species. More than one-third of U.S. endangered or threatened species live exclusively in wetlands, and nearly half of all such species inhabit or use wetlands at some point in their lives. Fish and shellfish that inhabit or use U.S. wetlands make up 75 percent of the country's total commercial seafood harvest and have an estimated annual value of \$15 billion.

Streams, tributaries, and many other kinds of more isolated waters are also disappearing or suffering degradation at alarming rates, thanks to increasing activities related to agriculture, construction, and extractive industries. Similar to wetlands, these water bodies supply unique habitat to a variety of animals and plants—including endangered species and economically valuable migratory birds—and they are essential to maintaining the health of the larger rivers and lakes to which they are connected. In particular, these water bodies serve as important conduits of nutrient non-point source pollution that now is among the leading threats to water quality in these larger rivers and lakes.

The consequences of destroying wetlands and these other more isolated water bodies can be catastrophic. For example, this past summer, a large toxic algal bloom in Lake Erie contaminated public drinking water supplies in Toledo, Ohio, leaving nearly a half-million area residents without access to potable water for several days. The algae, a growing layer of which covers Lake Erie every summer, is the result of rising water temperatures and the massive influx of nutrient pollution runoff, much of it in the form of fertilizer and manure from the surrounding farms and livestock feeding operations. Nutrient non-point source pollution is causing similar problems in other larger water bodies throughout the United States, including the large algal blooms that afflict the Chesapeake Bay and the massive dead zone that forms in the Gulf of Mexico each year.⁷⁵

A recent series of muddled U.S. Supreme Court decisions has spawned widespread confusion over whether the Clean Water Act's protections now cover many of these wetlands and more isolated water bodies. The Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (the Corps) have been attempting to clarify this confusion ever since. A 2007 congressional oversight memorandum concluded that because of this ongoing confusion "[h]undreds of violations have not been pursued with enforcement actions and dozens of existing enforcement cases have become informal responses, have had civil penalties reduced, and have experienced significant delays." Without a clear definition of whether several common categories of water bodies are covered by the Clean Water Act, EPA regional offices must now

assess these waters on a case-by-case basis, which wastes the agency's scarce personnel and financial resources and undermines the effectiveness of its Clean Water Act enforcement program.

To address this confusion, the EPA and the Corps have launched a joint rulemaking that attempts to establish a clear regulatory definition that, consistent with both the previous court decisions and the best available science, delineates which water systems are covered by the Clean Water Act. In general, the rule seeks to reduce the categories of waters that must be assessed on a case-by-case basis by identifying and defining those categories that are always covered by the Clean Water Act and those that are never covered.

What's the Holdup?

The EPA and the Corps formally published a joint "waters of the United States" proposal in April 2014, but the history of the rule stretches back much further. Prior to initiating the formal rulemaking, the agencies had originally sought to clarify the legal definition through a guidance document, a less formal means of agency policymaking that is usually quicker and involves fewer procedural hurdles. Nevertheless, the process for developing the guidance document needlessly stretched on for nearly four years before the agencies ultimately abandoned it in September 2013.

Progress on the document was slowed when the agencies subjected the guidance to full-fledged notice and comment procedures and two rounds of review by the White House Office of Information and Regulatory Affairs (OIRA), even though guidance documents are legally exempted from these time-consuming procedures. OIRA sat on the agencies' "proposed" guidance for over 16 months—well beyond the four months that is permitted for OIRA's normal rule reviews—before it finally completed the first round of review in April 2011. Thereafter, the agencies initiated a lengthy public comment period, which ran through the end of July 2011. The EPA and the Corps spent nearly two years revising the guidance in response to the public comments before sending the "final" version of the document to OIRA for a second round of review in April 2013. The guidance languished there for five months before the agencies finally withdrew the document in September 2013 when they initiated their "waters of the United States" rulemaking.

Much like the abandoned guidance document, the development of the "waters of the United States" rulemaking has been plagued by a series of delays. The review period for the draft proposal lasted over six months before OIRA released it in March 2014. The EPA and the Corps launched the public comment period for the proposal in April 2014 and has since extended the deadline for submitting comments twice. If the current deadline of November 14, 2014, holds, then the comment period will have lasted a total of 208 days, well beyond the standard 30- to 60-day comment period used for most rules.

The agencies' slow progress on both the guidance document and the pending rulemaking are at least in part attributable to the fierce industry opposition both actions have faced. Over the past several months, the Farm Bureau and other corporate interest groups representing the homebuilding, oil and gas, and mining industries have launched a massive public campaign against the "waters of the United States" rule that includes radio commercials and even a

YouTube music video.⁷⁷ These groups have used the campaign to spread blatant misinformation about the proposal's provisions, including that the rule would allow the EPA to regulate puddles in backyards and prohibit farmers from building fences in their fields.⁷⁸

Several anti-regulatory Members of Congress have joined the attacks against the pending "waters of the United States" rule. These members have held several highly politicized hearings at which industry groups were given the opportunity to recite many of their talking points and misinformation against the rule.⁷⁹ They have also introduced various bills aimed at blocking the EPA and the Corps from completing either the rule or the abandoned guidance document.⁸⁰ Over the past few years, each of the House appropriations bills to fund the EPA and the Corps has included provisions that would prohibit the agencies from using any of the appropriated funds to work on either the guidance document or the pending rulemaking.⁸¹ While many of these bill have passed the Republican-controlled House of Representatives, none have advanced in the Senate or been enacted into law.

What Should the Rule Do?

To ensure the strongest possible protections for critical wetlands and more isolated water bodies, the "waters of the United States" rule should clarify that the Clean Water Act's protections extend to any water body "that significantly affects the chemical, physical, or biological integrity of" the kinds of larger rivers or lakes that are already covered by the Clean Water Act. Under this approach, all tributaries of rivers and lakes covered by the Clean Water Act would automatically receive protection. In addition, this test would automatically include all streams, ponds, and wetlands found in floodplains or riparian corridors.

The proposal issued by the EPA and the Corps follows this general approach, but it could be strengthened in important ways. In particular, the agencies should follow the recommendations presented by the EPA's Science Advisory Board in its September 2014 draft report on the proposed rule with regard to additional categories of water bodies that should receive automatic protections. In the report, the Science Advisory Board criticized the agencies for being too conservative in their approach to addressing several categories of more isolated waters that either are not tributaries or are not located within floodplains or riparian corridors. In general, the agencies' proposal would require that these "other waters" be evaluated on a caseby-case basis to determine if they are covered by the Clean Water Act—a potentially timeconsuming and resource-intensive process. The Science Advisory Board report explains that the scientific literature clearly establishes that many of the water bodies defined by the proposal as "other waters"—including prairie potholes, Carolina and Delmarva Bays, and western vernal pools—have a significant impact on larger water bodies that are covered by the Clean Water Act. As such, the proposal should define these categories of smaller water bodies as automatically covered by the law's protections, so that the EPA and the Corps do not have to engage in wasteful case-by-case evaluations that would ultimately reach the same determinations. By following this recommendation, the agencies would ensure Clean Water Act protections for a greater number of water body types, while reducing the number of water bodies that must be subjected to time-consuming and resource-intensive case-by-case evaluations.

What's Next?

The EPA and the Corps will continue to receive public comments on the proposed "waters of the United States" rule through November 14, 2014. Provided that the agencies do not extend the comment period deadline again, they would then begin working toward a final version of the rule that accounts for the public input they have received. The agencies project that they will issue the final rule by April 2015. Even the repeated extensions of the comment period, it is unclear whether they still expect to follow that timeline. Despite these delays, the EPA and the Corps should finalize the rule no later than April 2015, so that they can quickly begin better enforcing the Clean Water Act's protections for wetlands and more isolated water bodies.

Recommended Timeline for Completing the Rulemaking: Waters of the United States				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
✓	√	by November 2014	by March 2015	by April 2015

Child Farm-Labor Safety Rules

What's at Stake?

Roughly every three days a child dies in a farming-related incident. ⁸³ From California's Central Valley to Florida's orange groves, child labor is integral to U.S. agribusiness. And while the notion of children working on farms conjures up images of a simple life in which kids lend a hand milking a cow and gathering eggs around the yard, the reality is much different. A more typical situation is the 12 year-old daughter of Central American immigrants, who spends 12 to 14 hours each day harvesting fruits and vegetables in the hot North Carolina sun, missing the end of one school year and the beginning of the next so that she can help her parents make enough money in a piece-rate payment scheme to make ends meet when the harvest season is over. When children work in the fields with their parents, they fall behind academically, limiting their opportunities. The Bureau of Labor Statistics (BLS) found that:

- 22 percent of children who work the fields with their parents were behind in grade, and
- 16 percent dropped out before graduating high school.⁸⁴

BLS data suggest that these stresses have a significant impact on the children of migrant workers:

- 44 percent of child farmworkers have a migrant parent, and
- 99 percent of those child farmworkers with a migrant parent migrate with them, making it difficult to keep up with school. 85

A poignant example of the problems with modern child labor in agriculture comes courtesy of Human Rights Watch, whose researchers interviewed 141 child tobacco workers in North Carolina, Kentucky, Tennessee, and Virginia. These children reported "vomiting, nausea, headaches, and dizziness while working on tobacco farms, all symptoms consistent with acute nicotine poisoning." They "worked long hours without overtime pay, often in extreme heat without shade or sufficient breaks, and wore no, or inadequate, protective gear." 86

Children need special protection in the agricultural field. For one thing, they are not just small adults—children are physiologically different, so they need special protections against risk factors that could affect their development either physically (e.g., from stressful work practices) or hormonally (e.g., from endocrine disrupting pesticide residues). For another, they are not socioeconomically independent and rarely understand their rights as workers, so they are highly vulnerable to abuse, especially by members of their community who defend bad farming practices as acceptable simply because they are "traditional."

What's the Holdup?

The Department of Labor (DOL) and the Environmental Protection Agency (EPA) have the authority to crack down on Big Ag's most exploitative child labor practices. But any time a federal agency attempts to regulate farming practices, Big Ag pushes back with a coordinated campaign that attempts to frame the issue as powerful deskbound bureaucrats tyrannizing salt-of-the-earth family farmers who seek only to carry on our nation's pastoral heritage. The ruse has worked for many years. The EPA's pesticide worker protection standards have remained unchanged since they were first adopted in 1992. Likewise, the DOL's child labor rules for agricultural work were adopted in 1970 and have not changed since.

Earlier this year, the EPA proposed new rules for pesticide use that could limit kids' exposures to dangerous levels of potent toxins. Pesticide manufacturers and Big Ag are fighting to loosen the proposed restrictions.

The DOL has a bigger problem—removing a barrier to action that President Obama himself put in the agency's way. In 2011, the DOL proposed rules that would have restricted children's participation in some of the most dangerous farm activities (such as harvesting and curing tobacco or working in oxygen-deficient storage bins). Big Ag went on a public relations blitz, using misinterpretations of the DOL proposal to argue that the new rules would fundamentally alter farming life. The main sticking points were accusations that children would be prohibited from engaging in time-honored traditions, such as caring for livestock, and that parental-consent exemptions were being eliminated (in fact, the DOL simply proposed revisions that would ensure a parent or close family member actually have some connection to the farm where kids are working). President Obama evidently determined that the rules were too heavy a political lift for him and for the more vulnerable members of his party. Just prior to the 2012 primaries, former Labor Secretary Hilda Solis pulled the proposed rules off the table and issued an extraordinary statement saying "[t]o be clear, this regulation will not be pursued for the duration of the Obama administration."87 Instead, the DOL would work with the Department of Agriculture to improve training programs. But two-and-a-half years later, a time span in which hundreds of children have died from farming-related injuries, national training standards are still not in place.⁸⁸

What Should the Rules Do?

The first step in better protecting child farmworkers is for the DOL to walk back its assurance that the Obama Administration has abandoned its rulemaking efforts under the Fair Labor Standards Act (FLSA). One approach would be to identify the aspects of the proposal that address the most pressing hazards. As originally proposed, the new rules made changes to 9 of 11 existing agricultural hazardous occupation orders ("Ag H.O.s"), the technical name for prohibitions on dangerous farm work for children under the age of 16. The proposed rules also instituted two new Ag H.O.s and two new non-agricultural H.O.s. ⁸⁹ The DOL should identify a subset of these proposed H.O. revisions and re-propose them. In September, 35 Members of Congress wrote a letter to Secretary of Labor Tom Perez urging him to propose a rule that would prohibit children from cultivating or curing tobacco. ⁹⁰ That would be a good start, given the seriousness of the hazards and the fact that the risks often fall on the most socioeconomically vulnerable workers. Other hazards that the DOL should address include:

- Vehicles and machinery, which are linked to more than 70 percent of child farmworker fatalities;⁹¹
- Falls, which are a leading cause of non-fatal injuries; and

• Pesticides, which can be addressed through a rule that simply ensures compliance with the EPA's Pesticide Worker Protection Standard (WPS).

The common thread running through these issues is that research shows children, no matter how seemingly mature or familiar with a farm environment they might be, lack the fully developed cognitive capacities of their adult co-workers. That research shows that children struggle to balance risk-reward decisionmaking and goal-oriented decisionmaking. ⁹² Chemical hazards posed by pesticides and nicotine are also especially pertinent because children's physiology is in a developmental stage. As a result, their bodies process chemical threats differently, which can cause significantly greater harms than would be the case for adults who experience similar exposures to these chemicals.

The EPA has proposed smart changes to the WPS, but could go further. The protections for kids in high-risk situations are a good example. Pesticide handling activities present the greatest risks. They include mixing, loading, or applying pesticides; cleaning pesticide containers or equipment; and disposing of pesticides. The proposed rules would prohibit any children under the age of 16 from performing pesticide handling operations—an improvement over the status quo, which allows farmworker kids under 16 to handle some pesticide that are considered lower toxicity.

Another high-risk situation is entering recently treated fields. As part of their EPA-regulated registration process, pesticide manufacturers must develop "restricted entry intervals," which are intended to keep people safe from acute toxic effects right after pesticides are applied to a field. They range from a matter of hours to several days. The WPS includes exemptions that allow farmers to send workers into fields during a restricted entry interval if certain conditions are met. Generally, even when workers are allowed into a field during a restricted entry interval, their employers may not force them to do work that involves touching the treated plants. But in cases where a farmer determines that a substantial economic loss will result if workers aren't sent into a field to perform tasks necessary to mitigate the emergency, higher-risk activities are allowed. The proposed rules would, for the first time, set a minimum age of 16 for kids allowed into fields during restricted entry intervals, even during emergency situations.

The new protections for kids doing pesticide handling activities or entering fields during restricted entry intervals are a step in the right direction, but they ought to be strengthened. In particular, the EPA should set the minimum age for pesticide handling and early entry during restricted entry intervals at 18 years instead of 16 years. Failing that, the EPA ought to use a common sense approach to limiting risks, requiring farmers and commercial pesticide employers to determine that using child labor is absolutely necessary before putting kids in harm's way. For example, the exemption to restricted entry intervals is based on a determination that forgoing a particular activity will result in potential economic loss to the farmer, without regard to who is performing the activity. Instead, the exemption should only allow workers under the age of 18 to enter recently treated fields if the farmer has determined that the significant economic losses will be incurred if the expected individual child workers do not perform the necessary activity.

The EPA can also better protect child farmworkers by increasing the size of entry restricted areas ("buffer zones") during and after pesticide application. While pesticides are

being applied, and then while they are volatilizing off the field, the drifting toxins can create significant risks for workers if the buffer zone between the treated area and workers is not spatially or temporally adequate. The EPA has proposed limited rules, which protect workers from drift only during pesticide application and only up to a farm's border or some set distance (as much as 100 feet, depending on the pesticide and how it is applied). Pesticide drift does not stop at property boundaries or the minute application ends, so the EPA needs to clarify that buffer zones can extend to neighboring property and that the waiting period for reentry into the buffer zone lasts long enough for toxins to dissipate.

"Take-home" pesticides are also a major concern for children, even when those children aren't farmworkers. At the end of a day handling pesticides, workers have toxic residue all over their clothes and skin. If not managed properly, those residues can end up in the workers' homes, accumulating over time and reaching dangerous concentrations. At an early stage in the rule's development, the EPA was preparing to require farm operators to provide shower facilities and changing areas to pesticide handlers so that they could wash off before leaving work. While the draft proposal was under review at the White House Office of Information and Regulatory Affairs (OIRA), though, that provision was stripped from the proposal on the ludicrous grounds that the EPA could not predict how often workers would make use of available showers. In the final rule, the EPA should reinstate the protections designed to minimize take-home exposures.

What's Next?

Even though the EPA has plenty of time to complete its revisions to the WPS before President Obama leaves the White House, it should not allow any further delays in issuing a final rule. The agency has proposed the new rules, taken public comment, and is now reviewing those comments and making appropriate changes.

The DOL still has a lot of work left to do if it is to complete the new rulemakings on child labor in agriculture before the end of the Obama Administration. Labor Secretary Perez should work with President Obama to explain that the DOL made a mistake when it announced child farm-labor regulations would be left alone for the remainder of this Administration. Then the DOL should re-propose the key aspects of the rules, take comment, and finalize them. Fortunately, the re-proposal step can be accomplished with ease, by simply using the language from the earlier proposal. If the DOL does this soon, the rules could be complete by the time President Obama leaves office.

Recommended Timeline for Completing the Rulemakings: Child Farm-Labor Safety Rules					
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule	
Pesticide Worker Protection rule:	✓	✓	by March 2015	by June 2015	
DOL Child Labor rule: by February 2015	by April 2015	by July 2015	by April 2016	by June 2016	

Crude-by-Rail Safety Standards

What's at Stake?

Canadian tar sands and fracked shale deposits in the United States are producing more crude oil than existing pipelines can move to refineries and, as a result, oil companies are using railroads and barges to move their product to refineries. Railroad traffic is booming and with it comes a growing concern about the safety of shipping massive quantities of highly flammable crude.

The destruction wrought on the small Quebec town of Lac-Mégantic in July 2013 exemplifies the threat. A railroad company's dysfunctional safety management system resulted in an unattended train barreling into town in the middle of the night. The train reached a top speed of 65 miles per hour before it hit a curve and derailed. More than 1 million gallons of crude oil spilled and ignited almost immediately. Tank cars exploded, and fires spread. Fortyseven people died, 2,000 people were forced from their homes, and a huge section of downtown was destroyed. The Lac-Mégantic derailment is the most disastrous incident yet in the nascent crude-by-rail transportation system, but that may be a matter of luck as much as anything. Four months later, an oil train derailed in rural Alabama, resulting in a fire that took days to extinguish. In late December 2013, a collision in North Dakota spilled 400,000 gallons of crude, which erupted into a fireball that forced evacuation of 1,400 people from their homes. Less than a month after that, a train carrying crude oil derailed on a bridge over the Schuylkill River in Philadelphia. Fortunately, the tank cars remained intact, and disaster was averted. But just one month later, a derailment in western Pennsylvania led to a spill of up to 4,000 gallons. 93 Two months after that, on tracks along the James River in Lynchburg, Virginia, another derailment spilled thousands of gallons of crude, some of which erupted into a fireball and some of which floated down the river toward Richmond's drinking water intake pipes.

Increased domestic energy production is a central piece of President Obama's national security and environmental agendas. The Bakken Shale play in North Dakota is a key piece of that puzzle—increased extraction of oil from that region correlates very well with decreased imports of light sweet crude from other nations. ⁹⁴

One way to look at this is to consider basic numbers. Crude shipments by rail have jumped from just 9,500 rail-carloads in 2008 to 415,000 rail-carloads in 2013. And the U.S. Department of Transportation (DOT) notes that "[a]t any given time, shipments of more than two million gallons are often traveling distances of more than one thousand miles." More oil spilled from trains in 2013 than in the four previous decades, combined. Preventing derailments and collisions is obviously the best way to limit the damage caused by shipping dirty fossil fuels around the country, but with hundreds of thousands of tank cars full of oil rolling along thousands of miles of track, the sheer scale of the enterprise makes spills pretty much a foregone conclusion.

To be clear, the dangers of transporting crude by rail are not an argument in favor of constructing more pipelines. The oil and gas industry is attempting to use valid safety concerns about the explosive growth of crude-by-rail shipments to justify large-scale oil pipeline projects,

including the Keystone XL pipeline. That pipeline would allow for the delivery of some of the dirtiest forms of crude oil to American refineries, such as crude from the Bakken Shale deposit and Canadian tar sands deposits. And it would make those deliveries by traversing thousands of miles of land, including through sensitive ecosystems that risk lasting damage from pipeline leaks or explosions. In any event, the oil and gas industry argument ignores the simple fact that increased crude-by-rail shipments will continue regardless of whether the Keystone XL pipeline is ever built, because the proposed pipeline is insufficient to satisfy industry's mammoth demands for carrying capacity and because railroads offer greater flexibility to ship crude oil almost anywhere.

Estimated North Dakota Rail Export Volumes 900,000 800,000 700,000 600,000 Per Day 500,000 400,000 200,000 100,000 Apr-11 Jul-12 Oct-12 Jan-13 Jul-13 Oct-13 Jan-11 Jul-11 Jan-12 Apr-12 Oct-11

Figure 1. Estimated North Dakota Rail Export Volumes⁹⁷

After prevention, mitigation is the next step in the risk management process, and one way to mitigate the damage is to force the industry to use sturdier tank cars. The DOT has begun the process of requiring updated tank cars by issuing a multi-faceted proposal to update rules that govern how railroads transport crude oil. 98

What's the Holdup?

The DOT rules have a little something for everyone, and the crude-by-rail industry comprises several industries with differing interests. The railroads are mainly interested in protecting this new revenue stream. Huge new supplies of oil and natural gas—along with new air regulations—make coal less economically attractive as a fuel source. As a result, the railroads' main source of revenue is crumbling. Domestic crude shipments have the potential to take coal's place, especially since production is happening in regions that are hundreds or thousands of miles away from refineries and existing pipelines do not have the capacity to deal with all of the new crude being pumped out of the ground. Railroads do not always own the tanker cars—they typically just move them—so they do not raise strong objections to requirements that would make the cars less likely to spill or ignite after a derailment or collision. Railroad companies are self-insured, so changes to tank cars that would limit damages from derailments could help their bottom lines. The railroads are less tolerant of the DOT's proposed

changes on positive train control, risk-based routing, and emergency planning and response, each of which might cost them money.

The shipping and oil companies, likewise, are primarily focused on the pieces of the DOT's proposal most relevant to their operations—in their case, the proposals to retire and/or retrofit old tank cars. They couch their objections in terms of timing, arguing that the DOT should allow for a multi-year phase-in so that tank car manufacturers have plenty of time to upgrade their operations. This argument has a wolf-in-sheep's-clothing character to it. Under the DOT's proposal, which would grandfather in any tanker cars built before 2017, the industry has time to add 61,000 new tank cars to its fleet using the old and flimsy specifications. 99 Not satisfied, shipping and oil companies are urging the DOT to extend the phase-in for another year.

For a rule of major consequence to U.S. energy production, Congress has been relatively quiet on this one. One subcommittee in the House and one in the Senate have held hearings on the issue, and in neither case did the questions go deeper than timing. Democrats have aligned in favor of speeding up development and implementation of new rules while Republicans are urging a pace dictated more by the shipping and oil industries.

With the public debate on this rule focused on timing, the Administration should be able to finalize it soon. The DOT sent the draft Notice of Proposed Rule Making (NPRM) to the White House's Office of Information and Regulatory Affairs (OIRA) for review in late April 2014 and while that review was complete in the standard timeframe of 90 days, OIRA staff held 19 meetings with industry representatives and none with public interest groups. High-level officials from the White House attended some of the meetings, including representatives of the Domestic Policy Council, Council of Economic Advisors, and more.

What Should the Rule Do?

The DOT should use its authority to force quick action to protect the communities and ecological resources between the oil fields and the final destinations. The agency's proposal covers:

- Testing and classification of oil;
- Risk-based routing;
- Emergency-response preparations; and,
- Technological improvement to cars.

Technological improvements to the tank cars and railroad operations are key. The best approach would be to force shippers to put crude oil in the safest tank cars available, which have pressurized tanks with thicker walls, special "jackets" for additional protection, stronger defenses for top-valves and fittings (which often shear off in crashes), and no bottom valves. Whether the DOT decides to go with the strongest protections or something less (the agency hinted it might require something less than the ideal in the July 2013 NPRM), it should ensure that the transition happens quickly. Shipping companies may think it a herculean task, but all crude moved by rail should be in safer cars by the end of President Obama's term. It is a fitting goal for a president who has worked to expand domestic oil and gas production.

The DOT should also stick to its guns and force the railroads to make some changes to their operations, especially on routes that carry crude oil. Positive train control is a system of automatic signals and braking controls that prevent collisions. It has been mandated on certain routes to protect rail passengers, but it could likewise improve safety for hazardous materials such as crude. The DOT should also force railroads to hire additional staff and adopt other practices to keep crude shipment safe. The risk-based routing scheme that the DOT has developed will help, as would a requirement that all crude shipment be on trains staffed by both an engineer and a conductor (some railroads, including major crude mover BNSF, are trying to phase out conductors to cut down on personnel costs). Significantly, the train that derailed and destroyed Lac-Mégantic was crewed by a single operator, and Canada outlawed the one-member crew as a result.

The DOT also has a responsibility to foster improvements in the training and planning for derailments, collisions, spills, and other disasters. Those training requirements should extend to railroad crews, first responders, and the communities that may be affected by a spill.

What's Next?

The comment period on this proposal has closed, so the ball is in the DOT's court. The next steps are for the agency to analyze the public comments, make necessary changes to the proposal, get White House approval on a draft final rule, and then publish the final rule. Enforcement of many aspects of this proposal will fall on the Federal Railroad Administration (FRA), an underfunded branch of the DOT.

Recommended Timeline for Completing the Rulemaking:				
Crude-by-Rail Safety Standards				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
✓	✓	✓	by May 2015	by August 2015

National Stormwater Pollution Controls

What's at Stake?

As rainwater flows over streets, parking lots, and rooftops, it picks up toxic metals, oil, grease, pesticides, herbicides, bacteria, and nutrients. This polluted stormwater makes its way through gutters and storm drains to the nearest stream, damaging water quality and aquatic life. Stormwater runoff is responsible for nearly 11 percent of "impaired" rivers and streams across the country. ¹⁰¹ The term impaired means that the body of water is not fit for its "designated uses," such as drinking, swimming, and boating. Stormwater is the single largest water quality problem in the Great Lakes and the only source of pollution to the Chesapeake Bay that is still growing.

The Clean Water Act requires certain stormwater dischargers to obtain permits from the EPA under the National Pollutant Discharge Elimination System (NPDES). The entities that are required to manage stormwater runoff are: cities that have separate stormwater sewer systems through which stormwater flows directly into a water body (called municipal separate storm sewer systems or MS4s); industries that collect and convey stormwater in the process of carrying out their activities; and operators of construction activities that disturb more than one acre of land.

To comply with the terms of their permits, permittees must develop stormwater management plans and implement best management practices (BMPs) to reduce stormwater runoff to the "maximum extent practicable." These BMPs range from structural designs that divert water to a central pipe that then discharges the pollution into the nearest stream ("grey" infrastructure), to incorporating "green" infrastructure, which uses marshes, trees, and rain gardens to soak up water and filter pollution where the rain falls.

Such pollution controls and management approaches are woefully inadequate to deal with the stormwater problem. First and foremost, the coverage of the rule is too narrow: The current program only covers "cities" as defined by the U.S. Census Bureau, completely ignoring fast-developing suburbs and rural areas outside the city. Even when the program covers a pollution source, the coverage is not stringent enough. In 2009, a panel of experts at the National Research Council (NRC) found that the "EPA's program has monitoring requirements that are so benign as to be of little use for the purposes of program compliance," and recommended a nearly complete overhaul of the stormwater program.

A new stormwater rule is vital to address such holes in coverage and fix the program's design flaws. The rule is also the most important thing President Obama can do to boost green infrastructure, which has been described as a key Administration priority. ¹⁰⁵ In addition to better managing stormwater pollution, integrating green design into development and redevelopment standards can ameliorate flooding while making cities more attractive and increasing property values.

What's the Holdup?

In addition to addressing the NRC's sobering report, the EPA also agreed to revisit its approach to stormwater in the wake of a lawsuit. In 2009, the Chesapeake Bay Foundation (CBF) sued the EPA for its failure to enforce an interstate agreement to restore the Chesapeake Bay. The parties settled out of court, with the EPA agreeing, among other things, to revise existing stormwater rules "to expand the universe of regulated stormwater discharges and to control, at a minimum, stormwater discharges from newly developed and redeveloped sites." 107

Under the settlement, the EPA was expected to issue a proposed rule in September 2011 and to promulgate a final rule by November 2012. The agency missed both deadlines. Since signing the settlement agreement, CBF has agreed to give the EPA no fewer than six deadline extensions. Not until the EPA blew another deadline in June 2013 did CBF officially declare the EPA in breach of the agreement. CBF must decide to go back to court to enforce the settlement.

Meanwhile, developers and some cash-strapped MS4s began to push back, fueled by a misleading report by Senate Republicans that inaccurately and selectively portrayed the economic costs of EPA water-protection regulations while ignoring the value of clean and safe water. Rather than sticking to its guns and publishing a proposed rule, the EPA announced that it was deferring action on the rulemaking and instead would provide incentives, technical assistance, and other approaches for cities to address stormwater runoff themselves.

What the Rule Should Do?

As laid out in the settlement with CBF, the rule must expand the universe of regulated stormwater discharges, requiring new controls on discharges from newly developed and redeveloped sites. To fully address existing stormwater runoff and remove negative incentives to redevelopment, the rule should go farther:

- Establish clear requirements for controlling post-construction runoff in MS4 areas. A new rule should adopt objective performance standards that will be incorporated into permits—requiring all buildings to retain a certain amount of stormwater on site, for example. Doing so will ensure that polluters can be held accountable for failing to protect local waterways. These new requirements should apply to newly developed and redeveloped sites, as well as to old developments. Requiring public and private owners to retrofit already developed land is the only way to fully address the impacts of existing stormwater pollution.
- Extend those requirements beyond the current geographic boundaries of MS4 areas and permitted industrial locations. Stormwater runoff starts to damage water quality well before areas achieve the population densities that now trigger Clean Water Act coverage. Proactively planning for stormwater protection as these exurbs grow is generally much cheaper than waiting for urbanization to occur and then attempting to retrofit the landscape to resolve the resulting water quality problems. Expanding the geographic scope of coverage is also necessary to level the playing field and persuade developers to build on previously developed lots rather than on green spaces. While stormwater controls on already-developed land are not as costly as once believed given

the value of urban development, regulations should be designed to encourage—not deter—developers from redeveloping a lot.

Promulgating a meaningful stormwater rule will be politically and technically challenging, and retrofitting urban landscapes to address stormwater costs can be expensive. But the nation's continued failure to effectively manage stormwater pollution will continue to offset the gains that other sectors are making to reduce pollution, making clean streams, rivers, and lakes an impossibility.

What's Next?

The Obama Administration should work quickly to direct the EPA to introduce an effective rule that addresses the growing impacts of stormwater pollution. Though President Obama has a little over two years left in his presidency, large and complex rulemakings such as this can take much longer to complete. Before abandoning the rule, the EPA had already begun to visit sites, collect information from stakeholders, conduct cost-benefit analyses, and develop necessary models and databases. President Obama's EPA should pick up where it left off and get to work immediately on a stormwater rule proposal to have any chance of addressing the fastest growing source of water pollution in the country. Once it has issued the proposal, the agency should then solicit public comment and quickly incorporate any input it receives into a final rulemaking. To have any chance of completing this rulemaking before the end of the Obama Administration, the EPA should commit to issuing a proposal by April 2015 and a final rule no later than June 2016.

Recommended Timeline for Completing the Rulemaking: Stormwater Pollution Controls				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
by February 2015	by April 2015	by July 2015	by April 2016	by June 2016

Coal Ash Waste Disposal Standards

What's at Stake?

On December 22, 2008, the contents of an enormous, 100-acre impoundment containing coal-ash slurry from the Tennessee Valley Authority's (TVA) Kingston Fossil Fuel Plant poured into the Emory River. The immediate cause of the spill was the bursting of a poorly reinforced dike holding back a pit of sludge that towered 80 feet above the river and 40 feet above an adjacent road. The volume and force of the spill were so great that 1.1 billion gallons of the inky mess flowed across the river, inundating 300 acres of land in a layer four to five feet deep, uprooting trees, destroying three homes, and damaging dozens of others. The catastrophic breach ruptured a gas line, wrought millions of dollars in property damage, and caused incalculable environmental damage to the Emory River and its receiving water, the Clinch River. Miraculously, no one was killed. 109

The slurry contained both fly and bottom ash, collectively known as "coal combustion residuals" (CCRs) in the euphemistic lexicon of environmental regulation. Coal-fired power plants have increasingly effective scrubbers that capture toxic fumes produced by burning coal before they are emitted into ambient air. These fumes are lodged in giant filters where they cool into fly and bottom ash. As scrubbers evolved to remove more of the heavy metals (for example, lead, cadmium, selenium, etc.) contained in coal, the composition of the ash has become far more toxic. The toxic components of the ash leach through unlined pits into drinking water and can also pose hazards to public health when left in open pits without top covers.

Coal-fired power plants generate some 129 million tons of coal ash annually, a startlingly large figure when compared to the 250 million tons of every category of household garbage that Americans generated in 2010. While the Environmental Protection Agency (EPA) has estimated that somewhere around 40 percent of the ash is recycled safely by, for example, placing it in the beds of new highway segments and covering it with road surface materials, too much is still dumped into one of more than 500 such surface impoundments around the nation, many of them unstable, unlined, and uncovered. 111

TVA later estimated that the Kingston spill had released around 2.6 million pounds of toxic pollutants into the Emory River. Cleanup costs for the federally subsidized TVA, one of the largest electric utilities in the country, are expected to total \$1.2 billion, adding \$0.69 per month to the utility bills of 9 million customers until 2024. 112

In the wake of the Kingston spill, the EPA undertook an investigation of the safety of existing surface impoundments, finding that 109 of 584 such facilities nationwide had either a "high" or a "significant" hazard potential rating. In addition, 186 of the units were not designed by a professional engineer. Although the impoundments were designed to last for about 40 years, 56 were older than 50 years old and 360 were between 26 and 40 years old. Thirty-five units at 25 facilities had already reported releases, ranging from minor spills to the massive release at the Kingston facility. By the EPA's accounting, 49 coal ash dumps in 18 states have the potential to damage human health by contaminating ground or surface water, a figure that almost certainly understates the problem. ¹¹³

While the Kingston spill may have been the worst of its kind in recorded history, it was not the first, nor would it be the last. Less than three years later, on Halloween 2011, the collapse of a bluff made of coal ash dumped a plume of ash the length of a football field, along with dirt, rocks, a pickup truck, and dredging equipment, into Lake Michigan. The culprit there was the We Energies Oak Creek Power Plant in Milwaukee County, Wisconsin. And in February 2014, a spill of 39,000 tons of coal ash slurry from a Duke Energy impoundment fanned into North Carolina's Dan River. Federal investigators have launched a criminal investigation into the spill. 115

Following the Kingston episode, newly appointed EPA Administrator Lisa Jackson promised to reexamine the agency's long-standing reluctance to regulate coal ash and to consider a new rule that would compel safer disposal of coal ash and the reinforcement of old, poorly designed, and carelessly maintained coal-ash dumps. As originally proposed, the rule would have had the agency regulate coal ash as a hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA), the federal environmental law that governs general waste disposal. The stringent Subtitle C option would authorize the agency to require cleanup and reinforcement of existing coal ash pits and to require liners and covers for new disposal facilities. The proposal cited two distinct categories of harm that justified imposing stringent federal controls on disposal: (1) the migration of toxic constituents of the ash into the environment, especially groundwater; and (2) the probable recurrence of spills like the one in Kingston.

What's the Holdup?

The EPA's coal ash rulemaking has been plagued by a series of delays from the very beginning. In October 2009, the EPA sent the draft of a proposed rule to Cass Sunstein, the White House "regulatory czar," known more formally as the administrator of the Office of Management and Budget's (OMB) Office of Information and Regulatory Affairs (OIRA), which reviews every "significant" rule proposed or finalized by Executive Branch agencies and departments. The agency's efforts were quickly thwarted when an intensive industry lobbying campaign provoked the White House to rewrite the proposal, which ultimately derailed the momentum of the rulemaking.

The White House team lead by Administrator Sunstein spent seven months rewriting the EPA's proposal to the point that it was barely recognizable when it was published in the *Federal Register* for comment in May of 2010. Not only did White House economists add hundreds of millions of dollars in "costs" to the proposal's cost-benefit analysis based on their unsubstantiated theory that regulating coal ash as a hazardous waste would create a "stigma" effect that in turn would discourage future recycling of the pollutant; they used these imagined costs to justify adding two much weaker alternatives to the original EPA Subtitle C option. One would allow the states to continue to regulate coal ash as a "solid waste" under Subtitle D of RCRA when it is disposed on land, essentially leaving all regulatory decisions and enforcement to state discretion. The second, a so-called "D prime" option, would allow all existing coal ash disposal landfills and surface impoundments to continue to function without change for the remainder of their useful lives. 117

The EPA's coal ash rulemaking has faced fierce opposition from an industry coalition led by electric utilities intent on avoiding the costs of rebuilding huge coal ash dump sites like the ones in Tennessee, Wisconsin, and North Carolina. They were joined by highway construction firms and local governments convinced that, despite the explicit *exemption*—without limitation—of any coal ash that was recycled for a more productive use, labeling coal ash that was dumped on the ground a hazardous waste would create a public backlash that would compel them to stop using it. Echoing the White House economists, they contended that recycled coal ash would pick up a stigma in the marketplace. People would be afraid to buy it for any purpose because someday they might be sued for using it.

Opponents of a stringent rule also argued that state regulation could take care of the problem, ignoring clear evidence that most had been doing an inadequate job. In addition to failing to prevent the three spills described above, an EPA investigation revealed that of the 36 states where coal ash surface impoundments are located, one-third do not have permitting programs for such facilities. ¹¹⁹ In addition, two-thirds of those states do not require surface impoundments to have liners to prevent the leaching of toxics into groundwater. ¹²⁰

Meanwhile, Republicans in the House of Representatives have introduced legislation that would take away the EPA's authority to regulate coal ash pits more stringently, leaving weak state regulation in place. ¹²¹ The Democratic-controlled Senate has refused to follow suit.

Led by Earthjustice, a coalition of public health experts, a Native American tribe, and national and local environmental groups sued the EPA for dragging its feet on the rule. When district court judge Reggie Walton ruled in the plaintiffs' favor, the case was settled. The agreement lodged before the judge requires the EPA to issue a final rule no later than December 19, 2014. 122

What Should the Rule Do?

The EPA should adopt its original Subtitle C proposal, exempting recycled coal ash from regulation, but treating coal ash disposed on land as a hazardous waste under federal law. Such a rule would ensure not only that new landfills will be built safely but that old landfills will be contained and closed so as to prevent further damage to the environment or public health.

What's Next?

The EPA published its proposed coal ash rule in May 2010, and since then, has initiated and completed several rounds of public comment, with the most recent one ending in September 2013. The agency recently submitted the draft final rule to OIRA for review. The EPA is under a judicial order to issue a final rule no later than December 19, 2014. Given the many years of delay that have already transpired, the EPA should ensure that it completes its work on the coal ash rule in accordance with that deadline.

Recommended Timeline for Completing the Rulemaking: Coal Ash Waste Disposal Standards				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
✓	✓	✓	✓	by December 2014 (judicial deadline)

Concentrated Animal Feeding Operation Water Pollution Standards

What's at Stake?

In 2008, then-candidate Barack Obama pledged to "strictly monitor and regulate pollution from large[-scale animal farms]." These facilities, known as concentrated animal feeding operations (CAFOs), generate approximately 500 million tons of manure each year—three times the amount of waste the human population of the U.S. produces. 126

This waste contains excess nitrogen and phosphorus; pathogens, including bacteria and viruses; antibiotics; and heavy metals such as copper and arsenic. Unlike human waste, livestock waste is not treated. Rather, it is stored in piles, pits, and sheds and spread onto land. These pollutants pose a threat to human health and wildlife and put our nation's waterways—including the Chesapeake Bay, Great Lakes, and Mississippi River—at risk.

Unlike most agricultural operations, CAFOs are required to obtain permits under the federal Clean Water Act. Even though CAFOs are regulated under federal law, exemptions in the regulations and insufficient state oversight mean that fewer than approximately 43 percent of CAFOs nationwide operate under permits. An updated permitting rule would increase the number of large livestock operations that are required to obtain and adhere to Clean Water Act permits. By also imposing more stringent requirements for disposing of the overwhelming amount of waste these farms produce, a new rule could help reduce major water quality problems such as the "dead zones" that annually plague huge portions of the Chesapeake Bay and Gulf of Mexico.

What's the Holdup?

In the early 2000s, the Environmental Protection Agency (EPA) took another look at its CAFO regulations, which had not been updated since the 1970s. The EPA started off relatively strong with a 2003 rule that attempted to cover nearly "60 percent of all manure generated by operations that confine animals." A variety of groups sued, with industry organizations led by the National Pork Producers Council and American Farm Bureau Federation on one side and environmental groups on the other. The Second Circuit decided in part in industry's favor and overturned the portion of the rule that imposed a duty on all CAFOs to either apply for a permit or demonstrate that they have no potential to discharge.

The EPA responded to the Second Circuit decisions by issuing new regulations in 2008 that shrank federal oversight—the rule required 25 percent fewer operations to obtain permits than the 2003 regulation had. Once again, the National Pork Producers Council and the American Farm Bureau Federation sued, stalling the regulation and resulting in what is effectively a "catch me if you can" approach to permitting operations. The 2008 rule had required CAFOs that discharged or *proposed* to discharge to apply for a permit under the Clean Water Act's permitting program. The propose-to-discharge requirement would have required CAFOs with the potential to discharge to obtain a permit, ensuring that more farms were operating under enforceable pollution limits. The Fifth Circuit vacated that portion of the rule, holding that only CAFOs with existing discharges were required to apply for a permit. 131

Shortly after the Fifth Circuit decision, the EPA again considered updating its CAFO rule. In 2009, the Chesapeake Bay Foundation (CBF) sued EPA for its failure to enforce an interstate agreement to restore the Chesapeake Bay. The parties settled, with the EPA agreeing to revise its Chesapeake Bay-specific CAFO regulations, among other concessions. The original settlement called for a proposal by June 2012. After that deadline was extended into 2013, the EPA indicated that it was considering any update of CAFO rules. By July 2013, however, CBF and the EPA had agreed to abandon the rulemaking, concerned that any new rule would be challenged and serve only to further dilute EPA oversight. Instead, they arranged for the EPA to review CAFO programs in each Bay watershed state by June 2015 to determine whether they were likely to meet applicable Bay cleanup goals. Of course, CAFOs are not confined to the Chesapeake Bay region. Proper regulation requires a nationwide solution.

Separately, the EPA was also considering a reporting rule that would have required CAFOs to report basic information directly both to the agency and to the states. Even though Clean Water Act regulations have been on the books for decades, the Government Accountability Office found that the EPA "does not have the information it needs to effectively regulate these CAFOs." The common-sense recordkeeping rule would have required CAFOs to disclose information such as their location, size, ownership, waste management procedures, and history of illegal discharges, as well as whether they had a federal permit. The agency withdrew the rule in summer 2012, limiting the EPA's knowledge of CAFOs to the insufficient information collected by the states.

What Should the Rule Do?

The EPA should pursue a rulemaking to significantly strengthen the current permitting requirements and effluent limitation guidelines for CAFOs and provide for greater transparency. The new rule should include:

- A narrowed definition of "agricultural stormwater" that ensures that more runoff of land-applied manure is regulated under Clean Water Act permits. Despite court setbacks, the Clean Water Act gives the EPA the authority to control pollution associated with the waste generated by CAFOs. The EPA and states can reasonably conclude that any discharge from a CAFO—including from the land application area—is not exempted agricultural stormwater, and should help determine whether a CAFO needs a permit.
- Smaller size thresholds to ensure that more facilities are considered CAFOs. The rule should decrease the minimum number of animals that constitute a regulated facility so that more farms, and therefore more waste, are covered under the federal permitting process.
- Increased oversight and control of CAFO-generated manure that is transported and applied away from the CAFO. Manure contains a potent cocktail of chemicals and nutrients that are harmful to humans and water quality. To ensure proper management, waste that is transported away from CAFOs should be tracked until it reaches its ultimate land application or disposal site, similar to the cradle-to-grave process used for hazardous waste under the Resource Conservation and Recovery Act.

- Explicit recognition that integrators that make management decisions about CAFO operations are also responsible for the CAFO's waste stream. Under the current food production system, small farmers contract with large companies such as Perdue ("integrators") to raise the companies' animals. Integrators control all phases of production, from the amount of food provided to animals to the temperature of their pens, but have so far escaped the liability and costs associated with disposing of animal waste. The rule should mandate shared responsibility for the disposal of CAFO waste between integrators and growers, similar to what the EPA proposed when it was drafting its 2003 CAFO rule. 136
- Strengthened requirements for nutrient management plans and other pollution control standards. As occurs in large human settlements, improper management of the highly concentrated manure produced by CAFOs can and does overwhelm natural cleansing processes. Humans have intricate sewage systems and wastewater treatment plants. CAFOs do not. Nutrient management plans and other requirements that govern the application, handling, and disposal of manure should be strengthened to minimize runoff.
- Enhanced transparency of permit records and additional water quality monitoring and reporting requirements. Unlike many other sources of pollution, the EPA does not have facility-specific information for all CAFOs in the United States, which, according to the EPA, is "essential information" needed to carry out the Clean Water Act. ¹³⁷ In addition to requiring that CAFOs report basic information to the EPA, a new rule must increase reporting and monitoring requirements to better track air, water, and land emissions from facilities. That information will enable policymakers to better evaluate the public health implications of these emissions.

What's Next?

The Obama Administration should work quickly and direct the EPA to introduce a comprehensive CAFO rule. Though President Obama has a little over two years left in his presidency, large, complex rulemakings such as this can often take much longer to complete. By making the rule a high priority, the Administration could meet even this expedited timeline. But, President Obama will need to get to work immediately to have any chance of fulfilling his promise to "strictly... regulate pollution" from massive animal farms. In particular, to ensure that the rulemaking is completed before the end of the Obama Administration, the EPA must commit to issuing a proposed CAFO rule by no later than April 2015 and a final rule by no later than June 2016.

Recommended Timeline for Completing the Rulemaking: Concentrated Animal Feeding Operation Water Pollution Standards				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
by February 2015	by April 2015	by July 2015	by April 2016	by June 2016

Permit 'eReporting' for the National Pollutant Discharge Elimination System

What's at Stake?

The main tool available to the Environmental Protection Agency (EPA) to limit the amount of pollution that entities discharge into the nation's waterways is to issue permits and to then enforce their provisions. This permitting scheme, known as the National Pollutant Discharge Elimination System (NPDES), requires permittees to monitor their operations and report back to the EPA or an approved state environmental agency. The reports submitted by the regulated entity contain information on whether the polluter met the terms of its permit and are among the most important compliance assurance and enforcement tools available to the EPA, the states, and, by extension, the communities affected by polluting operations.

The reports provide critical compliance information, but they also generate mountains of paperwork. The reports arrive by mail and regulators must enter the information into a database, an error-prone process that can take over-burdened agencies years to complete. Budgets of federal and state environmental agencies have been slashed, and funding for enforcement efforts has been hit hard. Faced with these restraints, the EPA recently announced that it intends to dramatically scale back on enforcement, bringing 28 percent fewer civil cases against industry scofflaws over the next five years than in the previous five, for example. States, which do the lion's share of on-the-ground enforcement, have also slashed budgets. State environmental agency budgets shrank by approximately \$17.5 million from fiscal year 2011 to fiscal year 2012, an average decline of \$357,000 per state.

Between the growing workload and shrinking budgets, the EPA and state agencies are increasingly forced to make tough choices about how they use their scarce resources, sometimes declining to pursue certain enforcement actions even in cases where corporate polluters are blatantly violating the law and causing significant damage to water resources.

A rule requiring permittees to submit their reports electronically could help greatly to alleviate these problems. Such a rule not only makes sense in the 21st century but would also make management, monitoring, and enforcement of NPDES permits more effective and efficient. With ready access to a more complete and accurate set of performance data, the EPA and state agencies could do a better job of making sure the nation's waterways are clean.

Critically, an electronic reporting rule would help the EPA and its state partners save money, which would free up needed resources to take necessary enforcement actions. Once the rule is in place, states are expected to save up to \$28.5 million annually because agency staff will spend significantly less time processing paper submissions and correcting data that were inputted improperly. The EPA, which processes less paperwork than the states, is projected to save \$0.7 million for the same reasons. An electronic reporting rule would also deliver significant economic benefits to NPDES permittees. By spending less on paper and postage, the regulated community is estimated to save \$1.1 million. The rule is a win-win if there ever was one.

The rule would also enhance transparency and accountability by providing the public with timely information on potential sources of water pollution. By making this more complete set of data available to the public, the EPA would provide communities and citizens with information on facility and government performance that is not currently available. The rule would shine much-needed light on polluters' performance, which could spur them to address environmental problems faster than they do now.

What's the Holdup?

In July 2013, the EPA published in the *Federal Register* a proposed rule that would require electronic reporting for current paper-based NPDES reports. This followed a nearly 18-month-long review by the White House Office of Information and Regulatory Affairs (OIRA), well beyond the four months that are usually allowed for such reviews. After one extension, the comment period on the proposal closed on December 12, 2013, and the agency received 170 comments, mostly from state agencies.

In April 2014, the EPA went through the highly unusual step of sending a draft supplemental notice of proposed rulemaking to OIRA. Now, seven months later, the draft is still sitting at OIRA. It is unclear what motivated the EPA to take this step or what the supplemental notice contains, as it is not yet public. What is clear is that it will add months or perhaps even more than a year of delay to this critical rulemaking.

What Should the Rule Do?

This proposed rule should require that entities with NPDES permits electronically submit Discharge Monitoring Reports, General Permit reports, and program reports instead of submitting them in paper form. To bolster accountability and transparency, the EPA should make these data available to the public in real time. Since the information provided by the program will be generated by industrial sources, the EPA and state agencies should also develop procedures to carefully verify the data.

What's Next?

The EPA must first carefully evaluate whether the supplemental notice undergoing OIRA review is necessary to ensure that the final rule would survive judicial review if challenged. If the supplemental notice is not necessary, it is only serving to unnecessarily delay the rulemaking process and should be abandoned. If, however, the supplemental notice is necessary (*i.e.*, because the final rule would be so different from the proposed rule as to make it vulnerable to being struck down by a reviewing court in the absence of the supplemental notice), the EPA will have to publish it once OIRA finishes its review, take comment on it, and then incorporate the comments it receives into the final rule the agency is already working on. Given that the review is already well past the maximum time allowed, OIRA should immediately release the draft supplemental notice back to the EPA, so that it can resume its work on this rulemaking. The agency projects that it will publish the supplemental notice in the *Federal Register* in December 2014 and issue a final rule by August 2015. Considering the long delays that have already taken place, the Administration should—at a minimum—stick to this schedule to ensure that this common-sense rule is completed well before President Obama leaves office.

Recommended Timeline for Completing the Rulemaking: Permit 'eReporting' for the National Pollutant Discharge Elimination System				
Agency Submits Draft Proposal to OIRA	OIRA Completes Review; Agency Issues Proposal	Agency Completes Taking Public Comment on Proposal	Agency Submits Draft Final Rule to OIRA	OIRA Completes Review; Agency Issues Final Rule
✓	by December 2014	by February 2015	by June 2015	by August 2015

Conclusion

Two years remain in the Obama Administration, and that is more than enough time to finalize all of the essential 13 regulatory actions outlined in this Issue Alert. While many of these rules have been subject to years of delays, the reality is that completing these rulemakings need not pose the Administration much of a challenge. The agencies responsible for these rules already have the clear authority—if not legal obligation—to issue them as quickly as possible. Translating those imperatives into timely action only requires political will.

These essential 13 regulatory actions offer President Obama an important opportunity to make meaningful progress on matters of public health, safety, and the environment, at a time when legislative solutions to these problems will not be forthcoming. It does not matter that the recent election results all but guarantee that Congress is unlikely to work constructively with the President to pass meaningful legislation, because the President already has the legal authority—thanks to previous Congresses that could see fit to pass such forward-looking statutes as the Clean Air Act and the Occupational Safety and Health Act—to improve the lives of current and future Americans. Through these essential 13 regulatory actions, the Obama Administration can tackle such pressing matters as global climate disruption, dangerous threats to the U.S. food supply, and the ever-growing problem of non-point source pollution that threatens the health of our critical water resources. To do this, it simply needs to develop rules that incorporate the strongest possible protections and safeguards and pursue them with the vigor they deserve.

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- ¹³² Fowler v. EPA, No. 1:09-cv-00005-CKK (D.D.C. 2009).
- 133 Settlement Agreement between the Envtl. Protection Agency & the Chesapeake Bay Foundation 19 (Nov. 10, 2010) (on file with the authors).
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- Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of CONCERN 5 (GAO-08-944, 2008), available at http://www.gao.gov/new.items/d08944.pdf.
- 136 For its 2003 CAFO rulemaking, the agency initially proposed requiring integrators that exercise sufficient control over an operation to obtain a permit. Known as "co-permitting," the provision would have required: "Any person who is an 'operator' of a CAFO on the basis that the person exercises substantial operational control of a CAFO (see § 122.23(a)(5)(ii)) must apply for a permit. Such operators may apply for an NPDES permit either alone or together as co-permittees with other owners or operators of the CAFO." National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations. 66 Fed. Reg. 2960, 3136 (proposed Jan. 12, 2001) (to be codified at 40 C.F.R. pts. 122 & 412).
- ¹³⁷ National Pollutant Discharge Elimination System (NPDES) Concentrated Animal Feeding Operation (CAFO) Reporting Rule, 76 Fed. Reg. 65431, 65433–34 (proposed Oct. 21, 2011) (to be codified at 40 C.F.R. pts. 9 & 122). ¹³⁸ U.S. Envil. Protection Agency, FY 2014–2018 EPA Strategic Plan 73 (2013), available at
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About the Center for Progressive Reform

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

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