CERCLA

Question: As you are aware, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) mandates that when a site is added to the National Priorities List (NPL) for Superfund remediation, due diligence must be taken to identify a Potentially Responsible Party(PRP) to help offset the cost of remediation.

On August 5, 2015, the EPA breached the Gold King Mine adit and spilled more than 3 million gallons of acid mine drainage into the Cement Creek which flows into the Animas River that extends into New Mexico and Utah. While the consequences may have been unintended, the fact remains that the EPA is the de facto PRP for the subsequent listing of the Bonita Peak Mining District National Priorities List Site.
Administrator McCarthy, how much money in the EPA's proposed budget is being dedicated for the following activities related to the Gold King Mine blow out?

A. Water monitoring for downstream communities in Colorado and New Mexico, as well as Southern Ute and Navajo tribal lands.

B. Ensuring that the emergency water treatment plant at Gladstone remains in place prior to and during Superfund remediation.

Answer:

A.

The EPA allocated a combined $2 million in grant funding in FY 2016 to support the water quality monitoring efforts of Colorado, the Southern Ute Indian Tribe, New Mexico, Navajo Nation, the Ute Mountain Ute tribe, and Utah through Sections 106 and 319 of the Clean Water Act. These grant programs include terms and conditions that require activities be conducted under appropriate quality management plans or quality assurance project plans and that the data quality be documented and submitted to the EPA via the Water Quality Exchange. These funds are in addition to the base program resources these states and tribes received from the EPA to implement their water quality management programs and nonpoint source control programs. The EPA will consider the results of state and tribal monitoring and its own monitoring efforts to determine, as appropriate, supplemental funding levels for state and tribal monitoring in FY 2017.

B.

The EPA installed a temporary water treatment plant in November 2015 to treat the accumulated acid mine water containing sediment and heavy metals at the Gold King Mine. The system,

which has an estimated annual operating cost of $1,000,000, will remain operating as site work resumes this summer. The EPA is assessing the appropriate overall duration of the plant's operations in conjunction with site work, such as a planned remedial investigation and feasibility study associated with the proposed National Priorities List listing.

CLEAN AIR ACT

Question: Administrator McCarthy, the EPA proposed revised Phase II Ozone Season NOx budgets under CSAPR at the very end of last year. From my understanding, this is a significant reduction and represents an over 70% cut in my home state of Pennsylvania a particularly severe revision compared to other states.

Could you explain the EPA's reasoning behind such a dramatic reduction?

1. Administrator McCarthy, are you at all concerned this could jeopardize particular sources of baseload power in Pennsylvania?
2. In your testimony you highlighted the agency's efforts to leverage technology and improve data quality. Could you expand on your work in that area?
3. Are there opportunities for universities or private companies to work with the EPA to achieve these goals?
4. In your testimony you highlight the importance of the Clean Power Plan to the administration, and explain that the EPA will continue to assist states that voluntarily decide to move forward with planning and implementation.

What kind of assistance will the EPA be providing, and are there any limitations as to who could receive such assistance?

Answer: The Cross State Air Pollution Rule (CSAPR) Update would reduce air quality impacts of the interstate transport of air pollution on downwind areas' ability to meet the 2008 ozone standard. Starting in 2017, this proposal would reduce summertime emissions of oxides of nitrogen (NO_X) from power plants in 23 states in the eastern half of the U.S., providing $1.2 billion in health benefits to millions of Americans.

Analyses for this proposal show that the power sector has a substantial amount of NO_X reductions that could be achieved quickly and affordably by 2017 by optimizing operation of existing pollution control technology, turning on existing pollution controls that are currently idled, upgrading to state-of-the-art low NO_X combustion controls, and shifting generation to lower-emitting power plants. Because this proposal uses an existing, familiar, and proven framework, these sources can adapt quickly to achieve cost-effective reductions. The agency is currently reviewing comments received on the proposal as we develop a final rule.

Under a trading program, sources have significant flexibility in deciding how to meet emission reduction requirements. Using the CSAPR allowance trading program allows facility

owner/operators to determine their own compliance path. The proposal does not make any unit-specific requirements except that facilities hold enough allowances to cover their emissions for the ozone season and that emissions are monitored and reported in compliance with 40 CFR Part 75.

The anticipated effects of this proposed rule on employment and retail electricity prices are modest and vary year by year. The EPA analysis shows small employment gains and losses in both the electricity generation and fuels sectors as some companies upgrade and optimize existing NO_X pollution control equipment to comply with the rule, and some generation is shifted from coal-fired electric generating units (EGUs) to gas-fired units.

REGIONAL HAZE PROGRAM (TEXAS)

Question: In a May 29, 2015 letter to EPA, I raised several questions regarding the Regional Haze Program and impacts on Texas. On July 13, 2015, EPA Region 6 Administrator Ron Curry responded and declined to answer any of my questions because the rulemaking was pending. The rulemaking has now been finalized. Please respond to the following questions from my letter:

A. Do the averaged 2009 to 2013 results from EPA's IMPROVE monitoring system indicate that visibility at Wichita Mountains currently exceeds the federal plan's 2018 goals?

B. The modeling in EPA's federal plan does not align with real-world data from EPA's IMPROVE monitoring system. What steps is EPA taking to improve that modeling before finalizing the plan?

C. EPA has been told that the federal plan's modeling likely overpredicts visibility impacts by 300%. Why, then, did EPA not conduct a full performance evaluation of the model before relying on the results in the federal plan?

D. Why is EPA mandating that Texas install expensive controls to achieve modeled visibility improvements that the Agency has told other states are "relatively small" and an "unreasonable" basis for regulation?

E. Does EPA believe that it is reasonable to impose $2 billion of new energy costs on Texas in order to improve modeled visibility by less than half a mile, at a cost of about $2.8 million per yard?

F. Could the human eye detect the visibility improvements resulting from the controls sought in EPA's federal plan?

Answer: The goal of the Regional Haze Program established by congress in the Clean Air Act is to improve visibility at more than 150 Class I areas in the United States (national parks, wilderness areas, national wildlife refuges, etc.) through the control of sources of visibility impairing pollution such as power plants, industrial sources, etc. The affected sources under the Texas - Oklahoma Regional Haze Federal Implementation Plan (FIP) emit thousands of tons of Sulfur Dioxide (SO_2) (and other visibility impairing pollutants) annually, which are transported over hundreds of kilometers into Oklahoma and other states. As explained in that FIP, due to this transport, pollution from sources in Texas impacts the visibility at the Wichita Mountains National Wildlife Refuge in Oklahoma more than all the pollution sources in Oklahoma.

E10 BLENDWALL

Question: In the November 30, 2015 RFS final rule, EPA recognized the E10 blendwall as a market constraint and utilized its waiver authority to reduce the volumes obligated parties would have to blend in 2016. EPA also stated, however, that they do not accept the blendwall as a policy constraint and intend to require obligated parties to blend increasing volumes in the coming years.

A. Does EPA plan to force obligated parties to blend more?

B. What is EPA proposing to change to overcome the constraints of the market?

C. How would these impact consumers overall?

D. What contingency plans does EPA have should the blendwall pose serious problems

Answer: The final 2016 standards were designed to develop the use of renewable fuel, requiring 10.1 percent of transportation fuel to be renewable fuels. The recently proposed standards for 2017 would go even further, requiring 10.44 percent of transportation fuels to be renewable. These standards establish ambitious yet achievable requirements for the fuels market, and continue to grow the use of renewable fuels as intended by Congress. While there is no standard for ethanol in the Clean Air Act, the majority of the gasoline pool is blended with ethanol at 10 volume percent (E10). For the use of ethanol to increase, the use of higher-level ethanol blends like E15 and E85 will also need to increase beyond their current use. The final 2016 standards help to incentivize the market place to use greater volumes of renewable fuels, including the increased use of E15 and E85. However, whether ethanol is used in greater volumes and in what form depends on market choices. Obligated parties can also choose to meet their obligations with other renewable fuels, such as biodiesel, biogas, and renewable diesel. If the market chooses to supply more ethanol through higher-level ethanol blends to meet the standards, we expect it may necessitate additional infrastructure investment. The USDA's Biofuels Infrastructure Partnership Program is an example of federal support for this type of infrastructure investment.

CLEAN WATER ACT SECTION 404 PERMIT

Question: Administrator McCarthy, as you may know the Dallas/Fort Worth Metroplex is a very fast growing area of Texas which is threatened with substantial water supply shortages if we cannot develop additional water supplies soon. One of the regional water providers, the North Texas Municipal Water District, serves over 1.6 million people with water, and its service population is projected to double in the next 20 years. The District has been working on a new reservoir, the Lower Bois d'Arc Creek Reservoir, for well over a decade. That project has been the subject of a Clean Water Act Section 404 permit application and NEPA review before the U.S. Army Corps of Engineers, with EPA involvement, for almost 10 years. Given the potential for over 1.6 million people to have insufficient water supplies in North Texas beginning in 2020, and the public safety issues and economic ramifications of having insufficient water supplies, will EPA commit to taking every action it can take to help ensure that the Final Environmental Impact Statement and Record of Decision for the Lower Bois d'Arc Creek Reservoir are completed timely, so as to allow issuance of the Clean Water Act Section 404 permit for the Reservoir no later than June 1, 2017?

Answer: The U.S. Army Corps of Engineers (the Corps) is the lead agency for completing the National Environmental Policy Act (NEPA) review and will be making the final permit decision. The EPA will continue to be a reliable and engaged partner in the review of this project so that the Corps can complete its responsibilities in a timely manner.

METHANE GAS REDUCTIONS

Question: In April 2012, the EPA released New Source Performance Standards (NSPS) for Volatile Organic Compounds (VOC) from the oil and gas industry.

The rule targeted VOC emission reductions through "green completion" and expected a yield of 95 percent reduction, including an estimated 1.7 million tons of methane.

In August 2015, EPA issued NSPS for new and existing wells.
EPA estimated the rule would achieve 400,000 metric tons of methane reductions.

1. Administrator McCarthy, are methane reductions from the NSPS above and beyond the 1.7 million achieved through the VOC rule?

2. EPA also estimates that 220,000 metric tons of methane reductions can be achieved by issuing Control Technique Guidelines.

Are these additional reductions beyond the VOC and NSPS rules?

Answer: Yes. The methane reductions from the final New Source Performance Standards (NSPS) will build on the agency's 2012 rules to curb Volatile Organic Compounds (VOC) emissions from new, reconstructed and modified sources in the oil and gas industry.

METHANE GAS REDUCTION RULE

Question: EPA's stated goal is to reduce methane emissions by 40 percent by 2025. According to EPA, a 40 percent reduction from the oil and gas sector would equate to approximately 3.6 million tons. Earlier this month, EPA issued an Information Collection Request for existing sources.

1. Administrator, is it EPA's hope that the existing source rule will yield a reduction of 1.3 million tons?
2. Do you have a sense as to how much these rules will cost in the aggregate?

Answer: The EPA is currently developing an Information Collection Request (ICR) that will allow the agency to collect the information that it needs to develop a proposal regarding existing sources of oil and gas methane, so at this time it is premature to estimate the reductions, benefits, or costs that would derive from such a rule.

CLEAN AIR ACT

Question: The EPA's regulation of carbon dioxide emissions from existing coal-fired power plants under Section 111(d) of the Clean Air Act is illegal in my opinion, for numerous reasons, because they are already regulated under Section 112. Should the Supreme Court disagree, however, EPA's regulation of new coal-fired power plants under Section 111(b) is also subject to legal challenges and has implications for the legality of the 111(d) rule as well.

EPA's final rule under Section 111(b) for new coal-fired power plants sets a standard that is based on use of carbon capture and storage (CCS) technology.

A. Is the 111(b) rule for new and modified power plants the predicate for the "Clean Power Plan"?

B. If the 111(b) rule is struck down, what is the impact on EPA's 111(d) rule for existing power plants?

C. EPA can point only to a single commercial electric generating unit using carbon capture—— the Boundary Dam Project in Saskatchewan, Canada—as demonstrating its new source standards, is that correct?

Answer: Section 111(d) applies to air pollutants for which the existing source would be regulated if it were a new source. Standards issued for new, modified, and reconstructed power plants to regulate their CO_2 emissions served as the predicate for the section 111(d) emission guidelines. The EPA is confident that the 111(b) rule is on solid legal and technical ground and therefore will be upheld by the Court.

The EPA has received petitions for reconsideration of the final standards of performance, focusing mostly on issues related to the standard of performance for newly constructed steam generating units and, more specifically, on the performance and cost of carbon capture technology. One petition maintains that the post-promulgation performance of carbon capture technology in actual operation at the Canadian SaskPower Boundary Dam Unit 3 facility shows that carbon capture is not yet adequately demonstrated at commercial scale. The EPA is denying reconsideration on this issue because, contrary to the petitioner's contention, the facility's performance, through March 2016, corroborates the EPA's conclusion in the rulemaking that partial Carbon Capture and Storage (CCS) is an adequately demonstrated technology within the meaning of CAA section 111(b). The same petition maintains that the SaskPower Boundary Dam facility uses a different carbon capture process than the one the EPA evaluated at proposal. This

contention is incorrect. The petition further maintains that the EPA has not accounted for cost overruns at that facility. This contention is significantly exaggerated and not borne out by the facts.

On April 29, 2016, the EPA denied five reconsideration petitions, including the one discussed above. The agency discusses each of the five petitions we are denying and the basis for those denials in a separate, docketed memorandum titled "Basis for Denial of Petitions to Reconsider the CAA section 111(b) Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Utility Generating Units."

CLEAN AIR ACT

Question: The EPA's regulation of carbon dioxide emissions from existing coal-fired power plants under Section 111(d) of the Clean Air Act is illegal in my opinion, for numerous reasons, because they are already regulated under Section 112. Should the Supreme Court disagree, however, EPA's regulation of new coal-fired power plants under Section 111(b) is also subject to legal challenges and has implications for the legality of the 111(d) rule as well.

EPA states in its final rule "The Boundary Dam facility has been operating full CCS successfully at commercial scale since October 2014." (80 Federal Register at 64573 (October 23, 2015))

A. This is the one and only operating project at a power generation facility that EPA can point to, correct?

B. Did EPA, before it issued the new plant rule, verify that the Boundary Dam facility had actually demonstrated that it was meeting EPA's performance standard for new plants?

C. Are you aware of the numerous Canadian press reports since this past fall that this facility has not been operating "successfully"?

D. Are you aware that this facility had been turned on only about 40% of the time during the period EPA was issuing its final standards?

E. Are you concerned EPA may not have done its due diligence when relying about Boundary Dam to make its judgement that CCS was adequately demonstrated in its rulemaking? If not, why not?

Answer: Suggestions that the SaskPower Boundary Dam facility experienced operational failures related to its carbon capture technology have largely been misstated or mischaracterized. The carbon dioxide (CO_2) capture system at SaskPower Boundary Dam is operating successfully, the unit meets the Canadian performance standard for CO_2 emissions (which is more stringent than the U.S. standard), and it is producing more CO_2 for enhanced oil recovery than called for by contract. Operational issues in the first year of operation were related largely to ancillary systems and not to the carbon capture system, and appear to have been successfully resolved.

CLEAN AIR ACT

Question: The EPA's regulation of carbon dioxide emissions from existing coal-fired power plants under Section 111(d) of the Clean Air Act is illegal in my opinion, for numerous reasons, because they are already regulated under Section 112. Should the Supreme Court disagree, however, EPA's regulation of new coal-fired power plants under Section 111(b) is also subject to legal challenges and has implications for the legality of the 111(d) rule as well.

Is it correct that EPA has determined that partial carbon capture technology has been demonstrated in full scale power production, in commercial service?

A. At page 5 of the New Source Performance Standards Rule (80 Fed. Reg. 64510, 64513 (Oct. 23, 2015)), it states that CCS is the "best system of emissions reduction" because it is "technically feasible" and used in industrial applications. But it does not say it has been fully demonstrated in commercial service for power plants, why is that?

B. Why is mere feasibility a basis for setting performance standards in something as vital as power generation?

Would you agree that "feasibility" is different than "demonstrated" and "commercially viable"? Will EPA be applying this "feasibility" standard to other 111 (b) rulemakings?

Answer: The Carbon Pollution Standards for new power plants rely on a wide range of data, information and experience well beyond that generated by a particular project. The EPA has determined that CCS is technically feasible for new coal-fired power plants because all of the major components of CCS—the capture, the transport, and the injection and storage—are available, integrated, and proven. The EPA specifically rejected full CCS (greater than 90% capture) as the 'best system of emission reduction' and instead found 'partial CCS' to be the best system for new coal-fired power plants. The final Carbon Pollution Standard can be met by capturing 1623% of a plant's potential CO_2 emissions. There are coal-fired power plants that have demonstrated partial carbon capture and some are capturing carbon pollution today, showing that the technology works in this application, such as AES Warrior Run, Southern Company Plant Barry, Boundary Dam, and others. A full discussion regarding "adequately demonstrated" can be found in the final rule (80 Fed. Reg. 64,537).

On April 29, 2016, the EPA denied five reconsideration petitions. The agency discusses each of the five petitions we are denying and the basis for those denials in a separate, docketed memorandum titled "Basis for Denial of Petitions to Reconsider the CAA section 111(b)

Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Utility Generating Units."

CLEAN AIR ACT

Question: EPA established new ozone standards in 2008. How many counties have been designated as being in nonattainment with the 2008 standards?

Answer: The EPA designated 46 areas as nonattainment for the 8-hour ozone standards finalized in March of 2008. These areas included 192 whole counties and 40 partial counties. Two of the areas have since been redesignated to attainment.

CLEAN AIR ACT

Question: Last October, the EPA revised the 2008 standards. How many counties does the EPA expect will be in nonattainment with the new standards?

A. Based on 2011-2013 air quality data, four counties in my district will be in nonattainment for the first time under these new standards, has EPA done any analysis of the impacts of either the 2008 or 2015 standards on manufacturing in areas designated as being in nonattainment?

Answer: The process for designating areas as attainment or nonattainment for the 2015 standards will take place during 2016 and 2017. The Clean Air Act (CAA) requires these designations to be issued by October 2017. The Clean Air Act requires the EPA to designate an area as nonattainment if it is violating the standards or contributing to a violation in a nearby area. The EPA expects to base the final designation decisions on air quality data from 2014 through 2016. Because air quality data for this entire period are not yet available and technical analyses will need to be conducted to determine nonattainment area boundaries, it is premature to estimate how many counties would be included in designated nonattainment areas.

CLEAN AIR ACT

Question: I am very concerned about areas, like Rochelle, Illinois, that is doing everything it can to attract new manufacturing and good jobs, but has never had to deal with these regulations before. Is it correct that one designated as "nonattainment" a county remains designated as nonattainment until EPA approves a maintenance plan even if the area's air quality data shows the area meets the standards?

A. How long can it take for EPA to approve a maintenance plan?

B. Do counties have to submit multiple maintenance plans?

C. How long do areas have to be subject to maintenance plans?

D. What does this mean for areas, like Rochelle, that want to attract new manufacturing?

Answer: The EPA coordinates with state co-regulators to provide timely review of state requests to redesignate an area to maintenance. As required by the Clean Air Act, an approved maintenance plan remains effective for 10 years beyond the effective date of an area's redesignation, and allows for new construction within the emissions control guidelines stated in the maintenance plan.

CLEAN AIR ACT

Question: In response to my question at the March 22nd hearing regarding the number of counties EPA expects will be designated to be in nonattainment with the 2015 standards, you testified that the number would be potentially only a dozen areas outside of California. EPA's website, however, indicates that there are 241 counties in 33 states that would not meet the 2015 ozone standards based on 2012-2014 data. (https://www.epa.gov/sites/production/files/201603/documents/20151001datatable20122014.pdf).

You indicated that you would go back and verify the numbers of areas expected to be in nonattainment with the new standards.

A. Could you clarify your response? How many counties does EPA expect will be designated to be in nonattainment with the 2015 standards?

Answer: The agency's analyses show the vast majority of U.S. counties will meet the 2015 standards by 2025 just with federal and state rules and programs now in place or underway. These preliminary analyses indicate that only 14 counties (excluding California) are projected to fail to meet the standards in 2025, down from 213 counties with monitors (excluding California) that measure ozone above a level of 70 ppb based on 2012-2014 air quality data.

The process for designating areas as attainment or nonattainment for the 2015 standards will take place during 2016 and 2017. The Clean Air Act (CAA) requires these designations to be issued by October 2017. The Clean Air Act requires the EPA to designate an area as nonattainment if it is violating the standards or contributing to a violation in a nearby area. The EPA expects to base the final designation decisions on air quality data from 2014 through 2016. Because air quality data for this entire period are not yet available and technical analyses will need to be conducted to determine nonattainment area boundaries, it is premature to estimate how many counties would be included in designated nonattainment areas.

CLEAN POWER PLAN

Question: In the current fiscal year, how much of its budget had EPA planned to spend on implementation of the Clean Power Plan?

A. Given the stay, how much will your spending go down in the current fiscal year?

B. Given the stay, how much will it go down in the proposed budget for Fiscal Year 2017?

Answer: Addressing carbon pollution is a part of the EPA's obligations under the Clean Air Act. Further, the Clean Air Act directs the EPA to engage with states and other stakeholders and to provide technical and financial assistance on all aspects of air pollution prevention and control. For the states that voluntarily continue work to cut carbon pollution from power plants and seek the agency's guidance and assistance, the EPA will continue to provide tools and support and technical assistance. The EPA also expects to continue to develop electronic systems to support state plan development activities, and other guidance, as appropriate, to support and respond to state needs. Such guidance may include information regarding evaluation, measurement, and verification of energy savings and emissions reductions.

CLEAN POWER PLAN

Question: EPA's budget request indicates EPA had intended in 2017 to work on "developing federal plans on a state specific basis as needed."

A. Following the Supreme Court's stay of the Clean Power Plan, is EPA continuing any work to develop "federal plans" for potential imposition on states?

B. Does EPA intend to finalize a "federal plan" before judicial review is complete?

Answer: On February 9, 2016, the Supreme Court stayed the Clean Power Plan (CPP) pending judicial review before the U.S. Court of Appeals for the D.C. Circuit and any subsequent proceedings in the Supreme Court. The EPA firmly believes the Clean Power Plan will be upheld when the courts address its merits because the Clean Power Plan rests on strong scientific and legal foundations. The stay means that no one has to comply with the Clean Power Plan while the stay is in effect. During the pendency of the stay, states are not required to submit anything to the EPA, and the EPA will not take any action to impose or enforce any such obligations. For example, the agency has clearly communicated to states that they are not required to make initial submittals on September 6, 2016.

Since the stay was issued, many states have said they intend to move forward voluntarily to continue to work to cut carbon pollution from power plants and are seeking the agency's guidance and assistance. The agency will be providing such assistance, which is not precluded by the stay. In particular, they have asked us to move forward with our outreach and to continue providing support and developing tools, including the Clean Energy Incentive Program (CEIP), the proposed model rules, and the proposed evaluation, measurement and verification (EM&V) guidance. For example, on April 28, 2016, a group of 14 state environmental agency officials wrote to the EPA to request that we provide a final model rule or rules, additional information on the Clean Energy Incentive Program, and other information and assistance. The EPA has received significant feedback on the CEIP and comment on the proposed model rules and EM&V guidance. The agency will move forward developing these actions in a way that is consistent with the stay while providing states the tools they have asked for to help address carbon pollution from power plants. For example, on June 16, 2016, the agency issued a proposed rule for public review and comment that includes details about the optional Clean Energy Incentive Program. This will help guide states and tribes that choose to participate in the program when the Clean Power Plan becomes effective.

Addressing carbon pollution is a part of the EPA's obligations under the Clean Air Act. Further, the Clean Air Act directs the EPA to engage with states and other stakeholders and to provide technical and financial assistance on all aspects of air pollution prevention and control.

For the states that voluntarily continue work to cut carbon pollution from power plants and seek the agency's guidance and assistance, the EPA will continue to provide tools and support and technical assistance. The EPA also expects to continue to develop electronic systems to support state plan development activities, and other guidance, as appropriate, to support and respond to state needs. Such guidance may include information regarding evaluation, measurement, and verification of energy savings and emissions reductions.

CLEAN POWER PLAN

Question: You have said that EPA "will keep moving the Clean Power Plan forwardwe'll keep moving forward with things like the model rule and [Clean Energy Incentive Program]."

A. Following the Supreme Court's stay of the Clean Power Plan, what work is EPA doing with respect to the "model rule"? Does EPA plan to finalize the "model rule" before judicial review is completed?

B. Following the Supreme Court's stay of the Clean Power Plan, what work is EPA doing with respect to the "Clean Energy Incentive Program"? Does EPA plan to implement this program before judicial review is completed?

How much is EPA requesting to spend on these activities in FY 2017?

Answer: As noted in the previous response, on February 9, 2016, the Supreme Court stayed the Clean Power Plan (CPP) pending judicial review before the U.S. Court of Appeals for the D.C. Circuit and any subsequent proceedings in the Supreme Court. The EPA firmly believes the Clean Power Plan will be upheld when the courts address its merits because the Clean Power Plan rests on strong scientific and legal foundations. The stay means that no one has to comply with the Clean Power Plan while the stay is in effect. During the pendency of the stay, states are not required to submit anything to the EPA, and the EPA will not take any action to impose or enforce any such obligations. For example, the agency has clearly communicated to states that they are not required to make initial submittals on September 6, 2016.

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Addressing carbon pollution is a part of the EPA's obligations under the Clean Air Act. Further, the Clean Air Act directs the EPA to engage with states and other stakeholders and to provide technical and financial assistance on all aspects of air pollution prevention and control.

For the states that voluntarily continue work to cut carbon pollution from power plants and seek the agency's guidance and assistance, the EPA will continue to provide tools and support and technical assistance. The EPA also expects to continue to develop electronic systems to support state plan development activities, and other guidance, as appropriate, to support and respond to state needs. Such guidance may include information regarding evaluation, measurement, and verification of energy savings and emissions reductions.

CLEAN POWER PLAN

Question: As you are aware on February 9, 2016 the U.S. Supreme Court granted five separate motions to stay the CPP. One of these granted motions specifically requested the court to extend "all" compliance dates by the number of days between the rule's publication and a final decision by the courts, including the Supreme Court, relating to the rule's validity.

In view of these granted stay motions, does EPA have a different legal opinion regarding the delaying of "all" compliance dates contained in the CPP including the delaying of the emission compliance deadlines by the amount described above? If so please cite legal authorities and relevant case holdings supporting this position.

Answer: The ultimate effect of the stay on the Clean Power Plan deadlines will be determined when the stay is lifted. The Court's orders are ambiguous because different applicants requested different relief. The government interpreted the stay applicants' opening briefs as requesting that all CPP deadlines be tolled, and it opposed the stay in part on the grounds that such relief would be extraordinary and unprecedented. In their reply brief, however, the states clarified that they were only seeking a stay that would relieve states of the obligation to comply with CPP deadlines during the litigation and that the stay would not necessarily provide for day-for-day tolling of the deadlines. The Supreme Court's orders granting the stay did not discuss the parties' differing views of whether and how the stay would affect the CPP's compliance deadlines, and they did not expressly resolve that issue. In this context, the question of whether and to what extent tolling is appropriate will need to be resolved once the validity of the Clean Power Plan is finally adjudicated.

REGULATIONS

Question: With the demonstrated link between poverty and increased incidences of chronic illnesses such as cancer, depression and illicit drug use, what consideration, if any, does your agency give to the societal cost of poverty before it issues regulations?

Answer: The EPA's regulatory development process ensures that all statutory and administrative requirements for rulemaking are met. These requirements often include assessment of cost and benefits, including effects on children's health, environmental justice considerations, tribal impacts, and impacts on small business. Also, as required by law, in setting the level of the ambient air pollution standards to adequately protect against health effects, the EPA considers at-risk populations, which may include children, older adults, those with health conditions, and those with lower socioeconomic status. In general, regulations that reduce air pollution result in considerable health benefits because many common air pollutants exacerbate serious health problems such as asthma and other respiratory and cardiovascular diseases (see for example: https://www.epa.gov/clean-air-act-overview/benefits-and-costs-clean-air-act).

CLEAN POWER PLAN

Question: Given the Supreme Court's February decision to stay the Clean Power Plan, does EPA plan to extend all of the rules' compliance deadlines in the event that the regulations are ultimately upheld by the courts?

Answer: The ultimate effect of the stay on the Clean Power Plan deadlines will be determined when the stay is lifted. The Court's orders are ambiguous because different applicants requested different relief. The government interpreted the stay applicants' opening briefs as requesting that all CPP deadlines be tolled, and it opposed the stay in part on the grounds that such relief would be extraordinary and unprecedented. In their reply brief, however, the states clarified that they were only seeking a stay that would relieve states of the obligation to comply with CPP deadlines during the litigation and that the stay would not necessarily provide for day-for-day tolling of the deadlines. The Supreme Court's orders granting the stay did not discuss the parties' differing views of whether and how the stay would affect the CPP's compliance deadlines, and they did not expressly resolve that issue. In this context, the question of whether and to what extent tolling is appropriate will need to be resolved once the validity of the Clean Power Plan is finally adjudicated.

CARBON CAPTURE

Question: At the time of EPA's final rule this past August, there were no commercial scale power-projects that demonstrated carbon capture technology could be integrated successfully into power generation and would be commercially viable, is that correct? If not, what commercial scale power project had successfully demonstrated carbon capture could be successfully integrated into power generation and would be commercially viable?

Answer: The final rule is based on the performance of a new, highly-efficient coal-fired power plant implementing *partial* CCS to meet an emission standard of 1,400 lb CO_2/MWh. This emission standard would require implementation of CCS technology on only a small portion (or slip stream) of the plant's flue gas output. In the final rule, the agency described a variety of facts to support the agency's conclusion that the technical feasibility of partial post-combustion carbon capture (partial CCS) is adequately demonstrated. The agency also specifically noted electric generating units (EGUs) that have previously utilized or are currently utilizing partial post-combustion carbon capture technology in the slip stream configuration. Further, the conclusion was reinforced by a discussion in the final rule of commercial vendors who offer carbon capture technology and provide performance guarantees.

BOUNDARY DAM CARBON CAPTURE AND STORAGE

Question: The only operational power project deploying Carbon Capture and Storage cited by EPA in its rule was the Boundary Dam project in Canada (SaskPower Boundary Dam 3 unit), which, according to Department of Energy and other analyses is not large enough to be considered demonstration scale. Moreover, as reported recently by the New York Times, the small $1.1 billion unit has expended tens of millions in new equipment and repairs and "has been plagued by multiple shutdowns, has fallen way short of its emissions targets, and faces an unresolved problem with its core technology." There remain serious questions whether the Canadian government will even pursue the financial investment to develop a full-scale demonstration project as follow-on to the Boundary Dam 3 unit work.
Administrator McCarthy, how much money in the EPA's proposed budget is being dedicated for the following activities related to the Gold King Mine blow out?

A. Given this, does EPA continue to maintain that it is reasonable to project that carbon capture technology used by SaskPower can be scaled up and that this technology will be economically feasible for companies in the United States?

B. If so, what is the evidence to support this position? And how has EPA validated this evidence?

Answer: Suggestions that the SaskPower Boundary Dam facility experienced operational failures related to its carbon capture technology have largely been misstated or mischaracterized. The carbon dioxide (CO_2) capture system at SaskPower Boundary Dam is operating successfully, the unit meets the Canadian performance standard for CO_2 emissions (which is more stringent than the U.S. standard), and it is producing more CO_2 for enhanced oil recovery than called for by contract. Operational issues in the first year of operation were related largely to ancillary systems and not to the carbon capture system, and appear to have been successfully resolved.

CLEAN AIR ACT

Question: This past November the Committee wrote to EPA seeking information related to the Agency's involvement in the codification of the Clean Air Act into a new Title 55 of the United States Code. In its initial November 18 response to the Committee's request, EPA's General Counsel, in attempting to justify why the Agency chose not to provide technical assistance to Congress's independent Office of Law Revision Counsel, seemed to indicate EPA actually has no intention of participating in the positive law codification process. Pursuant to title two, section 285b of the United States Code, the Office of Law Revision Counsel is required to prepare a restatement of all laws passed by Congress; there are no exceptions. Therefore, is it EPA's position that the statutory requirements for positive law codification do not apply to the Clean Air Act and other environmental statutes administered by the Agency?

Answer: This past November, the agency was asked for all documents relating to this subject, which goes back several years. We have produced a substantial number of these documents to the Committee and we are continuing to compile and review additional materials.

FOREIGN EMISSION-US

Question: Has EPA prepared any recent, comprehensive studies on the current and projected contribution of foreign emissions to current and projected ozone levels in the US?

A. If yes, please identify the studies and where copies can be located by the public.

B. If yes, have the studies been subject to peer review?

Answer: The EPA has not prepared any recent comprehensive studies on the contributions of foreign emissions on U.S. ozone levels. In February 2016, the EPA held a two-day workshop to advance the collective understanding of technical and policy issues associated with background ozone, including international transport, as part of the agency's ongoing efforts to engage with states and stakeholders on implementation of the 2015 ozone NAAQS. The workshop agenda, attendee lists, presentations used at the workshop, and high-level summary of the workshop are available at https://www.epa.gov/ozone-pollution/epa-workshop-background-ozone-february-24-and-25-2016. A non-regulatory docket was also opened for states and other stakeholders to provide additional comments on background ozone issues such as international transport, which is available at www.regulations.gov (Docket ID. EPA-HQ-OAR-2016-0097). Additionally, the EPA continues to actively participate in the Task Force on Hemispheric Transport of Air Pollution (HTAP). Partial results from the current set of model simulations and data analyses considering intercontinental transport are expected by the end of 2016.

OZONE STANDARD

Question: In a December 30, 2015 White Paper entitled "Implementation of the 2015 Primary Ozone NAAQS: Issues Associated with Background Ozone," EPA states that "Ambient data analyses have shown that mid-tropospheric [ozone] concentrations in remote areas, within the U.S. and globally, have been increasing over the past two decades at a rate of approximately 0.4 ppb/year within an overall uncertainty range of 0.1 to 0.7 ppb/year." The paper also notes that while "NOx emissions are expected to decline in North America and Europe out to 2030 and then stabilize," that "NOx emissions in East and South Asia are expected to continue to increase." (See White Paper available at https://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2016-0097-0004, p. 8).

A. What assumptions did EPA include in its analysis regarding the contribution of ozone from non-U.S. sources in projecting future nonattainment areas in 2025 and in assessing the cost and benefits of the 2015 ozone standard?

B. How many more nonattainment areas could occur in 2025 if the foreign contribution and transport of ozone continue at the same pace as it has done over the past two decades?

C. How many more nonattainment areas could occur in 2025 if the projected mid-tropospheric ozone increases at 0.7ppb/year, the upper end of the uncertainty range?

D. How would this affect the overall costs of meeting the 2015 ozone standard?

E. If EPA did not conduct this analysis prior to finalizing the 2015 ozone standard, why not?

Answer: In the Regulatory Impact Analysis (RIA) released with the final 2015 ozone standards, the EPA conducted an illustrative analysis of the costs and benefits of the new NAAQS in 2025. For this exercise, the EPA assumed that the contribution from non-U.S. sources in 2025 would be unchanged from current levels. This assumption was made due to the uncertainty associated with future trends in non-U.S. emissions. As noted in the ozone NAAQS response to comments document, the most recent evidence suggests the increasing trend in free tropospheric ozone has slowed over the most recent period. While future levels of background ozone have the potential to impact future U.S. attainment in some limited locations, the weight of the evidence suggests that the RIA assumption of unchanging background levels was a reasonable one.

CLEAN AIR ACT - SECTION 179B

Question: EPA's White Paper on ozone background also states that Section 179B of the Clean Air Act provides EPA with the authority to approve an area's attainment plan if the state can show that the plan would achieve attainment by the relevant attainment date "but for" the influence of international emissions.

A. How many Section 179B petitions have been submitted since 1990? How many of these petitions has EPA approved or disapproved?

B. What was the average time period for EPA action on a submitted petition?

Answer: The EPA has approved 179B demonstrations for five nonattainment areas. To date, all demonstrations have involved emissions from Mexico. Three of these SIPs addressed PM_{10}, one addressed CO, and one addressed ozone.

EPA'S WHITE PAPER

Question: EPA's White Paper states that EPA "will assist states with conducting the analyses necessary to demonstrate "but for" attainment, including estimating the extent of international contribution on high ozone days.

A. Please specify the extent and nature of this assistance and whether EPA will conduct the required modeling.

B. If not, what type of modeling does EPA expect will be necessary for a state to submit to make the required showing?

C. How will a successful petition under Section 179B affect an area's control obligations as a nonattainment area? Will it still have to meet all other requirements applicable to the area based on its classification?

Answer: As part of our efforts to assist states in implementing the new ozone standards, the EPA held a two-day workshop in February 2016 to advance the collective understanding of technical and policy issues associated with background ozone. A non-regulatory docket was opened for states and other stakeholders to provide additional comments on background ozone issues such as international transport. The EPA is currently reviewing the comments received at the workshop and via the docket. As part of this process, the EPA intends to provide a document that will outline any plans for specific policies, guidance, or modeling assistance related to 179B "but for" demonstrations.

Section 179B of Clean Air Act allows the EPA to approve an attainment demonstration for a nonattainment area if: (1) The attainment demonstration meets all other applicable requirements of the CAA; and (2) the submitting state can satisfactorily demonstrate that "but for emissions emanating from outside of the United States," the area would attain and maintain the ozone standard. The EPA has historically evaluated these "but for" demonstrations on a case-by-case basis, based on the individual circumstances, the classification of the area and the data provided by the submitting state. These data have included ambient air quality monitoring data, modeling scenarios, emissions inventory data and meteorological or satellite data. Due to the fact specific nature of section 179B demonstrations, the process and information required will be dependent on the circumstances of the state or locality in question.

Section 179B does not provide for any relaxation of Clean Air Act mandated emissions control measures (including contingency measures) or the prescribed emissions reductions necessary to

achieve periodic emissions reduction progress requirements. In this way, section 179B ensures that states will take actions to mitigate the public health impacts of exposure to ambient levels of pollution that violate the NAAQS by imposing reasonable control measures on the sources that are within the jurisdiction of the state, while also authorizing the EPA to approve such attainment plans and demonstrations even though they may not fully address the public health impacts of international transport.

WINTERTIME OZONE LEVELS

Question: Has EPA prepared any recent, comprehensive studies regarding the science of wintertime ozone formation, photochemical modeling of wintertime ozone formation, and the ability of western states to cost-effectively reduce wintertime ozone levels? If yes, please identify the studies and where copies can be located by the public.

Answer: The EPA has collaborated with the State of Utah, industry representatives, and NOAA in three field studies from 2012 to 2014 in the Uinta Basin in Utah to understand the emissions sources and meteorological conditions and photochemistry that contributes to winter ozone. Final reports describing each of these studies are available on the Utah webpage (http://www.deq.utah.gov/locations/U/uintahbasin/ozone/overview.htm). Additionally, the EPA also collaborated with the State of Wyoming in its field studies and modeling studies of winter ozone in the Upper Green River Basin. These reports are available at the Wyoming web page (http://deq.wyoming.gov/aqd/winter-ozone/resources/winter-ozone-study).

REGULATORY IMPACT ANALYSIS-OZONE STANDARDS

Question: EPA's Regulatory Impact Analysis for the 2015 ozone standards states that seven monitoring sites for which design values were influenced by wintertime ozone episodes were not included in the analysis because "modeling tools are not currently sufficient to properly characterize ozone formation during wintertime ozone episodes". In Appendix 2A of the RIA, EPA elaborates on these key modeling uncertainties:

Current modeling tools are not sufficient to properly characterize ozone formation for these winter ozone episodes due to (1) the challenging task of capturing complex local "cold pool" meteorology using a model resolution that is optimized to capture regional and synoptic scale process, (2) uncertainties in quantifying the local emissions from oil and gas operations, and (3) uncertainties in the chemistry that occurs both in the atmosphere and on snow surfaces during these episodes. Therefore, it was not appropriate to project ozone design values at monitors impacted by winter events.

A. Given the inadequacy of existing tools, how does EPA expect areas affected by wintertime ozone to develop appropriate compliance plans?

B. Does EPA expect states to resolve these significant uncertainties on their own, or is EPA planning to study the issue further and hopefully develop appropriate modeling tools that states can use?

C. Does EPA have a plan to resolve these technical uncertainties, and what assistance, if any, does the agency anticipate it will provide states to address these issues?

Answer: The current air quality modeling tools are continually being improved. The EPA, states, NOAA and other university researchers have made substantial progress in updating modeling tools for cold pool meteorology and the effects of snow surface of the chemistry of ozone formation and the EPA will continue to work with states. As an example, snow albedo treatment and a new chemical mechanism intended to better replicate wintertime chemistry have recently been added to key air quality models. Further there have been ongoing efforts to improve the characterization of oil and gas emissions in the National Emissions Inventory (NEI).

OZONE CONTROL STRATEGIES

Question: Has EPA prepared any recent, comprehensive studies regarding the relative contribution of human-made and naturally occurring nitrogen oxides, volatile organic compounds, and other pollutants in ozone formation to ensure air pollution control policies focus on the most cost-effective control strategies to reduce ozone? If yes, please identify the studies and where copies can be located by the public.

Answer: Throughout the 2015 ozone NAAQS review, the EPA assessed the contribution of various sources (anthropogenic and natural) to ozone levels. The Integrated Science Assessment (ISA), the Policy Assessment (PA), and the Regulatory Impact Analysis (RIA) (located at https://www3.epa.gov/ttn/naaqs/standards/ozone/s_o3_index.html) all have sections devoted to ozone attribution and/or the impacts of ozone precursor reductions on ozone concentrations. Additionally, Table 2 of the white paper on background ozone presents source apportionment modeling results from a 2017 projection that estimates the contributions of own-state anthropogenic emissions and all U.S. anthropogenic emissions at each location where 2012-2014 design values exceeded 70 ppb.

NATIONAL RESEARCH COUNCIL (NRC)

Question: At a November 18, 2015 meeting of EPA's Clean Air Act Advisory Committee (CAAAC) I understand that the agency received a recommendation to ask the National Research Council (NRC) to update its 1991 study, "Rethinking the Ozone Problem in Urban and Regional Air Pollution." My understanding is that there are new and continuing challenges to further reducing NOx emissions, and it was recommended that the EPA conduct an updated review of the science, considering that the science has evolved since the original determination.

A. Given that the original study is now 25 years old and that the science has evolved since its publication, does EPA have plans to ask the NRC to update this study?

B. If the agency has not yet made a decision, when does the agency expect to make a decision?

C. If EPA has decided to go forward with updating the 1991 NRC study, what is the schedule for when the study will be initiated and completed?

D. If EPA has decided against an update of the NRC's 1991 study, what is the basis for that decision, especially given the significant cost and technical challenges facing states and areas in complying with the new ozone standards?

Answer: As directed by the CAA, reducing pollution to meet any NAAQS, including ozone, always has been a shared task, one involving the federal government, states, tribes and local air agencies. This partnership has proved effective since the EPA first issued O_3 standards more than three decades ago, and is evidenced by significantly lower O_3 levels throughout the country. To inform the development of clean air plans for ozone during this period, the EPA and states have relied on region- and city-specific technical air quality data and analyses (e.g., on-going ambient air monitoring and computer modeling for ozone conducted by state air agencies); updated research on ozone chemistry performed by the EPA's Office of Research and Development and others (e.g., the Electric Power Research Institute); and recommendations from expert groups like the National Research Council (e.g., *Rethinking the Ozone Problem in Urban and Regional Air Pollution*, 1991, and *Air Quality Management in the United States*, 2004) and the North American Research Strategy for Tropospheric Ozone (e.g., *An Assessment of Tropospheric Ozone Pollution, A North American Perspective*, 2000).

To provide a foundation that helps air agencies build successful strategies for attaining O_3 standards, the EPA will continue to move forward with federal regulatory programs, such as the final Tier 3 Motor Vehicle Emissions Standards. To facilitate the development of CAA-

compliant implementation plans and strategies to attain new standards, the EPA intends to issue timely and appropriate implementation guidance and, where appropriate and consistent with the law, new rulemakings to streamline regulatory burdens and provide flexibility in implementation. On October 1, 2015, the EPA issued a memo (*Implementing the 2015 Ozone National Ambient Air Quality Standards*), which highlights many of the issues related to implementation of the new O_3 standard, and renewed the EPA's commitment to work with our state, local, federal and tribal partners to carry out the duties of ozone air quality management in a manner that maximizes common sense, flexibility and cost-effectiveness while achieving improved public health.

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

Question: Section 109(d) of the Clean Air Act requires the Administrator to review National Ambient Air Quality Standards (NAAQS) at "five-year intervals".

A. How many NAAQS reviews since 1980 have been completed within five years?

B. What is the range of time that the agency has taken since 1980 for EPA to conduct a review and promulgate a final decision on an existing standard?

C. How often has EPA met year the five-year interval deadline, and how often has EPA not met the deadline?

Answer: The EPA continually strives to meet its deadlines under the Clean Air Act. On a number of occasions, the review has been completed in the statutorily mandated time, although in some instances it has taken us longer.

WESTLAKE LANDFILL SUPERFUND

Administrator McCarthy, I've been hearing quite a bit from my colleagues on both sides of the aisle in the Missouri Delegation about the Westlake Landfill Superfund site near the St. Louis airport in Bridgeton, Missouri. In fact, I've been hearing quite regularly from them along with from residents living near the site, firefighters, environmental activists and many others.

The site, which is contaminated with tons of radioactive waste left over from the Manhattan Project, as well as industrial solid waste and other refuse, was added to the NPL in 1990. Today, more than 25 years later, not only is the site still sitting there, but there is also an underground fire that has been burning there for six years --since 2010!

No one in Congress understands better than I do the strain the Superfund program has been under since the funding authority lapsed in the mid-1990s. But even accounting for that, it is unconscionable that a toxic site of this nature, this close to a residential neighborhood, continues to sit there waiting for cleanup to really begin.

The Missouri Delegation is so frustrated with EPA that it has joined together to push legislation that would take the Westlake site out of the Superfund program and hand it over to the Army Corps of Engineers by moving the site into the Formerly Utilized Sites Remedial Action Program or FUSRAP for cleanup.

Now, I have a number of concerns about that legislation, its drafting, the precedent it sets, and the potential for actually slowing down cleanup of the site. So, I hope that we will soon be having a hearing on that legislation in this Committee because I think we need to get a better understanding of what the bill actually does and whether it comports with what the people living in the area really want.

That said, it is the lack of progress that has brought us to the point where one chamber of Congress has taken the extraordinary step of passing legislation to take control of this cleanup away from the Agency. As I said, it is an unconscionable situation, regardless of the merits of the legislation.

Madam Administrator, your agency has said publicly that it intends to come forward with a new remedy proposal for operable unit one by this fall and a final proposed remedy by December. I understand that you inherited a poor remedy selection and had to revisit that decision.

Question: What kind of assurances can you give to the people of Bridgeton that they will see a cleanup occur in short order and that the cleanup will actually be fully protective of public health?

Answer: The EPA is working closely with the U.S. Army Corp of Engineers, U.S. Geological Survey and the State of Missouri in all aspects of its West Lake Superfund site work to support the analysis and proposal of a final site remedy. To address contamination at the West Lake Landfill, the potentially responsible parties are performing the necessary investigative work and evaluating additional remedial alternatives pursuant to an enforceable schedule. This work will enable the EPA to propose a final remedy decision for public comment by the end of calendar year 2016.

In the meantime, response actions are currently underway at the site to protect on-site workers and the local community. In December 2015, the EPA issued an order to the potentially responsible parties to place a non-combustible cover over areas where Radiologically Impacted Material (RIM) was located at or near the surface. Installation of this cover began in February 2016 and is anticipated to be complete by early this summer. Also in December, the EPA announced its intention to require the potentially responsible parties to put an isolation barrier system in place to protect the RIM from any subsurface smoldering event at the adjacent Bridgeton Landfill. In April 2016, the EPA issued an order directing Bridgeton Landfill, LLC to install several critical components of the Isolation Barrier System to compliment the State of Missouri's efforts to address the subsurface smoldering event. The EPA and the potentially responsible parties continue to work on the technical and legal details of the remaining portions of the system and will provide these details to the public when they are available.

Question: How can you restore the confidence of those people and, frankly, those that would have us pass legislation to take the site away from EPA?

Answer: The most important action this agency can take right now to benefit the community is to propose a remedy decision for public comment. As the agency and the potentially responsible parties complete the essential work to select a protective remedy for the Site, the EPA will continue to keep the community informed and engaged in the discussions on progress and updates. An important communication conduit to the community is the EPA's recently established independent Community Dialogue Framework that brings participants from across the community, key stakeholders and the EPA together to share perspectives on the West Lake Landfill Superfund site. The Framework's long-term objective is to offer a forum for communication and understanding of the various activities underway at the West Lake Landfill that will protect the public from the RIM located at the site.

In addition, the EPA continues to support the Community Advisory Group (CAG) through regular communication and participation at CAG Technical Committee meetings and CAG meetings. The EPA also supports the CAG by providing independent technical assistance through the Technical Assistance Services for Communities contract. Finally, the EPA has enlisted the expertise of other agencies such as the U.S. Army Corps of Engineers and the USGS in addressing the West Lake Landfill's complicated remediation issues.

EMPLOYEES AND CONTRACTORS WORKING FOR EPA

Question: According to EPA's website, the agency had 15,408 employees in FY 2014. According to EPA's website, as of February 23, 2016, the agency also has 601 active contracts with outside entities.

What is the total number of employees working for the agency?

What is the total number of contractors working for the agency?

Please provide a breakdown of the number of employees by program office, and also the number of contractors by program office.

Answer: As of April 13, 2016, there were 15,649 employees working for the EPA. This number includes permanent and temporary employees and all work schedules (i.e., full time, part time, intermittent and phased retirement).

There are 4,060 contractors working for the agency.

The chart below breaks down the number of employees and contractors by program and region.

RPIO/ Sub Bureau	Employees	Contractors	Employees + Contractors
Region 1	566	73	639
Region 2	781	115	896
Region 3	787	111	898
Region 4	917	79	996
Region 5	1,088	47	1,135
Region 6	762	70	832
Region 7	488	36	524
Region 8	528	61	589
Region 9	736	151	887
Region 10	521	104	625
OARM	671	1,008	1,679
OAR	1,083	117	1,200
OCFO	322	77	399
OECA	739	44	783
OIG	273	3	276
OITA	78	1	79
OA	814	19	833
OEI	336	769	1,105
OGC	210	0	210
ORD	1,781	876	2,657
OLEM	483	114	597
OCSPP	1,101	108	1,209
OW	584	77	661
EPA Total	**15,649**	**4,060**	**19,709**

The data presented is from the HR data mart which includes intermittent, temporary employees, advisors, etc. This data is different from what the EPA reports to Congress in its Congressional Justification which represents the agency's FY 2016 Enacted Full Time Equivalent (FTE) Ceiling which is an estimate of the number of agency employees and includes ARRA, Sandy Supplement, and reimbursable FTE.

CLEAN POWER PLAN

Question: The President's budget proposal was developed and released before the Supreme Court issued its stay relating to the Clean Power Plan.

A. What direction have you given your staff regarding the impact of the stay on EPA's activities and spending?

B. Has EPA discontinued any Clean Power Plan related activities or spending following the stay?

Answer: On February 9, 2016, the Supreme Court stayed the CPP pending judicial review before the U.S. Court of Appeals for the D.C. Circuit and any subsequent proceedings in the Supreme Court. The EPA firmly believes the Clean Power Plan will be upheld when the courts address its merits because the Clean Power Plan rests on strong scientific and legal foundations. The stay means that no one has to comply with the Clean Power Plan while the stay is in effect. During the pendency of the stay, states are not required to submit anything to EPA, and EPA will not take any action to impose or enforce any such obligations. For example, we have clearly communicated to states that they are not required to make initial submittals on September 6, 2016.

Since the stay was issued, many states have said they intend to move forward voluntarily to continue to work to cut carbon pollution from power plants and are seeking the Agency's guidance and assistance. The Agency will be providing such assistance, which is not precluded by the stay. In particular, they have asked us to move forward with our outreach and to continue providing support and developing tools, including the Clean Energy Incentive Program (CEIP), the proposed model rules, and the proposed evaluation, measurement and verification (EM&V) guidance. The EPA has received significant feedback on the CEIP and comment on the proposed model rules and EM&V guidance. We will move forward developing these actions in a way that is consistent with the stay while providing states the tools they have asked for to help address carbon pollution from power plants. For example, on June 16, 2016, we issued a proposed rule for public review and comment that includes details about the optional Clean Energy Incentive Program. This will help guide states and tribes that choose to participate in the program when the Clean Power Plan becomes effective.

Addressing carbon pollution is a part of the EPA's obligations under the Clean Air Act. Further, the Clean Air Act directs the EPA to engage with states and other stakeholders and to provide technical and financial assistance on all aspects of air pollution prevention and control.

Therefore, the EPA expects to continue to use Agency funds to protect human health and the environment consistent with its authorities under the Act.

CLEAN POWER PLAN-COMPLIANCE

Question: What direction has EPA given states regarding the effect of the stay on their obligations under the Clean Power Plan?

A. What is EPA advising states regarding compliance dates, including the 2022 compliance date?

Answer: The ultimate effect of the stay on CPP deadlines will be determined when the stay is lifted. The Court's orders are ambiguous because different applicants requested different relief. The government interpreted the stay applicants' opening briefs as requesting that all CPP deadlines be tolled, and it opposed the stay in part on the grounds that such relief would be extraordinary and unprecedented. In their reply brief, however, the States clarified that they were only seeking a stay that would relieve States of the obligation to comply with CPP deadlines during the litigation and that the stay would not necessarily provide for day-for-day tolling of the deadlines. The Supreme Court's orders granting the stay did not discuss the parties' differing views of whether and how the stay would affect the CPP's compliance deadlines, and they did not expressly resolve that issue. In this context, the question of whether and to what extent tolling is appropriate will need to be resolved once the validity of the CPP is finally adjudicated. In addition, we have clearly communicated to states that they are not required to make initial submittals on September 6, 2016

CLEAN POWER PLAN-ASSISTANCE TO STATES

Question: At the budget hearing, you testified that there were 25 states either continuing to work with EPA or that have sent signals that they may keep working.

A. What is the nature of the assistance that EPA is providing to states following the stay?

B. Which states are continuing to work with EPA on the Clean Power Plan?

C. How much is EPA projecting it will spend in FY 2016 to provide this assistance to states?

D. How much funding is EPA requesting for FY 2017 to provide assistance to states?

Answer: Since the stay was issued, many states have said they intend to move forward voluntarily to continue to work to cut carbon pollution from power plants and are seeking the Agency's guidance and assistance. The Agency will be providing such assistance, which is not precluded by the stay. In particular, they have asked us to move forward with our outreach and to continue providing support and developing tools, including the Clean Energy Incentive Program (CEIP), the proposed model rules, and the proposed evaluation, measurement and verification (EM&V) guidance. For example, on April 28, 2016, a group of 14 state environmental agency officials wrote to EPA to request that we provide a final model rule or rules, additional information on the Clean Energy Incentive Program, and other information and assistance. The EPA has received significant feedback on the CEIP and comment on the proposed model rules and EM&V guidance. We will move forward developing these actions in a way that is consistent with the stay while providing states the tools they have asked for to help address carbon pollution from power plants. For example, on June 16, 2016, we issued a proposed rule for public review and comment that includes details about the optional Clean Energy Incentive Program. This will help guide states and tribes that choose to participate in the program when the Clean Power Plan becomes effective.

Addressing carbon pollution is a part of the EPA's obligations under the Clean Air Act. Further, the Clean Air Act directs the EPA to engage with states and other stakeholders and to provide technical and financial assistance on all aspects of air pollution prevention and control.

Similar to this year's request, the FY 2016 President's Budget request provided $50.5M to support EPA and state work to implement the Clean Power Plan in two distinct parts. (1) $25M in grants to help states implement their Clean Power Plan strategies. (2) $25.5M across both headquarters and regions to develop program implementation infrastructure, evaluate state plans,

and ensure consistent application of the emissions guidelines nationwide. Because the FY 2016 President's Budget was not fully funded by Congress, providing full funding for all National Programs was not possible.

For the states that voluntarily continue work to cut carbon pollution from power plants and seek the agency's guidance and assistance, the EPA will continue to provide tools and support and technical assistance in FY2017. The EPA also expects to continue to develop electronic systems to support state plan development activities, and other guidance, as appropriate, to support and respond to state needs. Such guidance may include information regarding evaluation, measurement, and verification of energy savings and emissions reductions.

CLEAN POWER PLAN - RESOURCES

Question: At the budget hearing, you indicated that notwithstanding the stay of the Clean Power Plan, EPA was continuing to expend resources relating to the Clean Power Plan and that no staff had been reassigned to other matters.

A. How much does EPA project it will spend in FY 2016 relating to the Clean Power Plan?

B. How much funding is EPA requesting for FY 2017 relating to the Clean Power Plan?

Answer: Similar to this year's request, the FY 2016 President's Budget request provided $50.5M to support EPA and state work to implement the Clean Power Plan in two distinct parts. (1) $25M in grants to help states implement their Clean Power Plan strategies. (2) $25.5M across both headquarters and regions to develop program implementation infrastructure, evaluate state plans, and ensure consistent application of the emissions guidelines nationwide. Because the FY 2016 President's Budget was not fully funded by Congress, providing full funding for all National Programs was not possible.

For the states that voluntarily continue work to cut carbon pollution from power plants and seek the agency's guidance and assistance, the EPA will continue to provide tools and support and technical assistance in FY2017. The EPA also expects to continue to develop electronic systems to support state plan development activities, and other guidance, as appropriate, to support and respond to state needs. Such guidance may include information regarding evaluation, measurement, and verification of energy savings and emissions reductions.

CLEAN POWER PLAN - RULEMAKING

Question: EPA's budget lists various rulemakings it planned to work on relating to the Clean Power Plan.

A. Is EPA continuing to work on any Clean Power Plan related rulemakings? If yes, which rulemakings?

B. Does the agency plan to finalize any additional regulations relating to the Clean Power Plan before the end of this Administration? If yes, what regulations?

Answer: As noted above, since the stay was issued, many states have said they intend to move forward voluntarily to continue to work to cut carbon pollution from power plants and are seeking the Agency's guidance and assistance. The Agency will be providing such assistance, which is not precluded by the stay. In particular, they have asked us to move forward with our outreach and to continue providing support and developing tools, including the Clean Energy Incentive Program (CEIP), the proposed model rules, and the proposed evaluation, measurement and verification (EM&V) guidance. For example, on April 28, 2016, a group of 14 state environmental agency officials wrote to EPA to request that we provide a final model rule or rules, additional information on the Clean Energy Incentive Program, and other information and assistance. The EPA has received significant feedback on the CEIP and comment on the proposed model rules and EM&V guidance. We will move forward developing these actions in a way that is consistent with the stay while providing states the tools they have asked for to help address carbon pollution from power plants. For example, on June 16, 2016, we issued a proposed rule for public review and comment that includes details about the optional Clean Energy Incentive Program. This will help guide states and tribes that choose to participate in the program when the Clean Power Plan becomes effective. At this time, we have made no decisions about timing for final actions.

CLEAN POWER PLAN - STATES

Question: Your written testimony relating to the Clean Power Plan also states that "[d]uring the stay, EPA will continue to assist states that voluntarily decide to move forward . . ."

A. Is EPA in any way reaching out to states or other organizations to encourage states to move forward with "voluntary" actions?

B. Is EPA in any way coordinating with, assisting, or funding nonprofits or other organizations to encourage states to move forward with "voluntary" compliance?

C. If a state voluntarily submits a "plan" pursuant to the Clean Power Plan rule, will EPA approve it?

Answer: As noted above, since the stay was issued, many states have said they intend to move forward voluntarily to continue to work to cut carbon pollution from power plants and are seeking the Agency's guidance and assistance. The Agency will be providing such assistance, which is not precluded by the stay. In particular, they have asked us to move forward with our outreach and to continue providing support and developing tools, including the Clean Energy Incentive Program (CEIP), the proposed model rules, and the proposed evaluation, measurement and verification (EM&V) guidance. For example, on April 28, 2016, a group of 14 state environmental agency officials wrote to EPA to request that we provide a final model rule or rules, additional information on the Clean Energy Incentive Program, and other information and assistance. The EPA has received significant feedback on the CEIP and comment on the proposed model rules and EM&V guidance. We will move forward developing these actions in a way that is consistent with the stay while providing states the tools they have asked for to help address carbon pollution from power plants. For example, on June 16, 2016, we issued a proposed rule for public review and comment that includes details about the optional Clean Energy Incentive Program. This will help guide states and tribes that choose to participate in the program when the Clean Power Plan becomes effective. The stay means that no one has to comply with the Clean Power Plan while the stay is in effect. During the pendency of the stay, states are not required to submit anything to EPA, and EPA will not take any action to impose or enforce any such obligations. For example, we have clearly communicated to states that they are not required to make initial submittals on September 6, 2016.

INTENDED NATIONALLY DETERMINED CONTRIBUTION (INDC)

Question: Approximately one year ago, the Administration submitted an "Intended Nationally Determined Contribution" (INDC) to the United Nations setting a 2025 target for reducing domestic greenhouse gas emissions by 26-28 percent below 2005 levels. The EPA's Clean Power Plan was identified by the Administration as a major component of its "INDC," and EPA's more recently issued FY 2017 budget documents expressly refer to the Clean Power Plan as "the President's highest priority for the EPA and is central element of the US domestic climate mitigation agenda.

A. Is the Obama Administration's INDC target contingent on the Clean Power Plan?

B. Will the Administration's INDC target be achievable if the Clean Power Plan is not upheld by federal courts?

Answer: The target is economy-wide, accounting for all sectors covered by the Intergovernmental Panel on Climate Change (IPCC) and for all greenhouse gases (GHGs) recorded in the US's 2014 inventory (carbon dioxide (CO2), methane (CH4), nitrous oxide (N_2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The CPP is only one component of a broad set of domestic actions this Administration has put in place or is in the process of putting in place to reduce GHG emissions. These include vehicle fuel economy standards, energy efficiency standards, methane regulations, restrictions on HFC uses, climate-friendly land management incentives, and so on. Regardless, EPA firmly believes the Clean Power Plan will be upheld when the merits are considered because the rule rests on strong scientific and legal foundations.

PARIS CLIMATE AGREEMENT

Question: On December 12, 2015, President Obama referenced the EPA's carbon dioxide power plant standards in his statement regarding the "Paris Climate Agreement."

A. What direction have you or your staff given to State Department officials regarding the impact of the stay on the Administration's INDC or the Paris Climate Agreement?

B. What direction have you or your staff given to foreign countries or other foreign entities, if any, regarding the impact of the stay on the Administration's INDC target or the Paris Climate Agreement?

Answer: The EPA has given no direction to either the State Department or foreign countries.

CLEAN AIR ACT

Question: In the Congressional Justification (CJ at 228), EPA states that "In FY 2017, the EPA will continue work to address [New Source Performance Standards] for sources of air pollutants and as appropriate, GHGs, consistent with the requirements of the CAA."

A. What sources is EPA currently considering for regulation of greenhouse gases under Section 111(b) or 111(d), or both, of the Clean Air Act? Please provide a list of all such sources.
B. Are there any additional sources EPA anticipates it may consider in FY 2017 for regulation of greenhouse gases under Section 111(b) or 111(d), or both, of the Clean Air Act? Please provide a list of all such additional sources.

Answer: On May 12, 2016, the EPA issued three final rules that together will curb emissions of methane, smog-forming volatile organic compounds (VOCs) and toxic air pollutants such as benzene from new, reconstructed and modified oil and gas sources, while providing greater certainty about Clean Air Act permitting requirements for the industry.

The EPA also took a critical step needed to carry out the Administration's commitment to regulate methane emissions from *existing* oil and gas sources: the agency issued for public comment an Information Collection Request (ICR) that will require companies to provide extensive information instrumental for developing comprehensive regulations to reduce methane emissions from existing oil and gas sources.

The ICR process, which is governed by the Paperwork Reduction Act, provides the public two opportunities to review drafts of the information collection request. The draft ICR was published on June 3, 2016, and the first of two public comment periods will last for 60 days. The agency may revise the first draft as necessary based on comments and then publish a second draft which also will be submitted to the Office of Management and Budget (OMB) for review. If the collection request is approved by OMB – which can include surveys and required emissions monitoring – it will be sent to industry, which is required to respond and attest that the information it provides is accurate. The EPA's goal is to receive the first phase of information later this year.

CLEAN AIR ACT - PENDING PETITIONS

Question: The agency has a number of petitions pending seeking additional regulation of greenhouse gases under other sections of the CAA, including Sections 108-110, 115, 211, 231, and other sections.

A. What is the status of each of these pending petitions?

B. Is the agency actively involved in settlement discussions relating to any these petitions? If yes, which petitions?

Answer: The EPA is currently reviewing a number of pending petitions regarding greenhouse gases. Of them, for a petition regarding regulating GHG emissions from aircraft under CAA Sec. 231, the agency has proposed a finding that such emissions endanger public health as well as released for public comment an Advanced Notice of Proposed Rulemaking. The agency is currently reviewing the comments on both of those to determine appropriate next steps. The agency is not actively engaged in settlement negotiations regarding any such petitions.

GREENHOUSE GASES - SECITON 108-110

Question: Is EPA considering regulation of greenhouse gases under Sections 108-110 of the CAA? If yes, please explain what potential regulation the agency is considering and for which greenhouse gases such regulation would apply.

Answer: The EPA is not currently engaged in developing such regulations.

GREENHOUSE GASES - SECTION 115

Question: Is EPA considering regulation of greenhouse gases under Section 115 of the CAA? If yes, please explain what potential regulation the agency is considering and for which greenhouse gases such regulation would apply.

Answer: The EPA is not currently engaged in developing such regulations.

STATE IMPLEMENTATION PLAN - BACKLOG

Question: EPA's budget documents indicate that at the end of FY 2015, EPA had 557 backlogged state implementation plans, the agency will have 300-400 at the end of FY 2016, and will still have 100-200 by the end of FY 2017 (see CJ at p. 903).

A. Could staff assigned to the Clean Power Plan be shifted over to work on reducing the SIP backlog? If not, why not?

Answer: The EPA has been working with states since 2013 on plans to reduce the SIP backlog and address the states' priority SIPs. This work has resulted in four-year plans developed with states to substantially reduce the historic backlog of SIPs by the end of 2017. Steady and substantial progress has been made over the last several years, through the EPA and the states working together. Work on the Clean Power Plan (CPP) is not expected to negatively impact the EPA's efforts to reduce the SIP backlog.

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

Question: In its budget documents, EPA states that regional implementation of the National Ambient Air Quality Standards (NAAQS) is becoming "increasingly complex."

A. Does EPA have sufficient staff and expertise to fully implement the 2008 ozone standards, and also implement the 2015 ozone standards at the same time?

B. Does EPA have the resources to timely process all of the new state implementation plans that will have to be submitted by states or counties under these standards?

Answer: The EPA and state co-regulators share a long history of managing ozone air quality under the Clean Air Act (CAA), underpinned by a wealth of previously issued EPA rules and guidance. In particular for areas where states are still actively working toward attaining the 2008 ozone NAAQS, the EPA is committed to helping air agencies identify and take advantage of potential planning and emissions control efficiencies that may occur within the horizon for attaining the 2015 standards. Following past precedent, the EPA intends to propose revoking the 2008 standards and provide transition rules intended to help avoid any potential inefficiencies as states begin implementing the Clean Air Act's requirements for the 2015 standards.

CLEAN AIR SCIENTIFIC ADVISORY COMMITTEE (CASAC)

Question: Under Section 109 of the Clean Air Act, the Clean Air Scientific Advisory Committee is supposed to advise EPA of "any adverse public health, welfare, social, economic or energy effects which may result from various strategies for attainment of national ambient air quality standards." Last May, the Government Accountability Office (GAO) issued a report (see http://gao.gov/assets/680/670288.pdf) indicating that CASAC has never provided advice on adverse social, economic or energy effects related to NAAQS because EPA has never requested such advice from CASAC.

A. Please explain why EPA has not requested CASAC to perform its statutory duty and advice on adverse effects relating to implementing NAAQS?

B. What is EPA's estimate of budgetary and personnel resources that would be necessary to support CASAC in this particular work?

Answer: CAA section 109 (d)(2)(C)(iv) states that one of the committee's duties is to "advise the Administrator of any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attainment and maintenance of [NAAQS]." The provision does not require that CASAC provide this advice as part of the five year review cycle. Moreover, when the Supreme Court in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), held that the EPA could not consider implementation and other costs in setting the NAAQS, the Court further held that any CASAC advice related to costs of implementation under 109 (d)(2)(C)(iv) would not be relevant to the EPA's review of the NAAQS. Therefore, as part of the most recent ozone review we have not provided CASAC with studies or charge questions that examine the adverse social, economic, or energy effects that may result from various strategies for attainment of the NAAQS.

The CAA does provide state and local officials in nonattainment areas the ability to consider several factors, including social, economic, and energy impacts, when designing their state implementation plans to implement the NAAQS. To assist the states, the EPA has received, and will continue to request, advice on health, welfare, and economic effects of strategies to improve air quality from several different science advisory bodies (including the Council on Clean Air Compliance Analysis, the National Research Council, and the Clean Air Act Advisory Committee). In addition, the EPA has provided states with information on air pollution control techniques, including the cost to implement such techniques (e.g., Control Techniques Guidelines and other implementation guidance). With respect to requesting advice from CASAC

related to CAA section 109 (d)(2)(C)(iv), the agency is continuing to examine the issue and is considering how to proceed.

The EPA has not estimated the budgetary or personnel resources that would be necessary to support such work.

METHANE EMISSIONS

Question: Recently the White House released a Joint Statement between the United States and Canada which indicated EPA "will begin developing regulations for methane emissions from existing oil and gas sources immediately and will move as expeditiously as possible to complete this process."

A. Given EPA's work on voluntary programs for existing oil and gas sector sources, when did the agency begin discussion of possible mandatory programs for these sources?

B. Please provide the timeline for development of these regulations, including any information collection requests.

C. Under what statutory authority does EPA plan to develop these regulations?

D. What is the status of development of these regulations?

E. Does EPA plan to propose or finalize regulations before the end of the Administration?

F. Is EPA considering establishing cap-and-trade standards for methane similar to what the agency has done in the Clean Power Plan for the power sector?

G. Is EPA considering setting individual state methane targets or budgets similar to what the agency has done in the Clean Power Plan for the power sector?

H. Does EPA envision that it will be imposing "federal plans" on state oil and gas sectors to impose methane or greenhouse gas emissions trading like the Clean Power Plan?

Answer: On May 12, 2016, the EPA issued three final rules that together will curb emissions of methane, smog-forming volatile organic compounds (VOCs) and toxic air pollutants such as benzene from new, reconstructed and modified oil and gas sources, while providing greater certainty about Clean Air Act permitting requirements for the industry.

The EPA also took a critical step needed to carry out the Administration's commitment to regulate methane emissions from *existing* oil and gas sources: the agency issued for public comment an Information Collection Request (ICR) that will require companies to provide extensive information instrumental for developing comprehensive regulations to reduce methane emissions from existing oil and gas sources.

The ICR process, which is governed by the Paperwork Reduction Act, provides the public two opportunities to review drafts of the information collection request. The draft ICR was published on June 3, 2016, and the first of two public comment periods will last for 60 days. The agency may revise the first draft as necessary based on comments and then publish a second draft which will also be submitted to the Office of Management and Budget (OMB) for review. If the collection request is approved by OMB – which can include surveys and required emissions monitoring – it will be sent to industry, who is required to respond and attest that the information is accurate. The EPA's goal is to receive the first phase of information later this year.

MERCURY AND AIR TOXICS STANDARDS

Question: The EPA's budget documents refer to the agency's defense of the litigation in the U.S. Supreme court relating to the "Mercury and Air Toxics Standards." In that case, the Court held EPA erred in failing to consider costs when deciding it was "necessary and appropriate" to issue the rule. EPA has stated in a proposed supplemental finding in response to the Supreme Court's ruling said that the annual costs of the rule are $9.6 billion in 2015, $8.6 billion in 2020, and $7.4 billion in 2030.

A. EPA provides annual costs for just 3 years over a 15 year period. What is the total cost of that rule over this period?

B. Does EPA agree that, based on the three points in time estimates, the total estimated costs would exceed more than $100 billion?

Answer: The EPA issued a final supplemental finding on April 14, 2016. In that final supplemental finding, the EPA discussed the costs and benefits of the rule on page 24423. The final finding was published in the Federal Register on April 24, 2016 and can be found at https://www.gpo.gov/fdsys/pkg/FR-2016-04-25/pdf/2016-09429.pdf.

In the final supplemental finding, the EPA evaluated costs to determine whether compliance with MATS is reasonable for the power sector. The EPA determined that the projected annual cost of MATS is a small fraction when compared to overall sales in the power sector - between just 2.7 and 3.5 percent of annual electricity sales from 2000 to 2011. The EPA also determined that annual compliance capital and operating expenditures to comply with MATS are a small fraction of the industry's capital and operating expenditures in a historical context.

The EPA also presented the results of an extensive cost-benefit analysis that was conducted at the time MATS was issued in 2012. This analysis found that the benefits of MATS are substantial, and for every dollar spent to reduce toxic pollution from power plants, the American public would see up to $9 in health benefits.

ENFORCEMENT - PENALTIES AND FINES

In the Congressional Justification (CJ at 888), EPA states that "The Agency obtained more than $404 million in combined federal administrative, civil judicial penalties and criminal finesmore than double the penalties and fines assessed in FY 2014."

A. Can EPA quantify how much its enforcement actions have actually improved the environment? For example, does more than doubling the penalties equate to more than doubling the environmental benefits?

B. Under EPA's National Enforcement Initiatives, one of those initiatives is "Ensuring Energy Extraction Activities Comply with Environmental Laws." Is obtaining significant monetary fines and penalties from the oil and gas sector an important part of this initiative?

C. Before threatening significant penalties under this initiative and other enforcement actions, does EPA consult with the relevant State authorities with primary jurisdiction over the regulated entities? If not, why not?

D. Does EPA have any protocol it follows with the Department of Justice before threatening significant penalties? If yes, how does the agency ensure the protocol is consistently followed?

Question: Can EPA quantify how much its enforcement actions have actually improved the environment? For example, does more than doubling the penalties equate to more than doubling the environmental benefits?

Answer: The overarching goal of the EPA's enforcement program is to assure compliance with our nation's environmental laws. A strong and effective enforcement program is essential to realizing the benefits of our laws and regulations, maintaining a level economic playing field, and attaining the public health and environmental protections our federal statutes were created to achieve. The EPA determines the environmental benefits associated with concluded enforcement actions using a set of science-based principles and a standard methodology that ensures national consistency.[1] In FY 2015, the environmental benefits of the EPA's enforcement actions included commitments to treat, minimize, or properly dispose of an estimated 535 million pounds of hazardous waste; to reduce pollution by an estimated 532 million pounds per year; to remediate an estimated 37 million cubic yards of contaminated soil; and to remediate an estimated 29 million cubic yards of contaminated water/aquifers.[2] Our enforcement annual results website includes an interactive map as well as analysis and trends information.

The amount of the pollutant reductions in a given case depend on a myriad of case-specific factors – for example, the overall size of a facility/how much pollution it generates, the extent of the pollution controls needed to comply with applicable requirements, whether mitigation of past environmental harm is needed, and whether a defendant voluntarily undertakes additional pollutant-reduction measures in settlement (i.e., supplemental environmental projects), among other factors. Civil penalties are based on specific factors enumerated in each of the statutes – such as the size of the business, its prior compliance history, the duration and severity of the violation(s), any good faith efforts to comply, and the economic benefit that the defendant may have unfairly obtained (by not installing and/or operating required pollution control equipment) over its competitors who complied with the law, among others. The EPA applies these factors using the applicable enforcement response policy or penalty policy in order to tailor penalties in a way that takes into account the unique circumstances of each individual case and defendant.

Question: Under EPA's National Enforcement Initiatives, one of those initiatives is "Ensuring Energy Extraction Activities Comply with Environmental Laws." Is obtaining significant monetary fines and penalties from the oil and gas sector an important part of this initiative?

Answer: Penalties are a component of the EPA's enforcement program and while an important tool for fair and effective enforcement, the primary objectives of the initiative for "Ensuring Energy Extraction Activities Comply with Environmental Laws" are addressing the public health and environmental risks in this area, and ensuring compliance with all applicable laws. As the nation continues to develop new forms and sources of energy, there is an urgent need to ensure that we develop energy sources in an environmentally protective manner. Working closely with states, the EPA has settled a number of high-impact cases under this initiative resulting in significant air emissions reductions and will continue to identify the best ways to address pollution through greater use of advanced pollution monitoring and reporting techniques.

Question: Before threatening significant penalties under this initiative and other enforcement actions, does EPA consult with the relevant State authorities with primary jurisdiction over the regulated entities? If not, why not?

Answer: The EPA is working closely with our state partners on the Energy Extraction initiative including conducting joint inspections and inviting states to be co-plaintiffs in actions where our enforcement authorities are jointly shared. For example, in the Energy Extraction initiative, the EPA and the state of Colorado conducted joint inspections at well sites in the D-J Basin and Colorado was a co-Plaintiff in the recent settlement with Noble Energy, Inc.[3] In addition, West Virginia has been a partner in multiple energy extraction settlements since 2013. Also, as a matter of practice, the EPA notifies the state prior to taking an enforcement action as required by §113(a) of the Clean Air Act.

Question: Does EPA have any protocol it follows with the Department of Justice before threatening significant penalties? If yes, how does the agency ensure the protocol is consistently followed?

Answer: The EPA follows an established protocol when interacting with the Department of Justice on relief sought, including penalties, in a civil judicial enforcement case. The protocol provides direction to the EPA in the development of referrals to DOJ for civil judicial

enforcement and facilitates the conveyance of useful information and provides an analytical framework for joint EPA-DOJ case decisions. This protocol is applicable to all enforcement matters referred to DOJ for judicial action (except for hazardous waste cleanups under CERCLA or RCRA, or for violations of response orders and cost recovery claims on behalf of the Coast Guard in oil spill cases under Section 311 of the Clean Water Act).

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[1] See https://www.epa.gov/enforcement/guide-calculating-environmental-benefits-epa-enforcement-cases for specific benefit calculation methodologies.

[2] More detailed results of our FY 2015 enforcement program can be found at https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-fy-2015.

[3] See https://www.epa.gov/enforcement/noble-energy-inc-settlement.

STATE CLEAN AIR REGULATIONS - CIVIL PENALTIES

Question: We understand that EPA may be conducting an enforcement campaign imposing significant civil penalties on oil and natural gas operators based on alleged violations of State clean air regulations.

A. Is this correct?

B. If yes, can you explain? What statutory authority does EPA have to usurp a state's authority to enforce its own state law?

Answer: The EPA is conducting an enforcement initiative to assure that domestic onshore natural gas extraction is done in a way that protects the environment. The primary objectives of the initiative for "Ensuring Energy Extraction Activities Comply with Environmental Laws" are addressing public health and environmental risks and ensuring compliance with applicable Federal laws. Importantly, Section 110 of the Clean Air Act requires each State to develop and submit to EPA for approval a State Implementation Plan (SIP) to ensure the achievement of compliance with air quality standards by, among other things, establishing enforceable emission limitations and other measures on air emissions. A particular State's SIP submission usually includes provisions incorporating State laws addressing air pollution, and once those provisions are approved for inclusion in the SIP, they become federally enforceable. Thus, both EPA and a State have the authority to enforce the requirements of these SIPs. Where a SIP includes requirements applicable to oil and gas production whether they are derived from existing State laws or existing Federal laws and a facility is not in compliance with those SIP requirements, Clean Air Act Section 113 authorizes EPA to take action to require the facility to come into compliance with the SIP. In addition, Section 113 of the Clean Air Act requires that EPA notify a State prior to EPA taking an action to enforce a SIP requirement.

OIL AND GAS SECTOR - BUDGET - ENFORCEMENT INITIATIVE

Question: How much is EPA budgeting for its enforcement initiative focused on the oil and gas sector?

Answer: The proposed FY 2017 budget for the civil enforcement program is $185.6 million. This amount is intended to support all of the EPA's enforcement actions under all media to assure compliance with the nation's environmental laws and regulations in order to protect human health and the environment. Together with the Department of Justice, states, local agencies, and tribal governments, the EPA seeks to ensure consistent and fair enforcement of all environmental laws and regulations to protect public health and the environment. The EPA strives to ensure a level playing field by strengthening partnerships with co-implementers in the states, encouraging regulated entities to rapidly correct their own violations, ensuring that violators do not realize an economic benefit from noncompliance and pursuing enforcement to deter future violations. The FY 2017 budget for the civil enforcement program also supports each of the EPA's National Enforcement Initiatives; in addition to "Ensuring Energy Extraction Activities Comply with Environmental Laws," the new initiatives for FY 2017 – FY 2019 include "Keeping Industrial Pollutants Out of the Nation's Waters," "Cutting Hazardous Air Pollutants" and "Reducing Risks of Accidental Releases at Industrial and Chemical Facilities[1]."

[1] (For more information on the EPA's National Enforcement Initiatives, see https://www.epa.gov/enforcement/national-enforcement-initiatives.)

MONTREAL PROTOCOL

Question: The Administration has been seeking to amend the Montreal Protocol to expand the treaty to cover hydrofluorocarbons or HFCs (a widely used class of chemicals that had been previously approved by EPA as substitutes for the compounds that were banned in the 1990 Clean Air Act because of their contribution to ozone depletion). In addition, EPA has recently finalized a rule restricting the use of HFCs in specific applications, and has stated that it will propose others in the near future.

A. The EPA led the negotiating team with respect to the international discussion last year, correct?

B. If the treaty is amended, it would need ratification by the U.S. Senate, correct?

Answer: The Montreal Protocol negotiating team is comprised of representatives from various agencies and departments including the EPA and the Department of State. In 2015, the Administrator was the Head of Delegation for the high level Meeting of the Parties, and the Department of State was Head of Delegation for other Protocol Meetings. Any questions concerning ratification should be directed to the Department of State.

HYDROFLUOROCARBONS (HFCS)

Question: Are current substitutes for HFCs more expensive and less safe?

A. What are estimates of the costs to consumers of phasing out HFCs?

B. One trade association, in a meeting with the White House, pledged to spend $5 billion dollars to replace HFCs in the years ahead. Isn't this an indication that the task will be very expensive?

C. What provisions are being made to avoid the premature obsolescence of HFC-using equipment such as refrigerators and air-conditioners so as to reduce the burden on small businesses and consumers?

D. Is EPA weighing the risks of HFCs against the risks of substitutes, some of which are known to be flammable or pose other dangers?

Answer: Under Section 612 of the Clean Air Act (CAA), the EPA's Significant New Alternatives Policy (SNAP) program reviews substitutes within a comparative risk framework across multiple industrial sectors. The SNAP program does not provide a static list of alternatives, but instead evolves the list as the EPA makes decisions that are informed by its overall understanding of the environmental and human health impacts as well as its current knowledge about available substitutes. For over 20 years since the initial SNAP rule was promulgated, the EPA has modified the SNAP list many times. There has been steady progress in developing safer alternatives that are suitable for use with a greater focus on new, not existing, equipment.

The EPA responded to comments on the cost and economic impacts of the proposed rule (79 FR 46126; August 6, 2014) in the comments sections for the end-uses addressed in the final rule, as well as in the section addressing public comments, see section VII.C. (80 Fr 42944; July 20, 2015), available at www.epa.gov/snap/snap-regulations#Rules. The EPA also conducted analyses of potential costs associated with the final and proposed changes, available in the docket at regulations.gov for the July 2015 final rule at EPA-HQ-OAR-2014-0198, and the docket for the April 2016 proposed rule at EPA-HQ-OAR-2015-0663.

In September 2014 and October 2015, the Administration announced new private-sector commitments and executive actions that will reduce the use and emissions of HFCs. To demonstrate U.S. leadership and commitment to innovation, the Air Conditioning, Heating and Refrigeration Institute (AHRI) announced in September 2014 that, combined, its members would

spend $5 billion in new R&D and capital expenditures to develop and commercialize low-GWP technologies over the next ten years. The White House factsheet from the October 2015 event is available at www.whitehouse.gov/the-press-office/2015/10/15/fact-sheet-obama-administration-and-private-sector-leaders-announce.

Information on the EPA's Small Business Impacts Screening Analysis is included in section VII.B.2 of the final rule (80 FR 42943; July 20, 2015). Servicing of existing equipment is not restricted by the SNAP regulations; thus, the final rule does not result in premature obsolescence of HFC-using equipment. Also, information on the EPA's SNAP guiding principles and criteria for comparative risk assessment is in the final rule sections II.D and II.E, respectively (80 FR 42876; July 20, 2015).

MONTREAL PROTOCOL - U.S. PROVISIONS

Question: Why is the administration pursuing international provisions under the Montreal Protocol while simultaneously promulgating U.S.-only restrictions on HFCs?

A. Aren't the U.S. only- provisions unnecessary and duplicative, especially since climate change is a global issue?

B. Won't the U.S.-only provisions disproportionately burden American consumers and businesses?

Answer: Title VI of the Clean Air Act was enacted to implement the Montreal Protocol and to take complementary domestic actions. Section 612 of the Clean Air Act directs the EPA to list both acceptable and unacceptable alternatives to ozone-depleting substances under the SNAP program. CAA section 612(c) requires the EPA to list a substitute as unacceptable if other available alternatives pose lower risk to human health and the environment. The EPA sees no conflict between the United States' strong support for a global HFC phase-down and this domestic action. The amendment proposal calls for a phase-down of production and consumption of a group of HFCs. It applies phase-down steps to this group of HFCs as a basket and does not assign individual deadlines to specific HFCs or address specific uses.

GREENHOUSE GASES RULES - HFCS REGULATIONS

Question: EPA's first rule restricting HFCs failed to calculate the expected reduction in temperatures and sea levels as the agency has done for other greenhouse gas rules.

A. Why did EPA not estimate these reductions?

B. Is there some threshold impact on temperatures and sea levels below which EPA will not take action, or is the agency committed to HFC regulations no matter how small the estimated benefits?

Answer: The EPA has conducted analyses including estimates of avoided CO_2 equivalent emissions, available in the docket for the July 2015 final rule at docket ID No. EPA-HQ-OAR-2014-0198 and the April 2016 proposed rule available at docket ID No. EPA-HQ-OAR-2015-0663.

Changes in the average temperature of the planet can translate to large and potentially dangerous shifts in climate and weather. Many places have seen changes in rainfall, resulting in more floods, droughts, or intense rain, as well as more frequent and severe heat waves. As these and other changes become more pronounced in the coming decades, they will likely present challenges to our society and our environment. To address the challenge of climate change, the EPA is reducing greenhouse gas emissions through highly successful partnerships and common-sense regulatory initiatives.

HYDROFLUOROCARBONS - DEPT OF ENERGY

Question: EPA's first rule regulating HFCs conflicted with Department of Energy efficiency standards that apply to some of the same types of equipment. HFCs are very energy efficient but some of their substitutes are not, so EPA restrictions on their use may complicate compliance with DOE efficiency standards.

A. Will EPA commit to better coordination with DOE on HFC-related rulemakings?

B. Does EPA plan to take the efficiency of substitutes into account before it bans HFCs in additional equipment?

C. If EPA plans to restrict HFCs in home appliances such as refrigerators and air-conditioners, will it consider the impacts on consumer costs and on household safety?

Answer: The EPA and the Department of Energy continue to collaborate and share information to minimize any potential conflicts between energy conservation standards and SNAP regulations. The agency considers issues such as technical needs for energy efficiency (e.g., to meet DOE conservation standards) in determining whether alternatives are "available". This is discussed in the final rule section VII.E (80 Fr 42946; July 20, 2015).

HYDROFLUOROCARBONS - CLEAN AIR ACT

Question: Congressional intent seems clear that HFCs cannot be regulated on the basis of the global warming potential. In fact, the Clean Air Act explicitly states that the global warming potential of a compound cannot be used as the basis of any regulation. Furthermore, legislative attempts to amend the Clean Air Act to restrict HFCs have repeatedly failed to become law. What statutory language are you relying upon that leads you to the opposite conclusion?

A. HFCs were previously approved by the agency as safe replacements for the ozone depleting compounds that were being banned under the Clean Air Act. They are now in widespread use as a consequence of EPA's actions. Even assuming EPA can ban chemicals on the basis of their global warming potential, does the agency have the authority to do so to previously-approved compounds?

Answer: The EPA discussed these issues in sections II and II.A.3 of the July 2015 final rule (Rule #20), available at www.epa.gov/snap/snap-regulations#Rules.

CAFE/GHG STANDARDS

Question: EPA's CAFE/GHG standards for cars and light trucks were issued in 2012 and will get more and more stringent every year through 2025. However, much has changed since 2012, and in particular gasoline prices are much lower today than the EPA had anticipated. As a result, we see that consumer demand for larger vehicles like pickups and SUVs is growing, while sales of hybrids have dropped to levels so low as to call into question whether EPA's stringent targets can be met in the years ahead.

1. EPA is in the beginning stages of conducting its mid-term review of the standards for Model Years 2022 – 2025. In that review, will you look into the possibility that the standards may need to be adjusted downwards to take consumer interests into account?

1. According to one study, the sticker price of new vehicles had been declining through 2008 but has been on the rise since 2009. The average price of a new car has risen to $32,000. Is the agency considering adjusting the standards to reduce the burden on consumers?

Answer: As part of the rulemaking establishing the model year (MY) 2017-2025 light-duty vehicle GHG standards, the EPA made a regulatory commitment to conduct a Midterm Evaluation (MTE) of longer-term standards for MY 2022-2025. The EPA is coordinating with the National Highway Traffic Safety Administration (NHTSA) and the California Air Resources Board (CARB) in conducting the MTE. The MTE is being conducted through a collaborative, data-driven, and transparent process.

Through the MTE, the EPA will decide whether the standards for model years 2022-2025, established in 2012, are still appropriate given the latest available data and information. The Administrator's decision could be that the standards remain appropriate, or that the standards should be changed, either more stringent or less stringent. The EPA is examining a wide range of factors, such as developments in powertrain technology, vehicle electrification, light-weighting and vehicle safety impacts, the penetration of fuel efficient technologies in the marketplace, consumer acceptance of fuel efficient technologies, trends in fuel prices and the vehicle fleet, employment impacts, and many others.

CAFE/GHG STANDARDS - UPDATES

Question: EPA's CAFE/GHG standards for cars and trucks are now several years old, and some of the assumptions that went into them are no longer valid. This is particularly true about gasoline prices, which have experienced an unexpectedly sharp decline. Has EPA updated its analysis to reflect this change?

A. EPA claimed that car buyers would be net economic winners as a result of these rules because the money saved from reduced fuel use would more than offset the higher sticker price of compliant vehicles. But according to EIA, gas prices are more than a dollar per gallon cheaper than was projected in 2012 when the car rule was finalized. What is EPA's position on the economic benefits to consumers now? Is it possible that some car owners won't earn back the higher sticker price in the form of gasoline savings?

B. EPA's latest rule for heavy duty vehicles was proposed last July and will be finalized this summer. Will EPA's final rule reflect the latest data on gasoline prices, which are considerably lower than the data used in the proposed rule?

Answer: As part of the Midterm Evaluation, the EPA is examining a wide range of factors including considering updated projections about future gasoline prices and an assessment of the vehicle market and consumer impacts. The final rule for heavy-duty vehicles also will use the best available information (such as information from the U.S. Energy Information Administration's 2015 Annual Energy Outlook).

EPA'S STANDARDS - VEHICLE PURCHASES

Question: Due in part to lower gasoline prices, consumer preferences have also changed, leading some to worry about the feasibility of EPA's standards. In fact, sales of hybrids and electric vehicles have been much lower than predicted, and truck sales are now outpacing car sales.

A. Explain how EPA's assumptions about vehicle purchases are in line with actual consumer preferences?

B. Are EPA's rising targets in the years ahead still achievable if gasoline prices do not rise significantly?

Answer: The light-duty GHG program is designed to reduce emissions and improve fuel economy proportionally across the entire spectrum of vehicles. It does not require all cars and trucks to meet an identical standard. Each automaker has its own unique fleet wide standard which is determined by the types and numbers of cars and trucks the manufacturer chooses to produce. This approach was adopted in order to achieve emissions reductions and fuel savings while accommodating consumer choice for any particular size or class of vehicle. As part of the Midterm Evaluation, the EPA will update the assessment of technologies available to meet the MY 2022-2025 standards, as well as other factors including the vehicle market, gasoline prices, and consumer impacts.

HIGHER VEHICLE PRICES

Question: While the estimated fuel savings from these rules may be less than expected, the boost in sticker prices may be much more than expected. EPA's original analysis estimated an increase of nearly $3,000 per vehicle by 2025, which is significant enough. But other estimates are considerably higher. Does EPA stand by its original analysis?

A. Average car prices were declining through 2008, but starting in 2009 they have been rising and in fact are now $6,200 higher than if the downward trend had continued. The average price of a new vehicle today has risen to $32,000. How much of this increase is attributable to the cost of EPA's GHG standards?

B. A recent study by the Heritage Foundation finds that the increase in vehicle prices from EPA's rule is thousands of dollars higher than EPA has estimated. What has EPA done to validate its original cost estimates?

C. According to a study from the National Association of Auto Dealers, up to 14.9 million low income households may not be able to qualify for a car loan by 2025 as a result of the EPA-induced rise in car and truck prices. Has the agency looked at the regressive impacts of higher vehicle prices?

Answer: As previously discussed, as part of the Midterm Evaluation the EPA will update its assessment of the vehicle market and impacts on consumers.

MID-TERM REVIEW OF STANDARDS

Question: EPA will soon embark on its mid-term review of these rules. Will consumer concerns be a part of the evaluation?

A. Will EPA consider relaxing these standards due to lower fuel savings and high sticker shock than was originally predicted?

B. EPA conceded in its final rules that their car and truck standards would have a very minor impact on the climate, estimated at perhaps a few hundredths of a degree C reduction in temperature and a few millimeters in sea level rise by 2100. Have these estimates changed since they were included in the final rules?

Answer: As previously discussed, as part of the Midterm Evaluation, the EPA will update its assessment of the vehicle market and impacts on consumers.

FUEL ECONOMY NHTSA

Question: These CAFE/GHG standards are really two overlapping programs, one from EPA and the other from NHTSA. And regulated automakers are finding that the two programs are not always harmonized. For example, the credits earned by automakers for exceeding the standard are subject to differing rules. For EPA, these credits have duration of up to 10 years, but for NHTSA they only last for 5 years. And while EPA has no limits on the amount of credits that can be transferred between the car and the truck fleet, NHTSA only allows such transfers up to 2 mpg worth of credits. Is EPA working with NHTSA to try to harmonize these rules?

Answer: The EPA continues to work with NHTSA to minimize differences between the two programs, recognizing that Congress has given the two agencies different statutes and obligations.

HD GHG STANDARDS

Question: The July 13, 2015, Notice of Proposed Rulemaking for medium and heavy-duty trucks would, for the first time, also regulate the trailer portion of a tractor-trailer. However, trailers do not come within the statutory definition of a motor vehicle (they are not self-propelled), nor are they an integral part of a motor vehicle (trailers are separately manufactured and completely detachable from the motor vehicles designed to pull them). Also relevant to this proposed rule targeting vehicle emissions is the fact that trailers are not a source of emissions. In light of this, on what basis does EPA claim authority to regulate trailers?

Answer: The EPA received comments similar to yours on this aspect of the proposed rule (80 FR 40169-71; July 13, 2015) and is currently considering them as it works to develop a final rule. The final rule will respond to these comments and explain the EPA's conclusion. See document number EPAHQOAR201408271627, "Legal Memorandum Discussing Issues Pertaining to Trailers, Glider Vehicles, and Glider Kits under the Clean Air Act," located in the public docket for the rulemaking at regulations.gov.

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