

U.S. Senate Committee on Environment and Public Works
Hearing entitled, “Hearing on the Nomination of Andrew Wheeler to be Administrator of
the Environmental Protection Agency”

January 16, 2019

Questions for the Record for Mr. Andrew Wheeler

Ranking Member Carper:

Your responses to questions for the record from the Committee’s August 1, 2018 hearing left much to be desired. Many questions did not receive specific responses, which is troubling given that the Committee did not receive your answers for four months. Please ensure that your responses to these questions are not similarly deficient. Moreover, in light of the Agency’s insistence on moving forward quickly with your confirmation hearing and the use of furloughed staff to prepare you for it, please do not attempt to justify a failure to provide any of the responses or requested materials on the shutdown, absent a concurrent request that further action on your nomination be postponed until after the EPA re-opens.

I appreciate your questions for the record following up on my January 16, 2019, confirmation hearing. The EPA has demonstrated that it takes inquiries from Congress very seriously. The Agency provided a thorough job of responding to the Questions for the Record from my prior confirmation hearing, and we are doing the same here while protecting our ability to complete reasoned and deliberative rulemaking on the actions that are in process. I am discouraged to learn from the Questions for the Record for this hearing that you found my answers deficient from a previous hearing although that concern has not been raised during our handful of meetings and discussions with you since that time. While maintaining those important executive branch equities, I will ensure that the longstanding practice of providing timely responses to Congressional inquiries continues, including producing documents as appropriate. If confirmed, I look forward to continuing to work with you and your staff to provide the information that Congress needs to perform its proper legislative function.

Questions on the Trump Administration’s Proposed Fuel Economy and Greenhouse Gas Tailpipe Standards Rollback

I asked you a number of questions on this topic following your testimony at the August 1, 2018 hearing. You failed to provide specific responses. Please do so now promptly, and answer the additional questions, especially in light of your statement at the hearing that “We know that we need to finalize our [fuel economy and greenhouse gas tailpipe standards] proposal by March 30.”

1. During the development of the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-26 Passenger Cars and Light Trucks”, EPA officials met with OMB and NHTSA officials to convey their concerns about the proposal several times. They left numerous documents with OMB officials that are now part of the rulemaking docket¹. These

¹ <https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0283-0453>

documents indicate that there are significant problems with the model that was used by NHTSA to develop the proposal to freeze fuel economy and greenhouse gas tailpipe standards from 2020-26. One such example is a document titled “Email_5_-_Email_from_William_Charmley_to_Chandana_Achanta_-_June_18,_2018%20(1).pdf”. This 122 page long document includes a number of PowerPoint presentations EPA made to OMB and NHTSA staff along with additional documentation and analysis.

- a. The document notes that “EPA analysis to date shows significant and fundamental flaws in CAFE model (both the CAFE version and the “GHG version”).... These flaws make the CAFE model unusable in current form for policy analysis and for assessing the appropriate level of the CAFE or GHG standards.” Do you believe that each of these flaws were fully remedied before the rules were proposed? If so, please list the specific remedies that addressed each of EPA’s concerns. If not, will you ensure that all necessary technical input from EPA’s Office of Transportation and Air Quality is incorporated into the final rule in order to ensure that the rule cannot be successfully over-turned in court on grounds that the model on which it is based is significantly or fundamentally flawed?

As I explained in responding to a similar question arising out of my August 1, 2018 hearing before the Committee, the documents you reference were made available by EPA in the rulemaking docket, because they are part of the documentation of interagency review of the draft proposed rule. EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies’ joint rulemaking development efforts.

In particular, with respect to the CAFE model, I would point out, that, as outlined in the Notice of Proposed Rulemaking, available at Docket No. EPA-HQ-OAR-2018-0283, having reviewed comments on the subject and having considered the matter fully, the agencies determined it is reasonable and appropriate to use DOE/Argonne’s model for full-vehicle simulation, and to use DOT’s CAFE model for analysis of regulatory alternatives. Using the CAFE model allows consideration of the following factors: the CAFE model explicitly evaluates the cost of compliance for each manufacturer, each fleet, and each model year; it accounts for lead time necessary for compliance by directly incorporating estimated manufacturer production cycles for every vehicle in the fleet, ensuring that the analysis does not assume vehicles can be redesigned to incorporate more technology without regard to lead time considerations; it provides information on safety effects associated with different levels of standards and information about many other impacts on consumers, and it calculates energy impacts (i.e., fuel saved or consumed) as a primary function, besides being capable of providing information about many other factors within EPA’s broad Clean Air Act discretion to consider. See 83 Fed. Reg. 43,000-01.

As work on this rule is ongoing, it would not be appropriate for me to comment on whether, as you put it, “each of these flaws were fully remedied before the rules were proposed.” We will be developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- b. One of the main contributors to the NHTSA conclusions that the augural standards would cause thousands of additional deaths is NHTSA’s “consumer choice” module, which asserts that making the fleet more fuel efficient will cause people to keep their less safe, older vehicles for longer, and that this will mean there are more unsafe vehicles on the road (because newer vehicles have more safety technologies). The document states that EPA believed this NHTSA model was flawed, because it predicts an additional 26 million non-existent vehicles would be in the 2016 fleet and 46 million additional non-existent vehicles in the 2030 fleet. For context, this would represent a 15-20% increase in registered vehicles. The document also notes that this problem appeared to be un-remedied several months after EPA first raised it. Was this problem remedied in the proposed rule? If so, how? If not, will you ensure that it is remedied before the EPA rule is finalized in order to avoid litigation that will result in the rule being overturned on grounds that the model on which it is based is significantly or fundamentally flawed?

With respect to the consumer choice model as it predicts fleet turnover, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies’ joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to comment on your query whether, as you put it, “this problem [was] remedied in the proposed rule.” We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- c. The document also found that NHTSA’s consumer choice model predicts an unexplained, and apparently fictitious 10-15% increase in vehicle miles traveled (VMT). Specifically, the model somehow predicts people will drive an extra 239 billion miles in 2016 and 302 billion more miles in 2030. The increased deaths associated with higher efficiency standards in the NHTSA model are highly correlated to VMT (more driving equals more accidents equals more deaths). It would thus seem that EPA believes that the NHTSA safety numbers are predicated on an entirely fictitious driving scenario. Was this problem remedied in the proposed rule? If so, how? If not, will you ensure that it is remedied before the EPA rule is finalized in order to avoid litigation that will result in the rule being overturned on grounds that the model on which it is based is significantly or fundamentally flawed?

With respect to the consumer choice model as it predicts VMT, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies' joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to comment on your query whether, as you put it, "this problem [was] remedied in the proposed rule." We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- d. The document also notes that NHTSA does not accurately model the manner in which automobile manufacturers trade credits as part of their compliance strategies, observing that NHTSA does not assume that compliance credits are traded between manufacturers' car and truck fleets (which is the manufacturers' current practice), and that this has the effect of over-estimating compliance costs. Was this modeling problem remedied in the proposed rule? If so, how? If not, will you ensure that it is remedied before the EPA rule is finalized in order to avoid litigation that will result in the rule being overturned on grounds that the model on which it is based is significantly or fundamentally flawed?

With respect to the modeling of credit trading, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies' joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to comment on your query whether, as you put it, "this modeling problem [was] remedied in the proposed rule." We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- e. The document observes that NHTSA's model overestimates the costs of particular technologies compared to their actual costs and use in the real world. The model also reportedly selects the most expensive technology packages to meet the standards, which overestimates the most cost-effective ways to do so by \$1-2,000 per vehicle. Do you agree that manufacturers would be more likely to select the most cost-effective set of technologies with which to meet standards, rather than the least cost-effective set of technologies? If not, why not? Was this problem remedied in the proposed rule? If so, how? If not, will you ensure that it is remedied before the EPA rule is finalized in order to avoid litigation that will result in the rule being overturned on grounds that the model on which it is based is significantly or fundamentally flawed?

With respect to the modeling of technology cost and technology selection, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies' joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to comment on your query whether, as you put it, "this problem [was] remedied in the proposed rule." We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- f. The document stated that the NHTSA model omitted the benefits of some fuel-efficient technologies entirely, while others were erroneously inputted into the model. For example, 'start/stop' technology, a technology that causes engines to automatically shut off while vehicles are stopped in traffic (and thus use no fuel), is estimated to have a negative effect on fuel-efficiency, which is simply not plausible. Were these problems remedied in the proposed rule? If so, how? If not, will you ensure that they are remedied before the EPA rule is finalized in order to avoid litigation that will result in the rule being overturned on grounds that the model on which it is based is significantly or fundamentally flawed?

With respect to the modeling of fuel-efficient technologies, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies' joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to comment on your query whether, as you put it, "these problems [were] remedied in the proposed rule." We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- g. The document observed that NHTSA's model appears to add vehicle miles travelled in unexplained ways. For example, it observed that as many as 25 billion more miles of driving were predicted in a given year, even when the rebound effect (a measure of how much extra driving consumers are expected to do as a result of having more fuel-efficient vehicles) was set to 0 percent. The document observes that NHTSA's model actually predicts less driving when the rebound effect was set to 20 percent (meaning 20% more driving by consumers in more fuel-efficient vehicles would have been included in the model) than when it was kept to 0 percent. This suggests that NHTSA's model is incapable of predicting anything accurately, separate and apart from whether one agrees with its policy premise. Was this problem remedied in the proposed rule? If so, how? If not, will you ensure that it is remedied before the EPA rule is finalized in order to avoid litigation that will result in the rule being overturned on grounds that the model on which it is based is significantly or fundamentally flawed?

With respect to the modeling of VMT, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies' joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to comment on your query whether, as you put it, "this problem [was] remedied in the proposed rule." We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- h. The document states that NHTSA's "Proposed standards are detrimental to safety, rather than beneficial" once NHTSA's modeling errors were corrected. In fact, EPA found that the proposed standards result in "an average increase of 17 fatalities per year in VYs 2036-2045" relative to the current standards. Do you agree with this conclusion? If not, why not?

With respect to the modeling of safety effects, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies' joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to respond to your query whether I "agree with this conclusion." We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- i. The document states that the NHTSA model projects that the current standards result in 8,000 fewer new automobiles sold annually in CYs 2021-2032, but that the used vehicle fleet would grow by 512,000 vehicles per year. That means that for every new fuel-efficient vehicle that consumers do not purchase (because NHTSA predicts their costs will be too high), somehow an additional 60 used vehicles will remain in the fleet. Do you agree that this scenario is simply implausible in the real world, as the EPA document points out? If not, why not? Was this problem remedied in the proposed rule? If so, how? If not, will you ensure that it is remedied before the EPA rule is finalized in order to avoid litigation that will result in the rule being overturned on grounds that the model on which it is based is significantly or fundamentally flawed?

With respect to the modeling of new sales and fleet size, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies' joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to comment on your query whether I "agree that this scenario is simply implausible in the real world." We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

- j. In draft comments submitted to OMB on June 29, EPA commented that more than 90% of the net benefits for which the proposed rule to freeze fuel economy and greenhouse gas tailpipe standards takes credit are in fact benefits associated with vehicles manufactured prior to 2021. EPA attributed this to NHTSA's flawed consumer choice model, and questioned whether these could technically be attributable to the actual post-2021 rule. What would the net benefits of the preferred alternative— and for each of the other seven alternatives included in the NPRM — be if the agencies were to compare the costs to the benefits of cars manufactured within the MY 2021-29 cohort timeframe?

With respect to the modeling of benefits, EPA and NHTSA are working collaboratively in developing this proposed rule and working through modeling methods and technical inputs and assumptions is a necessary and critical aspect of the agencies' joint rulemaking development efforts. As this work is ongoing, it would not be appropriate for me to comment on your query regarding the "net benefits of the preferred alternative" and the other alternatives. We are developing responses to the issue you raise here as part of our joint effort to finalize this important rule. We will not take definitive positions on any issues until the rule is final.

2. Please provide a list of all EPA employees or contractors who have been working on the fuel economy and greenhouse gas tailpipe standards rule since December 29, 2018, including a description of what precisely each individual has been doing and how much time they have spent on each task.

I and other Senate-confirmed senior managers have conferred on this rule. No career employees worked on the rulemaking during the shutdown.

3. I have been informed that on July 20, 2018, prior to the finalization and public release of the proposed roll-back, you received a briefing from EPA's career staff that consisted of about 20 slides (and a 3-page appendix) and lasted about an hour. The briefing described EPA career staff's significant concerns with the proposed rule, including their concern that the proposal "does not include EPA's technical assessment or input," that NHTSA failed to incorporate any of EPA's technical analysis or feedback, and that it was clear to EPA that "NHTSA doesn't want to engage EPA on technical aspects of NHTSA's analysis." That briefing also included the staff's request that EPA's logo be removed from the technical analysis document used to support the proposed rollback in light of the fact that no EPA input was included in it.

- a. Please provide me with a copy of the briefing slides.

The requested briefing slides include information that relates to a pending or contemplated action by EPA and are therefore deliberative and pre-decisional. We will provide any decisional documents in the administrative record for future final actions and can supply the final version at that time.

- b. You have repeatedly asserted in both public and private meetings that the proposed rollback will save lives. For example, in your January 16 nominations hearing you stated that “Under our proposal, we have submitted that there will be 1,000 lives saved a year under our CAFE proposal. I neglected to mention that earlier, but I think that is very important for everyone to understand.” Please provide me with a detailed explanation for why you have seemingly discounted the views and technical input of EPA’s career staff when making these statements.

I greatly value the views and technical input of EPA career staff. I have not in any way discounted them. As to the analysis of the vehicle safety issues you reference, EPA is working in conjunction with NHTSA on this joint rulemaking, and NHTSA is taking the lead with respect the safety implications at issue.

Further, I would point out, that, as outlined in the Notice of Proposed Rulemaking, available at Docket No. EPA–HQ–OAR–2018–0283, having reviewed comments on the subject and having considered the matter fully, the agencies determined it is reasonable and appropriate to use DOE/Argonne’s model for full-vehicle simulation, and to use DOT’s CAFE model for analysis of regulatory alternatives. Using the CAFE model allows consideration of the following factors: the CAFE model explicitly evaluates the cost of compliance for each manufacturer, each fleet, and each model year; it accounts for lead time necessary for compliance by directly incorporating estimated manufacturer production cycles for every vehicle in the fleet, ensuring that the analysis does not assume vehicles can be redesigned to incorporate more technology without regard to lead time considerations; it provides information on safety effects associated with different levels of standards and information about many other impacts on consumers, and it calculates energy impacts (i.e., fuel saved or consumed) as a primary function, besides being capable of providing information about many other factors within EPA’s broad Clean Air Act discretion to consider. See 83 Fed. Reg. 43,000-01.

- c. In your testimony, you also stated that the proposed rollback “would decrease the cost of a new car by \$2,300.” It is my understanding that the briefing you received on July 20, 2018 included a chart showing that NHTSA's per vehicle cost estimates associated with the current standards were more than double EPA's estimates. Please provide me with a detailed explanation for why you have seemingly discounted the views and technical input of EPA's career staff when making these statements.

Again, I have discounted neither the views nor the technical input provided by EPA career staff. As I previously noted, EPA and NHTSA are working collaboratively in this joint rulemaking effort. Further, with respect to the cost modeling, I would point out, that, as outlined in the Notice of Proposed Rulemaking, available at Docket No. EPA-HQ-OAR-2018-0283, having reviewed comments on the subject and having considered the matter fully, the agencies determined it is reasonable and appropriate to use DOE/Argonne's model for full-vehicle simulation, and to use DOT's CAFE model for analysis of regulatory alternatives. Using the CAFE model allows consideration of the following factors: the CAFE model explicitly evaluates the cost of compliance for each manufacturer, each fleet, and each model year; it accounts for lead time necessary for compliance by directly incorporating estimated manufacturer production cycles for every vehicle in the fleet, ensuring that the analysis does not assume vehicles can be redesigned to incorporate more technology without regard to lead time considerations; it provides information on safety effects associated with different levels of standards and information about many other impacts on consumers, and it calculates energy impacts (i.e., fuel saved or consumed) as a primary function, besides being capable of providing information about many other factors within EPA's broad Clean Air Act discretion to consider. See 83 Fed. Reg. 43,000-01.

Questions on EPA's Proposed Mercury and Air Toxics Standards Rollback

4. In EPA's 2018 proposed revision to the Supplemental Cost Finding for the Mercury and Air Toxics Standards, it states that, “while there are unquantifiable HAP [hazardous air pollutant] benefits and significant monetized PM co-benefits associated with MATS, the Administrator has concluded that the identification of these benefits is not sufficient, in light of the gross imbalance of monetized costs and HAP benefits, to support a finding that is appropriate and necessary to regulate EGUs under CAA section 112.”²

²EPA, “National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units -- Reconsideration of Supplemental Finding and Residual Risk and Technology Review” (Dec 2018), https://www.epa.gov/sites/production/files/2018-12/documents/frnmatsfindingandrtr_12_2018wdisc.pdf; Hereafter called EPA Revised Supplemental Finding Proposal, 2018.

- a. The proposed revision state that, “with the MATS rule in place, the estimated inhalation cancer risk to the individual most exposed to actual emissions from the source category is 9-in-1 million.” Such a risk is higher than the 1-in-1 million threshold provided in the Clean Air Act as the threshold to delist a source category. Do any documents in the proposal docket estimate what the inhalation cancer risk would be if the MATS rule was rescinded?

EPA has not proposed to revise the MATS standards that control mercury emissions. EPA is not proposing to remove, or delist, electric generating units from the list of source categories subject to regulation under Section 112, nor has it proposed to rescind or weaken the emission standards to which those units are currently subject. The proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review, were it to be finalized, would have no effect on mercury emissions reduction levels required under the existing MATS rule.

- b. The Clean Air Act does not permit the delisting of any source category with emissions that pose a cancer risk greater than 1 in 1,000,000 to the most exposed individual, regardless of the cost. Why does the proposal fail to regulate EGUs under Section 112 which pose a far greater cancer risk?

The proposal does not “fail to regulate EGUs”; EPA has proposed to maintain the existing standards. EPA is not proposing to remove, or delist, electric generating units from the list of source categories subject to regulation under Section 112, nor proposed to rescind or weaken the emission standards to which those units are currently subject.

- c. Given that we already know the inhalation cancer risk is greater than 1 in 1,000,000, and EPA’s proposal asserts that this is “not sufficient” to determine it is “appropriate and necessary” to regulate EGUs under Section 112, what would in EPA’s view be a “sufficient” cancer risk to deem that it is “appropriate and necessary” to regulate?

EPA’s proposed analysis of the statutory term “appropriate and necessary” is contained in the notice of proposed rulemaking (NPRM) signed on December 27, 2018, available at <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. The language that you quote appears in EPA’s discussion of this statutory provision at pages 26-31 and refers to the relationship between the monetized and unmonetized direct and indirect costs and benefits of the 2011 MATS rule, as informed by the Supreme Court’s opinion in *Michigan v. EPA*. It is important to note that the EPA is not proposing to remove, or delist, electric generating units from the list of source categories subject to regulation under Section 112, nor has it proposed to rescind or weaken the emission standards to which those units are currently subject. The analysis presented in the NPRM specifically addresses the EGU-specific provision in 112(n) and does

not relate to the references to 1 in 1,000,000 cancer risk found in the delisting provision at section 112(d)(9) and the residual risk review provision at section 112(f)(2).

- d. How did the agency weigh “unquantifiable HAP benefits” in the proposal’s formal cost-benefit analysis to ensure benefits that could not be monetized are not underrepresented?

With respect to the relationship between unquantifiable HAP benefits and monetized benefits, the bases for EPA’s proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review are provided in the notice of proposed rulemaking (NPRM) signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. EPA expects to receive comments on a number of related issues upon publication of the NPRM in the Federal Register, and it will respond to these comments as part of any final action.

As you will see, the accompanying memorandum presents a summary of costs and the target pollutant benefits that EPA views as pertinent to the appropriate and necessary finding under section 112(n)(1)(A). Target pollutant benefits consist of the quantified and unquantified benefits from reductions in hazardous air pollutants. EPA also estimated that the MATS rule would result in ancillary benefits from the concomitant reduction of non-target pollutants. These include the quantified PM_{2.5} co-benefits and other unquantified co-benefits that occur as a result of reductions of non-HAP emissions. However, for reasons described in the preamble and based on the specific statutory direction in 112(n)(1)(A), EPA proposes that the HAP benefits, both quantified and unquantified, are the most relevant portion of the analysis for purposes of the appropriate and necessary finding. Therefore, in evaluating the pertinent impacts of this proposed action, EPA has focused on the target pollutant impacts. EPA has proposed to conclude that the quantifiable portion of the target HAP benefits are not even moderately commensurate with the compliance cost of the rule, as the difference between costs and HAP benefits is substantial using either discount rate.

- e. Please provide detailed information on all the unquantifiable HAP benefits that were considered in this proposal and explain why EPA could not ascribe a dollar value to these benefits.

With respect to unquantifiable HAP benefits, the bases for EPA’s proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review are provided in the notice of proposed rulemaking (NPRM) signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at:

<https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. EPA expects to receive comments on a number of related issues upon publication of the NPRM in the Federal Register, and it will respond to these comments as part of any final action.

As discussed in the NPRM, even with the substantial monetized particulate matter co-benefits and the significant unquantified HAP benefits associated with MATS, the gross disparity between monetized costs and HAP benefits, which we believe to be the primary focus of the Administrator’s determination in Clean Air Act section 112(n)(1)(A), is too large to support an affirmative appropriate and necessary finding. As explained in the MATS Regulatory Impact Analysis, the only health benefit attributed to reducing mercury emissions that the EPA could quantify and monetize was IQ loss in children born to a subset of recreational fishers who consume fish during pregnancy. The EPA also identified benefits associated with regulation of HAP from EGUs that could not be quantified. These effects include impacts of mercury on human health (including neurologic, cardiovascular, genotoxic, and immunotoxic effects), a variety of adverse health effects associated with exposure to certain non-mercury HAP (including cancer, and chronic and acute health disorders that implicate multiple organ systems such as the lungs and kidneys), and effects on wildlife and ecosystems.

5. If a benefit cannot be monetized, do you consider it to be worth less than a benefit that can be monetized? If so, why? If not, why not?

As discussed in the answer to the previous question, EPA evaluated monetized and non-monetized costs and benefits in its NPRM. How EPA treats non-monetized benefits in the proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review is explained in the NPRM signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant

benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>.

6. When the 1990 Clean Air Act Amendments were written – which included the current version of Section 112(n)(1)(A) of the Clean Air Act - there were few, if any, quantifiable data available on cancer risks of air toxics and no quantifiable data whatsoever available for non-cancer risks, like birth and neurological defects.³ Despite the inability to put a dollar amount on the benefits of reducing these air toxics, Congress still found it necessary to require EPA to pursue robust regulations to address major sources of air toxics emissions. At the same time, Congress indicated that it was well aware of the limitations of relying exclusively on cost-benefit analysis when assessing air toxics. In the Senate Committee report on S. 1630 in the 101st Congress, it states, “[T]he public health consequences of substances which express their toxic potential only after long periods of chronic exposure will not be given sufficient weight in the regulatory process when they must be balanced against the present day costs of pollution control and its other economic consequences.”⁴ Yet, in EPA’s 2018 proposed revision to the Supplemental Cost Finding for the Mercury and Air Toxics Standards, the agency based the decision to reverse its “appropriate and necessary” finding solely on a formal cost-benefit analysis that does not incorporate this clear Congressional intent.
 - a. Where in the 1990 CAA’s legislative history does EPA believe that Congress required the agency to conduct a formal cost-benefit analysis to make an “appropriate and necessary” determination? Please provide a citation to the relevant portion of the legislative history.

With respect to legislative history, the bases for EPA’s proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review are provided in the NPRM signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. Information responsive to your questions, including EPA’s understanding of congressional intent with respect to Section 112(n)(1) of the Clean Air Act, may be found in those documents. In particular, pages 24 – 26 of the .pdf version of the NPRM currently available at this link discusses the statutory text, context, and purpose of CAA section 112(n)(1)(A) and the legislative history of CAA section 112. Of particular note, the December 2017 NPRM, in discussing the 2016 supplemental “appropriate and necessary” analysis, states:

³ Legislative History 1990 Clean Air Act Amendments, H.Rept 101-490 Part 1, 101st Congress (1989-1990).

⁴ Legislative History 1990 Clean Air Act Amendments, S.Rept 101-228, 101st Congress (1989-1990).

“The EPA’s justification for its equal reliance on the co-benefits of non-HAP emissions when setting the MATS standards in its CAA section 112(n)(1)(A) determination was flawed. The Agency erred in concluding that the statutory text of CAA section 112(n)(1)(A) and the legislative history of CAA section 112 more generally ‘expressly support[ed]’ the position that it was reasonable to consider co-benefits, and give equal weight to those co-benefits, in a CAA section 112(n)(1)(A) appropriate and necessary finding. 81 FR 24439. The 2016 Supplemental Finding pointed to CAA section 112(n)(1)(A)’s directive to ‘perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of [HAP] after imposition of the requirements of [the CAA],’ and noted that the requirement to consider co-benefit reduction of HAP resulting from other CAA programs highlighted Congress’ understanding that programs targeted at reducing non-HAP pollutants can and do result in the reduction of HAP emissions. *Id.* The finding also noted that the Senate Report on CAA section 112(d)(2) recognized that maximum achievable control technology (MACT) standards would have the collateral benefit of controlling criteria pollutants. *Id.* However, these statements acknowledging that reductions in HAP can have the collateral benefit of reducing non-HAP emissions and vice versa, provides no support for the proposition that any such co-benefits should be the Agency’s primary consideration when making a finding under CAA section 112(n)(1)(A). Indeed, it would be highly illogical for the Agency to make a determination that regulation under CAA section 112, which is expressly designed to deal with HAP, is justified principally on the basis of the criteria pollutant impacts of these regulations. That is, if the HAP-related benefits are not at least moderately commensurate with the cost of HAP controls, then no amount of co-benefits can offset this imbalance for purposes of a determination that it is appropriate to regulate under CAA section 112(n)(1)(A). *Cf. Michigan*, 135 S. Ct. at 2707 (‘One would not say that it is even rational, never mind “appropriate,” to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits.’).”

*** * * ***

“In sum, the Agency did not provide any meaningful support for its conclusion that the statutory text and legislative history support placing consideration of co-benefits in a CAA section 112(n)(1)(A) determination on equal footing with the consideration of HAP-specific benefits and, as explained below, the statutory text strongly supports the use of a different approach.”

- b. Do you agree with Congress' assessment that the benefits of reducing air toxics are not given significant weight in a formal cost-benefit analysis because it is difficult, and sometimes impossible, to put a dollar value on the benefits of reducing air toxic emissions? If not, why not? If so, why?

Regarding this question, with respect to cost-benefit analysis of air toxic emissions reductions, I would direct your attention in particular, to pages 29-31 of the .pdf version of the NPRM (footnotes omitted):

“The total cost of compliance with MATS (\$7.4 to \$9.6 billion annually) vastly outweighs the monetized HAP benefits of the rule (\$4 to \$6 million annually). Even with the substantial monetized PM co-benefits and the significant unquantified HAP benefits associated with MATS, the gross disparity between monetized costs and HAP benefits, which we believe to be the primary focus of the Administrator’s determination in CAA section 112(n)(1)(A), is too large to support an affirmative appropriate and necessary finding. As explained in the MATS RIA, the only health benefit attributed to reducing Hg emissions that the EPA could quantify and monetize was IQ loss in children born to a subset of recreational fishers who consume fish during pregnancy. The EPA also identified benefits associated with regulation of HAP from EGUs that could not be quantified. These effects include impacts of Hg on human health (including neurologic, cardiovascular, genotoxic, and immunotoxic effects), a variety of adverse health effects associated with exposure to certain non-Hg HAP (including cancer, and chronic and acute health disorders that implicate multiple organ systems such as the lungs and kidneys), and effects on wildlife and ecosystems. The EPA acknowledges the importance of these benefits and the limitations on the Agency’s ability to monetize HAP-specific benefits. The EPA agrees that such benefits are relevant to any comparison of the benefits and costs of a regulation. Because unquantified benefits are, by definition, not considered in monetary terms, the Administrator must evaluate the evidence of unquantified benefits and determine the extent to which they alter any conclusions based on the comparison of monetized costs and benefits. The MATS RIA accounts for all the monetized and unquantified benefits of the rule, and the EPA’s proposed approach to the cost-benefit analysis in the RIA does not discount the existence or importance of the unquantified benefits of reducing HAP emissions. Instead, after fully acknowledging the existence and importance of such benefits, the EPA proposes to conclude that substantial and important unquantified benefits of MATS are not sufficient to overcome the significant difference between the monetized benefits and costs of this rule. As noted, the unquantified HAP-related benefits of MATS involve only a limited set of mercury and other HAP-related morbidity effects in humans and ecosystems.”

7. As mentioned in the previous question, EPA appears to be ignoring Congressional intent when it comes to making “appropriate and necessary” determinations by ignoring the real benefits of reducing exposure to hazardous air pollution, especially those benefits that cannot be monetized. Since EPA is failing to follow the Clean Air Act’s requirements, please state what you consider to be a safe level of exposure to a carcinogenic hazardous air pollutant.

I disagree that EPA is “ignoring [c]ongressional intent” or “failing to follow the Clean Air Act’s requirements” in the proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review. For an explanation of EPA’s position regarding these matters, I would direct your attention to the explanation provided in the NPRM signed on December 27, 2018, and which will be available in the supporting documents in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. Information responsive to your questions, including EPA’s understanding of congressional intent with respect to Section 112(n)(1) of the Clean Air Act, may be found in those documents. In particular, pages 24 – 26 of the .pdf version of the NPRM currently available at the link discusses the statutory text, context, and purpose of CAA section 112(n)(1)(A) and the legislative history of CAA section 112. Particularly relevant passages are set forth in response to Question 6 above.

8. As mentioned in question #6, EPA appears to be ignoring congressional intent when it comes to making “appropriate and necessary” determinations by ignoring the real benefits of reducing exposure to hazardous air pollution, especially those benefits that cannot be monetized. Since EPA is failing to follow the Clean Air Act, please state what you consider to be a safe level of exposure to an acid gas hazardous air pollutant.

I disagree that EPA is “ignoring congressional intent when it comes to making ‘appropriate and necessary’ determinations” or “failing to follow the Clean Air Act” in the proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review. For an explanation of EPA’s position regarding these matters, I would direct your attention to the explanation provided in the NPRM signed on December 27, 2018, and which will be available in the supporting documents in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. Information responsive to your questions, including EPA’s understanding of congressional intent with respect to Section 112(n)(1) of the Clean Air Act, may be found in those documents. In particular, pages 24 – 26 of the .pdf version of the NPRM discusses the statutory text, context, and purpose of CAA section 112(n)(1)(A) and the legislative history of CAA section 112. Particularly relevant passages are set forth in response to Question 6 above.

9. As mentioned in question #6, EPA appears to be ignoring congressional intent when it comes to making “appropriate and necessary” determinations” by ignoring the real benefits of reducing exposure to hazardous air pollution, especially those benefits that cannot be monetized. Since EPA is failing to follow the Clean Air Act, please state what you consider to be a safe level of exposure to a heavy metal hazardous air pollutant?

I disagree that EPA is “ignoring congressional intent when it comes to making ‘appropriate and necessary’ determinations” or “failing to follow the Clean Air Act” in the proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review. For an explanation of EPA’s position regarding these matters, I would direct your attention to the explanation provided in the NPRM signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. Information responsive to your questions, including EPA’s understanding of congressional intent with respect to Section 112(n)(1) of the Clean Air Act, may be found in those documents. In particular, pages 24 – 26 of the .pdf version of the NPRM discusses the statutory text, context, and purpose of CAA section 112(n)(1)(A) and the legislative history of CAA section 112. Particularly relevant passages are set forth in response to Question 6 above.

10. EPA’s 2018 proposed revision to the Supplemental Cost Finding for the Mercury and Air Toxics Standards claims the proposal does not, “present a disproportionate risk to children.”⁵
- a. What analysis in the docket shows that rescinding or weakening MATS is not a threat to children’s health?

EPA is not rescinding or weakening the MATS standards that control mercury emissions. EPA is not proposing to remove, or delist, electric generating units from the list of source categories subject to regulation under Section 112, nor proposing to rescind or weaken the emission standards to which those units are currently subject. Accordingly, the proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review, were it to be finalized, would present no “threat to children’s health.”

⁵ EPA Revised Supplemental Finding Proposal, 2018.

- b. What analysis in the docket shows that the benefits of reducing mercury exposure to children from our nation's largest source of mercury is "insufficient" to trigger a determination that it is "appropriate and necessary" to regulate EGUs under Section 112 of the Clean Air Act?

I direct your attention to the document entitled "Residual Risk Assessment for the Coal- and Oil-Fired EGU Source Category in Support of the 2019 Risk and Technology Review Proposed Rule" which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>.

11. Are there currently any EGUs that are not compliant with the Mercury and Air Toxics Standards rule? If so please provide me with a list.

I understand that numerous coal-fired units shut down in whole or in part because of the costs of MATS compliance. Of those that remain operational, certain units firing eastern bituminous coal refuse may have received extensions of state requirements until early 2019. The MATS proposed rule requested comment on several important issues related to these units.

12. Is EPA aware of any blackouts, brownouts or extreme retail consumer price spikes that occurred as a direct result of the Mercury and Air Toxics Standards rule? If so, please share the analysis that demonstrates the connection of these events with the MATS rule.

The direct and indirect compliance cost of MATS measures are in the billions of dollars. It is my understanding that electricity consumers ultimately bear this cost.

13. Prior to implementation of the MATS rule, there were more mercury fish consumption advisories in this country than any other chemical or pollutant combined.

- a. Are there still fish consumption advisories for mercury in this country? If so, please provide copies.

Yes. While EPA does not comprehensively track all advisories, States, territories, and tribes provide advice on fish caught in waters in their jurisdiction. EPA has compiled contact information and website for all of these entities and their advisories at: <https://fishadvisoryonline.epa.gov/Contacts.aspx>. More information on Fish and Shellfish Advisories and Safe Eating Guidelines is available at:

<https://www.epa.gov/choose-fish-and-shellfish-wisely/fish-and-shellfish-advisories-and-safe-eating-guidelines>.

- b. How many states currently have one or more fish consumption advisories for mercury?

States, territories, and tribes provide advice on fish caught in waters in their jurisdiction. EPA has compiled contact information and website for all of these entities and their advisories at:

<https://fishadvisoryonline.epa.gov/Contacts.aspx>.

- c. Do you believe consuming mercury-laden fish poses any risk to pregnant women or their unborn babies in this country? If so, why? If so, what is the risk?

I believe that consuming mercury-laden fish poses risk to pregnant women or their unborn babies. More information on these risks is available at:

<https://www.epa.gov/mercury/health-effects-exposures-mercury>.

- d. In the docket for the 2018 proposed revision to the Supplemental Cost Finding for MATS, what data does EPA provide that led you to believe there was not a “sufficient” mercury risk from power plants to deem it “appropriate and necessary” to regulate EGUs under Section 112 of the Clean Air Act?

I direct your attention to the document entitled “Residual Risk Assessment for the Coal- and Oil-Fired EGU Source Category in Support of the 2019 Risk and Technology Review Proposed Rule” which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>.

14. In 2011, were coal-fired EGUs the largest source of unregulated mercury pollution in this country? If yes, please include by what order of magnitude coal plants were the largest source over other sources.

In the final MATS rule in 2012, EPA stated: “In 2005, U.S. EGUs emitted 50 percent of total domestic anthropogenic Hg emissions” (77 FR 9310). This figure did not include non-anthropogenic sources, including volcanic eruptions and emissions from the ocean, or substantial international sources. Estimates of annual global mercury emissions from both natural and anthropogenic sources are in the range of 5,000 to 8,000 metric tons per year, while 2011 U.S. anthropogenic mercury emissions were 52 tons.

Information responsive to your questions may be found in the NPRM signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. More information on mercury emissions can also be found in EPA's National Emissions Inventory at: <https://www.epa.gov/air-emissions-inventories>.

15. In EPA's 2018 proposed revision to the Supplemental Cost Finding for the Mercury and Air Toxics Standards, the agency is, "soliciting comment, however, on whether the EPA has the authority or obligation to delist EGUs from CAA section 112(c) and rescind (or to rescind without delisting)" the Mercury and Air Toxics Standards (MATS) Rule.⁶

- a. If the agency decides to delist "EGUs from CAA section 112(c)," which I do not believe it has the authority to do, would EPA have the authority to issue mercury and air toxics standards for the utility sector under Section 112 of the Clean Air Act, and would utilities legally be required to run control technologies to meet MATS?

EPA is not proposing to rescind or weaken the MATS standards that control mercury emissions. EPA is not proposing to remove, or delist, EGUs from Section 112. As noted on pages 32 – 33 of the .pdf version of the NPRM currently available at <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>, EPA is proposing to conclude that reversing the Clean Air Act section 112(n)(1)(A) determination, if finalized, would not have the effect of removing EGUs from the CAA section 112(c)(1) source category list.

- b. If the agency rescinds the MATS rule, which I do not believe EPA has the authority to do, would that not only weaken the standards, but remove them altogether? If MATS is removed, would utilities have any legal responsibility to run currently-implemented control technology used to comply with MATS?

EPA is not proposing to rescind or weaken the MATS standards that control mercury emissions. EPA is not proposing to remove, or delist, EGUs from Section 112. As noted on pages 32 – 33 of the .pdf version of the NPRM currently available at <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>, EPA is proposing to conclude that the reversal of the Clean Air Act section 112(n)(1)(A) determination, if finalized, would not have the effect of removing EGUs from the CAA section 112(c)(1) source category list.

⁶ EPA Revised Supplemental Finding Proposal, 2018.

16. During your confirmation hearing, several members expressed concerns about EPA's 2018 proposed revision to the Supplemental Cost Finding for the Mercury and Air Toxics Standards. During an exchange on this issue with Senator Cardin, you stated that, "on MATS, I don't think you can roll back a regulation that has been fully implemented. And the MATS requirements for the pollution control equipment has been fully implemented. And I don't believe, I honestly do not believe that that equipment will be turned off or removed under our proposal."

- a. If you "don't think you can roll back a regulation that has been fully implemented" as you stated to Senator Cardin during your confirmation hearing, then why is your agency requesting comment on EPA's authority and potential obligation to delist EGUs from Section 112 of the Clean Air Act and/or rescind the MATS rule?

EPA is not proposing to rescind or weaken the MATS standards that control mercury emissions. EPA is not proposing to remove, or delist, EGUs from Section 112. The bases for EPA's proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review are provided in the notice of proposed rulemaking (NPRM) signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. EPA expects to receive comments on a number of related issues upon publication of the NPRM in the Federal Register, and it will respond to these comments as part of any final action. As noted on pages 32 – 33 of the .pdf version of the NPRM currently available at the link, EPA is proposing to conclude that the reversal of the Clean Air Act section 112(n)(1)(A) determination, if finalized, would not have the effect of removing EGUs from the CAA section 112(c)(1) source category list. It is appropriate for EPA to take account of, and seek comment on, issues of relevance to the proposed action, in the interests of increasing the legal defensibility and policy soundness of any final determination in this matter.

- b. Have the courts ever vacated an EPA rule that has been implemented? If yes, which rules, and did it ever result in control technology being uninstalled or turned off?

Over the years, courts have found various EPA rules to be contrary to law or otherwise unreasonable, with the rule sometimes being vacated and sometimes not being vacated. In turn, those court actions have had different effects on sources' compliance obligations.

- c. Within the revised Supplemental Cost Finding for the Mercury and Air Toxics Standards 2018 proposal, EPA cites that, “[A]gencies have inherent authority to reconsider past decisions and to revise, replace, or repeal a decision to the extent permitted by law and supported by a reasoned explanation.”⁷ When you stated to Senator Cardin that you, “don’t think you can roll back a regulation that has been fully implemented,” did that mean you didn’t think the agency could do so legally and if so, how does that sync with the argument made in the proposal that the agency has inherent authority to reconsider past decisions?

EPA is not proposing to rescind or weaken the MATS standards that control mercury emissions. EPA is not proposing to remove, or delist, electric generating units from the list of source categories subject to regulation under Section 112, nor proposing to rescind the emission standards to which those units are currently subject. As noted on pages 32 – 33 of the .pdf version of the NPRM currently available at <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>, EPA is proposing to conclude that the reversal of the Clean Air Act section 112(n)(1)(A) determination, if finalized, would not have the effect of removing EGUs from the CAA section 112(c)(1) source category list. As stated in the NPRM, “Consistent with [the D.C. Circuit opinion] *New Jersey*, the EPA is proposing to find that this reversal of the CAA section 112(n)(1)(A) determination, if finalized, would not have the effect of removing EGUs from the CAA section 112(c)(1) source category list. Because EGUs would remain on the CAA section 112(c)(1) source category list, the CAA section 112(d) standards for that category, as promulgated in the MATS rule, would be unaffected by final action on this proposal.”

- d. If the courts end up vacating the MATS rule because of EPA’s decision to finalize its proposal finding that it is no longer “appropriate and necessary” to regulate under Section 112, would you still stand by your comments to Senator Cardin that you “honestly do not believe that that equipment will be turned off or removed?” If so, legally speaking, what would require utilities to run control technologies currently being used to meet MATS if the MATS rule were to be vacated or rescinded?

I stand by my testimony. EPA’s proposal would not rescind or weaken the MATS standards. Otherwise, EPA has not established a position on the speculative issue your question raises.

⁷ EPA Revised Supplemental Finding Proposal, 2018.

- e. Please list all the section 126 petitions your agency has during this Administration in which petitioners have expressed concerns that a utility upstream is turning off or not optimizing installed air control technologies and as a result is creating ozone transport concerns for downwind states. Please identify which of these petitions were rejected since you became Acting Administrator.

Section 126 of the Clean Air Act gives a state the authority to ask EPA to set emissions limits for sources of air pollution in other states whose emissions contribute significantly to nonattainment or interfere with maintenance of one or more National Ambient Air Quality Standard (NAAQS) in the petitioning state. Information on Clean Air Act Section 126 petitions related to ozone NAAQS are available at: <https://www.epa.gov/ground-level-ozone-pollution/ozone-national-ambient-air-quality-standards-naaqs-section-126>. Below are links to Section 126 petitions related to the 2008 or 2015 ozone NAAQS submitted since 2016 and their current status:

- **New York Petition - May 2018:** <https://www.epa.gov/ground-level-ozone-pollution/new-york-section-126-petition-may-2018>.
- **Delaware Petition - November 28, 2016:** <https://www.epa.gov/ground-level-ozone-pollution/delaware-section-126-petition-november-28-2016>.
- **Delaware and Maryland Petitions - November 2016:** <https://www.epa.gov/ground-level-ozone-pollution/delaware-and-maryland-126-petitions-november-2016>.
- **Delaware Petition - August 8, 2016:** <https://www.epa.gov/ground-level-ozone-pollution/delaware-126-petition-august-8-2016>.
- [Delaware Petition - July 7, 2016](#)
- [Connecticut Petition - July 2016](#)

In most cases, we have denied such petitions because: (1) they were inadequately justified by the applicant; and/or (2) other programs have adequately addressed upwind emission sources.

- f. Are you aware of any situation since you have served at EPA under this Administration, when a utility has turned off or not fully optimized their installed controls? If so, please list and explain all situations.

I am not aware of any situation in that time frame in which a utility has violated its obligations under the Clean Air Act and regulations and permits issued thereunder by turning off or not fully optimizing their installed controls.

17. OMB has also long recognized the limitations of a formal cost-benefit analysis, especially when benefits cannot be fully monetized. OMB's 2003 Circular A-4 requires EPA and other agencies to conduct a complete regulatory analysis that "includes a discussion of non-quantified as well as quantified benefits and costs. When there are important nonmonetary values at stake, you should also identify them in your analysis so policymakers can compare them with the monetary benefits and costs."⁸ In addition, OMB clarifies in Circular A-4 that all ancillary benefits should be counted in any rule analysis, directing agencies to "look beyond the direct benefits and direct costs of your rulemaking and consider any important ancillary benefits and countervailing risks. An ancillary benefit is a favorable impact of the rule that is typically unrelated or secondary to the statutory purpose of the rulemaking." OMB also states when an agency, "can estimate the monetary value of some but not all of the ancillary benefits of a regulation, but cannot assign a monetary value to the primary measure of effectiveness, you should subtract the monetary estimate of the ancillary benefits from the gross cost estimate to yield an estimated net cost."⁹ Why does EPA believe it not necessary to review all the benefits – including ancillary co-benefits – in EPA's analysis (which is based only in part on the regulatory impact analysis prepared for OMB and responsive to its guidance), that is being used to make its "appropriate and necessary" determination under Section 112(n)(1)(A)? Why are those benefits required to be counted in any other benefit assessment analysis for any other regulatory action, but not proposed to be included here?

The bases for EPA's proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review are provided in the notice of proposed rulemaking (NPRM) signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. Information responsive to your questions may be found in those documents. EPA expects to receive comments on a number of related issues upon publication of the NPRM in the Federal Register, and it will respond to these comments as part of any final action.

For example, the accompanying memorandum presents a summary of costs and the target pollutant benefits that EPA views as pertinent to the appropriate and necessary finding under section 112(n)(1)(A). Target pollutant benefits consist of the quantified and unquantified benefits from reductions in hazardous air pollutants. EPA also estimated that the MATS rule would result in ancillary benefits from the concomitant reduction of non-target pollutants. These include the quantified PM_{2.5} co-benefits and other unquantified co-benefits that occur as a result of reductions of non-HAP emissions. However, for reasons described in the preamble and based on the specific statutory direction in 112(n)(1)(A), EPA proposes that the HAP benefits, both quantified and unquantified, are the most relevant portion of the analysis for purposes of the appropriate and necessary finding. Therefore, in evaluating the pertinent impacts of this proposed action, EPA has focused on the target pollutant impacts. EPA has

⁸ 68 FR 58366

⁹ 68 FR 58366

proposed to conclude that the quantifiable portion of the target HAP benefits are not even moderately commensurate with the compliance cost of the rule, as the difference between costs and HAP benefits is substantial using either discount rate.

18. In determining it was no longer “appropriate and necessary” to regulate utilities under Section 112 in EPA’s 2018 proposed revision to the Supplemental Cost Finding for the Mercury and Air Toxics Standards –

- a. Did EPA use any data beyond what was included in the 2011 MATS Regulatory Impact Analysis? If so, please describe it. If not, why not?

EPA’s proposed action utilizes information from the 2011 Regulatory Impact Analysis (RIA) as well as an updated comparison of costs and target pollutant benefits in a memorandum to the rulemaking docket. The bases for EPA’s proposed Reconsideration of the 2016 Supplemental Finding and Residual Risk and Technology Review are provided in the notice of proposed rulemaking (NPRM) signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at:

<https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. EPA expects to receive comments on a number of related issues upon publication of the NPRM in the Federal Register, and it will respond to these comments as part of any final action.

The NPRM notes that the MATS RIA accounts for all the monetized and unquantified benefits of the rule, and the EPA’s proposed approach to the cost-benefit analysis in the RIA does not discount the existence or importance of the unquantified benefits of reducing HAP emissions. After fully acknowledging the quantified benefits of reducing HAP emissions, the EPA proposes to conclude that substantial and important unquantified benefits of MATS are not sufficient to overcome the significant difference between the monetized benefits and costs of this rule. The EPA has provided an updated comparison of costs and target pollutant benefits in a memorandum to the rulemaking docket. The actual costs and benefits of the MATS rule may differ from the EPA’s analysis. However, as explained in the accompanying memorandum, given that the CAA section 112(n)(1)(A) finding is a threshold analysis that Congress intended the Agency would complete prior to regulation, the EPA believes it is reasonable for purposes of this reconsideration to rely on the estimates projected prior to the rule’s taking effect, *i.e.*, the estimates of costs and benefits calculated in the 2011 RIA. In addition, even assuming that actual costs and benefits differed from projections made in 2011, given the large difference between target HAP

benefits and estimated costs, the outcome of the Agency's proposed finding here would likely stay the same.

- b. Did EPA consider updating the costs estimate to reflect the actual installation and operating costs required to meet MATS or consider accounting for costs already incurred by the utility industry? If so, why was this information not included in the proposal? If not, why not?

As noted above, EPA's proposed action utilizes information from the 2011 Regulatory Impact Analysis (RIA) as well as an updated comparison of costs and target pollutant benefits in a memorandum to the rulemaking docket. The actual costs and benefits of the MATS rule may differ from the EPA's analysis. However, as explained in the accompanying memorandum, given that the CAA section 112(n)(1)(A) finding is a threshold analysis that Congress intended the Agency would complete prior to regulation, the EPA believes it is reasonable for purposes of this reconsideration to rely on the estimates projected prior to the rule's taking effect, *i.e.*, the estimates of costs and benefits calculated in the 2011 RIA. In addition, even assuming that actual costs and benefits differed from projections made in 2011, given the large difference between target HAP benefits and estimated costs, the outcome of the Agency's proposed finding here would likely stay the same.

- c. Did EPA consider updating the benefits data to include the best available science? If not, why not? If so, why was this information not included in the proposal?

As noted above, EPA's proposed action utilizes information from the 2011 Regulatory Impact Analysis (RIA) as well as an updated comparison of costs and target pollutant benefits in a memorandum to the rulemaking docket. The actual costs and benefits of the MATS rule may differ from the EPA's analysis. However, as explained in the accompanying memorandum, given that the CAA section 112(n)(1)(A) finding is a threshold analysis that Congress intended the Agency would complete prior to regulation, the EPA believes it is reasonable for purposes of this reconsideration to rely on the estimates projected prior to the rule's taking effect, *i.e.*, the estimates of costs and benefits calculated in the 2011 RIA. In addition, even assuming that actual costs and benefits differed from projections made in 2011, given the large difference between target HAP benefits and estimated costs, the outcome of the Agency's proposed finding here would likely stay the same.

19. Under the George W. Bush Administration, EPA stated that “benefits calculations relying solely on IQ decrements are likely to underestimate the benefits to cognitive functioning of reduced mercury exposures.”¹⁰ Do you agree with this statement? If so, why? If not, why not?

As explained in detail in the signed NPRM, it is well known that certain benefits of HAP reductions are not quantifiable. We nevertheless give appropriate consideration to unquantifiable benefits in the NPRM.

20. In a recent residual risk proposal, EPA has stated “any reduction in HAP emissions would be expected to provide health benefits in the form of improved air quality and less exposure to potentially harmful chemicals.”¹¹ Does this statement apply to reductions in HAPs for all Section 112 listed source categories, including EGUs? If not, why not? If so, why? Please list all the acid gases, heavy metals, and other hazardous air pollutants (by name) that are emitted by electric generating units that contribute to particulate matter pollution. If reducing these HAPs also reduces particulate matter, wouldn’t reducing particulate matter be a direct benefit of the regulation, not a co-benefit?

Information responsive to your questions may be found in the notice of proposed rulemaking and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits are available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. The MATS rule requirements to limit emissions of mercury and other HAP are discussed on pages 41 – 51 of the .pdf version of the NPRM currently available at the link.

¹⁰ EPA, Regulatory Impact Analysis of the Clean Air Mercury Rule, (March 2005) https://www3.epa.gov/airtoxics/utility/ria_final.pdf.

¹¹ 83 FR 46262

21. In 2003, then-EPA Assistant Administrator for Air and Radiation Jeff Holmstead testified before the House Energy and Commerce Committee on the difficulty of quantifying the benefits of reducing air toxic emissions from power plants, saying: “These estimates [for Clear Skies] do not include the many additional benefits that cannot currently be monetized but are likely to be significant, such as human health benefits from reduced risk of mercury emissions, and ecological benefits from improvements in the health of our forests, lakes, and coastal waters.”¹² Is this also true for MATS?

As explained in detail in the signed NPRM, it is well known that certain benefits of HAP reductions are not quantifiable. We nevertheless give appropriate consideration to unquantifiable benefits in the NPRM.

22. EPA has tried to bridge the air toxic data gaps to better monetize benefits through various stakeholder workshops over the years. The latest workshop in 2009 concluded that monetizing all air toxic benefits is still not possible, making a cost benefit analysis “difficult” to do for any action involving hazardous air pollutants. Finding that, “[F]or many chemicals on the [Clean Air Act hazardous air pollutant] list, the information on potential health effects is so limited that quantitative benefits analysis is not feasible... This lack of information is in contrast to the criteria air pollutants for which there is extensive human exposure or epidemiological data on the health effects at ambient-exposure levels... characterizing the health effects of air toxics at ambient levels can be subject to a very high level of uncertainty; thus, using these health effects in economic benefits assessment is difficult.”¹³ Do you agree that monetizing all air toxic benefits is still not possible and “using these health effects in economic benefits assessment is difficult” if not impossible? If not, why not? If so, why?

EPA continues to work to quantify and monetize key costs and benefits for its regulations. Information on economic and cost analysis for air pollution regulations, including monetization of costs and benefits, is available at: <https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations>. Additional information responsive to your questions may be found in the notice of proposed rulemaking (NPRM) signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits is available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>.

¹² Statement of EPA Assistant Administrator Jeff Holmstead, Hearing Before the U.S. House of Representatives Energy and Air Quality Subcommittee of the House Energy and Commerce Committee entitled “The Clear Skies Initiative: A Multipollutant Approach to the Clean Air Act,” (July 8, 2003), https://archive.epa.gov/ocir/hearings/testimony/108_2003_2004/web/pdf/2003_0708_jh.pdf.

¹³ Gwinn et al, “Meeting Report: Estimating the Benefits of Reducing Hazardous Air Pollutants—Summary of 2009 Workshop and Future Considerations,” *Environ Health Perspectives*. 2011 Jan; 119(1): 125–130, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3018491/>.

23. Do you agree with the American Academy of Pediatrics, which has stated there is no safe level of mercury exposure for children in the womb? If not, why not?

It should be recognized, as a fundamental threshold matter, that under Clean Air Act section 112, EPA’s general obligation when analyzing existing MACT standards with regard to the regulation of hazardous air pollutant emissions, including mercury emissions from EGUs, is, under the residual risk provision in 112(f)(2), to provide an ample margin of safety to protect public health. The D.C. Circuit Court of Appeals has held that EPA is not obligated to establish “zero-risk” standards under section 112, *NRDC v. EPA*, 824 F.2d 1146, 1152 (D.C. Cir. 1987). EPA’s proposal explains why EPA believes that the existing MATS standards do provide an ample margin of safety to protect public health, *see especially* page 103 of the .pdf version available at <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>.

For information on the health effects of mercury exposures, please see EPA’s website: <https://www.epa.gov/mercury/health-effects-exposures-mercury>.

Further information responsive to your question as to EPA’s assessment of the pediatric health impacts of mercury exposure may be found in the NPRM signed on December 27, 2018, and in the supporting documents which will be available in Docket No. EPA-HQ-OAR-2018-0794. In the meantime, the signed NPRM and an accompanying factsheet and memorandum on compliance costs, hazardous air pollutant (HAP) benefits, and ancillary co-pollutant benefits is available at: <https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants>. Additional information on economic and cost analysis for air pollution regulations, including monetization of costs and benefits, is available at: <https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations>.

24. According to EPA’s 2018 Supplemental Cost Finding proposal, EGUs emitted 29 tons of mercury annually prior to the implementation of the rule. What populations were most susceptible to mercury exposure and is mercury easily removed from the environment once it gets into the environment?

How someone's health may be affected by an exposure to mercury depends on a number of factors: the form of mercury (for example, methylmercury or elemental (metallic) mercury); the amount of mercury in the exposure; the age of the person exposed (the fetus is the most vulnerable); how long the exposure lasts; how the person is exposed – breathing, eating, skin contact, etc.; and the health of the person exposed. For more information on the health effects of mercury exposures, please see EPA’s website: <https://www.epa.gov/mercury/health-effects-exposures-mercury>. More current information on mercury emissions can also be found in EPA’s National Emissions Inventory at: <https://www.epa.gov/air-emissions-inventories>.

25. Are there states in which utilities may no longer seek rate recovery from public utility commissions for the capital costs and/or operating costs of air pollution control equipment for which there is not a legal requirement to operate that equipment? If so, please identify the states.

Because EPA is not the national energy regulator, it does not compile such information. I suggest seeking information from the Department of Energy, the Federal Energy Regulatory Commission, or state public utility commissions themselves. However, if this question is directed at our MATS proposal, we do not believe it will remove the legal requirement for the equipment.

26. Are there states in which public utility commission rules or practices allow ratepayers or any third parties to mount challenges to power plant company rate recovery from public utility commissions for the capital costs and/or operating costs of air pollution control equipment for which there is not a legal requirement to operate that equipment? If so, please identify the states.

Because EPA is not the national energy regulator, it does not compile such information. I suggest seeking information from the Department of Energy, the Federal Energy Regulatory Commission, or state public utility commissions themselves. However, if this question is directed at our MATS proposal, we do not believe it will remove the legal requirement for the equipment.

27. Can you identify all third parties who urged the agency, or OMB, not to propose to rescind the "appropriate and necessary" finding or the MATS rule? In particular, please identify the positions urged by the Edison Electric Institute; Utility Air Regulatory Group; the American Public Power Association; the National Rural Electric Cooperative Association; the Clean Energy Group; any electric utility company; any state or local air pollution control agency or their associations; any public health or environmental non-governmental organization. Which groups supported the proposed changes?

EPA expects that interested third parties will submit comments setting forth their position on this issue. All comments submitted to Docket No. EPA-HQ-OAR-2018-0794 will be available for public inspection and will be carefully considered by EPA in taking final action. Materials provided to OMB in the context of Executive Order 12866 meetings can be found at: <https://www.reginfo.gov/public/do/eom12866SearchResults>. I do not recall any of the aforementioned groups reaching out to me prior to this proposal.

Questions on the Kigali Treaty

28. I have learned that counter to your implication in our private meeting, there have in fact been interagency meetings in which Bill Wehrum and other EPA officials participated to discuss the Kigali Amendment to the Montreal Protocol. Moreover, I have also been informed that EPA officials have stated at these meetings that EPA does not wish the treaty to be submitted for ratification.

- a. Please list the dates of and attendees at each such meeting.
- b. Do you share Mr. Wehrum's opinion that the Treaty should not be submitted to the United States Senate for ratification, or authorize him to convey this view at the meetings that have occurred?

Principal meetings on this issue occurred prior to my becoming Acting Administrator. I have not been briefed on this issue by my career staff and I am reserving judgement until that time.

The White House is leading an interagency process to consider the implications if the U.S. decides to ratify the Kigali Amendment. If a decision were made to seek ratification, the President would send the Amendment to the Senate for advice and consent.

29. U.S. businesses across the entire HFC supply chain are transitioning away from HFCs and taking advantage of new global markets. The US industries that use or produce fluorocarbons directly employ more than 593,000 Americans with an annual payroll in excess of \$34 billion, and sales of \$206 billion. The overall contribution of the fluorocarbon industries network to US economic activity is more than 2.5 million jobs and goods and services valued at more than \$630 billion annually. As I mentioned at the hearing - American industry, both users and producers of HFCs, strongly support the ratification of the Kigali Amendment to the Montreal Protocol because it encourages domestic manufacturing of next generation alternatives and technologies and provides businesses a predictable transition away from HFCs. Various studies clearly show that ratification of Kigali will benefit American manufacturing jobs with little to no impact to consumers and an obvious benefit to the environment.

- a. Do you support the ratification of the Kigali Amendment to the Montreal Protocol? If not, why not?

The White House is leading an interagency process to consider the implications if the U.S. decides to ratify the Kigali Amendment. If a decision were made to seek ratification, the President would send the Amendment to the Senate for advice and consent.

- b. What will you commit to do to help facilitate the transition away from HFCs toward innovative next-generation technologies?

EPA's responsibility in this area is bound by its authority to regulate under Title VI of the Clean Air Act. In those situations where it is appropriate, matters related to the transition away from HFCs will be taken into account in the development of implementing regulations.

- c. EPA conducted a cost-benefit analysis of the Montreal Protocol and the HFC phasedown that I believe shows that the ratification of Kigali will be a benefit to American businesses and American consumers. This study has not been released to the public yet. Will you immediately make the results of that study public? If not, why not and when will it be public?

Any analysis of costs and benefits by EPA is still undergoing review and includes information that relates to a pending or contemplated executive action and is therefore deliberative and pre-decisional.

- d. What challenges does EPA face in achieving these benefits and what will EPA, under your leadership, do to successfully overcome these challenges?

As I noted previously, the White House is leading an interagency process to consider the implications if the U.S. decides to ratify the Kigali Amendment. If a decision were made to seek ratification, the President would send the Amendment to the Senate for advice and consent. Until such time as those actions may take place, it would be premature for me to speculate about the challenges the EPA may face and how those challenges may be addressed and resolved.

More information on EPA's efforts on ozone layer protection is available at: <https://www.epa.gov/ozone-layer-protection>.

- 30. It is my understanding that EPA has prepared analysis of the consumer cost benefits of the Montreal Protocol, including projected benefits to US consumers from the implementation of the HFC phasedown consistent with the Kigali amendment to the Protocol.

- a. Will you immediately make the results of that study public? If not, why not and when will the agency release this report?

The White House is leading an interagency process to consider the implications if the U.S. decides to ratify the Kigali Amendment. Any analysis of costs and benefits by EPA is still undergoing review and includes information that relates to a pending or contemplated executive action and is therefore deliberative and pre-decisional.

- b. Please share with the Committee this analysis and the key findings from EPA's work.

Any analysis of costs and benefits by EPA is still undergoing review and includes information that relates to a pending or contemplated executive action and is therefore deliberative and pre-decisional. Should the analysis be finalized in connection with any future final action we will provide any decisional documents in the administrative record for those actions and can supply the final version at that time.

Questions on the Methylene Chloride Ban

31. When I raised my concerns at the hearing about EPA's failure to finalize a methylene chloride ban that sufficiently protects both consumer and commercial users against its severe risks (as your chief of staff committed to my staff would occur at the time former Administrator Pruitt first announced his plans to finalize the ban), you stated that "It is at OMB, it is ready to go as soon as the Federal Register opens. That is something that I have taken seriously, and it is something that we have spent a lot of time, I have spent a lot of personal time on that issue. And I hope we can get that out as quickly as possible."
 - a. Has EPA determined that methylene chloride poses an unreasonable risk to workers?
 - b. Do you agree that the majority of reported deaths due to methylene chloride exposure have occurred in a work setting, even when workers have undergone hours of training and followed all recommended precautionary measures?
 - c. Do you agree that the OSHA standard for methylene chloride exposure is more than 20 years old¹⁴, and that OSHA told EPA that it does not believe the OSHA standard is protective enough given the risks to workers that were identified by EPA?
 - d. Do you agree that as part of its analysis, EPA assessed whether a training program for the proper use of respirators for methylene chloride paint strippers could be effective, and concluded it would be too costly and would likely result in companies voluntarily using alternatives to methylene chloride?
 - e. How long does EPA expect it will take to finalize its proposal entitled "Methylene Chloride; Commercial Paint and Coating Removal Training, Certification and Limited Access Program" once it publishes this insufficiently protective approach to addressing occupational methylene chloride exposures?
 - f. How long does EPA expect it will take to finalize its consumer ban on methylene chloride?

Yes, under certain circumstances, methylene chloride not only can pose danger, but has also caused worker deaths. EPA submitted a final rule for methylene chloride paint and coating removal to OMB for interagency review on December 21, 2018, prior to the lapse in appropriations. Questions regarding the scope, implementation, and timing of

¹⁴ <https://www.regulations.gov/document?D=EPA-HQ-OPPT-2016-0231-0153>

the final rule, and associated EPA actions, will depend on the outcome of the interagency review process.

Questions on PFAS

32. The Agency for Toxic Substances and Disease Registry (ATSDR) announced its draft toxicological profile for PFAS on June 21, 2018, covering a total of 14 perfluoroalkyl substances. Due to inadequate data for 10 of the compounds, ATSDR could establish Minimum Risk Levels (MRLs) for only 4 of the PFAS chemicals. These MRLs are not the same as the current EPA Lifetime Health Advisories (LHAs) for PFOA and PFOS, but the new profiles indicate potential health impacts at lower concentrations than EPA's LHAs, which are set at 70 parts per trillion (ppt). Several states have established drinking water standards substantially lower than EPA's 70 ppt LHAs for PFOS and PFOA—some in the range of the equivalent levels reflected by the ATSDR profile, or about 7 ppt for PFOS and 11 ppt for PFOA. Is EPA evaluating these state actions and the ATSDR findings and incorporating the latest science in its regulatory process?

The EPA supports and has been engaged in the efforts of our state and federal partners, including ATSDR, to develop information related to PFAS. The EPA continues to take concrete steps, in cooperation with our federal and state partners, to address PFAS and ensure all Americans have access to clean and safe drinking water.

The EPA is evaluating PFOA and PFOS under the regulatory determination process, which builds on the work the agency completed in the health advisories for PFOA and PFOS and is an important step in the process for establishing a National Primary Drinking Water Regulation.

As a part of the evaluation, the EPA will continue to carefully review the draft ATSDR Toxicological Profile and will consider all newly available scientific information, including the science used to develop state standards.

33. When EPA conducted its Unregulated Contaminant Monitoring Rule (UCMR) 3 monitoring, it identified 63 drinking water systems¹⁵ with combined PFOA and PFOS levels that exceeded EPA's health advisory levels. However, according to former EPA officials, EPA also received data related to PFAS detected at levels below EPA's health advisory level. For each category below, please provide a list of drinking water systems (including their location) whose UCMR 3 occurrence data fell into the specified range.
- Systems whose levels exceeded the combined PFOA and PFOS health advisory levels.
 - Systems whose combined PFOA and PFOS levels were between 60-70 ppt.
 - Systems whose combined PFOA and PFOS levels were between 50-60 ppt.
 - Systems whose combined PFOA and PFOS levels were between 40-50 ppt.

¹⁵ https://pfas-1.itrcweb.org/wp-content/uploads/2018/01/pfas_fact_sheet_regulations_1_4_18.pdf

- e. Systems whose combined PFOA and PFOS levels were between 30-40 ppt.
- f. Systems whose combined PFOA and PFOS levels were between 20-30 ppt.

To provide Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS from drinking water, the EPA has established the health advisory levels at 70 parts per trillion. EPA fact sheets state that when both PFOA and PFOS are found in drinking water, the combined concentrations of PFOA and PFOS should be compared with the 70 parts per trillion health advisory level. This health advisory level offers a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOA and PFOS in drinking water.

The EPA worked with states and public water systems (PWSs) to characterize the occurrence of six PFAS in the nation's drinking water served by PWSs by including six PFAS in the third Unregulated Contaminant Monitoring Rule (UCMR3) under the Safe Drinking Water Act (SDWA). From 2013-2015, at least one sample of drinking water was collected and analyzed for six PFAS in nearly 5,000 PWSs across the nation, accounting for approximately 80 percent of the U.S. population served by PWSs (approximately 250 million people).

Under the UCMR3, the EPA found that 1.3 percent of the participating PWSs (63 out of 4,920 PWSs reporting) had at least one sample that measured PFOA, PFOS, or a combined value for PFOA and PFOS at concentrations greater than 70 ppt. The EPA found 4.0 percent of PWSs (198 out of 4,920 systems) reported results for which one or more of the six PFAS (PFOA, PFOS, perfluorononanoic acid (PFNA), perfluorohexane sulfonic acid (PFHxS), (perfluoroheptanoic acid) PFHpA, or perfluorobutane sulfonate (PFBS)) was measured at or above the minimum reporting limit (MRL) during one or more sampling events at one or more sampling locations.

The final UCMR3 data set is publicly available on the UCMR occurrence data web page (<https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule>) as are the instructions for importing the UCMR3 results (<https://www.epa.gov/sites/production/files/2016-08/documents/instructions-importing-viewing-ucmr3-results.pdf>) to filter, analyze, or view the analytical data under various scenarios, including the specified ranges in the question. However, please note the UCMR3 MRL for PFOA was 20 ppt and for PFOS was 40 ppt. The EPA has no numeric results below the MRLs.

Questions on Past Commitments

34. In Chad McIntosh's September 2, 2018 letter to me, he made several commitments. For each of the following commitments drawn from that letter, please indicate whether the commitment has been met. If it has not been met, why not, and by what date will it be met?

- a. “If confirmed, I will commit to working directly with the National Tribal Caucus (NTC), a national body of tribal advisors who focus primarily on identifying and addressing national, cross-media and emerging tribal environmental issues. I will commit to meeting with the NTC on at least an annual basis. In practice, discussions will likely occur on a monthly basis. I will commit to meeting with the entire National Tribal Operations Committee on an annual basis.”
- b. “In addition, I commit to meeting with each of the Regional Tribal Operations Committee (RTOC) at least on an annual basis with my EPA regional counterparts, and commit to participating in key tribal meetings such as the National Congress of American Indians Annual Convention”
- c. “Should I be confirmed, I will enhance the strength of Tribal representation within EPA by hiring a member of a federally recognized tribe to be the Director of the American Indian Environmental Office within the Office of International and Tribal Affairs.”

Assistant Administrator McIntosh’s nomination was confirmed by the United States Senate on January 3, 2019. He officially began as Assistant Administrator on January 18, 2019.

Prior to his confirmation by the US Senate, in his capacity as Senior Counsel to the Administrator, Chad McIntosh attended meetings with various tribal leaders in order to better understand EPA’s federal responsibilities and the interests and concerns of the tribes. Last fall, Mr. McIntosh participated in meetings with the Governor of the Pueblo of Santa Clara and Tribal Council representatives of the Nez Perce Tribe, as well as tribal organizations and associations, including the Alaska Native Village Cooperation Association. He also attended the EPA Region 9 Regional Tribal Operations Committee (RTOC) meetings, with EPA Region 9 Regional Administrator, Mike Stoker, in late October.

In his capacity as the Assistant Administrator for International and Tribal Affairs here at EPA, Mr. McIntosh is the Agency-lead for the National Tribal Operations Committee (NTOC) meeting, consisting of National Tribal Caucus representatives and EPA Senior Leadership. The NTOC meeting is being scheduled in Washington, D.C. in February, depending on the current government shutdown. I plan to co-chair the NTOC meeting when it is scheduled; Chad McIntosh and other Assistant Administrators and Regional Administrators will also attend.

Every year, Mr. McIntosh will meet with the Regional Tribal Operations Committees in each of the 10 EPA regions. The Regional Administrators and Mr. McIntosh take these meetings very seriously as a way to carry out EPA’s responsibilities with Tribes and to consult and communicate with the Tribes. In addition, he will attend key Tribal meetings and directly visit Tribes throughout the year.

The role of EPA’s American Indian Environmental Office is very important. He is working with EPA’s human resources office and with his colleagues here at the Agency

to identify and appoint a member of a federally recognized tribe to be Director of the American Indian Environmental Office as soon as possible.

Now that he is confirmed as his letter noted and which is key to fulfilling these commitments, I know that Mr. McIntosh will do everything in his power to meet his commitments throughout his appointment in an ongoing and transparent fashion.

35. In your January, 2019 letter to me, you made several commitments. For each of the following commitments drawn from that letter, please indicate whether the commitment has been met. If it has not been met, why not, and by what date will it be met?

- a. “EPA will withdraw its OMB submission to propose revisions to these [worker protection] rules and will not make any changes to the designated representative and minimum age provisions.”

The Agency has been developing proposals concerning the Agricultural Worker Protection Standard (WPS) rule, including changes to the designated representative and minimum age provisions, and application exclusion zone (AEZ) provisions. The Agency has also been developing changes to the Certification of Pesticide Applicators (CPA) rule. Although the subject matter associated with these potential changes has been subject to wide ranging public stakeholder meetings and public comments, EPA will withdraw its OMB submission to propose revisions to these rules and will not make any changes to the designated representative and minimum age provisions. It may consider proposing revisions to the AEZ provision in the WPS rule, but to no other substantive provision in the WPS rule. If such a proposal is issued, it would be subject to a public notice and comment period of no less than 90 days. I will follow through on the commitments in my January 2019 letter to you.

- b. The Agency will promptly submit the methodology for deciding how to collect and evaluate scientific research related to a chemical's safety that was recently developed by the Office of Chemical Safety and Pollution Prevention (OCSPP) to the National Academy of Sciences (NAS) for peer review and feedback.

Because it is important that all of the Agency’s chemical safety efforts comply with the requirements in the law as well as the regulations implementing the law regarding the Agency’s use of the best available science, the EPA will, promptly submit the methodology for deciding how to collect and evaluate scientific research related to a chemical’s safety that was recently developed by the Office of Chemical Safety and Pollution Prevention (OCSPP) to the National Academy of Sciences (NAS) for peer review and feedback and, at the same time EPA will use the Frank R. Lautenberg Chemical Safety for the 21st Century Act Section 26(o) mandated advisory committee, a FACA committee, whose purpose is to provide independent

advice and expert consultation with respect to the scientific and technical aspects of issues related to TSCA, to provide its independent advice on the methods used by OCSPP to collect and evaluate scientific research in the first ten risk evaluations. I also commit to make public the review, feedback and any recommendations received from both the NAS and the advisory committee within 30 days of their receipt. Finally, EPA will incorporate feedback and recommendations as appropriate. I will follow through on the commitments in my January 2019 letter to you.

Questions on the Shutdown

36. Please describe how the on-going government shutdown is affecting EPA's efforts to –
- a. Provide guidance to state drinking water programs; and
 - b. Coordinate with states to keep toxic chemicals out of drinking water and respond to contamination events.

EPA used carryover funding to keep the Agency open through December 28—one week beyond the lapse in appropriations, which occurred on December 21—and of course the lapse has now ended. During the shutdown, EPA had staff available to work on excepted activities such as providing emergency guidance to states and water systems when significant risk to human health occurs, conducting emergency response activities for contaminated drinking water, and providing assistance as necessary for other situations posing a danger to the public. For example, the State of New Jersey recently requested EPA staff to conduct critical work related to lead exposure in Newark. However, the EPA was not able to provide routine, non-emergency guidance or technical support to state drinking water programs during the government shutdown. Further information on EPA's shutdown procedures and activities that occurred during the lapse in funding can be found in the *U.S. EPA Contingency Plan in the Event of a Government Shutdown* (<https://www.epa.gov/2018lapse/us-epa-contingency-plan-event-government-shutdown>).

37. Please provide an update on when you expect the following EPA regulatory actions to be completed assuming the government shut-down ends by a) February 15 2019 or b) April 1, 2019.
- National Primary Drinking Water Regulations for Lead and Copper (revisions to the so-called Lead and Copper Rule) – proposed rule expected in February 2019 according to the Fall 2018 Unified Agenda.
 - National Primary Drinking Water Regulations: Regulation of Perchlorate (pursuant to a consent decree entered by the U.S. District Court for the Southern District of New York, EPA was supposed to propose a Maximum Contaminant Level Goal (MCLG) for perchlorate in drinking water no later than October 31, 2018 and finalize the MCLG no later than December 19, 2019).

- Use of Lead Free Pipes, Fittings, Fixtures, Solder and Flux for Drinking Water (EPA proposed regulations to implement section 1417 of the Safe Drinking Water Act on January 17, 2017 with a stated goal in the Unified Agenda of finalizing that rule by June 2019).

The EPA is working aggressively to develop proposed major revisions to the Lead and Copper Rule, which was last significantly updated in 1991. It is a complicated rulemaking, but EPA anticipates sending proposed revisions to OMB this spring. The same rulemaking team is working on the Lead Free Rule which the EPA plans to finalize in 2019. The EPA intends to maintain these rulemaking schedules; however, the agency will continue to evaluate the schedules in light of the government shutdown and make necessary adjustments. The consent decree deadline for the perchlorate rulemaking was extended to April 30, 2019, to reflect the additional time required to address extensive peer reviewer recommendations to improve the scientific tools the agency is using to inform the proposed rule which was not anticipated at the time the decree was entered. The consent decree includes a provision that automatically extends deadlines in the event of certain circumstances outside the reasonable control of the EPA, such as lapses in government funding.

38. EPW staff contacted your office via email on January 9, 2019 requesting the names of the 6 EPA staff deemed “*necessary to perform activities expressly authorized by law*” and the 12 EPA staff deemed “*necessary to the discharge of the President’s constitutional duties and powers*” in EPA’s December 31, 2018 shutdown contingency plan. On January 10, 2019 a member of your staff replied via email, writing “*It has been difficult with limited resources to pinpoint. Still working on this.*” To date, no additional response failed to that email request has been received.

Also on January 10, 2019, members of the EPW committee sent you a letter requesting information about any EPA staff that had been or was currently engaged in work related to your nomination. To date, no response to that letter has been received.

On the evening of January 14, 2019, reports surfaced that you had updated EPA’s contingency plan to increase the number of EPA staff deemed “*necessary to the discharge of the President’s constitutional duties and powers*” from 12 to 28, and increased the number of EPA staff deemed “*necessary to perform activities necessarily implied by law*” from zero (0) to 12.

During your confirmation hearing you also admitted in an exchange with Senator Van Hollen that certain EPA staff were brought back to work from furlough during the government shutdown to prepare you for this hearing;

Senator Van Hollen. And that there are approximately 891 who are on the job, is that approximately right?

Mr. Wheeler. That sounds pretty exact, 891. It varies from day to day. We bring back people to work on specific issues.

Senator Van Hollen. Right. Including some that you brought on to prepare for this hearing, is that right?

Mr. Wheeler. Yes, Senator.

- a. Please list the names and official titles of the 6 EPA staff deemed “necessary to perform activities expressly authorized by law” in EPA’s December 31, 2018 shutdown contingency plan.
- b. Please list the names and official titles of the 12 EPA staff deemed “necessary to the discharge of the President’s constitutional duties and powers” in EPA’s December 31, 2018 shutdown contingency plan.
- c. Please list the names and official titles of 28 EPA staff deemed “necessary to the discharge of the President’s constitutional duties and powers” in EPA’s January 14, 2019 contingency shutdown plan.
- d. Please list the names and official titles of the 12 EPA staff deemed “necessary to perform activities necessarily implied by law” in EPA’s January 14, 2019 contingency shutdown plan.
- e. For each EPA staff member described in questions (a) through (d), please provide their work schedules and an accounting of each hour worked by each of those staff, as applicable, on any work activity related to your nomination or the confirmation process, and a description of the task or work function performed during that time.
- f. Please submit all letters, emails, memoranda, or other written or electronic correspondence prepared, transmitted, or received by each EPA staff member described in questions (a) through (d) that relates to your nomination or confirmation process.
- g. At any time since December 29, 2018, has any EPA staff member not encapsulated by questions (a) through (d) engaged in work activities related to your nomination or the confirmation process?
- h. If your answer question (g) is yes, please list the names and official titles of those individuals.
- i. If your answer to question (g) is yes, please submit all letters, emails, memoranda, or other written or electronic correspondence prepared, transmitted, or received by those EPA staff member(s) that relates to your nomination or the confirmation process.
- j. If your answer to question (g) is yes, please submit work schedules and an accounting for hours worked by each of those EPA staff, as applicable, on any work activity related to your nomination or the confirmation process, including a description of the task or work function performed during that time.
- k. Please list the names and official titles of the 12 EPA staff deemed “necessary to perform activities implied by law” that were added to EPA’s contingency plan for the first time on January 14, 2019? What change in law or circumstance occurred between December 31, 2018 and January 14, 2019 lead you to add those 12 EPA staff after you originally estimated that no EPA staff would be necessary to perform activities implied by law?

- l. What work activities are the 12 EPA staff deemed “necessary to perform activities implied by law” by the January 14, 2019 EPA shutdown contingency plan engaged in? Are any of those 12 EPA staff engaged in work activities or functions related to your nomination or the confirmation process?
- m. Were any of the additional EPA staff added to the December 29, 2018 EPA shutdown contingency plan by the January 14, 2019 EPA shutdown contingency plan engaged in work activities or functions related to your nomination or confirmation process prior to January 14, 2019?
- n. If your answer to question (m) is yes, please list the names and official titles of any such EPA staff member or members.

OMB Circular A-11, Section 124.2 defines 5 categories of employees that must be accounted for in the Contingency Plan:

- **Their compensation is financed by a resource other than annual appropriation;**
- **They are necessary to perform activities expressly authorized by law;**
- **They are necessary to perform activities necessarily implied by law;**
- **They are necessary to the discharge of the President's constitutional duties and powers;**
- **They are necessary to protect life and property.**

Attached, please find a list of excepted employees. All excepted employees were instructed to only work the number of hours that were needed to complete their excepted duties. The number of excepted employees also fluctuated depending on the needs of the organization. While the majority of EPA’s excepted employees were excepted as necessary to protect life and property, we had personnel numbers under 3 other categories:

- **The Agency’s Presidentially appointed/senate confirmed individuals are necessary to perform activities expressly authorized by law.**
- **In the January 14th Contingency Plan, 12 individuals were deemed necessary to perform activities necessarily implied by law. These employees, from the Office of the Chief Financial Officer, were added to process payments for services rendered for excepted activities where there is an imminent threat to the safety of human life and property and funds are available.**
- **Individuals working on the Acting Administrator’s hearing preparation were identified as necessary to the discharge of the President's Constitutional duties and powers. This number increased between the December 31st and January 14th Contingency Plans according to the work needed to directly support the Hearing preparation activities.**

39. Have any EPA contractors, sub-contractors, or independent contractors performed work activities or functions related to your nomination or the confirmation process since December 29, 2018? If so, please list the names and official titles of those individuals.

No.

40. How many total hours have been spent by you and EPA staff discussing, researching or otherwise preparing for your nomination and the confirmation process, including your confirmation hearing testimony and responding to questions for the record?

It is difficult to estimate hours by me or EPA staff discussing, researching, or otherwise preparing for the nomination hearing. However, I can advise you that I met with each program office once or twice to discuss a variety topics and programs they suggested to highlight and specific questions I had within the work of each program office. I followed those individual meetings with a meeting with all offices to ensure that I had a comprehensive review of our activities and programs to be able to fully answer Congressional questions. I do not believe we are able to assign a specific number of hours to the process for all individuals involved. However, I do hope this description of our general preparation will be helpful to you.

41. In 2017 EPA conducted roughly 12,000 inspections to make sure that air, water and toxic waste rules were being complied with. That's more than 230 each week. How many inspections has EPA conducted in the approximately three weeks since December 29, 2018?

EPA did not conduct any routine, planned civil enforcement inspections since December 29, 2018, until the agency reopened after January 25, 2019. Criminal investigations continued, including laboratory support for those investigations. Emergency response personnel continued to respond as appropriate to accidental releases. Superfund personnel continued to do work, including soil, air and water sampling, at sites that may present an imminent threat to the safety of human life or to the protection of property. In addition, this question assumes that inspections are conducted evenly throughout the year. In actuality, the majority of inspections occur during the summer and warmer months.

- a. Has the ability of EPA's pollution inspectors to monitor air emissions been impacted or diminished in any way by the federal government shutdown, yes or no?

Entities regulated under the Clean Air Act remain subject to requirements to monitor, record, and report air emissions in accordance with federal and state regulations and permits.

- b. Has EPA's ability to monitor and test for water contamination been impacted or diminished in any way by the federal government shutdown, yes or no? If yes, please describe the impact of halted inspections during the shutdown on human health and the environment.

Entities regulated under the Clean Water Act remain subject to requirements to test and monitor for water contamination in accordance with their permits. NPDES permit holders should be continuing to submit discharge monitoring reports to either state systems or EPA's data system (ICIS).

Reviewing those monitoring results was not considered an excepted activity under EPA's lapse plan, so staff did not review monitoring and test results during that time.

Now that the government has reopened, EPA plans to update ICIS with submissions that were made during the shutdown.

- 42. I recently learned that samples of GenX, an unregulated, PFOA-like contaminant used to make nonstick cookware and other products, are sitting in refrigerators near the Lower Cape Fear River in Fayetteville, North Carolina because EPA's lab in Athens, GA has been shut down.

- a. Please confirm whether this is true.

It is our understanding, during the shutdown, that North Carolina Department of Environmental Quality (NCDEQ) held approximately seven samples/week in NCDEQ's Regional Office in Fayetteville. We also understand the NCDEQ is exploring options for alternative analysis of the samples. Region 4 intends to promptly determine the number of remaining samples needing analysis and provide support to NCDEQ now that the Agency has returned to work.

- b. If so, please provide a list of similar situations where EPA's ability to monitor and test for water contamination has been affected by the government shutdown.

As noted in response to question 41, where PFAS are subject to permit limitations, monitoring data should continue to be collected and reported by the permit holder. In addition, all Chemours facilities in North Carolina, West Virginia and New Jersey are subject to a TSCA section 5(e) order that requires monitoring of PFAS releases. Information on any activities undertaken in support of PFAS related enforcement investigations is confidential. However, except in cases involving imminent threats to the safety of human life or to the protection of property EPA enforcement investigations were suspended during the shutdown.

EPA/ORD is also providing technical support to several other states in addition to North Carolina relating to possible PFAS water contamination. These states include New Hampshire, New Jersey, West Virginia, New York, Michigan, and Minnesota. The government shutdown impacted EPA's ability to provide the requested technical support to these states as well, including delays in analyses and reporting of PFAS in environmental media and in the development of additional study plans for future analyses of PFAS.

43. I recently learned that EPA has had to stop sampling air emissions in Louisiana for chloroprene.
- a. Please confirm whether this is true.
 - b. If so, please provide a list of similar situations where the ability of pollution inspectors to monitor air emissions been impacted or diminished due to the government shutdown.

The Denka community air monitoring for chloroprene at six locations in LaPlace, Louisiana is continuing as part of EPA's activities to protect public health. News outlets incorrectly reported that EPA air monitoring had ceased during the shutdown and EPA reached out to the reporter with correct information on January 2 and 3, 2019, respectively. EPA also notified the state of Louisiana, citizen's science advocate Wilma Subra, and Louisiana Environmental Action Network (LEAN) President Marylee Orr of the reporting error. EPA posted the latest set of quality assured data from November on its website (<https://www.epa.gov/la/laplace-st-john-baptist-parish-louisiana>) on December 26, 2018.

Denka is the only facility with chloroprene emissions so there are no other similar situations.

44. I have heard that EPA was forced to cancel a public hearing on cleanup proposals for the former West Calumet Housing Complex in East Chicago, Indiana.
- a. Please confirm whether this is true.

EPA proposed an Amendment to Record of Decision for the residential area (Zone 1) for the USS Lead facility in East Chicago, Indiana on November 7, 2018. EPA held a public hearing on November 29, 2018 in East Chicago, IN to provide opportunity for input on the proposed remedy for Zone 3 of the USS Lead Superfund site. Members of the East Chicago community requested a second opportunity to provide public comment prior to the January 14, 2019 public comment deadline. EPA granted this request and

scheduled a second public hearing for January 10, 2019. This hearing was postponed due to the partial federal government shutdown.

- b. EPA's Office of Land and Emergency Management, which oversees cleanup of Toxic Superfund sites, is currently down from 468 staffers to 3. Has Superfund site monitoring or oversight been impacted or diminished in any way during the government shutdown as compared to the same time period last year? If so, please quantify all such impacts.

The number of employees that were excepted working nationwide on Superfund issues was dynamic and varies by region since the agency directs work to meet specific needs as allowed by law. EPA Headquarters and Regional excepted staff in the Superfund Program continue to respond at sites or incidents where there was an imminent threat to the safety of human life or to the protection of property. Ongoing work at Superfund sites also continued without EPA involvement up to the point that additional EPA direction or funding is needed. Now that the government has reopened, cleanup activities requiring new funding will restart and sites where cleanup activities had been stopped or shut down are able to commence.

- 45. Have you or any member of EPA staff directed EPA's Office of General Counsel (OGC) to engage in any work since December 29, 2018? Please provide this Committee with a comprehensive list of the types and scope of work performed by OGC staff since December 29, 2018, noting specifically any task that relates to (i) your nomination or confirmation hearing; (ii) pending or ongoing regulatory matters; and (iii) enforcement actions or consent decrees.

The Office of General Counsel (OGC) worked on excepted activities since December 29, 2018 providing significant legal advice on permissible activity during the shutdown. OGC appropriations law experts responded to questions from numerous EPA offices regarding whether certain agency activities could continue during the lapse in appropriations and have engaged regularly with OMB counsel to ensure excepted functions comport with legal requirements. In consultation with the Department of Justice (DOJ), OGC sought to extend court filing deadlines and court-ordered deadlines to take regulatory actions. In instances where an extension was not granted, the Agency worked with DOJ to draft required filings and continued work on pending regulatory actions to meet court-ordered deadlines. OGC also provided legal review and counsel connected to preparing for the confirmation hearing and responding to post-hearing Questions for the Record.

46. On December 28, 2019, EPA tweeted: “Due to a lapse in appropriations, EPA websites and social media will not be regularly updated. . . . In the event of an environmental emergency threatening the safety of human life or to protect certain property, epa.gov will be updated with appropriate information.” Aside from a post on January 10, 2019 announcing an enforcement settlement with Fiat Chrysler, EPA’s social media accounts have been silent since EPA closed on December 29, 2018. However, on the day of your confirmation hearing, January 16, 2019, EPA’s Twitter feed began posting messages promoting your nomination, including encouraging the public to watch your hearing, quoting statistics from your testimony, and posting an op-ed from Chairman Barrasso praising your nomination. On that same day, EPA also issued press releases to reporters with Chairman Barrasso’s op-ed and your written testimony.

- a. Have you or any member of EPA staff directed EPA’s Office of Public Affairs (OPA) to engage in any work since December 29, 2018?

A portion of the staff within the EPA’s Office of Public Affairs engaged in work during the shutdown. This work included preparing the Acting Administrator for his confirmation hearing, participating in preparatory briefings, drafting briefing documents, coordinating a comprehensive list of Agency accomplishments, as well as preparing the Acting Administrator’s opening statement for the confirmation hearing. In addition, OPA staff worked on the communications materials for the Fiat Chrysler enforcement settlement announcement with the Department of Justice, in order to comply with a court order. Other activities included responding incoming press inquiries about Superfund and Emergency Removal sites that fall under the environmental emergency threatening the safety of human life or property category. Finally, OPA assisted the Acting Administrator in tweeting condolences to the family of former EPA Administrator Doug Costle, on his passing.

- b. Do you consider your nomination or confirmation to constitute an “environmental emergency threatening the safety of human life” or property? If so, do you believe your nomination and confirmation warranted requiring furloughed OPA staff to draft and post on social media accounts?

Work associated with my nomination and confirmation is pursuant to the President’s constitutional appointment power, and necessary to allow the Senate to fulfill its constitutional role of advice and consent on the President’s nominees. All EPA staff working on the nomination hearing were acting in response to those authorities. This work constitutes an excepted activity that occurred during the lapse in appropriations for the following reasons. First, it falls under the President’s constitutional authority under the Appointments Clause and is necessary for the President’s discharge of that authority. And, second, as the legislative branch has enacted appropriations for FY 2019 and is not subject to the lapse in the appropriations, my participation in the scheduled hearing was necessary for

the Congress's funded function to be effective (and my absence from my own confirmation hearing would significantly damage the Committee's confirmation hearing), and was therefore necessarily implied to continue during EPA's lapse in appropriations. This is consistent with the December 13, 1995 Office of Legal Counsel decision, *Effect of Appropriations for Other Agencies and Branches on the Authority to Continue Department of Justice Functions During the Lapse in the Department's Appropriations*. The OMB General Counsel concurred with EPA that I could prepare for and participate in his confirmation hearing and receive support from EPA staff as necessary to prepare for and participate in the hearing.

- c. Please provide this Committee with a comprehensive list of the types and scope of work performed by OPA staff since December 29, 2018, noting specifically any task that relates to (i) your nomination or confirmation hearing; (ii) pending or ongoing regulatory matters; and (iii) enforcement actions or consent decrees.

A portion of the staff within the EPA's Office of Public Affairs engaged in work during the shutdown. This work has included OPA staff worked on preparing the Acting Administrator for his confirmation hearing, participating in preparatory briefings, drafting briefing documents, coordinating a comprehensive list of Agency accomplishments, as well as preparing the Acting Administrator's opening statement for the confirmation hearing. In addition, OPA staff worked on the communications materials for the Fiat Chrysler enforcement settlement announcement with the Department of Justice, in order to comply with a court order. Other activities included responding incoming press inquiries about Superfund and Emergency Removal sites that fall under the environmental emergency threatening the safety of human life or property category. Finally, OPA assisted the Acting Administrator in tweeting condolences to the family of former EPA Administrator Doug Costle, on his passing.

47. Tens of thousands of EPA staff and contractors were furloughed after the federal government was shut down and others have been asked to work for little or no pay.

I sympathize with those impacted by the shutdown. I remember experiencing a shutdown as a career EPA employee in the 1990s. As a general matter, the Privacy Act of 1974 limits the types of information about individuals that federal agencies can collect and how that information can be maintained. EPA has not collected the information referenced in this question, as that information has no connection with our specific statutory mission, and my understanding is that these types of records would not be excepted from the Privacy Act in any event.

- a. How many EPA staff or contractors have missed or made late rent or mortgage payments, or are facing eviction or foreclosure?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- b. How many EPA staff or contractors have missed or made late student loan payments during the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- c. How many EPA staff or contractors have missed payments on auto loans or leases during the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- d. How many EPA staff or contractors have missed credit card payments, or incurred credit card interest as a result of their inability to make those payments?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- e. How many EPA staff or contractors have been unable to pay for child care during the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- f. How many EPA staff or contractors have been unable to pay medical expenses for themselves or their families during the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- g. How many EPA staff or contractors have filed for unemployment benefits?

The EPA has posted guidance generated from the Office of Personnel Management to assist its employees with any financial challenges they are facing during the shutdown. Currently, a total of 1,645 EPA employees have applied for unemployment benefits as of January 22, 2019. We do not have any information on the nonfederal workforce. The EPA does not have any way to track any other specific information regarding EPA employees or contractors' financial hardships during this time period.

- h. How many EPA staff or contractors have attempted to get part-time or temporary jobs during the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- i. How many EPA staff or contractors have had their credit scores impacted by the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- j. How many EPA staff or contractors have applied for private loans to make ends meet during the shutdown? How many were rejected?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- k. How many EPA staff or contractors have been forced to spend money from their savings accounts, retirement accounts, 401ks, pension funds, or children's 529 college funds as a result of the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- l. How many EPA staff or contractors have been forced to secure, or attempt to secure private loans or additional lines of credit as a result of the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

- m. How many EPA staff or contractors have been forced to pawn or sell personal effects or real property as a result of the shutdown?

It is inappropriate for the EPA to collect, maintain, or disseminate such personal information for any of its employees or contractors.

48. It is my understanding that the EPA-managed projects listed below have stopped due to the shutdown.

- a. Please confirm whether that is true for each project.

No emergency responses were halted during the shutdown.

- b. In addition, please supplement this list with additional similar projects around the country that are halted because of the shutdown.
- i. Camp Fire, Paradise, CA (household waste cleanup)

The activities associated with the cleanup of household waste resulting from the Camp Fire continued during the shutdown.

- ii. Whiting Metals, Whiting, Indiana (cited for harmful levels of airborne lead)

Air Monitoring via EPA's XACT monitor continued during the shutdown at the Whiting Metals site in Whiting, IN with IDEM, the state environmental agency, conducting some routine maintenance on the equipment. IDEM continues to conduct filter-based monitoring on site, collecting a sample every third day.

- iii. SH Bell, East Liverpool, Ohio (fence line monitoring, cited for airborne manganese)

Although US EPA oversees the ambient air monitoring performed at SH Bell, East Liverpool, OH, the operation and maintenance is conducted by the company and is required to continue through an enforceable document. SH Bell East Liverpool is required by its consent decree with the US Department of Justice and US EPA to perform monitoring. The obligation for the facility to continue monitoring was not impacted by the temporary interruption of EPA's oversight during the partial government shutdown.

- iv. SH Bell, Chicago, Illinois (fence line monitoring, cited for airborne manganese)

Although US EPA oversees the ambient air monitoring performed at SH Bell, Chicago, IL, the operation and maintenance is conducted by the company and is required to continue through an enforceable document. SH Bell Chicago is required to monitor by a Clean Air Act Section 114 Information Request that was issued by US EPA. The obligation for the facility to continue monitoring was not impacted by the temporary interruption of EPA's oversight during the partial government shutdown.

- v. Watco, Chicago, Illinois (fence line monitoring, cited for airborne manganese)

Although US EPA oversees the ambient air monitoring performed at Watco, Chicago, IL, the operation and maintenance is conducted by the company and is required to continue through an enforceable

document. Watco is required to monitor by a Clean Air Act Section 114 Information Request that was issued by US EPA. The obligation for the facility to continue monitoring was not impacted by the temporary interruption of EPA's oversight during the partial government shutdown.

- vi. Sterigenics, Willowbrook, Illinois (ethylene oxide)

EPA Air Monitoring sample collection continued during the partial government shutdown. The Office of Air Quality Planning and Standards has been analyzing the data.

- vii. CII Rain Carbon, Robinson, Illinois (cited for airborne particulate matter)

Although US EPA reviews the ambient air monitoring performed at CII Carbon, Robinson, IL, the operation and maintenance is conducted by the company and is required to continue through an enforceable document. CII Carbon is required to monitor by a Clean Air Act Section 114 Information Request that was issued by US EPA. The obligation for the facility to continue monitoring not impacted by the temporary interruption of EPA's oversight during the partial government shutdown.

- viii. NASCO, Chicago, Illinois (awaiting results of metal and particulate matter monitoring)

Although US EPA reviews the ambient air monitoring performed at NASCO, Chicago, IL, the operation and maintenance is conducted by the company and is required to continue through an enforceable document. NASCO is required to monitor by a Clean Air Act Section 114 Information Request that was issued by US EPA. The obligation for the facility to continue monitoring was not impacted by the temporary interruption of EPA's oversight during the partial government shutdown.

- ix. General Iron, Chicago, Illinois (cited for Volatile Organic Compounds)

There is no pending testing to be performed at General Iron.

- x. USS Lead, East Chicago, Illinois (superfund emergency removal for lead, relocation of residents, soil removal)

The USS Lead cleanup did not stop work due to the shutdown. The residential yard cleanups were suspended prior to the shutdown due to the winter weather. It is anticipated that cleanup will start again in the spring as previously planned.

- xi. St. Regis Paper Co., Cass Lake, Minnesota (clean-up of dioxin, pentachlorophenol, PAHs)

The remedial site does not have any active cleanup occurring at this time. The shutdown did suspend progress on finalizing a proposed cleanup plan for public comment.

- xii. Lukenheimer Foundry, Cincinnati Ohio (clean-up of heavy metals, corrosives, ignitable wastes)

This removal action was suspended during the shutdown.

- xiii. Graveyard Auto, Clarksville, Indiana (clean-up of leaking drums)

EPA has secured drummed waste onsite in a Conex box at the site. The remaining site activities, including waste disposal and soil excavation, are on hold pending action memo approval, which was suspended during to the shutdown.

- xiv. C&H Mineral, Hubbel, MI (clean-up delayed of arsenic, lead)

This time-critical removal action did not stop due to the shutdown. The site is located in Upper Peninsula of Michigan, and construction was suspended due to the weather. It is scheduled to begin in the spring or as soon as weather condition permit construction.

49. EPA's Safe Drinking Water Information System (SDWIS) identifies which public water systems are in violation of drinking water standards and provides information on the severity of each violation. Unfortunately, a recent assessment of SDWIS drinking water reports indicates a major drop in enforcement actions. It appears that as a result of the government shutdown, EPA did not make its quarterly Dec 31, 2018 update to SDWIS. This means that communities will not have the most up-to-date information on the quality of their drinking water.

- a. Please confirm whether it is true that EPA is unable to update SDWIS because of the government shutdown.
- b. If you answered the first question in the affirmative, please explain the rationale behind your determination to allocate resources away from updating drinking water contamination data and to your confirmation hearing preparations.

The EPA did not complete its quarterly update of SDWIS before December 31, 2018 and will perform the update now that when Congress has provided appropriations for the agency. The data entered in SDWIS is provided by the communities that collected the data, meaning they already have access to their own drinking water quality

information. SDWIS contains information about public water systems and their violations of the EPA's drinking water regulations, as reported to the EPA by the states. The state agency with primary enforcement responsibility has access to the compliance data and is responsible for enforcing any public notification requirements to ensure that water systems provide safe water to their customers. Updating SDWIS, a federal database, does not satisfy the requirements of an excepted activity under the Anti-Deficiency Act, therefore EPA could not perform updates during the government shutdown.

Questions on Congressional Correspondence

50. For approximately the past year and a half, EPA has consistently provided documents I have requested in oversight letters at the same time or earlier than the same materials were being provided to Freedom of Information Act (FOIA) requestors or House Committee Chairs. Will you commit to continuing this practice of providing me with responsive materials at the same time they are provided to House Committee Chairs and FOIA requestors, or sooner? If not, please explain why not.

Yes.

51. Since you took the helm at EPA as Acting Administrator on July 6, 2018, I and members of this Committee have sent you many letters containing document requests that remain unanswered. A number of letters that were sent to your predecessor also lack complete responses. By what specific date should we expect to receive EPA's complete response to each of the following letters?

- a. April 4, 2017 – letter on political appointees' obstruction of career staff's estimates related to the implementation of the HONEST Act

EPA provided a response on August 23, 2017.

- b. April 6, 2017 and April 14, 2017 – letters on EPA's withdrawal of an Information Collection Request sent to the oil and gas industry

EPA provided a response on May 31, 2017.

- c. April 7, 2017 – letter on EPA's plans to rescind the Clean Power Plan

EPA provided a response on May 9, 2017.

- d. August 31, 2017 – letter on secrecy at EPA

We look forward to continuing to work with your staff to provide a response.

- e. October 25, 2017 – letter detailing concerns about the lead and copper rule
EPA provided a response on January 29, 2018.
- f. October 26, 2017 – letter on EPA’s decision to repeal the Clean Power Plan
EPA provided a response on November 28, 2017.
- g. December 13, 2017 – letter on EPA’s Sue and Settle Directive
EPA provided a response on January 30, 2018.
- h. January 9, 2018 – letter on Mr. Pruitt’s appointment of two scientists to serve on EPA’s Federal Advisory Committees who have financial conflicts of interest
We look forward to continuing to work with your staff to provide a response.
- i. January 18, 2018 – letter on a range of topics, including TSCA, climate change, and fuel efficiency standards
EPA provided a response on May 10, 2018.
- j. January 19, 2018 – letter on Mr. Pruitt’s meetings with industry
EPA provided a response on August 21, 2018.
- k. January 19, 2018 – letter on transparency, enforcement, and various other concerns
EPA provided a response on August 2, 2018.
- l. March 6, 2018 – letter on Mr. Pruitt’s wasteful spending
EPA provided a response on August 21, 2018.
- m. March 12, 2018 – letter on EPA’s decision to repeal emissions standards for glider trucks
EPA provided a response on October 16, 2018.
- n. March 14, 2018 – letter on EPA’s reversal of the once-in-always-in policy
EPA provided responses on June 6, 2018, and July 9.

- o. April 3, 2018 – letter on Mr. Pruitt’s decision to reverse EPA’s prior determination on greenhouse gas tailpipe standards

EPA provided a response on June 6, 2018, and subsequent link to documents responsive to this letter on November 21.

- p. April 3, 2018 – letter on Mr. Pruitt’s December 2017 trip to Morocco

We look forward to continuing to work with your staff to provide a response.

- q. April 9, 2018 – letter on Mr. Pruitt’s use of Safe Drinking Water Act authority to award large pay raises to favored aides

A link to documents responsive to this request was sent on August 31, 2018. We look forward to continuing to work with your staff to provide a response.

- r. April 12, 2018 – letter on Mr. Pruitt’s multiple ethics and wasteful spending practices

A link to documents responsive to this request was sent on May 4, 2018, August 21, and November 20. We look forward to continuing to work with your staff to provide a response.

- s. April 24, 2018 – letter on EPA’s drafting of the secret science rule and its major flaws

We look forward to continuing to work with your staff to provide a response.

- t. May 3, 2018 – letter on EPA’s signing of a Cooperative Research and Development Agreement with Water-Gen

We look forward to continuing to work with your staff to provide a response.

- u. May 15, 2018 – letter on reports that the White House prevented the release of a study concluding that PFAS poses a danger to human health at lower levels than set by EPA

EPA provided a response on May 21, 2018.

- v. May 17, 2018 – letter on EPA’s significant delay of the IRIS assessment on formaldehyde

EPA provided a response on July 5, 2018.

- w. May 21, 2018 – letter on Mr. Pruitt’s compliance with rules governing his legal defense fund

EPA provided a response on July 31, 2018.

- x. June 27, 2018 – letter on EPA’s reduced enforcement of the Clean Water Act

We look forward to continuing to work with your staff to provide a response.

- y. November 15, 2018 – letter on EPA’s federal advisory committees

We look forward to continuing to work with your staff to provide a response.

- z. December 3, 2018 – letter on the Trump Administration’s preparation and release of the Fourth National Climate Assessment

We look forward to continuing to work with your staff to provide a response.

- aa. December 6, 2018 – letter regarding EPA’s compliance with GSA’s travel regulations

We look forward to continuing to work with your staff to provide a response.

- bb. December 19, 2018 – letter requesting communications between industry and EPA about fuel economy or greenhouse gas tailpipe standards

We look forward to continuing to work with your staff to provide a response.

- cc. January 10, 2019 – letter requesting documents related to the government shutdown and use of furloughed staff to prepare you for your confirmation hearing

We look forward to continuing to work with your staff to provide a response.

- dd. January 10, 2019 – letter on Diane Hendricks’ \$50,000 contribution to Scott Pruitt’s legal defense fund

We look forward to continuing to work with your staff to provide a response.

Questions on other Clean Air Act issues

52. The Ozone Transport Commission has documented electric generating units (EGUs) that appear to have turned off their nitrogen oxide (Nox) controls. What are the public health and environmental impacts of these actions? Are downwind states including Maryland, Delaware and Connecticut adversely impacted by transported NO_x and/or ozone?

The Clean Air Act's "good neighbor" provision requires EPA and states to address interstate transport of air pollution that affects downwind states' ability to attain and maintain National Ambient Air Quality Standards (NAAQS). Specifically, Clean Air Act section 110(a)(2)(D)(i)(I) requires each state in its State Implementation Plan (SIP) to prohibit emissions that will contribute significantly to nonattainment of a NAAQS, or interfere with maintenance of a NAAQS, in a downwind state.

EPA has determined that the Cross-State Air Pollution Rule (CSAPR), the CSAPR Update, and the CSAPR Close-out (finalized 12/6/18) fully address states' good neighbor obligations for the 1997 and 2008 ozone NAAQS and the 1997 and 2006 PM_{2.5} NAAQS. For power plants covered by this program for cross-border ozone, nitrogen oxide emissions have dropped by over 20 percent - roughly 80,000 tons - just since the 2016 ozone season.

The recently finalized CSAPR Close-out rule determined that emission reductions under the CSAPR Update will sufficiently control transported ozone pollution with respect to the 2008 ozone NAAQS in states covered by the Update. EPA is actively working with states to provide the technical tools and information to facilitate "good neighbor" state plans addressing interstate transport under the 2015 ozone NAAQS. More information on EPA's efforts to address interstate ozone transport is available at: <https://www.epa.gov/interstate-air-pollution-transport>.

53. In your August 1, 2018 hearing before the EPW Committee, you said you could not "predict with certainty" the effects EPA's rollbacks would have on transport pollution and attainment status for states. In part, that is because at the time EPA had not modeled any of the effects these rules may or may not have on states. Since that time, has EPA modeled the effects of the proposed clean air regulations and changes in guidance on air pollution and transport pollution?

The U.S. is a global leader in clean air progress, and EPA expects these trends to continue in the future. For example, as part of its effort to provide data and analyses to support state planning efforts, EPA projects that nearly all areas of the country will meet the 2008 and 2015 ozone standards in the early 2020s. These projections are based on an air quality modeling platform which includes emissions, meteorology and other inputs for a base year as well as emissions for a future analytic year base case. EPA projections are based on a number of key inputs, including on-the-books rules. For the actions identified, EPA regularly conducts accompanying analyses to evaluate relevant regulatory impacts.

This progress builds upon recent trends which are not driven solely by Clean Air Act requirements. Between 2007 and 2017, emissions of nitrogen oxide (NO_x), the key contributor to ground-level ozone, have dropped in the U.S. by more than 40 percent. For power plants that EPA and states regulate to address cross-border ozone contributions, NO_x emissions dropped by 77,000 tons (21 percent) just between the 2016 and 2017 ozone seasons. From 1970 to 2017, the combined emissions of the six key pollutants regulated under the National Ambient Air Quality Standards dropped by 73 percent, while the U.S. economy grew more than 260 percent and the population continued to expand.

- a. If the Affordable Clean Energy Act goes final, how will that affect downwind pollution and the states' ability to meet attainment status for all National Ambient Air Quality Standards (NAAQS), and State Implementation Plans (SIPs), since EPA estimates there will be an increase in sulfur dioxide and ozone pollution from this rule?

The proposed Affordable Clean Energy (ACE) rule is projected to significantly reduce emissions, including sulfur dioxide (7,000 to 15,000 tons), and nitrogen oxides (8,000 to 15,000 tons). The Clean Power Plan (CPP) was stayed by the Supreme Court and thus never achieved any emission reductions.

- b. If EPA rescinds MATS, how will that affect downwind pollution, the states' ability to meet attainment status for all NAAQS and SIPs?

EPA has not proposed to remove or delist electric generating units from the list of source categories subject to regulation under Section 112, nor proposed to rescind the emission standards to which those units are currently subject.

- c. What are the effects of the "once in, always in" change in guidance on downwind pollution, the states' ability to meet attainment status for all NAAQS and SIPs?

In a 2007 proposed rule, EPA projected that rescinding the "once in, always in" policy would result in an overall reduction in emissions. Further, a rulemaking currently underway to implement the January 2018 interpretive rule, rescinding the "once in, always in" policy, will provide further information regarding the expected emission consequences of this action.

- d. What are the effects of the New Source Review changes in guidance on downwind pollution, the states' ability to meet attainment status for all NAAQS and SIPs?

EPA does not expect the improvements it has been making to the New Source Review program to have any adverse effects on states' ability to meet

attainment status. Where EPA is following up on its NSR guidance with rulemaking, appropriate analyses addressing this matter will be undertaken.

- e. How will the changes in regulating methane emissions from oil and gas affect downwind pollution, the states' ability to meet attainment status for all NAAQS and SIPs?

EPA's proposed targeted improvements to the 2016 New Source Performance Standards for the oil and gas industry would streamline implementation, reduce duplicative EPA and state requirements, and significantly decrease unnecessary burdens on domestic energy producers. The accompanying regulatory impact analysis (RIA), which discusses the emissions impacts of this proposal, is available at: https://www.epa.gov/sites/production/files/2018-09/documents/oil_and_natural_gas_nsps_reconsideration_proposal_ria.pdf. The RIA notes that, due to the high degree of variability in ozone and particulate matter responsiveness to volatile organic compounds, EPA did not evaluate the effects on attainment status.

- 54. Can you name three policies you have formally proposed (not just announced that you will propose) or implemented that the scientific community believes will actually lead Americans to breathe LESS toxic air pollution than they would have had all the protective rules implemented by President Obama stayed in place?

Virtually all of EPA's recent Clean Air Act proposed and final actions would result in continued reductions of air pollution, including hazardous air pollutants, criteria pollutants like ozone and particulate matter, as well as greenhouse gases. For example, the proposed Affordable Clean Energy rule is projected to significantly reduce emissions, including 2030 reductions of carbon dioxide (12 to 27 million tons), sulfur dioxide (7,000 to 15,000 tons), and nitrogen oxides (8,000 to 15,000 tons). I would note that the Clean Power Plan was stayed by the Supreme Court and thus never achieved any emission reductions. In addition, on November 13, 2018, EPA announced the Cleaner Trucks Initiative, a future rulemaking to update standards for nitrogen oxide (NOx) emissions from highway heavy-duty trucks and engines. Over the last decade, NOx emissions in the U.S. have dropped by more than 40 percent. Nonetheless, EPA expects that heavy-duty trucks will be responsible for one-third of NOx emissions from transportation in 2025. Updating these standards will result in NOx reductions from mobile sources and could be one important way that allows areas across the U.S. to meet National Ambient Air Quality Standards for ozone and particulate matter. Updating the standards will also offer opportunities to reduce regulatory burden through smarter program design.

55. During the August 1, 2018 EPW hearing, I asked you several questions for the record regarding the Renewable Fuel Standard (RFS) and my continued concerns about the volatility in the RFS compliance trading system used by EPA, known as the Renewable Identification Number (RIN) market. Despite promises to act on this issue, I've seen no action to date from EPA on the issue of RIN market manipulation and still do not have a clear answer on how EPA is coordinating with other agencies to address this issue. I was extremely disappointed by your August 1st hearing answers and ask that you please provide greater clarity.

- a. Please provide the dates, times and details of any communication, including any emails and phone calls, between the Commodity Futures Trading Commission (CFTC) and EPA since the CFTC-EPA memorandum of understanding on RIN market manipulation was signed.

EPA regularly works with other agencies, including the CFTC, on implementation and continued improvement of the Renewable Fuel Standard program. CFTC has a wealth of expertise in terms of rooting out market manipulation and improving the overall function of our nation's commodities markets. EPA has been working with CFTC technical staff to assess what tools or structural approaches could be employed in the RIN market to reduce any manipulation, provide greater transparency and establish stability. Most recently, EPA's transportation team had an extensive conversation with the CFTC regarding these ongoing efforts. Pursuant to President Trump's direction, the agency plans to propose a RIN market reform rule in 2019 that will be followed by a public notice and comment period. We appreciate your interest in these issues and will keep you updated as they progress.

- b. CFTC has stated publicly that it provided EPA with recommendations on what data EPA should be collecting to mitigate RIN market manipulation. Please provide CFTC's recommendations and explain why EPA has refused to make this information public.

EPA has ongoing dialogue with the CFTC and continues to work consistent with the existing MOU. CFTC has provided recommendations on a number of options aimed at improving the RIN market including the collection of necessary data. Many of CFTC's recommendations will be reflected in our forthcoming proposed RIN market reform rule. Once complete, the proposed rule will be made public and will be subject to a notice and comment period.

- c. In your answers to my August 1st hearing questions you indicated your staff had only met with Federal Trade Commission (FTC) staff one time. Was that an accurate assessment? Has the number changed since August 1, 2018? And if true, why isn't EPA having ongoing conversations with FTC on this issue?

My understanding is that, from January 2017 to August 2018, EPA had one conversation with the FTC dedicated to this topic. Recent conversations regarding market stability and associated improvements have primarily been with the CFTC. Through the exchange of information among our agency experts, the CFTC expertise has proven to be the most helpful and applicable in terms of developing out the forthcoming proposed RIN market reform rule. Once a draft of the forthcoming proposed rule is complete, subject to appropriations, it will be submitted to the Office of Management and Budget for interagency review, which will provide the FTC an opportunity to review and provide comment.

- d. Your answers to my August 1st hearing questions suggest that your staff only shared RIN data with CFTC from 2010 to August 2016. Why hasn't EPA shared any RIN data with CFTC since August 2016?

EPA shared the above-referenced data because both agencies were working to respond to a specific request from the Renewable Fuels Association, which alleged manipulation during a specific timeframe - 2010 to 2016. After review of that information, the CFTC did not find any misbehavior in the market. Outside of that specific request, EPA and CFTC continue to have regular contact to assess options for improving the RIN market. As previously mentioned, many of CFTC's recommendations will be reflected in our forthcoming proposed RIN market reform rule, which will be subject to a public notice and comment period.

- e. The State of California has created a dashboard to provide weekly, monthly, quarterly and annually trading data for its own renewable fuel program. After talking to many stakeholders involved in that process, it seems that California's renewable fuel trading dashboard has been able to provide valuable insight into trading and helped reduced market volatility. EPA can easily create a similar dashboard today and not wait for rulemaking. You have already created a dashboard for small refinery waivers, why hasn't EPA created a RIN dashboard that provides the public weekly, quarterly and annual RIN trading data?

EPA posts RIN transactional and compliance information on our RFS Data website. We are open to comments and suggestions for improving and expanding program and market insight. Currently, information is updated the third Thursday of each month to reflect all transactions submitted through the end of the prior month. Last year, we implemented revisions to the website to incorporate additional data through a more interactive dashboard. Please visit the following link for additional

information: <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/public-data-renewable-fuel-standard>.

- f. The CFTC has successfully used position limits to protect against excessive speculation and market manipulation, which helped stabilize markets. In addition, Canada and California have also used position limits as effective market controls to help reduce market credit hoarding. Canada, specifically, has done so regarding their own RFS program with success. Are position limits being considered in any efforts to improve RIN market transparency and has EPA had any discussions with the CFTC about establishing position limits for the RFS RIN market? If not, why not?

Yes, as part of the ongoing conversations EPA has discussed position limits as a means to improve the RIN market. As previously mentioned, many of CFTC's recommendations will be reflected in our forthcoming proposed RIN market reform rule, which will be subject to a public notice and comment period.

- g. Has EPA had any discussions with Canada about their biofuel market credit controls? If so, can you elaborate on those discussions? If not, why not?

I am not aware of interactions with Canada on these issues.

56. With a significant non-compliance rate, why isn't EPA's Office of Enforcement and Compliance Assurance enforcing the manufacturer emission reporting requirements under the residential wood heater New Source Performance Standards rules?

OECA has been successfully working with wood heater manufacturers and retailers, who are mostly small business owners, in providing compliance assistance to help them comply with the regulations. In general, the Agency worked with them on any outstanding certification issues, and, when necessary, addressed observed deficiencies/potential violations during the certification process without collecting any penalties or taking other formal enforcement.

57. In your testimony, you highlighted EPA's announcement that it will officially begin the process to set a new national nitrogen oxide (NOx) emissions standard for heavy-duty vehicles.

- a. States have been asking EPA to take this action for over two years. Why is EPA waiting until early 2020 to propose regulations?

On November 13, 2018, EPA announced the Cleaner Trucks Initiative (CTI), a future rulemaking to update standards for nitrogen oxide (NOx) emissions from highway heavy-duty trucks and engines. Over the last decade, NOx

emissions in the U.S. have dropped by more than 40 percent. Nonetheless, EPA expects that heavy-duty trucks will be responsible for one-third of NO_x emissions from transportation in 2025. Updating these standards will result in NO_x reductions from mobile sources and could be one important way that allows areas across the U.S. to meet several National Ambient Air Quality Standards. Updating the standards will also offer opportunities to reduce regulatory burden through smarter program design. As I am sure you recognize, the development of a technically and legally sound rulemaking proposal for an action of this significance and complexity takes time.

- b. Will you finalize a rule in time to help states that have ozone nonattainment concerns meet their SIP requirements for the ozone NAAQS?

EPA intends to finalize the rule as expeditiously as possible, consistent with its responsibility to ensure that any final rule is well supported. We expect this action to reduce NO_x emissions and obtain NAAQS.

- c. What ozone reduction metric will you use to determine whether the proposal is adequately protective of public health?

We expect the rulemaking to evaluate the appropriate metric to evaluate emission reduction.

- d. Emissions control technologies are able to reduce NO_x emissions by 90%, down to .02 g/bhp-hr, at approximately \$500-1000 per diesel truck by 2024 or earlier. Alternative fuel vehicles such as those with natural gas engines already achieve those reductions. How does this estimated cost compare to the current or projected range of cost-effectiveness of stationary control technologies that might otherwise have to be implemented to achieve the same NO_x reductions in ozone nonattainment areas?

These are issues that we expect to be addressed during the rulemaking.

The timeline announced in November will allow full engagement with stakeholders and the opportunity to assess policy considerations identified in your question. More information on the CTI is available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/cleaner-truck-initiative>.

Questions on EPA's Use of Science

58. The EPA recently disbanded its 20-member Particulate Matter Review Panel (PMRP) and decided not to convene the Ozone Review Panel. In addition, EPA announced that the responsibility of those two panels to advise on EPA's 5-year review of the National Ambient Air Quality Standards (NAAQS) will be transferred to the significantly smaller seven-member Clean Air Science Advisory Committee (CASAC), and such review will occur on an accelerated schedule. Notably, CASAC's draft comments to you dated December 10, 2018 recommend that you reconvene the PMRP and warns that the accelerated schedule is too short.
- a. Given that your decision to eliminate the first two larger expert panels, transfer the workload to the much smaller CASAC, and speed up the review will have a direct impact on the quality of review conducted, did you consult with CASAC on the accelerated schedule in the memo or the consequences of doing away with panels before you took those actions? If not, please explain why not.
 - b. Several members of CASAC have expressed doubt that they have the needed expertise to review the science on particulate matter. Do you still believe that members of this CASAC are qualified to do the work you have asked of them? If so, please explain why.
 - c. One of the areas of expertise that is lacking on CASAC is epidemiology, which would inform CASAC's understanding of the impacts of particulate matter on early death and heart attacks. Do you believe that CASAC can conduct an informed review of the NAAQS given the absence of this crucial subject matter expertise? If so, please explain why.

CASAC is a seven-member committee, required under Section 109 of the Clean Air Act, which provides critical advice related to National Ambient Air Quality Standards (NAAQS). The membership includes at least one member of the National Academy of Sciences, one physician, and one person who represents a state air pollution control agency. In October 2018, EPA announced the appointment of five new members to the chartered CASAC. More information on CASAC and its members is available at: <https://yosemite.epa.gov/sab/sabpeople.nsf/WebCommittees/CASAC>.

I believe the current CASAC has the experience and expertise needed to serve in this capacity as well as to complete the reviews for the particulate matter and ozone NAAQS. The chartered CASAC is filled with qualified, independent experts who have decades of experience working on ozone and particulate matter issues and a diverse set of backgrounds in fields like toxicology, engineering, medicine, ecology, and atmospheric science. EPA also has the ability to seek advice from other experts to assist CASAC as needed for these reviews.

Tasking the chartered CASAC with overseeing these reviews ensures the early engagement of the advisors who ultimately provide advice to EPA, and this action is consistent with the Clean Air Act, regulations implementing the Federal Advisory Committee Act, and CASAC's charter. In May 2018, EPA issued a memorandum

outlining a “Back-to-Basics” process for NAAQS under the Clean Air Act. This memo ensures that EPA and its independent science advisors follow a transparent, timely, and efficient process in reviewing and revising public health- and welfare-based NAAQS. Consistent with the memo, EPA intends to finalize any necessary revisions to the ozone and particulate matter NAAQS by the end of 2020.

EPA welcomes feedback during all stages of these reviews from members of the scientific community and public. The Committee has received feedback from a number of outside experts during recent public meetings and teleconferences.

59. Please provide a copy of the IRIS Handbook that has been completed but is not yet published.

The IRIS Handbook is being revised in response to additional comments received from the Agency, and has not concluded the interagency review process. We intend to provide the Handbook when the revision is completed.

Questions on other Clean Water Issues

60. It has been a very long time since Washington, DC struggled with its lead in drinking water discovery, and it has been four years since the drinking water crisis erupted in Flint, MI.
- a. How many lead service lines in Flint have been replaced as of December 31st, 2018?
 - b. Administrator Pruitt made lead—especially in drinking water—an agency priority, declaring a "War on Lead" in February 2018. Approximately 5000 municipalities across the country exceeded the 15 parts per billion standard in place at the time of his declaration. How many of those municipalities now comply with that legal limit?
 - c. What has EPA done to facilitate that compliance?
 - d. Having admitted a failure of oversight in the Flint situation, could you describe how EPA has since strengthened its oversight of state drinking water programs?

The EPA recently received a status report from the City of Flint regarding its ongoing efforts to identify and replace lead service lines, an effort funded in part through the Water Infrastructure Improvements for the Nations Act (WIIN Act). According to the City of Flint: “As of January 14, 2019 there have been 20,131 service lines replaced or identified as copper. The City of Flint has approximately 28,400 active residential water accounts. We have approximately 8269 lines left to identify or replace. If we assume 20% of the remaining 8269 lines to be lead and need replacement we have approximately 1,654 lead service lines remaining in the system. At this time weather is allowing the project to continue and these numbers are subject to change.” The City has evaluated connections to more than 15,000 homes and has identified and replaced lead or galvanized steel service lines to over 7,000 homes.

The EPA supports the Michigan Department of Environmental Quality (MDEQ) in its continued efforts to work with the City of Flint and all other public water systems to improve drinking water quality throughout the State of Michigan. This includes working with the City and MDEQ to ensure that the requirements of the EPA's Emergency Order and amendment are being addressed. The drinking water system in Flint has returned to compliance with the Lead and Copper Rule (LCR) and the EPA is committed to supporting the City and State in their efforts to ensure the delivery of a safe and sustainable water supply to the residents of Flint.

The EPA has also reached full agreement with the Inspector General (IG) on the actions the agency will implement in response to the Flint, Michigan IG Report. The EPA's actions to address the IG's recommendations are well underway. For example, the EPA is working aggressively to update the LCR and is working with states to ensure full implementation of existing LCR requirements. That engagement includes working with state, local, tribal and other stakeholders to identify LCR implementation challenges and provide technical assistance and communication tools to address those challenges. To improve technical knowledge and implementation of the LCR and its corrosion control requirements, for example, the EPA conducted approximately 30 in-person technical trainings across the country in all ten EPA regions over the last two years. This full-day training focused on optimal corrosion control treatment to improve compliance and reduce lead exposure at the tap through successful implementation of corrosion control treatment. The training also provided participants, including states, technical assistance providers and water utility operators, an opportunity to work through case studies, analyze actual water system data and participate in interactive activities. Over the last two years, the EPA also hosted its LCR 3-Part Webinar series and monthly webinars for small systems; conducted national training on sample site selection; provided individual trainings to the National Rural Water Association and the State of California; and hosted a three-day online training with Guam and Hawaii. In 2018, the EPA's Office of Research and Development and the Office of Water hosted the National Drinking Water Workshop with 400 participants in attendance. This workshop included multiple sessions on lead testing, lead service line replacement, and other LCR topics. It also included a two-hour discussion between states, the EPA, academia experts and workshop participants on key issues and implementation challenges related to the LCR.

The EPA also collaborates with states and public water systems to update our nation's drinking water infrastructure, including important projects to reduce lead in drinking water. The FY 2019 President's Budget request included \$863.2 million for the Drinking Water State Revolving Fund, allowing states to finance high priority infrastructure investments, including the replacement of lead service lines to protect human health. The FY 2018 Omnibus appropriation provided \$50 million for three new grant programs under the WIIN Act. These funds will help public water systems meet Safe Drinking Water Act requirements, provide funding for infrastructure projects that reduce the presence of lead in drinking water, and assist schools and childcare facilities with voluntary lead testing programs. In addition, the Water Infrastructure Finance and Innovation Act (WIFIA) program is inviting 39 projects in 16 states and

Washington, D.C. to apply for loans totaling over \$5 billion to help finance over \$10 billion in water infrastructure investments, in FY 2019, but not all of those projects are associated with lead. Multiple projects selected in FY18 involve reducing lead or other contaminants and address aging infrastructure.

As indicated in the EPA’s response to the IG Report, the agency has also worked to strengthen its oversight of state drinking water programs nationwide. For example, in response to the EPA’s, New England states’, and water utility proactive measures, as of August 2018, more than 99% of the public water supply systems in New England that are obligated to meet requirements of the LCR are meeting the drinking water lead action levels. Recognizing that there is no safe level of lead in drinking water, the 1991 LCR set a health-based maximum contaminant level goal of zero. The LCR also established an action level of 0.015 mg/L (15 ppb) for lead. Exceedance of the lead action level is not a violation but rather results in the public water system having to take actions to reduce lead exposure, which could include optimizing corrosion control, removing lead service lines, and conducting public education. Failure to take such actions results in a violation of the LCR that is called a treatment technique violation.

A 2016 analysis prepared by an environmental nongovernmental organization indicated that 5,363 community water systems had violated the LCR based on 2015 SDWIS data. According to the report, the analysis included counts of violations for failure to take actions to reduce lead exposure, to test, or to report test results. The majority of these community water systems receiving violations had a treatment technique violation. Based on the most recent data in SDWIS, approximately 97% of these treatment technique violations have returned to compliance. Since 2016, the EPA and the states have enhanced oversight and collaboratively provided targeted technical assistance to address compliance with the complex and challenging LCR requirements. This assistance has improved the states’ technical capabilities to address LCR violations and aid systems in achieving compliance with the LCR.

61. Please explain EPA’s intentions regarding the discharge of partially treated or “blended” sewage from wastewater treatment plants.
- a. Does EPA intend to propose regulations permitting discharge of partially treated or blended sewage from wastewater treatment plants? If so, when?
 - b. If so, under what circumstances (i.e., what thresholds of rainfall, etc.)?
 - c. Does EPA have evidence that such discharges are safe for public health and the environment? If so, please provide it.
 - d. In EPA’s assessment, how effective are so-called “side-stream” technologies, proposed by treatment plant operators, as an alternative to their historic treatment methods?

The EPA is currently engaged in rulemaking to address longstanding questions regarding permit compliance in wet weather events. The agency is working with stakeholders as we prepare options for the proposed rulemaking. No final decisions

regarding the content of the proposed rule have been made at this time. The EPA will consider all appropriate information regarding the relationship between wet weather discharges and compliance with water quality standards during the rulemaking process, including, for example, resources like a 2014 public forum the EPA facilitated on potential public health impacts associated with wet weather discharge events. Documents from that forum are available at: <https://www.epa.gov/npdes/npdes-experts-forum-public-health-impacts-wet-weather-blending-documents>. The EPA will also consider available treatment, cost and related data on potential side-stream technologies as it continues its stakeholder outreach and proposed rulemaking.

62. As you know, the proposed WOTUS Rule you and the Army Corps of Engineers propose is notably lacking in specifics related to some of the necessary details the public needs to fully consider the implications of your proposal, much less address the numerous and potentially rule-obliterating questions posed in the preamble.
- a. With that concern in mind, please provide estimates of the miles and acres affected for the following categories of waters covered by the proposed rule (please provide this information on a state-by-state basis):
 - i. The number of miles of ephemeral streams;
 - ii. The number of miles of intermittent streams;
 - iii. The acres of wetlands without a surface water connection to any “waters of the United States” as the December 2018 proposal would define that term;
 - iv. The acres of wetlands without a surface water connection to any “waters of the United States” as the December 2018 proposal would define that term plus those wetlands with a surface water connection only to intermittent streams; and
 - v. The acres of ponds that will not qualify as “waters of the United States” as the December 2018 proposal would define that term.
 - b. To further assist our consideration of the proposed rule, please provide the following information (also on a state-by-state basis) for each of the categories of waters identified in response to question 16(a) above:
 - i. The population served by drinking water systems with source water protection areas containing any of the waters identified above.
 - ii. Any dischargers permitted under the National Pollutant Discharge Elimination System to discharge to any of the waters identified above.
 - iii. Any facilities subject to the oil spill prevention, control, and countermeasure program because of their potential to affect any of the waters identified above.
 - iv. Any of the waters identified included on a state list submitted to EPA pursuant to section 303(d)(1) of the Clean Water Act.
 - v. Any enforcement action under the authority of section 309 of the Clean Water Act, in which the water body about which the violation was alleged

was any of the waters identified above. This includes any compliance order, civil or criminal action, or assessed administrative penalty.

- vi. Any jurisdictional determination (either preliminary or approved) by the U.S. Army Corps of Engineers which assessed whether a water body was a “water of the United States” and for which the subject water was any of the waters identified above.
- vii. Any activity for which an applicant has sought a federal license or permit and which may result in a discharge into any of the waters identified above, for which the state has granted, denied, waived, or provided conditional certification pursuant to section 401 of the Clean Water Act.

The EPA and the Department of the Army provided significant, substantive supporting documentation for the proposed “waters of the United States” rule that was posted to our website in December along with the pre-publication text of the proposed rule and its preamble. See <https://www.epa.gov/wotus-rule/step-two-revise>. The documents entitled “Resource and Programmatic Assessment for the Proposed Revised Definition of ‘Waters of the United States’” and “Economic Analysis for the Proposed Revised Definition of ‘Waters of the United States’” identify, where possible, how the proposed definition might affect categories of water resources across the country and potential effects on Clean Water Act programs. The agencies have also identified data limitations that prevent quantitative national estimates for many Clean Water Act programs, due in large part to the fact there is no nationwide map depicting “waters of the United States” under previous regulations nor that could identify waters that would be jurisdictional under the proposal.

With regard to water resources, state-based information on ephemeral, intermittent, and perennial stream miles and wetland acreage as mapped in the National Hydrography Dataset and National Wetlands Inventory, respectively, is presented in Table A-1 of the Economic Analysis. The numbers and percentages of streams and wetlands by category presented in Table A-1, however, do not equate to a quantification of waters that will or will not be jurisdictional under the proposed rule or existing regulation. The agencies discuss potential impacts of the proposal on Clean Water Act section 303, 311, 401, 402, and 404 programs and other relevant federal regulations in the Economic Analysis and Resource and Programmatic Assessment. Regarding data limitations, see for example the discussion in Section II.C. of the Economic Analysis and Section 4 of the Resource and Programmatic Assessment Appendix A. With respect to section 404 permitting, see for example Table 3 of the Resource and Programmatic Assessment Appendix A summarizing the total number of waters by category in the Army’s fiscal year 2013-2017 approved jurisdictional determination data under pre-2015 practice. Note that in addition to the analyses discussed in the documents supporting the proposal, the agencies maintain websites that contain specific information on the jurisdictional determinations completed under section 404. See http://corpsmapu.usace.army.mil/cm_apex/f?p=340:11:0::NO and <https://watersgeo.epa.gov/cwa/CWA-JDs/>.

In Clean Water Act enforcement cases, the EPA would have gathered evidence to support a claim that there is a discharge to a navigable water or a tributary of a navigable water or a wetland adjacent to a water of the United States applying the EPA's 1988 regulations, the 2003 SWANCC legal memorandum, and the 2008 *Rapanos* guidance. However, those documents all lack the clarity of the December 2018 proposed rule. For example, none of them use the 2018 proposal's definitions of "intermittent," "ephemeral," and "adjacent wetlands," and do not define "tributary." Accordingly, the factual records the agency would have developed to support a claim of jurisdiction do not lend themselves to categorizing enforcement actions as you have requested.

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