



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 25 2015

OFFICE OF CONGRESSIONAL  
AND INTERGOVERNMENTAL RELATIONS

The Honorable Ed Whitfield  
Chairman  
Subcommittee on Energy and Power  
Committee on Energy and Commerce  
U.S. House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your July 2, 2015, letter to EPA Acting Assistant Administrator Janet McCabe requesting responses to Questions for the Record following the June 12, 2015, hearing before the Subcommittee on Energy and Power entitled, "EPA's Proposed Ozone Rule."

The responses to the questions are provided as an enclosure to this letter. If you have any further questions, please contact me, or your staff may contact Josh Lewis at [lewis.josh@epa.gov](mailto:lewis.josh@epa.gov) or (202) 564-2806.

Sincerely,



Nichole Distefano  
Deputy Associate Administrator  
for Congressional Affairs

Enclosure

**Attachment-Additional Questions for the Record Following the June 12, 2015, Energy and Power Subcommittee hearing “EPA’s Proposed Ozone Rule.”**

**The Honorable Ed Whitfield**

1. Your Regulatory Impact Analysis for the proposed ozone rule provides only a snapshot of annual costs for one year, 2025.
  - A. Please provide an estimate of the total costs to meet the current standard of 75 parts per billion (ppb).
  - B. Please provide an estimate of the annual costs of control in 2020 and in 2030.
  - C. What is the total cost of this program if you were to add up all the costs imposed every year?

**Answer: Consistent with Executive Order 12866, and OMB guidance, the EPA prepared a Regulatory Impact Analysis accompanying the proposed updates to the ozone NAAQS that shows the benefits and costs of illustrative control scenarios that states may choose in complying. Because states have flexibility in how to meet their goals, the actions taken to meet the goals may vary from what is modeled in the illustrative scenarios. Specific details, including information about how costs and benefits are estimated for these illustrative scenarios and about costs over time are available in the RIA (<http://www.epa.gov/ttn/ecas/regdata/RIAs/20141125ria.pdf>).**

2. In EPA's ozone proposal, the agency said it would update certain rules and guidance that would be needed to comply with the proposed rule, including the i) "Exceptional Events Rule;" ii) guidance for the nonattainment designation process; and iii) implementing regulations.
  - A. For each of these rulemakings or guidance documents, what is the current status?
  - B. For each of these rulemakings or guidance documents, what is EPA's current schedule for proposing and finalizing them?
  - C. Will these rulemakings and guidance be finalized before states are required to submit their nonattainment designation recommendations?

**Answer: The EPA intends to propose revisions to the Exceptional Events Rule in the fall of 2015 in a notice and comment rulemaking. At that time, we will also issue a Notice of Availability and public comment for draft exceptional events implementation guidance that will address Exceptional Events Rule criteria for wildfires that influence ozone concentrations. The EPA intends to assess comments and finalize the rulemaking in the**

summer of 2016. This would be in advance of the date by which states, and any tribes that wish to do so, would be required to make area designation recommendations for any potential revised NAAQS (e.g., October 2016 if the ozone NAAQS is revised). The wildfire guidance is expected to be finalized in the same timeframe as the rule revisions.

**The EPA intends to issue additional guidance on ozone designations (if the standard is revised) soon after the promulgation of a new standard. The EPA intends to propose and finalize implementing regulations, as necessary, no later than the date of nonattainment designations.**

3. In EPA's ozone proposal, the agency also stated that "EPA is planning a rulemaking in the spring of 2015 to consider whether to update Appendix W." What is the status of this rulemaking?

**Answer: Consistent with its commitment to engage in a rulemaking process to determine whether updates to Appendix W in 40 CFR part 51 are warranted, the EPA proposed a rulemaking on July 14, 2015, to consider whether to update Appendix W. The EPA concluded that it is technically and scientifically appropriate to propose revisions to Appendix W as part of that rulemaking and also provide associated technical guidance. In the meantime, in order to demonstrate that a proposed source or modification does not cause or contribute to a violation of the applicable O<sub>3</sub> NAAQS, PSD permit applicants would follow the current provisions in Appendix W until any revisions to them are finalized and in effect.**

4. In EPA's proposal, the agency has estimated there would be 358 counties with ozone monitors that would violate a standard of 70 ppb, and 558 counties that would violate a 65 ppb standard.
  - A. Based on previous nonattainment designations, in addition to these 358 to 558 counties, how many nearby counties could also be designated as being in nonattainment?

**Answer: Designations decisions for any revised ozone standard, including which counties or partial counties to include within the boundaries of any nonattainment area, would depend on a number of factors that are currently highly uncertain, including future monitored air quality data, state recommendations of nonattainment area boundaries (due to EPA in late 2016), and joint EPA-state evaluation of area-specific information relevant to the Clean Air Act's definition for nonattainment (i.e., any area that does not meet the ozone standard, and any nearby area that contributes to the area that does not meet the ozone standard). This evaluation would include a detailed, area-specific assessment of monitored air quality data, relevant sources of emissions, ozone-related meteorology, relevant topography, and jurisdictional factors.**

**While it is true that in the RIA accompanying its proposal to revise the ozone NAAQS, EPA estimated 358 counties had air quality not meeting a 70 ppb standard and 558 counties had air quality not meeting a 65 ppb standard based on ambient monitoring data from 2011 to 2013, these are not the same data that will be used to designate areas**

**for any revised ozone standards and are not a reliable indicator of how many counties, or which specific counties, would be determined in the future to be nonattainment for any revised standard.**

B. Do these estimates of 358 to 558 counties include EPA's proposal to extend the ozone monitoring season?

**Answer: The EPA proposed to extend the O<sub>3</sub> monitoring seasons for 33 states, effective starting January 1, 2017. If finalized, the extended seasons would not affect the 2014 to 2016 data which EPA anticipates would be used to designate areas for the revised O<sub>3</sub> standards, and are not included in EPA's estimates.**

C. Do these estimates of 358 to 558 counties include the values and readings from CASTNET monitors?

**Answer: The CASTNET monitoring network became part of EPA's regulatory O<sub>3</sub> monitoring network starting in 2011, and thus the CASTNET monitors are included in EPA's estimates of counties that would not meet 70 ppb and 65 ppb based on 2011 to 2013 air quality data.**

5. How many counties in the country do not currently have ozone monitors?

A. Provide an estimate of how many of these counties may violate a 70 ppb standard and could be in "nonattainment" if they had a monitor.

**Answer: There were approximately 814 U.S. counties (26%) with ozone monitors reporting data to EPA in 2013, and 2,330 counties (74%) with no ozone monitoring. EPA's ozone monitoring network requirements are population-oriented, and thus the 814 counties with ozone monitors represent about 229 million Americans, or 74% of the U.S. population based on 2010 Census estimates. EPA has not estimated how many counties without a monitor might violate a 70 ppb standard. States are not required to monitor every location in the U.S. The state and local ozone monitoring network specifications are found in 40 CFR Part 58, Appendix D. The minimum number of monitors in urbanized areas ranges from 0 to 4 depending on the size of MSA and severity of air quality. Appendix D does not require monitoring in MSAs that have less than 350,000 population unless the design value is likely to be in excess of 63 ppb. EPA's monitoring network design requirements for ozone do not require monitoring for areas with less than 50,000 population.**

B. Provide an estimate of how many of these counties may violate a 65 ppb standard and could be in "nonattainment" if they had a monitor.

**Answer: EPA has not estimated how many counties without a monitor might violate a 65 ppb standard.**

C. Provide an estimate of how many counties nationwide could ultimately be designated to be in nonattainment with the new standards.

**Answer: As provided in the response to Part A of this question, the designation determinations will be based a number of factors including the use of future year air quality monitoring data. Therefore it is premature to estimate how many counties will be designated nonattainment for the revised O3 standards at this time.**

6. EPA projects that after 2025, only 9 counties outside of California would violate a 70 ppb standard.

A. If only 9 counties outside of California are projected to be in nonattainment in 2025, why is the cost of the program so high?

B. Would these 9 counties come into attainment based on federal measures if more time was given beyond 2025?

**Answer: Consistent with Executive Order 12866, and OMB guidance, the EPA prepared a Regulatory Impact Analysis accompanying the proposed updates to the ozone NAAQS that shows the benefits and costs of illustrative control scenarios that states may choose in complying. Because states have flexibility in how to meet their goals, the actions taken to meet the goals may vary from what is modeled in the illustrative scenarios. Specific details, including information about how costs and benefits are estimated for these illustrative scenarios are available in the RIA (<http://www.epa.gov/ttn/ecas/regdata/RIAs/20141125ria.pdf>).**

7. Recently, a survey was released indicating that 26 states have "raised concerns about the role of background ozone, including both naturally-occurring and internationally-transported contributions to ground-level ozone, as an achievability or implementation challenge."

A. Do you agree that naturally occurring ozone and also foreign emissions will make it difficult for certain areas to meet the proposed standards if they are finalized?

**Answer: The Clean Air Act contains provisions that can assist states in ensuring background ozone does not create unnecessary control obligations as they continue their work to improve air quality. If a state provides an adequate assessment or demonstration, there are a few types of CAA-authorized relief they can legally invoke, which are described in the ozone NAAQS proposal. As examples, an area may be able to rely upon the exceptional events provisions of the Act to exclude certain emissions data from consideration during the process of area designations under a revised NAAQS, which could impact whether an area is designated nonattainment. An area also may be able to rely on certain provisions of the Act addressing international emissions when making attainment demonstrations, which could limit their ultimate control requirements and any consequences for failing to attain by the area's attainment date. Finally, the Administrator can determine that certain qualifying nonattainment areas are Rural Transport Areas, thus eliminating the need for states to develop an attainment plan. All of these CAA-authorized provisions have been used in the past for implementing ozone standards.**

8. This survey of state environmental agency comments on EPA's proposed rule also indicated that 24 states identified limitations to the Clean Air Act "tools" that EPA highlights for regulatory relief to address background ozone.
- A. For example, EPA points to the "Exceptional Events Rule" as one of these measures.
- i. How many Exceptional Events requests has the agency received and how many has the agency approved? If the agency does not track this information, why doesn't the agency track this information?
  - ii. How long does EPA take to respond to such a request? What is the range of time EPA has taken to act on such requests?
  - iii. Does EPA have an estimate of the costs for states to prepare and submit Exception Events requests?
  - iv. What changes is EPA considering with respect to the Exceptional Events Rule and how would those changes make it easier or more cost-effective for states to submit such requests?
- B. A second regulatory relief tool EPA points to is the "Rural Transport Areas" designation under section 182(h) of the Clean Air Act.
- i. How many times has EPA designated an area to be a Rural Transport Area? Please identify each instance in which this has occurred.
  - ii. What do areas need to demonstrate to be designated as a "Rural Transport Area"?
  - iii. Are areas reclassified as "Rural Transport Areas" subject to Transportation Conformity or General Conformity requirements that would affect federal projects, including federally funded transportation projects?
  - iv. Would applicants for PSD or NNSR permits in areas reclassified as a "Rural Transport Area" need to comply with the new standards?
- C. A third type of regulatory relief EPA points to is the "International Transport" provisions under section 179B of the Clean Air Act.
- i. What do areas need to do to demonstrate international transport of ozone and ozone precursor emissions?
  - ii. How many requests has EPA received under the "International Transport" provisions, and how many times has EPA granted the requested relief?

- iii. Has relief under the "International Transport" provisions ever been provided for emissions from any countries other than Mexico or Canada? If yes, which countries?
- iv. Does EPA have an estimate of the costs for states to prepare and submit requests under the "International Transport" provisions? If yes, please provide the agency's estimate.

**Answer: Please see the answers to questions 2 & 7, above, for discussion of the tools that may be available to states and of the exceptional events provision.**

**For the 1997 and 2008 ozone standards, no states requested that the EPA consider a nonattainment area as a rural transport area.**

**The rural transport provision was last used for designations in 1991 for the 1979 ozone standards. At that time, four states requested that EPA consider areas as rural transport areas. After evaluating the requests, the EPA determined that the four areas qualified to be treated as rural transport areas. These areas are: Door County Area, WI; Edmonson County Area, KY; Essex County Area (Whiteface Mountain), NY; and Smyth County Area (White Top Mountain), VA.**

**The CAA section 182(h) Rural Transport Area provision provides the Administrator with the discretion to treat an ozone nonattainment area as a rural transport area if the area is not part of, or adjacent to, a metropolitan statistical area and emissions from within the area do not make a significant contribution to ozone concentrations in the area or in other areas. The EPA developed draft guidance in 2005, titled "Criteria For Assessing Whether an Ozone Nonattainment Area is Affected by Overwhelming Transport" that explains the kinds of technical analyses that states could use to establish that transport of ozone and/or ozone precursors into the area is so overwhelming that the contribution of local emissions to an observed 8-hour ozone concentration above the level of the NAAQS is relatively minor and determine that emissions within the area do not make a significant contribution to the ozone concentrations measured in the area or in other areas. The document is available at [http://www.epa.gov/scram001/guidance/guide/owt\\_guidance\\_07-13-05.pdf](http://www.epa.gov/scram001/guidance/guide/owt_guidance_07-13-05.pdf). The EPA will work with states to ensure all nonattainment areas eligible for treatment as rural transport areas are identified.**

**Transportation conformity and general conformity apply to all areas that are designated nonattainment, including Rural Transport Areas. In any area that is designated nonattainment, permit applicants would need to address the NNSR requirements for ozone. PSD regulations do not apply to pollutants for which an area is designed nonattainment.**

**Section 179B of Clean Air Act allows the EPA to approve an attainment demonstration for a nonattainment area if: (1) The attainment demonstration meets all other applicable requirements of the CAA; and (2) the submitting state can satisfactorily demonstrate that "but for emissions emanating from outside of the United States," the area would attain and maintain the ozone standard. The EPA has historically evaluated these "but for"**

**demonstrations on a case-by-case basis, based on the individual circumstances, the classification of the area and the data provided by the submitting state. These data have included ambient air quality monitoring data, modeling scenarios, emissions inventory data and meteorological or satellite data.**

**The EPA is aware of five nonattainment areas for which a 179B demonstration was approved. To date, all demonstrations have involved emissions from Mexico. Three of these SIPs addressed PM10, one addressed CO, and one addressed ozone. The EPA does not have estimates specific to the costs for eight states to prepare and submit requests under the “International Transport” provisions.**

9. According to your proposal, in certain areas this rule is getting close to background ozone levels that are uncontrollable. An article this week in the journal "Science" stated:

"Attaining a lower standard may be particularly challenging in high elevations of the western United States, which are more likely to be affected by ozone that has been transported long distances or that originated in the stratosphere."

The article also noted that observation and modeling of background levels is not very precise, and stated: "If a revised ozone standard is adopted, air quality-control programs will have a greater need to precisely and accurately attribute ozone sources on a continuous basis, and systematic and long-term efforts of scientists will be required to help identify and fill gaps in observations and modeling capabilities in coming years.

A. Does EPA believe its standard will be set above background ozone levels in all areas of the country?

B. If key researchers in the field are expressing uncertainty, what analysis does EPA rely on to make sure that states and cities will not be forced into nonattainment because of background levels they cannot control?

C. If there is so much uncertainty, how can states make requests for Exceptional Events or the "International Transport" provisions under section 179B of the Clean Air Act, and how can EPA approve such submissions?

D. Why is it sound policy to subject states to regulatory burdens and risks when there is so much uncertainty, especially when we know further improvements in air quality will occur without the standard?

**Answer: EPA discussed these background ozone and associated issues in the proposal at 79 FR 75382. We are currently reviewing the more than 430,000 comments we received on the proposal, many of which discussed background ozone.**

10. EPA maintains most States can meet the new ozone requirements by 2025 with existing "federal measures" such as the "Mercury and Air Toxics" (a/k/a "MATS" or "Utility

MACT") Rule or Tier 3 standards.

A. For states that would have to prepare State implementation plans to meet a new ozone standard, would states be able to point to these federal measures?

B. Will states get full credit up front in their plans for expected reductions from existing federal measures and thereby avoid the need for unnecessary local controls? For example, could a state rely on the reductions expected to occur under the Utility MACT Rule or Tier 3 standards to meet the new ozone standards?

**Answer: EPA projections show the vast majority of U.S. counties would meet the proposed standards by 2025 just with the rules and programs now in place or under way, including the Tier 3 fuel standards. States are able to take federal measures into account in developing any required attainment plans. Any controls implemented for purposes of meeting MATS could be included in a state's control strategy for attainment planning purposes as long as the control requirements remain permanent and enforceable.**

11. EPA did not finalize its implementation regulations for the 2008 standard until March of 2015.

A. Will states have to comply with these implementation regulations if EPA revises the 2008 standard?

B. If EPA revises the 2008 standard, will areas still have to comply with that standard or will the agency revoke that standard?

**Answer: Sections 108 and 109 of the Clean Air Act (CAA) govern the establishment, review, and revision, as appropriate, of the NAAQS to protect public health and welfare. The CAA requires the EPA to periodically review the air quality criteria—the science upon which the standards are based—and the standards themselves. This rulemaking is being conducted pursuant to these statutory requirements.**

**The final State Implementation Plan (SIP) Requirements Rule, signed by the Administrator on February 13, 2015, provides EPA's interpretation of Clean Air Act requirements that state, tribal, and local air quality management agencies will need to meet as they develop their plans to implement the 2008 ozone NAAQS. In that final rule, the EPA determined it appropriate to revoke the prior (1997) primary and secondary 8-hour NAAQS given that the 2008 ozone NAAQS was more stringent. Unless and until EPA makes such a determination for the 2008 ozone NAAQS relative to any revised ozone NAAQS, states and tribes with nonattainment or maintenance areas for the 2008 ozone NAAQS must continue to meet all applicable statutory and regulatory requirements related to that particular NAAQS.**

12. Section 165(a)(3) of the Clean Air Act requires that a PSD permit applicant demonstrate that its proposed project will not cause or contribute to a violation of any National Ambient

Air Quality Standards.

A. Is EPA confident that applicants in all areas of the country will be able to make this demonstration given the proximity of the proposed standards to background levels?

**Answer: New or modified major stationary sources that must get a PSD permit must show that the project will not cause or contribute to a violation of a revised ozone standard upon the effective date of that standard. The EPA has proposed a grandfathering provision for PSD permit applications that are sufficiently far enough along in the approval and issuance process on the effective date of a revised standard [79 FR 75234 (December 17, 2014) at page 75379]. Those in-pipeline permit applications meeting the qualification criteria in EPA's final rule would not need to be revised in order to be approved. For permit applications that are subject to the revised standards, EPA believes based on past experience that it is unlikely that a source will not be able to make the required demonstration. EPA regulations (51.165(b)(3)) also provide that state programs may contain an approach that would enable an applicant to obtain a permit by offsetting its adverse ambient impact.**

13. In 2012, the President issued an Executive Order to address the problem of permitting delays for major federal infrastructure projects. The order created a Steering Committee to be chaired by the Chief Performance Officer, and included many of the large federal agencies.

A. Has EPA consulted with the Steering Committee regarding the impacts of EPA's proposed rule on major federal infrastructure projects?

B. If yes, when did those consultations occur and with whom did EPA consult?

C. Has EPA analyzed the potential impacts of its change in ozone standards on major infrastructure projects? If yes, what was the result of that analysis and is it publically available

**Answer: The Clean Air Act directs the EPA to set National Ambient Air Quality Standards (NAAQS) at a level requisite to protect public health with an adequate margin of safety and to protect the public welfare from any known or anticipated adverse effects of air pollutants. The NAAQS are based on consideration of the most up-to-date scientific evidence and technical information, expert advice from independent advisory committees, and public comments. The EPA is prohibited by law from considering the costs of implementation in setting the level of the NAAQS. The U.S. Supreme Court ruled in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), that the EPA may not consider the costs of implementation in setting standards that are requisite to protect public health and welfare, as provided in section 109(b) of the Clean Air Act. Moreover, if EPA were to consider such costs, it would be "grounds for vacating the NAAQS, because the Administrator**

**had not followed the law". Id. at n. 4. However, when designing their state implementation plans to implement the NAAQS, state and local officials have the authority to consider several factors, including employment impacts and costs of controls.**

14. Has EPA consulted with other Federal agencies, such as the Department of Transportation, regarding the potential impacts of EPA's proposed ozone standards on major infrastructure projects?

A. If yes, which agencies did EPA consult with and when did the consultations occur?

**Answer: In accordance with Executive Order 12866, the Office of Management and Budget coordinated the interagency Executive Branch review of the proposed ozone standard before the rule was published. The Department of Transportation participated in this review. With respect to the potential impacts of EPA's proposed ozone standards on major infrastructure projects, the Clean Air Act directs the EPA to set National Ambient Air Quality Standards (NAAQS) at a level requisite to protect public health with an adequate margin of safety and to protect the public welfare from any known or anticipated adverse effects of air pollutants. The NAAQS are based on consideration of the most up-to-date scientific evidence and technical information, expert advice from independent advisory committees, and public comments. The EPA is prohibited by law from considering the costs of implementation in setting the level of the NAAQS. The U.S. Supreme Court ruled in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), that the EPA may not consider the costs of implementation in setting standards that are requisite to protect public health and welfare, as provided in section 109(b) of the Clean Air Act. Moreover, if EPA were to consider such costs, it would be "grounds for vacating the NAAQS, because the Administrator had not followed the law". Id. at n. 4. However, when designing their state implementation plans to implement the NAAQS, state and local officials have the authority to consider several factors, including employment impacts and costs of controls.**

15. The EPA's proposed "Clean Power Plan" envisions a major shift nationwide from coal-fired generation to heavy reliance on natural gas to generate electricity.

A. What is EPA's estimate of the impact the ozone rule will have on natural gas production?

B. What is EPA's estimate of the impact of the ozone rule on the permitting of new natural gas plants or the expansion of existing natural gas plants in areas that are designated nonattainment?

**Answer: Consistent with Executive Order 12866, and OMB guidance, the EPA prepared a Regulatory Impact Analysis accompanying the proposed updates to the ozone NAAQS that shows the benefits and costs of illustrative control scenarios that states may choose in complying. Because states have flexibility in how to meet their goals, the actions taken to**

meet the goals may vary from what is modeled in the illustrative scenarios. Specific details, including information about how costs and benefits are estimated for these illustrative scenarios and about costs over time are available in the RIA (<http://www.epa.gov/ttn/ecas/regdata/RIAs/20141125ria.pdf>).

16. In the proposed rule, EPA assumes that ozone levels will decline due to the implementation of other regulations, such as the Utility MACT Rule, Tier 3 standards and other rules. EPA also assumes that its proposed "Clean Power Plan" will be implemented and includes it in the agency's "baseline" for calculating costs.

A. What would the costs of EPA's ozone rule be if the agency did not assume the Clean Power Plan in the baseline?

**Answer: In analyzing the emission reductions that may be needed to meet a standard, EPA believes it is important to represent any major federal action that will have a substantial impact on emissions sources being evaluated. This allows us to provide the public with as accurate a picture of the baseline (the starting point for this action) as possible. Including the Clean Power Plan in the baseline provides a more representative projection of where future emissions reductions may be needed and the amount of those emissions reductions in order to attain any revised standard. We did not specifically analyze the potential cost of implementing a revised standard with an alternate scenario where the CPP is not in the baseline.**

17. In your testimony, you state that the agency cannot consider costs or feasibility in setting National Ambient Air Quality Standards.

A. Does EPA believe that under the Clean Air Act it must set standards even if those standards are infeasible regardless of the costs to implement?

**Answer: The Clean Air Act directs the EPA to set National Ambient Air Quality Standards (NAAQS) at a level requisite to protect public health with an adequate margin of safety and to protect the public welfare from any known or anticipated adverse effects of air pollutants. The NAAQS are based on consideration of the most up-to-date scientific evidence and technical information, expert advice from independent advisory committees, and public comments. The EPA is prohibited by law from considering the costs of implementation in setting the level of the NAAQS. The U.S. Supreme Court ruled in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), that the EPA may not consider the costs of implementation in setting standards that are requisite to protect public health and welfare, as provided in section 109(b) of the Clean Air Act. Moreover, if EPA were to consider such costs, it would be "grounds for vacating the NAAQS, because the Administrator had not followed the law". *Id.* at n. 4. However, when designing their state implementation plans to implement the NAAQS, state and local officials have the authority to consider several factors, including employment impacts and costs of controls.**

18. Many commenters have indicated that EPA's proposed ozone standards are so low that even the Grand Canyon and Yellowstone National Parks may not meet the proposed standards.

- A. Is it correct that there are areas where national parks are located that may not meet the proposed standards?
- B. Can you confirm that there are no areas with national parks that would violate the proposed standards?
- C. If national parks are located in areas that do not meet the proposed standards, will the remedy be to limit vehicle traffic and visitors to the park?

**Answer: If the ozone standard is revised, states would have primary responsibility for determining what control strategies to employ to attain the standard. The attainment plan for each area is unique in that it considers the appropriate set of emissions controls necessary to successfully achieve a standard in that area based on the characteristics of elevated ozone levels in each area.**

19. EPA's 2010 Regulatory Impact Analysis of the Renewable Fuel Standard (RFS) concluded that the program would contribute to ozone as a consequence of increased ethanol use. Nonetheless, EPA recently proposed its latest targets for the RFS through 2016 which would lead to higher levels of ethanol in the nation's fuel supply.

- A. Does the proposed RFS rule potentially undercut the nation's efforts to reduce ozone?

**Answer: EPA and the States have the tools and flexibilities to both reduce ozone and increase renewable fuels. For example, EPA has the authority it needs to set vehicle emissions and fuel standards to improve air quality as necessary. In fact, just last year EPA issued the new "Tier 3" vehicle emissions and fuel standards that will reduce ozone precursors by over 300,000 tons in 2017, with increasing annual reductions in future years.**

**States also develop their own plans to attain and maintain the ozone standard, and they have the flexibility to identify and adopt control strategies that are most appropriate for their local circumstances. This is important because air quality modeling of RFS reveals that the ozone impacts are variable from region to region, with some areas experiencing increases and others experiencing decreases. When States develop their attainment and maintenance plans, they will be accounting for the impacts of renewable fuel use. EPA's motor vehicle emissions model, which States use in their air quality planning, includes our most up-to-date understanding of how renewable fuels affect motor vehicle emissions. Thus, we can all ensure that our efforts to reduce ozone and implement the RFS program are not occurring**

independently.

**Finally, it is important to note that the RFS program does not specify the type of renewable fuel. The emissions impacts of renewable fuels depend on the specific types of renewable fuels and feedstocks the market chooses to comply with the RFS standards. There are certainly opportunities over time to increase the use of renewable fuels and production processes that have fewer emissions impacts, and EPA will consider possible ways to encourage such developments, consistent with the statutory program.**

B. I understand that a May 8, 2015, Journal of Geophysical Research article measured emissions of ozone-forming VOCs from ethanol refineries at levels 5 times higher than those assumed by EPA, and a December 20, 2014, study in the Proceedings of the National Academy of Sciences found that the use of ethanol in vehicles results in greater emissions of ozone-forming compounds and other air pollutants than the gasoline it replaces. Do these and other recent studies suggest that the impact of ethanol on ozone may be greater than previously thought?

**Answer: The scientific understanding of the emissions impacts of ethanol production and use has continued to evolve since EPA's 2010 analysis. However, the results of all studies, including EPA's 2010 analysis, depend on assumptions about the ethanol content of the fuel and where it is used, and where and how it is produced. The geographic variability of the ozone impacts of renewable fuels are partly a function of these assumptions. We believe the studies of ethanol and ozone over the past few years are generally consistent with the conclusions of the 2010 Regulatory Impact Analysis of the Renewable Fuel Standard (RFS), given the differences in assumptions. With respect to emissions from ethanol plants specifically, the study published in the Journal of Geophysical Research focused on one plant that is not representative of the vast majority of U.S. plants, so it is difficult to draw conclusions from that study about the industry in general. The plant studied is a coal-fired wet mill plant, whereas most U.S. plants are natural gas dry mill.**

C. What implications do these and other studies have on the ability to achieve attainment with existing and proposed new ozone standards while at the same time complying with the agency's proposed RFS targets that necessitate increases in ethanol usage?

**Answer: As discussed above, we can attain the ozone standards and at the same time comply with RFS. Our inventories and air quality modeling analyses account for the impacts of renewable fuels, and we will continue to work with States to design air quality plans and policies that will enable attainment of the ozone standard even as the RFS program is being implemented. We also note that the RFS does not necessarily require increases in ethanol use, though such increases are a possible market response to the increasing mandates.**

20. Pursuant to section 211(v) of the Clean Air Act, EPA was required to complete a study of the adverse air quality impacts of the RFS by June of 2009, and promulgate rules to

mitigate any such impacts by December of 2010.

A. Has EPA complied with either of these requirements? If not, why not?

**Answer: EPA has not completed the “anti-backsliding” study required by Clean Air Act section 211(v). Our first steps were to conduct vehicle emissions testing to determine how ethanol and other fuel properties affect the emissions of newer-model vehicles, and to update our vehicle emissions model with that new data. Those steps have now been completed. Other time-consuming and resource-intensive elements have not yet been completed, such as developing emissions inventories and air quality modeling analyses.**

B. Do you believe the agency should simultaneously move ahead with both a new ozone rule and a new RFS rule when the agency is years behind schedule in determining the extent the RFS contributes to ozone and before it has taken steps to mitigate any impact?

**Answer: Yes, for several reasons. First, we are legally obligated to do both, and we have specific timelines established under the Clean Air Act. Furthermore, the two actions are not contradictory. The ozone rule will define the National Ambient Air Quality Standard for ozone—that is, the level of ozone that will protect public health with an “adequate margin of safety.” This is about informing Americans about what is healthy air quality so we can take steps as a country, over time, to achieve healthy air for all. This is an important and statutorily required responsibility. In addition, as described above, EPA and the states have the tools and flexibilities to both attain the ozone standard and implement the RFS program.**

C. Is EPA planning to take into account its proposed ozone rule when setting targets in the RFS and vice versa, or is the agency going to essentially promulgate both of these potentially contradictory rules independently of each other?

**Answer: As described above, EPA does not view Congress’ direction for these two programs as contradictory, and we are not pursuing them in isolation. For example, the air quality modeling in the Regulatory Impact Analysis supporting the ozone NAAQS final rule will be accounting for the use of renewable fuels.**

## **The Honorable Bill Flores**

1. During its 2010 reconsideration of the 2008 ozone standard, EPA projected that compliance with a 60 ppb standard could cost as much as \$90 billion. However, in the 2014 ozone proposal, EPA projected that compliance with a 60 ppb standard would be significantly less expensive, costing as much as \$40 billion. During the hearing, I asked you to explain what happened in that four year period to make those costs projections go down. You attributed the change to methodological differences in the two projections, explaining that the 2010 projection analyzed the costs of reducing ozone from an 84 ppb standard, while the 2014 projection analyzed the costs of reducing ozone from a 75 pbb standard. However, EPA's Regulatory Impact Analysis from the 2010 reconsideration projected that reducing ozone from 84 ppb to 75 ppb would cost only \$7.6 to \$8.8 billion.<sup>1</sup> Thus even when netting out compliance costs for reducing ozone concentrations from 84 ppb to 75 ppb, the 2014 proposal still projects substantially lower costs to reduce ozone from 75 ppb (by as much as \$12.3 billion to 70 ppb, \$20.2 billion to 65 ppb, and \$42.2 billion to 60 ppb) than EPA did during the 2010 reconsideration. As your explanation only covers a small portion of the change in question, please provide a detailed account of the differences between the Regulatory Impact Analyses for the 2010 reconsideration and for the 2014 proposal resulting in this reduction of projected compliance costs.

**Answer: The difference between the 2011 and 2014 Regulatory Impact Analyses for the ozone NAAQS is described in the RIA (Section 5.3 Updated Methodology Presented in this RIA, page 5-8 and Section 8.2 Discussion of Results, page 8-8). In general, the differences in the cost projections between 2011 and 2014 result from analysis of a baseline year of 2025, rather than 2020, which allows for more time to attain and for Federal measures to be fully implemented; different current and proposed standards than in previous analyses; and improvements in air quality that substantially reduce the emissions reductions needed to meet any revised standard.**

## The Honorable David McKinley

1. As you know, some counties with little or no industrial presence may not be able to comply with new ozone standards through no fault of their own. There may be many factors that are causing these counties to be in non-compliance with an ozone standard, including high background levels or emissions that are otherwise beyond the county's control.
  - A. How does EPA expect a county (described above) to comply with the proposed ozone standards? What policies are in place to address these situations?
  - B. Are there policies in place to ensure that non-compliant counties (described above) can continue to attract manufacturers and other industry and ensure job growth?

**Answer: The Clean Air Act contains provisions that assist states in ensuring ozone in their area that results from certain sources of emissions outside their control does not create unnecessary control obligations as they continue their work to improve air quality. If a state can provide an adequate assessment or demonstration to legally invoke statutory and regulatory relief, there are a few types of CAA-authorized relief that are described in the ozone NAAQS proposal. As examples, an area may be able to rely upon the exceptional events provisions of the Act to exclude certain emissions data from consideration during the process of area designations under the possible revised NAAQS, which could impact whether an area is designated nonattainment. An area also may be able to rely on the international emissions provisions of the Act when making attainment demonstrations, which could limit their ultimate control requirements. Finally the Administrator can determine that certain qualifying nonattainment areas are Rural Transport Areas, thus eliminating the need for states to develop an attainment plan. All of these CAA-authorized provisions have been used in the past for implementing ozone standards.**

2. How does EPA work with states to ensure that a non-compliant county (described in question 1 above) that is surrounded by other non-compliant counties can meet ozone standards?

**Answer: As explained above, the Clean Air Act contains provisions that can assist states in ensuring ozone in their area that results from certain sources of emissions outside their control does not create unnecessary control obligations as they continue their work to improve air quality. EPA has and will continue to work with states that can provide an adequate assessment or demonstration to legally invoke the appropriate statutory and regulatory relief.**

3. Section 109 of the Clean Air Act expressly requires that that the Clean Air Scientific Advisory Committee, in reviewing any National Ambient Air Quality Standards, "advises the Administrator of *any adverse public health, welfare, social, economic, or energy effects* which may result from various strategies for attainment and maintenance

of such national ambient air quality standards."

- A. Has EPA ever asked CASAC to review the adverse public health effects that may result from implementing a new national ambient air quality standard?
- B. In a June 26, 2014 letter to EPA, the Clean Air Scientific Advisory Committee told EPA that it would be willing to review these effects for the pending ozone proposal if EPA requested such a review. Has EPA requested such a review for its proposed ozone standard?

**Answer: The Clean Air Act directs the EPA to set National Ambient Air Quality Standards (NAAQS) at a level requisite to protect public health with an adequate margin of safety and to protect the public welfare from any known or anticipated adverse effects of air pollutants. The NAAQS are based on consideration of the most up-to-date scientific evidence and technical information, expert advice from independent advisory committees, and public comments. The EPA is prohibited by law from considering the costs of implementation in setting the level of the NAAQS. The U.S. Supreme Court ruled in *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), that the EPA may not consider the costs of implementation in setting standards that are requisite to protect public health and welfare, as provided in section 109(b) of the Clean Air Act. Moreover, if EPA were to consider such costs, it would be "grounds for vacating the NAAQS, because the Administrator had not followed the law". *Id.* at n. 4. EPA has not sought advice from CASAC on the costs of implementation as part of the NAAQS review to avoid undermining the public health and legal basis for the revised NAAQS. However, when designing their state implementation plans to implement the NAAQS, state and local officials have the authority to consider several factors, including employment impacts and costs of controls.**

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<sup>1</sup> See *Updated Regulatory Impact Analysis (RIA) for the Reconsideration of the 2008 Ozone National Ambient Air Quality Standard (NAAQS)*, pg. SI-4, Table SI.