Air Quality
ENVIRONMENTAL QUALITY

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

May 15, 2017

Mr. Ryan Jackson, Chief of Staff and Chairman, Regulatory Reform Task Force
Ms. Samantha K. Dravis, Associate Administrator,
Office of Policy, and Regulatory Reform Officer
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Subject: Docket ID: EPA-HQ-OA-2017-0190; *Evaluation of Existing Regulations*

Dear Chairman Jackson and Associate Administrator Dravis:

The North Carolina Division of Air Quality (DAQ), within the Department of Environmental Quality, appreciates the opportunity to comment as requested during the U.S. Environmental Protection Agency's (EPA) regulatory reform process involving the evaluation of existing regulations.

The DAQ's detailed comments are provided in the Attachment to this letter. Our recommendations are focused on those seeking consistency, clarification, process improvements, and efficiencies while focusing on our common goal of environmental protection.

Thank you again for the opportunity to comment. We look forward to working with the EPA and the Regulatory Reform Task Force as it moves forward with this process. If you should have any questions regarding this submittal, you can reach me at Michael.Abraczinskas@ncdenr.gov or (919) 707-8447.

Sincerely,

Michael A. Abraczinskas, Director
Division of Air Quality, NCDEQ

# Contents

## Comment 1 – Recommend the use of 1 ppb as the significance threshold for Ozone Interstate Transport Analyses

*RRTF Criteria (iii) impose costs that exceed benefits and (iv) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies*

For the 2015 8-hour ozone National Ambient Air Quality Standard (NAAQS), under the Prevention of Significant Deterioration (PSD) program, EPA imposes a 1 part per billion (ppb) "significance" level based on modeling of a single or small group of stationary sources primarily to assess the potential impact on in-state ozone levels. However, EPA imposes a more stringent 0.7 ppb significance level for assessing potential interstate transport impacts over much longer distances and much larger uncertainties associated with emissions and air quality modeling assumptions. It is a very significant expense for a state to prepare a state implementation plan (SIP) to address downwind state air quality problems that are defined based on a very low significance level, especially when it is questionable that the low significance level can be recorded by air quality monitors. The North Carolina Division of Air Quality (NCDAQ) requests that EPA consider revising the "significance" threshold for assessing interstate transport based on scientific analyses that (1) account for the uncertainties associated with the emissions forecast and air quality modeling used to evaluate potential downwind impacts; and (2) is consistent with the threshold applied under the PSD program.

**Background**

Clean Air Act (CAA) section 110(a)(2)(D)(i)(I) requires upwind states to complete air quality modeling to determine their contribution to ozone levels at downwind state nonattainment and maintenance monitors. EPA has used a 1% of the NAAQS standard to define a "significant" contribution; upwind states with a contribution of 1% or more of the NAAQS must implement actions to bring the contribution below the 1% threshold. For the current 2015 ozone NAAQS, the threshold is 0.7 parts per billion (ppb); however, EPA has not provided the scientific basis for deciding on the 1% significance level. Although EPA has "historically found that the 1% threshold is appropriate,"[1] this approach is not preordained and EPA has also used several alternative metrics for previous significance assessments.

The U.S. Supreme Court has noted delegation to EPA to "select among reasonable options" in allocating upwind state contributions to downwind pollution.[2] EPA established this threshold in the Cross-State Air Pollution Rule (CSAPR)[3] but has the flexibility under CAA Section 110(a)(2)(D) to develop a level that matches modeling accuracy. In examining interstate transport obligations under 2015 8-hour ozone NAAQS, which is near background levels,[4] EPA should recognize the tremendous progress that has been made in reducing ozone precursors, including a reduction in $NO_x$ emissions from stationary fuel combustion nationwide of nearly 65% between 2000 and 2015.[5]

[1] 82 FR 1740.
[2] *EPA v. EME Homer City Generation, L.P.,*(2014).
[3] 76 FR 48211, 48236.
[4] AAPCA, State Environmental Agency Perspectives on Background Ozone & Regulatory Relief, June 2015.
[5] U.S. EPA, "Our Nation's Air: Status and Trends Through 2015," 2016.

EPA should consider whether an alternative threshold above 0.7 ppb is appropriate, particularly given the uncertainties associated with the forecast year inventories used as inputs to the air quality modeling as well as the uncertainties associated with the air quality modeling to predict very small changes in ambient ozone concentrations over long distances. Currently, the 0.7 ppb threshold is below the detection limit of ambient monitors; consequently, it is unreasonable to assume that the air quality models can accurately predict levels at this threshold.[6]

In addition, the 1% threshold EPA applies to interstate transport assessments is inconsistent with the Significant Impact Levels (SIL) value recommended by EPA in 2016 draft Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program. This Guidance recommends a SIL of 1.0 ppb based on an air quality variability analysis based on the 4$^{th}$ highest daily maximum 8-hour concentration (averaged over three years). EPA's technical analysis of this SIL "provides a basis for a permitting authority to conclude that concentration increases below this SIL do not cause or contribute to violations of the relevant NAAQS or PSD increments." In the accompanying legal document, EPA states it has "often equated an insignificant impact with one that is trivial or de minimis in nature."[7]

[6] The precision of the 2Btech 205 FRM ozone monitors have a listed accuracy of 1.0 ppb or 2% of the reading, whichever is greater. http://twobtech.com/model-205-ozone-monitor.html. The precision of the Thermo Scientific 49i ozone monitor is 1 ppb. https://tools.thermofisher.com/content/sfs/brochures/EPM-49i-Datasheet.pdf.

[7] https://www.epa.gov/sites/production/files/2016-08/documents/pm2_5_sils_and_ozone_2060-za24_legal_document.pdf.

## Comment 2 -Alignment of NAAQS Issuance & Implementation Schedules and Multipollutant Planning

*RRTF Criteria (iii) impose costs that exceed benefits; (iv) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies*

Declining resources and increasing responsibilities demand that we address air quality management in a new way. Federal statutory, regulatory, and procedural mandates can hinder progress toward a fully effective air quality managing system through imposition of unnecessary burdensome, complicated and costly requirements.[8] The current reality of multiple SIP schedules and deadlines creates major obstacles for air agencies and the regulated community. The Environmental Council of States (ECOS) has requested EPA to work with states to "identify needed SIP process improvements and methods for effecting them, and to revise the SIP process so as to foster cost-effective, efficient, and multi-pollutant National Ambient Air Quality Standards (NAAQS) implementation strategies." In the absence of CAA reform, EPA must work with all stakeholders to find innovative ways to work within the constraints of the CAA to allow for an improved and updated approach to managing air quality. Listed below are a few recommendations:

- Align schedules for new/revised NAAQS, to the extent possible, to allow for efficient and effective air quality management. Tables 1 and 2 illustrate the schedules released by EPA for NAAQS review. Clearly, there are opportunities to align the release of NAAQS proposals and final actions.
- Follow an efficient and timely designations process, consistent with the CAA.
- Align implementation schedules for multiple NAAQS to the extent possible. EPA did not publish implementing regulations for the 2008 NAAQS until February 2015, and then revised the standard in October 2015. States now face the prospect of implementing two NAAQS for ozone simultaneously. It is possible that some counties will be in non-attainment for both the 2008 NAAQS and the 2015 NAAQS. Some regulatory relief and flexibility should be granted to states that face the burden of implementing potentially overlapping standards.
- Better align compliance dates for rules that reduce the same or different pollutants from the same source sectors
- Transition to an integrated air quality management approach to protect public health and the environment that maximizes air quality improvement and minimizes the unintended consequences and resource burden of pollutant-by-pollutant air quality management.
- Recognize that solutions are interrelated. Transform and simplify, where feasible, a comprehensive multi-pollutant approach.
- Allow states to develop and submit SIPs in a multi-pollutant format if they choose to do so. If a pollutant-by-pollutant SIP submittal approach fits the resources better in a given state, that state could follow the more traditional approach as its option.

**Background**

The CAA contains specific schedules for the review of the NAAQS. However, due to the length of time taken to evaluate the science, propose the NAAQS, and make the final policy decision, EPA rarely promulgates the final NAAQS within the schedule specified in the statute. Oftentimes, the effective dates are further delayed due to legal challenges and/or legislations passed by the U.S. Congress. These actions trickle down to varying schedules for the implementation of the NAAQS. In the case of the 2010

1-hour sulfur dioxide NAAQS, EPA did not follow the CAA timeline and deferred designations for all areas of the country that did not have violating monitors. It was not until multiple legal challenges were filed and a subsequent consent decree was put in place that EPA issued a designation and implementation schedule, far beyond that allowed in the statue. The consequence of such a patch work of rulemaking results in a resource intensive and costly air quality management strategy for the states to develop one pollutant at a time, sometimes to the detriment or avoidance of other pollutant concerns (see Figure 1). It also creates a regulatory uncertainty for industries regarding control technology investment options and compliance alternatives for sources that are affected by multiple NAAQS related regulations.

NAAQS Reviews: Status Update

(March 2017)

| | Ozone | Lead | Primary $NO_2$ | Primary $SO_2$ | Secondary (Ecological) $NO_2$, $SO_2$, PM[1] | $PM^2$ | CO |
|---|---|---|---|---|---|---|---|
| Last Review Completed (final rule signed) | Oct. 2015 | Sept 2016 | Jan 2010 | Jun 2010 | Mar 2012 | Dec 2012 | Aug 2011 |
| Recent or Upcoming Major Milestone(s)[3] | TBD[4] | TBD[4] | Jan 2016 Final ISA<br>Sep 2016 1st Draft PA<br>Spring 2017 Final PA | Dec 2016 2nd Draft ISA<br>Feb 2017 REA Planning Document<br>March 2017 CASAC review of Draft ISA and REA Planning Document | Jan 2017 Final IRP<br>Spring 2017 CASAC review of 1st Draft ISA | Dec 2016 Final IRP<br>Winter 2017/2018 1st draft ISA REA Planning Document | TBD[4] |

Additional information regarding current and previous NAAQS reviews is available at: http://www.epa.gov/ttn/naaqs/

[1] Combined secondary (ecological effects only) review of $NO_2$, $SO_2$ and PM
[2] Combined primary and secondary (non-ecological effects) review of PM
[3] IRP – Integrated Review Plan; ISA – Integrated Science Assessment; REA – Risk and Exposure Assessment; PA – Policy Assessment
[4] TBD = to be determined

**Table 1. Most recent NAAQS review schedule released by EPA.**

Anticipated NAAQS Implementation Milestones

(March 2017)

| Pollutant | Final NAAQS Date | Designations Effective | Infrastructure SIP Due | Attainment Plans Due | Attainment Date |
|---|---|---|---|---|---|
| $PM_{2.5}$ (2006) | Oct 2006 | Dec 2009 | Oct 2009 | Dec 2014 | Dec 2015 (Mod)<br>Dec 2019 (Ser) |
| Pb (2008) | Oct 2008 | Dec 2010-2011 | Oct 2011 | June 2012-2013 | Dec 2015-2019 |
| $PM_{2.5}$ (2012) | Dec 2012 | Apr 2015 | Dec 2015 | Oct 2016 (Mod) | Dec 2021 (Mod)<br>Dec 2025 (Ser) |
| $NO_2$ (2010) (primary) | Jan 2010 | Feb 2012 | Jan 2013 | N/A | N/A |
| $SO_2$ (2010) (primary) | June 2010 | Oct 2013, Sept 2016 (+2 rounds) | June 2013 | April 2015, March 2018 (2019, 2022) | Oct 2018, Sept 2021 (2023, 2026) |
| Ozone (2008) | Mar 2008 | July 2012 | Mar 2011 | Mid 2015-2016 | Mid 2015-2032 |
| Ozone (2015) | Oct 2015 | Dec 2017 | Oct 2018 | Dec 2020-2021 | 2020-2037 |

**Table 2. Most recent NAAQS implementation schedule released by EPA.**

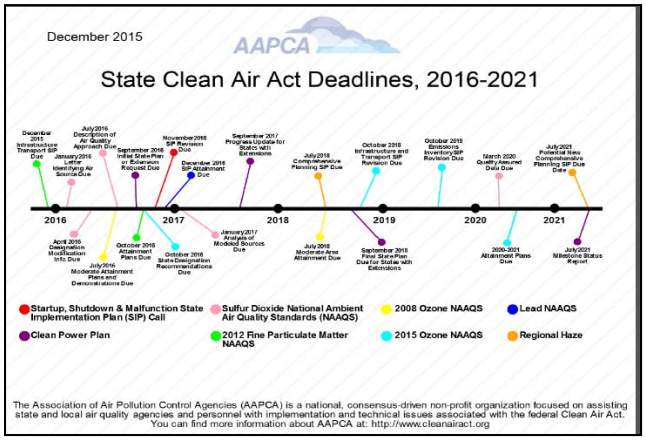


**Figure 1. Patchwork of implementation related requirements affecting air agencies and regulated entities**

## Comment 3 - EPA Should Not Accept/Grant CAA Section 176A Petitions unless the Petitioning States have Implemented all Required Measures and are Complying with their SIPs

*RRTF criteria (iii) impose costs that exceed benefits; (iv) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies;*

To improve environmental protection, ensure environmental resource efficiency, and to eliminate unnecessary administrative and regulatory burdens, EPA must conduct upfront due diligence to ensure states petitioning under the Clean Air Act (CAA) Section 176A have met their CAA and SIP obligations to control local pollution. Petitioning states are imposing emission control requirements that are above and beyond those occurring in their own states. In cases like North Carolina, the petitioner's request would impose more costly control requirements and many of the control requirements would have no environmental benefit due to nitrogen oxide (NOx) limited nature of the southeast region. EPA must develop minimum criteria for 176A petitions to be accepted, and ensure the required SIP elements are in place in the downwind states before acting on such a petition.

**Background**

In December 2013, many northeastern states petitioned EPA to expand the Ozone Transport Region (OTR) by adding several downwind states that they believed to significantly contribute to violations of the 2008 ozone National Ambient Air Quality Standards (NAAQS). It is a scientific fact that emission reductions achieved from closer, local sources are much more effective in meeting the NAAQS than those from distant sources. Many of the petitioning states have failed to submit adequate SIPs as evidenced by EPA's Finding of Failure to submit action in February 2017.[9] Examples of SIP elements inadequately addressed include: NOx reasonably available control technology (RACT) for major sources, basic inspection and maintenance (I/M) requirements, non-control technique guidelines (CTG) volatile organic compound (VOC) RACT for major sources, and CTG VOC RACT for all 44 CTG categories.

NCDAQ's review has also revealed inconsistencies within the OTR states. For example, some northeast states have imposed stringent requirements on local electricity generating units by addressing high electricity demand days, peaking units, and setting short term performance standards. They have also reevaluated the 1990 RACT definition for what is deemed reasonable, and elevated the economic threshold for certain RACT source categories. Conversely, power plant emission control requirements in a few states are delayed through a phased approach which results in delayed emission reductions otherwise required to meet an attainment due date.

A remedy to address these discrepancies is to ensure: (1) the petition is based on contemporaneous and factual technical analysis, (2) the petitioners have submitted adequate and approvable SIPs to address their nonattainment issue, and (3) the petitioning states have fully implemented all elements specified in their SIP.

[9] Findings of Failure to Submit State Implementation Plan Submittals for the 2008 Ozone National Ambient Air Quality Standards (NAAQS), 82 FR 9158, February 3, 2017.

## Comment 4 - Formalize States as Stakeholders in EPA Rule Development and Litigation Agreements

*RRTF criteria: all 6*

NCDAQ requests that EPA seriously consider formalizing the involvement of state, local, and tribal environmental agencies as stakeholders during the early stages of regulatory, guidance, and litigation agreement (consent decree) development. EPA's current method allows agency personnel to operate in a "silo" environment without fully understanding or involving the stakeholder community, accept strategies pushed by special interest groups, and produce regulations, guidance documents and consent decrees that are heavily contested in the proposal stage and later through litigation. This pattern of "sue and settle" and producing weak air quality regulations drains tremendous resources within air agencies, the regulated community, and all affected parties without achieving expeditious attainment of the National Ambient Air Quality Standards (NAAQS) or achieving environmental objectives. We recommend that a model similar to the Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), be implemented through Congressional action mandating upfront air agency involvement. Alternatively, we request that EPA prepare a rulemaking that formally requires the opportunity for early air agency involvement in major EPA policy development efforts.

**Background**

States are tasked with implementing and enforcing environmental protection requirements outlined in EPA regulations, guidance, and litigation agreements. They generally work more closely and more often with the regulated community than EPA, and therefore have much greater awareness of how alternative policies could impact affected entities. In addition, EPA policies interact with state agency environmental programs in a myriad of ways given the specific environmental conditions and priorities of individual states. States are in the best position to identify the advantages and disadvantages of alternative EPA policies on these agencies' ability to achieve environmental objectives.

Under the current system, states can be either entirely left out of input to the EPA policy-setting process, or allowed input during the late stages of the process (e.g., as part of the public comment period after release of EPA proposed rules). This has resulted in EPA not fully taking advantage of states' knowledge related to the regulated community and environmental conditions in each state, resulting in sub-optimal results.

Under the Regulatory Flexibility Act, as amended by the SBREFA, small entities are formally provided the opportunity to provide early input into the development of many environmental regulations (see https://www.epa.gov/reg-flex and https://www.sba.gov/advocacy/summary-sbrefa). The SBREFA ***requires*** that EPA, and the Occupational Safety and Health Agency (OSHA), receive input from affected small business through the SBA's Office of Advocacy ***before*** proposed rules are published. When an EPA proposal is expected to have a significant impact on a substantial number of small entities, the agency must convene a panel of staff from the agency, the Office of Advocacy, and the Office of Management and Budget to review a copy of the draft proposed rule and related agency analyses, and to solicit recommendations on regulatory alternatives to minimize the burden on small entities. Within 60 days of convening the panel, a report is submitted, which the agency then reviews and makes any appropriate revisions to the rule before publishing the proposed rule with the panel report as part of the

record. NCDAQ recommends that EPA formally adopt an analogous process that requires input from state agency representatives in major regulatory development and litigation agreement efforts. Ideally, NCDAQ requests that this process be required via Congressional legislation mandating state agency involvement. If this is not feasible; however, then we request that EPA prepare a rulemaking that formally requires the opportunity for early state agency involvement in major EPA policy development efforts.

A few examples of past EPA regulations, guidance, and litigation agreements that resulted in suboptimal air quality planning are:

- 2010 Nitrogen Dioxide ($NO_2$) NAAQS – near road monitoring requirements that turned out to be unnecessary for the later phases
- 2010 Sulfur Dioxide ($SO_2$) NAAQS – deferment of designations, excluding air agencies when making agreements with special interest groups regarding designation schedule
- Startup, Shutdown, and Malfunction (SSM) State Implementation Call (SIP) Call – excluding states when considering the reversal of decades long policy; excluding states while having discussions with special interest groups in the review and determination of inadequate SIPs
- 2015 Ozone NAAQS – expansion of Photochemical Assessment Monitoring Stations (PAMS) monitoring network

## Comment 5 - NOx SIP Call Transition Requirements for Large Non-Electric Generating Units (EGUs)

*RRTF Criteria* (ii) are outdated, unnecessary, or ineffective; *(iii) impose costs that exceed benefits; and (iv) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies*

To provide regulatory relief and remove unnecessary administrative burden, EPA should conduct formal rulemaking and remove 40 CFR Part 75 monitoring, record keeping and reporting requirements for large non-EGUs subject to the 1998 Nitrogen Oxides (NOx) State Implementation Plan (SIP) call. Alternatively, in cases where a state such as North Carolina has submitted Clean Air Act (CAA) Section 110(l) noninterference demonstration, EPA should review and approve the SIP based on the technical merits and reasonableness of the alternative approach that provides regulatory relief to both the state agency and the affected sources. North Carolina's practical approach achieves similar emissions reporting results as Part 75 by utilizing existing state rules and federal new source performance standards (NSPS) and new source review (NSR) program. EPA must provide a reasonable and cost-effective transition for air agencies and the affected non-EGUs.

**Background**

EPA issued the NOx SIP Call on October 27, 1998 (63 FR 57356). The NOx SIP Call was designed to assist areas in attaining the 1979 1-hour ozone National Ambient Air Quality Standards (NAAQS) by reducing the transport of ozone and precursor emissions from upwind states. The EPA developed a cap and trade system for NOx emissions referred to as the Federal NOx Budget Trading Program (NBP)[10]. The NOx SIP Call was subsequently replaced by the Clean Air Interstate Rule (CAIR) and the Cross-State Air Pollution Rule (CSAPR).

Although the non-EGU sources have no federal requirements to monitor or reduce emissions under the CSAPR, EPA has stated that the anti-backsliding provisions of 40 CFR 51.905(f) require that the provisions of the NOx SIP Call, including the statewide NOx emission budgets for non-EGUs, be maintained. Furthermore, the requirements of the NOx SIP Call continue to be permanent and enforceable, including all state regulations developed to implement the requirements of the NOx SIP Call. EPA is currently requiring large non-EGUs subject to the 1998 NOx SIP Call NBP to continue complying with the 40 CFR Part 75 monitoring, record keeping and reporting requirements. This is despite excluding these sources from EPA's most recent CSAPR rule. EPA reasoned that "as a group, these units did not actually reduce emissions for the NBP or CAIR."[11]

- NCDAQ finds EPA's requirements impractical and unnecessary for sources that the agency "believes [have] little or no emission reductions available at the cost thresholds used in the final rule and so no basis for developing non-EGUs state budgets reflecting the elimination of significant contribution to nonattainment and interference with maintenance."

EPA's requirement to put in place a new state-level compliance mechanism puts the regulatory burden on air agencies to continue a legacy program whose emissions reductions from non-EGUs have not been relied upon to attain and maintain the ozone standards. Part 75 monitoring requires the use of continuous emissions monitoring systems (CEMS) which are costly to install and operate. Several of

[10] Codified in 40 Code of Federal Regulations (CFR) Part 97
[11] Cross-State Air Pollution Rule Final Rule, 76 FR 48322-48323, February 1, 2016

North Carolina's affected non-EGU facilities have notified NCDAQ that their CEMS have reached the end of their useful life, and significant investment in capital is required to replace the existing equipment with new CEMS. Furthermore, many of the instrument parts are out of warranty and are no longer supported by the vendors. Removal of Part 75 requirements would bring economic relief in avoided capital investment, and recurring operating costs associated with replacing unsupported hardware.

For states interested in removing the Part 75 requirement for non-EGUs from their SIPs, EPA has provided unclear NOx SIP Call transition guidance through a Frequently Asked Questions document[12] and has commented that states must demonstrate that reductions from alternative programs are over and above those already required by the current federal trading program. EPA has stated that: (1) CSAPR does not preempt or replace the requirements of the NOx SIP Call, (2) NOx SIP Call budgets remain in place for non-EGUs, and (3) 40 CFR Part 75 monitoring, record keeping and reporting requirements must be retained. A demonstration showing the removal of NOx SIP Call requirements for non-EGUs must also show non-interference within the State and its downwind neighbors to attain and maintain federal air quality standards in accordance with Section 110(l) of the CAA.

- NCDAQ objects to EPA's policy making through FAQs/guidance and recommends undertaking formal rulemaking to warrant continuation of the requirements for the non-EGUs.
- NCDAQ recommends that EPA conduct formal rulemaking and remove non-EGUs from Part 75 requirements.

On July 20, 2016, North Carolina submitted a Section 110(l) SIP revision that showed that the NOx SIP Call requirements in the state have been achieved without any emission reductions from non-EGUs, and that their emissions will not interfere with the attainment and maintenance of the NAAQS in North Carolina and neighboring states. We concluded that Part 75 requirements for existing non-EGUs are unnecessary, not beneficial and not cost-effective. Furthermore, we proposed the implementation of an alternative emissions monitoring, reporting and recordkeeping approach which utilized existing applicable reporting requirements contained in the current operating permits. We committed to calculating ozone season NOx emissions to ensure that the total from the group remains below the NOx SIP Call budget.

- NCDAQ requests that EPA review and approve the SIP based on the technical merits and reasonableness of the alternative monitoring, reporting and recordkeeping mechanism outlined in the SIP revision. North Carolina's practical approach achieves similar emissions reporting results as Part 75 by utilizing existing state rules and federal reporting programs under the NSPS and NSR programs.

[12] Cross-State Air Pollution Rule (CSAPR) Frequently Asked Questions; NOx SIP Call Transition for Large non-EGUs; http://www3.epa.gov/crossstaterule/faqs.html, accessed July 20, 2016

## Comment 6 - Use of Proprietary Tools in Regulatory Development and Policy Actions

*RRTF Criteria (v) are inconsistent with the requirements of section 515 of the Treasury and General Government Appropriates Act, 2001 (44 U.S.C. 3516 note), or the guidance issued pursuant to that provision in particular those regulations that rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard of reproducibility.*

EPA routinely uses a highly complex proprietary model titled the "Integrated Planning Model"[13] to project future year electricity demand, generation, fuel use and air pollution emissions for the entire U.S. electric power sector. EPA uses IPM to develop air quality rules for the electricity sector including The Clean Power Plan, Cross-State Air Pollution Rule (CSAPR) and Mercury and Air Toxics Standards (MATS). States are not able to adequately understand, review and comment on the assumptions used in the model or the outcomes of the model including unit retirements, new units, re-powered units, retrofit of air pollution controls, and air emissions in the projection year. Furthermore, it is expensive to run IPM; consequently, states are subject to EPA's schedule and funding priorities which frequently do not align with state schedules for developing state rules and State Implementation Plans (SIPs).

NCDAQ requests that EPA either make IPM transparent and available as an open source model at a reasonable cost for state's use, or adopt the use of the "Eastern Regional Technical Advisory Committee (ERTAC) EGU Forecasting Tool"[14] which states developed to address the concerns they have with IPM. An open source tool like ERTAC would provide the following: 1) make EPA's regulatory development process more transparent, 2) ensure better input data and assumptions that can be tracked and understood by the states and other stakeholders per the Data Quality Act, 3) eliminate duplication of cost and effort by states to develop their own emissions projection tool, and 4) allow states to more easily use and /or modify EPA's emissions projection for this sector to develop state-level rules and State Implementation Plans (SIPs).

**Background**

EPA is required to develop a Regulatory Impact Analysis (RIA) for any proposed and final rules. This includes projecting future year costs, impacts and air emissions to estimate the overall benefit of the rule. States often rely on this analysis to develop state-level impacts of proposed federal rules. In addition, states use EPA air emissions projections and air quality models to develop SIPs.

For cost-benefit analysis of the electric power sector, EPA has relied on the IPM for many years. This highly complex, proprietary tool projects future year electricity demand, generation, fuel use, costs, and air pollution emissions under various constraints and policies. The IPM employs a multi-regional, dynamic, deterministic linear programming model of the entire U.S. electric power sector. It provides forecasts of least-cost capacity expansion, electricity dispatch, and emission control strategies while meeting energy demand and environmental, transmission, dispatch, and reliability constraints. It includes fossil fuel sources and non-emitting sources, such as nuclear and renewables, of all sizes that are selling electricity to the grid. Because of its complex and proprietary nature, it makes reviewing,

[13] Documentation on the Integrated Planning Model version 5.13, provided at EPA's web site. URL: https://www.epa.gov/airmarkets/power-sector-modeling-platform-v513 (EPA 2013).
[14] Software Design Manual: Computer Code to Estimate Future Activity and Air Emissions from Electric Generating Units (EGUs), Prepared by MACTEC Engineering and Consulting, Inc. for Mid-Atlantic Regional Air Management Association, Inc., April 21, 2011.

understanding and using the assumptions, constraints, and outcomes of the model difficult for state government personnel and other stakeholders.

Historically, EPA has developed many tools for projecting emissions for various sectors including, for example, the MOtor Vehicle Emission Simulator (MOVES)[15] for onroad and nonroad vehicles and equipment and the Nonpoint Oil and Gas Emission Estimation Tool. All of these tools can be downloaded and used by states to analyze EPA's rulemakings and develop future projections for state-level rules and SIPs. States and other stakeholders routinely utilize these tools. The IPM is the only proprietary emissions projection tool that is regularly used by EPA. Given the importance of the electric power sector to the U.S. economy and the number of recent rulemakings impacting this sector, EPA should be using an open source tool for the electric power sector as well.

In addition, the rapid shifting of the electricity sector from coal to other sources has made it difficult for IPM to model the electric power sector correctly. For example, in IPM version 5.14, the use of coal-fired power plants in the State of North Carolina for 2017 was over-predicted by almost 50% compared to Duke Energy projections. However, IPM version 5.16 under-predicted the use of coal in 2023 by 40% compared to Duke Energy projections. Part of the problem is due to EPA's inability to modify the model inputs and assumptions in response to state comments on changes in the electricity generating fleet. The complexity of the tool prevents responding to comments made during the rulemaking process. If EPA cannot modify the tool to include stakeholder comments during the rulemaking process, then EPA is not responding to state comments adequately.

Lastly, EPA has not yet confirmed that it will allow the use of the electric power sector projection tools such as ERTAC developed by the states and Regional Planning Organizations (RPOs) to develop SIPs. The states and RPOs have spent considerable time and money developing this tool over recent years and are currently working with EPA on allowing this model to be used to develop projection year emissions inventories to support air quality modeling for developing SIPs. However, states feel the hurdles EPA has imposed for using the ERTAC tool have been substantial. Given the issues states and RPOs have with relying on IPM for producing reliable forecasts of emissions from the electric power sector, NCDAQ requests that EPA allow as expeditiously as possible the use of ERTAC or other electricity sector open source projection tools for developing state rules and SIPs, and provide clear and reasonable guidelines and documentation for doing so.

[15] MOVES2014 and MOVES2014a Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity, EPA-420-B-15-093, November 2015.

## Comment 7 - Consolidation of Emissions Reporting Programs

*RRTF Criteria (iii) impose costs that exceed benefits; (iv) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies; and (v) regulations that rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard of reproducibility*

Emissions inventories are the fundamental building block for a wide variety of applications, including, but not limited to, State Implementation Plans (SIPs), air quality modeling studies supporting implementation of the National Ambien Air Quality Standards (NAAQS), compliance demonstrations, annual trends reports, emissions trading, and emissions fees programs. Regulatory agencies and industrial facilities rely on emission inventories on an ongoing basis as indicators of air quality changes. For the SIP program, emissions inventories are a fundamental building block in developing air quality control and maintenance strategies. Section 172, Part C, of the Clean Air Act (CAA), which addresses SIP requirements, states that ". . . plan provisions shall include a comprehensive, accurate, current inventory of actual emissions from all sources or the relevant pollutants or pollutants in such area . . ." For these reasons, State/Local/Tribal (SLT) agencies dedicate significant, on-going resources toward developing their emissions inventories using the most comprehensive and accurate methodologies, tools, and data available to provide the basis for sound policy decisions.

SLT agencies have relied on partnerships with EPA for developing guidance and tools for SLT agencies to use in developing inventories to fulfill CAA requirements. However, in recent years, NCDAQ has observed some concerning trends at EPA toward developing tools that most SLT agencies cannot use effectively, requiring industry and SLT agencies to report the same data to multiple emissions inventory systems, or has failed to update the tools with current data that EPA expects SLT agencies to use. Given that SLT agencies must rely on the use of these tools to fulfill reporting requirements to EPA as well as CAA requirements, NCDAQ requests that EPA renew its commitment to consolidating reporting requirements to eliminate the burden on reporting entities, re-engineer models so that SLT agencies can run the models and efficiently replace default data with SLT-specific data, and updating models with current input data following a routine schedule. The following provides three examples to illustrate these concerns. In the future, NCDAQ encourages EPA to invest the time and resources needed to involve SLT agencies with re-engineering models and database reporting systems and updating underlying data in models to ensure the accuracy and ease of use of the models and data systems.

**Background**

**Consolidation of Emission Reporting Programs – Combined Air Emissions Reporting (CAER) initiative**

EPA maintains four air emission data collection systems that contain common data elements which can be duplicative and burdensome to the reporting entities. These four systems are Emission Inventory System (EIS), Toxic Release Inventory (TRI), electronic Greenhouse Gas Reporting Tool (eGGRT), and Compliance and Emissions Data Reporting Interface (CEDRI). In December 2014, NCDAQ became involved with EPA and other states in the planning and scoping for the E-Enterprise project (named Combined Air Emissions Reporting (CAER)) to combine the four systems and eliminate duplicative reporting of data elements by the reporting entities. Even though this project has received limited funding, products have already been produced that will be used to build the foundation of the final product, a common emission reporting form. The NCDAQ recommends that EPA prioritize and

adequately fund the consolidation of the emissions data collection systems through the CAER initiative. The CAER initiative supports Executive Order 13777 through its goals of:

1. Reducing industry burden for point source reporting;
2. Improved timeliness and transparency of data;
3. Creating consistent data and information across EPA air programs;
4. Improving data quality;
5. Improving accessibility and usability of data; and
6. Data availability for more timely rule and program decision making.

Adverse effects of reporting to multiple EPA programs by EPA; state, local, and tribal (SLT) agencies; and the regulatory community include the following:

1. Increased cost to EPA and SLTs to maintain software programs for reporting on differing timelines, reconciling data elements, reporting levels and differing reporting formats.
2. Increased burden to reporting community due to managing schedules, submitting the same data elements and values to multiple reporting systems, and reporting these data in differing formats.
3. Issues with EPA regulations that contain identical/similar data elements that have different definitions for data elements, differing data collection periods and scale of data collection varies (facility-wide versus process level). The Air Emissions Reporting Requirements (AERR), Mandatory Greenhouse Gas Reporting Rule and Emergency Planning and Community Right-to-Know Act (EPCRA) may need to be modified to address these conflicts.
4. In addition, the electronic reporting systems created to implement emission reporting for these regulations have the following issues:
   a. Each reporting system assigns new unique identifiers rather than using existing identifiers.
   b. Code table contained within each of these reporting systems can be different versions of these code tables (e.g., North American Industrial Classification System codes, source classification codes). These systems should access one universal code table.
5. When the Mandatory Greenhouse Gas Reporting Rule was proposed in April 10, 2009, commenters noted that facility reporting of GHG emissions to this program is duplicative of SLT and voluntary programs and requested that EPA use existing emission inventory reporting programs. EPA chose to instead, move forward with this regulation and adding an additional emissions data collection system. These comments and EPA's responses can be found in the Federal Register Volume 74, number 209, published October 30, 2009 on pages 56284 and 56358.

**MOtor Vehicle Emission Simulator (MOVES) Model**

The MOVES model, while more scientifically rigorous than its predecessor models, requires significantly more time and resources for SLT agencies to develop localized input data to replace less accurate default data prepared by EPA. The MOVES model also requires significantly more time and resources for SLT agencies to execute the model. Because of this, many SLT agencies did not submit onroad mobile source emissions inventories for the 2014 National Emissions Inventory (NEI), opting instead to allow EPA to create SLT agency inventories using default input data. This created a greater burden on EPA and resulted in compromising the accuracy of SLT emissions inventories incorporating into the NEI. This is a critical issue, particularly in urban areas, where mobile sources can account for a significant portion of total emissions.

The latest version of the MOVES model requires new types of input data that are not commonly available to SLT agencies. An example of this is the input data the MOVES model requires to calculate

the emissions from trucks idling at rest areas, known as "hoteling" emissions. The MOVES model also requires input data in specific formats, often as the distribution of values by one or more parameters (e.g., time/date, vehicle type and speed). For example, the hourly vehicle miles traveled (VMT) distribution input file comprises fractions of VMT broken down by vehicle type, road type, day (weekday/weekend), and hour. MOVES users from SLT agencies often do not have access to the data required to develop input files with this level of detail. They instead must rely on default MOVES model data and distributions, which may not be appropriate for their modeling domains.

While the EPA has provided some assistance to SLT agencies with MOVES model updates and new data made available on an ad hoc basis, more needs to be done to empower more SLT agencies to use the model and improve the quality of onroad mobile source emissions estimates. The EPA should:

1. Provide detailed plans and schedules for MOVES model maintenance and update releases, allowing for review and input by SLT agencies.
2. Work more closely with other government agencies and industry partners to identify sources of readily available data for MOVES model improvement and input development. For example, work with the Federal Highway Administration (FHWA) on VMT data and the Federal Motor Carrier Safety Administration (FMCSA) for hoteling data.
3. Improve guidance for MOVES input data development, including identification of preferred data sources and best practices for input data development.
4. Provide new input data development tools to SLT agencies that implement best practices, and regularly update the tools with the latest default data.

Finally, NCDAQ understands that the MOVES Review Work Group is charged to provide input to EPA via the Mobile Sources Technical Review Subcommittee and the Clean Air Act Advisory Committee on specific issues regarding the development of the MOVES model. NCDAQ highly recommends that this group find a way to re-engineer MOVES to enable SLT agencies to not only run the model in-house for both emissions inventory and air quality modeling purposes, but also to minimize the burden on SLT agencies associated with replacing EPA default data with state and local data needed to improve the accuracy of the emissions inventories calculated by the model.

**Stationary Nonpoint and Mobile Nonroad Emissions Inventories**

For the stationary nonpoint and mobile nonroad source categories, emissions estimates are generally estimated using models that incorporate numerous assumptions and default data developed by EAP. The NCDAQ requests that EPA make efforts to perform the following tasks:

1. Validate model results with actual data; and
2. More frequently update the models to reflect updated data.

Given the large number of source categories/models used for the various source categories, NCDAQ understands that time and resource constraints limit EPA's ability to perform these tasks for all stationary nonpoint and nonroad mobile source models/source categories. Therefore, NCDAQ requests that EPA prioritize this effort for the models/source categories that account for the largest emissions. A key example that EPA should prioritize is the nonroad mobile source portion of their MOVES model. For most nonroad equipment types, this model's estimates of emissions activity and equipment populations reflect national estimates from the early 1990s. Because of this concern, NCDAQ has provided EPA with updates to model inputs for select diesel equipment types that reflect recent data for North Carolina.

EPA should perform these types of nonroad and stationary area source emissions model input updates on a regular basis to ensure that policy decisions are based on currently valid inputs.

## Comment 8 - Emissions and Air Quality Modeling

*RRTF Criterion (iii) impose costs that exceed benefits; (iv) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies; and (v) regulations that rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard of reproducibility*

EPA relies on the development and use of emissions and air quality modeling studies to understand the relative contributions of emissions sources to potential violations of the NAAQS and contributions to regional haze pollution. State and local air agencies look to EPA for guidance to ensure that they are providing EPA with the highest quality data supported with documentation to ensure transparency and reproducibility. Recently, on some studies, North Carolina has requested information from EPA to clarify how EPA developed emissions inventories and ran air quality models but EPA has failed to provide the information in sufficient detail that would provide transparency to their methods and results. EPA's lack of responsiveness to air agency questions and concerns raises questions about the reasonableness and accuracy of the modeling studies and EPA's intentions. NCDAQ requests that in the future, EPA be very diligent in addressing comments that air agencies submit to EPA in response to these modeling analyses since air agencies must ultimately comply with any Federal regulation that may result from the analyses. The following examples illustrate this concern.

**Cross-State Air Pollution Rule (CSAPR) Update for the 2008 ozone NAAQS**

EPA was not forthcoming with modeling details for modeling for the Cross-State Air Pollution Rule (CSAPR) Update for the 2008 ozone NAAQS. This is a clear lack of transparency and makes it difficult or impossible for states to replicate the EPA modeling. In the initial modeling for the CSAPR Update, EPA made changes to the code for the CAMx photochemical model. The EPA failed to document the changes in the code in their technical support document,[16] and the altered code was not included in the initial release of model data. Modeling performed by Alpine Geophysics shows peak differences in ozone of up to 2.8 ppb. These differences call into question the predicted nonattainment/maintenance status and contributions derived from the EPA modeling. The NCDAQ requests that EPA be transparent with the changes it makes to default settings in CAMx to enable users to peer review the impacts associated with changing default settings in CAMx. The NCDAQ asks that the EPA ensure that any changes it may decide to make to default CAMx settings not compromise the accuracy of model results, especially those that the EPA uses to support policy decisions.

[16] Air Quality Modeling Technical Support Document for the 2008 Ozone NAAQS Cross - State Air Pollution Rule Proposal, November 2015. http://www.epa.gov/sites/production/files/2015-11/documents/air_quality_modeling_tsd_proposed_rule.pdf

For the CSAPR Update, the EPA should have conducted photochemical grid and source apportionment modeling of all control cases, to understand the true impacts associated with reducing emissions from the affected Electric Generating Units (EGUs) in each state. For the proposed rule, the EPA did not conduct source apportionment modeling for any of the control cases so it was impossible to understand the potential effects of each control case on reducing contributions to monitors on a state-by-state basis. This lack of transparency could lead to possible over-control for some states like North Carolina. For example, under the proposed "Illustrative Control Case," the EPA modeled emissions by applying the $1,300/ton control case to the IPM v5.14 (that did not include the effects of the Clean Power Plan) base case. Then, the EPA entered the base-case and control-case emissions and modeled ozone concentrations into its Air Quality Analysis Tool. It is unclear how the EPA applied adjustments in the tool to account for additional emissions reductions associated with the IPM v5.15 base case and control cases modeled incremental to the IPM v5.15 control case. In addition, it is unclear how the tool simulates the non-liner relationships between changes in emissions and observed ozone concentrations at monitors. The EPA needs to take the time to perform photochemical grid and source apportionment modeling for the proposed IPM v5.15 base case and of the all control cases and provide these results to the public for review and comment before finalizing the rule.

EPA also failed to be transparent in releasing simple details about the modeling for the final rule. In October 2016, the NCDAQ contacted EPA asking trivial details about the final modeling, such as the version of the model to be used for the final rulemaking. EPA refused to release any information until the final rule was issued. This is a clear lack of transparency and hindered NCDAQ's ability to work in parallel with EPA to further analyze ozone transport. Any rulemaking should be a fully transparent and collaborative process, and in this instance EPA clearly failed to satisfy this requirement.

**Air Emissions Reporting Requirements (AERR) Rule**

The AERR requires State and local air agencies to report to EPA annual emissions for major stationary sources every year and for all other sources every third year. The following documents transparency issues associated with EPA changing data that the NCDAQ submitted to EPA.

- Wildland Fire Emissions: For the 2014 National Emissions Inventory (NEI), the NCDAQ expended substantial resources in compiling and completing quality assurance reviews of wildfire and prescribed fire activity data (i.e., date and time of fire, type of fuel burned, location coordinates, and acres burned). The NCDAQ submitted these data to EPA who processed the data through its SmartFire2-BlueSky (SF2-BS) modeling framework to augment the data and calculate emissions. EPA provided data files of the final modeling results to the NCDAQ and draft documentation of the how the SF2-BS framework was used to develop North Carolina's inventory. Unfortunately, the data files and documentation supplied by EPA made it impossible to understand how EPA augmented some of North Carolina's data. Consequently, the NCDAQ held multiple phone calls with EPA and its contractor to understand why the total wildfire acreage for North Carolina increased by over 800 acres when EPA stated that they used only the data that the NCDAQ submitted to EPA. The NCDAQ

requested that our data not be augmented in this way because the Regional Haze and Exceptional Events Rules treat wildfires as natural and prescribed fires at anthropogenic sources. Unfortunately, it is too late for EPA to correct this error for North Carolina's 2014 wildland fire inventory. This illustrates the lack of documentation and transparency with how EPA handled North Carolina data that potentially could have significant regulatory implications. In addition, EPA is currently preparing a new 2016 base year inventory that will be used for the next generation modeling platform to support developing regional haze plans.

- MOtor Vehicle Emission Simulator (MOVES) Model – Inventory Development Using SMOKE-MOVES: EPA has integrated the MOVES model with the Sparse Matrix Operator Kernel Emissions (SMOKE) Modeling System to provide a tool for creating onroad mobile source emission inventory data for input to photochemical air quality models. The SMOKE-MOVES system is also used to generate the onroad mobile source emission inventory data for the triennial NEI. However, the SMOKE-MOVES system is so complicated and computationally intensive that few if any state or local air agencies have the computing resources or experienced staff to run the models in-house to reproduce and validate EPA's inventory data. The EPA needs to:
  - Redesign the SMOKE-MOVES system to reduce the computing resources needed and simplify the skillset needed to run the model; and
  - Provide better guidance and documentation and develop training materials and courses for SMOKE-MOVES system users.

NCDAQ understands that the MOVES Review Work Group is charged to provide input to EPA via the Mobile Sources Technical Review Subcommittee and the Clean Air Act Advisory Committee on specific issues regarding the development of the MOVES model. NCDAQ highly recommends that this group find a way to re-engineer MOVES to enable SLT agencies to not only run the model in-house for air quality modeling purposes as well as emissions inventory development, but also to minimize the burden on SLT agencies associated with replacing EPA default data with state and local data needed to improve the accuracy of the emissions inventories calculated by the model.

**Last Minute Change to AERMOD / Appendix W Imposes Significant Costs on Public and Private Sectors**

EPA has a history of changing modeling guidance at the last minute, and still requiring states to meet existing deadlines. A prime example is the impact that EPA's last-minute change to AERMOD had on NCDAQ's compliance strategy for the 2010 1-hour sulfur dioxide ($SO_2$) standard as part of Round 3 of the $SO_2$ Data Requirements Rule (DRR). For large $SO_2$ sources, states were required to either 1) submit a modeling demonstration showing compliance with the 1-hour $SO_2$ standard, or 2) establish a monitoring site for three years for determining compliance with the standard. The modeling demonstration was due on December 31, 2016, or alternatively, monitoring was to begin January 1, 2017.

NCDAQ submitted a modeling protocol to EPA based on EPA guidance during the summer of 2016[17], which was subsequently approved by EPA. A modeling demonstration using version 16216 of AERMOD showing compliance was done based on this guidance. After the release of version 16216 of AERMOD, some issues were discovered with the model including how the model was utilizing the ADJ_U* option. This resulted in the release of a revised version called 16216r after the original December 20, 2016 of AERMOD version 16216 and Appendix W. The release of the revised version and how the ADJ_U* option was handled within the model forced NCDAQ to re-model the Duke Asheville facility at the last minute. This new modeling did not show compliance with the standard; consequently, NCDAQ worked with Duke Energy over the holidays to establish a monitoring site and monitor which was placed into operation and data collection started on January 5, 2017.[18]

EPA should have extended the deadline for the modeling demonstration and the deadline for establishing the monitoring. Keeping the original deadlines after updating the modeling options was unreasonable and unnecessarily burdensome. Furthermore, the monitor has recorded 1-hour $SO_2$ concentrations well below the standard. Thus, this last-minute change in AERMOD and Appendix W not only caused a significant disruption in NCDAQ's and Duke Energy's schedules during the holiday season, it demonstrates that the revised model over-predicted 1-hour $SO_2$ concentrations for the facility resulting in unnecessary costs associated with operating and maintaining a monitor to the tune of approximately $25,000 to $30,000 per year (excluding the capital cost of the monitoring system).

[17] https://www.epa.gov/sites/production/files/2016-07/documents/north_carolina_source_characterization.pdf
[18] https://www.epa.gov/sites/production/files/2017-02/documents/december_28_2016_holman_to_mcteer_toney_re_so2_characterization_duke_energy_asheville.pdf

## Comment 9 - Timely Issuance of Guidance Documents

*RRTF Criteria (ii) are outdated, unnecessary, or ineffective; and (iii) impose costs that exceed benefits*

In the past, EPA has issued guidance to state and local agencies for developing State Implementation Plans (SIP) to implement a new or revised National Ambient Air Quality Standard (NAAQS). At times the guidance issued by EPA has either been confusing or issued after the SIP submittal deadline thus making the guidance outdated or ineffective, placing the air agencies at significant risk. The uncertainty created by the guidance or lack of guidance imposes an unnecessary cost on air agency resources to determine how to manage the risk associated with either EPA disapproving the SIP or exposure to potential litigation. In a March 30, 2011 resolution approved by the Environmental Council of States (ECOS), it was stated that EPA should minimize the use of interim guidance, interim rules, draft policy and reinterpretation policy and eliminate the practice of directing its regional or national program managers to require compliance by states with the same in the implementation of delegated programs.[19]

Going forward, NCDAQ requests that EPA issue critical guidance for implementing regulations with sufficient lead time for air agencies to apply the guidance while developing SIPs. EPA should refrain from issuing guidance wherever possible and conduct formal rulemaking to allow public opportunity to review and comment on EPA's proposal. The following provides examples to illustrate these points of concern.

**Background**

- EPA issued "Guidance on Infrastructure State Implementation Plan (SIP) Elements Required Under Section 110(a)(1) and 110(a)(2)" on September 13, 2013, for states to use in developing infrastructure SIPs for the 2008 ozone NAAQS, the 2010 nitrogen dioxide NAAQS, the 2010 sulfur dioxide NAAQS, and the 2012 fine particulate matter ($PM_{2.5}$) NAAQS, as well as infrastructure SIPs for new or revised NAAQS promulgated in the future. Although this guidance was helpful in many ways, the introduction to the guidance clearly states that the guidance is non-binding and provides recommendations for air agencies. However, NCDAQ has been advised by our EPA regional office to treat the guidance as necessary requirements because certain parties have applied such guidance to claim deficiencies in state submittals. If this is indeed true, it leaves air agencies in an unpredictable situation on whether or not to accept the guidance as a form of absolute requirements even though

[19] Environmental Council of States, Resolution 11-1: Objection to U.S. EPA Imposition of Interim Guidance, Interim Rules, Draft Policy, and Reinterpretation Policy, April 8, 2017, https://www.ecos.org/documents/resolution-11-1-objection-to-u-s-epa-imposition-of-interim-guidance-interim-rules-draft-policy-and-reinterpretation-policy/ (accessed April 28, 2017)

it is not meant to be. EPA should not use or allow the use of such guidance as a substitution for a regulation or law. If a need arises, EPA should propose a regulation to address conflicting interpretations.

- The September 13, 2013 guidance did not address Clean Air Act (CAA) section 110(a)(2)(D)(i)(I), which concerns interstate pollution transport affecting attainment and maintenance of the NAAQS. EPA noted in this guidance that it expects to issue guidance in the future with respect to section 110(a)(2)(D)(i)(I). EPA revised the annual $PM_{2.5}$ NAAQS on December 14, 2012; therefore, the $PM_{2.5}$ infrastructure SIP for this revised standard was due December 14, 2015. EPA issued the guidance for addressing the CAA Section 110(a)(2)(D)(i)(I) element for $PM_{2.5}$ on March 17, 2016; three months after the states' deadline for submitting their infrastructure SIPs. As of April 2017, EPA has failed to act on the interstate transport element of North Carolina's infrastructure SIP for the revised $PM_{2.5}$ NAAQS. EPA's delay in issuing timely guidance for states to use in preparing the infrastructure SIPs for the revised $PM_{2.5}$ standard placed states in a difficult position because EPA could then disapprove a state's infrastructure SIP because it did not follow EPA's guidance.

- EPA finalized the Air Emissions Reporting Requirement (AERR) rule on December 17, 2008, which was two years later than EPA anticipated (73 FR 76539). This rule required states, local programs and tribes (SLT) to report emissions data in a new electronic format. The Emission Inventory System (EIS) Implementation Plan containing the information necessary for SLTs to modify their data collection and reporting systems (required data elements, formatting, etc.) was published on December 9, 2008. Although EPA committed to providing SLTs with sufficient lead time (two years) to modify their data collection rules and data systems as necessary to meet the new reporting requirements, it cut the time to one year (73 FR 76549). Although EPA provided some relief for demonstrating compliance with the schedule specified in the final rule, the compressed timeline resulting from EPA's failure to follow its own timeline imposed a significant burden on many SLTs for updating and quality assuring their data collection and reporting systems.

## Comment 10 - Regional Haze Rule and Guidance

*RRTF Criteria (ii) are outdated, unnecessary, or ineffective; (iii) impose costs that exceed benefits; and (iv) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies*

The NCDAQ requests that EPA revise the regional haze rule and guidance to provide states with significant regulatory relief by:

1. Removing the requirement that states conduct an expensive four-factor analysis and update their long-term strategy for Class I Federal Areas for which monitoring data already shows the areas to be at or below the uniform rate of progress (URP) in 2028. Instead, require states to demonstrate that the emissions for 2028 will remain below the current base year like a maintenance area demonstration for the National Ambient Air Quality Standards (NAAQS).
2. Replacing the screening threshold recommendation in the guidance that identifies emissions sources to which a full four-factor analysis is to be applied. EPA should initiate a rulemaking to establish a screening methodology that gives states the flexibility to decide on the appropriate screening for each Class I Federal Area and where appropriate, establish a lower threshold using IMPROVE monitoring data for areas that are at or below the URP in 2028.
3. Removing the Reasonably Attributable Visibility Impairment (RAVI) requirements which are unnecessary and outdated.

Like many states in the Eastern U.S., North Carolina has achieved significant progress toward reducing visibility impairment in each of its five Class I Federal Areas due to successful implementation of federal, state and local air quality programs over the past 20 years. The extensive technical work that North Carolina and other southeastern states completed to support the first round of regional haze SIPs led to the development of an initial long-term strategy and progress goals that has put North Carolina ahead of the 2018 visibility improvement goals established for each of the five Class I Federal Areas, and well below the URP targets for 2018. In addition, the four Class I Federal Areas in western North Carolina are below the URP target for 2028, and the Shining Rock Wilderness Area is showing visibility impairment to be below the URP for 2038. None of the Class I Federal Areas are showing degradation for the 20 percent least impaired days.

**Background**

On August 9, 2016, NCDAQ submitted comments on EPA's proposed revisions to the regional haze rule (81 FR 26942, May 4, 2016). On August 22, 2016, NCDAQ also submitted comments on EPA's "Draft Guidance on Progress Tracking Metrics, Long-Term Strategies, Reasonable Progress Goals and Other Requirements for Regional Haze State Implementation Plans for the Second Implementation

Period." In our comments we noted that because of the extensive amount of time and resources (3-4 full time equivalent staff over 4 years) it will take to revise our already successful long-term strategy, that EPA seriously consider providing in the rule less burdensome alternatives for meeting state plan requirements for Class I Federal Areas where the Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring network is currently recording impairment values that are below the progress goals for 2018 and below the URP for 2028.

For example, it is reasonable to assume that if the 2028 forecast year emissions inventory results in emissions that are lower than 2014, then visibility conditions should continue to improve through 2028. This demonstration would eliminate the need to conduct a time consuming and expensive four-factor (costs of compliance, time necessary for compliance, energy and non-air quality environmental impacts and remaining useful life) analysis that, under EPA's rule and guidance, may result in an over control of emissions for sources under the regional haze program (a welfare-based program) where those same sources have demonstrated an adequate level of control for all of the health-based NAAQS. The NCDAQ also believes that such broad application of a control strategy assessment has been decided by the courts in several cases as being excessive and unnecessary. The SIP should take a form similar to maintenance plans for areas that have been redesignated from nonattainment to attainment for a NAAQS where a state would show that emissions responsible for visibility impairment will be lower in 2028 compared to current conditions.

NCDAQ noted in its comments on the draft guidance that it agrees that a screening methodology is appropriate for identifying emissions sources to which a full four-factor analysis should be applied. NCDAQ is pleased that EPA has included in the draft guidance an alternative for states to consider visibility impacts both during the screening step and when considering the four statutory factors. However, in the draft guidance, EPA indicates that states should consider sources representing 80 percent of the "anthropogenic extinction budget" when addressing the visibility impact of sources within their state. All of the sources are then to be brought forward for a full four factor analysis to determine whether additional controls should be required. For the Class I Federal Areas located in North Carolina and many other Class I Federal Areas throughout the southeast, the number of sources that would be subject to screening to meet the 80 percent threshold would be excessive. This approach could also result in the imposition of controls even when the controls are not needed to demonstrate compliance with a state's URP. NCDAQ is concerned that the 80 percent threshold will be treated by EPA and possibly other interest groups as a bright line that should not be crossed. Rather than recommending a specific screening threshold that would be subject to interpretation, NCDAQ recommends that EPA address the screening process through a formal rulemaking. NCDAQ requests that EPA address the following points in the rulemaking:

1. Give states the flexibility to decide on the appropriate screening threshold for each Class I Federal Area in consultation with the EPA Regional Office, Federal Land Manager (FLM), and stakeholders and be allowed to establish a lower threshold for Class I Federal Areas with IMPROVE monitoring data showing that the areas are at or below the URP in 2028.

2. Apply the threshold to all sources (both in-state and out-of-state) screened for a given Class I Federal Area rather than applied on a state-by-state basis to focus resources on the sources with the highest contribution to visibility impairment.
3. Because the tracking metric for evaluating progress is a 5-year average of the 20 percent most impaired days, exclude a source from a full four-factor analysis when it accounts for the largest impact on a single day during the 5-year average.

In addition, NCDAQ requested that EPA reconsider the need to include the RAVI requirements in the rule. The current regional haze program coupled with a state's New Source Review and Prevention of Significant Deterioration programs have and will continue to identify and address potential concerns with any single or small group of sources potentially contributing to visibility impairment in any Class I Federal Area. The RAVI requirements are outdated and unnecessary because they duplicate the existing regional haze program and other regulatory requirements. Demonstrating compliance with the regional haze rule should be more than sufficient to fulfill the RAVI requirements.

It should be noted that many other states submitted similar comments on these two provisions of the regional haze rule. However, the EPA did not change the final regional haze rule (82 FR 3078, January 10, 2017) to incorporate these comments.

## Comment 11 - Selectively Following EPA Guidance and Not Addressing States' Formal Comments

*RRTF Criteria (iii) impose costs that exceed benefits; (iv) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies; and (v) regulations that rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard of reproducibility*

EPA issues guidance, typically after seeking input from state air agencies and other stakeholders, to ensure consistency across air agencies regarding the interpretation and application of methods, data sources, and models to support the development of state implementation plans (SIPs) and regulatory decision making. This guidance has been very helpful to state air agencies who follow the guidance to ensure that they prepare defensible analyses and fulfill all requirements that EPA needs to approve SIP submissions. Conversely, the air agencies expect EPA to follow the same guidance that air agencies are expected to follow. Related to the Cross-State Air Pollution Rule (CSAPR) Update for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS), the NCDAQ found that EPA did not follow its own guidance regarding the use of gridded photochemical air quality models for determining when an upwind state has a significant contribution to a downwind state's ozone problems. Failure to follow its own guidance led to inaccurate results and, for North Carolina, nearly imposed a significant cost and regulatory burden to control nitrogen oxide (NOx) emissions when it was totally unnecessary. The NCDAQ, as well as other states and stakeholders, had submitted comments to EPA and participated in meetings to communicate this and other model performance issues to EPA. We are now faced with preparing a new interstate transport study for the 2015 8-hour ozone NAAQS. For this new study, NCDAQ strongly recommends that EPA take these issues seriously, engage with the states and other stakeholders to address their comments on the issues, and follow their own guidance.

**Background**

At times EPA has not followed its own guidance. For example, Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze[20] contains a provision that poor performing model data may be excluded from an air quality analysis. This guidance states:

> *As part of the weight of evidence demonstration, if there is compelling evidence to determine that a particular day, while being among the 10 highest MD A8 values at a location, is not representative of the expected source-receptor relationship at that location; then that day can be considered for removal from the RRF calculation. Air agencies should document the evidence that argues for the exclusion of any other wise-eligible days. As noted earlier, poor model performance on individual days can lead to ratios of future to base ozone that may be biased on those days. For example, underprediction of ozone concentrations may lead to ratios that are unresponsive to emissions controls. Air agencies may want to examine the day- and site-specific model performance for days that are p art of the RRF calculation. Where feasible, it is recommended that days with model biases greater than +/- 20 percent be examined to make sure that they can be appropriately used in calculating the expected response.*

[20] EPA, 2014: Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze. Available from: http://www3.epa.gov/scram001/guidance/guide/Draft-O3-PM-RH-Modeling_Guidance-2014.pdf.

In EPA's proposal for the CSAPR Update for the 2008 8-hour ozone NAAQS, North Carolina was linked as a contributor to ozone at the Essex monitor near Baltimore, Maryland. NCDAQ made a strong argument that North Carolina should not be linked to the Essex monitor based on poor model performance. On one day (August 19, 2011) the model predicted that ozone would be above 76 parts per billion (ppb) and that North Carolina contributed over 7 ppb to the modeled concentration. However, the Essex monitor recorded an 8-hour ozone concentration of 56 ppb on that day and the air quality model had nearly a 50% high bias on that day, which is well above acceptable model performance thresholds specified in the guidance. If this poor performing model day is removed from the analysis, North Carolina would no longer have significant contributions to the Essex monitor and would not have been included as a linked state in the proposed rule. Additionally, the future predicted ozone design value at the Essex monitor was biased high throughout the entire 2011 summer modeling episode by data from model grid cells located over the Chesapeake Bay. As it turned out, North Carolina was not included in the final CSAPR Update because the predicted 2017 ozone design value in the final version of the modeling at the Essex monitor was below the NAAQS, not because of model performance considerations but because of additional nitrogen oxide control measures in Pennsylvania that were not included in the modeling for the proposed rule.

It is important to note that NCDAQ submitted formal comments to EPA throughout the CSAPR Update rulemaking process; however, most of the model performance issues documented in these comments were ignored by EPA in the final rulemaking.

Title: Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS
Comment Submittal Date: February 1, 2016
EPA Docket: Docket No. EPA–HQ–OAR–2015–0500

Title: Notice of Availability of the Environmental Protection Agency's Updated Ozone Transport Modeling Data for the 2008 Ozone National Ambient Air Quality Standard (NAAQS)
Comment Submittal Date: October 23, 2015
EPA Docket: Docket No. EPA–HQ–OAR–2015–0500

In addition, NCDAQ expressed its concerns with these model performance issues in its final Section 110(a)(2)(D)(i)(I) "Good Neighbor" state implementation plan (SIP) submitted to EPA on December 9, 2015 (note that EPA has yet to act on this SIP submission as of April 30, 2017).[21] Subsequently, NCDAQ participated in an "ad hoc" meeting that EPA held on October 25, 2016, at the Community Modeling and Analysis System (CMAS) Conference to discuss model performance and evaluation issues. NCDAQ appreciated the opportunity to participate in this meeting to share its concerns and to learn about other issues raised by other participants. The EPA provided a summary of the issues during a January 5, 2017 call of the Federal State Technical Work Collaboration Group, noting that "…(1) we did not discuss the extent to which we agree or disagree on the importance or relevance of any particular issue and (2) the photochemical modeling guidance already addresses some, but not all of these issues. We may agree on appropriate changes that are needed to the guidance in some cases, but in other cases the guidance may already be adequate." NCDAQ is not aware of any follow-up discussions between EPA and state air agencies since the January 5, 2017 call. NCDAQ strongly encourages EPA to address the model performance issues identified and continue the dialogue with the states and other stakeholders to resolve the issues.

[21] Revision to North Carolina's Clean Air Act Section 110(a)(2)(D)(i)(I) "Good Neighbor" State Implementation Plan for the 2008 Ozone Standard, December 9, 2015, located at: https://deq.nc.gov/about/divisions/air-quality/air-quality-planning/state-implementation-plans/110i-infrastructure-certifications/2008-8-hour-ozone-110a-infrastructure-certification.

## Comment 12 - Changes to Electronic Reporting under CEDRI/CDX

EPA should limit electronic reporting requirements to Title V sources only. EPA should also suspend the use of the Electronic Reporting Tools (ERT) until the web-based version is available.

**Background**

There are two areas for improvement for CEDRI/CDX. The first deals with the general electronic reporting requirements. The second deals with reporting test results (and some CEM testing) through the Electronic Reporting Tool (ERT). Certain subparts under 40 CFR 60 and 63 already contain electronic reporting requirements and other subparts that have been recently promulgated are under review.

Electronic Reporting

EPA currently requires or plans to require many of the notifications and other annual, semi-annual or quarterly reports, as well as excess emissions reports and other reports, to be submitted electronically though CEDRI/CDX in a prescribed, uniform format.

Some states already allow electronic recordkeeping with provisions that those electronic records be accessible to inspectors. However, the records being kept may not match (well) the records and reports that EPA wants reported through CEDRI/CDX. Although EPA has produced xml schema for various reports that they require or anticipate being required under the rules, they have done a poor job of providing an easily used clearinghouse to inform states and facilities of what is available and how to find it.

We would recommend that these reporting requirements apply only to facilities subject to Title V facilities. As major sources, these facilities have the largest emissions of concern and are more likely to have the environmental management support staff to address these reporting requirements. Facilities that retain permits as less than “major,” are registered sources, or are permit exempt are less likely to have or may not have any environmental support staff to address all the issues associated with establishing CDX accounts, learning how to navigate the CEDRI requirements or determine how to address the reporting requirements of the online forms.

Electronic Reporting Tool (ERT)

NC recognizes EPA’s obligation to develop and periodically review emission factors under Section 130 of the Clean Air Act. We also recognize that the ERT (and the subsequent data availability on WebFIRE) is designed to assist in the development of emission factors. However, as an information gathering tool for emission factors, it is not particularly user friendly as it relies upon legacy software (Microsoft ACCESS) from its initial development. Although designed to automatically find or prevent common mistakes, it contains far more information than NCDAQ requires to determine compliance with emission limits. First time utilization of the ERT requires substantial data input that is better suited to emission factor development than compliance determinations.

Again, for Title V sources that have recurring periodic testing requirements the initial source characterization requirements are a substantial investment in time even if they only must be completed

once and the test data merely substituted into the appropriate location in the file. For small sources and permit exempt sources, the effort to complete the ERT data so one can insert and submit the test data, which NCDAQ is looking for, is substantial. We would recommend that EPA suspend the use of ERT until the web-based version is available.

## Comment 13 - Eliminate Requirements beyond Engine Certification for Area Sources

EPA should rely on engine manufacturer certification for GACT ZZZZ and NSPS for area sources.

**Background**

Under NSPS IIII and JJJJ and GACT ZZZZ, engines are subject to various requirements in addition to the manufacturers' engine certification. These requirements include record-keeping and period tune-up provisions. Inspection experience at area sources has informed State officials that these requirements are beyond the ability of many of the owners of these engines. Additionally, the sheer number of these engines have put a strain on state resources.

The original rulemaking does not indicate that EPA performed a separate cost benefit analysis for this sector of engine users. EPA should revisit the cost analysis for this sector, and, if warranted, should sub-categorize these engines making engine certification the only emission standard.

## Comment 14 - Startup, Shutdown, and Malfunction Rule Should be Reconsidered

EPA should withdraw its SIP call for 36 States published on June 12, 2015. EPA failed to provide the required finding of substantial inadequacy under the Clean Air Act.

**Background**

Where health-based standards under the Clean Air Act are concerned, the Act is predicated on a cooperative federalism where the Federal Government develops health-based standards and the States develop a plan to achieve those standards. The State Implementation Plan (SIP) are a collection of rules that are demonstrated, to the satisfaction of EPA, to achieve compliance with the National Ambient Air Quality Standards (NAAQS). More than thirty years ago EPA approved regulations covering emissions during startup, shutdown, and malfunctions (SSM) for 36 states as parts of these states' SIPs.

The Act does provide EPA a mechanism to require a state to amend a previously approved SIP rule under §110(k)(5) when EPA "finds that the applicable implementation plan for any area is substantially inadequate to attain or maintain the relevant [NAAQS]." On June 12, 2015, EPA published their decision to force the 36 States (for provisions applicable in 45 statewide and local jurisdictions) to amend their SIPs because of how those SIPs treated periods of startup, shutdown, and malfunction (SSM). The SIP Calls do not purport to improve air quality. EPA made no findings at all about the air-quality effects of the States' SSM regulations in general, much less State-specific findings about the specific provisions that EPA has identified as substantially inadequate. Instead, EPA asserted that certain CAA requirements are "fundamental," such that any SIP provision that failed to satisfy them was substantially inadequate. In the absence of any factual finding of substantial inadequacy, however, EPA's decision is inconsistent with the Act.

## Comment 15 - Title V Review Process – Jurisdictional Limitations

EPA should promulgate rules implementing the requirements under §505 of the Act. Specifically, that EPA will respond within 45 days of receipt of a proposed permit from the State and that EPA will, in writing, either object to the permit as being not in compliance with the Clean Air Act requirements or EPA will approve the permit as a function of law[22]. If EPA objects, EPA shall provide a statement of the reasons for the objection.

**Background**

The submittal of proposed Title V permits to EPA for review after public comments have been made provides EPA the opportunity for oversight of the State permit program. Bearing in mind that Congress intended this oversight to be used judiciously, [23] EPA has the duty to object to any proposed permit if it finds the permit is not in compliance with the applicable requirements of the Act.[24] In recent years, however, EPA has simply responded to the State authority that it has failed to adequately address a citizen comment. In other cases, EPA does not respond at all in the statutorily prescribed 45-day period. Responses to a review of a proposed permit that deviates from the Act leads to uncertainty to the public, the State authority, and the applicant as to where the permit stands and, specifically, if the permit can be issued without threat from EPA veto.

[22] Consistent with *Sierra Club v. Otter Tail Power Co.*, 615 F.3d 1008 (2010), and *Romoland School Dist. V. Inland Empire Energy Center, LLC*, 548 F.3d 738 (2008).
[23] Sen. Max Baucus admonished EPA to "not unduly interfere with States' implementation of the permit program," when discussing the oversight EPA had under Title V. (A Legislative History of the Clean Air Act Amendments of 1990, 1004, (1993).
[24] §505(b)(1).

## Comment 16 - Revise the "Network Design for Photochemical Assessment Monitoring Stations (PAMS) and Enhanced Ozone Monitoring" Rule

**Revise PAMS Requirements**

Revise the "Network Design for Photochemical Assessment Monitoring Stations (PAMS) and Enhanced Ozone Monitoring" (Appendix D to Part 58, Section 5), to include, at a minimum, waiver provisions for each of the substantive requirements. The current rule, which focuses most of its effort on the collection of detailed VOC data, requires collection of data without respect to geographic location. Because of this one-size-fits-all approach, state and local programs will be required to collect data that is not necessary to support ozone reduction efforts. The rule should be revised to allow the EPA Regional Administrator to waive collection of PAMS data in cases where the requesting agency can demonstrate the collection of data is not necessary to support ozone model development and the targeted pollutants are not important ozone precursors.

**Background**

On October 26, 2015, the EPA published a revised National Ambient Air Quality Standard (NAAQS) for ozone. 80 Fed. Reg. 65,291. In addition to establishing a revised NAAQS for ozone the EPA also finalized revisions to the photochemical assessment monitoring (PAMS) network requirements. The PAMS network requirements were originally established in 1993 and required areas in certain ozone nonattainment areas to gather ambient monitoring data that would be useful in evaluating control strategies and better understand ozone formation. See 58 Fed. Reg. 8452 (February 12, 1993). The 2015 revisions to the PAMS monitoring requirements significantly changed the program and imposed for the first time PAMS ambient monitoring requirements at NCORE sites in ozone attainment areas. The provision requiring PAMS in attainment areas was not included in the proposed rulemaking. Because of these changes North Carolina is required to install two PAMs stations – one in Charlotte and one in Raleigh - by June of 2019.

The EPA stated the requirement to install PAMS monitoring stations in areas already achieving compliance with the ozone NAAQS was "intended to support ozone model development" and track "trends of important ozone precursor concentrations." 80 Fed. Reg. at 65,421.

The requirement to collect ozone precursor data should be consistent with the understanding that reducing ozone is dependent on the geography and inventory of precursors within a specific airshed. The revised rule failed to account for the unique data needs of each region. In cases where the state/local agency can demonstrate to the EPA that the goals of the PAMS program will not be advanced by the collection of data, the Regional Administrator should be authorized to provide a waiver. (See attached petition for Rulemaking)

## Comment 17 - Initiate Stakeholder Meetings and Rulemaking to Improve Federal Monitoring

**Initiate Stakeholder Meetings and Rulemaking to Improve Federal Monitoring**

The federal EPA should form a stakeholder group to evaluate federally-operated air monitoring sites including but not limited to the Clean Air Status and Trends (CASTNET) sites. EPA should convene a stakeholder process to evaluate regulatory changes that would:

1) ensure that federal monitoring networks are required to comply with requirements and recommendations that the EPA applies to state air monitoring programs,
2) increase transparency by allowing state and local programs to access the data, and
3) require consultation with the host state or local program if the data from these sites is used for any regulatory purpose.

**Background**

Most ambient monitoring is performed at the state/local level. However, there are several programs where EPA, or some other federal agency, is responsible for the installation, operation, and maintenance of ambient monitoring equipment. The data from these monitoring programs is often relied upon by the EPA for regulatory purposes (e.g. attainment determinations, regional haze program). Because these monitoring programs are relied upon for regulatory purposes, the programs should be required by regulation to meet the same siting, quality assurance, and validation and certification requirements that state and local air monitoring programs are required to satisfy. In addition, the EPA should be required to consult with the state and/or local program that would be impacted from the use of that data prior to relying on that data. This consultation will allow state and local agencies to evaluate that data in the context of a larger data set to help identify any potential inconsistencies or trends that would tend to validate or invalidate the data. Finally, if data from a federally operated monitoring site is made available on a real-time basis (e.g. a publicly facing webpage like AIRNow) it is necessary to have real-time support. Having real time support will help ensure the data that is being presented to and relied upon by the public is high quality accurate data.

## Comment 18 – Rulemaking for "Once In Always In"

**EPA Should Initiate Rulemaking in the Issue of "Once In Always In"**

The EPA should initiate rulemaking to address the issue of "Once In Always In" (OIAI). The 1995 OIAI Policy has been applied in an inconsistent manner resulting in a nationwide patchwork approach to MACT applicability.

**Background**

In 1995 the EPA issued a policy memorandum commonly referred to as "Once In Always In." (Potential to Emit for MACT Standards – Guidance on Timing Issues; May 16, 1995) https://www.epa.gov/sites/production/files/2015-08/documents/pteguid.pdf. The policy provides that source can avoid the applicability of an otherwise applicable MACT standard only if the source reduces its potential to emit before the first substantive compliance date of the MACT. The ten-page policy document contains several factors that should be considered in determining how and when to the apply the policy. EPA acknowledged at that time that it intended to "follow this guidance memorandum with rulemaking actions to address these issues. The Agency intends to include provisions on potential to emit timing in future MACT rules and amendments to the section 112 general provisions." To date, with limited exception, the EPA has not initiated rulemaking to codify the interpretations contained in the memorandum. State and local programs, and EPA regional offices apply the memorandum differently and the result has been a patchwork of MACT applicability. Rulemaking on this issue will ensure nationwide consistency with respect to MACT applicability.