Comments by the Texas Commission on Environmental Quality

Regarding THE PROPOSED RULE FOR FINE PARTICULATE MATTER

NATIONAL AMBIENT AIR QUALITY STANDARDS:

STATE IMPLEMENTATION PLAN

EPA Docket ID No. EPA-HQ-OAR-2013-0691

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# I. Summary

On March 23, 2015, the United States (U.S.) Environmental Protection Agency (EPA) published in the *Federal Register* a proposed rule to establish requirements that state, local, and tribal air agencies would have to meet as they implement the current and future National Ambient Air Quality Standards (NAAQS) for fine particulate matter (PM2.5) (80 FR 15340). Specifically, the notice provides details on how the EPA proposes that air agencies meet the statutory state implementation plan (SIP) requirements that apply to areas designated as nonattainment for any PM2.5 NAAQS. The proposed rule also sets specific attainment planning requirements that would apply to PM2.5 nonattainment areas based on their classification and the process for reclassifying moderate areas to serious. Additionally, the EPA is proposing to revoke the 1997 primary annual PM2.5 standard. The Texas Commission on Environmental Quality (TCEQ) provides the following comments on this proposed rule.

# II. Comments

## Continuing Technical Challenges

##### The TCEQ continues to be concerned about continued technical challenges related to PM2.5 implementation.

Throughout the nearly 18 years after the EPA’s adoption of the PM2.5 NAAQS on July 18, 1997, the EPA noted many technical difficulties associated with state implementation plan (SIP) development, and the nonattainment new source review (NNSR) and new source review (NSR) prevention of significant deterioration (PSD) permitting programs. In a previous rulemaking in 2010, the EPA stated that technical difficulties had been resolved sufficiently so that meaningful permit-related PM2.5 analyses could be conducted for directly emitted PM2.5 but that technical difficulties remained related to the formation of PM2.5 by precursor emissions. As the EPA notes in this proposal, the contribution of PM2.5 precursors continues to be an issue that EPA suggests will not be settled soon; and may force the states to address this issue on their own.

## PM2.5 Precursors

##### The TCEQ continues to be concerned about how the EPA proposes to regulate and address the contribution of PM2.5 precursors in the NNSR and NSR PSD permitting programs.

There are many unanswered questions and the science is not adequate to justify regulation of secondary formation precursors at this time and thus, the TCEQ is concerned about the precedent the EPA’s proposals may set. The EPA should continue to work expeditiously to conduct the analyses needed to effectively address the precursor contributions to secondary PM2.5 formation. Because of the remaining technical difficulties, the TCEQ supports the EPA’s approach to phase-in the regulation of PM2.5 precursors in both the NNSR and NSR PSD permitting programs (80 FR 15436).

As the EPA states in this proposal, much more analysis is needed to determine technically justifiable major source thresholds, significant emission rates, and associated permit and modeling guidance. The EPA should take the lead for this analysis rather than the states. Otherwise, the state or applicants would have to expend significant resources to conduct the demonstrations needed to develop the contribution of PM2.5 precursors. Following are some questions for the EPA to consider.

For example, the EPA should determine:

* whether the contribution of sulfur dioxide (SO2), nitrogen oxides (NOX), volatile organic compounds (VOC), and ammonia (NH3) emissions to secondary formation of PM2.5 at locations of maximum primary PM2.5 impacts could be negligible for NNSR or NSR PSD under all or certain conditions;
* how the size of an area (nonattainment or PSD) would affect the time for SO2, NOX, VOC, and ammonia to react to form secondary PM2.5;
* geographically based default mass relationships between precursor emissions and secondary PM2.5 formation;
* if the conversion of SO2, NOX, VOC, and ammonia to secondary PM2.5 is relatively fast or slow, and how far downwind from a project maximum contributions would be expected;
* whether in certain geographic areas the equilibrium concentration of ammonium nitrate is so low that the potential impact of additional NOX emissions on secondary PM2.5 is so small that it does not warrant consideration in NNSR or NSR PSD;
* whether in low latitude areas, the NOX significant emission rate (SER) for PM2.5 NNSR and NSR PSD purposes should be large. (Note, it is important that setting the NOX SER in more northern areas should not drive the NOX SER for low latitude areas); and
* if there is generally ample opportunity for area sources of ammonia to add enough ammonia to an area such that ammonia is no longer a limiting reactant in the formation of PM2.5 mass.

## Emissions Inventory Requirements

The EPA should not create any additional emissions inventory requirements regarding filterable and condensable particulate matter emissions less than 2.5 micrometers in diameter (PM2.5) beyond those currently detailed in the Air Emissions Reporting Requirements (AERR), 40 Code of Federal Regulations (CFR) Part 51, Subpart A.

Regarding SIP emissions inventory requirements for the PM2.5 NAAQS, the EPA states in the proposed rule, “The detail of the emissions included in the inventory must be consistent with the detail required by 40 CFR part 51, subpart A” (80 FR 15364). However, later in the preamble, the EPA actually proposes an emissions inventory requirement above and beyond the requirements of 40 CFR Part 51, Subpart A, also referred to as the AERR. Specifically, the EPA states, “Furthermore, the inventory must differentiate between the condensable and filterable portions of direct PM2.5 emissions” (80 FR 15365). This proposed requirement conflicts with the AERR, which requires states to report primary PM2.5 emissions including both filterable and condensable emissions “as applicable” but no requirement to differentiate between the filterable and the condensable emissions.

Differentiating between filterable and condensable PM2.5 emissions would place an unnecessary regulatory burden on states. Currently, area sources account for the majority of PM2.5 emissions statewide in Texas. Requiring states to distinguish between filterable and condensable emissions would not only necessitate changes to the state’s database to facilitate reporting of these emissions to the EPA, it would necessitate resource-intensive work to assess filterable and condensable portions of complex sources of PM2.5 emissions such as paved and unpaved roads, construction, and agriculture.

Point sources are the next largest contributor to statewide PM2.5 emissions. Currently, Texas does not inventory filterable and condensable PM2.5 emissions separately in its point source emissions inventory. Changing point source reporting requirements to require this distinction would not only create a burden on entities that report to the point source portion of the emissions inventory, it would require resource-intensive changes to existing reporting systems, databases, and quality assurance procedures.

These database and other updates detailed above are estimated to cost $350,000 for Texas, alone. Industries that report to the point source inventory will have to invest resources to assess filterable and condensable portions of PM2.5 emissions and report these components accurately in the emissions inventory. This investment of resources by states and industry does not appear necessary since advanced analytical techniques will be able to determine the composition of PM2.5 emissions at any monitors that do not attain the standard. Therefore, the EPA should remove the requirement to report filterable and condensable PM2.5 emissions separately in the state’s emissions inventory and continue to allow the currently accepted practice of reporting total primary PM2.5 emissions.

## Attainment Plan Control Strategy

##### D.1. The preamble is inconsistent in the use of terminology describing reasonably available control measures (RACM), reasonably available control technology (RACT), “additional reasonable measures,” “other reasonable measures,” “reasonable control measures,” and “other control measures.” It is unclear whether some of these control measure definitions apply to sources within the nonattainment area, outside of the nonattainment area, or both.

The EPA interprets Federal Clean Air Act (FCAA), §172(c)(1) and §189(a)(1)(C) together to require that moderate nonattainment area attainment plans must provide for the implementation of RACM and RACT for existing sources of PM2.5 and PM2.5 precursors in the nonattainment area as expeditiously as practicable but no later than four years after nonattainment designation. The term “additional reasonable measures” is defined in proposed 40 CFR Part 51, §51.1000 as “any control measure that otherwise meets the definition of ‘reasonably available control measure’ (RACM) but can only be implemented in whole or in part during the period beginning 4 years after the date of designation of a nonattainment area and no later than the end of the sixth calendar year following the date of designation of the area.” The preamble further states that “the EPA proposes to require implementation of these ‘other’ control measures to the extent necessary to demonstrate attainment by the applicable attainment date pursuant to section 172(c)(6) of the CAA.” The EPA indicates that RACT, RACM, and these “additional reasonable measures” make up the set of control strategies it refers to in the preamble as “reasonable control measures.” Based on the EPA’s stated interpretations and the definition in proposed §51.1000, these “reasonable control measures,” consisting of RACT, RACM, and “additional reasonable measures” are therefore assumed to be for existing sources located within the nonattainment area.

However, later in the preamble, the EPA interprets the ‘‘other measures’’ required under FCAA, §172(c)(6) to apply to stationary, area, and mobile sources located outside of the nonattainment area but within the state if the application of “reasonable control measures” on such sources would facilitate attainment of the PM2.5 NAAQS in the nonattainment area. Proposed §51.1009(b) requires that the state

“shall identify, adopt, and implement control measures, including control technologies, on sources of direct PM2.5 emissions and sources of emissions of PM2.5 precursors located outside the Moderate PM2.5 nonattainment area, or portion thereof, located within the state if doing so is necessary to provide for attainment or will expedite attainment of the applicable PM2.5 NAAQS is such area.”

The EPA thus redefines “reasonable control measures” to include not only those for sources in the nonattainment area, but also requires that the state implement control measures outside the nonattainment area.

The preamble and proposed rule are therefore unclear regarding whether the state has the option to identify control measures outside the nonattainment area that it determines would provide for or advance attainment, or if the state is required to implement those measures. Requiring states to evaluate all sources of direct PM2.5 emissions and sources of emissions of PM2.5 precursors located outside the moderate PM2.5 nonattainment area but within the state, would require considerable technical analysis, and related expense, for a state of large geographic size, such as Texas.

Further, the EPA proposes that the precursor demonstration must include an evaluation of emissions from sources located in the nonattainment area only. Again, this is inconsistent with the EPA’s later discussion of the requirement to evaluate all sources in the state when considering other reasonable measures. The EPA’s interpretation of FCAA, §172(c)(6) is thus inconsistent throughout the preamble.

**D.2. The TCEQ disagrees with the EPA that a requirement for the imposition of “other control measures” outside of a designated nonattainment area is legally required for an attainment demonstration.**

The TCEQ disagrees with the EPA that FCAA, §172(c)(6) gives the EPA authority to require imposition of “other control measures” outside of a designated nonattainment area as part of an attainment demonstration. Section 172 is found in Part D of the FCAA; it is limited to plan requirements for nonattainment areas. Although states may have broader authority to regulate air emissions within its borders than the EPA, any such authority to require states to impose control requirements necessary for a nonattainment area to reach attainment is not conferred by §172 of the FCAA. Any possible imposition of controls outside a nonattainment area to help such an area attain the NAAQS would be appropriate for states to consider on a case-by-case basis, but it should be at the option of states to require more stringent controls than those required by the FCAA.

**D.3. The EPA should not be redefining the permitting term best available control technology (BACT) for the purposes of control strategy analyses for PM2.5 implementation. Using separately defined BACT for control strategy analysis for PM2.5 is unnecessary and will only create confusion.**

The EPA is creating a new definition for the term BACT for the purposes of control strategy analyses for serious nonattainment areas under the PM2.5 implementation rule which is essentially the same as RACT but presumed to be at a more stringent level of control than RACT for moderate nonattainment areas. Creating a new definition of BACT solely for the purposes of the PM2.5 implementation rule is unnecessary and will only create confusion with the term BACT as applied in permitting. Furthermore, the FCAA does not use the term BACT in the context of control strategy analyses in attainment demonstrations under §172 or §189. The TCEQ recommends that the EPA not use a redefined BACT to represent RACT for serious nonattainment areas. Instead, the EPA should use the already defined term RACT for both moderate and serious nonattainment areas but clarify that RACT for the purposes of a serious nonattainment area may be more stringent than RACT for a moderate nonattainment area.

**D.4. The TCEQ supports including *de minimis* thresholds for exempting certain source categories from consideration for reasonable control measure determinations and supports the EPA’s proposed first option, which would allow a state to determine whether a particular source category should be considered *de minimis* based on particular facts and circumstances for a specific area.**

The EPA has proposed two options regarding the threshold for *de minimis* emissions. Under the first proposed option, the EPA would not establish a nationally applicable ‘‘bright line’’ threshold for defining a *de minimis* source category but would allow a state to determine whether a particular source category should be considered *de minimis* given the particular facts and circumstances of a specific PM2.5 nonattainment area and subject to approval by the EPA. Under the second option, the EPA proposed to establish a nationally applicable *de minimis* source category threshold that would be a specific percentage of the level of the relevant PM2.5 NAAQS. Due to the complexity associated with determining a nationally applicable threshold, the TCEQ supports the flexibility provided by the EPA’s first proposed option.

**D.5. The TCEQ objects to the proposed rule language in 40 CFR Part 51, §51.1009(a)(2) and §51.1010(a)(2) that requires states identify *all* potential control measures. If taken literally, the requirement may be used as a basis to disapprove a SIP submittal solely for a single control measure not being identified because the state had no knowledge of that control measure. States do not have unlimited resources to research every possible control measure that might exist for all source types within the state boundaries.**

While the EPA states in the preamble that states might use sources such as the RACT/BACT/LAER database to identify potential control measures (80 FR 15372), the actual proposed rule language in §51.1009(a)(2) and §51.1010(a)(2) requires the state to identify *all* potential control measures. While both provisions provide that the state may elect to not identify potential control measures for sources that contribute insignificantly to ambient PM2.5 concentrations in the area or for *de minimis* source categories if the appropriate demonstrations are made in accordance with proposed §51.1006 or §51.1007, respectively. However, the TCEQ is concerned that the requirement to identify *all* potential control measures in the rule may be applied literally and if a SIP submittal does not include a particular measure that the state had no knowledge of but is later identified by the EPA or a third party then the omission could be used a basis to disapprove a SIP. Similarly, the EPA is open to risk when approving a SIP submittal if a third party identifies a measure that was not included in the submittal that neither the state nor the EPA had knowledge of.

State agencies do not have unlimited resources to research all possible control measures that might exist in United States, or possibly even internationally, for all sources that exist within their state. The TCEQ suggests that either the EPA remove the word “all” from the requirement or add language to §51.1009(a)(2) and §51.1010(a)(2) that clarifies that the state is only required to identify control measures that the state would have a reasonable expectation of having knowledge of.

**D.6. The EPA should revise the proposed rule language to include a provision clarifying that states are not required to include control measures that are absurd, unenforceable, or impractical. Excluding such control measures is equally appropriate under a best available control measures (BACM) analysis in addition to RACM and RACT analyses.**

The EPA indicates in the preamble that:

…inherent to the concept of RACM and RACT is the basic premise that the measures be “reasonable,” thus the EPA believes that a state may decline to evaluate control measures that are plainly “absurd, unenforceable, or impractical,” for example, measures that would cause “severely disruptive socioeconomic impacts, (e.g., gas rationing and mandatory source shutdowns.)” It is the agency’s interpretation that evaluation of such measures is not required by the CAA (80 FR 15371).

The EPA’s interpretation in the preamble is consistent with prior EPA interpretations of RACM in the context of ozone control strategy analysis and the TCEQ agrees with this interpretation. However, the proposed rule provisions in §51.1009 and §51.1010 are not consistent with the EPA’s prior interpretation and the preamble for this proposal. Since the EPA is outlining in the proposed rule how control strategy evaluations must be performed, this exclusion regarding control measures that are absurd, unenforceable, or impractical should also be included in the rule as well. It is conceivable that a control measure might meet all criteria for technological and economic feasibility, yet the control measure might be unenforceable or could have severe adverse socioeconomic impacts. Furthermore, the EPA does not indicate in the preamble that this same interpretation applies to BACM evaluations for serious nonattainment areas. It is unclear whether this omission is inadvertent, intentional, or because the EPA considers the exclusion of such measures to be implied by the EPA’s comparison of BACM and RACM. Regardless of an area’s classification, a state should not be required to evaluate control measures that are absurd, unenforceable, or impractical. Even as BACM, a control measure must be enforceable. The TCEQ requests that the EPA revise both proposed §51.1009 and §51.1010 to include a provision that makes clear that states are not required to evaluate control measures that are absurd, unenforceable, or impractical.

**D.7. The EPA should clarify certain statements in the preamble regarding the states’ evaluation of economic feasibility and the requirement to consider certain financial indicators to support claims that a source cannot afford the controls determined to be economically feasible for other sources in the same category. Consideration for confidential business information should be included in the EPA’s discussion of financial indicators to support such claims of inability to afford controls.**

The EPA indicates in the preamble that “it is appropriate for states to give substantial weight to cost effectiveness in evaluating the economic feasibility of an emission reduction measure or technology.” In the proposed rule language in §51.1009(a)(3)(ii) and §51.1010(a)(3)(ii), the EPA indicates that states may consider factors including but not limited to capital costs, operating and maintenance costs, and cost-effectiveness of the measure. The TCEQ agrees that such factors and potentially others should be considered in evaluating economic feasibility of a control measure. However, in the preamble discussion of control strategy analysis for both moderate and serious nonattainment areas, the EPA states the following:

In addition, if a state contends that a source-specific control-level should not be established because the source(s) cannot afford the control measure or technology that is demonstrated to be economically feasible for other sources in its source category, the EPA proposes that the state must support the claim with information regarding the impact of imposing the identified control measure or technology on the following financial indicators, to the extent applicable:

1. Fixed and variable production costs ($/unit)

2. Product supply and demand elasticity

3. Product prices (cost absorption vs. cost pass-through)

4. Expected costs incurred by competitors

5. Company profits

6. Employment costs

7. Other costs (e.g., for RACM implemented by public sector entities).

The EPA seeks comment on the factors described above for states to consider when determining whether a control technology or measure is economically feasible (80 FR 15374).

The EPA provides similar language in the discussion of economic feasibility for BACM and BACT for serious nonattainment areas (80 FR 15410). While the introductory portion of the discussion indicates that the factors are in the context of a source-specific analysis and a source’s ability to afford the controls, the EPA’s solicitation of comments on the factors might be interpreted as the state must consider these factors when evaluating economic feasibility in all cases. Additionally, in both the preamble discussions for moderate and serious nonattainment areas, the EPA cites the appendices to an April 28, 1992 preamble as the source of these “long-standing” factors established in EPA guidance. However, the EPA has taken the referenced financial indicators slightly out of context from the 1992 preamble. The original guidance cited by the EPA was specific to a company making a claim that it cannot afford the technology that would be otherwise required and was written as guidance rather than mandate. The actual language from the April 28, 1992 preamble states the following:

*If a company contends* that it cannot afford the technology that appears to be RACT for that source or group of sources, *the claim should be supported* with such information as the impact on:

1. Fixed and variable production costs ($/unit),

2. Product supply and demand elasticity,

3. Product prices (cost absorption vs. cost pass-through),

4. Expected costs incurred by competitors,

5. Company profits, and

6. Employment.

If a company contends that available control technology is not affordable and would lead to closing the facility, the costs of closure *should be considered*. Closure may incur costs for demolition, relocation, severance pay, etc. (57 FR 18074).

As an initial matter, the TCEQ requests that the EPA clarify that consideration of the specified financial indicators is only applicable in source-specific evaluations when a determination that a control measure is not economical feasible is based solely on a company’s inability to afford the necessary controls. Additionally, states will likely not have the information necessary for determining these indicators and may not have the legal authority to obtain the information. Furthermore, some of the specified information would likely be considered confidential. Even if provided by the company, the state may not be able to provide the information to the EPA and the public because the information is confidential. Other factors beyond those identified by the EPA may need to be considered by the state and may be more appropriate for the particular situation. The TCEQ suggests the EPA more closely mirror the language from the 1992 preamble, i.e., the company making such a claim is expected to support the claim with the specified information rather than the state, and the indicated financial indicators are recommendations rather than mandated factors.

Lastly, the state cannot disclose a company’s confidential business information through the public comment process. Neither should a state be forced to impose a control measure on a source that has been adequately demonstrated to be economically infeasible for that particular source because the state is legally prohibited from disclosing certain information that was the basis of the state’s determination. The EPA should acknowledge that such a detailed evaluation of a company’s financial state may involve confidential information and that, while the state may consider such information, the state is not required to disclose confidential information as part of the public record for a SIP submittal.

**D.8. Moderate nonattainment areas for which the state cannot demonstrate attainment by the statutory attainment date should only be required to implement those technologically and economically feasible measures identified for sources in the area that would effectively reduce ambient PM2.5 concentrations.**

Regardless of which of the three proposed precursor options the EPA finalizes in this rulemaking, it is appropriate for the EPA to allow states to not implement control measures that collectively would not effectively reduce ambient PM2.5 concentrations. The proposed alternative approach, which would require states to implement all technologically and economically feasible control measures that have been identified for sources in the area, could result in the implementation of control measures that would not provide for attainment, thus not meeting the requirements of FCAA, §172(c)(6). Precursor options 2A and 2B would allow a state to demonstrate that emissions from all sources of a particular precursor do not contribute significantly to PM2.5 levels in the area, however that does not necessarily imply, as the EPA suggests, that the measures identified by the state would already implicitly exclude control measures on sources of any insignificant precursor. There could still be measures identified for the significant precursors that could be demonstrated to collectively not reduce ambient PM2.5 concentrations in the area.

**D.9. The FCAA does not grant the EPA the authority to require early adoption of BACM. This cannot be done under a moderate nonattainment designation, regardless of whether an area is modeling attainment by the attainment deadline.**

In the proposal’s preamble, the EPA suggests that states consider selecting and implementing controls that may qualify as BACM or BACT in a moderate nonattainment area as part of their RACT or RACM analysis if the state has “reason to suspect” that the area may not attain by the attainment deadline. FCAA, §189(a)(1)(C) only allows for the implementation of reasonably available control measures under a moderate area designation. BACM must be implemented under FCAA, §189(b)(1)(B) for serious nonattainment areas. A moderate nonattainment area that cannot demonstrate attainment is not subject to §189(b)(1)(B) until the area has been bumped up to a serious designation. Without a statutory requirement to implement BACM, states are also constrained by their own statutory and regulatory requirements, which may not allow and certainly do not require early implementation of controls that would only be required by a future designation.

## Attainment Demonstrations

##### E.1. The EPA should provide further clarification in the final PM2.5 implementation rule and revise the December 2014 draft modeling guidance to include thorough guidance on how states should demonstrate attainment and implement SIP requirements at near-road monitoring sites.

The final 2012 PM2.5 NAAQS rule contained new requirements for near-road monitors in large metropolitan areas. The EPA proposes that the initial set of attainment demonstrations for moderate nonattainment areas will not need to include projected design values for these near-road monitor locations. However, attainment demonstrations submitted after 2018 will need to address near-road monitoring locations in attainment plans and will need to include a demonstration of attainment by the applicable statutory attainment date. The EPA points to the *Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze* published on December 3, 2014 to explain how modeling should be done to demonstrate attainment at these near-road locations. The EPA states that “the revised modeling guidance document for the PM2.5 NAAQS includes procedures for applying a dispersion model or a combination of photochemical grid models and dispersion modeling to demonstrate attainment at near-road monitor locations.” However, the draft guidance published in December 2014 does not include such procedures and only mentions that the draft guidance will be updated at a later date to reflect additional recommendations and/or requirements for near-road modeling, following finalization of the PM2.5 implementation rule. In addition to the lack of modeling guidance associated with near-road monitoring sites, the proposed implementation rule does not consider how the implementation requirements outlined in the rule (RACT, RACM, RFP, etc.) would apply to nonattainment areas resulting from near-road monitors. As PM2.5 concentrations in such near-road nonattainment areas are inherently comprised of predominantly mobile source emissions, the EPA should provide comprehensive and timely guidance for states on how to achieve necessary emissions reductions and meet implementation requirements as they relate to near-road nonattainment areas. The final modeling guidance and implementation rule should include sufficient guidance for states regarding modeling and implementation plan requirements for near-road monitoring sites.

##### E.2. The TCEQ supports the EPA’s Option 1 for demonstrating attainment in unmonitored areas but does not think it is appropriate for the EPA to require states to perform the attainment test at “recent” monitoring locations.

The EPA’s proposed Option 1 for demonstrating attainment in unmonitored areas requires states to show attainment only at locations that have current Federal Reference Method (FRM) and/or Federal Equivalent Method (FEM) monitoring data. As the EPA states, this approach is consistent with how attainment is determined for purposes of designations and redesignations. Furthermore, the EPA acknowledges, and the TCEQ agrees, that there is inherent uncertainty in modeled attainment projections in locations where there is no monitoring data to anchor the future model results.

However, within the EPA’s description of Option 1, the proposed rule indicates that the attainment test required under Option 1 would also apply to locations that have “recent” FRM and/or FEM monitoring data. The EPA does not provide any further explanation to define “recent” data. The TCEQ does not think it is appropriate for the EPA to require states to perform the attainment test at locations with “recent” monitoring data and believes that current FRM/FEM monitoring data should be sufficient to demonstrate attainment. If the EPA requires the demonstration of attainment at “recent” monitoring locations as part of the final implementation rule, further clarification should be provided to define “recent” and justification should be provided for this requirement.

## Reasonable Further Progress (RFP)

##### F.1. The TCEQ supports the EPA’s Proposed Option 1 (demonstration of generally linear progress or step-wise progress) for developing a RFP analysis for a moderate PM2.5 nonattainment area.

The EPA’s proposed Option 1 for an RFP analysis allows the state to demonstrate RFP with generally linear progress through emissions reductions to be achieved annually between a baseline year and the projected attainment date for the area or step-wise progress that will be achieved through adherence to a compliance schedule that would not necessarily achieve reductions on an annual basis. As the EPA points out, this approach is consistent with the pattern of emissions reductions of many nationally-applicable federal emissions reduction measures and is further backed by established legal and technical support.

The TCEQ disagrees that Option 2 simplifies the approach to developing an RFP plan and recommends that the EPA provide more comprehensive guidance for states to develop RFP plans under this option, if included in the final implementation rule.

##### F.2. The TCEQ disagrees with the EPA’s proposed required components for an RFP milestone report.

Under the quantitative milestone requirement of FCAA, §189(c)(2), a state must submit a demonstration that all measures in an approved RFP plan have been implemented and that the RFP milestones have been met. As part of the PM2.5 implementation rule, the EPA is proposing that state RFP milestone report submissions include four required components. The TCEQ believes that the first component, a certification that the state’s attainment plan control strategy is being implemented as described in the attainment plan; and the second component, technical support that documents completion statistics for appropriate milestones and demonstrates that the quantitative milestones have been satisfied, are sufficient to comply with the requirements of §189(c)(2). The third component, an air quality screening analysis, is not supported by the statute and is unnecessary if the second component is fulfilled. The fourth component, a description and schedule for remedial actions the state has taken or will take to address any failure to meet a quantitative milestone, is more than what is necessary to demonstrate compliance with RFP milestones and could potentially require revisions to the SIP.

## Reclassification

##### The TCEQ does not agree with the EPA’s interpretation of FCAA, §188(b)(1) regarding its discretionary authority to reclassify an area as a serious nonattainment area if the Administrator determines that the area cannot practicably attain the NAAQS by the attainment date.

FCAA, §188(b)(1) gives the Administrator the authority to reclassify a moderate PM10 nonattainment area to serious if the Administrator determines that an area cannot practicably attain the NAAQS by the attainment date. The FCAA does not specify the basis on which the EPA can make this determination. If a state determines that it cannot meet an attainment deadline, it can submit an impracticability demonstration to show that an area cannot attain the NAAQS by the prescribed attainment date. The EPA asserts that the agency can base its determination to reclassify an area “upon whatever factors are pertinent” and can do so whether or not the state in question has submitted an attainment plan or an impracticability demonstration. The EPA has not defined what factors it considers “pertinent,” therefore it is impossible to fully comment on the legality of the factors considered for reclassification. The TCEQ disagrees with the EPA’s interpretation of the intent of the statute and believes that the EPA’s discretionary authority should be limited to reclassification of areas that submit an impracticability demonstration.

## NNSR and NSR PSD Control Options

##### The EPA should provide a case-by-case permitting option to determine significant contribution since NNSR permits will be issued before the SIP is effective.

Once a SIP is effective, the NNSR permit review focuses on lowest achievable emission rates and offsets. An impacts evaluation is not required for this review since the impacts evaluation was done as a key part of the SIP development process. However, since NNSR permitting is implemented from the effective date of an area’s nonattainment designation, the TCEQ believes that until the SIP is approved, a case-by-case NNSR permitting option should be available so an applicant can demonstrate that a proposed new major or major modification project’s applicable precursors would not contribute significantly to PM2.5 concentrations in the area.

For NSR PSD, there are significance levels in 40 CFR §51.165(b) that can be used (at a minimum) to demonstrate whether a source will cause or contribute to violations in areas that do not meet the PM2.5 national standards. The EPA should consider a rule to allow the state to require a NNSR case-by-case technical demonstration of significant contribution in a PM2.5 nonattainment area, and consider the existing significance levels in 40 CFR §51.165(b) for use in both NSR PSD and NNSR permitting during the SIP transition period.

## Thresholds for PM2.5 Precursors

##### I.1. The EPA should include a provision in the rule allowing states to make a case-by-case demonstration to use higher major source thresholds or major modification SER for precursors for NSR PSD and NNSR permit review.

The EPA proposes to revise the definition of *major stationary source* contained in NNSR regulations to include regulated precursors for PM2.5. The TCEQ is concerned that the precursor thresholds and rates are too low and do not realistically reflect the effect that each precursor has on ambient PM2.5 concentrations. Evaluations by the EPA and others have indicated that considerably more precursor emissions than direct PM2.5 emissions are needed to result in a particular ambient concentration of PM2.5. The TCEQ is also concerned that, similar to greenhouse gases, significant increases in any of the PM2.5 precursors could trigger review for PM2.5 in both NNSR and PSD permitting programs even though the increase of direct PM2.5 emissions is not major.

As proposed, the thresholds and rates would significantly increase human and financial resources and burden efforts to develop effective PM2.5 SIPs for nonattainment areas and to implement both NSR PSD and NNSR permitting programs efficiently. A further concern relates to the EPA's reference to future rulemaking that might resolve the inconsistencies that will continue to exist with this rulemaking related to precursor thresholds and SERs. While the EPA plans to gather more data and continue its analysis of the relationship between each precursor and ambient PM2.5 concentrations, in the interim, the TCEQ must implement PM2.5 permitting programs when standards or nonattainment designations are effective. Therefore, until the EPA completes its analysis, the TCEQ needs the ability to conduct case-by-case reviews for NSR PSD and NNSR permits by requiring applicants to submit a technical demonstration showing that emissions of a particular precursor do not significantly contribute to PM2.5 levels that exceed the standard in an area, thus exempting the precursor from control. As previously commented, the EPA should consider a rule allowing the state to require a NNSR case-by-case technical demonstration of significant contribution in a PM2.5 nonattainment area, and consider the existing significance levels in 40 CFR §51.165(b) for use in both NSR PSD and NNSR permitting during the SIP transition period. When the EPA considers its precursor analysis, it should ensure thresholds and rates for these precursors are consistent between the NSR PSD and NNSR permitting programs.

##### I.2. The EPA should not add VOC and ammonia to 40 CFR §51.165 (a) (1) (x) (A), 40 CFR §51.165 (a) (1) (x) (C), Appendix S 10(i), or Appendix S 31(ii) (b) (2) at this time.

Due to ongoing technical challenges related to evaluating the contribution of PM2.5 precursor gases to ambient PM2.5 concentrations, VOC and ammonia should not be included in PM2.5 rules at this time. In addition, the EPA should consider rules to allow the state to demonstrate that an alternative SER for SO2 and NOX can be used to determine major source status. The demonstration could be done through general statewide or specific area SIP analysis, or through the NSR PSD or NNSR permit program on a case-by-case basis.

##### H.3. If ammonia is specifically regulated as a PM2.5 precursor, the EPA should develop a specific major modification SER for both the NSR PSD and NNSR permitting programs.

Notwithstanding the TCEQ comments regarding the addition of VOC and ammonia as regulated PM2.5 precursors, if ammonia becomes a regulated precursor, the EPA should develop a specific SER for both the NSR PSD and NNSR permitting programs. The preamble indicates that ammonia is one of four precursors of interest for PM2.5; however, unlike the other precursors (SO2, NOX, and VOC), the EPA does not provide a SER for ammonia to use in the major source applicability process. Without a SER, any significant emission increase greater than zero tons per year would result in a major review for both NSR PSD and NNSR.

The EPA indicates that such a rate may be developed in a subsequent rulemaking. If that rulemaking is not timely, the state would need to develop a SER for ammonia to reduce the burden and permit issuance delays related to major source applicability determinations and permit development for ammonia and PM2.5. Ammonia is used in many industry and source types to control NOX emissions though the implementation of selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) control devices. Without a SER for ammonia, it’s very possible that many PSD and NNSR reviews will be initiated simply because of any ammonia increase at a major source.

## NNSR and NSR PSD Applicability Procedures

##### J.1. The TCEQ concurs with the proposed change to 40 CFR §51.165 (a) (2) (Applicability Procedures) related to precursors.

The TCEQ agrees that major source applicability determinations should continue to be based on individual precursor pollutant emissions. Different pollutants, including individual precursors, should not be summed to determine applicability for NNSR major stationary source or major modification. This procedure should be in rules for both the NNSR and NSR PSD to ensure consistency between NSR PSD and NNSR permitting programs.

##### J.2. The EPA should clarify how to evaluate major source applicability for NNSR and PSD with respect to PM2.5 precursors.

The TCEQ is concerned about NNSR major source thresholds and major modification SERs for PM2.5 precursors and their effect on NSR PSD applicability determinations. As stated previously, the lack of a specific ammonia SER is problematic since it could trigger major source applicability review for any project with a significant emission increase greater than zero tons per year.

The EPA should clarify how the precursors would trigger major source applicability for other pollutants. Is it the EPA's intent that a proposed source in a PM2.5 nonattainment area with significant emission increases of PM2.5 precursors at or above the PSD SERs for SO2, NOX, VOC, or ammonia would also automatically trigger NNSR review for PM2.5?

Likewise, if a source is a major source or has a major modification, and triggers major source applicability for NSR PSD permitting for SO2, NOX, VOC, or ammonia, will the increase automatically trigger PSD review for PM2.5, even if the source would not be major for direct PM2.5?

##### J.3. The EPA should discuss the relationship between PM10 and PM2.5 in the major source applicability evaluation process.

The EPA does not discuss the relationship between PM10 and PM2.5 in the major source applicability evaluation process in this proposal. The TCEQ is concerned about PM10 major source applicability procedures since PM10 includes PM2.5. The EPA should clarify whether applicability determinations for PM10 and PM2.5 are linked and whether the determinations apply to all major NSR PSD and NNSR applicability determinations. The TCEQ suggests that the EPA discuss what it expects states to do for the following likely scenarios:

* Would the applicability determinations of baseline actual emission rates for PM10 and direct PM2.5 emissions be evaluated and aligned to establish the same consecutive 24-month average for both PM10 and PM2.5?
* When does a PM2.5 project with direct emissions and no significant precursors require a simultaneous PM10 applicability determination and vice versa?
* When does a PM2.5 project with significant precursor emissions require a simultaneous PM10 applicability determination and vice versa?
* If there is no ammonia SER, when would a PM2.5 project with ammonia emissions require a simultaneous PM10 applicability determination and vice versa?
* Depending on the outcome of the precursor applicability determination, could NSR PSD and NNSR applicability be triggered for three of the precursors (SO2, NOX, and VOC)?

## Transition Provisions for PM2.5

##### K.1. The EPA should allow NSR PSD permits to be issued after the effective date of a nonattainment designation under certain conditions.

The TCEQ reiterates that technical challenges associated with the evaluation of precursor contributions to ambient PM2.5 concentrations continue to exist. The TCEQ suggests that the EPA adopt a grandfather rule similar to the previously adopted rule in 40 CFR §51.166 (i) (10). A permit should be grandfathered once the permitting authority determines that a permit is technically complete and should be issued. Likewise, a permit should be grandfathered if the applicant is directed to provide notice or the proposed permit has been noticed for NSR PSD even if the issuance date is after the designation date. The TCEQ believes the number of permits that could be grandfathered would be low. Not requiring an applicant with a pending PSD application to withdraw the part of the application that addresses PM2.5 and submit an application for a nonattainment permit would not necessarily hinder the nonattainment area from attaining the annual PM2.5 NAAQS as expeditiously as practicable.

Under the NSR PSD program, if the area is monitoring nonattainment but has not been designated, the applicant must provide offsets when the project’s contribution to applicable monitored concentrations is adverse per 40 CFR §51.165 (b). While the offsets are different than offsets required for a PM2.5 NNSR permit, the required controls must meet BACT.

In addition, FCAA , §165(c), that forms part of the EPA’s basis for grandfathering in the NSR PSD context, should also apply to NNSR permit decisions. Otherwise, requiring a NNSR permit application rather than issuing a technically complete PSD permit would result in a longer permitting process that could cause economic hardships for the applicant and local area that would not be mitigated by significant air quality improvements.

##### K.2. The TCEQ supports the EPA’s proposed transitional approach to establish a phased-in process for regulating PM2.5 precursors in the NNSR program.

The EPA should establish a phased-in process for regulating PM2.5 precursors in both the NSR PSD and NNSR permitting programs. Many of the challenges previously discussed in the TCEQ comment would be mitigated by initially requiring sources issued a permit to control only SO2 and NOX as PM2.5 precursors, and only later, after the prescribed date (e.g., the date on which SIP revisions based on Subpart 4 requirements are due), requiring sources issued a permit to control emissions of VOC and ammonia, if applicable.

## Section 179B/International Border Areas

##### The TCEQ appreciates the EPA’s efforts to clarify the agency’s existing interpretation of control strategy requirements for moderate area attainment plans to be approved under FCAA, §179B. However, the EPA should allow states the flexibility to consider both approaches outlined in the proposed rule to develop a control strategy for an area affected by international transport of emissions.

The EPA proposes two approaches for control strategies in moderate PM2.5 nonattainment areas that are affected by international transport of emissions. The first requires states to implement all technologically and economically feasible measures that can be implemented on sources in the area by the sixth calendar year following designation of an area with a possible exception for any measures that would not be effective in reducing PM2.5 levels in an area. The second requires states to demonstrate that its selected control measures for a moderate nonattainment area would achieve reductions in PM2.5 levels that exceed the applicable NAAQS in proportion to their contribution to PM2.5 levels in the area. The TCEQ suggests that the EPA allow states the flexibility to consider both approaches to determine which strategy to implement on a case-by-case basis as each situation is unique.

## Revocation of the 1997 Primary Annual PM2.5 NAAQS

##### The TCEQ supports Option 2 for revoking the 1997 primary annual PM2.5 NAAQS.

The TCEQ supports revocation of the 1997 primary annual PM2.5 NAAQS for all purposes in all nonattainment and attainment areas. However, the TCEQ suggests that the EPA incorporate a mechanism for satisfying anti-backsliding requirements like the one included in the rule for implementation of the 2008 ozone NAAQS to allow states to submit a redesignation substitute for the revoked standard. The EPA provides no explanation in the proposed rule as to why its options for transitioning to the 2012 PM2.5 NAAQS are not aligned with the approach ultimately decided upon for transition from the 1997 eight-hour ozone standard to the 2008 eight-hour ozone standard.