The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts the amendment to §106.4.

The amendment is adopted *without change* to the proposed text as published in the November 19, 2010, issue of the *Texas Register* (35 TexReg 10157) and will not be republished.

The amended section will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the state implementation plan (SIP).

Background and Summary of the Factual Basis for the Adopted Rule

The commission adopts the amendment to §106.4 to address the applicable significant emission thresholds for particulate matter (PM), PM 10 micrometers or less (PM_{10}), and PM 2.5 micrometers or less ($PM_{2.5}$) to provide clarity to the permitting process for PM.

On July 18, 1997, the EPA revised the National Ambient Air Quality Standards (NAAQS) for PM to add new standards for $PM_{2.5}$ as an indicator. However, at that time, certain difficulties regarding implementation of the $PM_{2.5}$ regulations remained, including the lack of necessary tools to calculate emissions of $PM_{2.5}$ and related precursors, the lack of adequate modeling techniques to project ambient impacts, and the lack of $PM_{2.5}$ monitoring sites. Therefore, on October 23, 1997, EPA issued a memorandum providing

for PM_{10} to be used as a surrogate for $PM_{2.5}$. EPA reaffirmed use of the surrogate policy in a memorandum dated April 5, 2005.

On November 1, 2005, the EPA proposed regulations to implement the New Source Review (NSR) program for $PM_{2.5}$. EPA published the bulk of the major NSR program final regulations for $PM_{2.5}$ on May 16, 2008 (effective on July 15, 2008). EPA noted that this final action, with EPA's proposed rule on increments, significant impact levels (SILs), and significant monitoring concentration (SMC) when final, will represent the final elements necessary to implement a $PM_{2.5}$ Prevention of Significant Deterioration (PSD) program. EPA published the final rule on increments, SILs, and SMC on October 20, 2010 (effective December 20, 2010 for the SILs and SMC, and October 20, 2011 for the increment demonstration). On February 11, 2010, the EPA proposed two actions that would end the EPA's 1997 policy allowing sources and permitting authorities to use a demonstration of compliance with the PSD requirements for PM_{10} as a surrogate for meeting the PSD requirements for $PM_{2.5}$. In the first action, the EPA proposed to repeal the "grandfathering" provision for $PM_{2.5}$ contained in the federal PSD program. This provision allows applicants for proposed new major sources and major modifications that have submitted a complete PSD permit application prior to the effective date of an amendment to the PSD regulations but have not yet received final and effective PSD permit, to continue relying on information already in the application rather than immediately having to amend applications to demonstrate compliance with the new PSD requirements. In the second action, EPA also proposed to end early the PM_{10} Surrogate

Policy applicable in states that have an approved PSD program in their SIP. The three-year transition period for revising the SIP and for use of the surrogate policy ends in May 2011, unless revised by EPA. In an effort to ensure the TCEQ meets regulatory requirements of the Federal Clean Air Act (FCAA), the commission is adopting amendments to 30 TAC Chapter 101, General Air Quality Rules, and to Chapter 106 to add specific definitions related to $PM_{2.5}$ regulation, and to address the known requirements for implementation.

Existing federal regulations require both major and minor NSR programs to address any pollutant for which there is a NAAQS and precursors to the formation of such pollutant when identified for regulation by the EPA. TCEQ rules outline the requirements for both major and minor NSR programs under 30 TAC §116.110, Applicability. This section requires any person who plans to construct any new facility or to engage in the modification of any existing facility which may emit air contaminants into the air of this state to obtain a permit under §116.111, General Application, or satisfy the conditions for another authorization type as listed within that section. Chapter 116, Subchapter B, New Source Review Permits, outlines the general requirements for both minor and major NSR permits. Specifically, §116.111 covers the general application requirements for both major and minor NSR. Minor NSR sources are required to comply with §116.111 except §116.111(a)(2)(H) and (I), which only apply to major NSR (Nonattainment and PSD).

For precursors, EPA provided some clarification regarding regulation of $PM_{2.5}$ precursors in the May 16, 2008, $PM_{2.5}$ implementation rule, stating that generally where scientific data and modeling analyses provide reasonable certainty that the pollutant's emissions are a significant contributor to ambient $PM_{2.5}$ concentrations, EPA believes that pollutant should be identified as a "regulated NSR pollutant" and subject to the $PM_{2.5}$ NSR provisions. Conversely, where the effect of a pollutant's emission on ambient $PM_{2.5}$ concentrations is subject to substantial uncertainty, such that in some circumstances the pollutant may not result in the formation of $PM_{2.5}$, or control of the pollutant may have no effect or may even aggravate air quality, EPA generally believes it is unreasonable to establish a nationally-applicable presumption that the pollutant is a regulated NSR pollutant subject to the requirements of NSR for $PM_{2.5}$. Therefore, EPA has established certain presumptions regarding the $PM_{2.5}$ precursors, sulfur dioxide (SO_2), nitrogen oxide (NO_X), volatile organic compound (VOC) and ammonia. Specifically, EPA presumes SO_2 and NO_X to be significant contributors to ambient $PM_{2.5}$ concentrations in all areas and thus, have termed these pollutants "presumed in," meaning requiring regulation as a precursor for $PM_{2.5}$. Conversely, the final rule does not require regulation of VOC or ammonia as a precursor to $PM_{2.5}$ for the NSR program because additional research and technical tools are necessary to characterize the emissions inventories for VOC, and there is considerable uncertainty related to ammonia as a precursor. Therefore, EPA has categorized these pollutants as "presumed out," meaning not regulated as a precursor for $PM_{2.5}$ regulation. However, states have

the option to exclude NO_X, as a precursor by demonstrating that NO_X emissions are not a significant contributor to ambient $PM_{2.5}$ concentrations in a particular area. In addition, states have the option of identifying VOC and/or ammonia as precursor(s) by demonstrating that emissions for VOC and/or ammonia are a significant contributor in an area, and thus, should be subject to major NSR.

Furthermore, in the Final Rule for increments, SILs, and SMC, EPA removed the reference to "direct" $PM_{2.5}$ emissions, to allow for consideration of precursor emissions when determining whether the air quality impact of a major new source or modification would be less than the $PM_{2.5}$ SILs. EPA has indicated that estimating techniques are being developed that will be able to be applied to the $PM_{2.5}$ analysis in the near future. Removing the reference to direct emissions in the rule also allows EPA to include precursor emissions through guidance without notice and comment required for rulemaking. Furthermore, EPA may require precursors be included in "photochemical" modeling to obtain concentrations that could include direct and secondarily formed PM2.5 in the source impact and air quality analyses.

EPA has also provided clarification regarding regulation of condensable PM under the $PM_{2.5}$ regulations stating it will not require states to address condensable PM in establishing enforceable emissions limits for either PM_{10} or $PM_{2.5}$ in NSR permits during the transitional period that ended on January 1, 2011. During this transitional period,

EPA assessed the capabilities of test methods available for measuring condensable emissions, publishing a final rule for methods of measuring filterable PM_{10} and $PM_{2.5}$ and measuring condensable PM emissions on December 21, 2010. The final rule promulgates amendments to Methods 201A and 202. The final amendments to Method 201A add a particulate-sizing device to allow for sampling of PM with mean aerodynamic diameters less than or equal to $PM_{2.5}$. The final amendments to Method 202 revise the sample collection and recovery procedures of the method to reduce the formation of reaction artifacts that could lead to inaccurate measurements of condensable PM. Additionally, the final amendments to Method 202 eliminate most of the hardware and analytical options in the existing method, thereby increasing the precision of the method and improving the consistency in the measurements obtained between source tests performed under different regulatory authorities. This final rule became effective on January 1, 2011.

Finally, EPA clarified that there will be no changes to the implementation of Best Available Control Technology (BACT) requirements for $PM_{2.5}$ at major sources that are subject to the PSD program. If a new major source will emit, or have the potential to emit, a significant amount of a regulated NSR pollutant in an attainment area for that pollutant, the source must apply BACT for each emissions unit that emits the pollutant. In addition, if a physical change or operational change at an existing major source will result in a significant emissions increase and significant net emissions increase of a

regulated NSR pollutant, the source must apply BACT to each proposed emissions unit experiencing a net increase in emissions of that pollutant as a result of the physical or operational change in the unit. Under the $PM_{2.5}$ PSD program, these requirements will apply to direct $PM_{2.5}$ emissions; SO_2 emissions; and NO_X emissions, unless states demonstrate that NO_X is not a significant contributor to ambient $PM_{2.5}$ concentrations in that area; and to VOC if identified by a state as a precursor in the $PM_{2.5}$ attainment area where the source is located. Although EPA has specified that direct emissions of $PM_{2.5}$ at or above the significant emission rate (SER) would trigger a BACT analysis, EPA has not specified whether a precursor's emissions above the precursor's SER would trigger a BACT analysis for $PM_{2.5}$ if direct emissions of $PM_{2.5}$ are below the $PM_{2.5}$ SER. Therefore, it is presumed that BACT for direct $PM_{2.5}$ will apply only if direct $PM_{2.5}$ emissions are significant, and BACT for precursor pollutants will apply only if the precursor emissions equal or exceed the specific SER for the precursor pollutant.

Section Discussion

§106.4, Requirements for Permitting by Rule

The commission adopts the amendment to §106.4 to address the applicable significant emission thresholds established by EPA for PM, PM_{10}, and $PM_{2.5}$. The significant emission threshold for PM is 25 tons per year (tpy), PM_{10} is 15 tpy, and $PM_{2.5}$ is 10 tpy. Section 106.4(a)(1) and (4) has been revised to include these changes. This change will provide clarity to the permitting process for PM by including the significant levels for

PM, PM_{10}, and $PM_{2.5}$. It will not affect existing claims and is only applicable to new or modified claims under this chapter, not currently operating authorized facilities under standard exemption or permit by rule (PBR) in accordance with §106.2, Applicability.

Final Regulatory Impact Analysis

The commission reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225 and determined that the adopted rule does not meet the definition of a "major environmental rule." Texas Government Code, §2001.0225 states that a "major environmental rule" is, "a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state." While the purpose of this rulemaking is to increase protection of the environment and reduce risk to human health, it is not expected that this rulemaking will adversely affect in a material way the economy, a sector of the economy, productivity, jobs, the environment, or the public health and safety of the state or a sector of the state.

Furthermore, while the adopted rulemaking does not constitute a major environmental rule, even if it did, a regulatory impact analysis would not be required because the adopted rulemaking does not meet any of the four applicability criteria for requiring a

regulatory impact analysis for a major environmental rule. Texas Government Code, §2001.0225 applies only to a major environmental rule which: 1) exceeds a standard set by federal law, unless the rule is specifically required by state law; 2) exceeds an express requirement of state law, unless the rule is specifically required by federal law; 3) exceeds a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopts a rule solely under the general powers of the agency instead of under a specific state law. The adopted rulemaking does not meet any of the four applicability criteria listed in Texas Government Code, §2001.0225 because: 1) the proposed rulemaking is designed to meet, not exceed the relevant standard set by federal law; 2) parts of the proposed rulemaking are directly required by state law; 3) no contract or delegation agreement covers the topic that is the subject of this rulemaking; and 4) the proposed rulemaking is authorized by specific sections of THSC, Chapter 382 (also known as the Texas Clean Air Act or TCAA), which is cited in the (statutory authority) section.

The specific intent of the adopted rulemaking is to amend Chapter 106 to include the significant levels for PM, PM_{10}, and $PM_{2.5.}$ The preamble to this rulemaking clarifies how precursors and condensable emissions are addressed, that EPA has made no changes to the BACT analysis process for $PM_{2.5}$, and provides a basis for regulation of $PM_{2.5}$ emissions when the use of PM_{10} as a surrogate for $PM_{2.5}$ is no longer applicable.

Takings Impact Assessment

The commission evaluated the adopted rule and performed an analysis of whether the rule constitutes a taking under Texas Government Code, Chapter 2007. The specific purpose of the rulemaking is to facilitate implementation of new federal regulations under the NSR program. The adopted amendment would substantially advance this stated purpose by including the significant levels for PM, PM_{10}, and $PM_{2.5}$ in Chapter 106. The commission's analysis indicates that Texas Government Code, Chapter 2007 does not apply to this adopted rule because this is an action that is reasonably taken to fulfill an obligation mandated by federal law, which is exempt under Texas Government Code, §2007.003(b)(4). Specifically, EPA has promulgated new NSR regulations for $PM_{2.5}$ in accordance with 40 Code of Federal Regulations (CFR) §§52.21, 52.24, 51.160 - 51.164, 51.165, 51.165(b), and 51.166, and 40 CFR Part 51, Appendix S. TCEQ, as the administrator of the NSR program for Texas, is tasked with implementing the new federal regulations in accordance with 40 CFR §51.166 and FCAA, §107(d)(1)(A)(ii) or (iii).

Nevertheless, the commission further evaluated the adopted rule and performed an assessment of whether the rule constitutes a takings under Texas Government Code, Chapter 2007. The specific purpose of the adopted rule is to facilitate implementation of new federal regulations under the NSR program. The adopted rule would substantially advance this stated purpose by including the significant levels for PM, PM_{10}, and $PM_{2.5}$

in Chapter 106.

Promulgation and enforcement of the adopted rule would be neither a statutory nor a constitutional taking of private real property. Specifically, the subject proposed regulations do not affect a landowner's rights in private real property because this rulemaking does not burden (constitutionally), nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of the regulations. In other words, the rule does not affect private property in a manner that restricts or limits an owner's right to the property that would otherwise exist in the absence of a governmental action. Consequently, this rulemaking action does not meet the definition of a takings under Texas Government Code, §2007.002(5).

Consistency with the Coastal Management Program

The commission determined that this rulemaking action relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 *et seq*.), and commission rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. As required by §281.45(a)(3) and 31 TAC §505.11(b)(2), relating to Actions and Rules Subject to the Coastal Management Program, commission rules governing air pollutant emissions must be

consistent with the applicable goals and policies of the CMP. The commission reviewed this action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council and determined that the action is consistent with the applicable CMP goals and policies.

The CMP goal applicable to this adopted rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(l)). The adopted rule will benefit the environment by ensuring the NSR program meets applicable federal requirements, and is adequately enforceable so that air quality is protected. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with federal regulations in 40 CFR, to protect and enhance air quality in the coastal areas (31 TAC §501.32). Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and policies.

The commission invited public comment regarding the consistency with the coastal management program during the public comment period. No comments were received on the Coastal Management Program.

Effect on Sites Subject to the Federal Operating Permits Program

There should be no significant effect on facilities subject to the Federal Operating

Permits Program since APD is currently conducting reviews of sources subject to PSD and minor NSR that meet federal definitions and requirements. Permit holders may need to conduct an evaluation and determine if a revision to a Federal Operating Permit is needed to update the applicable requirements.

Public Comment

The commission held a public hearing on December 13, 2010. The comment period closed on December 20, 2010. The commission received comments from Baker Botts L.L.P. on behalf of the Texas Industry Project (TIP), an individual, and EPA. The individual and the EPA were in support of the rule project. TIP was opposed to the rule project.

Response to Comments

An individual supports this rule project and hopes TCEQ implements the new more stringent $PM_{2.5}$ and does not take the allowed SIP of 10 micrometers or less. In addition, the individual would like to see some suggested guidance in this proposed rule on formation of $PM_{2.5}$ from photochemical interaction.

The commission did not make any changes to the rule in response to this comment. The TCEQ will develop guidance to address photochemical modeling at the appropriate time when necessary.

EPA appreciates the State's proposed revisions but reminds the TCEQ that any source subject to the Greenhouse Gas permitting requirements cannot rely upon a PBR but must perform the Major NSR applicability determination.

The commission did not make any changes based on this comment. The changes adopted under this rulemaking do not address applicability to greenhouse gas permitting, but are made to facilitate implementation of $PM_{2.5}$ requirements under TCEQ rules and Texas' SIP.

TIP opposes the proposed amendments at this time since EPA has not identified a test method for measuring different types of PM and condensable $PM_{2.5}$. They also state at this time there are no federally approved test methods for measuring $PM_{2.5}$. While EPA has proposed changes to existing PM test methods in order to more accurately measure $PM_{2.5}$, EPA recognizes there are technical issues that need to be resolved. TIP states that rule comments reflect a strong desire for EPA to consider other $PM_{2.5}$ measurement approaches. There are concerns with sources being required to perform an emission test to demonstrate compliance with a $PM_{2.5}$ PSD permit emission limit when there are no federally approved methods, and significant technical issues remain associated with the test methods for measuring $PM_{2.5}$. TCEQ should allow regulated entities to use test methods that are shown to be equivalent rather than limiting sources to only the method

or methods promulgated by EPA. EPA issued additional $PM_{2.5}$ rules on October 20, 2010, establishing significant impact levels and de minimis monitoring levels for $PM_{2.5}$. TIP is concerned that this proposal does not address the concepts established in that rulemaking.

The commission did not make any changes to the rule in response to these comments. EPA proposed rulemaking for repealing the Grandfathered Provisions, Implementation of the NSR Program for $PM_{2.5}$; Notice of Proposed Rulemaking to repeal Grandfathering Provision and the end to the PM_{10} Surrogate policy prior to the May 16, 2011 deadline, which has not been finalized. In efforts to ensure the TCEQ meets regulatory requirements of the FCAA, the commission is adopting amendments to add specific definitions related to $PM_{2.5}$ regulation and to address known requirements for implementation.

Subsequent to receipt of TIP's comments, EPA published the final rule on the Methods for Measurement of Filterable PM_{10} and $PM_{2.5}$ and Measurement of Condensable PM Emissions (75 *Federal Register* 80118, December 21, 2010).

This adoption addresses known requirements to date in order to meet the

May 16, 2011 deadline for implementation of the PM2.5 requirements and the end of the PM_{10} Surrogate policy. TCEQ will consider any future rule making, as necessary to address future state or federal regulatory requirements.

SUBCHAPTER A: GENERAL REQUIREMENTS

§106.4

Statutory Authority

The amendment is adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amendment is also adopted under THSC, §382.002, concerning Policy and Purpose, which establishes the commission purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.003, concerning Definitions; §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; §382.051, concerning Permitting Authority of Commission; Rules, which authorizes the commission to issue a permit by rule for types of facilities that will not significantly contribute air contaminants to the atmosphere; §382.0513, concerning Permit Conditions, which authorizes the commission to establish and enforce permit

conditions; and §382.0514, concerning Sampling, Monitoring, and Certification.

The adopted amendment implements THSC, §§382.002, 382.003, 382.011, 382.012, 382.051, 382.0513, and 382.0514.

§106.4. Requirements for Permitting by Rule.

(a) To qualify for a permit by rule, the following general requirements must be met.

(1) Total actual emissions authorized under permit by rule from the facility shall not exceed 250 tons per year (tpy) of carbon monoxide (CO) or nitrogen oxides (NO_X); or 25 tpy of volatile organic compounds (VOC) or sulfur dioxide (SO_2) or inhalable particulate matter (PM); or 15 tpy of particulate matter with diameters of 10 microns or less (PM_{10}); or 10 tpy of particulate matter with diameters of 2.5 microns or less ($PM_{2.5}$); or 25 tpy of any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen.

(2) Any facility or group of facilities, which constitutes a new major stationary source, as defined in §116.12 of this title (relating to Nonattainment and Prevention of Significant Deterioration Review Definitions), or any modification which

constitutes a major modification, as defined in §116.12 of this title, under the new source review requirements of the Federal Clean Air Act (FCAA), Part D (Nonattainment) as amended by the FCAA Amendments of 1990, and regulations promulgated thereunder, must meet the permitting requirements of Chapter 116, Subchapter B of this title (relating to New Source Review Permits) and cannot qualify for a permit by rule under this chapter. Persons claiming a permit by rule under this chapter should see the requirements of §116.150 of this title (relating to New Major Source or Major Modification in Ozone Nonattainment Areas) to ensure that any applicable netting requirements have been satisfied.

(3) Any facility or group of facilities, which constitutes a new major stationary source, as defined in 40 Code of Federal Regulations (CFR) §52.21, or any change which constitutes a major modification, as defined in 40 CFR §52.21, under the new source review requirements of the FCAA, Part C (Prevention of Significant Deterioration) as amended by the FCAA Amendments of 1990, and regulations promulgated thereunder, must meet the permitting requirements of Chapter 116, Subchapter B of this title and cannot qualify for a permit by rule under this chapter.

(4) Unless at least one facility at an account has been subject to public notification and comment as required in Chapter 116, Subchapter B or Subchapter D of this title (relating to New Source Review Permits or Permit Renewals), total actual

emissions from all facilities permitted by rule at an account shall not exceed 250 tpy of CO or NO_X; or 25 tpy of VOC or SO_2 or PM ; or 15 tpy of PM_{10}; or 10 tpy of $PM_{2.5}$; or 25 tpy of any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen.

(5) Construction or modification of a facility commenced on or after the effective date of a revision of this section or the effective date of a revision to a specific permit by rule in this chapter must meet the revised requirements to qualify for a permit by rule.

(6) A facility shall comply with all applicable provisions of the FCAA, §111 (Federal New Source Performance Standards) and §112 (Hazardous Air Pollutants), and the new source review requirements of the FCAA, Part C and Part D and regulations promulgated thereunder.

(7) There are no permits under the same commission account number that contain a condition or conditions precluding the use of a permit by rule under this chapter.

(8) The proposed facility or group of facilities shall obtain allowances for NO_X if they are subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program).

(b) No person shall circumvent by artificial limitations the requirements of §116.110 of this title (relating to Applicability).

(c) The emissions from the facility shall comply with all rules and regulations of the commission and with the intent of the Texas Clean Air Act (TCAA), including protection of health and property of the public, and all emissions control equipment shall be maintained in good condition and operated properly during operation of the facility.

(d) Facilities permitted by rule under this chapter are not exempted from any permits or registrations required by local air pollution control agencies. Any such requirements must be in accordance with TCAA, §382.113 and any other applicable law.