The Texas Commission on Environmental Quality (TCEQ or commission) adopts the amendment to §101.1.

The amendment is adopted *with changes* to the proposed text as published in the November 19, 2010, issue of the *Texas Register* (35 TexReg 10147) and will be republished.

The amendment 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

This rulemaking adds clarifying definitions to TCEQ rules necessary for proper implementation of new and revised federal regulations regarding the National Ambient Air Quality Standard (NAAQS) for particulate matter (PM).

On July 18, 1997, the EPA revised the NAAQS for PM to add new standards for fine particles using PM with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers ($PM_{2.5}$) 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 with an aerodynamic diameter less than or equal to a nominal 10 micrometers (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 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. The 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 Chapter 101 and 30 TAC Chapter 106, Permits by Rule, 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 all sections of §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 they 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 particulate matter 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 particulate matter. 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 has 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

The commission adopts the amendment to §101.1, Definitions, to remove the figure in §101.1(25) providing the *de minimis* impact levels for SO_2, PM_{10}, nitrogen dioxide (NO_2),

and carbon monoxide (CO). In its place, the definition will reference 40 Code of Federal Regulations (CFR) §51.165(b)(2). 40 CFR §51.165(b)(2) provides the significance levels, above which a major source or major modification would be considered to cause or contribute to a violation of the NAAQS when such source or modification would, at a minimum, exceed the listed significance levels. In addition, the commission is adopting changes to §101.1(75), which currently defines PM. The adoption will move the definition for PM_{10} from §101.1(78) to §101.1(75)(A), and add the definition for $PM_{2.5}$ under §101.1(75)(B). PM emissions is defined under §101.1(76). This section will be amended to include §101.1(76)(A) and (B), which will define direct and secondary PM emissions. The definitions for direct and secondary PM emissions were changed from proposal due to EPA's comment. $PM_{2.5}$ emissions will be defined under existing §101.1(78) when the definition for PM_{10} is moved to new §101.1(75)(A). These changes will provide the definitions for PM_{10} and $PM_{2.5}$ emissions and the definitions for direct and secondary PM emissions which currently do not exist. The definition of $PM_{2.5}$ emissions in §101.1(78) has been amended to address continuing technical issues associated with the measurement of $PM_{2.5}$ in wet gas streams. EPA acknowledged in promulgating amendments to its particulate matter measurement methods that "using Method 5 on stacks with entrained moisture and assuming that the catch is $PM_{2.5}$ can potentially overestimate $PM_{2.5}$ concentrations. ... Monitoring the emission of PM_{10} or $PM_{2.5}$ from a wet gas stream is a challenging problem that has not been addressed successfully despite considerable effort." EPA further notes that state permitting

authorities have the responsibility to interpret EPA's recommendations regarding wet gas measurement (December 21, 2010, issue of the Federal Register (FR) (75 FR 80,117, 80,126)). Based on these technical issues and the commission's interpretation of EPA's recommendations, the final language of §101.1(78) has been amended to allow the use of test methods approved under the SIP or an EPA delegation or approval. Finally, the federal significant monitoring concentration for $PM_{2.5}$, 4 micrograms per cubic meter 24-hour average, also applies to Texas $PM_{2.5}$ sources.

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 Health and Safety Code (THSC), §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 adopted rulemaking is designed to meet, not exceed the relevant standard set by federal law; 2) parts of the adopted 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 adopted rulemaking is authorized by specific sections of THSC, Chapter 382 (also known as the TCAA), which is cited in the (statutory authority) section.

The specific intent of the adopted rulemaking is to amend Chapter 101 to add definitions necessary for implementation of $PM_{2.5}$ NSR regulations, and replace current definitions

with references to federal definitions for efficiency. 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 adopted 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 adding definitions to Chapter 101, necessary for implementation of the $PM_{2.5}$ regulations. The commission's analysis indicates that Texas Government Code, Chapter 2007 does not apply to the 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 CFR §§52.21, 52.24, 51.160 - 51.164, 51.165, 51.165(b), 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 adopted 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 adding new definitions to Chapter 101, necessary for implementation of the $PM_{2.5}$ regulations.

Promulgation and enforcement of the adopted rule would be neither a statutory nor a constitutional taking of private real property. Specifically, the subject adopted 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 amendment will indirectly benefit the environment because it will require $PM_{2.5}$ emissions to be evaluated for compliance not to exceed significance levels which will ensure that there will be fewer adverse impacts to public health and the environment. 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. EPA did suggest changes to the definitions of "Direct PM Emissions" and "Secondary PM Emissions." 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 state implementation plan 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 non-rule guidance to address photochemical modeling.

EPA appreciates the state's proposed revisions but has concerns over the proposed definitions for "Direct PM Emissions" and "Secondary PM Emissions." EPA states the definitions are similar to, but not identical to the definitions of "Direct $PM_{2.5}$" and "$PM_{2.5}$ precursor" in 40 CFR §51.1000. EPA states that TCEQ must either use the federal definitions or provide a demonstration that its proposed definition is as stringent as or more stringent than the federal definitions. If Texas excludes NO_X as a $PM_{2.5}$ precursor, it must provide a demonstration that NO_X is not a significant contributor to ambient $PM_{2.5}$. Texas may include VOCs and ammonia and $PM_{2.5}$ precursors if Texas has identified these substances as significant contributors to ambient $PM_{2.5}$.

EPA also noted that they have 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 the PM_{10} Surrogate policy

prior to the May 16, 2011 deadline, but has not yet taken final action.

EPA also issued a recent order in response to a Title V petition for Louisville Gas and Electric Company (LG&E), located in Trimble County, Kentucky, that discussed use of PM_{10} as a surrogate for $PM_{2.5}$. They remind TCEQ and sources in Texas to carefully consider the case law and the limits of the Surrogate policy discussed in the LG&E petition decision to determine what information and analysis needs to be included in the permit application and permit record before relying on the Surrogate policy.

The commission did make changes to the proposed text based on the comment that the definitions for "Direct PM Emissions" and "Secondary PM Emissions" are similar to, but not identical to the definitions of "Direct $PM_{2.5}$" and "$PM_{2.5}$ precursor" in 40 CFR §51.1000. The proposed definitions were derived from EPAs *Federal Register* notice (73 Federal Register 28341, May 16, 2008). The proposed definitions have been revised to be identical to the definitions of "Direct $PM_{2.5}$" and "$PM_{2.5}$ precursor" in 40 CFR §51.1000.

The commission appreciates EPA' comments and continues to track developments on case law and EPA's policies concerning PM2.5 issues.

TIP opposes the proposed amendment 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. This rulemaking is necessary since 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 has 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 rulemaking, as necessary to address future state or federal regulatory requirements.

SUBCHAPTER A: GENERAL RULES

§101.1

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.

§101.1. Definitions.

Unless specifically defined in the Texas Clean Air Act (TCAA) or in the rules of the commission, the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition to the terms that are defined by the TCAA, the following terms, when used in the air quality rules in this title, have the following meanings, unless the context clearly indicates otherwise.

(1) **Account**--For those sources required to be permitted under Chapter 122 of this title (relating to Federal Operating Permits Program), all sources that are aggregated as a site. For all other sources, any combination of sources under common ownership or control and located on one or more contiguous properties, or properties contiguous except for intervening roads, railroads, rights-of-way, waterways, or similar divisions.

(2) **Acid gas flare**--A flare used exclusively for the incineration of hydrogen sulfide and other acidic gases derived from natural gas sweetening processes.

(3) **Agency established facility identification number**--For the purposes of Subchapter F of this chapter (relating to Emissions Events and Scheduled Maintenance, Startup, and Shutdown Activities), a unique alphanumeric code required to be assigned by the owner or operator of a regulated entity that the emission inventory reporting requirements of §101.10 of this title (relating to Emissions Inventory Requirements) are applicable to each facility at that regulated entity.

(4) **Ambient air**--That portion of the atmosphere, external to buildings, to which the general public has access.

(5) **Background**--Background concentration, the level of air contaminants that cannot be reduced by controlling emissions from man-made sources. It is determined by measuring levels in non-urban areas.

(6) **Boiler**--Any combustion equipment fired with solid, liquid, and/or gaseous fuel used to produce steam or to heat water.

(7) **Capture system**--All equipment (including, but not limited to, hoods, ducts, fans, booths, ovens, dryers, etc.) that contains, collects, and transports an air pollutant to a control device.

(8) **Captured facility**--A manufacturing or production facility that generates an industrial solid waste or hazardous waste that is routinely stored, processed, or disposed of on a shared basis in an integrated waste management unit owned, operated by, and located within a contiguous manufacturing complex.

(9) **Carbon adsorber**--An add-on control device that uses activated carbon to adsorb volatile organic compounds from a gas stream.

(10) **Carbon adsorption system**--A carbon adsorber with an inlet and outlet for exhaust gases and a system to regenerate the saturated adsorbent.

(11) **Coating**--A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives, thinners, diluents, inks, maskants, and temporary protective coatings.

(12) **Cold solvent cleaning**--A batch process that uses liquid solvent to remove soils from the surfaces of parts or to dry the parts by spraying, brushing, flushing, and/or immersion while maintaining the solvent below its boiling point. Wipe cleaning (hand cleaning) is not included in this definition.

(13) **Combustion unit**--Any boiler plant, furnace, incinerator, flare, engine, or other device or system used to oxidize solid, liquid, or gaseous fuels, but excluding motors and engines used in propelling land, water, and air vehicles.

(14) **Combustion turbine**--Any gas turbine system that is gas and/or liquid fuel fired with or without power augmentation. This unit is either attached to a foundation or is portable equipment operated at a specific minor or major source for more than 90 days in any 12-month period. Two or more gas turbines powering one shaft will be treated as one unit.

(15) **Commercial hazardous waste management facility**--Any hazardous waste management facility that accepts hazardous waste or polychlorinated biphenyl compounds for a charge, except a captured facility that disposes only waste generated on-site or a facility that accepts waste only from other facilities owned or effectively controlled by the same person.

(16) **Commercial incinerator**--An incinerator used to dispose of waste material from retail and wholesale trade establishments.

(17) **Commercial medical waste incinerator**--A facility that accepts for incineration medical waste generated outside the property boundaries of the facility.

(18) **Component**--A piece of equipment, including, but not limited to, pumps, valves, compressors, and pressure relief valves that has the potential to leak volatile organic compounds.

(19) **Condensate**--Liquids that result from the cooling and/or pressure changes of produced natural gas. Once these liquids are processed at gas plants or refineries or in any other manner, they are no longer considered condensates.

(20) **Construction-demolition waste**--Waste resulting from construction or demolition projects.

(21) **Control system or control device**--Any part, chemical, machine, equipment, contrivance, or combination of same, used to destroy, eliminate, reduce, or control the emission of air contaminants to the atmosphere.

(22) **Conveyorized degreasing**--A solvent cleaning process that uses an automated parts handling system, typically a conveyor, to automatically provide a continuous supply of parts to be cleaned or dried using either cold solvent or vaporized solvent. A conveyorized degreasing process is fully enclosed except for the conveyor inlet and exit portals.

(23) **Criteria pollutant or standard**--Any pollutant for which there is a national ambient air quality standard established under 40 Code of Federal Regulations Part 50.

(24) **Custody transfer**--The transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(25) ***De minimis* impact**--A change in ground level concentration of an air contaminant as a result of the operation of any new major stationary source or of the operation of any existing source that has undergone a major modification that does not exceed the significance levels as specified in 40 Code of Regulations (CFR) §51.165(b)(2) [following specified amounts].

[Figure: 30 TAC §101.1(25)]

AIR CONTAMINANT	**ANNUAL**	**24-HOUR**	**8-HOUR**	**3-HOUR**	**1-HOUR**
Inhalable Particulate Matter	1.0 $\mu g/m^3$	5 $\mu g/m^3$			

(PM_{10})					
Sulfur Dioxide	1.0 μg/m^3	5 μg/m^3		25 μg/m^3	
Nitrogen Dioxide	1.0 μg/m^3				
Carbon Monoxide			0.5 mg/m^3		2 mg/m^3

(26) **Domestic wastes**--The garbage and rubbish normally resulting from the functions of life within a residence.

(27) **Emissions banking**--A system for recording emissions reduction credits so they may be used or transferred for future use.

(28) **Emissions event**--Any upset event or unscheduled maintenance, startup, or shutdown activity, from a common cause that results in unauthorized emissions of air contaminants from one or more emissions points at a regulated entity.

(29) **Emissions reduction credit**--Any stationary source emissions reduction that has been banked in accordance with Chapter 101, Subchapter H, Division 1 of this title (relating to Emission Credit Banking and Trading).

(30) **Emissions reduction credit certificate**--The certificate issued by the executive director that indicates the amount of qualified reduction available for use as offsets and the length of time the reduction is eligible for use.

(31) **Emissions unit**--Any part of a stationary source that emits, or would have the potential to emit, any pollutant subject to regulation under the Federal Clean Air Act.

(32) **Excess opacity event**--When an opacity reading is equal to or exceeds 15 additional percentage points above an applicable opacity limit, averaged over a six-minute period.

(33) **Exempt solvent**--Those carbon compounds or mixtures of carbon compounds used as solvents that have been excluded from the definition of volatile organic compound.

(34) **External floating roof**--A cover or roof in an open top tank that rests upon or is floated upon the liquid being contained and is equipped with a single or double seal to close the space between the roof edge and tank shell. A double seal consists of two complete and separate closure seals, one above the other, containing an enclosed space between them.

(35) **Federal motor vehicle regulation**--Control of Air Pollution from Motor Vehicles and Motor Vehicle Engines, 40 Code of Federal Regulations Part 85.

(36) **Federally enforceable**--All limitations and conditions that are enforceable by the United States Environmental Protection Agency administrator, including those requirements developed under 40 Code of Federal Regulations (CFR) Parts 60 and 61; requirements within any applicable state implementation plan (SIP); and any permit requirements established under 40 CFR §52.21 or under regulations approved under 40 CFR Part 51, Subpart 1, including operating permits issued under the approved program that is incorporated into the SIP and that expressly requires adherence to any permit issued under such program.

(37) **Flare**--An open combustion unit (i.e., lacking an enclosed combustion chamber) whose combustion air is provided by uncontrolled ambient air around the flame, and that is used as a control device. A flare may be equipped with a

radiant heat shield (with or without a refractory lining), but is not equipped with a flame air control damping system to control the air/fuel mixture. In addition, a flare may also use auxiliary fuel. The combustion flame may be elevated or at ground level. A vapor combustor, as defined in this section, is not considered a flare.

(38) **Fuel oil**--Any oil meeting the American Society for Testing and Materials (ASTM) specifications for fuel oil in ASTM D396-01, Standard Specifications for Fuel Oils, revised 2001. This includes fuel oil grades 1, 1 (Low Sulfur), 2, 2 (Low Sulfur), 4 (Light), 4, 5 (Light), 5 (Heavy), and 6.

(39) **Fugitive emission**--Any gaseous or particulate contaminant entering the atmosphere that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening designed to direct or control its flow.

(40) **Garbage**--Solid waste consisting of putrescible animal and vegetable waste materials resulting from the handling, preparation, cooking, and consumption of food, including waste materials from markets, storage facilities, and handling and sale of produce and other food products.

(41) **Gasoline**--Any petroleum distillate having a Reid vapor pressure of four pounds per square inch (27.6 kilopascals) or greater that is produced for use as a motor fuel, and is commonly called gasoline.

(42) **Hazardous wastes**--Any solid waste identified or listed as a hazardous waste by the administrator of the United States Environmental Protection Agency under the federal Solid Waste Disposal Act, as amended by Resource Conservation and Recovery Act, 42 United States Code, §§6901 *et seq*., as amended.

(43) **Heatset (used in offset lithographic printing)**--Any operation where heat is required to evaporate ink oil from the printing ink. Hot air dryers are used to deliver the heat.

(44) **High-bake coatings**--Coatings designed to cure at temperatures above 194 degrees Fahrenheit.

(45) **High-volume low-pressure spray guns**--Equipment used to apply coatings by means of a spray gun that operates between 0.1 and 10.0 pounds per square inch gauge air pressure measured at the air cap.

(46) **Incinerator**--An enclosed combustion apparatus and attachments that is used in the process of burning wastes for the primary purpose of reducing its volume and weight by removing the combustibles of the waste and is equipped with a flue for conducting products of combustion to the atmosphere. Any combustion device that burns 10% or more of solid waste on a total British thermal unit (Btu) heat input basis averaged over any one-hour period is considered to be an incinerator. A combustion device without instrumentation or methodology to determine hourly flow rates of solid waste and burning 1.0% or more of solid waste on a total Btu heat input basis averaged annually is also considered to be an incinerator. An open-trench type (with closed ends) combustion unit may be considered an incinerator when approved by the executive director. Devices burning untreated wood scraps, waste wood, or sludge from the treatment of wastewater from the process mills as a primary fuel for heat recovery are not included under this definition. Combustion devices permitted under this title as combustion devices other than incinerators will not be considered incinerators for application of any rule within this title provided they are installed and operated in compliance with the condition of all applicable permits.

(47) **Industrial boiler**--A boiler located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes.

(48) **Industrial furnace**--Cement kilns; lime kilns; aggregate kilns; phosphate kilns; coke ovens; blast furnaces; smelting, melting, or refining furnaces, including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, or foundry furnaces; titanium dioxide chloride process oxidation reactors; methane reforming furnaces; pulping recovery furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; and other devices the commission may list.

(49) **Industrial solid waste**--Solid waste resulting from, or incidental to, any process of industry or manufacturing, or mining or agricultural operations, classified as follows.

(A) Class 1 industrial solid waste or Class 1 waste is any industrial solid waste designated as Class 1 by the executive director as any industrial solid waste or mixture of industrial solid wastes that because of its concentration or physical or chemical characteristics is toxic, corrosive, flammable, a strong sensitizer or irritant, a generator of sudden pressure by decomposition, heat, or other means, and may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, or otherwise managed, including hazardous industrial waste, as defined in §335.1 and §335.505 of this title (relating to Definitions and Class 1 Waste Determination).

(B) Class 2 industrial solid waste is any individual solid waste or combination of industrial solid wastes that cannot be described as Class 1 or Class 3, as defined in §335.506 of this title (relating to Class 2 Waste Determination).

(C) Class 3 industrial solid waste is any inert and essentially insoluble industrial solid waste, including materials such as rock, brick, glass, dirt, and certain plastics and rubber, etc., that are not readily decomposable as defined in §335.507 of this title (relating to Class 3 Waste Determination).

(50) **Internal floating cover**--A cover or floating roof in a fixed roof tank that rests upon or is floated upon the liquid being contained, and is equipped with a closure seal or seals to close the space between the cover edge and tank shell.

(51) **Leak**--A volatile organic compound concentration greater than 10,000 parts per million by volume or the amount specified by applicable rule, whichever is lower; or the dripping or exuding of process fluid based on sight, smell, or sound.

(52) **Liquid fuel**--A liquid combustible mixture, not derived from hazardous waste, with a heating value of at least 5,000 British thermal units per pound.

(53) **Liquid-mounted seal**--A primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.

(54) **Maintenance area**-- A geographic region of the state previously designated nonattainment under the Federal Clean Air Act Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under 42 United States Code, §7505a, as described in 40 Code of Federal Regulations Part 81 and in pertinent *Federal Register* notices.

(55) **Maintenance plan**--A revision to the applicable state implementation plan, meeting the requirements of 42 United States Code, §7505a.

(56) **Marine vessel**--Any watercraft used, or capable of being used, as a means of transportation on water, and that is constructed or adapted to carry, or that carries, oil, gasoline, or other volatile organic liquid in bulk as a cargo or cargo residue.

(57) **Mechanical shoe seal**--A metal sheet that is held vertically against the storage tank wall by springs or weighted levers and is connected by braces to the

floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(58) **Medical waste**--Waste materials identified by the Department of State Health Services as "special waste from health care-related facilities" and those waste materials commingled and discarded with special waste from health care-related facilities.

(59) **Metropolitan Planning Organization**--That organization designated as being responsible, together with the state, for conducting the continuing, cooperative, and comprehensive planning process under 23 United States Code (USC), §134 and 49 USC, §1607.

(60) **Mobile emissions reduction credit**--The credit obtained from an enforceable, permanent, quantifiable, and surplus (to other federal and state rules) emissions reduction generated by a mobile source as set forth in Chapter 114, Subchapter F of this title (relating to Vehicle Retirement and Mobile Emission Reduction Credits), and that has been banked in accordance with Subchapter H, Division 1 of this chapter.

(61) **Motor vehicle**--A self-propelled vehicle designed for transporting persons or property on a street or highway.

(62) **Motor vehicle fuel dispensing facility**--Any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks.

(63) **Municipal solid waste**--Solid waste resulting from, or incidental to, municipal, community, commercial, institutional, and recreational activities, including garbage, rubbish, ashes, street cleanings, dead animals, abandoned automobiles, and all other solid waste except industrial solid waste.

(64) **Municipal solid waste facility**--All contiguous land, structures, other appurtenances, and improvements on the land used for processing, storing, or disposing of solid waste. A facility may be publicly or privately owned and may consist of several processing, storage, or disposal operational units, e.g., one or more landfills, surface impoundments, or combinations of them.

(65) **Municipal solid waste landfill**--A discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 Code of Federal Regulations §257.2. A municipal solid waste landfill (MSWLF) unit also may

receive other types of Resource Conservation and Recovery Act Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small-quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. An MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion.

(66) **National ambient air quality standard**--Those standards established under 42 United States Code, §7409, including standards for carbon monoxide, lead, nitrogen dioxide, ozone, inhalable particulate matter, and sulfur dioxide.

(67) **Net ground-level concentration**--The concentration of an air contaminant as measured at or beyond the property boundary minus the representative concentration flowing onto a property as measured at any point. Where there is no expected influence of the air contaminant flowing onto a property from other sources, the net ground level concentration may be determined by a measurement at or beyond the property boundary.

(68) **New source**--Any stationary source, the construction or modification of which was commenced after March 5, 1972.

(69) **Nitrogen oxides (NO_X)**--The sum of the nitric oxide and nitrogen dioxide in the flue gas or emission point, collectively expressed as nitrogen dioxide.

(70) **Nonattainment area**-- A defined region within the state that is designated by the United States Environmental Protection Agency (EPA) as failing to meet the national ambient air quality standard (NAAQS or standard) for a pollutant for which a standard exists. The EPA will designate the area as nonattainment under the provisions of 42 United States Code, §7407(d). For the official list and boundaries of nonattainment areas, see 40 Code of Federal Regulations (CFR) Part 81 and pertinent *Federal Register* notices. The designations and classifications for the one-hour ozone national ambient air quality standard in 40 CFR Part 81 were retained for the purpose of anti-backsliding and upon determination by the EPA that any requirement is no longer required for purposes of anti-backsliding, then that requirement no longer applies.

(71) **Non-reportable emissions event**--Any emissions event that in any 24-hour period does not result in an unauthorized emission from any emissions point equal to or in excess of the reportable quantity as defined in this section.

(72) **Opacity**--The degree to which an emission of air contaminants obstructs the transmission of light expressed as the percentage of light obstructed as measured by an optical instrument or trained observer.

(73) **Open-top vapor degreasing**--A batch solvent cleaning process that is open to the air and that uses boiling solvent to create solvent vapor used to clean or dry parts through condensation of the hot solvent vapors on the parts.

(74) **Outdoor burning**--Any fire or smoke-producing process that is not conducted in a combustion unit.

(75) **Particulate matter**--Any material, except uncombined water, that exists as a solid or liquid in the atmosphere or in a gas stream at standard conditions.

(A) Particulate matter with diameters less than 10 micrometers (PM_{10})--Particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers as measured by a reference method based on 40 Code of Federal Regulations (CFR) Part 50, Appendix J, and designated in accordance with 40 CFR Part 53, or by an equivalent method designated with that Part 53.

(B) Particulate matter with diameters less than 2.5 micrometers ($PM_{2.5}$)--Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR Part 50,

Appendix L, and designated in accordance with 40 CFR Part 53, or by an equivalent method designated with that Part 53.

(76) **Particulate matter emissions**--All finely-divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by United States Environmental Protection Agency Reference Method 5, as specified at 40 Code of Federal Regulations (CFR) Part 60, Appendix A, modified to include particulate caught by an impinger train; by an equivalent or alternative method, as specified at 40 CFR Part 51; or by a test method specified in an approved state implementation plan.

(A) Direct PM emissions-- Solid particles emitted directly from an air emissions source or activity, or gaseous emissions or liquid droplets from an air emissions source or activity which condense to form particulate matter at ambient temperatures. Direct 2.5 micrometers ($PM_{2.5}$) emissions include elemental carbon, directly emitted organic carbon, directly emitted sulfate, directly emitted nitrate, and other inorganic particles (including but not limited to crustal materials, metals, and sea salt)~~Particulate matter that is emitted directly into the air as a solid or liquid particle (e.g. elemental carbon from diesel engines or fire activities, or condensable organic particles from gasoline engines)~~.

(B) Secondary PM emissions-- Those air pollutants other than $PM_{2.5}$ direct emissions that contribute to the formation of $PM_{2.5}$. $PM_{2.5}$ precursors

include sulfur dioxide (SO_2), NO_X, volatile organic compounds, and ammonia

~~Particulate matter that is formed in the atmosphere as a result of various chemical reactions (e.g. sulfate and nitrate)~~.

(77) **Petroleum refinery**--Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oil, or through the redistillation, cracking, extraction, reforming, or other processing of unfinished petroleum derivatives.

(78) **$PM_{2.5}$ emissions**--Finely-divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method specified in 40 Code of Federal Regulations Part 51, or by a test method ~~specified in~~ approved under a ~~approved~~ state implementation plan or under a United States Environmental Protection Agency delegation or approval. [PM_{10} -- Particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers as measured by a reference method based on 40 Code of Federal Regulations (CFR) Part 50, Appendix J, and designated in accordance with 40 CFR Part 53, or by an equivalent method designated with that Part 53.]

(79) **PM_{10} emissions**--Finely-divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal ten micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method specified in 40 Code of Federal Regulations Part 51, or by a test method specified in an approved state implementation plan.

(80) **Polychlorinated biphenyl compound**--A compound subject to 40 Code of Federal Regulations Part 761.

(81) **Process or processes**--Any action, operation, or treatment embracing chemical, commercial, industrial, or manufacturing factors such as combustion units, kilns, stills, dryers, roasters, and equipment used in connection therewith, and all other methods or forms of manufacturing or processing that may emit smoke, particulate matter, gaseous matter, or visible emissions.

(82) **Process weight per hour**--"Process weight" is the total weight of all materials introduced or recirculated into any specific process that may cause any discharge of air contaminants into the atmosphere. Solid fuels charged into the process will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. The "process weight per hour" will be derived by dividing the total process weight by the number of hours in one complete operation from the

beginning of any given process to the completion thereof, excluding any time during that the equipment used to conduct the process is idle. For continuous operation, the "process weight per hour" will be derived by dividing the total process weight for a 24-hour period by 24.

(83) **Property**--All land under common control or ownership coupled with all improvements on such land, and all fixed or movable objects on such land, or any vessel on the waters of this state.

(84) **Reasonable further progress**--Annual incremental reductions in emissions of the applicable air contaminant that are sufficient to provide for attainment of the applicable national ambient air quality standard in the designated nonattainment areas by the date required in the state implementation plan.

(85) **Regulated entity**--All regulated units, facilities, equipment, structures, or sources at one street address or location that are owned or operated by the same person. The term includes any property under common ownership or control identified in a permit or used in conjunction with the regulated activity at the same street address or location. Owners or operators of pipelines, gathering lines, and flowlines under common ownership or control in a particular county may be treated as a single regulated entity for purposes of assessment and regulation of emissions events.

(86) **Remote reservoir cold solvent cleaning**--Any cold solvent cleaning operation in which liquid solvent is pumped to a sink-like work area that drains solvent back into an enclosed container while parts are being cleaned, allowing no solvent to pool in the work area.

(87) **Reportable emissions event**--Any emissions event that in any 24-hour period, results in an unauthorized emission from any emissions point equal to or in excess of the reportable quantity as defined in this section.

(88) **Reportable quantity (RQ)**--Is as follows:

(A) for individual air contaminant compounds and specifically listed mixtures by name or Chemical Abstracts Service (CAS) number, either:

(i) the lowest of the quantities:

(I) listed in 40 Code of Federal Regulations (CFR) Part 302, Table 302.4, the column "final RQ";

(II) listed in 40 CFR Part 355, Appendix A, the column "Reportable Quantity"; or

(III) listed as follows:

(-a-) acetaldehyde - 1,000 pounds, except in the Houston-Galveston-Brazoria (HGB) and Beaumont-Port Arthur (BPA) ozone nonattainment areas as defined in paragraph (70) of this section, where the RQ must be 100 pounds;

(-b-) butanes (any isomer) - 5,000 pounds;

(-c-) butenes (any isomer, except 1,3-butadiene) - 5,000 pounds, except in the HGB and BPA ozone nonattainment areas as defined in paragraph (70) of this section, where the RQ must be 100 pounds;

(-d-) carbon monoxide - 5,000 pounds;

(-e-) 1-chloro-1,1-difluoroethane (HCFC-142b) - 5,000 pounds;

(-f-) chlorodifluoromethane (HCFC-22) - 5,000 pounds;

(-g-) 1-chloro-1-fluoroethane (HCFC-151a) - 5,000 pounds;

(-h-) chlorofluoromethane (HCFC-31) - 5,000 pounds;

(-i-) chloropentafluoroethane (CFC-115) - 5,000 pounds;

(-j-) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124) - 5,000 pounds;

(-k-) 1-chloro-1,1,2,2 tetrafluoroethane (HCFC-124a) - 5,000 pounds;

(-l-) 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee) - 5,000 pounds;

(-m-) decanes (any isomer) - 5,000 pounds;

(-n-) 1,1-dichloro-1-fluoroethane (HCFC-141b) - 5,000 pounds;

(-o-) 3,3-dichloro-1,1,2,2-pentafluoropropane (HCFC- 225ca) - 5,000 pounds;

(-p-) 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb) - 5,000 pounds;

(-q-) 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFR-114) - 5,000 pounds;

(-r-) 1,1- dichlorotetrafluoroethane (CFC-114a) - 5,000 pounds;

(-s-) 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a) - 5,000 pounds;

(-t-) 1,1-difluoroethane (HFC-152a) - 5,000 pounds;

(-u-) difluoromethane (HFC-32) - 5,000 pounds;

(-v-) ethanol - 5,000 pounds;

(-w-) ethylene - 5,000 pounds, except in the HGB and BPA ozone nonattainment areas as defined in paragraph (70) of this section, where the RQ must be 100 pounds;

(-x-) ethylfluoride (HFC-161) - 5,000 pounds;

(-y-) 1,1,1,2,3,3,3-heptafluoropropane (HFC-227ea) - 5,000 pounds;

(-z-) 1,1,1,3,3,3-hexafluoropropane (HFC-236fa) - 5,000 pounds;

(-aa-) 1,1,1,2,3,3-hexafluoropropane (HFC-236ea) - 5,000 pounds;

(-bb-) hexanes (any isomer) - 5,000 pounds;

(-cc-) isopropyl alcohol - 5,000 pounds;

(-dd-) mineral spirits - 5,000 pounds;

(-ee-) octanes (any isomer) - 5,000 pounds;

(-ff-) oxides of nitrogen - 200 pounds in ozone nonattainment, ozone maintenance, early action compact areas, Nueces County, and San Patricio County, and 5,000 pounds in all other areas of the state, which should be used instead of the RQs for nitrogen oxide and nitrogen dioxide provided in 40 CFR Part 302, Table 302.4, the column "final RQ";

(-gg-) pentachlorofluoroethane (CFR-111) - 5,000 pounds;

(-hh-) 1,1,1,3,3-pentafluorobutane (HFC-365mfc) - 5,000 pounds;

(-ii-) pentafluoroethane (HFC-125) - 5,000 pounds;

(-jj-) 1,1,2,2,3-pentafluoropropane (HFC-245ca) - 5,000 pounds;

(-kk-) 1,1,2,3,3-pentafluoropropane (HFC-245ea) - 5,000 pounds;

(-ll-) 1,1,1,2,3-pentafluoropropane (HFC-245eb) - 5,000 pounds;

(-mm-) 1,1,1,3,3-pentafluoropropane (HFC-245fa) - 5,000 pounds;

(-nn-) pentanes (any isomer) - 5,000 pounds;

(-oo-) propane - 5,000 pounds;

(-pp-) propylene - 5,000 pounds, except in the HGB and BPA ozone nonattainment areas as defined in paragraph (70) of this section, where the RQ must be 100 pounds;

(-qq-) 1,1,2,2-terachlorodifluoroethane (CFR - 112) - 5,000 pounds;

(-rr-) 1,1,1,2-tetrachlorodifluoroethane (CFC-112a) -5,000 pounds;

(-ss-) 1,1,2,2-tetrafluoroethane (HFC-134) - 5,000 pounds;

(-tt-) 1,1,1,2-tetrafluoroethane (HFC-134a) - 5,000 pounds;

(-uu-) 1,1,2-trichloro-1,2,2-trifluoroethane (CFR-113) - 5,000 pounds;

(-vv-) 1,1,1-trichloro- 2,2,2- trilfloroethane (CFC- 113a) - 5,000 pounds;

(-ww-) 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123) - 5,000 pounds;

(-xx-) 1,1,1-trifluoroethane (HFC-143a) - 5,000 pounds;

(-yy-) trifluoromethane (HFC-23) - 5,000 pounds; or

(-zz-) toluene - 1,000 pounds, except in the HGB and BPA ozone nonattainment areas as defined in paragraph (70) of this section, where the RQ must be 100 pounds;

(ii) if not listed in clause (i) of this subparagraph, 100 pounds;

(B) for mixtures of air contaminant compounds:

(i) where the relative amount of individual air contaminant compounds is known through common process knowledge or prior engineering analysis or testing, any amount of an individual air contaminant compound that equals or exceeds the amount specified in subparagraph (A) of this paragraph;

(ii) where the relative amount of individual air contaminant compounds in subparagraph (A)(i) of this paragraph is not known, any amount of the mixture that equals or exceeds the amount for any single air contaminant compound that is present in the mixture and listed in subparagraph (A)(i) of this paragraph;

(iii) where each of the individual air contaminant compounds listed in subparagraph (A)(i) of this paragraph are known to be less than 0.02% by weight of the mixture, and each of the other individual air contaminant compounds covered by subparagraph (A)(ii) of this paragraph are known to be less than 2.0% by weight of the mixture, any total amount of the mixture of air contaminant compounds greater than or equal to 5,000 pounds; or

(iv) where natural gas excluding carbon dioxide, water, nitrogen, methane, ethane, noble gases, hydrogen, and oxygen or air emissions from crude oil are known to be in an amount greater than or equal to 5,000 pounds or the

associated hydrogen sulfide and mercaptans in a total amount greater than 100 pounds, whichever occurs first;

(C) for opacity from boilers and combustion turbines as defined in this section fueled by natural gas, coal, lignite, wood, fuel oil containing hazardous air pollutants at a concentration of less than 0.02% by weight, opacity that is equal to or exceeds 15 additional percentage points above the applicable limit, averaged over a six-minute period. Opacity is the only RQ applicable to boilers and combustion turbines described in this paragraph; or

(D) for facilities where air contaminant compounds are measured directly by a continuous emission monitoring system providing updated readings at a minimum 15-minute interval an amount, approved by the executive director based on any relevant conditions and a screening model, that would be reported prior to ground level concentrations reaching at any distance beyond the closest regulated entity property line:

(i) less than one-half of any applicable ambient air standards; and

(ii) less than two times the concentration of applicable air emission limitations.

(89) **Rubbish**--Nonputrescible solid waste, consisting of both combustible and noncombustible waste materials. Combustible rubbish includes paper, rags, cartons, wood, excelsior, furniture, rubber, plastics, yard trimmings, leaves, and similar materials. Noncombustible rubbish includes glass, crockery, tin cans, aluminum cans, metal furniture, and like materials that will not burn at ordinary incinerator temperatures (1,600 degrees Fahrenheit to 1,800 degrees Fahrenheit).

(90) **Scheduled maintenance, startup, or shutdown activity**--For activities with unauthorized emissions that are expected to exceed a reportable quantity (RQ), a scheduled maintenance, startup, or shutdown activity is an activity that the owner or operator of the regulated entity whether performing or otherwise affected by the activity, provides prior notice and a final report as required by §101.211 of this title (relating to Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements); the notice or final report includes the information required in §101.211 of this title; and the actual unauthorized emissions from the activity do not exceed the emissions estimates submitted in the initial notification by more than an RQ. For activities with unauthorized emissions that are not expected to, and do not, exceed an RQ, a scheduled maintenance, startup, or shutdown activity is one that is

recorded as required by §101.211 of this title. Expected excess opacity events as described in §101.201(e) of this title (relating to Emissions Event Reporting and Recordkeeping Requirements) resulting from scheduled maintenance, startup, or shutdown activities are those that provide prior notice (if required), and are recorded and reported as required by §101.211 of this title.

(91) **Sludge**--Any solid or semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant; water supply treatment plant, exclusive of the treated effluent from a wastewater treatment plant; or air pollution control equipment.

(92) **Smoke**--Small gas-born particles resulting from incomplete combustion consisting predominately of carbon and other combustible material and present in sufficient quantity to be visible.

(93) **Solid waste**--Garbage, rubbish, refuse, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control equipment, and other discarded material, including solid, liquid, semisolid, or containerized gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations and from community and institutional activities. The term does not include:

(A) solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued under the Texas Water Code, Chapter 26;

(B) soil, dirt, rock, sand, and other natural or man-made inert solid materials used to fill land, if the object of the fill is to make the land suitable for the construction of surface improvements; or

(C) waste materials that result from activities associated with the exploration, development, or production of oil or gas, or geothermal resources, and other substance or material regulated by the Railroad Commission of Texas under Natural Resources Code, §91.101, unless the waste, substance, or material results from activities associated with gasoline plants, natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants and is hazardous waste as defined by the administrator of the United States Environmental Protection Agency under the federal Solid Waste Disposal Act, as amended by Resource Conservation and Recovery Act, as amended (42 United States Code, §§6901 *et seq.*).

(94) **Sour crude**--A crude oil that will emit a sour gas when in equilibrium at atmospheric pressure.

(95) **Sour gas**--Any natural gas containing more than 1.5 grains of hydrogen sulfide per 100 cubic feet, or more than 30 grains of total sulfur per 100 cubic feet.

(96) **Source**--A point of origin of air contaminants, whether privately or publicly owned or operated. Upon request of a source owner, the executive director shall determine whether multiple processes emitting air contaminants from a single point of emission will be treated as a single source or as multiple sources.

(97) **Special waste from health care-related facilities**--A solid waste that if improperly treated or handled, may serve to transmit infectious disease(s) and that is comprised of the following: animal waste, bulk blood and blood products, microbiological waste, pathological waste, and sharps.

(98) **Standard conditions**--A condition at a temperature of 68 degrees Fahrenheit (20 degrees Centigrade) and a pressure of 14.7 pounds per square inch absolute (101.3 kiloPascals).

(99) **Standard metropolitan statistical area**--An area consisting of a county or one or more contiguous counties that is officially so designated by the United States Bureau of the Budget.

(100) **Submerged fill pipe**--A fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when applied to a tank that is loaded from the side, that has a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.

(101) **Sulfur compounds**--All inorganic or organic chemicals having an atom or atoms of sulfur in their chemical structure.

(102) **Sulfuric acid mist/sulfuric acid**--Emissions of sulfuric acid mist and sulfuric acid are considered to be the same air contaminant calculated as H_2SO_4 and must include sulfuric acid liquid mist, sulfur trioxide, and sulfuric acid vapor as measured by Test Method 8 in 40 Code of Federal Regulations Part 60, Appendix A.

(103) **Sweet crude oil and gas**--Those crude petroleum hydrocarbons that are not "sour" as defined in this section.

(104) **Total suspended particulate**--Particulate matter as measured by the method described in 40 Code of Federal Regulations Part 50, Appendix B.

(105) **Transfer efficiency**--The amount of coating solids deposited onto the surface or a part of product divided by the total amount of coating solids delivered to the coating application system.

(106) **True vapor pressure**--The absolute aggregate partial vapor pressure, measured in pounds per square inch absolute, of all volatile organic compounds at the temperature of storage, handling, or processing.

(107) **Unauthorized emissions**--Emissions of any air contaminant except carbon dioxide, water, nitrogen, methane, ethane, noble gases, hydrogen, and oxygen that exceed any air emission limitation in a permit, rule, or order of the commission or as authorized by Texas Clean Air Act, §382.0518(g).

(108) **Unplanned maintenance, startup, or shutdown activity**--For activities with unauthorized emissions that are expected to exceed a reportable quantity or with excess opacity, an unplanned maintenance, startup, or shutdown activity is:

(A) a startup or shutdown that was not part of normal or routine facility operations, is unpredictable as to timing, and is not the type of event normally authorized by permit; or

(B) a maintenance activity that arises from sudden and unforeseeable events beyond the control of the operator that requires the immediate corrective action to minimize or avoid an upset or malfunction.

(109) **Upset event**--An unplanned and unavoidable breakdown or excursion of a process or operation that results in unauthorized emissions. A maintenance, startup, or shutdown activity that was reported under §101.211 of this title (relating to Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements), but had emissions that exceeded the reported amount by more than a reportable quantity due to an unplanned and unavoidable breakdown or excursion of a process or operation is an upset event.

(110) **Utility boiler**--A boiler used to produce electric power, steam, or heated or cooled air, or other gases or fluids for sale.

(111) **Vapor combustor**--A partially enclosed combustion device used to destroy volatile organic compounds by smokeless combustion without extracting energy in the form of process heat or steam. The combustion flame may be partially visible, but at no time does the device operate with an uncontrolled flame. Auxiliary fuel and/or a flame air control damping system that can operate at all times to control the air/fuel

mixture to the combustor's flame zone, may be required to ensure smokeless combustion during operation.

(112) **Vapor-mounted seal**--A primary seal mounted so there is an annular space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof or cover.

(113) **Vent**--Any duct, stack, chimney, flue, conduit, or other device used to conduct air contaminants into the atmosphere.

(114) **Visible emissions**--Particulate or gaseous matter that can be detected by the human eye. The radiant energy from an open flame is not considered a visible emission under this definition.

(115) **Volatile organic compound**--As defined in 40 Code of Federal Regulations §51.100(s), except §51.100(s)(2) - (4), as amended on January 21, 2009 (74 FR 3441).

(116) **Volatile organic compound (VOC) water separator**--Any tank, box, sump, or other container in which any VOC, floating on or contained in water

entering such tank, box, sump, or other container, is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.