

The Texas Natural Resource Conservation Commission (TNRCC or commission) adopts amendments to §101.1, concerning Definitions; §101.6, concerning Upset Reporting and Recordkeeping Requirements; §101.7, concerning Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements; and §101.11, concerning Exemptions from Rules and Regulations; and revisions to the state implementation plan (SIP) with changes to the proposed text as published in the January 28, 2000 edition of the *Texas Register* (25 TexReg 530). The commission will withdraw these sections as amended August 5, 1997 as proposed revisions to the SIP and submit the sections as amended by this adoption.

BACKGROUND AND SUMMARY OF THE FACTUAL BASE FOR THE ADOPTED RULES

On July 9, 1997, the commission adopted amendments to §§101.1, 101.6, 101.7, and 101.11 concerning the upset, maintenance, start-up, and shutdown rules. These amendments modified the requirements, under which, owners and operators of sources releasing unauthorized emissions due to upset, maintenance, start-up, and shutdown (U/M) events would report those episodes to the commission. The adopted amendments used the concept of a “reportable quantity” (RQ) to govern when a source must report unauthorized emissions due to upsets. Based on similar rules concerning solid waste and on evaluation of the off-property effects of emissions of regulated compounds to the atmosphere, the amendments did not require a report of U/M emissions below a significance threshold. The owner or operator of the source is required to keep records of all U/M events, but is only required to report to the commission those events where the U/M emissions equal or exceed an RQ. This report must be submitted to the commission within 24 hours of discovery of the event. Records of events below the RQ are maintained at the source site and are to be made available to the commission on

request. The 1997 amendments also required that records of U/M events causing unauthorized emissions, both reportable and not, contain specific information including date, time, duration, substance released and quantity, cause of the event, and actions taken to correct the situation. To gain an exemption from emission limitations, owners or operators must first comply with this reporting requirement. Additionally, the episode must have been reasonably unavoidable, the operator must have taken appropriate corrective actions as soon as practicable after the onset of the event, and the operator must have minimized the emissions to the extent practicable. Similar requirements were adopted for unauthorized emissions resulting from maintenance, start-up, or shutdown of a source. The commission adopted these amendments and requested staff to examine the effectiveness of the rules as implemented over the next two years. Additionally, the commission submitted the rules to the United States Environmental Protection Agency (EPA) as a revision to the SIP. The commission adopted the 1997 amendments to reduce the number of U/M reports being submitted, through the use of RQs, allowing concentration of staff time on the most significant or higher priority events. While records of all events are kept on-site, the number of reports submitted to the commission has been limited to significant events. Reporting has been reduced by approximately 50%.

In November 1998, EPA informed the commission that the 1997 amended version of the U/M rules could not be approved as a SIP revision and that it intended to begin formal disapproval procedures. EPA specifically cited the reporting requirements of the rule as being deficient. Records of events below an RQ are not routinely submitted to the commission, but are currently maintained at the site and submitted on request of the commission. EPA believes that this procedure does not give the general public sufficient access to this information, requiring them to go through the commission to obtain

reports. Secondly, EPA stated that the commission's method of exempting unauthorized emissions released during an U/M event did not require sufficient proof from a source operator that the event was reasonably unavoidable. EPA stated that the commission's rule did not place the burden of such proof on the source owner or operator and was not specific enough as to what would constitute "reasonably unavoidable."

The January 28, 2000 proposal contained two principal features to satisfy EPA concerns. Sections 101.6 and 101.7 were proposed with new requirements for a follow-up report on an U/M event when the initial report contained information that needed correction. Section 101.11 was proposed with new language that described the criteria that an owner or operator of a source must satisfy to demonstrate that unauthorized emissions from U/M were unavoidable, and clearly placed the burden of proof on the owner or operator to demonstrate that unauthorized emissions should be exempt.

SECTION BY SECTION DISCUSSION

The commission adopts the addition of the following substances to the RQ list in §101.1(82)(A)(i)(III) with an RQ of 5,000 pounds: butanes, pentanes, ethanol, isopropyl alcohol, mineral spirits, hexanes, octanes, and decanes. The commission has also added the clarification that the 5,000-pound RQ applies to all isomers of butanes, pentanes, hexanes, octanes, and decanes.

The commission adopts a correction to a formatting error in §101.1(82)(B)(i), (ii), and (iii). The term "definition" is replaced with the term "paragraph."

The commission adopts a correction to a typographical error in §101.1(82)(B)(iv). The language should have read, “where natural gas or air emissions from crude oil are known...” This change will clarify that the intent of the language was to allow either natural gas or air emissions from crude oil to have an RQ of 5,000 pounds. The commission also clarified the rule language so that it is clear that methane and ethane are excluded from the term “natural gas.”

The commission clarified §101.6(a)(2) and §101.7(b)(1) with the addition of the phrase “in §101.1 of this title (relating to Definitions).” This clarification is needed so that it is clear that the conditions of §101.1(82)(C) concerning fuels used in boilers or combustion turbines must be met before a source can use the notification conditions of §101.6(a)(3) and §101.7(2).

The commission adopts amendments to §101.6(a)(2) and (3) and also to §101.7(b)(1) and (2) requiring owners or operators of sources to report the cause of the upset or the type of activity and the reason for maintenance, startup, or shutdown if known at the time of notification.

The commission adopts amendments to §101.6(a)(4), (b), and (e) and to §101.7(c) which would allow any local or federal air pollution program with jurisdiction to review U/M records maintained at facilities and to request more detailed information on the event. Specifically, the term “local” was deleted to clarify that EPA Region VI also has jurisdiction to review such records. The term “local” remains in provisions discussing the submission or notification of reports. Reporting of U/M events to EPA Region VI is not required under these rules.

The commission adopts amendments to §101.6(b)(5) and §101.7(c)(5) to clarify that source owner or operators must record the compound descriptive type of the individually-listed compounds or mixtures of air contaminants for all U/M events, not just those that result in a release at or above a reportable quantity. The commission is retaining the phrase “in the definition of reportable quantity” in §101.6(b)(5) for clarity. The commission had proposed this phrase for deletion.

The commission adopts amendments to §101.6(c) and §101.7(d) that will require that final records of all U/M events at or above an RQ be submitted to the appropriate regional offices no later than two weeks after the end of the event. The final record is in addition to the initial notification of the event. However, if the cause of the upset or the type and reason for the maintenance, start-up, or shutdown is known at the time that the initial notification is submitted, and all other required information submitted at the time of the notification is correct and no additions are needed, the initial notification will be considered to be the final record of the U/M event and no additional report is required. The commission believes that this reporting frequency will provide timely public accessibility to records of the most significant events and will not impose an unreasonable burden on affected sources. To provide consistency, §101.6(b) and §101.7(c) have been revised to state that a final record must be created as soon as practicable, but no later than two weeks after the end of the event.

The commission adopts an amendment to §101.6(d) that exempts owners or operators of boilers and combustion turbines equipped with a continuous emission monitoring system providing updated readings at a maximum 15-minute interval from creating, maintaining, and submitting records of

reportable and nonreportable upsets if the source is required to submit unauthorized emission reports by another state or federal requirement. The commission also adopts a similar exemption in §101.7(e) that applies to the creation, maintenance, and submission of records of maintenance, start-up, or shutdown activities under the same conditions. This adopted amendment results from the staff review of the U/M rules and is consistent with the concept of the 1997 amendments to reduce duplicate reporting.

The commission has adopted revisions to §101.7(b) to clarify the intent of the rule language. The phrase “which results in an unexpected unauthorized emission that equals or exceeds the reportable quantity” has been replaced with the phrase: “event for which no notification required by this subsection was submitted, which results in unauthorized emissions that equal or exceed a reportable quantity, or any maintenance, start-up, or shutdown which exceeds the estimates submitted under the notification requirements of this subsection.” The new rule language applies to source operators conducting a maintenance, start-up, or shutdown operation who believe that the event would not result in emissions equal to or above an RQ. This circumstance does not require source operators to notify the commission before the activity occurs. If the maintenance, start-up, or shutdown subsequently did equal or exceed an RQ, the operator is required to report the event as an upset, under §101.6. Additionally, the rule requires that an owner or operator report, as an upset, a maintenance, start-up, or shutdown event previously submitted to the commission and estimated to exceed an RQ if the maintenance, start-up, or shutdown exceeds the estimate.

The commission adopts an amendment to §101.7(b)(1)(E) that corrects a typographical error and correctly references “subparagraph (E) of this paragraph” instead of “paragraph (4) of this subsection.”

The commission adopts an amendment to §101.7(b)(2)(B) and §101.7(c) that corrects a typographical error and correctly references “maintenance, start-up, or shutdown” instead of “upset.” The commission also adopts an amendment to §101.7(c) to require the retention of maintenance, start-up, and shutdown records for five years. This was the commission’s original intent and would correct a typographical error referring to “maintaining records on-site for a minimum of two years.”

The commission amended the title of §101.11 from “Exemptions from Rules and Regulations” to “Demonstrations” to better describe how the section is applied.

The language proposed for §101.11 was intended to establish the criteria used to determine if an upset was unavoidable and clearly place the burden of proof on the owner or operator. During the public comment period, the commission received numerous comments stating that the language created tests that were too subjective or established standards that were infinitely strict. As an example, many commenters cited the phrase “all possible steps” as establishing a potentially endless stringency test. The commission agreed that there were several phrases in §101.11 where it could reduce the subjectivity of the language. As a basic principle, the commission uses the concept of good engineering and operating practices as a starting point to evaluate upsets. While this concept is still somewhat subjective, regulated industries and regulators have a range of experience that the commission believes make this standard interpretable and enforceable. The commission interprets good operating practices as those which use manufacturers’ recommendations for equipment operation and maintenance, adequate training of operators, and any equipment modification. The commission has retained language throughout the section that clearly places the burden on the owner or operator to demonstrate that

unauthorized emissions from an upset were unavoidable. In addition, the commission has clarified that an exemption which may be claimed based on lack of technological knowledge will not be available if the source which cannot be controlled or reduced does not meet a requirement established under a federal program, i.e., 40 CFR Parts 60 (New Source Performance Standards), 61 (National Emission Standards for Hazardous Air Pollutants), and 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories). Specific changes to paragraphs are discussed in the ANALYSIS OF TESTIMONY portion of this preamble.

The executive director's regional staff will continue to evaluate reported upset, startup, shutdown, and maintenance events to determine whether it would be appropriate to visit the source site as the event is occurring. Staff will also review previously submitted reports related to the source to determine whether there is a pattern of events that may suggest inappropriate or inadequate responses to previous events. Regional staff may elect to conduct a site inspection specifically related to a source with recurring upsets, startups, shutdowns, and/or maintenance or other circumstances as determined by the executive director based upon the reported information.

Regional staff will review upset, startup, shutdown, and maintenance reports prior to conducting SIP inspections. While on site, the inspector will review the source operator's records, which include the records of events below the RQs. A review and evaluation of these records will allow the executive director to identify sources with chronic problems. The executive director may request additional information from the source operator as permitted by §101.11(g). The executive director may ask an owner or operator to make the demonstrations found in §101.11. This demonstration must be made in a

reasonable amount of time. The executive director will evaluate any information provided by the operator to determine whether the event(s) meet the criteria to exempt the owner or operator from compliance with emissions limits. The executive director will also continue to examine RQ settings considering toxicological effects, photo-reactivity, and the stated intent of the commission to limit upset reports to the most significant events. The commission would seek the participation of regulated industries prior to proposing any adjustments to RQs.

FINAL REGULATORY IMPACT ASSESSMENT

The commission has reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and has determined that the rulemaking does not meet the definition of a major environmental rule as defined in that statute. Major environmental rule means 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, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The adopted rule requires that records of upsets causing releases above an RQ be submitted to the commission within two weeks of the event if any information changes from that transmitted in the original report sent within 24 hours of the event. The requirement to create these records is not new; the only change is that they will be transmitted to the commission. The commission believes that the cost of transmitting these records will not add significant new costs above those incurred by creating the records and that the act of reporting does not add significant costs to those already associated with compliance with the rules. This adoption does not authorize any new emissions and does not cause an adverse effect on the environment or increase risks to human health. Therefore, the rulemaking does

not meet the definition of a “major environmental rule.” In addition, the adopted amendments do not meet any of the four applicability criteria of a major environmental rule. The adopted amendments do not exceed a standard set by federal law, an express requirement of state law, or exceed a requirement of a delegation or contract between the state and an agency or representative of the federal government to implement a state or federal program. The amendments are not adopted solely under the general powers of the commission, but rather the specific state laws of Texas Health and Safety Code, Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.014, 382.016, 382.017, 382.025, and 382.085.

During the public comment period the commission received comments from the Texas Industry Project; Bracewell & Patterson, LLP; Brown McCarroll & Oaks Hartline, LLP; and the Texas Association of Business & Chambers of Commerce. The commenters questioned whether there is a federal statute or SIP requirement that would require the commission to adopt these amendments. They also believe that the amendments are a “major environmental rule” and require a full regulatory impact analysis (RIA).

The commission believes that the legislative history contradicts the comment that a full RIA is required of the rules. The requirement to provide a fiscal analysis of proposed regulations in the Texas Government Code was amended by Senate Bill (SB) 633 during the 75th Legislative Session. The intent of SB 633 was to require agencies to conduct an RIA of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state or federal law, a delegated federal program, or are adopted solely under the general powers of the commission. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded, based on an assessment of

rules adopted by the commission in the past, that it is not anticipated that the bill will have significant fiscal implications for the commission due to its limited application. The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted proposed rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law. The Texas SIP includes the federally delegated and state permitting programs for the control of air quality. These amendments continue to make enforceable the requirements adopted in 1997 under which owners and operators of sources releasing unauthorized emissions due to upset, maintenance, start-up, and shutdown events would report those episodes to the commission, since those emissions are not authorized under any of the permitting or other programs in the SIP. These types of rules are routinely adopted as SIP amendments. The Legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, every SIP rule would require the full RIA contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the Legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was to only require the full RIA for rules that are extraordinary in nature. While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the SIP regulations promulgated under the Federal Clean Air Act (FCAA). Comments received during the comment period regarding the draft RIA are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

TAKINGS IMPACT ASSESSMENT

The commission has prepared a takings impact assessment for these rules under Texas Government Code, §2007.043. The following is a summary of that assessment. These amendments require that final records of upsets that cause emissions at or above an RQ be submitted to the commission within two weeks of the event. They do not restrict or limit an owner's right to their property that would otherwise exist in the absence of governmental action and therefore do not constitute a taking.

COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission has reviewed this rulemaking for consistency with the Texas Coastal Management Program (CMP) goals and policies in accordance with the regulations of the Coastal Coordination Council. The commission has determined that this rulemaking relates to an action or actions subject to the CMP in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et seq.), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. For the actions in the proposed amendments to Chapter 101, the commission has determined that the rules are consistent with the applicable CMP goal expressed in 31 TAC §501.12(1) by protecting and preserving the quality and values of coastal natural resource areas and the policy in 31 TAC §501.14(q), which requires the commission to protect air quality in coastal areas. The commission has determined that the rules are consistent with 40 Code of Federal Regulations (CFR) 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans) and will not allow any new emissions to the atmosphere.

HEARING AND COMMENTERS

The commission conducted a public hearing on this proposal in Austin on February 22, 2000. The comment period closed on February 28, 2000.

The following 34 organizations submitted written comments on the proposed rulemaking: Baker Botts, LLP (Baker) on behalf of Texas Industry Project (TIP); BP Amoco Chemicals (Amoco); Bracewell & Patterson, LLP (B&P); Brown McCarroll & Oaks Hartline, LLP (Brown); Central and Southwest Services, Inc. (CSW); Chemical Analysis, Inc. (CA); City of Houston (Houston); Concerned Citizens of the Cedar Creek Lake Area (CCCCLA); Dow Chemical Company (Dow), Duke Energy Field Services Inc. (DEFS), Eastman Chemical Co. (Eastman); ExxonMobil Refining Supply Company (Mobil); Friends United for a Safe Environment (FUSE); Galveston-Houston Association for Smog Prevention (GHASP); Harris County Pollution Control Division (HCPCD); Huntsman Corporation (Huntsman); Lakeway Parents Concerned About Sewage Spray (LPCASS); League of Women Voters of Dallas (LWV-D); League of Women Voters of Texas (LWV-Tx); Mothers for Clean Air (MCA), Protect All Children's Environment (PACE); Public Research Works (PRW); Sierra Club Austin Regional Group (Sierra-Austin); Sierra Club Dallas Regional Group (Sierra-Dallas); Sierra Club Houston Regional Group (Sierra-Houston); Sierra Club Lone Star Chapter (Sierra-Lone Star); Sustainable Energy and Economic Development Coalition (SEED); Tarrant Coalition for Environmental Awareness (TCEA); Texas Association of Business & Chambers of Commerce (TABCC); Texas Chemical Council (TCC); Texas Oil & Gas Association (TXOGA); Texas Utilities Company (TXU); EPA; U.S. Intec, Inc. (Intec); and 50 individuals for a total of 84 commenters.

Three individuals supported the proposal. Seventy-seven commenters opposed specific parts of the proposal. EPA supported the proposal.

GENERAL COMMENTS

CA, CCCCLA, FUSE, LPCASS, LWV-D, LWV-Tx, SEED, Sierra-Austin, Sierra-Dallas, Sierra-Houston, Sierra-Lone Star, TCEA, and 30 individuals feel that the commission needs to be more vigilant in protecting public health from unauthorized emission events since the toxicity, volume, community impacts, and preventability of pollution from such events has been very poorly scrutinized by the commission in the past. Eleven individuals feel that it is crucial that the commission strengthen its upset rules. They commented that the commission must seriously address the magnitude, type of emissions, and avoidability of emissions, due to upsets, maintenance, start-ups, and shutdowns. Houston feels that the proposed rules do not move the state forward in curtailing upset activity. Houston would like to see a more definitive description of violations included in the rules, including a specific number of upsets during a set period that would trigger a detailed investigation.

TCEA and two individuals suggested that there be a limit on the number of yearly upsets allowed without penalties, and that the commission should make all rules based on “protection of the health of the people of Texas” and not on protecting the profit of the polluters. MCA commented that repeated releases, reported or not, require stiff enforcement by the commission, and suggested criminal prosecution of Chief Executive Officers and/or shutdown of facilities for repeated upset, maintenance, or burning of off-specification product.

One individual was dissatisfied with the commission's current system and commented that maybe reporting should also be made to local newspapers. One individual suggested that there be no nonreportable upsets and that all upsets must be part of the public record.

The commission agrees that the magnitude and avoidance of upsets deserve further scrutiny, and the commission is currently implementing such a program to more closely examine U/M emissions. The intent of the program is to reduce these emissions where practical, and the ability to conduct such a program has been enhanced with recent transfers of full-time staff positions to the regional offices. The commission has not and will not issue a blanket exemption for U/M emissions simply when an incident is reported. However, occasional failures of equipment and the need to do periodic maintenance are to be expected. The commission believes that a method of exempting unauthorized emissions releases during these periods is appropriate, provided the owner or operator of the source meets the conditions established in §101.11. The commission will always have a limited amount of resources in its regional offices to investigate upsets. This was a principal reason behind the 1997 amendments to the U/M rules which established the concept of a "reportable quantity" allowing the commission to concentrate those resources on releases of unauthorized emissions that were the most significant. All rules of the commission concerning release of contaminants to the environment are based on the protection of human health. The list of RQs, which is the basis of upset reporting, is established using criteria for the protection of health and the prevention of nuisances.

The commission agrees that a recurring pattern of upsets is justification for closer examination of a particular operation, but it is not the only reason. The commission does not believe that it is necessary to establish a particular number of upsets in a given period that would automatically be nonexempt. The commission will rely on a case-by case determination by its field staff and/or central office, using established criteria, of the appropriate response to U/M events. TCAA, Chapter 382, Subchapter D contains statutes that establish criteria for criminal offenses and penalties, and application of these statutes requires the state to establish intention and knowledge of a responsible person. The established occurrence of a specific set of events alone would be insufficient to sustain a criminal conviction.

The commission does not require reporting of all upsets, but all upsets must be recorded and are required to be made available to the public through the commission.

B&P, Eastman, Huntsman, TABCC, TIP, and TXOGA questioned whether there is a federal statute, rule, or a SIP call to require the commission to make the proposed changes. TABCC commented that there is no change in federal law, regulation, delegation agreement, or state statutory requirement that requires the commission to adopt new U/M rules. Brown and TXOGA commented that EPA is attempting to impose a new requirement on the state that has no basis in law. Brown and TXOGA commented that it believes that the this new EPA policy regarding excess emissions occurring during upset and maintenance conditions is illegal, irrelevant for state purposes, and conflicts with express legislative directives contained in the TCAA. Huntsman stated this EPA policy is not law and was not subject to notice and comment rulemaking. Brown and TXOGA also commented that EPA is using a

threatened SIP disapproval rather than attempt to enforce its new policy concerning excess emissions policy through a SIP call and that the commission's response ignores state law, and that, in any event, the commission's current practices and rules concerning exemptions for unauthorized emissions during periods of upset and maintenance meet the requirements of the FCAA and 40 CFR, Part 51 for approval as a SIP revision. TABCC commented that by EPA avoiding the formal federal regulatory procedure with its due process, opportunity for public hearing and for public comment the EPA is attempting to rule by fiat, not by law and, that by proposing these rules, the commission is giving tacit approval to this attempt by EPA to subvert this regulatory process. TABCC believes that the commission is surrendering to EPA's demands to revise the Texas U/M rules, and thereby is acknowledging that state rules and law can and should be based on EPA policy or whim and not necessarily on federal statutes or EPA regulations. By proposing these rules, TABCC claims the commission is giving tacit approval to EPA's attempt to subvert this regulatory process. Huntsman stated that the commission should propose its own set of exemption criteria after considering EPA policy. Absent one of these federal actions, Brown, TABCC, and TXOGA suggested that the commission withdraw the SIP revision request, resulting in the 1997 rules continuing for state purposes and the 1972 approved SIP version of the rules applicable for federal purposes. Huntsman and TIP would prefer the 1997 U/M rule revisions to become part of the EPA-approved SIP.

EPA's primary issue with the U/M rules was the clear assignment of the burden of proof to the owner or operator to demonstrate that an upset was unavoidable. The burden has always been on the owner or operator, and the adoption of the criteria in §101.11 represents a codification of commission practice. The commission proposed specific language, suggested by EPA, to address

EPA's concerns that the rule language was not specific enough about burden of proof. EPA had stated that the lack of these specific requirements would prevent the 1997 amendments from approval into the SIP. The commission has modified the proposed language in §101.11 to remove words and phrases that the commission believe are either too subjective or did not clarify an enforceable standard. Therefore, the commission has maintained a clear assignment of burden of proof to the owner or operator. These changes are more fully discussed later in the section regarding §101.11. Although the FCAA, §7410(a)(F)(iii) is one of the statutory bases for adoption of these rules, there is no federal statute, rule, or SIP call that specifically requires the commission to make these adoptions, nor are the amendments adopted based on EPA guidance. The commission's jurisdiction and authority are found in state law and are cited later in this preamble. Rather, the commission has considered EPA's guidance and interpretation and elected to follow some of EPA's suggestions as it does when administering programs in conjunction with the EPA or under federal mandates administered by EPA. The commission also retains the RQ concept of the 1997 version of the U/M rules, which was not part of the 1972 rules which are currently in the SIP, because the RQ concept had the desired effect of reducing upset reports to those that are the most significant. Therefore, the commission adopts these amendments as a revision to the SIP to have rules that are enforceable under both state and federal law.

Brown, TABCC, and TXOGA believe that the proposed rules are a major environmental rule under Texas Government Code, §2001.0225, because there has been no change in either federal law or regulation that requires the commission to adopt new U/M rules. TABCC also commented that there is no delegation agreement of state statutory requirement to adopt new U/M rules. As such, these rules

are subject to the requirement necessitating a draft impact analysis. However, Brown and TXOGA also commented that the rulemaking does not contain any reference to a standard required by federal law or a requirement of state law that supports the proposed amendments and that is because none exist.

The determination of a major environmental rule is based on adverse material effects on 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. The adopted rule requires that records of upsets causing releases above an RQ be submitted to the commission within two weeks of the event if any information changes from that transmitted in the original report sent within 24 hours of the event. The requirement to create these records is not new; the only change is that they will be transmitted to the commission. The commission believes that the cost of transmitting these records will not add significant new costs above those incurred by creating the records, and that the act of reporting does not add significant costs to those already associated with compliance with the rules. Further, these rules do not impose any new recordkeeping requirements, authorize any new emissions and do not cause an adverse effect on the environment or increase risks to human health. In addition, the adopted amendments do not meet any of the four applicability criteria of a major environmental rule. The adopted amendments do not exceed a standard set by federal law, an express requirement of state law, or exceed a requirement of a delegation or contract between the state and an agency or representative of the federal government to implement a state and federal program. The amendments are not adopted solely under the general powers of the commission, but rather the specific state laws. Therefore, the rulemaking does not meet the definition of a “major environmental rule” and no draft regulatory analysis is required.

Huntsman and TIP commented that the proposal together with the announced increase in enforcement scrutiny could result in a significant increase in cost not comprehended by the Rules Impact Analysis. CSW commented that the exemption criteria in §101.11 could be construed to require the submission of demonstration documentation for every upset, and the creation of new records.

This adopted amendments to §101.6 require owners or operators to submit an additional upset report within two weeks of an event if any information changes from the original report submitted within 24 hours. Because this information must already be recorded, the commission does not believe that submission of the information to the appropriate regional office is a significant cost.

The commission intends that the owner or operator be able to demonstrate the exemption criteria in §101.11 through operational records routinely kept. Section 101.11 does not require separate records be created to demonstrate exemption criteria. Additionally, the commission will not require routine submission of these records, but does expect that the owner or operator produce them on request. Therefore, the commission disagrees that there are significant new costs created by this adopted rule. These factors were considered in the rules impact analysis.

Amoco, Eastman, Huntsman, TCC, and TIP would like to see the commission allow permitting of maintenance emissions that satisfy otherwise applicable permitting standards. The commenters stated that wide variety of maintenance activities are essential for the proper and safe operation of most industrial facilities, and that as long as emissions from maintenance activities are consistent with the applicable technological requirements, and modeling does not reveal unacceptable health effects

concerns, there should be no barrier to the inclusion of permit terms that authorize these emissions.

Huntsman and TIP commented that, in practice, the commission has looked to the U/M rules to authorize elevated emission from maintenance activities rather than including them in permits. They also state that by greatly narrowing the exemption without simultaneously permitting maintenance activities, more facilities face enforcement for entirely necessary and unarmful emissions. Eastman, Huntsman, and TIP encouraged the commission to carefully consider the potential impact of the revisions to §101.11 in this regard and alter its air permitting practices accordingly.

The commission disagrees that these rules have been used to authorize elevated emissions from maintenance activities. The commission has recently begun permitting emissions from routine maintenance activities. The commission expects this practice to increase as more sources request this option. Emissions that are routine, anticipated, or a part of a plant's normal operations should be included in the authorized emission limits if the owner or operator can satisfy all of the applicable permitting requirements. The U/M rules, including the exemption criteria in §101.11, would only be applied in the case of emissions that are not authorized by permit, statute, or rule. The commission does not agree that the exemption for maintenance activities has been narrowed. As discussed in this preamble, the changes in §101.11 clarify exemption criteria.

Sierra-Lone Star commented that discrete emissions reduction credits (DERCs) can be applied for by certain Texas plants in lieu of making nitrogen oxides (NO_x) reductions and raised the concern that the process may be abused by certain companies in the ozone nonattainment areas during upsets. The

commenter stated that companies receiving DERCs need to have their U/M NO_x emissions counted against the DERCs to insure that companies do not abuse the upset reporting process.

The use of DERCs is not an option under the upset rules. To use a DERC, the user must submit a notice at least 45 days prior to the first day of the use period if the generator of the DERC is a stationary source. Upsets are unscheduled occurrences or excursions of a process or operation that results in an unauthorized emission of air contaminants. A owner or operator cannot notify the commission 45 days in advance of an upset. The commission did not propose counting U/M NO_x emissions against a facility's DERCs and has not made any changes in response to this comment.

Sierra-Lone Star commented that the commission needs to carefully track industrial upsets related to power plant brownouts during peak electrical usage demand during the hottest summertime and coldest winter periods. Sierra-Lone Star is concerned that industrial facilities may suffer electrical power failures and shortages due to brownouts when electric power plants are unable to produce enough energy to meet the load. Sierra-Lone Star feels that this is special problem that needs a reporting mechanism to track the problem, since the commenter feels that industry is not required to properly report brownout induced upsets.

The commission disagrees that upsets due to brownouts or blackouts require separate tracking. When an owner or operator creates the final record of an upset as required in §101.6(b)(1), it is required to state the cause of the upset. If an upset is caused by a brownout or blackout, an

owner or operator must include that information in the final notice. The commission has therefore not made any changes in response to this comment.

Sierra-Lone Star commented that certain plants, such as olefins plants, may be flaring off-spec products and this type of flaring has been reported as plant upset conditions when the reason for the flaring is the fact that there is no upset condition, but rather the product quality does not meet specifications and the company makes a choice to flare the off-spec product.

The production of product outside of desired specifications (off-spec product) may or may not be within the control of the owner or operator of a facility flaring off-spec product. Unauthorized emissions from flaring events which do not meet the definition of upset in §101.1(102) would not be eligible for an exemption under §101.11. The commission acknowledges that an upset that is beyond the control of the owner or operator could result in the production of product that is not within specifications. The flaring of any off-spec product resulting from an upset that is eligible for exemption under §101.11 would be examined in conjunction with the upset.

Sierra-Lone Star requested improved U/M reporting and tracking of ozone precursor emissions data and speciation for days of one-hour ozone violations, including more speciation reporting of reactive VOCs and NO_x emissions from flares since there is too little if any reporting of NO_x from emergency/process flares during U/M flaring. This is of particular concern in the eastern airshed of Texas because of regional transport of VOC, NO_x and associated ozone from large power plants, smelters and major sources where the state's worst ground level ozone problem exists. Sierra-Lone Star also commented

that the commission needs to conduct greater scrutiny of all industry U/M emissions on days where ozone exceeds the federal one-hour National Ambient Air Quality Standard (NAAQS).

A company is required by §101.6(b) to create records of all nonreportable and reportable upsets. As part of this record, the owner or operator is required to provide a compound descriptive type of the individually listed compounds or mixtures of air contaminants which are known through common process knowledge or past engineering analysis or testing and the owner or operator is also required to estimate the quantities for those compounds or mixtures described. This requires specification of the compounds to the best of the ability of the owner or operator. The commission believes that the requirements of §101.6 are adequate to characterize upset emissions. The commission has not made any changes to the proposal in response to this comment. The commission continues to examine daily upset reports for possible correlation with high ozone concentrations.

Amoco and TCC commented that upsets required to be reported under §101.6 are, and should remain, completely unrelated to Title V and 30 TAC Chapter 122 unless the originator of the report elects to use the upset report as a deviation report for Title V. They recommended that the commission make a clarification in the preamble to these rules that upset reports and deviation reports for Title V are not synonymous, and that at the current time, reports related to state-only requirements do not need to be reported under Chapter 122.

The commission agrees with the commenter. Reporting under §101.6 is a separate and distinct requirement from the requirement in §122.145, Reporting Terms and Conditions, and only those sources that hold federal operating permits are subject to deviation reporting and only for situations involving deviations from operating permit terms and conditions.

Where both reporting requirements exist for a given event, a responsible official may find it desirable to use the same report to satisfy both requirements. If so, the combined report must meet the requirements of both §101.6 and §122.145.

§101.1, DEFINITION OF “REPORTABLE QUANTITY”

HCPCD stated that the commission should not raise the RQ to 5,000 pounds for extremely reactive chemicals that contribute to ozone formation. RQs for olefins, such as propylene, ethylene, etc., should not fall under the generic 5,000-pound limit. Rather, the commission should consider the relative reactivity of the chemical being emitted. Huntsman and TIP requested that the commission provide the scientific measure of odor that was used to determine that a higher than 100-pound RQ is not appropriate for pentenes, hexenes, heptenes, octenes, butyl acrylate, and methyl acrylate.

Huntsman and TIP would also like to see the level or cutoff established for that scientific measure for the purpose of making that determination. Intec requested that asphalt be added to §101.1(82)(A)(i)(III), giving it a RQ of 5,000 pounds. Dow requested that CFCs and HCFCs which are excluded from the VOC definition be listed with an RQ of 5,000 pounds.

The commission agrees that compounds should be reviewed for their potential to contribute to ozone formation. The commission has begun to examine upset emissions and their correlation to high ozone readings. The current list of RQs and those published in the proposal are based on toxicological effects alone. While the commission has an internal policy to evaluate upsets and their relation to ozone formation, it does not believe that it has yet established the correlation or justification to introduce reactivity as a base for lowering RQs in a rule adoption without that concept and the resulting RQs being published for public comment. The commission has made no changes in response to these comments.

The commission established the RQ for pentenes, hexenes, heptenes, octenes, butyl acrylate, methyl acrylate, and asphalt based on the staff's experience with these compounds and their nuisance potential and believes that it is appropriate to leave the compounds at the default RQ of 100 pounds. The commission also declines to add CFCs and HCFCs at a 5,000-pound RQ, as proposed changes to these compounds were not noticed in the proposal and there was no chance for public comment. There may be issues with these compounds and the deterioration of stratospheric ozone.

The commission intends to continue its examination of RQs considering toxicological effects, photo-reactivity, and its stated intent of limiting upset reports to the most significant events. The commission would direct its staff to examine draft RQs with the participation of regulated industries prior to proposing rules to change the RQs.

Amoco, Eastman, Huntsman, Mobil, TCC, TIP, and TXOGA suggested that in order to eliminate possible confusion, the term “(all isomers)” should be changed to either “(each isomer)” or “(any isomer).” TXOGA supported the change in the proposed rule to add certain compounds to the list of substances having an RQ of 5,000 pounds. TXOGA also supported the concept that U/M events that result in emissions of less than the RQ are not reportable.

The commission agrees with these comments and has made the recommended change to “any isomer.”

Dow, Eastman, Huntsman, and TIP requested that the commission eliminate or raise the 100-pound “default” RQ that applies to all air contaminants not assigned a specific RQ. The commenters stated that the current rule is contrary to the commission’s goal of making the U/M rules consistent with federal reporting requirements and causes unnecessary confusion, as well as unnecessary reporting. The provision is counter to the RQ reporting scheme because it assigns a relatively low RQ to all air contaminants that have not been identified by EPA or the commission as sufficiently hazardous to merit their own RQ. Huntsman and TIP suggested that at the least, the default RQ should be raised to 5,000 pounds, which is still less than the RQ of many specifically-designated substances.

In 1997, the commission determined that the RQs established by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Emergency Planning and Community-Right-To-Know Act of 1986 (EPCRA) were a reasonable framework for the reporting of unauthorized air emissions. However, the commission did modify that framework when it promulgated the 1997 U/M rules. These changes were made to recognize differences in significance of releases to air, water, or land, and to include specific air contaminants common to large Texas industries.

The commission followed two concepts of the CERCLA and EPCRA reporting and used five set values of RQs: one pound, ten pounds, 100 pounds, 1,000 pounds, the highest RQ value of 5,000 pounds, and the 100-pound default value for non-listed compounds. The commission has chosen to keep the 100-pound default because the 100-pound value is on the conservative side of the mid-line of the five RQ values. This conservative approach is needed in part, not only so the commission can be responsive to public inquiries concerning unauthorized emissions from U/M events, but also because the commission does not have resources to review all possible non-listed compounds to determine their potential impact on the environment and citizens of Texas.

As a worst case scenario, a source could emit approximately 2 1/2 tons of unauthorized emissions every day of the year and the commission would not be aware of the problem until it conducted an annual inspection. This is approximately 900 tons/year of unauthorized emissions from one source at a plant. While the commission understands that this is worst case, this case is only for one source at one plant. The possibility exists that two or more sources could emit non-listed

compounds on the same day. The commission believes that if the default were raised to 5,000 pounds, this could lead to a unacceptable amount of unauthorized emissions that the commission would potentially become aware of only during the annual inspection of the plant. Therefore, the commission believes that it is appropriate to take a more conservative approach and stay with the 100-pound default. The 100-pound default placed a slight additional burden on the regulated community, but the commission believes that this reporting is necessary to provide the public access to information on emissions that affect their communities. Sources are still required to keep records of all U/M events, reportable or nonreportable.

CA, CCCCLA, FUSE, GHASP, LPCASS, LWV-D, LWV-Tx, PACE, SEED, Sierra-Austin, Sierra-Dallas, Sierra-Houston, Sierra-Lone Star, TCEA, and 31 individuals expressed support for the present 100-pound default RQ value, but prefer a lower default of 50 pounds. MCA and one individual supported the 100-pound default limit. Sierra-Lone Star also commented that it would like to see an RQ for hydrogen sulfide gas be moved to one pound.

The purpose of the RQ is to limit reports of upsets to the most significant releases of unauthorized emissions, and the significance of the release is based on the potential for off-property effects. An RQ of 50 pounds would be appropriate for hazardous substances, and these substances are currently listed with specific RQs. The commission believes that a default value of 50 pounds would result in unnecessary reporting of insignificant events, and this contradicts the intent of the RQ concept. Hydrogen sulfide is currently listed at an RQ of 100 pounds. The commission recognizes the toxicity of this gas, but 100 pounds of hydrogen sulfide would readily disperse in

the atmosphere, diluting the gas and its effects. The 100-pound RQ is also consistent with the default RQ the commission uses for substances that are not listed or have a strong potential for odor or nuisance. The commission has therefore not made any changes in response to this comment.

TXU, commenting on §101.1(82)(B)(4), stated that methane and ethane are the primary constituents of natural gas and are currently excluded from the definition of “Unauthorized emission” contained in §101.11(101) along with such innocuous substances such as water and nitrogen. TXU commented that the purpose of the upset rule is to quantify emissions to the air that are potentially harmful to the public. There are no health or environmental benefits to reporting these constituents. Natural gas pipelines are already required to report to a number of state agencies, including the Railroad Commission of Texas, the Department of Transportation, and the Occupational Safety and Health Agency. As such, TXU argued that methane and ethane should not be included in the 5,000-pound RQ limit for natural gas.

The commission agrees with these comments and has made the recommended change to exclude methane and ethane.

Eleven individuals commented on §101.1(101), the definition of “Unauthorized emission,” and stated that the commission needs to more clearly define what an “emission limitation” is as used in the definition of unauthorized emission.

Emission limitations are established on an hourly and annual basis in both permits and rules. As an example, emissions in excess of the hourly rate would be considered unauthorized and subject to U/M rules. The commission has not made any changes in response to this comment.

§101.6, UPSET REPORTING AND RECORDKEEPING REQUIREMENTS

LWV-Tx opposes the goal of reducing the reporting burden on the regulated community and commented that while it is important to spend commission resources on the most significant episodes, the goal is at odds with the need to protect public health and the public's right to know.

The intent of this adoption is not to reduce the reporting requirement on regulated industries, and, in fact, new §101.6(c) and §101.7(d) increases the reporting requirements in certain situations. This adoption specifies conditions that owners or operators of sources of air pollution must meet before unauthorized emissions from U/M may be exempted from enforcement. The amendments to the U/M rules adopted in July 1997 introduced the concept of RQ for application to unauthorized air emissions, and one of the results of that adoption was to reduce reporting requirements for air pollution sources. The primary intent of the 1997 amendments was to reduce the number of reports to the commission and allow the commission to concentrate on events that were more significant and had the most likelihood of affecting persons and property off-site from the source of the upset. The commission disagrees that this concept is at odds with the protection of public health or the public's right to know. The RQs are based on their

potential for harm to human health, and the commission will continue to require reports of release at or above these quantities. The commission currently requires and will continue to require that owners or operators of air pollution sources keep records of all unauthorized emissions. These records are available to the public through the commission.

Dow commented that having to complete and retain records on nonreportable events is excessively burdensome. Furthermore, Dow commented that the commission's statement in the preamble to this proposed rule change expresses that the purpose of maintaining records of the nonreportable events was to allow the commission to identify sources with chronic or pattern upsets. Dow gave two reasons why it maintains that the reporting is unnecessary. First, Dow commented that it is unlikely that true upsets are so controlled that the facility can consistently have upsets and stay under the RQ target. If there was a chronic pattern of incidences, it should appear in the reportable events in which the commission would be notified. Second, a facility that is chronically exceeding the permitted levels for any of its processes already has an obligation to come to the commission and have the scenario reviewed by both the enforcement and permitting group.

An industrial operation of such size that upsets are rarely below a RQ would be little affected by the requirement to keep records on nonreportable events. Smaller operations might not routinely exceed an RQ during an upset, and emission inventory data supplied to the commission shows a difference between upsets reported and upsets recorded for the annual emission inventory. The commission concludes that there remains a significant amount of emissions resulting from nonreportable upsets. Eliminating the requirement to record nonreportable upsets would

essentially add to allowable emissions without any review by the commission. As the commenter notes, such an addition to allowables requires a review by the enforcement and permitting divisions of the commission. The commission has not made any changes in response to this comment.

Amoco, Dow, TABCC, and TCC commented on the proposed amendments to §101.6(b)(5) and §101.7(c)(5) requiring the source to report the compound descriptive type of the individually listed compounds or mixtures of air contaminants for “. . .all upset/maintenance activities, not just those equal to or greater than a reportable quantity.” TABCC commented that this requirement will result in a greatly increased reporting burden for regulated businesses, without any appreciable environmental gain, and questioned whether the commission will be able to adequately process the additional paperwork of this requirement in any meaningful way without adding staff resources. B&P suggested that instead of deleting the phrase “to exceed the reportable quantity” from §101.6(b)(5) and §101.7(c)(5), it should be replaced with the phrase “to be emitted by the process” in order to clarify that the individually listed compounds or mixtures of air contaminants emitted by the process during the U/M activity must be included in the final record. B&P also commented that the phrase “in the definition of reportable quantity” should not be deleted from §101.6(b)(5) and §101.7(c)(5), because it merely describes the list of compounds and mixtures to which §101.6(b)(5) and §101.7(c)(5) refer.

Reporting under the U/M rule is based on quantities of substances released to the atmosphere and requires awareness by the owner or operator of the types and relative proportion of substances in their industrial processes. The types of substances present should not change, regardless of the

size of the upset. The commission disagrees that the recording of compound descriptions for nonreportable upsets is an onerous burden. The commission uses this information to confirm emission inventories.

The commission proposed this amendment to clarify that the source must record the compound descriptive type of the individually-listed compounds or mixtures of air contaminants for all U/M activities, and is not limited to emissions above an RQ. Sections 101.6(b) and 101.7(c) state that the records being produced are for emissions resulting from the U/M event in question. The amendments were proposed in order to eliminate any confusion of the intent of the requirement. The commission has always intended that owners or operators of sources must record the compound descriptive type of the compounds or mixtures of contaminants from all upsets. The proposed rule change should not increase recordkeeping. The commission has therefore not made any changes in response to this comment.

The commission agrees that the phrase “in the definition of reportable quantity” should remain in §101.6(b)(5) and §101.7(c)(5) and will retain that phrase.

Commenting on §101.6(c), CA, CCCCLA, FUSE, GHASP, LPCASS, LWV-D, LWV-Tx, MCA, PACE, PRW, SEED, Sierra-Austin, Sierra-Dallas, Sierra-Houston, Sierra-Lone Star, TCEA, and 42 individuals stated that they support nonreportable upsets being sent to the regions at least twice a year. Sierra-Dallas would like to see nonreportable upset data sent to the commission at least twice each year if not once per quarter. An individual commented that a complete summary report of all reportable and

nonreportable upset events should be provided by the companies to the commission every six months since their last report.

The commission believes that the infrequency of public requests for information on upsets below an RQ does not justify the regular submission of these records. The commission and any program with jurisdiction in any particular area of the state have authority to request records on nonreportable upsets at any time. The commission has not made any changes in response to this comment.

Amoco, Huntsman, TCC, TIP, and TXOGA did not object to the proposed revision to §101.6(c) which requires that a follow-up report to be submitted with two weeks after the end of the upset. However, Huntsman and TIP requested that the commission revise the language in the proposed rule to more clearly delineate the scope of the new reporting obligation, namely so as not to require the submission of unnecessary updates. Huntsman and TIP expressed concern that the proposed language could be interpreted to require a report to be submitted if it differs with regard to “information provided” in the initial report, not merely information required to be provided in the initial report. Second, the commenters stated that the use of the term “differs” suggests that any difference whatsoever between the initial report and the follow-up record requires that the record be submitted, and that the follow-up report should be required to be submitted only when it materially changes or corrects required information in the initial report. The example used was that a facility should not be required to submit a follow-up report merely because it indicates that a release began at 8:15 p.m. where the initial report

stated that it began at 8:10 p.m. Mobil supported the clarification that the two-week limit requirement to create final records of an upset begins at the end of the upset period, thus allowing the facility to include the most accurate information in its final report to the commission.

The commission selected the reporting criteria for upset emissions based on the significance of the information to potential follow-up investigations. Because upset reports may be used in further investigation of an incident, the commission does not believe that it is consistent to have follow-up reports based on standards of material changes that could differ from company to company. The commission considered the option of designating standards of material difference within the rule language, but concluded that this would only create a new standard in place of the one currently in the rule. Consequently, the commission has not made any changes in response to this comment.

Huntsman and TIP suggested that the commission develop a standard reporting form for U/M notification to be used by each of the commission's regions. The data required by the form should be consistent with and limited to information required under the U/M rules. Forms currently provided for use by some of the regional offices call for information not required by the U/M rules and often use terminology inconsistent with the U/M rules.

In the past, the commission has issued reporting forms, which a source may use when reporting an upset. However, the commission has not required that the form be used. The U/M rules do not require that all notifications be submitted in writing, only that the report contain specific information. A U/M notification can also be submitted by telephone. With the adoption of these

rules, the commission will revise the reporting forms for U/M events. These forms will be available at the commission's regional offices.

CA, CCCCLA, FUSE, GHASP, LPCASS, LWV-D, LWV-Tx, MCA, PACE, PRW, SEED, Sierra-Austin, Sierra-Dallas, Sierra-Houston, Sierra-Lone Star, TCEA, and 45 individuals oppose §101.6(c) and (d) and §101.7(d) and (e) and commented that copies of required information should also be sent to the local air pollution control agencies. They also stated that current U/M rules do not give the public sufficient access to nonreportable upset information since the reports are kept at the facility. HCPCD supported the requirement to report the correct information two weeks after the upset; however, it suggested that the reports should also be sent to local air pollution control agencies. An individual suggested that all upset reports be sent to the executive director within one week, instead of two weeks. An individual stated that all investigation records shall be in the public domain and kept for six years, be part of every permit application for any part of the plant and any plant for the same company and be made available to any other state upon request.

The commission believes that the infrequency of public requests for information on upsets below an RQ does not justify the regular submission of all U/M records. The commission and any program with jurisdiction in any particular area of the state have authority to request records on nonreportable upsets. The commission does not believe it necessary to require general reporting to local programs, as it forwards upset reports to local programs when necessary for enforcement and other local programs are not requesting this information. The commission also believes that one week may be insufficient time to evaluate an upset. The commission standard for record

retention is five years and no extension of this period was proposed. The regional staff of the commission reviews investigation reports to determine potential violation of commission rules. Where violations are confirmed, the situation is addressed through enforcement rather than permitting. The commission has not made any changes in response to these comments.

CA, CCCCLA, FUSE, GHASP, LPCASS, LWV-D, MCA, PACE, PRW, SEED, Sierra-Austin, Sierra-Dallas, Sierra-Houston, Sierra-Lone Star, TCEA, and 44 individuals oppose the amendments to §101.6(d), which exempt owners and operators of boilers and combustion turbines from reporting compound descriptions and estimating quantities of compounds released during upsets, provided the units are equipped with a continuous emission monitoring system (CEMS), burn fuel with less than 0.02% concentration of hazardous air pollutants, and are required to submit excess emission reports by other state or federal requirements. They commented that local agencies do not routinely get many of the emission reports required by other state and federal regulations and therefore will not have complete enforcement files on these companies.

The proposed amendments to this rule are not a relaxation of rule requirements. This rule does not exempt boilers and turbine compressors from the notification requirements of §101.6(a)(3) or §101.7(b)(2). In most cases, the commission requires that copies of the unauthorized emission reports required by other state and federal regulations be sent quarterly to the commission's regional office in which the source is located. The reports must contain records of all emissions above the limits set out in the state rules or federal regulations. The exemption from reporting compound descriptions and quantities does not apply to all boilers and combustion turbines. The

exemption is only applicable to boiler and combustion turbines which are both equipped with a CEMS providing updated readings at a minimum 15-minute interval, and required by another state or federal regulation to report excess emissions and are fueled by natural gas, coal, lignite, wood, or fuel oil containing hazardous air pollutants at a concentration of less than 0.02% by weight. The modification was added in 1997 in recognition of the fact that boiler emissions consist primarily of carbon dioxide, nitrogen oxides (NO_x), water, and small amounts of carbon monoxide and are not acutely harmful if unconfined. The figure of 0.02% by weight is significant because trace contaminants at this concentration or less, that might be present in used oil fired in boilers, will generally result in emissions below an RQ in the event of an upset.

B&P suggested that the word “minimum” be changed to “maximum” in §101.6(d) and §101.7(e). B&P feels that the proposed language could be interpreted that CEMS which provide update readings more frequently than every 15 minutes are not sufficient, while those that provide update readings less frequently are.

The commenter is correct. The commission intends that the rules require that CEMS should complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. The commission has revised the rule language to clarify this point.

Amoco and TCC suggested that §101.6(d) and §101.7(e) be broadened to include any source which has a CEMS or predictive emission monitoring system and is required to submit excess emission reports

related to other rule requirements such as NO_x, reasonably available control technology, new source performance standards, maximum available control technology, etc.

The exemption in the referenced sections was added in recognition of the fact that boiler emissions consist primarily of carbon dioxide, NO_x, water, and small amounts of carbon monoxide and are not acutely harmful if unconfined. The same cannot be said for all sources equipped with CEMS. Owners or operators of sources, other than boiler or combustion turbines, equipped with CEMS may, under §101.1(82)(D), request alternative reporting requirements based on a screening model. The commission has not made any changes in response to this comment.

§101.7, MAINTENANCE, START-UP, AND SHUTDOWN REPORTING, RECORDKEEPING,
AND OPERATIONAL REQUIREMENTS

Mobil and TXOGA requested that the commission provide some mechanism for obtaining a permit for, or including in an existing permit, the emissions from routine, recurring maintenance activities that are a normal part of a facility's operations.

The commission currently allows permits and permit amendments to include emissions from recurring routine maintenance. Emissions that are anticipated, or part of a plant's normal operations, should be included in the authorized emission limits if the owner or operator satisfies all applicable permitting requirements.

CA, CCCCLA, FUSE, GHASP, LPCASS, LWV-D, LWV-Tx, MCA, PACE, SEED, Sierra-Austin, Sierra-Dallas, Sierra-Houston, Sierra-Lone Star, TCEA, and 31 individuals support the requirement in §101.7(c) that records maintained on-site for five years instead of two. An individual requested a record retention period of six years.

A five-year record retention period is consistent with the commission's inspection cycles and is adequate to provide a traceable record. The commission has not made any changes in response to this comment.

Amoco and TCC suggested that §101.7(c) should be revised to clarify that final records are prepared no later than two weeks "after the end of the" maintenance, start-up, or shutdown, consistent with the proposed language in §101.7(d).

The commission agrees with this commenter and has made the necessary change.

DEFS opposed §101.7(c) as proposed. DEFS believes that as proposed the rule is unreasonable and cannot be satisfied in any practical manner. In order to record every instance of maintenance, start-up, and shutdown at every facility in Texas to the extent required in §101.7, DEFS stated that it would have to allocate a tremendous amount of both time and resources which will provide no benefit in emission reductions or air quality improvement. DEFS proposed that §101.6 and §101.7 be rewritten to allow the creation and maintenance of documentation from routine activities based on engineering calculations, process knowledge, or performance testing which could demonstrate that emissions from

such activities do not exceed the RQ thresholds given in §101.1. Operators choosing to maintain such documentation would then be exempt from the recordkeeping requirements of §101.6(b) and §101.7(c). In this manner, sources would be able to comply with the apparent intent of the rule, which is to require operators to be knowledgeable as to whether events resulted in, or could have resulted in, reportable emissions.

The requirement to maintain records of unauthorized emissions from start-up, shutdown, and maintenance is not new. The commission recognizes that large industrial plants can have thousands of components that require periodic maintenance. However, only a limited number of these components should result in unauthorized emissions during maintenance. The commission disagrees that the requirement to create records of unauthorized emissions from maintenance cannot be practically satisfied. Owners and operators also have the option of amending their permits to include periodic emissions from maintenance. The commission also believes that the higher potential for unauthorized emissions during start-up and shutdown justifies the recording of these events. The commission has not made any changes in response to these comments.

§101.11, DEMONSTRATIONS

LWV-Tx commented that the cumulative effects of episodes should be taken into account in reviewing plant compliance. An individual commented that repeated upsets at a plant should call for penalties or permit revocation.

The commission will examine upset reports and consider repeat upsets or upsets that fit a particular pattern in its decision whether unauthorized emissions are exempt.

MCA commented that requests for exemptions from emission limits need to clearly state that the event was not caused by poor or inadequate design, operation, or maintenance. Exemption requests must also indicate that repairs were made as quickly as possible and that control equipment was bypassed only if necessary to prevent loss of life, personal injury, or severe property damage.

The commission has included these criteria for exemption in the adopted rule.

HCPCD strongly supported the proposal to clarify and define the situations that will or will not constitute an exemption for an upset. These rules may help eliminate the industrial practice of burning off-specification product, such as ethylene, in flare systems and may help identify and correct recurring equipment breakdowns. HCPCD recommended that the person or persons responsible at a plant should be specified by the commission, and that person or their designee certify that the information being offered in accordance with this rule is true and correct.

The commission appreciates the support of HCPCD. Flaring of off-spec production will be reviewed by the executive director on a case-by-case basis to determine if the event is an upset and is eligible for an exemptions under the criteria set out in §101.11. The commission does not believe that it is necessary to specify a responsible individual for the content of an upset report as the company submitting the report will be accountable and would be the responsible party in any

enforcement case. The commission has not made any changes to the rule in response to this comment.

Houston would like to see a bright-line standard and suggested that three breakdowns within a given period should result in a penalty. Furthermore, failure to complete the corrective action within a given period should result in a penalty. Houston also suggested that upsets resulting from human error should result in a penalty. Houston would also like to see upsets resulting from failure to maintain equipment, and records, result in a penalty. Lastly, Houston would like to see the development of standard time intervals for startups or shutdowns.

The conditions and circumstances stated by the commenter are all criteria the commission would use to determine if unauthorized emissions from upset or maintenance events were unavoidable. However, these criteria will be applied on a case-by-case basis and will serve as a basis for evaluation of a particular incident for exemption or possible enforcement. The commenter's suggestion would make the determination of a violation automatic and would remove the commission's discretion in U/M enforcement matters. A single set of "bright line" standards may not be appropriate for all circumstances and may inhibit the commission's ability to enforce. The commission has not made any changes in response to this comment.

B&P, Huntsman, and TIP commented that §101.11 inappropriately incorporates redundant and confusing standards which set an impossible threshold based on an EPA policy pronouncement that never underwent review and comment by the regulated community. Huntsman and TIP suggested that

the commission should instead develop its own standards that will provide clear guidance to those who will be bound by them. Section 101.11 as proposed imposes a potentially insurmountable burden of proof on the regulated community. The language of the rule must delineate clearly what will constitute an affirmative defense. Dow commented that the criteria used to demonstrate that a malfunction is unavoidable should not be copied out of the EPA guidance document, but should be simplified statements devised by the commission which can be consistently applied across all scenarios by industry and regulatory agencies alike. Furthermore, Dow commented that this concept would apply to the maintenance, startup, and shutdown rules.

The commission has modified the proposed language for demonstration criteria to provide additional clarity. The exemption criteria in §101.11 are not simply a blanket adoption of EPA's guidance document but are the factors the commission believes are necessary to evaluate U/M events. The criteria are not insurmountable or an impossible threshold. As previously stated in this preamble, the commission expects that equipment will occasionally fail and periodic maintenance is necessary and should be handled in a manner consistent with good engineering practice. When owners and operators meet the notification requirements of §101.6 and handle any U/M event appropriately, the unauthorized emissions will be exempt.

Huntsman's primary concern with the proposed standards is that they could be construed to eliminate the availability of the exemption for any upset in which human error played any role. Huntsman commented that where there is any element of human error, it will be difficult, if not impossible, for an owner or operator to prove that the event was beyond the control of the operator and could not have

been avoided by better operation. Huntsman does not believe that the commission intends to disqualify from exemption any upset that involves an element, no matter how unintended or how insignificant, of human error.

The commission generally considers human error avoidable. Owners or operators should have adequate training and procedures in place to minimize the number of human errors and back-up procedures to reduce the effect of errors. In most cases, an error occurs when an individual was not following the established procedures or training. The owner or operator is responsible for the actions of its employees and should ensure that they follow established procedures. The commission intentionally sets a high standard for excusing human error but does not discount that there may be cases where an error was unavoidable and would therefore examine these requests for exemption individually. Emissions that are anticipated, or part of a plant's normal operations, should be included in the authorized emission limits if the owner or operator satisfies all applicable permitting requirements. The commission has not made any changes in response to this comment.

Huntsman commented that regulations should be developed which allow a company to demonstrate compliance during an upset by showing that there was no exceedance of applicable emission or ambient air requirements. Huntsman feels that U/M emission limitations could be developed and incorporated into permits, general or plant-specific, for many kinds of U/M incidents. Huntsman commented that other approaches should be allowed to be used in U/M events to demonstrate compliance, such as fence-line monitoring, emission modeling, or pollutant credits allowing the emissions.

The commission establishes emission standards and limits to protect ambient air quality, but the limits that are written into permits and rules are based on proven performance of equipment and processes. The U/M rules are intended for application to breakdowns in equipment or other deviations from processes. The commission believes that this is the best method of protecting ambient air quality as opposed to waiting until there are detectable effects. The commission also believes that applying emission credits to compensate for U/M emissions is a disincentive to proper maintenance and timely replacement of obsolete equipment. The commission currently allows incorporation of routine maintenance emissions into permits. The commission has not made any changes in response to these comments.

Commenting on §101.11(a)(1), Amoco and TCC suggested that the term “sudden” should not imply only events of catastrophic magnitude. In addition, the use of the term “technology” is unclear and might better be replaced with the term “equipment.” Therefore, Amoco and TCC suggested that §101.11(a)(1) be revised as follows: “the excess emissions were caused by an unanticipated equipment failure or breakdown, beyond the immediate control of the owner or operator.” TXOGA and CSW suggested that the terms “control of the owner or operator” and “unavoidable” are extremely difficult to demonstrate. Therefore, TXOGA and CSW requested that the term “unavoidable” be removed and the following language be used: “the excess emissions were caused by a sudden breakdown of technology beyond the reasonable control of the owner or operator.” Huntsman and TIP commented that §101.11(a)(1) and (2) basically are aiming at the same underlying cause of the upset, for example, something that is sudden and unavoidable. But by using slightly different wording in two separate standards, each of which must be satisfied to demonstrate qualification for an exemption from

compliance, the commission would be establishing a confusing standard. Huntsman and TIP suggested that it would seem logical to combine these two standards into a single, consistent standard relating to cause. Furthermore, they commented that there was a confusing difference in terminology. The use of the term “excess emissions” is in contrast with the use of the term “unauthorized emissions” elsewhere in the U/M rules. Huntsman and TIP also expressed concern about wording used for the various requirements which is often imprecise; for example, many of the requirements refer to actions that are “possible,” while others refer to actions that are “practicable.” Mobil suggested insertion of the word “reasonable” in “...beyond the *reasonable* control of the owner or operator....” TXU and CSW commented that upsets previously reported and exempted under the existing rule, such as spontaneous combustion in coal storage piles, would not be eligible for exemption under the proposed rule, since there was no breakdown of technology. TXU suggested the following language: “The excess emissions were caused by a sudden, unavoidable breakdown of a process or technology, beyond the control of the owner or operator;”.

The paragraphs in §101.11 contain language used to determine if unauthorized emissions can be exempted. Because of the large number of variables affecting industrial operations, it is impossible to write specific circumstances into a rule with the response or responses to those circumstances that would allow the upset to be exempted. Instead, the commission must rely on terms such as “minimization,” “good operating practices,” or “beyond the control.” The commission understands that the terms leave room for debate or interpretation, but believes that there exists sufficient operational and regulatory experience to narrow the scope of these terms to allow effective demonstrations under §101.11.

The use of the term “sudden” is not meant to be applied to catastrophic failures only, but is intended to differentiate between events that occur without warning and those that are a result of gradual and detectable deterioration in equipment or processes. The commission has not combined §101.11(a)(1) and (2) in response to TIP’s suggestion because, while the two paragraphs are related, the concept of good engineering, operational or maintenance specified in §101.11(a)(2) are intended to define the types of practices that can prevent events other than those that are sudden and unpredictable. The commission agrees with TXOGA about the use of the term “unavoidable” and has deleted it from the adopted rule.

The term “technology” has been replaced with “equipment and processes.” In response to Mobil’s comment, the commission declines to add the term “reasonable,” because it does not believe that the term adds any clarity for purposes of determining exemptions. The commission would interpret “beyond the control of the owner or operator” to include situations and events for which no standard operating procedure or training could be specifically devised. The commission agrees that a breakdown in process is a clarifying addition to the rule and has made the necessary change in §101.11(a)(1). The commission agrees with TIP that the use of the terms “excess emissions” and “unauthorized emissions” interchangeably could be confusing and has changed references to “unauthorized emissions” in the adopted rule.

Amoco and TCC suggested a revision to minimize “negative” demonstrations and to clarify the intent of the phrase “better operation and maintenance practices” in §101.11(a)(2). Amoco, TCC, CSW, and TXOGA proposed alternative language: “the excess emissions did not stem from any activity or event

that could have been reasonably foreseen and avoided, or planned for. In addition, the facility was operated in a manner consistent with good practice for minimizing emissions.” Brown and TXOGA commented that the proposed rule requires demonstrations that seemingly have no limit in stringency, and stated as an example, that given enough time and energy, any upset could have been planned for.

The commission agrees that the proposed language could be modified to limit the range of “negative” demonstrations and has chosen to adopt language referring to “good design, operation and maintenance practices.” While this language is subject to interpretation, the commission believes that it defines a narrower and enforceable range of actions.

Huntsman suggested the following language for §101.11(a)(3) “the air pollution control equipment or processes were designed, maintained and operated in a manner consistent with good practice for controlling emissions;”. CSW recommended removing the phrase “to the maximum extent practicable.”

The commission has removed the phrase “to the maximum extent practicable” from §101.11(a)(3) because it does not clearly describe the standard that must be met. The commission instead chooses to require that owner and operators operate equipment in a “manner consistent with good practice for minimizing emissions.” This remains a general statement, but the commission believes that the term “good practice” designates a narrower range of industry practices accepted by regulators.

Commenting on §101.11(a)(4), Mobil, CSW, and TXOGA suggested that the term “repairs” should be replaced with the term “remedies” since operation changes or other actions besides repairs may be a more appropriate response in a given situation. TXOGA also commented that using off-shift labor and overtime will often be appropriate in larger facilities, but in remote locations such as isolated, unmanned production facilities, this language could be construed to require a person to be on call around the clock to respond to an upset even though the emissions resulting from that upset are so small that they would not approach a reportable quantity. Brown and TXOGA commented that the requirement for off-shift labor does not comply with TCAA, §382.011(b), and raises occupational safety issues. Huntsman and TIP suggested that the first time the term “practicable” is used in the subsection, it should be replaced with the phrase “required and practicable.” Huntsman suggested the following language: “repairs were made in an expeditious fashion after the operator knew or reasonably should have known that the applicable emissions limitations were being exceeded;”.

The commission has modified §101.11(a)(4) to require “prompt action...to achieve compliance” to cover situations where a mechanical repair alone would not correct an upset. The commission has also deleted the requirement to use off-shift labor and overtime to correct an upset, but acknowledges such measures may be appropriate corrective actions in responding to certain upset events. The owner or operator is required to make expeditious repairs and minimize emissions in the event of an upset. The commission believes that these requirements are sufficient statements of the responsibility of the owner or operator, and it is not necessary to specify the details of how these requirements will be met.

TXOGA and CSW requested that the wording of §101.11(a)(5) be modified to insert the phrase, “of pollution control equipment” after the word “bypass” in this paragraph to match the language and intent of §101.11(b)(3). Mobil suggested that the phrase “to the maximum extent practicable” be replaced with “to the extent practicable,” stating: “This provides the regulated community with more clarity on issues related to unit/facility operation during periods of emission control device upset.” Brown and TXOGA commented that §101.11(a)(5), (6), and (7) are vague and impose requirements that are subjective. An individual commented that the wording of §101.11(a)(5) is unclear, and would like the wording used in the current §101.11(b)(3). TXOGA suggested that the words “at all possible” in §101.11(a)(7) be changed to say “to the extent practicable.” This change would be consistent with other portions of the proposed regulation.

The commission agrees with the TXOGA comment concerning the phrase “of pollution control equipment” and has made the revision. Also in response to TXOGA the commission has deleted the words “at all” from §101.11(a)(7) because they do not add to the clarity of the requirement.

The commission has deleted the phrase “to the maximum extent practicable” from §101.11(a)(5), believing that the phrase does not add any stringency to the word “minimize.” The commission expects that minimization of emissions could include shutting down a facility or that portion of a facility in upset, but only if that shutdown would not result in more emissions than continued operation at a reduced level. Neither does the commission expect a facility to shut down if the shutdown compromises safety or could lead to a catastrophic failure of equipment and structures. However, the owner or operator must be fully prepared to justify its choice of actions.

Justification of a decision not to shut down will not automatically result in an exemption under §101.11 for the release of unauthorized emissions. Although both §101.11(a)(5) and §101.11(b)(3) both refer to bypass, the standard in (b)(3) is not appropriate for an upset event, therefore the commission declines to make this change.

Commenting on §101.11(a)(6), Amoco, CSW, Eastman, Huntsman, Mobil, TCC, TIP, and TXOGA stated that it is virtually impossible to take “all possible steps” to minimize the impact of emissions. TXOGA proposes that the phrase “all possible steps” in §101.11(a)(6) and (b)(6) be changed to “all reasonable steps.” As an example, in some cases emissions resulting from a complete shutdown are greater than the emissions during reduced operations. A facility should be allowed to remain in operation at reduced rates during an upset if emissions are less than what would result from a total shutdown. TXOGA also requested that the commission include safety as one of the major considerations of whether a unit must be shut down if the emission control device malfunctions. TXOGA and CSW commented that the commission should give consideration to those situations which may warrant reduced rate of operation in lieu of shutdown of a facility. Amoco, TCC, and TXOGA requested that commission include in the preamble to the rule that for certain case-specific events, shutdown of the facility should not be automatically required. CSW stated that the term “at all possible” be changed to “to the extent practicable” in §101.11(a)(7).

The commission has deleted §101.11(a)(6) because it believes that minimization of emissions from an upset is the best method to minimize effects of the upset on ambient air quality. The subsequent paragraphs have been renumbered. The commission also expects monitoring

equipment measuring emissions from a facility in upset to be kept in operation unless that operation prevents correction of the upset or would cause irreparable damage to the monitoring equipment. The commission has deleted the words “at all” from §101.11(a)(7), which was formerly §101.11(a)(6), as they do not add to the clarity of the requirement.

Amoco and TCC requested some clarification in the preamble that the demonstration language is not intended to force unreasonable redundancy. TCC’s example was if a plant had a leak to the atmosphere from a cooling water system, those emissions could be minimized by the installation of spare heat exchangers in every service. While this may be possible, TCC contends that it is not a reasonable approach. TCC feels that the commission should clarify that this type of redundant equipment is not intended by the language. TCC suggested the following language for §101.11(a)(6): “All reasonably practical steps were taken to minimize the impact of the excess emissions on ambient air quality; provided, however, that this provision shall not be construed to require the use of installation of additional stand-by or redundant pollution control equipment not otherwise required.” The commenter stated that similar language should also be added to §101.11(b)(6).

The U/M rules do not require that sources have stand-by or redundant pollution control equipment on hand in the case of an upset. However, other rules or permits may have this requirement. It is the commission’s intent that sources should have the means to minimize the unauthorized emissions to the extent that the source comes back into compliance with its emission limitation as soon as practicable. This can be accomplished by a number of ways, which include, but are not limited to: spare equipment, reduction of the process, rerouting of the process, or a

shutdown of the process if the emissions from the shutdown would not create more emissions than those that are being emitted. In addressing TCC's example concerning unauthorized emissions to the atmosphere from a cooling water system due to a leak in a heat exchanger, the commission would expect the source to minimize the emission so as to come back into compliance with its emission limitation promptly. This might require the installation of a spare heat exchanger, routing the process stream to another heat exchanger, or reducing or shutting down the individual process line until the problem heat exchanger could be fixed. In most cases, the commission would not allow upsets to continue for months until the next scheduled maintenance for that source. Therefore, the commission has not made changes in response to these comments. However, in order to be consistent with the other rules in this title, the term "excess emissions" has been replaced with the defined term "unauthorized emissions."

Amoco, Huntsman, TCC, and TIP stated that language in §101.11(a)(8) does not clearly indicate what properly signed means, whose signature is required, and complained that the standard is vague on whether "other relevant evidence" must be "properly signed" and "contemporaneous." Furthermore, Brown, Huntsman, TIP, and TXOGA are concerned that this standard will be interpreted to require the creation of new records solely for the purpose of obtaining the exemption. Huntsman and TIP suggested the following language: "the owner's or operator's actions in response to the unauthorized emission are reflected in, and consistent with, operating logs or other similar documents created during the upset or soon after the upset ended." Amoco and TCC suggested the following language: "the owner or operator's action in response to the excess emissions were documented in the final record." This suggested change would also be applicable to §101.11(b)(8).

Section 101.11(a)(8) does not create new recordkeeping requirements concerning the upset event, other than the records required by §101.6(b). However, the subsection does require that a source should be able to show documentation on its normal operation logs or computer systems that the event occurred and how the source owner or operator responded to the event. This is what is meant by “contemporaneous operation logs.” The commission agrees that the term “signed” is unclear as to whose signature is required; therefore, the term has been removed. This change was also made in §101.11(b)(8).

Amoco and TCC stated that language in §101.11(a)(9) concerning “inadequate design” is not defined. Amoco, Brown, TCC, and TXOGA believe that this general language might inappropriately bias older equipment and process technologies that still perform in a safe and environmentally protective manner. Therefore, the Amoco and TCC feel that the commission should give consideration to the environmental impact of a release, not simply the quantity of releases. CSW suggested adding the words “original” or “initial” in front of “design” to make clear the rules will not affect best available control technology determinations.

The commission does not believe that the phrase “inadequate design” requires definition beyond what is commonly ascribed in the field of air pollution control. The commission also expects retrofits of existing equipment to conform with good design and installation practices. The intent of this subsection is to determine if the unauthorized emissions were due to a recurring pattern indicative of inadequate design for the process or control equipment based on original design of the equipment and any modification which might have occurred since it was installed. The

operation and maintenance of the equipment should also be consistent with good operating practice. The commission would interpret this as practices commonly accepted by industry and regulators. Therefore, the commission has not made any change concerning these comments. However, in order to be consistent with the other rules in this title, the term “excess” has been replaced with the defined term “unauthorized.”

Amoco and TCC commented that if a maintenance, start-up, or shutdown plan is properly reported to the commission at least ten days prior as specified in §101.7(b), and the commission chooses not to exercise its authority under proposed §101.7(f) to modify or limit application of the plan, and if the plan is followed and emissions do not exceed those predicted in the plan, then it should be considered that the criteria of §101.11(b) have been satisfied.

One of the conditions for exemption under §101.11 is that the maintenance activity be properly reported under §101.7. The failure of the executive director to respond to the plan under §101.7(b) does not relieve the owner or operator of its obligation to meet all of the exemption criteria in §101.11.

TXOGA and CSW supported the commission’s desire to minimize startup, shutdown, and maintenance emissions. However, TXOGA and CSW expressed concern that §101.11(b) could be used to benchmark the performance of one facility against another. Different ages of facilities, equipment, design, and throughput require that maintenance be performed as appropriate to each facility and not in competition with other facilities.

The commission will base its judgment of maintenance practices on the procedures and schedules recommended by the manufacturers of process equipment. Factors such as equipment age and older technology will not be considered when evaluating unauthorized emissions provided that the equipment is properly designed, installed, maintained, and is not operated beyond its manufacturers recommended limits. The commission would only examine the maintenance performance of facilities against the performance of another facility that is similar in design and age.

Amoco and TCC commented that the word “careful” in §101.11(b)(1) should be replaced with the term “reasonable.” Brown and TXOGA commented that the provisions would require a re-analysis, in hindsight, of technology and processes that may have been developed many years prior to the event.

The commission agrees with the commenter’s concerns. The term “careful” does not add any clarity to the standard and has been deleted. The commission does not believe it necessary to replace the term with another. Section 101.11(b)(1) is amended to delete the term “short and infrequent.” This term does not add to the clarity of the rule and is redundant when considered with the language in §101.11(b)(5), which requires the minimization of the frequency and duration of operations under maintenance, start-up, or shutdown.

Brown and TXOGA commented that the language proposed in §101.11(b)(2) would penalize a source merely because of a pattern indicative of some shortcoming. Brown and TXOGA stated that this paragraph would penalize a source even if there were not an actual flaw. In addition, Brown and

TXOGA commented that the term “inadequate” is vague to the point of not notifying a source of what standard the commission is proposing.

The commission does not believe that the phrase “inadequate design” requires definition beyond what is commonly ascribed in the field of air pollution control. The intent of this subsection is to determine if the unauthorized emissions were due to a recurring pattern based on inadequate design for the process or control equipment based on original design of the equipment and any modification which might have occurred since it was installed. The operation of the equipment and the maintenance history may also need to be reviewed to determine if a pattern of neglect exists. If it is determined that a source has a recurring pattern of upsets which allow unauthorized emissions to be released to the atmosphere, then it is reasonable to conclude that there is an actual flaw in the process requiring correction. Therefore, the commission has not made any change concerning these comments. However, in order to be consistent with the other rules in this title, the term “excess” has been replaced with the defined term “unauthorized.”

Amoco, Brown, TCC, and TXOGA believe that the language proposed in §101.11(b)(3) imposes an unreasonable threshold to demonstrate an exemption from compliance with emission limitations.

Amoco and TCC believes that the commission should give consideration to process safety issues and suggested that §101.11(b)(3) be revised as follows: “if the excess emissions from maintenance, start-up, or shutdown were caused by a bypass..., the bypass was minimized to the extent practicable or was unavoidable to prevent loss of life, personal injury, or severe property damage to equipment or structures at the facility.”

The proposed language contains a condition allowing a bypass to avoid severe property damage which would include equipment and structures. The language currently states “...the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.” The commission does not believe that the commenter’s suggestion clarifies the language, and has not made any changes in response.

Mobil and TXOGA proposed that the words “at all times” in §101.11(b)(4) be replaced with the words “to the extent practicable.” Huntsman suggested the following language: “the facility was designed, operated and maintained in a manner consistent with good practice for controlling emissions;”.

The commission believes that the phrase “at all times” is redundant and has deleted it. The requirement to operate consistent with good practice sufficiently defines the standards of the paragraph as used in the field of air pollution control, and the commission does not believe that the phrase suggested by the commenters clarifies these standards and declines to add it to the adopted language.

Huntsman suggested the following language for §101.11(b)(5): “the frequency and duration of operation in maintenance, start-up or shutdown mode resulting in unauthorized emissions was minimized to the extent practicable.”

The commission has previously discussed the use of the term “minimized” in this adoption preamble. The commission expects that minimization of emissions could include shutting down a

facility or that portion of a facility producing unauthorized emissions during maintenance, but only if that shutdown would not result in more emissions than continued operation at a reduced level. Neither does the commission expect a facility to shut down if the shutdown compromises safety or could lead to a catastrophic failure of equipment and structures. However, the owner or operator must be fully prepared to justify its choice of actions. Justification of a decision not to shut down will not automatically result in an exemption under §101.11 for the release of unauthorized emissions.

Amoco, Mobil, TCC, and TXOGA suggested that the words “all possible steps” in §101.11(b)(6) should be replaced with “all reasonable steps.” Brown and TXOGA also objected to the proposed rule, commenting that it fails to inform a source operator of what its obligations are to avoid being determined in noncompliance.

The commission has deleted this paragraph. In order to obtain an exemption under §101.11(b) an owner or operator must minimize emissions, and the commission has discussed what is expected under “minimization” previously in this adopted preamble. The commission believes that the minimization of emissions is the best method to minimize effects on ambient air quality. Therefore, the requirement to minimize effects on ambient air quality as proposed in §101.11(b)(6) is redundant.

Seven individuals commented on §101.11(d) and disagreed that equipment, machines, devices, flues, and/or contrivances built or installed to be used at a domestic residence for domestic use are not required to meet the allowable emission levels set by the rules and regulations unless specifically required by a particular regulation.

The commission does not regulate unauthorized emissions from upset and maintenance activities at domestic residences. This subject was not addressed in the proposed rulemaking.

CA, CCCCLA, FUSE, GHASP, LPCASS, LWV-D, LWV-Tx, MCA, PRW, SEED, Sierra-Austin, Sierra-Dallas, Sierra-Houston, Sierra-Lone Star, TCEA, and 44 individuals agreed that the burden of proof should be on the source operator to demonstrate that the U/M event was “reasonably unavoidable.” Mobil supported the clarification in §101.11(g) that the owner or operator of a facility has the burden of proof of compliance with these rules. Mobil has always assumed that this was the case and believes that the clarification is appropriate.

The commission agrees with these comments and has always considered the burden of proof to be with the owner or operator to prove that upsets were unavoidable and that the owner or operator took measures necessary to minimize emissions.

Brown and TXOGA opposed the use of the term “burden of proof” to the extent that it implies that every excess emission is automatically an enforcement action. They stated that the commission should clarify that a source is required to submit information in order for the commission to make a determination as to whether unauthorized emissions require the initiation of an enforcement action.

Unauthorized or excess emissions are, by definition, violations of permit conditions or applicable emission limits. Without the ability to exempt these emissions due to unavoidable circumstances, all cases of unauthorized emissions would be automatically subject to enforcement. The exemption has no base without a demonstration from the owner or operators that unavoidable circumstances existed. The commission has not made any changes in response to this comment.

TXOGA requested that the following wording be considered as replacement for the proposed

§101.11(g): “The owner or operator has the burden of proof to demonstrate that the criteria identified in subsection (a) for upsets, or in subsection (b) for maintenance, start-up, or shutdown events, are satisfied. Once an owner or operator complies with the reporting and recordkeeping requirements of §101.6, the criteria in subsection (a) or (b) are presumed to be satisfied unless the executive director requests the owner or operator to provide additional information to demonstrate that the criteria are satisfied.” Amoco, TCC and TXOGA also commented that the commission should clarify in both the preamble and the rule that the owner or operator will be provided sufficient and reasonable time to prepare a demonstration if requested by the commission.

Eastman, Huntsman, and TIP commented that they believe it is important that the revisions to the U/M rules not contain a suggestion that it is necessary for the executive director or the commission to affirmatively determine whether unauthorized emissions are exempt in order for the exemption to apply. For that reason, Huntsman and TIP recommended that the commission revise the language in proposed §101.11(g) to state that “the owner or operator has the burden of proof in an enforcement action to demonstrate....” They also suggested that the sentence in §101.11(g) concerning the authority of air pollution agencies to obtain exemption-related documentation be moved to a separate subsection.

Qualification for an exemption is a two-step test. The event must first meet the requirements of §101.6 or §101.7 as applicable and must then be followed by a demonstration that the event was unavoidable. Meeting the first test cannot be taken as meeting the second without invalidating this two-step test. The commission has chosen the wording in §101.11(g), now §101.11(f), to

clearly indicate that the owner or operator is expected to be able to supply a demonstration that a release of unauthorized emissions was unavoidable for every event for which it seeks an exemption. In the event that the commission requests additional information to determine qualification for an exemption, it will allow adequate time to submit the requested information. Additionally, any alleged violator not qualifying for an exemption will have the opportunity to respond to any notice of violation, and can further present its case through the enforcement process. The executive director may initiate an enforcement action if he believes the requirements of this rule have not been met.

The commission cannot determine a regulatory significant difference in the location of the language allowing air pollution programs with jurisdiction to request exemption documentation. The commission has not made any changes in response to these comments.

Mobil and TXOGA requested that the first sentence in §101.11(h) be removed. The sentence conflicts with the requirements to demonstrate that a release is unavoidable. Amoco, Eastman, Huntsman, TCC, TIP, and TXOGA commented that the subsection does not give the commission any additional authority to what is currently provided in the TCAA, and it is a standard that is impossible to meet. They commented that if the commission does retain the language, the commission should add language to the proposed subsection to clarify that it only applies to upset and maintenance activities that result in “unauthorized” emissions in compliance with emissions limitations. Without clarifying language, the new subsection could be interpreted to prohibit any upset or maintenance activity that causes or contributes to a condition of air pollution, even if that activity and the emissions it causes are fully

authorized. Huntsman and TIP respectfully noted that the commission does not possess the statutory authority to promulgate such a regulation.

The commission has redesignated proposed §101.11(h) as §101.11(g) and revised it by deleting the first sentence. The prohibition against causing or contributing to a condition of air pollution has been added as new §101.11(a)(9) and (b)(8) as a condition to qualify for an exemption. This prohibition against contributing or causing a condition of air pollution is identical to the prohibition against causing a nuisance, which has been a condition for exemption since the 1970's. The commission has also deleted §101.11(f) as being redundant of the prohibition to cause or contribute to a condition of air pollution. TCAA, §382.025 gives the commission authority to order any action indicated by the circumstances to control a situation of air pollution. Air pollution is defined in TCAA, §382.003 as the presence in the atmosphere of one or more air contaminants in such concentration and duration that they tend to be injurious to human health or welfare, animal life, vegetation, or property; or interfere with the normal use or enjoyment of animal life, vegetation, or property.

STATUTORY AUTHORITY

The amendments are adopted under the Texas Health and Safety Code, TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop a plan for control of the state's air; §382.014, which authorizes the commission to require a person whose activities cause emissions of air contaminants to submit information to enable the commission to develop an emission inventory; §382.016, which authorizes the commission to

prescribe reasonable requirements for the measuring and monitoring of emissions of air contaminants; §382.017, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; §382.025, which authorizes the commission to order actions indicated by the circumstances to control a condition of air pollution; §382.085, which prohibits the unauthorized emissions of air contaminants; and Federal Clean Air Act (FCAA), §7410(a)(F)(iii), which requires correlation of emissions reports and emission-related data by the state agency with any emission limitations or standards established under the FCAA.

CHAPTER 101
GENERAL AIR QUALITY RULES
§§101.1, 101.6, 101.7, 101.11

§101.1. Definitions.

Unless specifically defined in the 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 which are defined by the TCAA, the following terms, when used in this chapter, shall 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), all sources which 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) **Ambient air** - That portion of the atmosphere, external to buildings, to which the general public has access.

(4) **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.

(5) **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.

(6) **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.

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

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

(9) **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.

(10) **Cold solvent cleaning** - A batch process that uses liquid solvent to remove soils from the surfaces of metal 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.

(11) **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.

(12) **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 which disposes only waste generated on-site or a facility that accepts waste only from other facilities owned or effectively controlled by the same person.

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

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

(15) **Component** - A piece of equipment, including, but not limited to, pumps, valves, compressors, and pressure relief valves, which has the potential to leak VOCs.

(16) **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.

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

(18) **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.

(19) **Conveyorized degreasing** - A solvent cleaning process that uses an automated parts handling system, typically a conveyor, to automatically provide a continuous supply of metal 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.

(20) **Criteria Pollutant or Standard** - Any pollutant for which there is a National Ambient Air Quality Standard established under 40 Code of Federal Regulations (CFR) Part 50.

(21) **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.

(22) **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 which has undergone a major modification, which does not exceed the following specified amounts.

Figure: 30 TAC §101.1(22) (No change.)

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

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

(25) **Emissions reduction credit (ERC)** - Any stationary source emissions reduction which has been banked in accordance with §101.29 of this title (relating to Emission Credit Banking and Trading).

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

(27) **Emissions unit** - Any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the FCAA.

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

(29) **External floating roof** - A cover or roof in an open top tank which 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.

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

(31) **Federally enforceable** - All limitations and conditions which are enforceable by the EPA administrator, including those requirements developed under 40 CFR Parts 60 and 61, requirements within any applicable state implementation plan (SIP), any permit requirements established under 40 CFR §52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, 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.

(32) **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 which 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 is not considered a flare.

(33) **Fuel oil** - Any oil meeting The American Society for Testing and Materials (ASTM) specifications for fuel oil in ASTM D 396-86, Standard Specifications for Fuel Oils. This includes fuel oil grades 1, 2, 4 (Light), 4, 5 (Light), 5 (Heavy), and 6.

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

(35) **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.

(36) **Gasoline** - Any petroleum distillate having a Reid Vapor Pressure (RVP) of four pounds per square inch (27.6 kPa) or greater which is produced for use as a motor fuel and is commonly called gasoline.

(37) **Hazardous waste management facility** - All contiguous land, including structures, appurtenances, and other improvements on the land, used for processing, storing, or disposing of hazardous waste. The term includes a publicly or privately owned hazardous waste

management facility consisting of processing, storage, or disposal operational hazardous waste management units such as one or more landfills, surface impoundments, waste piles, incinerators, boilers, and industrial furnaces, including cement kilns, injection wells, salt dome waste containment caverns, land treatment facilities, or a combination of units.

(38) **Hazardous waste management unit** - A landfill, surface impoundment, waste pile, boiler, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or land treatment unit, or any other structure, vessel, appurtenance, or other improvement on land used to manage hazardous waste.

(39) **Hazardous wastes** - Any solid waste identified or listed as a hazardous waste by the administrator of the EPA under the federal Solid Waste Disposal Act, as amended by RCRA, 42 United States Code (USC) §§6901 et seq., as amended.

(40) **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.

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

(42) **High-volume low-pressure (HVLP) spray guns** - Equipment used to apply coatings by means of a spray gun which operates between 0.1 and 10.0 pounds per square inch gauge air pressure.

(43) **Incinerator** - An enclosed combustion apparatus and attachments which 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 which is equipped with a flue for conducting products of combustion to the atmosphere. Any combustion device which burns 10% or more of solid waste on a total British thermal unit (Btu) heat input basis averaged over any one-hour period shall be considered 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 shall also be considered 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 regulations within this title provided they are installed and operated in compliance with the condition of all applicable permits.

(44) **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.

(45) **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.

(46) **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 of this title (relating to Definitions) and §335.505 of this title (relating to 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).

(47) **Internal floating cover** - A cover or floating roof in a fixed roof tank which 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.

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

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

(50) **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.

(51) **Maintenance area** - A geographic region of the state previously designated nonattainment under the FCAA Amendments of 1990 and subsequently redesignated to attainment

subject to the requirement to develop a maintenance plan under FCAA, §175A, as amended. The following are the maintenance areas within the state: Victoria Ozone Maintenance Area (60 FR 12453) - Victoria County.

(52) **Maintenance Plan** - a revision to the applicable SIP, meeting the requirements of FCAA, §175A.

(53) **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.

(54) **Mechanical shoe seal** - A metal sheet which 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.

(55) **Medical waste** - Waste materials identified by the Texas Department of Health as “special waste from health care-related facilities” and those waste materials commingled and discarded with special waste from health care related facilities.

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

(57) **Mobile emissions reduction credit (MERC)** - The credit obtained from an enforceable, permanent, quantifiable, and surplus (to other federal and state regulations) emissions reduction generated by a mobile source as set forth in Chapter 114, Subchapter E of this title (relating to Low Emission Vehicle Fleet Requirements) or Chapter 114, Subchapter F of this title (relating to Vehicle Retirement and Mobile Emission Reduction Credits), and which has been banked in accordance with §101.29 of this title.

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

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

(60) **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.

(61) **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.

(62) **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 CFR §257.2. A municipal solid waste landfill (MSWLF) unit also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, non-hazardous 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.

(63) **National Ambient Air Quality Standard (NAAQS)** - Those standards established under FCAA, §109, including standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), inhalable particulate matter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂).

(64) **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.

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

(66) **Nonattainment area** - A defined region within the state which is designated by EPA as failing to meet the National Ambient Air Quality Standard for a pollutant for which a standard exists. The EPA will designate the area as nonattainment under the provisions of FCAA, §107(d). For the official list and boundaries of nonattainment areas, see 40 CFR Part 81 and pertinent *Federal Register* notices. The following areas comprise the nonattainment areas within the state:

(A) Carbon monoxide (CO). El Paso (ELP) CO nonattainment area (56 FR 56694) - Classified as a Moderate CO nonattainment area with a design value less than or equal to 12.7 parts per million. Portion of El Paso County. Portion of the city limits of El Paso: That portion of the City of El Paso bounded on the north by Highway 10 from Porfirio Diaz Street to Reynolds Street, Reynolds Street from Highway 10 to the Southern Pacific Railroad lines, the Southern Pacific Railroad lines from Reynolds Street to Highway 62, Highway 62 from the Southern Pacific Railroad lines to Highway 20, and Highway 20 from Highway 62 to Polo Inn Road. Bounded on the east by Polo Inn Road from Highway 20 to the Texas-Mexico border. Bounded on the south by the Texas-Mexico border from Polo Inn Road to Porfirio Diaz Street. Bounded on the west by Porfirio Diaz Street from the Texas-Mexico border to Highway 10.

(B) Inhalable particulate matter (PM₁₀). El Paso (ELP) PM₁₀ nonattainment area (56 FR 56694) - Classified as a Moderate PM₁₀ nonattainment area. Portion of El Paso County which comprises the El Paso city limit boundaries as they existed on November 15, 1990.

(C) Lead. Collin County lead nonattainment area (56 FR 56694) - Portion of Collin County. Eastside: Starting at the intersection of south Fifth Street and the fence line approximately 1,000 feet south of the Gould National Batteries (GNB) property line going north to the intersection of south Fifth Street and Eubanks Street; Northside: Proceeding west on Eubanks to the Burlington Railroad tracks; Westside: Along the Burlington Railroad tracks to the fence line approximately 1,000 feet south of the GNB property line; Southside: Fence line approximately 1,000 feet south of the GNB property line.

(D) Nitrogen Dioxide (NO₂). No designated nonattainment areas.

(E) Ozone.

(i) Houston/Galveston (HGA) ozone nonattainment area (56 FR 56694)
- Classified as a Severe-17 ozone nonattainment area. Consists of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.

(ii) El Paso (ELP) ozone nonattainment area (56 FR 56694) -
Classified as a Serious ozone nonattainment area. Consists of El Paso County.

(iii) Beaumont/Port Arthur (BPA) ozone nonattainment area (61 FR 14496) - Classified as a Moderate ozone nonattainment area. Consists of Hardin, Jefferson, and Orange Counties.

(iv) Dallas/Fort Worth (DFW) ozone nonattainment area (63 FR 8128)

- Classified as a Serious ozone nonattainment area. Consists of Collin, Dallas, Denton, and Tarrant Counties.

(F) Sulfur Dioxide (SO₂). No designated nonattainment areas.

(67) **Nonreportable upset** - Any upset that is not a reportable upset as defined in this section.

(68) **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.

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

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

(71) **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.

(72) **Particulate matter emissions** - All finely-divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by EPA Reference Method 5, as specified at 40 CFR Part 60, Appendix A, modified to include particulate caught by impinger train; by an equivalent or alternative method, as specified at 40 CFR Part 51; or by a test method specified in an approved SIP.

(73) **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.

(74) **PM₁₀** - Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 CFR Part 50, Appendix J and designated in accordance with 40 CFR Part 53, or by an equivalent method designated with that Part 53.

(75) **PM₁₀ emissions** - Finely-divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method specified in 40 CFR Part 51, or by a test method specified in an approved SIP.

(76) **Polychlorinated biphenyl compound (PCB)** - A compound subject to 40 CFR Part 761.

(77) **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.

(78) **Process weight per hour** - "Process weight" is the total weight of all materials introduced or recirculated into any specific process which 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 which 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.

(79) **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.

(80) **Reasonable further progress (RFP)** - Annual incremental reductions in emissions of the applicable air contaminant which 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 SIP.

(81) **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.

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

(A) for individual air contaminant compounds and specifically listed mixtures,
either:

(i) the lowest of the quantities:

(I) listed in 40 CFR §302, Table 302.4, the column “final
RQ;”

(II) listed in 40 CFR §355, Appendix A, the column
“Reportable Quantity;” or

(III) listed as follows:

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

(-b-) butenes (any isomer, except 1,3-butadiene) - 5,000
pounds;

(-c-) ethylene - 5,000 pounds;

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

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

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

(-g-) propylene - 5,000 pounds;

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

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

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

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

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

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

(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 which 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 which 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 methane and ethane, or air emissions from crude oil are known to be in an amount greater than or equal to 5,000 pounds or associated hydrogen sulfide and mercaptans in a total amount greater than 100 pounds, whichever occurs first;

(C) for opacity, an opacity which is equal to or exceeds 15 additional percentage points above the applicable limit, averaged over a six-minute period. Opacity is the only reportable quantity applicable to boilers or combustion turbines fueled by natural gas, coal, lignite, wood, or fuel oil containing hazardous air pollutants at a concentration of less than 0.02% by weight;

(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 facility 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.

(83) **Reportable upset** - Any upset which, in any 24-hour period, results in an unauthorized emission of air contaminants equal to or in excess of the reportable quantity as defined in this section.

(84) **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 which will not burn at ordinary incinerator temperatures (1,600 degrees Fahrenheit to 1,800 degrees Fahrenheit).

(85) **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.

(86) **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.

(87) **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 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 the 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 EPA under the federal Solid Waste Disposal Act, as amended by RCRA, as amended (42 USC, §§6901 et seq.).

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

(89) **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.

(90) **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.

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

(92) **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 kPa). Pollutant concentrations from an incinerator will be corrected to a condition of 50% excess air if the incinerator is operating at greater than 50% excess air.

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

(94) **Submerged fill pipe** - A fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 cm) from the bottom or, when applied to a tank which 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.

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

(96) **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 shall include sulfuric acid liquid mist, sulfur trioxide, and sulfuric acid vapor as measured by Test Method 8 in 40 CFR Part 60, Appendix A.

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

(98) **Total suspended particulate** - Particulate matter as measured by the method described in 40 CFR Part 50, Appendix B.

(99) **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.

(100) **True vapor pressure** - The absolute aggregate partial vapor pressure (psia) of all VOCs at the temperature of storage, handling, or processing.

(101) **Unauthorized emission** - An emission of any air contaminant except carbon dioxide, water, nitrogen, methane, ethane, noble gases, hydrogen, and oxygen which exceeds any air emission limitation in a permit, rule, or order of the commission or as authorized by TCAA, §382.0518(g).

(102) **Upset** - An unscheduled occurrence or excursion of a process or operation that results in an unauthorized emission of air contaminants.

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

(104) **Vapor combustor** - A partially enclosed combustion device used to destroy VOCs 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, which 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.

(105) **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.

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

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

(108) **Volatile organic compound** - Any compound of carbon or mixture of carbon compounds excluding methane; ethane; 1,1,1-trichloroethane (methyl chloroform); methylene chloride (dichloromethane); perchloroethylene (tetrachloroethylene); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-

134); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro-1-fluoroethane (HCFC-141b); 1-chloro-1,1-difluoroethane (HCFC-142b); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; acetone; 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1-chloro-1-fluoroethane (HCFC-151a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane; 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane; 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane; 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane; methyl acetate; carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; ammonium carbonate; and perfluorocarbon compounds which fall into these classes:

(A) cyclic, branched, or linear, completely fluorinated alkanes;

(B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(D) sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(109) **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.

§101.6. Upset Reporting and Recordkeeping Requirements.

(a) The following requirements for reportable upsets shall apply.

(1) As soon as practicable, but not later than 24 hours after the discovery of an upset, the owner or operator shall:

(A) determine if the upset is a reportable upset; and

(B) notify the commission's regional office for the region in which the facility is located and all appropriate local air pollution control agencies if the upset is reportable.

(2) The notification for reportable upsets, except for boilers or combustion turbines referenced in §101.1 of this title (relating to Definitions) in the definition of reportable quantity, shall identify:

(A) the cause of the upset, if known;

(B) the processes and equipment involved;

(C) the date and time of the upset;

(D) the duration or expected duration of the upset;

(E) the compound descriptive type of the individually listed compounds or mixtures of air contaminants in the definition of reportable quantity which are known through common process knowledge or past engineering analysis or testing to exceed the reportable quantity;

(F) the estimated quantities for those compounds or mixtures described in subparagraph (E) of this paragraph except in the case of upsets determined on opacity only, where opacity will be estimated; and

(G) the actions taken or being taken to correct the upset and minimize the emissions.

(3) The notification for reportable upsets for boilers or combustion turbines referenced in the definition of reportable quantity shall identify:

(A) the cause of the upset, if known;

(B) the processes and equipment involved;

(C) the date and time of the upset;

(D) the duration or expected duration of the event;

(E) the estimated opacity; and

(F) the actions taken or being taken to correct the upset and minimize the emissions.

(4) The owner or operator of a facility must report additional or more detailed information on the upset when requested by the executive director or any air pollution control agency with jurisdiction.

(5) Any spill or discharge required to be reported under §§327.1-327.5, and 327.31 of this title (relating to Spill Prevention and Control), is not required to be reported under paragraphs (1) and (2) of this subsection.

(b) The owner or operator of a facility shall create a final record of reportable and nonreportable upsets as soon as practicable, but no later than two weeks after the end of an upset. Final records shall be maintained on-site for a minimum of five years and be made readily available upon request to commission staff or personnel of any air pollution program with jurisdiction. If a site is not normally staffed, records of upsets may be maintained at the staffed location within Texas that is responsible for day-to-day operations of the site. Such records shall identify:

(1) the cause of the upset;

(2) the processes and equipment involved;

(3) the date and time of the upset;

(4) the duration of the upset;

(5) the compound descriptive type of the individually listed compounds or mixtures of air contaminants in the definition of reportable quantity which are known through common process

knowledge or past engineering analysis or testing, except for boilers or combustion turbines referenced in the definition of reportable quantity;

(6) the estimated quantities for those compounds or mixtures described in paragraph (5) of this subsection, except in the case of upsets determined on opacity only, where opacity will be estimated; and

(7) the actions taken or being taken to correct the upset and minimize the emissions.

(c) For all reportable upsets, if the information required in subsection (b) of this section differs from the information provided in the 24-hour notification under subsection (a) of this section, the owner or operator of the facility shall submit a copy of the final record to the commission's regional office for the region in which the facility is located no later than two weeks after the end of the upset. If the owner or operator does not submit a record under this subsection, the information provided in the 24-hour notification under subsection (a) of this section will be the final record of the upset.

(d) The owner or operator of a boiler or combustion turbine referenced in the definition of reportable quantity that is equipped with a continuous emission monitoring system providing updated readings at a minimum 15-minute interval that completes a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period and is required to submit excess emission reports by other state or federal requirements, is exempt from creating,

maintaining, and submitting records of reportable and nonreportable upsets of the boiler or combustion turbine under subsection (b) of this section.

(e) The owner or operator of any facility subject to the provisions of this section shall perform, upon request by the executive director or any air pollution control agency with jurisdiction, a technical evaluation of the upset event. The evaluation shall include at least an analysis of the probable causes of the upset and any necessary actions to prevent or minimize recurrence. The evaluation shall be submitted in writing to the executive director within 60 days from the date of request. The 60-day period may be extended by the executive director.

§101.7. Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements.

(a) All pollution emission capture equipment and abatement equipment shall be maintained in good working order and operated properly during normal facility operations. Emission capture and abatement equipment shall be considered in good working order and operated properly when operated in a manner such that the facility is operating within air emission limitations established by permit, rule, or order of the commission or as authorized by TCAA, §382.0518(g).

(b) The owner or operator shall notify the commission's regional office for the region in which the facility is located and all appropriate local air pollution control agencies at least ten days prior to any maintenance, start-up, or shutdown which is expected to cause an unauthorized emission which

equals or exceeds the reportable quantity in any 24-hour period. If notice cannot be given ten days prior to any start-up, shutdown, or maintenance which is expected to cause an unauthorized emission that will equal or exceed a reportable quantity in any 24-hour period, notification shall be given as soon as practicable prior to the maintenance, start-up, or shutdown. Any maintenance, start-up, or shutdown, for which no notification under this subsection was submitted, which results in unauthorized emissions that equal or exceed a reportable quantity, or any maintenance, start-up, or shutdown which exceeds the estimates submitted under the notification requirements of this subsection shall be considered a reportable upset and subject to §101.6 of this title (relating to Upset Reporting and Recordkeeping Requirements).

(1) The notification, except for boilers and combustion turbines referenced in §101.1 of this title (relating to Definitions) in the definition of reportable quantity, shall identify:

(A) the type of activity and the reason for the maintenance, start-up, or shutdown, if known;

(B) the expected date and time of the maintenance, start-up, or shutdown;

(C) the processes and equipment involved;

(D) the expected duration of the maintenance, start-up, or shutdown;

(E) the compound descriptive type of the individually listed compounds or mixtures of air contaminants in the definition of reportable quantity which are known through common process knowledge or past engineering analysis or testing to exceed the reportable quantity;

(F) the estimated quantities for those compounds or mixtures described in subparagraph (E) of this paragraph, except in the case of unauthorized emissions determined on opacity only, where opacity will be estimated; and

(G) the actions taken to minimize the emissions from the maintenance, start-up, or shutdown.

(2) The notification for boilers or combustion turbines referenced in the definition of reportable quantity shall identify:

(A) the type of activity and the reason for the maintenance, start-up, or shutdown, if known;

(B) the processes and equipment involved;

(C) the date and time of the maintenance, start-up, or shutdown;

(D) the duration or expected duration of the event;

(E) the estimated opacity; and

(F) the actions taken or being taken to minimize the emissions from the maintenance, start-up, or shutdown.

(c) The owner or operator of a facility shall create a final record of all maintenance, start-ups, and shutdowns with unauthorized emissions as soon as practicable, but no later than two weeks after the maintenance, start-up, or shutdown. Final records shall be maintained on-site for a minimum of five years and be made readily available upon request to commission staff or personnel of any air pollution program with jurisdiction. If a site is not normally staffed, records of maintenance, start-ups, and shutdowns may be maintained at the staffed location within Texas that is responsible for day to day operations of the site. Such records shall identify:

(1) the type of activity and the reason for the maintenance, start-up, or shutdown;

(2) the processes and equipment involved;

(3) the date and time of the maintenance, start-up, or shutdown;

(4) the duration of the maintenance, start-up, or shutdown;

(5) the compound descriptive type of the individually listed compounds or mixtures of air contaminants in the definition of reportable quantity which are known through common process knowledge or past engineering analysis or testing, except for boilers or combustion turbines referenced in the definition of reportable quantity;

(6) the estimated quantities for those compounds or mixtures described in paragraph (5) of this subsection, except in the case of unauthorized emissions determined on opacity only, where opacity shall be estimated; and

(7) the actions taken to minimize the emissions from the maintenance, start-up, or shutdown.

(d) For any maintenance, start-up, or shutdown event which causes an unauthorized emission which equals or exceeds the reportable quantity in any 24-hour period, if the information required in subsection (c) of this section differs from the information provided under subsection (b) of this section, the owner or operator of the facility shall submit a copy of the final record to the commission's regional office for the region in which the facility is located no later than two weeks after the end of the maintenance, start-up, or shutdown event. If the owner or operator does not submit a record under this subsection, the information provided under subsection (b) of this section will be the final record of the maintenance, start-up, shutdown event.

(e) The owner or operator of a boiler or combustion turbine referenced in the definition of reportable quantity that is equipped with a continuous emission monitoring system that completes a minimum of one cycle per operation (sampling, analyzing, and data recording) for each successive 15-minute interval and is required to submit excess emission reports by other state or federal regulations, is exempt from creating, maintaining, and submitting records of maintenance, start-ups, and shutdowns with unauthorized emissions under subsection (c) of this section.

(f) The executive director may specify the amount, time, and duration of emissions that will be allowed during the maintenance, start-up, or shutdown. The owner or operator of any source subject to the provisions of this section shall submit a technical plan for any start-up, shutdown, or maintenance when requested by the executive director. The plan shall contain a detailed explanation of the means by which emissions will be minimized during the maintenance, start-up, or shutdown. For those emissions which must be released into the atmosphere, the plan shall include the reasons such emissions cannot be reduced further.

§101.11. Demonstrations.

(a) Upset emissions are exempt from compliance with air emission limitations established in permits, rules, and orders of the commission, or as authorized by TCAA, §382.0518(g) if the owner or operator complies with the requirements of §101.6 of this title (relating to Upset Reporting and Recordkeeping Requirements) and satisfies all of the following:

(1) the unauthorized emissions were caused by a sudden breakdown of equipment or process, beyond the control of the owner or operator;

(2) the unauthorized emissions did not stem from any activity or event that could have been foreseen and avoided and could not have been avoided by good design, operation, and maintenance practices;

(3) the air pollution control equipment or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;

(4) prompt action was taken to achieve compliance once the operator knew or should have known that applicable emission limitations were being exceeded;

(5) the amount and duration of the unauthorized emissions and any bypass of pollution control equipment were minimized;

(6) all emission monitoring systems were kept in operation if possible;

(7) the owner or operator's actions in response to the unauthorized emissions were documented by, contemporaneous operation logs, or other relevant evidence; ~~and~~

(8) the unauthorized emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(9) unauthorized emissions do not cause or contribute to a condition of air pollution.

(b) Emissions from any maintenance, start-up, or shutdown are exempt from compliance with air emission limitations established in permits, rules, and orders of the commission, or as authorized by TCAA, §382.0518(g) if the owner or operator complies with the requirements of §101.7 of this title (relating to Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements) and satisfies all of the following:

(1) the periods of unauthorized emissions from any maintenance, start-up, or shutdown and could not have been prevented through planning and design;

(2) the unauthorized emissions from any maintenance, start-up, or shutdown were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

(3) if the unauthorized emissions from any maintenance, start-up, or shutdown were caused by a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(4) the facility and air pollution control equipment were operated in a manner consistent with good practice for minimizing emissions;

(5) the frequency and duration of operation in maintenance, startup, or shutdown mode resulting in unauthorized emissions was minimized;

(6) all emissions monitoring systems were kept in operation if possible; ~~and~~

(7) the owner or operator's actions during the period of unauthorized emissions from any maintenance, start-up, or shutdown were documented by contemporaneous operating logs, or other relevant evidence; and

(8) unauthorized emissions do not cause or contribute to a condition of air pollution.

(c) Smoke generators and other devices used for training inspectors in the evaluation of visible emissions at a training school approved by the commission are not required to meet the allowable emission levels set by the rules and regulations, but must be located and operated such that a nuisance is not created at any time.

(d) Equipment, machines, devices, flues, and/or contrivances built or installed to be used at a domestic residence for domestic use are not required to meet the allowable emission levels set by the rules and regulations unless specifically required by a particular regulation.

(e) Sources emitting air contaminants which cannot be controlled or reduced due to a lack of technological knowledge may be exempt from the applicable rules and regulations when so determined and ordered by the commission. The commission may specify limitations and conditions as to the operation of such exempt sources. The commission will not exempt sources from complying with any federal requirements.

(f) The owner or operator has the burden of proof to demonstrate that the criteria identified in subsection (a) of this section for upsets, or in subsection (b) of this section for maintenance, start-up, or shutdown occurrences are satisfied for each occurrence of unauthorized emissions. The executive director or any air pollution program with jurisdiction may request documentation of the criteria in subsections (a) and (b) of this section at their discretion. Satisfying the burden of proof is a condition to unauthorized emissions being exempt under this section.

(g) This section does not limit the commission's power to require corrective action as necessary to minimize emissions, or to order any action indicated by the circumstances to control a the condition of air pollution.