

The commission adopts amendments to §101.1, concerning Definitions, and §101.11, concerning Exemptions from Rules and Regulations, the repeal of §101.6, concerning Notification Requirements for Major Upset, and §101.7, concerning Notification Requirements for Maintenance, and new §101.6, concerning Upset Reporting and Recordkeeping Requirements, and §101.7, concerning Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements. The amendments and new sections are adopted with changes to the proposed text as published in the January 31, 1997, issue of the *Texas Register* (22 TexReg 1065). The repeals are adopted without changes and will not be republished. This rulemaking will be submitted to the United States Environmental Protection Agency as a revision to the State Implementation Plan (SIP).

EXPLANATION OF ADOPTED RULES. The commission requires industrial facilities to report unauthorized air emissions resulting from upsets, maintenance, start-ups, and shutdowns in order to provide useful information for the protection of air quality. This adoption is intended to clarify when and how emissions must be recorded and reported, considering reporting requirements found in other state and federal regulations, enhancement of compliance, and utilization of agency resources. The commission uses the reports to organize potential monitoring of long duration events, provide technical assistance to emergency personnel, and inform the public. The records are used to evaluate trends and provide an enforcement perspective. The adoptions are intended to make use of the same reporting tools as the commission's spill prevention and control rules found in 30 TAC Chapter 327, which coordinate with the reporting requirements found in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 United States Code Annotated (USCA), §§9601-9675) and the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) (42

USCA, §§11001-11050), and the related regulations implementing these Acts. The reporting requirements under CERCLA, EPCRA, and the spill rules are based on reportable quantities (RQs). CERCLA, EPCRA, and the spill rules all require the reporting of any release which equals or exceeds an RQ. The adopted rules will promote consistent reporting for state and federal programs.

The adopted rules incorporate the concept of using RQs as the mechanism that defines what should be reported immediately. The definition of RQ establishes quantities for several air contaminants significant to Texas industries. Additional compounds may be added to the list through rulemaking. The new rules recognize that facilities using a continuous emission monitor are unique, and the rules allow the owner or operator to apply for a unique reportable quantity. The excess opacity reporting requirements have been retained, but the opacity reporting and recordkeeping have been adjusted due to the difficulty in estimating quantities and volumes. The RQs are not intended to represent a judgment as to the specific degree of hazard associated with certain releases, but rather function as a mechanism by which the regulated community will know when to notify the commission of an unauthorized emission. The recordkeeping requirements replace the need for reporting of all events. Adoption of these rules is expected to reduce the number of reports received, promote consistency in reporting, promote the reporting of more meaningful information for the agency to use in decision-making, and assure that valuable facility operation information will be on-site and available during inspections.

The amendments to §101.1 delete the definition of “major upset” and add definitions for “non-reportable upset,” “reportable quantity,” “reportable upset,” “upset,” and “unauthorized emission.”

The definition of unauthorized emissions specifically includes compounds and elements that the agency

does not want to consider in records and reports. The definitions establish the distinction between reportable and non-reportable upsets through the use of specific weights for reportable quantities. The definition of RQ establishes quantities for several air contaminants significant to Texas industries, and now also includes an RQ of 5,000 pounds for natural gas, air emissions from crude oil not including hydrogen sulfide and mercaptans. The reportable quantity definition has been further modified from the proposal to clarify that the rule is directed at all air contaminants that are released into the ambient air and that individual air contaminant compounds that are not specifically listed have an RQ of 100 pounds. The 100-pound RQ is necessary to cover all the potentially problematic compounds that were not listed.

The definition of reportable quantity was also modified to establish a lower bound of concern with respect to speciation for any one of the unlisted air contaminant compounds at 2.0% of the weight of the mixture and a total of all compounds of 0.02% by weight of the mixture. In both cases, the RQ for the mixture will be 5,000 pounds. The air contaminant compounds specifically listed within the reportable quantity definition are not listed in CERCLA and EPCRA, but are air contaminants significant to Texas industries. The definition of RQ also contains an option for the executive director to establish a unique RQ where air contaminant compounds are measured by a continuous emission monitoring system (CEMS).

The definition of RQ was further modified for boilers 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 only RQ for these units is opacity which is 15 additional percent above applicable limits. This modification is

added in recognition of the fact that boiler emissions consist primarily of carbon dioxide, nitrogen oxides, 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.

The agency considered use of additional generic categories such as particulate matter, volatile organic compounds, alkanes, and alkenes. These categories are not included in the adoption to ensure that the agency will receive appropriate information on the chemical characteristics of the release. Particulate matter, volatile organic compounds, and alkene groups can include significantly hazardous constituents listed in CERCLA, EPCRA, and agency permits. Alkanes were not added as a group because the most common gaseous alkanes are individually listed at the maximum RQ that the commission considered appropriate.

The new §101.6 establishes the reporting and recordkeeping requirements for upsets, including establishment of a time period for making certain decisions related to reporting and recordkeeping. The owners or operators will continue to be required to provide timely notification of reportable upsets, and the language “as soon as practicable” is intended to provide the flexibility to make a cursory determination of whether the upset has or will exceed a reportable quantity, and allow sufficient time to gather enough information to make a reasonably informative report. The outside limit for reporting is 24 hours from discovery of the upset. Where obvious health and human safety concerns are involved, more immediate reporting is expected. Any requirement for additional or updated information after the

initial report would be at the discretion of the executive director or a local air pollution control agency and is required only on request. The concept of a compound descriptive air contaminant is introduced to clarify that compound specific information is not required when it cannot be determined, but to ensure that the owner or operator provides as much insight as possible regarding the nature of the air contaminants released. The new section also clarifies that an estimate of the quantity is acceptable, rather than an exact quantity. For upsets involving opacity exceedences only, the owner/operator would report an estimate of the opacity and not the amount of particulate matter released. The requirement in the proposal to estimate the volumetric flow rate was determined to be not sufficiently important in many cases and was removed, since it can be requested when needed. The location, magnitude, and the chemical characteristics of the release are the important factors that will aid the agency in its short-term response. The new rule establishes that spills to the land or water that would be required to be reported under 30 TAC §§327.1-327.5 and 327.31, regarding Spill Prevention and Control, would not require notification under this rule. The amendments require that a record of any upset be created within two weeks of the occurrence and that the record be retained for five years. The proposed retention schedule of two years was increased to allow a better perspective of any upset patterns, including patterns associated with shutdowns and major plant turnarounds.

The example of an unauthorized air release of regular unleaded gasoline in the proposal has changed with respect to modification of the reportable quantity definition and the reporting requirements, but it still provides a good example of the commission's expectations for reporting upsets. Obviously, it would be impractical to provide an exact speciation of all the compounds in a gasoline release, and the major constituents of gasoline, such as branched-chain paraffins, cycloparaffins, and aromatics

(including listed air contaminants) are reasonably well-known. Regular unleaded gasoline is sufficiently “compound descriptive” as compared to a description like volatile organic compounds. If the release is from evaporation of a spill from an overfilled tank onto land in an amount over 210 gallons, the spill would be reported under the spill rules, and only the record of the air emission portion of the spill would be required for this rule. Where gasoline is boiling off in an upset and is not affecting the land or water, knowledge of the basic makeup of the gasoline at the facility should be used to evaluate the listed constituent of the gasoline that controls the reportable quantity. Normally, benzene is the known hazardous constituent of gasoline with the lowest listed RQ at ten pounds. Owners or operators who know the benzene in their gasoline is never greater than about 5.0% by weight (or five pounds benzene per 100 pounds gasoline) would know the benzene RQ is the controlling RQ. This would make the reportable quantity for regular unleaded gasoline about 200 pounds, which is the point that the benzene release would reach its RQ. It would be important for an owner or operator to be aware of and report unusually high concentrations of hazardous additives, such as lead compounds, which would affect the toxic nature of the mixture.

The new §101.7 establishes the reporting, recordkeeping, and operational requirements for maintenance, start-ups, and shutdowns. The new section utilizes the concept of RQs for the purpose of limiting the number of required reports. The section retains the specific authority of the executive director to establish the amount, time, and duration of emissions allowed during the maintenance, start-up, or shutdown, which was codified in §101.11(b). The executive director also retains the specific authority to require a detailed plan on how these emissions can be limited. The new section requires that maintenance, start-up, and shutdown events which were not expected to equal or exceed an RQ, but

which resulted in reportable emissions, be considered upsets. As such, they would be subject to the requirements for upset reporting and recordkeeping, and the additional standard of “not reasonably avoidable” to be eligible for an upset exemption under §101.11.

The language prohibiting the creation of nuisances during upsets, maintenance, start-ups, and shutdowns in existing sections §101.6 and §101.7 is not carried into the new sections. This prohibition is retained in §101.11(f).

The adopted amendments to §101.11 establish conditions for an exemption of unauthorized emissions from limits in permits, rules, and orders of the commission during upsets, maintenance, start-ups, and shutdowns. The amendments to §101.11 have eliminated the requirement for the executive director to take definitive action to exempt unauthorized emissions during upsets. This action cannot be practically provided in all cases. The amendments retain separate exemptions for upsets and for maintenance, start-up, and shutdown.

The exemption for upsets requires that the owner or operator comply with the §101.6. This retains the concept in the current rule that upsets must be correctly reported, and provides an appropriate incentive for the regulated community to communicate reportable upsets to the agency and record and correct all upsets. The rule sets the standard that an upset can only be exempt if it was reasonably unavoidable and appropriate corrective actions were taken as soon as practicable. The amendments have modified the language in the current rule to ensure that a shutdown would only occur when a shutdown would result in lower emissions than continuing to operate in an upset condition. Specifically, the commission

intends that appropriate action should include minimization of emissions in concert with correction of the upset.

The exemption for maintenance, start-up, and shutdown establishes the requirement that the owner or operator comply with §101.7 to receive the exemption for unauthorized emissions during those activities. This retains the concept in the current rule that maintenance, start-ups, and shutdowns must be correctly reported, which provides an appropriate incentive for the regulated community to communicate these activities to the agency. The amended exemption also requires emissions to be minimized to the extent practicable. The executive director's specific authority to establish the amount, time, and duration of emissions allowed is moved to §101.7. It is not common practice for the executive director to set limits where maintenance, start-up, and shutdown are expected to cause unauthorized emissions, so the exemption criteria of minimizing emissions to the extent practicable is important in ensuring that the owner or operator takes reasonable precautions in internal plans for these activities.

In addition to comments on the specific language and impacts of the proposed rules, the commission solicited suggestions on alternative language or approaches on how unauthorized air emissions during upsets, maintenance, start-ups, and shutdowns should be recorded, reported, limited, or exempted. The commission specifically requested comments on how to eliminate any duplicate or unnecessary reporting or information. Additionally, the commission requested comments on how continuous emission monitors provide the same or similar information and how the requirements of the proposal should be modified or made inapplicable to avoid unnecessary duplication. Commenters suggested

reducing the scope of the rules to include only those air contaminants and industries covered in the CERCLA and EPCRA regulations and eliminating reporting where any other rule required reporting of similar information. The rules were not so modified, because the air contaminants that would be excluded are regulated by the commission and elimination would not be protective of air quality, and the reporting required under the rules was for the unique purpose of determining immediate response or review needs and informing the public in a timely and appropriate manner.

The commission adopts these amendments with the directive to the staff that they review the amendments for effectiveness and report to the commission within 30 months of the effective date of the amendments.

These rule revisions will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the SIP. The commission requested comments on delaying the effect of these rules until EPA approval, but comments and further review established that a delay of that nature would not be appropriate.

TAKINGS IMPACT ASSESSMENT. The commission has prepared a Takings Impact Assessment for these sections under Texas Government Code, §2007.043. The following is a summary of that assessment. The specific purpose of these sections is to clarify when and how unauthorized emissions must be reported and recorded and when those unauthorized emissions can be exempt from limits established in permits, rules, and orders of the commission. Promulgation and enforcement of these sections will not affect private real property.

COASTAL MANAGEMENT PLAN. The commission has determined that this rulemaking action is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code §§33.201 et. seq.), the rules of the Coastal Coordination Council (31 TAC Chapters 501-506), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. As required by 31 TAC §505.11(b)(2) and §505.22(a), and 30 TAC §281.45(a)(3) relating to actions and rules subject to the CMP, agency rules governing air pollutant emissions must be consistent with applicable CMP goals and policies. The commission has reviewed this rulemaking action for consistency, and has determined that it is consistent with the applicable CMP goals and policies because these rules comply with regulations in Code of Federal Regulations, Title 40, adopted under the Clean Air Act, United States Code, §7401 et seq., to protect and enhance air quality and promote public health, safety, and welfare in the coastal natural resources areas. Therefore, in compliance with 31 TAC §505.22(e), the commission affirms that these rules are consistent with CMP goals and policies.

PUBLIC HEARING AND COMMENTERS. A public hearing was held March 6, 1997. Thirty five commenters submitted written or oral comments during the comment period which was extended to April 11, 1997. DuPont Gulf Coast Regional Manufacturing Services (DuPont), Monsanto Company (Monsanto), Texas Chemical Council (TCC), Huntsman International Trading Corporation (Huntsman), Clark Refining and Marketing, Inc. (Clark), and the Texas Industrial Project (TIP) expressed general support for the proposal, stating that it establishes much clearer standards for reportable events and reduces chances for inconsistent application of reporting rules, but also suggested several changes in the proposed requirements, which will be addressed in more detail in discussion on specific topics or

sections. The EPA also generally supported the proposal with changes. The other commenters either opposed the proposal or suggested changes of sufficient number or significance to indicate general opposition. These commenters are Texas Utility Services (TUS), Texas Mid-Continent Oil and Gas Association (TMOGA), Houston Lighting and Power (HLP), City Public Service of San Antonio (CPS), Association of Electric Companies of Texas (AECT), Harris County Pollution Control Department (HCPCD), Southwestern Public Service Company (Southwestern), Dow Chemical Company (Dow), Lyondell-Citgo Refining Company Ltd. (LCR), GATX Terminals Corporation (GATX), PetroUnited Terminals, Inc. (Petro), Mobil Oil Corporation (Mobil), Pennzoil Company (Pennzoil), Natural Gas Pipeline Company of America (Pipeline), Phillips 66 Company (Phillips), Central and South West Services, Inc. (CSWS), Aluminum Company of America (Alcoa), Exxon Company, U.S.A. (Exxon), Amoco Corporation (Amoco), American Electronics Association (AEA), Valero Refining Company (Valero), Air Products and Chemicals, Inc. (Air Products), Brown McCarroll and Oaks Hartline (Brown), Formosa Plastics Corporation (Formosa), Solvay Polymers (Solvay), Lone Star Chapter, Sierra Club (Sierra), and an individual.

General Comments. The majority of commenters referenced specific sections or paragraphs; however, several comments were addressed to key aspects of the proposal which would affect the content of all sections. CSWS, AECT, and TUS suggested that an applicability section be added to precede the other provisions of the proposal to deal with expressed differences in application due to facility type, and they requested an extension of time to discuss this issue. CSWS continued with the comment that existing upset and maintenance rules are working well, and that there is no need to revise the reporting requirements to add an RQ approach.

The commission has carefully considered the issue of applicability of these amendments and the potential complications of differing applicability according to industry type and has determined that these rules should continue to apply to all facilities with air emissions. The commission needs to know of unauthorized emissions in order to protect the state's air quality and believes the only applicability to be addressed in these rules is when and how it will be informed of these events in the most efficient manner. This concept is further developed in this preamble. The commission recognizes that many events leading to unauthorized emissions may not be immediately harmful. Eliminating the requirement to immediately report a portion of these events will redirect the commission's resources to more immediate response needs and leave full evaluation of all unauthorized emissions to inspection audits. Regulated facilities will benefit from a clarification of requirements.

This rulemaking is based on the concept in Chapter 327, which uses RQs to trigger reporting requirements. Adoption of these rules reduces the current reporting requirements, promotes consistency in reporting, promotes the reporting of more meaningful information to the agency to use in decision-making, and requires the creation of valuable on-site information concerning facility operation. The regional offices will receive reports on events that are of more immediate significance and will be able to distribute this information to the public and other regulatory or emergency response organizations as necessary. These amendments also preserve the important function of the upset and maintenance report, which provides a mechanism to excuse unauthorized emissions when the emissions are caused by events beyond the control of the owner/operator and when appropriate corrective action is taken. The commission extended the

comment period on these amendments for a period of 30 days and believes that it has received comments and opinions on the most relevant issues and that no further extension is necessary.

DuPont, Monsanto, TCC, Valero, CSWS, Exxon, TIP, GATX, and Petro stated that the commission should not base the effective date of the rules on EPA approval of the adopted rules as a SIP change.

Phillips commented that the proposal should be retracted if it cannot be approved as a SIP revision.

The commission agrees that the effective date of this adoption should remain consistent with other rules and become effective 20 days after the rules are filed with the *Texas Register* in accordance with the Administrative Procedure Act. It is vital that regulated facilities know exactly when they must comply with the rules. The commission believes that the requirements fully meet the intent of the Federal Clean Air Act and that the EPA will support the enhancements of this adoption and its consistency with the community right-to-know rules. If EPA has difficulty approving the amendments, the commission will address specific issues as they arise.

Also commenting on the preamble, EPA stated that the commission should state that one of the purposes of the proposal is to allow discretion in selecting episodes for investigation while continuing to allow public access to all upset information.

The commission intends for this adoption to provide information that allows discretion in selecting episodes for investigation. These rules enhance public information available beyond what federal regulations require by including requirements for unlisted air contaminants and other air

emissions, such as petroleum products and electric utility emissions, that would not be required to report under the community right-to-know rules. The enhanced recordkeeping requirements will provide direct information for technical review by staff for investigations of specific facilities, which will enhance the public information currently available through the investigation reports.

TUS, CSWS, and AECT disagreed with the fiscal note and takings impact assessment contained in the proposed preamble and stated that the amended rules, if adopted, will require modifications to CEMS software that could cost the industry as much as \$3 million and could constitute a taking.

A modification to CEMS software would be necessary if the commission were requiring that immediate upset reports be made through computer generated data. The amendments do not require this. An operator can observe a reportable upset on CEMS readouts and make the required report with all necessary information by telephone. The more detailed record of the event will be created by the CEMS software. Software modification to simplify an analysis of whether an RQ is exceeded is a choice of the individual facility, does not affect private real property, and is not a “taking.” The commission recognizes that emissions from boilers are generally non-harmful, if unconfined, and has modified the rule language to require that only opacity, process, time, and duration be reported for boilers in upset. The only records required for these units are those created under federal rules and forwarded to the commission.

Sierra stated and cautioned the agency that the proposal may be discriminatory by not providing sufficient environmental protection for low income or minority neighborhoods. It cautioned that this

could be interpreted as a violation of United States Civil Rights statutes, as the commission would be denying environmental protection by not properly administering a program which receives federal funds. Sierra stated that unless a program of protection from excess emissions is properly administered, there would be the effect of subjecting individuals to discrimination based on race, color, national origin, or sex because the producers of these emissions are frequently located near minority or low-income neighborhoods.

The adoption of these amendments will not affect and is a not an indication of the willingness of the commission to enforce its rules based on the location of a violation. The intent of this amendment is to require immediate reports on those events that would most likely warrant immediate action or consideration by a regional office. The smaller events that do not warrant immediate reports under this adoption would have been those least likely to trigger an immediate response under the previous rule. This adoption only establishes conditions under which a facility must report an upset. It does not prevent the regional office from responding to a situation where it has an indication that emissions are a potential hazard or nuisance.

An individual commented that the proposal provides industry with an incentive to under-report upset and maintenance emissions. The individual is opposed to the concept of reportable quantities and removal of the definition of "major upset." The individual also stated that it should not be industry that determines whether a release is significant. This responsibility should remain with the commission.

The commission believes that this proposal does not add an incentive for under-reporting that would not exist with any form of rule that requires the reporting of upsets. The commission makes the assumption that a facility will make a good faith effort to comply with the rules to report upsets as this is the method by which a facility can gain an exemption for unauthorized emissions. In the event of a violation, the commission will pursue timely and appropriate enforcement. The proposed amendments establish a set time to produce a written record of all upsets, reportable or not. This will tend to enhance the quality and completeness of a facility's on-site upset reports.

The term "major upset" has been deleted because it was subject to differing interpretations by the regulated community. The commission understands that even small releases of unauthorized emissions can be significant in unusual or unique circumstances and where they establish a pattern or frequency that creates a cumulative effect. The requirement to maintain on-site records of such events is a recognition of the commission's responsibility to determine the significance of these events. An RQ is a tool for determining which releases may be of immediate significance.

An individual commented that upset and maintenance reports provide data for a more accurate emission inventory and should be retained as an important part of the commission's duties. The same individual also commented that the proposal is more difficult to understand than the current rule.

The main purpose of these rules is to clarify which unauthorized emissions should be reported immediately and to specify what information relating to these emissions must be recorded. All

unauthorized emissions, whether reported or not, are to be recorded by the facility, and these records should be used by the facility to compile its emission inventories. The new records requirements should enhance that collection of information by requiring the timely creation of the record.

Any added complexity associated with this proposal would come from the determination of RQs. A period of familiarization should pass quickly as industries generally operate using consistent raw materials with predictable waste and known products. It should require only a short time to determine if a raw material, product, or waste is on the RQ list.

§101.1. Definitions. DuPont, TCC, Huntsman, TIP, GATX, Petro, Exxon, Amoco, Pipeline, and HLP commented that the definitions of “upset” and “unauthorized emission” should be modified to make clear that they refer to releases to the atmosphere and not in-stack concentrations. They said that some agency staff have attempted to apply the rules to in-stack concentrations. DuPont, TCC, TIP, GATX, Petro, Pipeline, and Exxon commented that the term “emission limits” should be replaced with “emission limitations” throughout the rule to be consistent and TIP noted that it means a mass release.

The commission concurs that an “unauthorized emission” is an actual emission to the atmosphere, and not a contained event. The rule is directed at air emissions which would be to the atmosphere with the potential of having effects off the property of the owner/operator of the regulated facility and the rule has been changed for clarity. Where emissions to the atmosphere are measured in a stack or vent prior to their release, and that information is reflective of the actual emission to the

atmosphere, the stack measurements should be used. To be consistent throughout the rule, the terms “limit,” “limitations,” and “emission limits” have been changed to “air emission limitation” and “air emission limitations” as appropriate to foster consistency and understanding. The limitations refer specifically to concentration, mass, mass rate, and opacity of an air emission, which are indicators of the effect on the ambient air. The limitations do not refer to general ground level ambient air standards, like the standards for particulate matter in 30 TAC §111.155, or the standard for nuisance in 30 TAC §101.4.

TMOGA, Mobil, and Pennzoil additionally stated that releases of solids or liquids may have limited emissions to the air due to volatility or confinement, and the term “unauthorized emission” should be modified to clarify that, in the event of a liquid or solid release to the environment, the upset would be limited to actual air emissions related to the release.

The commission agrees with this comment. The rule is directed at the actual releases of air contaminants into the ambient air as particulate matter, gas, or mist. To clarify the relation of this adoption to the commission’s rules regarding spills to the ground or water, the commission modified the language to exclude reporting of any spill under §101.6 that is reported under §§327.1-327.5 or 327.31, concerning Spill Prevention and Control. This covers situations such as tank and process equipment overfills, leaks, and ruptures where liquid or solid material is generally dripping, pouring, or spraying to the ground or water. The owner/operator will be required to note releases to the air such as vaporization, blowing, or spraying of the spill material under §327.3(d)(8) and will be required to create the record of the upset under §101.6(b) to

include only those portions of the spill emitted to the air to obtain exemption of the emissions under §101.11.

TMOGA, Mobil, and Pennzoil noted that the term “unauthorized emissions” should also validate the intent of the rule with respect to allowable emissions for facilities that do not have such limits specified in permits, specifically facilities covered in standard and special exemptions and those constructed prior to adoption of the Texas Clean Air Act (TCAA) permitting requirements and operated since that time with no modification. Exxon commented that “unauthorized emission” should be modified to include exemption for facilities in operation prior to the adoption of the TCAA.

Facilities exempted from permitting by the TCAA, known as grandfathered facilities, are subject to rules and orders of the commission. It is important that these facilities be covered by this rule because of the older control technologies and equipment in use. The commission concurs with TMOGA, Mobil, and Pennzoil and has added language concerning emissions authorized by the TCAA that will clarify applicability of the rule to grandfathered facilities. The allowable emissions for these facilities are any emissions associated with the normal operation of unmodified equipment constructed prior to the requirement of permits under the TCAA unless modified by rules or orders of the commission. The commission concurs with the assertion that standard and special exemptions establish limits for facilities.

Air Products stated that opacity upsets should be exempted entirely to align commission regulations with federal regulations. Alternatively, when applying the term “applicable limits” to opacity

standards, it should be clear that this not only includes limits set in permits, but those limits in other rules of the commission, specifically 30 TAC §111.111.

The commission disagrees that upsets based on opacity should be exempted. The commission must be protective of visibility and responsive to public concern over visible emissions.

Applicable limits are those included in permits, rules, and orders of the commission.

EPA made the recommendation that the commission reconcile the difference between the term “upset” and the term “malfunction” used in Code of Federal Regulations (CFR) Title 40, Parts 60, 61, and 63, which are incorporated into the SIP in 30 TAC §101.20. EPA stated that a relaxation of §§101.6, 101.7, and 101.11 cannot affect the application of the federal rules. This could lead to confusion, particularly with synthetic organic chemical manufacturing industries.

The federal term “malfunction” would include any failure of process or air pollution control equipment. It does not necessarily mean that an unauthorized emission has occurred. Use of the term within this adoption would have the same meaning as the federal definition because this term was adopted into the Texas SIP and rules of the commission. The intent of this adoption is to reduce the number of reports that regional staff must evaluate. The commission does not require reports on events that do not result in unauthorized emissions, and using the term “malfunction” as a synonym for “upset” would defeat that intent. The commission will continue the use of the federal term where appropriate.

Pennzoil recommended a definition for “upset” similar to the federal definition of “emergency.”

The commission does not view an upset condition as necessarily being an emergency and prefers language without that implication. Additionally, the federal definition uses the term “avoidability,” which is the standard for exemption and needs to be separate from the definition of “upset.”

Brown suggested adding language to the definition of “upset” to include releases initiated to protect life in the immediate area.

The commission has deleted any reference to potential cause from the term “upset” so that it may make a separate determination of avoidability.

An individual commented that air pollution upset and maintenance reporting does not fit well within the CERCLA and EPCRA requirements, as these miss hundreds of tons of releases each year.

The commission does not agree with this comment, because the rule addresses excess emissions of all significant air contaminants from all facilities. The commission believes that CERCLA and EPCRA provide a reasonable framework for the reporting of unauthorized air emissions by making use of a reporting concept already in place. The rule modifies that framework somewhat to recognize differences in significance of releases to air, water, or land, and to include specific air contaminants common to large Texas industries. Additionally, the commission believes that

aligning upset and maintenance, startup, and shutdown reporting with these federal rules will enhance the quality and accuracy of the reports by allowing regulated facilities to concentrate their resources on more consistent reporting requirements.

The individual also commented that the weight percentage content of hazardous material will be difficult for investigators to determine, and companies will be protective of content analysis.

While investigators will not generally be responsible for determining percentage content of mixtures, the commission staff has the technical expertise to make these types of evaluations. The responsibility of knowing the composition of mixtures that could potentially be released into the ambient air from a facility belongs to the owner or operator of the facility, and this information will be available to the commission under its regulatory powers.

TIP and Amoco commented that the commission rules should be no broader in scope than federal rules. Under the federal CERCLA scheme, petroleum and petroleum fractions are excluded from the list of hazardous substances. Additionally, mixtures and compounds should not require speciation under §§101.6, 101.7, or 101.11 unless some other law or provision requires it. Pipeline added that certain industries will have unique requirements that should be addressed separately and used the example of reporting natural gas releases to the Texas Railroad Commission and the United States Department of Transportation. Phillips added that the rule should clarify that either a speciation can be performed or the default RQ used. Dow, Mobil, Pennzoil, and Pipeline commented that the definition should specify

that 100 pounds would be the default value for unlisted hazardous substances not listed in 40 CFR §302.4.

The commission believes that limiting the scope of this rule by removing petroleum fractions from the requirements would exclude air contaminants that the commission is required to regulate under the TCAA. This rule is directed at all air emissions except those specifically excluded in the definition of “unauthorized emission.” This approach is much simpler for all facilities regardless of their understanding of “hazardous substances,” “solid waste,” and other similar definitions associated with the lists.

Speciation of individual air contaminant compounds is only necessary to the extent that it provides the commission staff sufficient information to evaluate the potential effects of a release. Basic knowledge of the composition of a release allows a company to use the specific reportable quantity for each compound. The rule language has been clarified to specify that the 100-pound default reportable quantity is for each individual air contaminant compound that is not specifically listed in the definition.

The commission has unique purposes for receiving upset reports. These purposes include judging the necessity for monitoring, providing technical assistance for emergency personnel, and informing the public. This concept is developed further in response to a comment from Brown.

The rule language has also been modified to allow mixtures with less than 2.0% of any unlisted compound to have a “default” reportable quantity of 5,000 pounds, but there must be some basic knowledge of the composition of the release.

CSWS stated that the CERCLA emergency release notification does not apply to emissions into the air, since the statement is made in 40 CFR §355.40(a)(2)(ii) that the section does not apply to federally permitted releases. CSWS stated that overall, the RQ approach does not apply well to utilities and would cause redundant paperwork and reporting.

The CERCLA emergency release notification does apply to emissions into the air. Federally permitted releases apply to the air, water, or ground that are specifically authorized in a federally enforceable permit, rule, or order. Emissions to the air that exceed the air emission limitations in a federally enforceable permit, rule, or order are not federally permitted and are covered under CERCLA emergency release notification. The RQ approach can be applied to utilities, but the commission recognizes that utilities and other facilities with CEMS are unique, so the rule was modified to allow a unique reporting trigger for those facilities. Where the same information is required for more than one purpose, a single comprehensive record will suffice. The more immediate report may not be as accurate or complete as the cumulative reporting requirements of other rules and is for the purposes of determining immediate response or review needs and informing the public. The cumulative reports in other rules and the records required for this rule are generally for the purpose of compliance evaluation and planning.

TIP stated that the definition of “reportable quantity” should not include the terms “substances” and “mixtures” as these are not state-defined terms. As an alternative, TIP suggested that a distinction be drawn between hazardous substances under CERCLA and EPCRA and “air contaminants.” Moreover, if federal terms are used within the state definition, the proposal must incorporate the federal exclusions such as petroleum and continuous releases; otherwise, the state rule will be more restrictive than federal requirements. Also, TIP recommended elimination of the phrase “lowest of the quantities” as it will also be more stringent than federal requirements.

Rather than discuss mixtures, TIP commented that the definition should specify when speciation is and is not required. The rule should not require speciation beyond what is otherwise required by the chapter or federal regulations. If not changed, these requirements place more burden on industry than the current regulatory scheme.

The commission is not trying to duplicate federal regulations. These rules cover significant air contaminants. The commission agrees that the rule is directed uniquely at air contaminants and has modified the language in the definition of “reportable quantity” to clarify that intent. The term “lowest of the quantities” should not be more restrictive than federal requirements for the purpose of a reporting trigger. The term “mixture” provides the appropriate distinction between the listed specific compounds and mixtures of compounds. The rule language has been modified to clarify that speciation or understanding of the content of all mixtures that contain listed compounds and any compounds specifically listed in permits is needed to comply with the rule. Knowledge of the more hazardous constituents of mixtures is logical and appropriate for the

purpose of this regulation. The current rules are more restrictive since they require that the “compound-specific types” of emissions be reported, which is not feasible in all cases of naturally occurring mixtures like crude oil. This adoption uses the more general term “compound descriptive.”

DuPont, TCC, TMOGA, and Dow suggested that the definition of “reportable quantity” be modified to include process knowledge in determining constituents. TMOGA also suggested that rule language specify that composition of releases may be defined based on process knowledge or reasonable knowledge of similar substances and does not necessarily require a speciated analysis of the particular substance. For example, benzene will normally be less than 0.1% of a release by weight, or five pounds in a 5,000-pound release. TMOGA and Amoco recommended that mixtures be subject to a general provision that the operator is able to justify by process knowledge, reasonable estimate of composition, or otherwise that there will be no exceedence of an RQ.

The commission agrees with this comment and has made the appropriate change to the definition of “reportable quantity” to clarify that common process knowledge or any prior engineering analysis or testing could be used in determining the reportable quantity. A test for concentration of the released air contaminants is generally not practical and often not possible and this adoption does not require such a test. The commission agrees the use of process knowledge to determine the exceedence of an RQ is reasonable.

DuPont, TMOGA, TCC, AEA, Huntsman, GATX, Petro, Phillips, Mobil, LCR, Exxon, and Amoco commented that the default RQ of 100 pounds is overly conservative. The commenters further stated that the intent of the federal program is to capture all compounds that constitute a known or suspected threat, and the default RQ of 100 pounds does not take into account the degree of hazard posed by the substance. Air contaminants not on the federal lists should, by definition, be less threatening than those on the list. It is overly restrictive to have a default RQ lower than that established for substances deemed more hazardous by EPA. The default value for non-listed compounds should be 1,000 pounds. TIP and Exxon agreed that the intent of the default RQ in the proposal is to cover substances not already on CERCLA, EPCRA, or TNRCC lists; therefore, the default substances should be less hazardous. They suggested a default value of 5,000 pounds.

The commission believes that a default RQ of 100 pounds is appropriate for the significant number of potentially hazardous air contaminant compounds that are not listed, such as dimethyl sulfide. This is an example of a substance that might not be hazardous under the solid waste regulation tests for hazardous substances. The commission recognizes the unnecessary restriction of applying a single RQ to all situations and has made some accommodation for facilities using CEMS where the emissions are directly measured. The commission added RQ values, and eliminated the need for RQ evaluation where a spill or discharge is reported under spill rules. After implementation of the rule, the commission will initiate appropriate rulemaking if it finds that some compounds or mixtures warrant higher or lower RQs.

Monsanto commented that “one size fits all” rulemaking does not work, and the executive director should have the authority to set limits other than those in the definition of “reportable quantity” when there is showing of good cause.

The RQ for a substance should be viewed as a trigger that, when reached, requires a report to the commission. The commission agrees with the concept of flexibility within the rules, but the flexibility lies in the method of meeting standards and not the standard itself. This rule does provide flexibility in managing and reporting unauthorized emissions from upset and maintenance events. For example, the rule does not specify an upset reporting method. Additionally, the commission has included a method for establishing an alternate RQ for facilities meeting specific equipment requirements.

TMOGA agreed with the concept of RQs as reporting triggers, and that many upset and maintenance activities are not of sufficient magnitude for immediate reporting. TMOGA recommended that the definition of “reportable quantity” be modified to clarify that the CERCLA list is for hazardous substances and the EPCRA list is for extremely hazardous substances. It also suggested that the following be added to the 5,000-pound default RQ: natural gas, crude oil, condensate, natural gas liquids, and liquefied natural gas; emissions from process streams that do not contain any listed CERCLA hazardous substance; and other substances that do not contain a reportable quantity of a substance whose RQ is determinable by the hazardous substance list. Pennzoil suggested an RQ for natural gas of one million cubic feet.

The commission agrees that the CERCLA and EPCRA lists are of hazardous and extremely hazardous substances respectively, but the terms were not included in the definition to help distinguish this rule as being directed specifically at air contaminants. The commission agrees that a reportable quantity for natural gas and emissions evolved or stripped from crude oil and condensate separated from natural gas in the production process should be 5,000 pounds, with the exception of hydrogen sulfide and mercaptan fractions of the emission which must be evaluated with respect to their 100-pound RQ. The commission has not used a volume for the RQ of a gas primarily because the mass contained in that volume will vary according to temperature and pressure and the designation by mass is consistent with other RQ measurements.

Solvay suggested that isobutane be added to the list of 5,000-pound default RQ substances, as this would simplify reporting for polyethylene manufacturers. Exxon also stated that the RQ for butane should be modified to make a distinction between two types of butane, iso-butane and normal butane, each of which will have an RQ of 5,000 pounds.

The commission agrees that isobutane should be added to the list with normal butane, as their effects are similar and the compound is common to Texas industry. The rule language has been changed accordingly. The RQ for butane remains at 5,000 pounds as proposed.

Air Products noted that the rule should clearly state that reportable quantities are those quantities above an applicable emission limit so the RQ definition is aligned with federal definitions. For example, a source with a pound per hour emission limit (24 pounds per 24 hours) would not reach an RQ until 124

pounds had been reached or exceeded in a 24-hour period, provided that 100 pounds is the CERCLA RQ. CSWS also suggested that the proposal clarify the intent of the opacity RQ. For example, if the opacity limit of a source is 20%, any six-minute period at 35% or above would be an RQ.

Southwestern recommended that the commission establish clear minimum reporting conditions for opacity rather than a simple percentage, and apply the requirement to releases to the atmosphere and not just the conditions within the stack or vent.

Air Products' interpretation of the adoption is correct, but incomplete in the analysis of the amount of emissions that would trigger a report. The RQ is not subject to a 24-hour accumulation exclusively. For example, in the commenter's scenario, if a source in upset releases 100 pounds over its allowable emission rate in any period short of 24 hours, the event is reportable. Continuing the example, 101 pounds in a one-hour release or 102 pounds in a two-hour release, would also be reportable. The example given by CSWS is also correct if the facility does not have any other more restrictive limitations.

The rule is directed at emissions which would be released to the atmosphere. Where emissions to the atmosphere are measured in a stack or vent just prior to their release, as in a CEMS, the commission assumes this is a measurement of the release to the atmosphere. Opacity is a recognized standard for describing smoke plumes and is expressed in percentage of light blocked. An increase of 15% additional light blocked by a plume is generally noticeable and is a logical amount to serve as an RQ. The opacity RQ is a substantial and very observable change in visible emissions, which routinely causes public concern.

EPA commented that the definition of “reportable upset” should be modified to include any emission of air contaminants equal to or in excess of any allowable limit in any permit or rule.

The intent of this rule is to reduce the number of reports of unauthorized emissions that are not immediately harmful, so the commission may better use its short- and long-term resources. The suggestion to set a reportable upset as any amount equal to or in excess of limits in permits or rules is in direct conflict with this concept. Additionally, an emission in excess of any operating limit in a permit or rule is not necessarily an upset.

HCPCD stated that the proposal does not take into account episodes that may have potential negative off-site impacts. Substances with low odor thresholds, dust, or particulate may have immediate effects off-site. The definition for reportable upsets should include the phrase “which will or may tend to negatively impact off-site structures containing sensitive receptors.” This would cover episodes that may cause an immediate impact to nearby residents.

All emissions, regardless of magnitude or nature, have a potential for off-site effects. These amendments seek to balance the potential for impact and need for immediate response with the responsible use of the commission’s limited resources. The commission believes that the suggested language would broaden the scope of the adoption and be difficult to interpret. Episodes that the commenter has referenced can be effectively handled through complaints and investigations.

General Reporting and Recordkeeping. Sierra expressed concerns of potential abuse by grandfathered sources and agency failure to pursue aggressive investigation and enforcement. Sierra suggested requiring companies to identify whether excess emissions were from grandfathered or permitted facilities, an investigation of grandfather source reporting, and strengthening of the nuisance prohibition and public health protection under the proposed rules. An individual also suggested that the proposal did not adequately address grandfathered sources.

The commission does not agree that there is a lack of investigation or enforcement and believes the adopted rules will enhance those efforts by improving resource allocation. Grandfathered facilities have been specifically considered under the requirements of this adoption and the unique circumstances of each facility can be properly evaluated with the new requirement for records. The prohibition against nuisances during upsets and maintenance, startup, and shutdown remains intact through application of §101.11(f). A change in the definition or interpretation of the term “nuisance” is beyond the scope of this rulemaking.

Brown desired that the commission retain the option of allowing source owners to report all events.

The commission would prefer the use of the RQ values to limit the information staff is required to evaluate immediately upon notification. However, the commission does not intend to limit what the regulated community may report. Reporting all events would not be a violation of the rule.

CPS, AECT, CSWS, HLP, TUS, and Phillips commented that electric utilities make extensive use of CEMS and currently report excess emissions to EPA under the New Source Performance Standards (NSPS). These reports are also submitted quarterly to the commission. Because CERCLA and EPCRA do not require utilities to report upsets to EPA, the RQ approach will require additional analysis and does not eliminate duplicate or unnecessary reporting for utilities. They suggested exempting facilities that are currently required to report excess emissions under NSPS, acid rain, or other programs that require periodic reports. These commenters argue that there is no imminent danger from electric utility upsets.

The use of CEMS defines a unique subset of sources where there is direct and continuous facility knowledge of emissions. This creates the possibility of operating a source at or near its regulatory limit where minor control or raw material changes can cause exceedences of regulatory limits that are usually noted on a recording device. CEMS provide a simple and reliable measure of emissions from which exceedances of an RQ can be immediately known with accuracy and precision. All other releases are an estimate based on parameters that are measured and other process and emission knowledge. The facilities with CEMS are generally the most significant individual sources of air pollution in the state. The reporting under the proposed rule is not duplicative in purpose with federally mandated quarterly and semiannual reporting requirements. The purpose of the immediate report is to provide reasonable and timely public information and effectively use short-term resources to evaluate and potentially take actions to mitigate unauthorized emissions or their effects during an event. The quarterly and semiannual reporting in the standards are generally for compliance evaluation and future planning purposes.

To provide a more appropriate reporting trigger for major sources using CEMS, the commission has revised the definition of RQ to allow these sources to request a unique reporting trigger based on a screening model. The commission may also consider other factors to determine this facility specific RQ such as tall stacks to promote good dispersion and other physical plant configurations. The commission recognizes that emissions from utility and other boilers consist primarily of carbon dioxide, nitrogen oxides, water, and small amounts of carbon monoxide and are not acutely harmful if unconfined. The rule language has been modified to limit reportable quantities for boilers to opacity and recordkeeping to that currently required under federal reporting programs.

Brown stated that the exception from reporting upsets and reporting of upsets due to maintenance, start-up, or shutdown be extended to any facility currently reporting under any other reporting or recordkeeping regime. This requirement should also be eliminated for those facilities with direct reporting to the commission by telemetry to encourage the installation of these systems. Brown stated that significant events warranting immediate public notification do not justify immediate reporting to the commission. Such events are rare and are likely to be picked up by other reporting requirements (CERCLA/EPCRA). Finally, even if the reports were not legally compelled, after years of mutual experience with the commission, the regulated community understands the value of immediately reporting significant events. Should the commission find in a particular case that a company lacks that appreciation, the agency has other tools to achieve the desired result.

The amendments do not specify a method for upset reporting. If a facility has a direct telemetry link to the appropriate commission regional office, a report with the required information transmitted through that link can satisfy the requirements of the rules.

The commission disagrees with the commenter that immediate reports to the commission concerning upsets are not warranted. The commission needs to know of events that may affect public health and the environment or events that may continue for an extended period of time. The regional offices use upset information to make a judgment on the necessity of organizing monitoring for large or long duration events, provide technical assistance for emergency personnel, or establish limits for ongoing events. Additionally, the public and other regulatory or emergency agencies expect the regional offices to be informed about excess emissions from facilities under the commission's regulation so the situation may be objectively monitored. Immediate reporting under these rules serves unique purposes not covered in other regulations. The commission also believes that regulated facilities should not overlook the beneficial public perception gained from timely upset reporting.

Through their enforcement and inspection activities, the regional offices are most familiar with the processes and materials used at facilities in their geographic area which are subject to upset reporting. This makes them a logical central source of information for upset reports. Finally, by filing an immediate upset report, facilities receive protection from enforcement for unauthorized emissions that were unavoidable. The commission acknowledges that many facilities report

activities of potential off-site effect regardless of their legal obligation to do so, but for regulatory consistency the requirement to report must be codified.

DuPont, Monsanto, Southwestern, TCC, AEA , Huntsman, TIP, GATX, Petro, Alcoa, and Mobil stated that the commission should recognize that different industries will have unique situations and made the following specific comments. The proposed rules should be viewed as “default” rules that apply in most situations, but do not preclude a company from being able to establish an alternative reporting mechanism as allowed in the Spill Rules (§327.3(j)). Industry sectors should be given the ability to negotiate separate reporting requirements where the unique situation of the industry is taken into account (tall stacks, CEMS, different contaminants). Additionally, they state that many regulatory programs (such as NSPS) and permit provisions identify time frames for reporting excess emissions and note that these source specific requirements were developed after consideration of source specific factors such as type of emissions, type of monitoring, and source type and should supersede the upset reporting requirements in Chapter 101. This would also eliminate duplicate reporting requirements.

The amended rules are flexible in that they simply require notification. This is typically a simple phone call or facsimile transmission and it does not prohibit other mechanisms of notification, as long as they are timely and informative as required by the rules.

The resources necessary to evaluate all the possible unique circumstances that could arise from upsets with respect to each facility and the number of facilities in the state make it impractical for the commission to negotiate separate reporting requirements for each facility. Only facilities that

can precisely measure their emissions through a CEMS have been given an option to use a unique trigger. The purpose of these rules is unique as compared to NSPS and permit provisions, which are generally designed to enhance evaluation of compliance with the limitations.

TMOGA and Exxon requested additional guidance on who was to receive upset and maintenance reports if the regional office cannot be contacted and Brown wanted the commission to confirm that any form of upset notification is acceptable. TMOGA and Mobil requested that the commission create a reporting format that covers multimedia impacts.

The method of notification is flexible, allowing any reliable form of transmittal that can deliver the required information, such as telephone, facsimile, or electronic mail. An optional form for both spill and air upset, maintenance, startup, and shutdown will be available upon adoption.

Exxon suggested that the commission address the issue of revising or adding RQs as the agency and the regulated community gain experience with the rules. Future guidance or rulemaking should establish a mechanism for regulated industries to propose an alternate reporting plan.

The commission intends that additional compounds may be added to the RQ list through rulemaking as the commission and industry gain experience using the reporting methods in this adoption. Similarly, substances may also be removed or RQs modified. While the commission has provided reporting flexibility with this adoption and believes reporting trigger amounts should

remain consistent for all industries, it will remain open for possible future amendments to reporting procedures.

TMOGA, DuPont, TCC, CPS, Dow, LCR, TIP, GATX, Petro, AECT, Phillips, CSWS, Alcoa, Exxon, Amoco, TUS, and HLP stated that the commission should remove the requirement to report volumetric flow rate in the event of an upset based on opacity alone. It may be impossible to determine with any meaningful accuracy and opacity can vary from the start of the event until the end. Since the RQs are stated as a release over a 24-hour period, there is no flow rate associated with the releases. The more important question is the duration of the event. CPS added the comment that units equipped with flow monitors would require a software modification to accommodate shorter periods of time than those presently required by CEM regulations. TIP, CSWS, and Alcoa added that there is no direct correlation between opacity and particulate emissions.

The commission agrees with these comments and has adjusted the rule language to remove the requirement to report flow rate.

In related comments concerning opacity, Formosa noted that it is difficult to estimate an exceeded opacity limit and suggested that only the opacity limit be reported. Formosa further stated that the proposal does not provide any regulatory relief for facilities using flares with a “no visible emissions” requirement. It provided the example where flares are limited to five minutes of visible emissions during any consecutive two hours. Formosa further noted that the determination of compliance of these

flares requires an observer trained in opacity observations and suggested that the opacity standard should be duration as well as opacity driven.

The commission desires the best estimate of the actual opacity. The commission agrees that opacity evaluation requires equipment or training and understands that all facilities do not have an opacity monitor or a certified opacity reader available. Observation of visible emissions does not require certification. If no certified reader is available, reports of any visible emission along with any descriptions of the plume are acceptable.

With respect to the commenter's example, flares with a "no visible emissions" requirement are restricted to five minutes of visible emissions in any consecutive two-hour period, as required by 40 CFR Appendix A, Method 22. Therefore, no upset has occurred until that requirement, which includes the exempt period has been exceeded. The upset would not be required to be reported until the flare had five minutes of visible emissions followed by a consecutive six-minute period where the opacity reached 15%. The duration, six minutes, is included in the RQ.

TMOGA, Amoco, Clark, and Pennzoil recommend that non-reportable upsets are, by definition, insignificant, and do not contravene the intent of the TCAA. They stated that insignificant upsets, which are those below an RQ, are consistent with the TCAA and should be exempted from recordkeeping requirements. Pipeline agreed and believes that the concept of not contravening the TCAA should be incorporated into the definition of "major upset." The commenters wish to retain the term "major upset" and add to it releases initiated to protect life in the immediate area.

Valero, Phillips, and Mobil stated that recordkeeping requirements should be applied to reportable upsets only. Phillips emphasized its belief that keeping records on non-reportable upsets and all maintenance is unduly burdensome, and no clear environmental benefit has been demonstrated by keeping these records.

Clark and Exxon added the comment that separate documents for non-reportable upsets in §101.6(b) should not be required, as these reports are currently required in the compilation of annual emission inventories required in §101.10(a).

The commission does not agree that non-reportable unauthorized emissions are insignificant. The primary purpose of reporting is to allow the agency to determine if it should become involved in the response to, or management of, the upset condition and to help inform the public. The RQ concept defines when an immediate report of unauthorized emissions is required based in part on the potential for immediate effect. The recordkeeping allows exemption of unauthorized emissions. The commission believes that this clarification is valuable and seeks to avoid inconsistent interpretations of the terms “major upset” and “contravenes the intent of the TCAA.” Recordkeeping is required for all unauthorized emissions to assure that the facility has addressed the cause. The rule does not require separate documents for non-reportable upsets. Facilities may use common documentation for non-reportable upsets and emission inventory records.

Mobil suggested different requirements for attainment and nonattainment areas.

The commission does not agree with this comment. Reports and data on unauthorized emissions fill a unique purpose as stated in response to the comment from Brown concerning the commission's need for upset reports.

TIP, GATX, and Amoco are concerned that the term "compound descriptive" as used in §101.6 will leave the regulated community confused as to the type of information the commission expects in upset notifications. Moreover, the term "expected to be released" as used in §101.6 broadens the scope of the rule without providing a basis for the expansion. The commission's spill rules require only an estimate of the quantity "discharged or spilled." The commenters suggested language that states "the type of air contaminant released during the upset." They also believe the rules should allow facilities to send in follow-up reports documenting that no upset has occurred if an internal investigation reveals such. Similarly, Exxon stated that corrections to records should be allowed to cover circumstances where an RQ was reported, but later found that the emissions did not actually reach RQ value.

The commission has retained the use of the term "compound descriptive" in this adoption. The term "compound descriptive" is used to ensure that overly simple type descriptions like VOC and PM are not used since they do not address the true chemical nature of the release. The term also provides relief from the current requirement to provide compound specific information.

The concept of "expected to be released" refers to ongoing situations where the upset has not been controlled and projection is warranted so the commission staff can better evaluate the event.

There is no limitation on follow-up reports indicating that an upset did not occur, and both the initial report and the correcting report will be retained.

Huntsman supports the notification process in §101.6(a)(2)(E), (3), and (b), and believes that the internal record of an event should be the definitive record of the upset, not the initial report.

The commission agrees, and believes that this applies to the notification and records for maintenance, startup, and shutdown as well. The owner/operator of the regulated facility will be held accountable for making a responsible and timely report, but the record developed in the two weeks subsequent to the initial report allows for evaluation of information unavailable at the time of the initial report.

An individual stated that the proposal does not reduce the number of records industry must maintain, but does prevent public access to these records.

The amended rules reduce the number of records the agency will have to evaluate for more immediate response needs and improves the records the agency will have to review during periodic and spot investigations of a facility. The public will still have access to all federally mandated reporting, such as the toxic release inventory (TRI) and the enhanced state information from the annual emission inventories, permits, and all investigations.

The individual commenter stated that this proposal should not have the purpose of limiting reports of potential air pollution, and that facilities should maintain upset maintenance reports for five years. The individual stated that two years is too short a period.

The commission believes that it is appropriate and necessary to limit upset reports to those with higher potential for immediate effects. The potential for air pollution could be virtually infinite and it is not a productive use of the state's limited resources to receive immediate reports on all unauthorized emissions regardless of size.

The commission agrees with the commenter that extending the record retention time to five years is an important adjustment of the rule for several reasons. Five years will allow a more appropriate perspective and comparison period for evaluating control of the frequency and magnitude of these events, which will allow the commission staff to consider the regulated facilities trends. The five-year retention period should assure an evaluation of the effect of a facility's planned shutdowns for major maintenance and their effect on upset, maintenance, startup, and shutdown events for most facilities. The five-year retention period will also significantly enhance the staff's ability to assure compliance at the facilities that are inspected less frequently. The commission is extending the record retention period.

EPA recommended that the commission require submission of a written report of all reportable upsets within two weeks after an event, and a written summary of all upsets and unauthorized emissions due to

maintenance, shutdowns, and start-ups quarterly containing the information required in §101.6 and §101.7 respectively.

The commission does not believe that the duplication and maintenance of the record at the state and local offices is a productive use of resources. The analysis of the record at the facility provides the improved perspective of being able to see the physical equipment and consider additional information such as operator logs and maintenance records that would only be available at the facility. In most cases where reports are submitted, such as the federally required quarterly reports for 40 CFR 60, regarding NSPS, the commission staff has found that a detailed review of reports is not performed until an inspection is conducted.

Phillips suggested that the rules should allow the keeping of records at an alternate location upon approval by the agency even if the site is manned.

The commission does not agree. The record should be maintained at the site, if routinely staffed, to simplify the logistics of commission staff review during inspection.

§101.6. Upset Reporting and Recordkeeping Requirements. TMOGA, DuPont, Southwestern, TCC, Huntsman, TIP, GATX, Petro, CPS, Valero, Exxon, and Pipeline stated that the language of §101.6 should be modified to make the outer time limit for the reporting of an upset “...not later than 24 hours after the discovery of a *reportable* upset...” Since the RQ is based on a 24-hour period, it

may be impossible to calculate and phone in a report within 24 hours of the discovery of an upset.

Brown suggested eliminating the 24-hour requirement and using the condition “as soon as practicable.”

The commission believes 24 hours is a reasonable limit for a timely and useful report of an upset and prefers that a company report what they know if they are having difficulty calculating the amount of an emission. The proposed language reflects the commission’s intent that the clock starts upon discovery of the upset and not at some indefinite time in the future when a company might perform a calculation of emissions.

CPS, AECT, CSWS, HLP, and TUS commented that reporting within 24 hours is a significant change and an increase in the regulatory burden, as utilities are not currently required to make these reports under the CERCLA/EPCRA requirements. They suggested modifying the language of §101.6(a)(1) that would allow reporting of upsets within two business days for substances likely to originate from electric utilities. This would eliminate the difficulty in informing the appropriate agency of a benign release, as commission offices normally close at 5:00 p.m. and holidays and weekends, frequently leaving no one to receive the upset report.

Alternatively, an individual objected to the use of the phrase “as soon as practicable,” as it is meaningless, and commented that 24 hours is too long a period in which to report an upset.

The commission believes that this reporting requirement is not an increase in regulatory burden because the current rule requires reporting of these events as soon as possible. Adoption of these

rules reduces the current reporting requirements, promotes consistency in reporting, promotes the reporting of more meaningful information to the agency to use in decision-making, and assures valuable on-site information concerning facility operation. The regional offices are adjusting their procedures to evaluate reports on holidays and weekends. The commission has modified the rules to allow a unique trigger for reporting when the facility uses a CEMS, but the timing of the notification will remain the same. As stated earlier, the commission believes that 24 hours is the outside time in which an upset report can be submitted and still be useful. The phrase “as soon as practicable” indicates that the commission expects upset reporting to be a priority with a facility after stabilizing the upset.

TIP, GATX, and Petro commented that the commission should clarify that the information for a reportable upset notification under §101.6(a)(2) satisfies the requirements of §101.6(b) once the additional information and corrective actions to eliminate the upset and minimize emissions, required by subsection (b), have been added to the report.

The information required under §106.6(a)(2) and (b) may not be the same, due to unknowns. For example: a company might have a pressure relief valve on a large reactor stuck partially open allowing an obviously reportable quantity to be released. The company calls the regional office and a local program and indicates in the notification that it may take as long as 24 hours to repair the valve with a worst case release of 20,000 pounds of butane. The procedure takes 12 hours, 15,000 pounds of butane is released, and the company is not requested to provide additional or

more detailed information. The record should correct the notification to reflect the actual duration of the event and estimated emissions.

The information requirement is the same, but the data should reflect any enhanced or improved information developed by the company after the initial notification or unknown to the company at the time of the initial notification.

TIP, GATX, Petro, and Exxon believe that the cause of all upsets cannot be identified as required by §101.6(b), but the upset should still be excusable if the conditions of §101.11 are met, because appropriate corrective action was taken and the event was not reasonably avoidable.

Reasonable avoidability is difficult to establish when the cause is not known. Some explanation is required. The commission believes that the owner/operator should provide a record of what was reviewed.

HCPCD commented that §101.6(a) should include the words “the corrective action taken to eliminate the upset and/or minimize the emissions.”

The commission agrees that reporting of the corrective action and emission minimization efforts would be valuable in the analysis of the report and decisions on agency action. The requirement has been added to the list of report items.

HCPCD also stated that §101.6(a)(3) and (c) should include the phrase “or any local air pollution control agency.”

The suggested language has been added to the rule because many local programs have been delegated authority to investigate facilities for violation of state rules. These local programs may be the primary investigation organization for significant upsets.

§101.7. Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements. EPA commented that the following terms used in §101.7 should be defined: “normal facility operations,” “emission capture equipment,” and “emission abatement equipment.” There are definitions for “capture system,” “control devices,” and “control equipment” in the SIP.

The commission believes that these very general terms are sufficiently understood and that definitions in this adoption are not necessary. However, if misunderstandings occur, the commission will reconsider this position.

An individual commented that the commission should eliminate the word “capable” from §101.7(a).

The commission concurs, and has removed the words “capable of” from the rule. The intent of the rule is to mandate compliance with the air emission limitations, not just the possibility of compliance.

TMOGA, CSWS, and LCR stated that the commission should remove the requirement for ten days' notice prior to maintenance, shut-down, or start-up, and 24 hours would be more reasonable. Formosa and Alcoa added that there are certain circumstances where prior notification of maintenance, start-up, or shutdowns is not practical, for example, a start-up that results in an upset would be shutdown immediately. Amoco supported the "as soon as practicable" provision of reporting exceedences of RQs during maintenance, but did not want the limitation of prior notice.

The commission does not agree and believes the advance notice provides the commission staff reasonable time to determine if the emissions can or should be limited. If advance notice cannot be given, the event is considered an upset under the rule, which provides a logical line between upsets and maintenance startup and shutdown events.

Huntsman stated that the proposal should not apply the term "reportable upset" to emissions in excess of an RQ released during start-up, maintenance, or shutdowns. Section 101.7(b) should be modified to recognize the difference between "upsets" and "start-ups, maintenance, and shutdowns." Amoco also suggested that maintenance activities that are not expected to, but do, exceed an RQ should be reported but be eligible for exemption if emissions are minimized to the extent possible.

Similarly, TIP, GATX, Petro, and Brown commented that the practical effect of §101.7(b) would be to encourage companies to report all maintenance, start-up, and shutdowns regardless of their potential for excess emissions in order to avoid a demonstration that the event was "unavoidable" to be exempt under §101.11(a). If notice is not given, excess emissions will pull the facility into §101.6 and require

a demonstration that the emissions were unavoidable. This goes against the stated intent of the rule to reduce the number of required reports to the commission.

The commission disagrees with the comment. The prior notice provides an appropriate dividing line for the events and the standard of unavoidability should apply to events that the commission cannot consider in advance of their occurrence. The commission does not require that all maintenance, start-up, and shutdown events be reported, but the rule does not prohibit this.

Amoco stated that the commission should not set emission limits for maintenance, start-up, and shutdown and instead should let best operating practices provide minimization of emissions. HLP concurred, stating that the priority in these cases should be the return to normal operation instead of notifying the commission.

In response to Brown, the commission stated its reasons for receiving upset reports. These same reasons apply to anticipated events where a facility will exceed its authorized emission limit during maintenance, start-up, and shutdown. The commission agrees with the idea that the priority of the facility should be a quick return to production operations. However, notification to the commission of anticipated excess emissions will take a short amount of time and should not affect the time required for a facility to resume normal operations.

Monsanto recommended that the commission relocate the following sentence in §101.7(b) to a separate subparagraph for clarity and because it does not fit with the subject matter: "...Any maintenance, start-

up, or shutdown which results in an unexpected unauthorized emission that equals or exceeds the reportable quantity shall be considered an upset and subject to §101.6 of this title....”

Similarly, Phillips stated that the structure of §101.7(b) should be modified to make clear that reporting is required in advance of maintenance where excess emissions are expected.

The commission believes that the meaning is sufficiently clear to ensure that all unauthorized emissions that exceed an RQ will be reported in a timely manner. The requirement to report maintenance, start-up, and shutdown under §101.6 is linked to the requirements in §101.7(b), which clearly state that maintenance should be reported at least ten days in advance if it is expected to cause unauthorized emissions.

Amoco stated that written records should not be required for maintenance when exceedence of an RQ is not expected.

The commission uses records of unauthorized emissions to analyze trends, identify processes and equipment that have regular problems, and provide a perspective for potential enforcement. To provide meaningful information, these records must be a complete as possible. For these reasons, the commission requires records of all unauthorized emissions from maintenance, start-up, or shutdowns regardless of whether the emissions exceed an RQ.

Formosa commented that the General Provisions of 40 CFR Part 63 and the Hazardous Organic National Emission Standards for Hazardous Air Pollutants require affected facilities to develop a start-up, shutdown, and maintenance plan. The plan's purpose is to document how a facility will do its reasonable best to maintain compliance with standards during these events. If the plan is not followed, a report is due to EPA within two working days. Formosa stated that this should be an acceptable report to the commission for upset reporting purposes.

In response to Brown, the commission stated its reasons for requiring timely reports of unauthorized emissions that exceed an RQ. The information associated with the federal report will have relevant information for the record to support an exemption.

§101.11. Exemptions from Rules and Regulations. All commenters with the exception of EPA, Sierra Club, and an individual supported the concept of automatic exemption for properly reported events.

The exemption is not automatic. There are standards that must be met to qualify for the exemption. Removal of the requirement for a definitive action by the executive director reflects current agency practice and leaves the agency resources directed at pursuing upset and startup, shutdown, and maintenance events that do not meet the standards. Substantial resources would be required to produce exemption approvals of all the unauthorized emissions that meet the standards with no public benefit.

Brown commented that reporting requirements should be separated from the conditions that would qualify for exemption of excess emissions. Because the excess emissions would be in effect automatically excused if not “reasonably avoidable” and “appropriate corrective actions” were taken, the necessity of the report is eliminated.

Connection of the exemption to the event reporting and recordkeeping requirements is essential to the integrity of the rule. Compliance with reporting and recordkeeping requirements is dramatically enhanced by tying the benefit of exemption to the requirements. This concept provides additional justification for not requiring all unauthorized emission events to be reported, by ensuring that quality records will be created and maintained in a timely manner.

EPA commented that its policy/guidance opposes a standard exemption from compliance if certain conditions are met, and requires each exceedence to be individually reviewed. It recommended that the proposal make clear that the executive director will have the ultimate authority to decide if these conditions have been met. Section 101.11(b), which allows for automatic exemption, appears to contradict §101.7(d), which allows the executive director to exempt emissions due to maintenance, start-up, or shutdown on a case-by-case basis.

As previously stated, the exemption for unauthorized emissions is not automatic. Specific information must be included in the report of the upset in order to claim an exemption. This information includes the cause of the upset and actions taken to correct it and reduce emissions. The executive director, acting through the staff, retains the authority to request a full technical

evaluation of the event. Additionally, the upset must meet the criteria of “not being reasonably avoidable” and “appropriate corrective actions taken as soon as practicable.” The commission acknowledges that each and every upset will not be questioned under these criteria, but all upsets will be reviewed. The larger events or those of extended duration will be subject to closer examination.

Under §101.7(d), the executive director may set emission limits for start-up, maintenance, or shutdown episodes. Again, this is discretionary authority that will not be exercised in every case; only the larger or longer duration events are likely to be subject to this subsection. However, any exemption claimed under §101.11 is based on meeting all the requirements of §101.7, including those requirements that are exercised at the executive director’s discretion.

Air Products believes that the proposal should also exempt operating conditions which are used to monitor or control emissions. An upset condition will often make it impossible to meet these operating conditions, and the conditions should be eligible for exemption to prevent excess emissions being exempted, but the deviation from permitted operating conditions would be a violation.

One of the purposes of this adoption is to reduce the number of immediate upset reports that the staff will have to evaluate. Requiring reports on deviations from facility operating parameters when they do not cause unauthorized emissions would defeat the purpose of reducing reports. The commission expects that facilities will monitor operating conditions for their effect on

emissions, but does not require or expect a report when the operating conditions waiver with no effect on emissions or result in emissions below an RQ.

The adopted rules are directed at the exemption of unauthorized emissions during upset, maintenance, startup, and shutdown. Operating parameters are still subject to potential violation and enforcement under permit conditions and other applicable rules. An exemption of operating parameters could lead to an inappropriate relaxation of standards.

TIP, GATX, and Petro expressed concern over statements in the preamble that refer to factors to consider in determining “reasonable avoidability.” Commission staff at local offices may not be qualified to determine negligence, which is a legal term generally determined by a judge or jury. Similarly, the staff may not be well versed in a particular engineering skill for an industry to evaluate “good engineering practice.” The commenters recommended that the preamble clarify that this list represents examples and not the set of criteria for the judgment of engineering practices.

The commission clarifies that the factors listed in the preamble (presence of negligence, good engineering practice, repetition of similar upsets) are examples of what the commission may consider in determining whether an upset was reasonably avoidable. These examples are not intended to be an exclusive list of what information will be considered in making such a determination. Commission staff is required to exercise judgment when investigating upsets to determine whether violations have occurred. Any information regarding what constitutes "reasonably avoidable" and "appropriate corrective action" that the owner or operator may

provide to the commission may be considered by staff in their evaluation of the matter. Alleged violators not qualifying for an exemption have the opportunity to respond to any notice of violation, and can further present their case in hearing and through the judicial process.

Similarly, Huntsman stated that the terms “reasonably avoidable” and “appropriate corrective action” in §101.11 are vague and subject to differing interpretations by the commission and the facility. This would place in doubt the issue of whether or not emissions are exempt. In order to clarify when upset emissions have been automatically exempted, a paragraph should be added to §101.11 that allows the commission 30 days to challenge the report. This concept should also be applied to confirmation of the exemption provided for in the proposed §101.7.

The commission does not agree that a 30-day limit to challenge a report is appropriate. Like other agency standards found in rules promulgated under the TCAA, there are no time limits associated with agency determinations of violations of these rules. In many cases, it would also be inappropriate to determine compliance with the exemption standards until the non-reportable events are evaluated to ensure the claim of unavailability and the appropriateness of the corrective action.

TMOGA, Mobil, and Pennzoil requested clarification in §101.11(a) and (b) that upset emissions are exempt from air emission limits set by “permit, rule, or order of the commission,” including grandfathered limits and limits set by standard exemptions.

The commission agrees, and has clarified the rule to include grandfathered limits by reference to emissions authorized by the TCAA.

HCPCD recommended that §101.11(a) and (b) should include the phrase “after consultation with appropriate local agencies.” Sierra and an individual argued that the phrases “reasonably avoidable” and “not reasonably avoidable” are vague and recommended that local agencies be retained in the reporting loop and that the commission consult with local agencies to determine avoidability.

The commission does not agree. The exemption is allowed if the event meets the standards of §101.7 and minimizing emissions to the extent practicable. Where a local program has jurisdiction to enforce the state rules, that program may enforce this standard.

Brown commented that §101.11(a) and (b) should be revised to state that upsets and maintenance “are deemed to be in compliance with emission limits” rather than “exempt from compliance.”

The commission does not agree. The purpose of §101.11 is to provide relief from possible enforcement, where appropriate, for unauthorized air emissions that would otherwise be a violation.

STATUTORY AUTHORITY. The amendments are adopted under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.016, and 382.017, which provide the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA.

These sections of the TCAA require the commission to administer the act and develop a general comprehensive plan for proper control of the state's air. They also provide the authority to control air contaminants by all practical and economically feasible methods. The commission has the authority to prescribe reasonable requirements for owners and operators of the sources of air contaminants to make and maintain records on the measuring and monitoring of emissions of air contaminants.

CHAPTER 101

GENERAL RULES

§101.1, §101.11

§101.1. Definitions.

Unless specifically defined in the Texas Clean Air Act (TCAA) or in the rules of the commission, the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition to the terms 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.

Non-reportable upset - Any upset that is not a reportable upset as defined in this section.

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 Code of Federal Regulations (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-) butane - 5,000 pounds;

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

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

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

(-e-) isobutylene - 5,000 pounds;

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

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

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

(-i-) isobutane - 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 definition;

(ii) where the relative amount of individual air contaminant compounds in subparagraph (A)(i) of this definition 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 definition;

(iii) where each of the individual air contaminant compounds listed in subparagraph (A)(i) of this definition 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 definition 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 and 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.

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.

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

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 Texas Clean Air Act, §382.0518(g).

This agency hereby certifies that the sections as adopted have been reviewed by legal counsel and found to be within the agency's authority to adopt.

Issued in Austin, Texas, on July 9, 1997.

CHAPTER 101

GENERAL RULES

§101.6, §101.7

The repeals are adopted under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.016, and 382.017 which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA.

These sections of the TCAA require the commission to administer the act and develop a general comprehensive plan for proper control of the state's air. They also provide the authority to control air contaminants by all practical and economically feasible methods. The commission has the authority to prescribe reasonable requirements for owners and operators of the sources of air contaminants to make and maintain records on the measuring and monitoring of emissions of air contaminants.

§101.6. Notification Requirement for Major Upset.

§101.7. Notification Requirement for Maintenance.

This agency hereby certifies that the sections as adopted have been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

Issued in Austin, Texas, on July 9, 1997.

CHAPTER 101

GENERAL RULES

§101.6, §101.7

The new sections are adopted under the Texas Health and Safety Code, the Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.016, and 382.017, which provide the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA.

These sections of the TCAA require the commission to administer the act and develop a general comprehensive plan for proper control of the state's air. They also provide the authority to control air contaminants by all practical and economically feasible methods. The commission has the authority to prescribe reasonable requirements for owners and operators of the sources of air contaminants to make and maintain records on the measuring and monitoring of emissions of air contaminants.

§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 the definition of reportable quantity, shall identify:

(A) the processes and equipment involved;

(B) the date and time of the upset;

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

(D) 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;

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

(F) 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 processes and equipment involved;

(B) the date and time of the upset;

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

(D) the estimated opacity; and

(E) 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 local air pollution control agency.

(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 records of reportable and non-reportable upsets as soon as practicable, but no later than two weeks after an upset. The 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 local air pollution program having 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 to exceed the reportable quantity, 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) 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 is exempt from creating and maintaining records of reportable and non-reportable upsets of the boiler or combustion turbine under this section.

(d) The owner or operator of any facility subject to the provisions of this section shall perform, upon request by the executive director or any local air pollution control agency, 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 Texas Clean Air Act, §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 which results in an unexpected unauthorized emission that equals or exceeds the reportable quantity 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 the definition of reportable quantity shall include:

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

(B) the processes and equipment involved;

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

(D) 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;

(E) the estimated quantities for those compounds or mixtures described in paragraph (4) of this subsection, except in the case of unauthorized emissions determined on opacity only, where opacity will be estimated; and

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

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

(A) the processes and equipment involved;

(B) the date and time of the upset;

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

(D) the estimated opacity; and

(E) 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 records 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. The records shall be maintained on-site for a minimum of two years and be made readily available upon request to commission staff or personnel of any local air pollution program having 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 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 to exceed the reportable quantity, 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 will be estimated; and

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

(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 is exempt from creating and maintaining records of maintenance, start-ups, and shutdowns of the boiler or combustion turbine under this section.

(e) 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. Exemptions from Rules and Regulations.

(a) Upset emissions are exempt from compliance with air emission limitations established in permits, rules, and orders of the commission, or as authorized by Texas Clean Air Act, §382.0518(g) if:

(1) the owner or operator properly complies with the requirements of §101.6 of this title (relating to Upset Reporting and Recordkeeping Requirements);

(2) the upset was not reasonably avoidable; and

(3) appropriate corrective actions were taken as soon as practicable after initiation of the upset.

(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 Texas Clean Air Act, §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 the emissions are minimized to the extent practicable.

(c) - (f) (No change.)

The agency certifies that the sections as adopted have been reviewed by legal counsel and found to be a valid exercise of the agency's authority.

Issued in Austin, Texas, on July 9, 1997.