

The Texas Natural Resource Conservation Commission (TNRCC or commission) proposes amendments to §101.1, concerning Definitions; §101.6, concerning Upset Reporting and Recordkeeping Requirements; §101.7, concerning Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements; and §101.11, concerning Exemptions from Rules and Regulations; and revisions to the State Implementation Plan (SIP). The commission also proposes to withdraw the revisions to the SIP which included the amendments to these rules effective August 5, 1997.

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASE FOR THE PROPOSED RULES

On July 9, 1997, the commission adopted amendments to the sections in Chapter 101 concerning the upset, maintenance, start-up and shutdown rules that are the subject of this proposal. These amendments modified the method by which owners and operators of sources releasing excess emissions due to upset, maintenance, start-up and shutdown (U/M) events would report those episodes to the commission. The adopted amendments used the concept of a “reportable quantity” (RQ) to govern when a source must report excess emissions due to upsets. Based on similar rules concerning solid waste and on evaluation of the effects of emissions of regulated compounds to the atmosphere, the amendments did not require a report of U/M emissions below a significance threshold. The owner or operator of the source is required to keep records of all U/M events, but is only required to report to the commission those events where the U/M emissions equal or exceed an RQ. This report must be submitted to the commission within 24 hours of discovery of the event. Records of events below the RQ are maintained at the source site and are to be made available to the commission on request. The 1997 amendments also required that records of U/M events causing unauthorized emissions, both reportable and not, contain specific information including date, time, duration, substance released and

quantity, cause of the event, and actions taken to correct the situation. To gain an exemption from emission limitations, owners or operators must first comply with this reporting requirement.

Additionally, the episode must have been reasonably avoidable, the operator must have taken appropriate corrective actions as soon as practicable after the onset of the event, and the operator must have minimized the emissions to the extent practicable. Similar requirements were adopted for excess emissions resulting from maintenance, start-up, or shutdown of a source. The commission adopted these amendments and requested staff to examine the effectiveness of the rules as implemented over the next two years. Additionally, the commission submitted the rules to the United States Environmental Protection Agency (EPA) as a revision to the SIP. The commission adopted the 1997 amendments to reduce the number of U/M reports being submitted, through the use of RQs, allowing concentration of staff time on the most significant or higher priority events. While records of all events are kept on-site, the number of reports submitted to the commission has been limited to significant events. Reporting has been reduced by approximately 50%.

In November 1998, EPA informed the commission that the 1997 amended version of the U/M rules could not be approved as a SIP revision and that it intended to begin formal disapproval procedures. EPA specifically cited the reporting requirements of the rule as being deficient. Records of events below an RQ are not routinely submitted to the commission, but are currently maintained at the site and submitted on request of the commission. EPA believes that this procedure does not give the general public sufficient access to this information, requiring them to go through the commission to obtain reports. Secondly, EPA stated that the commission's method of exempting excess emissions released during an U/M event did not require sufficient proof from a source operator that the event was

reasonably unavoidable. EPA stated that the commission's rule did not place the burden of such proof on the source owner or operator and was not specific enough as to what would constitute "reasonably unavoidable."

On January 29, 1999, the commission published in the *Texas Register* a notice of rule review of Chapter 101, as required by the General Appropriations Act, Article IX, §167, 75th Legislature, 1997. The intent of the rule review was to determine if a need for the rules in Chapter 101 continues to exist. In addition to other generally applicable rules, Chapter 101 contains all the rules relating to U/M. During the public comment period for rule review, the commission received comments from the Texas Chemical Council (TCC) and the Texas Industrial Project (TIP) requesting changes to the U/M rules. The agency response to these requested changes was as follows: "The commission adopted amendments to the upset/maintenance rules in the summer of 1997. At that adoption the commission directed the staff to further evaluate the rules after two years. The staff has initiated that review and will consider all comments concerning upset/maintenance and the definition of reportable quantity as part of that review. The commission will consider upset/maintenance rules for possible amendment, including administrative changes, after the evaluation is completed. Rulemaking resulting from the evaluation would likely be initiated prior to the end of calendar year 1999." As part of this two-year review, the commission specifically instructed the executive director to evaluate the burdens placed on the regulated community, explain what is obtained from U/M reporting, how the data was used, and make recommendations on the future disposition of the rule. As stated earlier, the major impact of the 1997 amendments was a major reduction in the number of U/M reports being submitted through the use of RQs, thus reducing the reporting burden on the regulated community. Furthermore, the 1997

amendments allowed the agency to concentrate its resources on the most significant or higher priority events. However, the scope of this review was considerably changed with EPA's pending disapproval of the U/M SIP revisions. One of EPA's major criteria for obtaining SIP approval of the U/M rules is the reporting of all excess emissions from U/M episodes. While this may place additional burdens on the regulated community, EPA believes that this reporting is necessary to provide the public access to information on emissions that affect their communities.

#### SECTION BY SECTION DISCUSSION

The commission proposes to amend §§101.1, 101.6, 101.7, and 101.11 to address comments received during the rule review of Chapter 101, and EPA comments concerning the acceptability of the rules as SIP amendments.

At the suggestion of TCC and TIP, the commission is proposing to add certain compounds to the list of substances with an RQ of 5,000 pounds. Other TCC and TIP suggestions received during rule review have not been proposed. The commission addresses those comments in greater detail where specific proposals for individual sections are described.

To address EPA concerns about insufficient public information, the commission is proposing that the 24-hour initial notice be followed up with a written report sent to the appropriate regional office within two weeks of the end of the event. This will provide the regional offices information on the most significant events that can be made available for public inspection. Facilities must still create and maintain records of events below an RQ, but these records will not routinely be sent to the commission.

This is consistent with the concept of an RQ which establishes a significance threshold to reduce regulatory burden and the amount of information received by regulatory agencies.

TIP recommended either eliminating the 100-pound default RQ or raising it to 5,000 pounds. TIP recognized that adding Texas-specific compounds to the definition at an RQ of 5,000 pounds is also an available option. It recommend adding butyl acrylate, ethanol, heptenes, hexanes, hexenes, isopropyl alcohol, methyl acrylate, mineral spirits, octenes, pentanes, pentenes, and unspeciaded volatile organic compounds (VOC). TCC commented that the commission should modify its list of RQs to contain the following general compounds with an RQ of 5,000 pounds: butanes, pentanes, pentenes, heptenes, hexenes, octanes, decanes, and ethanol. It also suggested that the commission raise its default RQ from 100 pounds to 5,000 pounds. Five thousand pounds is the highest RQ for hazardous substances on the RQ list under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The commission's default value of 100 pounds applies to air contaminants not found on the CERCLA hazardous substance list or the Emergency Planning and Community Right-to-Know Act (EPCRA) list.

The commission proposes to amend the definition of "reportable quantity" to include the following air contaminants at an RQ of 5,000 pounds: butanes (all isomers), pentanes (all isomers), hexanes (all isomers), octanes (all isomers), decanes (all isomers), ethanol, isopropyl alcohol, and mineral spirits. Since isobutylene is one of the isomers of butene, it would be deleted as an individual compound from the RQ list. These air contaminants proposed for inclusion under a 5,000-pound RQ are not listed in CERCLA and EPCRA lists, but are air contaminants common to Texas industries.

The commission declines to add pentenes, hexenes, heptenes, octenes, butyl acrylate, and methyl acrylate at an RQ of 5,000 pounds based on their potential to emit strong odors at low concentrations. Unspeciated VOCs were not included in the proposal to ensure that the agency will receive appropriate information on the chemical characteristics of the releases. Unspeciated VOCs can include significantly hazardous constituents listed in CERCLA, EPCRA, and agency permits. The commission also believes that it is not appropriate to raise the default RQ to 5,000 pounds from 100 pounds because certain compounds, such as dimethyl sulfide, are potentially hazardous when released to the air in much smaller amounts. Additionally, the 100-pound default RQ is needed to cover all potentially problematic compounds not listed in CERCLA or EPCRA. The commission will consider individual compounds, as submitted, for a higher RQ.

The commission proposes the correction of a formatting error in §101.1(127)(B)(i), (ii), and (iii). The term “definition” is being replaced with the term “paragraph.”

The commission also proposes the correction of a typographical error in §101.1(127)(B)(iv). The language should have read, “where natural gas or air emissions from crude oil are known...” This change will clarify that the intent of the language was to allow either natural gas or air emissions from crude oil to have an RQ of 5,000 pounds. The current definition indicates that the 5,000-pound RQ applies to a combination of emissions from natural gas and crude oil.

TIP suggested that unauthorized emissions from flares be treated similarly to emissions from boilers and combustion turbines. TIP stated that unauthorized emissions from flares should be reportable in terms of how long a flare smokes in excess of the time specified in a permit or rule.

The commission declines to propose this suggestion because the sources are not comparable. The 15-percentage point opacity level of boilers and combustion turbines is for units using fuels containing very low concentrations of hazardous air pollutants (less than 0.02% by weight). Typically, it is not the flare that will be in an upset condition (i.e., a problem with the burner tips); instead, it is normally the process feeding the flare which will be in upset. A facility operator should have knowledge of the compounds which are present in the affected process, and should be able to provide a reasonable estimate of the amounts of compounds being emitted.

TIP requested that the commission consider some mechanism to authorize routine emissions resulting from start-up, shutdown, and maintenance (SSM). It stated that while such emissions are episodic, the vast majority do not pose a threat requiring immediate response, and requested the opportunity to discuss this situation further with the staff. Additionally, the commenter stated that the commission should consider exempting SSM emissions in compliance with an EPA-required start-up, shutdown, and maintenance plan. TIP also requested that the commission incorporate into the U/M rules the reduced reporting obligations for continuous releases under CERCLA and the EPCRA because of the routine and predictable emissions resulting from SSM.

The commission does not propose any changes to the current rule in response to this comment. The definition of continuous release under CERCLA in 40 Code of Federal Regulations (CFR) §302.8(b) requires that the release be “routine, anticipated, and intermittent and incidental to normal operations....” The same section defines “routine” as a release “that occurs during normal operating procedures or processes.” The analogous situation under the air emission rule would be the normal operation of a pollution source with the anticipated emissions. The commission does not require reports for normal operation of air emission sources. The commission’s rule currently does not require owner/operators to notify the agency of emissions from SSM unless it is expected that unauthorized emissions will be released in amounts at or above a RQ. The commission believes that this is justified because, as with upsets, releases at or above an RQ have the strongest potential for causing effects off property. Because the majority of SSM emissions are predictable, the commission believes that its current rule allows source operators to conduct maintenance with predictable and reasonable reporting requirements.

TCC commented that the commission should delete recordkeeping requirements for non-reportable upsets. A non-reportable upset is one that results in a release of air contaminants less than an RQ. It commented that the current U/M rule has been in place for over one year, and that the commission has had adequate time to collect information regarding non-reportable upsets. In addition, elimination of this requirement would reduce the recordkeeping burden on industry. In a related comment, TIP suggested that the commission should make an exception to recordkeeping for releases only slightly above authorized amounts. It suggested that the commission either exempt from recordkeeping amounts that are less than a certain percentage (for example, 10%) of an RQ above an authorized emission, or

set a non-recordkeeping level at less than one pound above authorized limits for substances with an RQ at ten pounds or higher.

The commission declines to propose the amendments as suggested by TIP and TCC. The commission believes that establishing a “grace amount” of 10% or some other value above an authorized limit does, in effect, establish a new limit. This introduces an unnecessary complication in determining whether an event should be recorded. In response to the suggestion by TCC, the commission will continue to require that records of all unauthorized emissions be created and maintained by the source. These records will allow the commission to identify sources with chronic or pattern upsets.

The commission proposes an amendment to §101.6(a)(2) and (3) and also to §101.7(b)(1) and (2) that if the cause of the upset or the type of activity and the reason for the maintenance, startup, or shutdown are known at the time of notifications, the owner or operator of the source must provide that information at that time.

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

The commission proposes an amendment to §101.6(b)(5) and §101.7(c)(5) to correctly reference that the source must report the compound descriptive type of the individually-listed compounds or mixtures of air contaminants for all U/M activities, not just those equal to or greater than a reportable quantity.

To address EPA's comments on public accessibility of records, the commission proposes to add §101.6(c) and §101.7(d) that will require that records of all U/M events at or above an RQ be submitted to the appropriate regional offices no later than two weeks after the end of the event. This record is in addition to the initial notification of the event. However, if the cause of the upset or the type and reason for the maintenance, start-up, or shutdown is known at the time that the initial notification is submitted, and all other required information submitted at the time of the notification is correct and no additional changes are needed, then the notification will be considered to be the final record of the U/M event and no additional report is needed. The commission believes that this reporting frequency will provide timely public accessibility to records of the most significant events and will not impose an unreasonable burden on affected sources.

The proposed amendment §101.6(d) would allow boilers and combustion turbines equipped with a continuous emission monitoring system providing updated readings at a minimum 15-minute interval to be exempt from creating, maintaining, and submitting records of reportable and non-reportable upsets as long as the source is required to submit excess emission reports by another state or federal requirement. This same language is also proposed for §101.7(e), thus exempting the previously mentioned sources from creating, maintaining, and submitting records of maintenance, start-up, or shutdown activities under the same conditions. This proposed amendment results from the staff review

of the U/M rules and is consistent with the initial concept of the 1997 amendments to reduce duplicate reporting.

TIP pointed out what appear to be typographical errors in §101.7(b)(2)(B), now proposed as §101.7(b)(2)(C), resulting in incorrect references to "upset" when the subject of the section is SSM. The commission proposes an amendment to §101.7(b)(2)(B) to correct the typographical error and correctly reference "maintenance, start-up, or shutdown" instead of "upset." The commission also proposes an amendment to §101.7(c) to require the maintenance of SSM records for five years. This was the commission's original intent and would correct a typographical error referring to "maintaining records on-site for a minimum of two years."

The commission proposes an amendment to the title of §101.11. In an effort to better describe what the section is intended to address, the title is being changed from "Exemptions from Rules and Regulations" to "Demonstrations."

The proposed amendments to §101.11 would satisfy EPA's second concern for obtaining SIP approval. EPA believes that the current U/M rules are inconsistent with EPA's policy on excess emissions resulting from upset, startup, shutdown, and malfunctions. According to EPA's policy on excess emissions, any request for exemption from emission limits needs to clearly state that the event was not caused by poor or inadequate design, operation, or maintenance, and was not of a recurring pattern indicating inadequate design, operation, or maintenance. The EPA policy also requires exemption requests to indicate that repairs were made in an expeditious manner and, if a bypass of a control

equipment occurred, that the bypass was necessary to prevent loss of life, personal injury, or severe property damage. The proposal would clarify these conditions in §101.11(a) and (b). The intent of the proposed changes is to detail the existing terms and conditions that a source owner or operator must demonstrate to qualify for an exemption of otherwise unauthorized emissions. Proposed new language in §101.11(e) would clarify the commission's existing practice of not exempting sources from complying with federal requirements. EPA requested language to specifically make clear that §101.11(e) is not intended to grant waivers or exempt sources from complying with any requirement established under a federal program. The proposed new §101.11(g) would state that the burden of proof is placed on the owner or operator to demonstrate that a source meets the criteria to be exempt from compliance with emission limits.

The new §101.11(h) states that emissions from upsets, maintenance, start-ups, or shutdowns may not contribute to a condition of air pollution. This new subsection also clarifies that the rule is not intended to limit the commission's power to require corrective action necessary to minimize emissions. This authority exists under Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.085, Unauthorized Emissions Prohibited; and Texas Water Code, §7.002, Enforcement Authority; §7.032, Injunctive Relief; and §7.073, Corrective Action.

The agency regional staff will continue to evaluate reported upset, startup, shutdown, and maintenance events to determine whether it would be appropriate to visit the source site as the event is occurring. Staff will also review previously submitted reports related to the source to determine whether there is a pattern of events that may suggest inappropriate or inadequate responses to previous events. Regional

staff may elect to conduct a site inspection specifically related to a source with reoccurring upsets, startups, shutdowns, and/or maintenance or other circumstances as determined by the executive director or other air pollution program with jurisdiction based upon the reported information.

Regional staff will review upset, startup, shutdown, and maintenance reports prior to conducting SIP inspections. While on-site, the inspector will review the source operator's records, which include the records of events below the RQs. A review and evaluation of these records will allow the executive director to identify sources with chronic pattern problems. The executive director will request additional information from the source operator as permitted by §101.11(g) if the executive director discovers a source that appears to have a chronic pattern of upsets, startups, shutdowns, and/or maintenance, they will request additional information from the source operator. The operator will be asked to make the demonstrations found in §101.11. This demonstration must be made in a reasonable amount of time. The executive director will evaluate any information provided by the operator to determine whether the event(s) meet the criteria to be exempt from compliance with emissions limits.

#### FISCAL NOTE

Bob Orozco, Strategic Planning and Appropriations Section, has determined that for the first five-year period the proposed amendments are in effect there will be no significant fiscal implications for the commission and other units of state and local government as a result of administration or enforcement of the proposed amendments to Chapter 101, General Rules, concerning U/M reporting.

The purpose of the proposed amendments is to revise and clarify state rules to conform with federal regulations and policies with regard to U/M reporting. The term “upset” generally refers to an unscheduled occurrence of a process or operation that results in unauthorized release of emissions of air contaminants. The proposed amendments would require records of unauthorized emissions at or above the RQ to be maintained and reported to the commission within two weeks of the event instead of the current practice, which requires U/M records to be maintained on site and submitted to the commission on request. Initial reports of upsets with emissions at or above the RQ will continue to be required within 24 hours of discovery of the upset.

The proposed amendments would also require that any request for exemption from emission limits needs to clearly demonstrate that the event was not caused by poor or inadequate design, operation, or maintenance; the event was not that of a recurring pattern indicative of inadequate design, operation, or maintenance; the repairs were made in an expeditious manner; and, if a bypass of control equipment occurred, the bypass was necessary to prevent loss of life, personal injury, or severe property damage. These requirements are intended to make state requirements conform to language in EPA requirements.

In the proposed amendments, the RQ for certain air contaminants has been raised from the default level of 100 pounds to 5,000 pounds because these contaminants are not listed in the CERCLA and the EPCRA. Other compounds were retained at the default RQ because of their potential to emit strong odors at low concentrations or because they are potentially hazardous when released to the air in amounts smaller than 5,000 pounds. The default RQ remains at 100 pounds because certain compounds are potentially hazardous when released into the air in small amounts.

Current rules, which allow routine emissions from maintenance, start-ups, or shut-downs below the RQ to remain unreported, remain unchanged because the majority of start-up, shut-down, and maintenance emissions are routine and predictable, and should have predictable and routine reporting requirements. The proposal retains the requirement that emissions at or above a reportable quantity resulting from maintenance, start-ups, or shut-downs be reported within 24 hours, but adds a requirement for a permanent record to be submitted within two weeks after the event. The proposed amendments would allow any air pollution program having jurisdiction to review U/M records being maintained at a facility.

#### PUBLIC BENEFIT

Mr. Orozco has also determined that for each year of the first five years the proposed amendments to Chapter 101 are in effect, the public benefit anticipated from enforcement of and compliance with the proposed amendments will be increased access to excess air emission data and emission-related information resulting from upset, maintenance, startup, and shut-down operations at certain facilities regulated by the TNRCC.

The proposed amendments are intended be consistent with federal regulations and policies while minimizing regulatory reporting requirements. There are no significant additional costs anticipated to any person or business as a result of complying with the proposed amendments to Chapter 101. Since current rules require U/M reports below the RQ to be generated and maintained on-site, the cost of transmitting these reports to the commission's regional offices and the Industrial Emissions Assessment Section are not anticipated to be significant.

#### SMALL BUSINESS AND MICRO-BUSINESS ANALYSES

No significant adverse economic effects are anticipated to any person, small business, or micro-business as a result of implementing the provisions of the proposed amendments to the rules. The purpose of the proposed amendments to Chapter 101 is to revise and clarify state rules to conform with the federal regulations and policies regarding U/M reporting. While the proposed amendments add the requirement to submit records of unauthorized emissions at or above the RQ to the commission within two weeks, it is anticipated that these costs would not be significant and would have no significant adverse economic effect on small and micro-businesses. This proposal does not require that any new records be created. It only requires that the information contained in those records be transmitted to the commission. Additionally, the commission does not anticipate that a large number of small or micro-businesses use raw material in such quantities as to exceed a reportable quantity in the event of an upset.

#### DRAFT REGULATORY IMPACT ANALYSIS

The commission has reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and has determined that the rulemaking does not meet the definition of a “major environmental rule” as defined in that statute. “Major environmental rule” means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The proposal requires that records of upsets causing releases above an RQ be submitted to the commission within two weeks of the event if any information changes from that

transmitted in the original report sent within 24 hours of the event. These are records that are being created under the current rule. The commission believes that the cost of transmitting these records will not add any significant new costs above those incurred by creating the records. This proposal would create a new reportable quantity for certain substances, but does not authorize any new emissions of these substances; thus, it does not cause an adverse effect on the environment or increase risks to human health. Therefore, the rulemaking does not meet the definition of a “major environmental rule.” In addition, the proposed amendments to Chapter 101 do not meet any of the four applicability requirements of a “major environmental rule.” The proposed amendments do not exceed a standard set by federal law, an express requirement of state law, or exceed a requirement of a delegation agreement. The amendments are also proposed under the specific state laws of Texas Health and Safety Code, TCAA, §§382.011, 382.012, 382.014, 382.016, 382.017, 382.025, and 382.085.

#### TAKINGS IMPACT ASSESSMENT

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

#### COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission has reviewed this rulemaking for consistency with the Texas Coastal Management Program (CMP) goals and policies in accordance with the regulations of the Coastal Coordination

Council. The commission has determined that this rulemaking relates to an action or actions subject to the CMP in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et seq.), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. For the actions in the proposed amendments to 30 TAC Chapter 101, the commission has determined that the rules are consistent with the applicable CMP goal expressed in 31 TAC §501.12(1) by protecting and preserving the quality and values of coastal natural resource areas and the policy in 31 TAC §501.14(q), which requires the commission to protect air quality in coastal areas. The commission has determined that the specific actions detailed in previous explanations under the headings "Explanation of Proposed Rules," "Public Benefit," "Small Business and Micro-Business Analyses," "Draft Regulatory Impact Analysis," and "Takings Impact Analysis" are consistent with 40 CFR 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans) and will not allow any new emissions to the atmosphere.

Persons may comment on this consistency review.

#### PUBLIC HEARING

A public hearing on this proposal will be held in Austin on February 22, 2000 at 10:00 a.m. at the TNRCC Complex in Building E, Room 201S, located at 12100 Park 35 Circle. The hearing will be structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. There will be no open discussion during the hearing; however, an agency staff member will be available to discuss the proposal 30 minutes prior to the hearing and will answer questions before and after the hearing.

Persons with disabilities who have special communication or other accommodation needs who are planning to attend the hearing should contact the Office of Environmental Policy, Analysis, and Assessment at (512) 239-4900. Requests should be made as far in advance as possible.

#### SUBMITTAL OF COMMENTS

Comments may be submitted to Lisa Martin, MC 205, Office of Environmental Policy, Analysis, and Assessment, Texas Natural Resource Conservation Commission, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. All comments should reference Rule Log Number 99050-101-AI. Comments must be received by 5:00 p.m., February 28, 2000. For further information, please contact Keith Sheedy, P.E., of the Office of Compliance and Enforcement, at (512) 239-1556, or Beecher Cameron, of the Regulation Development Section, at (512) 239-1495.

#### STATUTORY AUTHORITY

The amendments are proposed under the Texas Health and Safety Code, TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop a plan for control of the state's air; §382.014, which authorizes the commission to require a person whose activities cause emissions of air contaminants to submit information to enable the commission to develop an emission inventory; §382.016, which authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of emissions of air contaminants; §382.017, which provides the commission with the authority to adopt rules consistent with the policy and purposes of the TCAA; §382.025, which authorizes the commission to order actions indicated by the circumstances to control a condition of air pollution; §382.085, which prohibits the unauthorized

emissions of air contaminants; and Federal Clean Air Act (FCAA), §7410(a)(F)(iii), which requires correlation of emissions reports and emission-related data by the state agency with any emission limitations or standards established under the FCAA.

The proposed amendments implement §382.011, concerning General Powers and Duties; §382.012, concerning State Air Control Plan; §382.014, concerning Emission Inventory; §382.016, concerning Monitoring Requirements; Examination of Records; §382.017, concerning Rules; and §382.085, concerning Unauthorized Emissions Prohibited.

**CHAPTER 101**  
**GENERAL AIR QUALITY RULES**  
**§§101.1, 101.6, 101.7, 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.

(1) - (81) (No change.)

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

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

either:

(i) the lowest of the quantities:

(I) - (II) (No change.)

(III) listed as follows:

(-a-) butanes (all isomers) [butane] - 5,000 pounds;

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

(-c-) - (-d-) (No change.)

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

(-e-) [(-f-)] pentanes (all isomers) [pentane] - 5,000  
pounds;

(-f-) [(-g-)] propane - 5,000 pounds;

(-g-) [(-h-)] propylene - 5,000 pounds;

[(-i-) isobutane - 5,000 pounds; or]

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

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

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

(-k-) hexanes (all isomers) - 5,000 pounds;

(-l-) octanes (all isomers) - 5,000 pounds; or

(-m-) decanes (all isomers) - 5,000 pounds

(ii) (No change.)

(B) for mixtures of air contaminant compounds:

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

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

(iii) where each of the individual air contaminant compounds listed in subparagraph (A)(i) of this paragraph [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 paragraph [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 or [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) - (D) (No change.)

(83) - (109) (No change.)

#### **§101.6. Upset Reporting and Recordkeeping Requirements.**

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

(1) (No change.)

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

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

(B) [(A)] the processes and equipment involved;

(C) [(B)] the date and time of the upset;

(D) [(C)] the duration or expected duration of the upset;

(E) [(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;

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

(G) [(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 cause of the upset, if known;

(B) [(A)] the processes and equipment involved;

(C) [(B)] the date and time of the upset;

(D) [(C)] the duration or expected duration of the event;

(E) [(D)] the estimated opacity; and

(F) [(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 with jurisdiction.

(5) (No change.)

(b) The owner or operator of a facility shall create a final record [records] of reportable and non-reportable upsets as soon as practicable, but no later than two weeks after the end of an upset. Final [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 with [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)-(4) (No change.)

(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)-(7) (No change.)

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

(d) [(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 and is required to submit excess emission reports by other state or federal requirements, is exempt from creating, [and] maintaining, and submitting records of reportable and non-reportable upsets of the boiler or combustion turbine under subsection (b) of this section [this section].

(e) [(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 with jurisdiction, a technical evaluation of the upset event. The evaluation shall include at least an analysis of the probable causes of the upset and any necessary actions to prevent or minimize recurrence. The evaluation shall be submitted in writing to the executive director within 60 days from the date of request. The 60-day period may be extended by the executive director.

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

(a) (No change.)

(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 §101.1 of this title (relating to Definitions) in the definition of reportable quantity, shall identify [include]:

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

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

(C) [(B)] the processes and equipment involved;

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

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

(G) [(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 identify [include]:

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

(B) [(A)] the processes and equipment involved;

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

(D) [(C)] the duration or expected duration of the event;

(E) [(D)] the estimated opacity; and

(F) [(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 a final record [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. Final [The] records shall be maintained on-site for a minimum of five [two] years and be made readily available upon request to commission staff or personnel of any [local] air pollution program with [having] jurisdiction. If a site is not normally staffed, records of maintenance, start-ups, and shutdowns [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)-(4) (No change.)

(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 shall [will] be estimated; and

(7) (No change.)

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

(e) [(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 and is required to submit excess emission reports by other state or federal regulations, is exempt from creating, [and] maintaining, and submitting records of maintenance, start-ups, and shutdowns with unauthorized emissions [of the boiler or combustion turbine] under subsection (c) of this section [this section].

(f) [(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. Demonstrations [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 TCAA [Texas Clean Air Act], §382.0518(g) if the owner or operator properly complies with the requirements of §101.6 of this title (relating to Upset Reporting and Recordkeeping Requirements) and satisfies all of the following:

(1) the excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond the control of the owner or operator;

(2) the excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;

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

(4) repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;

(5) the amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;

(6) all possible steps were taken to minimize the impact of the excess emissions on ambient air quality;

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

(8) the owner or operator's action in response to the excess emissions were documented by properly signed, contemporaneous operation logs, or other relevant evidence; and

(9) the excess emissions were not part of the recurring pattern indicative of inadequate design, operation, or maintenance.

[(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 TCAA [Texas Clean Air Act], §382.0518(g)[,] if the owner or operator properly complies with the requirements of §101.7 of this title (relating to Maintenance, Start-up and Shutdown Reporting, Recordkeeping, and Operational Requirements)[,] and satisfies all of the following: [the emissions are minimized to the extent practicable.]

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

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

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

(4) at all times, the facility was operated in a manner consistent with good practice for minimizing emissions;

(5) the frequency and duration of operation in maintenance, startup, or shutdown mode was minimized to the maximum extent practicable;

(6) all possible steps were taken to minimize the impact of the excess emissions from any maintenance, start-up, or shutdown on ambient air quality;

(7) all emissions monitoring systems were kept in operation if at all possible; and

(8) the owner or operator's action during the period of excess emissions from any maintenance, start-up, or shutdown were documented by properly signed, contemporaneous operating logs, or other relevant evidence.

(c)-(d) (No change.)

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

(f) (No change.)

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

(h) Upset emissions and emissions from any maintenance, start-up, or shutdown may not cause or contribute to a condition of air pollution. This section does not limit the commission's power to require corrective action as necessary to minimize emissions, or to order any action indicated by the circumstances to control the condition.