The Texas Commission on Environmental Quality (commission) proposes new §§101.390 - 101.394, 101.396, 101.399 - 101.401, and 101.403. These new sections are being proposed in Subchapter H, Emissions Banking and Trading, new Division 6, Highly-Reactive Volatile Organic Compound Emissions Cap and Trade Program.

The new sections are proposed to be submitted to the United States Environmental Protection Agency (EPA) as revisions to the state implementation plan (SIP).

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The Houston/Galveston ozone nonattainment area (HGA) is classified as Severe-17 under the Federal Clean Air Act Amendments of 1990 (as codified in 42 United States Code (USC), §§7401 *et seq*.), and therefore, is required to attain the one-hour ozone standard of 0.12 parts per million (125 parts per billion) by November 15, 2007. The HGA consists of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, and the commission has been working to develop a demonstration of attainment in accordance with 42 USC, §7410. The most relevant HGA SIP revisions to date are the December 2000 one-hour ozone standard attainment demonstration, the September 2001 follow-up revision, and the December 2002 nitrogen oxides (NO_x)/highly-reactive volatile organic compound (HRVOC) revision.

This process has proven to be extremely challenging due to the magnitude of reductions needed for attainment. The emission reduction requirements included as part of the December 2000 SIP revision represent substantial, intensive efforts on the part of stakeholder coalitions in the HGA, in partnership

with the commission, to address ozone. These coalitions include local governmental entities, elected officials, environmental groups, industry, consultants, and the public, as well as the EPA and the commission, who have ~~and~~ worked diligently to identify and quantify control strategy measures for the HGA attainment demonstration.

December 2000

The December 2000 SIP revision contained rules and photochemical modeling analyses in support of the HGA ozone attainment demonstration. The majority of the emissions reductions identified in this revision were from a 90% reduction in point source NO_x. The modeling analysis also indicated a shortfall in necessary NO_x emission reductions, such that an additional 91 tons per day (tpd) of NO_x reductions were necessary for an approvable attainment demonstration. In addition, the revision contained post-1999 rate-of-progress (ROP) plans for the milestone years 2002 and 2005 and for the attainment year 2007, and transportation conformity motor vehicle emissions budgets (MVEB) for NO_x and volatile organic compound (VOC) emissions. The SIP also contained enforceable commitments to implement further measures in support of the HGA attainment demonstration, as well as a commitment to perform and submit a midcourse review.

September 2001

The September 2001 SIP revision for the HGA included the following elements: 1) corrections to the ROP table/budget for the years 2002, 2005, and 2007 due to a mathematical inconsistency; 2) incorporation of a change to the idling restriction control strategy to clarify that the operator of a rented or leased vehicle is responsible for compliance with the requirements in situations where the operator of

a leased or rented vehicle is not employed by the owner of the vehicle (the commission committed to making this change when the rule was adopted in December 2000); 3) incorporation of revisions to the clean diesel fuel rules to provide greater flexibility for compliance with the requirements of the rule while preserving the emission reductions necessary to demonstrate attainment in the HGA; 4) incorporation of a stationary diesel engine rule that was developed as a result of the state's analysis of EPA's reasonably available control measures; 5) incorporation of revisions to the point source NO_x rules; 6) incorporation of revisions to the emissions cap and trade rules; 7) removal of the construction equipment operating restriction and the accelerated purchase requirement for Tier 2/3 heavy-duty equipment; 8) replacement of these rules with the Texas Emission Reduction Plan program; 9) layout of the midcourse review process that details how the state will fulfill the commitment to obtain the additional emission reductions necessary to demonstrate attainment of the one-hour ozone standard in the HGA; and 10) replacement of 2007 ROP MVEBs to be consistent with the attainment MVEBs.

As was discussed in the December 2000 revision, the modeling resulted in a 141 parts per billion peak ozone level that correlated to a shortfall calculation of 91 tpd NO_x equivalent emissions. An additional five tpd were added to the shortfall, because the state could not take credit for the NO_x reductions associated with the diesel pull-ahead strategy. The excess emissions from this strategy were not included in the original emissions inventory. The gap control measures adopted in December 2000, along with the stationary diesel engine rules included in the September 2001 revision, resulted in NO_x reductions of 40 tpd, which left a total remaining shortfall of 56 tpd. The state committed to address this shortfall through the midcourse review process.

December 2002

In January 2001, the Business Coalition for Clean Air - Appeal Group and several regulated companies challenged the December 2000 HGA SIP and some of the associated rules. Specifically, the Business Coalition for Clean Air - Appeal Group challenged the 90% NO_x reduction requirement from stationary sources in the HGA. In May 2001, the parties agreed to a stay in the case, and Judge Margaret Cooper, Travis County District Court, signed a consent order, effective June 8, 2001, requiring the commission to perform an independent, thorough analysis of the causes of rapid ozone formation events and identify potential mitigating measures not yet identified in the HGA attainment demonstration, according to the milestones and procedures in Exhibit C (Scientific Evaluation) of the order.

In compliance with the consent order, the commission conducted a scientific evaluation based in large part on aircraft data collected by the Texas 2000 Air Quality Study (TexAQS). The TexAQS, a comprehensive research project conducted in August and September 2000 involving more than 40 research organizations and over 200 scientists, studied ground-level ozone air pollution in the HGA and east Texas regions. The study revealed that while industrial source NO_x emissions were generally correctly accounted for, industrial source VOC emissions were likely significantly understated in earlier emissions inventories. The study also showed that surface monitors were insufficient to capture the phenomenon of ozone plumes downwind of industrial facilities. On four separate days, aircraft instruments recorded ozone levels exceeding 125 parts per billion that were missed by surface monitoring equipment. The findings from the study are constantly evolving and have raised questions about the formation of high ozone levels in the HGA.

To address these findings and to fulfill obligations in the consent order, the commission adopted a SIP revision in December 2002 that focused on replacing the most stringent 10% industrial NO_x reductions with VOC controls. In light of the TexAQS study, the commission conducted further modeling analysis of ambient VOC data. The results of photochemical grid modeling and analysis indicated that the same level of air quality benefits achieved with a 90% industrial NO_x emissions reduction could be achieved with an overall 80% industrial NO_x emissions reduction when combined with an industrial VOC emissions reduction. This conclusion was based on results from several studies, including photochemical grid modeling of the August - September 2000 episode using a top-down emissions inventory adjustment to point source HRVOC emissions, and analyses of ambient HRVOC measurements made by commission automated gas chromatographs and airborne canisters using the maximum incremental reactivity and hydroxyl reactivity scales. Four HRVOCs (ethylene, propylene, 1,3-butadiene, and butenes) clearly play important roles in the HGA ozone formation, and these four are the best candidates for the first round of HRVOC controls.

In order to address these scientific findings, the commission adopted revisions to the industrial source control requirements, one of the control strategies within the existing federally approved SIP. The December 2002 revision contains new rules to reduce HRVOC emissions from four key industrial sources: fugitives, flares, process vents, and cooling towers. The adopted rules target HRVOCs while maintaining the integrity of the SIP. Analysis showed that limiting emissions of ethylene, propylene, 1,3-butadiene, and butenes in conjunction with an 80% reduction in NO_x is equivalent in terms of air quality benefit to that resulting from a 90% point source NO_x reduction requirement. As such, the

HRVOC rules are performance-based and emphasize monitoring, recordkeeping, reporting, and enforcement, rather than establishing individual unit emission rates.

The technical support documentation accompanying the revision contains the supporting analysis for early results from ongoing analysis examining whether reductions in HRVOC emissions could replace the last 10% of industrial NO_x controls with a reduction of approximately 64% in industrial HRVOC emissions, while ensuring that the air quality specified in the approved December 2000 HGA SIP is met.

Current SIP Revision

As mentioned previously, the commission committed to perform a midcourse review to ensure attainment of the one-hour ozone standard. The midcourse review process provides the ability to update emissions inventory data, utilize current modeling tools, such as MOBILE6, and enhance the photochemical grid modeling. The data gathered from the TexAQS continues to improve photochemical modeling of the HGA. All of these technical improvements give a more comprehensive understanding of the ozone challenge in the HGA that is necessary to develop an attainment plan. In the early part of 2003, the commission was preparing to move forward with the midcourse review; however, during the same time period the EPA announced its plans to begin implementation of the eight-hour ozone standard. The EPA published proposed rules for implementation of the eight-hour ozone standard in the June 2, 2003 issue of the *Federal Register* (68 FR 32802). In the same time frame, EPA also formalized its intentions to designate areas for the eight-hour ozone standard by April 15, 2004, meaning that states would need to reassess their efforts and control strategies to address this

new standard by 2007. Recognizing that existing one-hour nonattainment areas would soon be subject to the eight-hour ozone standard, and in an effort to efficiently manage the state's limited resources, the commission decided to develop an approach that addresses the outstanding obligations under the one-hour ozone standard while beginning to analyze eight-hour ozone issues.

The commission's one-hour ozone SIP commitments include: 1) completing a one-hour ozone midcourse review; 2) performing modeling; 3) adopting measures sufficient to fill the NO_x shortfall; 4) adopting measures sufficient to demonstrate attainment; and 5) revising the MVEB using MOBILE6.

Results from the TexAQS and recent photochemical modeling indicate that additional HRVOC reductions would be the most beneficial measure in reducing ozone in the HGA. The commission is proposing to reduce HRVOC emissions to reach attainment of the one-hour ozone standard. The photochemical modeling of the August - September 2000 episode coupled with a weight-of-evidence argument demonstrates attainment of the one-hour ozone standard. To achieve the necessary HRVOC reductions, the commission is proposing a two-pronged approach that would address variable short-term emissions through a not-to-exceed limit, and would address steady state and routine emissions through an annual cap. The annual HRVOC cap in Harris County would be reduced from the existing HRVOC cap in order to support the attainment demonstration modeling. The annual HRVOC cap in the seven-county surrounding area is equivalent to the total emissions limits established in the December 2002 revision, but represented on an annual basis instead of a 24-hour rolling average. The commission will continue to evaluate the necessity to require short-term and annual reductions from those sites subject to Chapter 115, Subchapter H, Divisions 1 and 2, that are located within the seven-county surrounding

area. If the evaluation demonstrates that reductions from these counties have little impact on attainment of the one-hour ozone standard, the short-term and annual limits for those other seven counties within HGA may no longer be required.

The annual cap emissions would be distributed and enforced through an HRVOC emissions cap and trade program through Subchapter H, Division 6 of Chapter 101. This program would establish a mandatory annual HRVOC emission cap on all sites located in the HGA that have the potential to emit more than ten tpy of HRVOC and that are subject to the HRVOC control requirements of 30 TAC Chapter 115, Subchapter H, Division 1, Vent Gas Control, or Division 2, Cooling Tower Heat Exchange Systems. The cap would be enforced by the allocation, trading, and banking of allowances. An allowance is the equivalent of one ton of HRVOC emissions. This HRVOC cap would be established at levels demonstrated as necessary to allow the HGA to attain the one-hour ozone standard. The proposed cap would initially be implemented on April 1, 2006. These proposed sections would also require all sites with new or modified HRVOC sources in the HGA to obtain unused allowances from other sites already participating under the cap for any increased HRVOC emissions. For sites that have the potential to emit ten tons per year (tpy) or less of HRVOC from sources subject to the HRVOC control requirements of Chapter 115, Subchapter H, Divisions 1 or 2, the total, aggregate HRVOC emissions from those sources would be limited to ten tpy. Sites exempt from the HRVOC emissions cap and trade program would be extended an opportunity to opt-in, receive an HRVOC allocation, and thereby not be restricted to the ten tpy limit.

The HGA SIP no longer relies solely on NO_x-based strategies. A combination of point source HRVOC controls and NO_x reductions appear to be the most effective means of reducing ozone in the HGA and there is no longer a NO_x shortfall in the HGA SIP. The commission also evaluated a number of the existing control strategies that were put in place in the December 2000 revision. The photochemical modeling shows that some of these strategies are no longer necessary to attain the one-hour ozone standard. This SIP revision is proposing the repeal of the commercial lawn and garden equipment restrictions, the repeal of the heavy-duty vehicle idling restrictions, and the removal of the motor vehicle inspection and maintenance program requirements from Chambers, Liberty, and Waller Counties. In addition, this SIP proposal includes revisions to the environmental speed limit strategy. In September 2002, the commission revised the existing speed limit strategy to suspend the 55 mile per hour (mph) speed limit until May 1, 2005, and, where posted speeds were 65 mph or higher before May 1, 2002, to increase speed limits to five mph below what was posted. The 78th Legislature, 2003, removed the commission's authority to determine speed limits for environmental purposes; therefore, this proposal would remove the reinstatement of the 55 mph speed limit on May 1, 2005, and would maintain the currently posted speed limits at five mph below the posted limit before May 1, 2002. Also, as part of this SIP revision, the commission is proposing new statewide portable fuel container rules. Historically, the commission has expressed a preference to implement technology-based strategies over behavior-altering strategies, and these proposed changes embody that philosophy. Through this revision, the commission is fulfilling its outstanding one-hour ozone SIP obligations and beginning to plan for the upcoming eight-hour ozone standard. This proposal demonstrates attainment of the one-hour ozone standard in the HGA in 2007 and provides a preliminary analysis of the HGA in terms of the eight-hour ozone standard in 2007 and 2010. EPA's proposed eight-hour implementation

rules provide flexibility to the states in transitioning from the one-hour to the eight-hour ozone standard, and the commission believes the steps taken in this proposal and the technical work performed to date will be invaluable through the transition period. Upon EPA's finalization of the eight-hour implementation and the transportation conformity rules, the commission expects to begin developing eight-hour ozone SIPs.

This is to put all interested parties on notice that, although the commission is proposing the following rules, including a cap and trade program and a short-term limit on HRVOC emissions, the commission may significantly amend these proposed rules at adoption, repropose a portion of these rules, or propose additional rules, as appropriate.

First, the commission continues to analyze the rules for implementation of the eight-hour ozone standard adopted by EPA on April 15, 2004. These rules and their preamble suggest that a demonstration of attainment of the one-hour ozone standard may not be required for the portion of the SIP pertaining to the HGA. This means that the commission will need to review the measures contained in the current proposal to ensure that they are needed in this form in order to demonstrate noninterference. Additional analysis of the impact of the proposed rules on attainment of the eight-hour standard may indicate a need for new or more stringent control measures and could result in the modification of the HRVOC emissions caps established under this proposed rule.

Second, the commission may determine that, if a one-hour attainment demonstration is necessary, additional, different, or more stringent control measures may be needed based on additional modeling.

The commission staff continues to model scenarios under the one-hour standard, and the commission may determine that the results indicate a need for changes in control strategies. Moreover, the one-hour attainment demonstration includes a weight-of-evidence argument. Additional review of the issues relating to the weight-of-evidence argument could lead the commission to propose new strategies or to repropose the control strategies proposed today.

SECTION BY SECTION DISCUSSION

Section 101.390, Definitions

The proposed new §101.390 would contain the definitions to be used with the proposed new HRVOC emissions cap and trade program. The definition of "Allowance" would be the authorization to emit 1/10 ton of HRVOC during a control period. The definition of "Authorized account representative" would be the responsible person who is authorized in writing, to transfer and otherwise manage allowances. The definition of "Banked allowance" would be an allowance that is not used to reconcile emissions in the designated year of allocation, but is carried forward for up to one year and noted in the compliance or broker account as banked. The definition of "Broker" would be a person not required to participate in the requirements of this division who opens an account under this division for the purpose of banking and trading allowances. The definition of "Broker account" would be the account where allowances held by a broker are recorded. Allowances held in a broker account may not be used to satisfy compliance requirements for this division. The definition of "Compliance account" would be the account where allowances held by a source or multiple sources are recorded for the purposes of meeting the requirements of this division. Sources not under common ownership or control may have separate compliance accounts. The definition of "Level of activity" would be the amount of HRVOCs in pounds

produced as an intermediate, by-product, or final product or used by a process unit during a given period of time, but excluding any recycled HRVOCs internal to the process unit. The definition of "Petroleum refinery" would be the collection of process units used at a site primarily engaged in petroleum refining as defined in the North American Industrial Classification System for Petroleum Refining (324110). For the purposes of this subchapter, a petroleum refinery process unit refers only to those process units located at sites that do not include process units that produce ethylene except as a by-product. The definition of "Process unit" would be a collection of equipment assembled and connected by hardpiping or duct work, used to process a raw material or intermediate in the manufacture or production of a final product.

The new division refers to the following predefined definitions: "Cooling tower heat exchange system" as defined in 30 TAC §115.760; "Flare" as defined in 30 TAC §101.1; "Houston/Galveston (HGA) ozone nonattainment area" as defined in §101.1; "HRVOC" as defined in 30 TAC §115.10; "Site" as defined by 30 TAC §122.10; and "Vent" as defined in §101.1.

Section 101.391, Applicability

The proposed new §101.391 would state that the requirements of Division 6 apply to each site located in the HGA that is subject to the HRVOC requirements of Chapter 115, Subchapter H, Division 1 or 2 and the types of facilities covered. The proposed new §101.391 would also state that any site that elects to opt-in to this division under §101.392(b), Exemptions, would always be subject to the program.

Section 101.392, Exemptions

The proposed new §101.392 would exempt from this division any site meeting the applicability requirements of §101.391 with the potential to emit ten tpy or less of HRVOC from all covered facilities at the site. For the purpose of determining exemption status, the site's potential to emit HRVOC from all covered facilities would be compared to the ten tpy exemption level for each year of operation beginning with calendar year 2000. If at any time the site's potential to emit exceeds the ten tpy exemption level, the site would be subject to the HRVOC emissions cap and trade program. Once subject to the HRVOC cap and trade program, a site would always be subject to the program. Sites exempt from this division would be extended an opportunity to opt-in to the HRVOC emissions cap and trade program. Notification of a site's election to opt-in to the requirements of this division would be required in writing to the executive director no later than April 30, 2005.

Section 101.393, General Provisions

The proposed new §101.393 would state that allowances may only be used to meet the requirements of Division 6 and cannot be used to meet or exceed the limitations of any annual emission limitation established under 30 TAC Chapter 116, Subchapter B, any applicable rule or law, or for netting purposes to avoid the applicability of federal and state new source review (NSR) requirements. The new section would set the initial control period as April 1, 2006 through December 31, 2006 with each control period thereafter beginning on January 1 and ending on December 31. The new section would require each site subject to this division to hold a quantity of allowances in its compliance account equal to or greater than its total HRVOC emissions from all covered facilities during the previous control period. The new section states that allowances may be simultaneously used to satisfy offset

requirements for new or modified sources subject to federal nonattainment NSR requirements as provided in Chapter 116, Subchapter B, Division 7 but not for netting requirements. The new section states that all allowances would be allocated, transferred, deducted, or used in tenths of tons and that one compliance account shall be used for each site. The new section states that an allowance would not constitute a security or a property right. The commission would maintain a registry of the allowances in each compliance and broker account. The registry would not contain proprietary information. Requests for information identified as proprietary when submitted to the agency would be subject to the procedures set out in the Texas Public Information Act.

Section 101.394, Allocation of Allowances

The proposed new §101.394 describes how allowances would be allocated to each site subject to this division. The executive director would allocate allowances under this division on March 31, 2006. For sites subject to this division that are located in Harris County, allowances would be allocated for emissions of the following HRVOCs: 1,3-butadiene; all isomers of butene (e.g., isobutene (2-methylpropene or isobutylene), alpha-butylene (ethylethylene) and beta-butylene (dimethylethylene, including both cis- and trans- isomers)); ethylene; and propylene. Allowances would be allocated in the aggregate, not specifically identified for each HRVOC species. Sites within Harris County that would not receive an allocation under subsection (c) or (d) would receive an allocation based on a percentage of the site's baseline level of activity relative to the total baseline level of activity for all sites within Harris County. This percentage would then be applied to the tons of HRVOC modeled in the attainment demonstration for those sites within Harris County. For sites subject to this division that are located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties,

allowances would be allocated for emissions of the following HRVOCs: ethylene and propylene. Allowances would be allocated in the aggregate, not specifically identified for each HRVOC species. Sites within Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties that would not receive an allocation under subsection (c) or (d) would receive an allocation based on a percentage of the site's baseline level of activity relative to the total baseline level of activity for all sites within those counties. This percentage would then be applied to the tons of HRVOC modeled in the attainment demonstration for those sites within Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties. The level of activity baseline for a site would be calculated as the average annual level of activity for the five consecutive year period of calendar years 2000 through 2004. For the five-year period, the level of activity would be determined by summing the levels of activity for all process units located at the site that produce one or more HRVOCs as an intermediate, by-product, or final product or that use one or more HRVOCs as a raw material or intermediate to produce a product. New sites or sites that become subject to this division at a later date by increasing HRVOC emissions above the exemption level would be required to obtain allowances from other sites already participating in the cap and trade program.

Sites subject to this division that do not include process units that produce or use an HRVOC would receive an allocation based on HRVOC throughput or storage capacity for the five consecutive year period between calendar years 2000 through 2004. Examples of facilities that do not produce or use HRVOCs include storage facilities or pipelines. Up to 10% of the total HRVOC emissions for Harris County would be equitably allocated to those sites within Harris County subject to this division but that do not include process units that produce or use an HRVOC. Likewise, up to 10% of the total HRVOC

emissions for Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties would be equitably allocated to sites in those counties meeting the same qualifications. In order to be allocated allowances from this set-aside, owners or operators of sites subject to this division that do not include process units that produce or use an HRVOC would be required to apply to the executive director no later than January 30, 2005. Allowances up to the full 10% not allocated to sites meeting the previously mentioned criteria would be distributed proportionately to those sites producing or using an HRVOC. The commission may evaluate the distribution of any allowances remaining from this 10% that has been set aside to sites that are newly constructed, and therefore, have not established a baseline.

The commission proposes to allocate allowances to those process units that are a part of a petroleum refinery independent of those process units that are a part of a chemical plant or a petroleum refinery collocated with a chemical plant. Because the commission's allocation process is based on HRVOC production or use, the commission~~commissions~~ is segregating these refineries to an independent segment of the emissions allocation. This segregation is based on the understanding that HRVOC emissions from a refinery may be disproportionate to HRVOC emissions from a chemical plant. As a part of the refining process, HRVOCs are produced in the cracking of gas oil feedstocks into lower molecular weight hydrocarbons and distributed throughout the refinery in various production units. The HRVOC produced or used in a refinery may be associated with multiple emission points resulting in a greater chance for the HRVOCs to escape controls while the HRVOC produced or used in a chemical or olefins plant may be more typically associated with fewer emission points and has greater potential to be present in a concentrated stream and controlled at fewer emission points. Therefore emissions from

refineries may be disproportionate when basing allowance allocations on HRVOC production use and versus chemical plants.

For petroleum refinery process units subject to this division that are located in Harris County, allowances would be allocated for emissions of the following HRVOCs: 1,3-butadiene; all isomers of butene (e.g., isobutene (2-methylpropene or isobutylene), alpha-butylene (ethylethylene) and beta-butylene (dimethylethylene, including both cis- and trans- isomers)); ethylene; and propylene. Allowances would be allocated in the aggregate, not specifically identified for each HRVOC species. Petroleum refineries within Harris County would receive an allocation based on a percentage of the site's baseline level of activity relative to the total baseline level of activity for all refinery process units within Harris County. This percentage would then be applied to the tons of HRVOC modeled in the attainment demonstration for those refinery units within Harris County. For petroleum refinery process units subject to this division that are located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties, allowances would be allocated for emissions of the following HRVOCs: ethylene and propylene. Allowances would be allocated in the aggregate, not specifically identified for each HRVOC species. Petroleum refineries within Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties would receive an allocation based on a percentage of the site's baseline level of activity relative to the total baseline level of activity for all petroleum refineries within those counties. This percentage would then be applied to the tons of HRVOC modeled in the attainment demonstration for those sites within Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties. The level of activity baseline for a site would be calculated as the average annual level of activity for the five consecutive year period between

calendar years 2000 through 2004. For the five-year period, the level of activity would be determined by summing the levels of activity for all process units located at the site that produce one or more HRVOCs as an intermediate, by-product, or final product or that use one or more HRVOCs as a raw material or intermediate to produce a product.

The section states that if a site emits more HRVOC than what was held in the compliance account on March 1 following a control period, that the allocation for the next control period will be reduced by an amount equal to the emissions exceeding the compliance account plus an additional 10%. For example, an emissions exceedance of ten tons would result in a penalty reduction of 11 tons for the next control period. If a compliance account does not have sufficient allowances to accommodate the penalty reduction, it is the responsibility of the owner or operator to purchase or transfer additional allowances within 30 days of the notice of deficiency from the executive director. Allowances would be deposited initially by March 31, 2006 and subsequently by January 1 of each control period. To account for program implementation on April 1, allocations for the 2006 control period would be reduced by 25% from the annual allocation to be distributed in each control period thereafter. The annual allocation of allowances may be adjusted to reflect any new or existing SIP requirements. Allowances may be added or subtracted from a site's compliance account in accordance with the annual reporting requirements in §101.400. Proposed language would allow an owner or operator of a site to request that the executive director approve the substitution of the level of activity from one calendar year with the level of activity from the preceding or following calendar year within the 2000 through 2004 time period due to extenuating circumstances at the site. The executive director would only consider circumstances not attributable to economic fluctuation.

Section 101.396, Allowance Deductions

The proposed new §101.396 describes how allowances would be deducted from compliance accounts. On March 31 of the year following each control period, allowances would be deducted from the site's compliance account equivalent to the total HRVOC emissions from all covered facilities at the site. The amount of HRVOC emissions would be required to be based on the monitoring and testing protocols established in 30 TAC §115.725 and §115.764, as appropriate for each process unit at the site. The section states that annual HRVOC emissions from covered facilities would be calculated for each hour of the year and summed to determine the total annual HRVOC emissions. Emissions events subject to the requirements of 30 TAC §101.201 and emissions from scheduled maintenance, startup, or shutdown activities subject to the requirements of 30 TAC §101.211 would be required to be included in the total annual HRVOC emissions for each control period. However, the hourly emissions for emission events or emissions from scheduled maintenance, startup, or shutdown activities to be included in the summation cannot exceed the short-term limit of 30 TAC §115.722(c) and §115.761(c). This section would also include a provision for missing data. Should the monitoring and testing data required by this section be nonexistent or unavailable, a site would be allowed to determine its HRVOC emissions using the following methods and in the following order: continuous monitoring data; periodic monitoring data; testing data; data from manufacturers; and engineering calculations. For sources using continuous monitors to measure emissions, the last valid data point from the monitor would be allowed to substitute for the missing data. A justification would be required for sites using one of these alternate methods for determining HRVOC emissions due to missing monitoring and testing data. The section states that the executive director shall deduct allowances for compliance with

a control period beginning with the most recently allocated allowances prior to deducting banked allowances.

Section 101.399, Allowance Banking and Trading

The proposed new §101.399 describes how allowances may be traded and banked. Allowances may generally be banked for future use or traded during the control period for which they are allocated or the following control period. Any allowance not used for compliance may be banked or traded for use in the following control period. The section states that allowances that have not expired or been used would be available for trade at any time after they have been allocated. Trade requests involving allowances allocated for the current control period or excess allowances from the previous control period would be made through the submittal of a completed Form ECT-2, Application for Transfer of Allowances. Persons receiving an annual allocation of HRVOC allowances would be allowed to permanently transfer ownership of the current and future allowances to be allocated to that site through the submittal of a completed Form ECT-4, Application for Permanent Transfer of Allowance Ownership. Trades involving the transfer of allowances scheduled to be allocated for a future control period would be allowed through the submittal of a completed Form ECT-5, Application for Transfer of Individual Future Year Allowances. With the exception of transfers between sites under common ownership or control, the account representative would be required to report the price paid per allowance for all transfer transactions. All trades would be completed through the executive director and would be considered final when the executive director issues a letter to buyer and seller reflecting the transaction. Allowances initially allocated to sites located in Harris County would be restricted from use at sites located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and

Waller Counties. Allowances initially allocated to sites located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties would be restricted from use in Harris County. Only authorized account representatives would be permitted to trade allowances. The section states that allowances subject to an approved transaction would be deposited into the purchaser's broker or compliance account within 30 days of receipt of a completed transfer application.

Section 101.400, Reporting

The proposed new §101.400 states that sites shall submit a completed HRVOC Emissions Cap and Trade Annual Compliance Report to the executive director no later than March 31 following each control period detailing the amount of actual HRVOC emissions for the preceding control period. The Annual Compliance Report would be required to include the total amount of HRVOC emissions from each covered facility at the site, the methods used in determining the HRVOC emissions, and a summary of all final trades. The commission also proposes to give the executive director authority to suspend trades involving the transfer of allowances for future control periods from any site that has not submitted an HRVOC Emissions Cap and Trade Annual Compliance Report. For example, if after March 31, 2007, site A has not submitted an HRVOC Emissions Cap and Trade Annual Compliance Report for the 2006 control period but has submitted an application for transfer of 2003 allowances to site B, the trade would be withheld pending the submittal of site A's HRVOC Emissions Cap and Trade Annual Compliance Report and verification of compliance for 2006.

Section 101.401, Level of Activity Certification

The proposed new §101.401 states that all sites subject to this division would be required to submit a completed Level of Activity Certification Form certifying their baseline level of activity no later than April 30, 2005. The Level of Activity Certification would include the level of activity for all covered facilities at the site during the five consecutive year period between calendar years 2000 through 2004. The Level of Activity Certification would be required to include information and documentation in support of the proposed level of activity baseline such as production, purchase, or usage records. This information will be used to calculate each site's allocation. The proposed section would allow an owner or operator to mark any portion of the Level of Activity Certification Form and the supporting documentation relating to HRVOC production or use as confidential under Texas Health and Safety Code, §382.041.

Section 101.403, Program Audits and Reports

The proposed new §101.403 would require the executive director to perform an audit of the HRVOC emissions cap and trade program within three years of the effective date of the new division and every three years thereafter. The audit would evaluate the impact of the program on the state implementation plan, availability and cost of allowances, compliance by participants, necessity for additional trading restrictions, and any other elements chosen by the executive director. Additionally, no later than June 30 following each control period, the executive director would be required to prepare and make available a report for the previous control period. This report would detail the number of allowances allocated to each compliance account, total number of allowances allocated under this division, total

amount of HRVOC allowances deducted from each compliance account based on actual HRVOC emissions, and a summary of all trades for the control period.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Nina Chamness, Analyst, Strategic Planning and Grants Management Section, determined that for the first five-year period the proposed rules are in effect, there will be no significant fiscal impact to the agency or other units of state and local government as a result of the administration or enforcement of the proposed rules.

The proposed rules would establish a mandatory annual cap for HRVOC emissions on all sites located in the HGA that emit, or have the potential to emit, more than ten tpy of HRVOC and are subject to the HRVOC control requirements for vent gas control or cooling tower heat exchange systems. The cap would be enforced by the allocation, trading, and banking of allowances. An allowance is the equivalent of one ton of HRVOC emissions. This HRVOC cap would be established at levels necessary for the HGA to attain the national ambient air quality standard (NAAQS) for the one-hour ozone standard. Unused allowances from one site could be traded or sold to another site in the HGA. The proposed rules would also require all sites with new or modified HRVOC sources in the HGA to obtain unused allowances from other sites already participating under the cap to offset any increased HRVOC emissions.

For sites that emit, or have the potential to emit, less than ten tons of HRVOC per year from sources subject to the HRVOC control requirements for vent gas control or cooling tower heat exchange

systems, the total, aggregate emissions from those sources would be limited to ten tpy of HRVOC. Sites exempt from the HRVOC emissions cap and trade program would be extended an opportunity to opt-in, receive an HRVOC allocation, and thereby not be restricted to the ten tpy limit.

To implement the mandatory cap and allowance trading program, the agency would have to perform oversight functions. Specifically, the commission's Air Permits Division would allocate allowances, process allowance trades, and review annual compliance reports as required by the proposed rules. These tasks would be done by using existing resources within the Air Permits Division.

PUBLIC BENEFITS AND COSTS

Ms. Chamness also determined that for each year of the first five years the proposed new rules are in effect, the public benefit anticipated will be the reduction of ground-level ozone in the HGA to levels determined by EPA as necessary for a healthy and safe environment.

There will be a significant impact on petrochemical, chemical, refinery, storage, and loading companies located in the HGA ozone nonattainment area that emit, or have the potential to emit, more than ten tpy of HRVOC and are subject to the HRVOC control requirements for vent gas control or cooling tower heat exchange systems. Approximately 150 sites will be subject to the proposed rules. They would be required to submit a Level of Activity Certification form to the agency no later than April 30, 2005. Compliance with the annual cap and trade program would begin on April 1, 2006. By March 1 of each year, sites would be required to possess a quantity of HRVOC allowances equivalent to the previous year's actual HRVOC emissions. No later than March 31, 2007 and every March 31 for each year

thereafter, sites would be required to submit to the agency an Annual Compliance Report to demonstrate compliance with the cap and trade program for the previous year.

Affected sites may incur significant costs related to the control of HRVOC emissions or purchase of additional HRVOC allowances. Through the cap and trade approach, sites would have the choice of controlling HRVOC emissions or purchasing additional HRVOC allowances in order to meet their allowance obligations. Costs may vary significantly depending on whether a site chooses to control emissions or purchase allowances for compliance.

Because the commission does not know which methods companies will choose to comply with the mandatory cap, it is unable to provide detailed cost estimates for each site or process. However, the commission does have some estimated cost information for particular devices and allowances that companies may choose to utilize when complying with the cap. Based on fiscal information provided in the 2002 HRVOC rule proposal, if a company wants to control HRVOC emissions by installing an additional control device for previously uncontrolled vent gas streams, the estimated capital and annual operating costs for such a device could be approximately $600,000 and $360,000 respectively. If a company chooses to purchase allowances, it may find that the costs of purchasing allowances may vary significantly depending on their availability and the demand for them. Also, no historical data for the price of trading allowances of HRVOCs exists. The only available cost data is for NO_x allowances. The cost of allowances under the mass emissions cap and trade program for NO_x has historically yielded allowance prices in the range of $100 to $200 per ton for a current year allowance and $40,000

per ton for a continuous stream of allowances. Affected industries would be required to possess allowances equivalent to the actual HRVOC emissions from the site.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

The commission has been unable to identify any small or micro-businesses that would be affected by the proposed rules. If there are affected small or micro-businesses, the estimated capital and annualized cost in this fiscal note could be a used as a cost estimate for small or micro-businesses.

LOCAL EMPLOYMENT IMPACT STATEMENT

The commission reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking action meets the definition of a "major environmental rule" as defined in that statute. A "major environmental rule" is a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

The proposed rulemaking action to Chapter 101 and revisions to the SIP would affect owners and operators of sources emitting HRVOC subject to Chapter 115, Subchapter H, Divisions 1 and 2. The rules are intended to protect the environment and reduce risks to human health and safety from environmental exposure and may have adverse effects on owners and operators of certain sources. Many of these sources are owned or operated by utilities, petrochemical plants, refineries, and other industrial, commercial, or institutional groups, and each group could be considered a sector of the economy. This determination is based on the analysis provided elsewhere in this preamble, including the discussion in the PUBLIC BENEFITS AND COSTS section of this proposal.

This proposed rulemaking does not meet any of the four applicability criteria of a "major environmental rule" as defined in the Texas Government Code. Section 2001.0225 applies only to a major environmental rule the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

The rulemaking implements requirements of 42 USC. Under 42 USC, §7410, states are required to adopt a SIP that provides for "implementation, maintenance, and enforcement" of the primary NAAQS in each air quality control region of the state. While 42 USC, §7410, does not require specific programs, methods, or reductions to meet the standard, SIPs must include "enforceable emission

limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter," (meaning Chapter 85, Air Pollution Prevention and Control). It is true that 42 USC does require some specific measures for SIP purposes, such as the inspection and maintenance program, but those programs are the exception, not the rule, in the SIP structure of 42 USC. The provisions of 42 USC recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public, to collaborate on the best methods to attain the NAAQS for the specific regions in the state. Even though 42 USC allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. Thus, while specific measures are not generally required, the emission reductions are required. States are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that the nonattainment areas of the state will be brought into attainment on schedule.

The requirement to provide a fiscal analysis of proposed regulations in the Texas Government Code were amended by Senate Bill (SB) 633 during the 75th Legislature, 1997. The intent of SB 633 was to require agencies to conduct an regulatory impact analysis (RIA) of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded "based on an

assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted proposed rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law. As discussed earlier in this preamble, 42 USC does not require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each nonattainment area to ensure that area will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full RIA contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board in its fiscal notes. Because the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the Legislative Budget Board, the commission believes that the intent of SB 633 was only to require the full RIA for rules that are extraordinary in nature. While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of 42 USC. For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are specifically required by federal law.

In addition, 42 USC, §7502(a)(2), requires attainment as expeditiously as practicable, and 42 USC, §7511a(d), requires states to submit ozone attainment demonstration SIPs for severe ozone nonattainment areas such as the HGA. The proposed rules, that will reduce ambient HRVOC and ozone in the HGA, will be submitted to the EPA as one of several measures in the federally approved SIP. As discussed earlier in this preamble, the banking and trading scheme in the proposed rules are necessary to address some of the elevated ozone levels observed in the HGA; this scheme will result in reductions in ozone formation in the HGA and help bring the HGA into compliance with the air quality standards established under federal law as NAAQS for ozone.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. The commission presumes that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485. 489 (Tex. App.–Austin 1995), *writ denied with per curiam opinion respecting another issue*, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App.–Austin 1990), *no writ*; *Cf. Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Sharp v. House of Lloyd, Inc.*, 815 S.W.2d 245 (Tex. 1991); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App.–Austin 2000), *pet. denied*; and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

As discussed, this rulemaking action implements requirements of 42 USC. There is no contract or delegation agreement that covers the topic that is the subject of this action. Therefore, the proposed rulemaking does not exceed a standard set by federal law, exceed an express requirement of state law, exceed a requirement of a delegation agreement, nor adopted solely under the general powers of the agency. Finally, this rulemaking action was not developed solely under the general powers of the agency, but is authorized by specific sections of Texas Health and Safety Code, Chapter 382 (also known as the Texas Clean Air Act), and Texas Water Code that are cited in the STATUTORY AUTHORITY section of this preamble, including Texas Health and Safety Code, §§382.011, 382.012, 382.014, 382.016, 382.017, 382.021, and 382.034. Therefore, this rulemaking action is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because the proposed rulemaking does not meet any of the four applicability requirements. The commission invites public comment on the draft RIA determination.

TAKINGS IMPACT ASSESSMENT

The commission completed a takings impact assessment for this proposed rulemaking action under Texas Government Code, §2007.043. The rules are proposed as part of a strategy to reduce and permanently cap HRVOC emissions to a level which would allow the HGA nonattainment area to attain the NAAQS for ozone. Promulgation and enforcement of the rules will not burden private real property. The proposed rules do not affect private property in a manner that restricts or limits an owner's right to the property that would otherwise exist in the absence of a governmental action. Additionally, the credits and allowances created under these rules are not property rights. Consequently, this rulemaking action does not meet the definition of a takings under Texas Government

Code, §2007.002(5). Although the proposed rules do not directly prevent a nuisance or prevent an immediate threat to life or property, they do prevent a real and substantial threat to public health and safety, and partially fulfill a federal mandate under the 42 USC, §7410. Specifically, the emission limitations and control requirements within these rules were developed in order to meet the ozone NAAQS set by the EPA under the 42 USC, §7409. States are primarily responsible for ensuring attainment and maintenance of the NAAQS once the EPA has established them. Under 42 USC, §7410 and related provisions, states must submit, for approval by the EPA, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. Therefore, the purpose of this rulemaking action is to revise programs which provide flexibility in meeting the ozone NAAQS set by the EPA under 42 USC, §7409. Consequently, the exemption which applies to these proposed rules is that of an action reasonably taken to fulfill an obligation mandated by federal law. Therefore, these proposed revisions will not constitute a takings under Texas Government Code, Chapter 2007.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

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

policies in accordance with the rules of the Coastal Coordination Council, and determined that the action is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(l)). No new sources of air contaminants will be authorized and the proposed rules will maintain the same level of, or reduce the level of emissions as the existing rules. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with federal regulations in 40 Code of Federal Regulations, to protect and enhance air quality in the coastal areas (31 TAC §501.14(q)). This rulemaking action complies with 40 Code of Federal Regulations Part 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans. Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and policies.

The commission solicits comments on the consistency of the proposed rulemaking with the CMP during the public comment period.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

Because Chapter 101 contains applicable requirements under 30 TAC Chapter 122, Federal Operating Permits, owners or operators subject to the Federal Operating Permit Program must, consistent with the revision process in Chapter 122, revise their operating permits to include the revised Chapter 101 requirements for each emission unit at their site affected by the revisions to Chapter 101.

ANNOUNCEMENT OF HEARING

Public hearings for this proposed rulemaking have been scheduled for the following times and locations: August 2, 2004, 1:30 p.m. and 5:30 p.m., City of Houston, City Council Chambers, 2nd Floor, 901 Bagby, Houston; August 3, 2004, 10:30 a.m., John Gray Institute, 855 Florida Avenue, Beaumont; and August 5, 2004, 9:30 a.m., Texas Commission on Environmental Quality, 12100 North I-35, Building F, Room 2210, Austin. The hearings will be structured for the receipt of oral or written comments by interested persons. Registration will begin 30 minutes prior to the hearings. Individuals may present oral statements when called upon in order of registration. A time limit may be established at the hearings to assure that enough time is allowed for every interested person to speak. There will be no open discussion during the hearings; however, commission staff members will be available to discuss the proposal 30 minutes before the hearings and will answer questions before and after the hearings.

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 Patricia Durón, MC 205, Texas Commission on Environmental Quality, Office of Environmental Policy, Analysis, and Assessment, P.O. Box 13087, Austin, Texas 78711-3087, or by fax to (512) 239-4808, or emailed to *siprules@tceq.state.tx.us*. All comments should reference Rule Project Number 2004-058-101-AI. Comments must be received by 5:00 p.m.,

August 9, 2004. For further information, please contact Cory Chism, Air Permits Division, (512) 239-0539 or Clifton Wise, Policy and Regulations Division, (512) 239-2263.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 6: HIGHLY-REACTIVE VOLATILE ORGANIC COMPOUND EMISSIONS CAP AND TRADE PROGRAM

§§101.390 - 101.394, 101.396, 101.399 - 101.401, 101.403

STATUTORY AUTHORITY

The new sections are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, that authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code; and under Texas Health and Safety Code, §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The new sections are also proposed under Texas Health and Safety Code, §382.002, concerning Policy and Purpose, that establishes the commission purpose to safeguard the state air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state air; and §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state air. The new sections are also proposed under Texas Health and Safety Code, §382.014, concerning Emission Inventory, that authorizes the commission to require a person whose activities cause air contaminant emissions to submit information to enable the commission to develop and emissions inventory; §382.016, concerning Monitoring Requirements, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions; and §382.051 and §382.0518, concerning Permitting Authority of Commission and Preconstruction Permit, that authorize

the commission to issue preconstruction and operating air permits. The new sections are also adopted under 42 USC, §7410(a)(2)(A), that requires SIPs to include enforceable measures or techniques, including economic incentives such as fees, marketable permits, and auction of emission rights.

The proposed new sections implement Texas Health and Safety Code, §§382.002, 382.011, 382.012, and 382.017; and House Bill 2912, §5.01 and §18.14, 77th Legislature, 2001.

§101.390. Definitions.

The following words and terms, when used in this division, have the following meanings, unless the context clearly indicates otherwise.

(1) **Allowance** - The authorization to emit one ton of highly-reactive volatile organic compounds, expressed in tenths of a ton, during a control period.

(2) **Authorized account representative** - The responsible person who is authorized in writing to transfer and otherwise manage allowances for the site.

(3) **Banked allowance** - An allowance that is not used to reconcile emissions in the designated year of allocation, but is carried forward for up to one year and noted as banked in the compliance account or broker account.

(4) **Broker** - A person that is not required to participate in the requirements of this division, but that opens an account under this division for the purpose of banking and trading allowances.

(5) **Broker account** - The account where allowances held by a broker are recorded. Allowances held in a broker account may not be used to satisfy compliance requirements for this division.

(6) **Compliance account** - The account in which allowances held by a site are recorded for the purposes of meeting the requirements of this division.

(7) **Level of activity** - The amount of highly-reactive volatile organic compounds, as defined in §115.10 of this title (relating to Definitions), in pounds produced as an intermediate, by-product, or final product or used by a process unit during a given period of time, but excluding any recycled highly-reactive volatile organic compounds internal to the process unit.

(8) **Petroleum refinery** - A collection of process units used at a site primarily engaged in petroleum refining as defined in the North American Industry Classification System (324110). For the purposes of this division, a petroleum refinery process unit refers only to those process units located at sites that do not include process units that produce ethylene except as a by-product.

(9) **Process unit** - A collection of equipment assembled and connected by hardpiping or duct work, used to process a raw material ~~materials~~ or intermediate in the manufacture or production of a final product ~~and to manufacture a product~~.

§101.391. Applicability.

This division applies to each site, as defined in §122.10 of this title (relating to General Definitions), in the Houston/Galveston ozone nonattainment area, as defined in §101.1 of this title (relating to Definitions), that is subject to Chapter 115, Subchapter H, Division 1 of this title (relating to Vent Gas Control) or Division 2 of this title (relating to Cooling Tower Heat Exchange Systems). Covered facilities include all vent gas streams, flares, and cooling tower heat exchange systems that emit highly-reactive volatile organic compounds, as defined in §115.10 of this title (relating to Definitions), and that are located at a site subject to Chapter 115, Subchapter H of this title (relating to Highly-Reactive Volatile Organic Compounds). For the purpose of compliance with Chapter 115, Subchapter H, Divisions 1 or 2 of this title, each site that meets the applicability requirements of this section, or elects to opt-in to this division under §101.392(b) of this title (relating to Exemptions), shall always be considered to be subject to this division.

§101.392. Exemptions

(a) Sites in the Houston/Galveston ozone nonattainment area that have the potential to emit ten tons per year or less of highly-reactive volatile organic compounds from all covered facilities at the site are exempt from the requirements of this division.

(b) Sites exempt from this division under subsection (a) of this section may elect to opt-in to the requirements of this division by notifying the executive director in writing by April 30, 2005.

§101.393. General Provisions.

(a) Allowances may be used only for the purposes described in this division and may not be used to meet or exceed the~~comply with any~~ emission limitations authorized under Chapter 116, Subchapter B of this title (relating to New Source Review Permits), or any other applicable rule or law.

(b) The initial control period is April 1, 2006 through December 31, 2006. Each control period after December 31, 2006 shall begin January 1 and end December 31 of each year. No later than March 1 after each control period, a site subject to this division must hold a quantity of allowances in its compliance account that is equal to or greater than the total highly-reactive volatile organic compound emissions from the covered facilities located at the site during the control period.

(c) Allowances may not be used to satisfy netting requirements under Chapter 116, Subchapter B, Divisions 5 and 6 of this title (relating to Nonattainment Review; and Prevention of Significant Deterioration Review).

(d) Allowances may be used simultaneously to satisfy the requirements of this division and the one-to-one portion of the offset requirements for new or modified covered facilities, subject to federal nonattainment new source review requirements as provided in Chapter 116, Subchapter B, Division 7 of this title (relating to Emission Reductions: Offsets).

(e) An allowance does not constitute a security or a property right.

(f) All allowances will be allocated, transferred, deducted, or used in tenths of tons. The number of allowances will be rounded down to the nearest tenth of a ton when determining excess allowances and rounded up to the nearest tenth of a ton when determining allowances used.

(g) Each site shall have only one compliance account.

(h) The commission will maintain a registry of compliance accounts and broker accounts. The registry will not contain proprietary information.

§101.394. Allocation of Allowances

(a) On March 31, 2006, the executive director will allocate allowances as follows.

(1) For sites located in Harris County that are not eligible to receive allowances under subsection (c) or (d) of this section, allowances for the emissions of one or more of the highly-reactive volatile organic compounds (HRVOC) as defined in §115.10 of this title (relating to Definitions), will be determined using the equation in the following figure.

Figure: 30 TAC §101.394(a)(1)

$$S = \frac{LA}{\sum_{i=1}^{n} LAi} \times AC$$

Where:

S	=	the allocation for the site.
i	=	each site located in Harris County and subject to this division.
n	=	the total number of sites subject to this division.
LA	=	the level of activity baseline for a site, calculated as the average annual level of activity for the five consecutive year period of 2000 - 2004 for the site, as certified by the executive director.
AC	=	2,240.8 tons per year of highly-reactive volatile organic compounds.

(2) For sites located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties that are not eligible to receive allowances under subsection (c) or (d) of this section, allowances for emissions of ethylene and propylene for each site will be determined using the equation in the following figure.

Figure: 30 TAC §101.394(a)(2)

$$S = \frac{LA}{\sum_{i=1}^{n} LAi} \times AC$$

Where:

S	=	the allocation for the site.
i	=	each site located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties and subject to this division.
n	=	the total number of sites subject to this division.
LA	=	the level of activity baseline for a site, calculated as the average annual level of activity for the five consecutive year period of 2000 - 2004 for the site, as certified by the executive director.
AC	=	3,085.4 tons per year of highly-reactive volatile organic compounds.

(b) The level of activity of a site for a year shall be determined by summing the levels of activity for all process units located at the site that produce one or more HRVOCs as an intermediate, by-product, or final product or that use one or more HRVOCs as a raw material or intermediate to produce a product.

(c) The owner or operator of a site that is subject to this division, but that does not include a process unit that produces or uses an HRVOC, shall apply by January 30, 2005 to the executive director

for an allocation based on HRVOC throughput or storage capacity for the five consecutive calendar year period of 2000 through 2004.

(1) The executive director may equitably allocate up to 10% of the total HRVOC allocations for Harris County to all such sites located in Harris County;

(2) For sites located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties, the executive director may allocate up to 10% of the total HRVOC emissions allocated for those counties to all such sites located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties.

(3) The executive director shall distribute all allowances not allocated under this subsection proportionally to those sites receiving allocations under subsections (a) and (b) of this section.

(d) On March 31, 2006, the executive director will allocate allowances to petroleum refineries as follows.

(1) For petroleum refinery process units located in Harris County, allowances for the emissions of one or more of the HRVOCs, will be determined using the equation in the following figure.

Figure: 30 TAC §101.394(d)(1)

$$S = \frac{LA}{\sum_{i=1}^{n} LAi} \times AC$$

Where:

S	=	the allocation for the petroleum refinery process units.
i	=	each refinery located in Harris County and subject to this division.
n	=	the total number of refineries subject to this division.
LA	=	the level of activity baseline for a petroleum refinery process unit, calculated as the average annual level of activity for the five consecutive year period of 2000 - 2004 for the refinery, as certified by the executive director.
AC	=	770.2 tons per year of highly-reactive volatile organic compounds.

(2) For petroleum refinery process units located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties, allowances for emissions of ethylene and propylene for each refinery will be determined using the equation in the following figure.

Figure: 30 TAC §101.394(d)(2)

$$S = \frac{LA}{\sum_{i=1}^{n} LAi} \times AC$$

Where:

S	=	the allocation for the petroleum refinery process units.
i	=	each refinery located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties and subject to this division.
n	=	the total number of refineries subject to this division.
LA	=	the level of activity baseline for a petroleum refinery process unit, calculated as the average annual level of activity for the five consecutive year period of 2000 - 2004 for the refinery, as certified by the executive director.
AC	=	1,489.3 tons per year of highly-reactive volatile organic compounds.

(e) If the total actual HRVOC emissions from the covered facilities at a site during a control period exceed the amount of allowances in the compliance account for the site on March 1 following the control period, allowances for the next control period shall be reduced by an amount equal to the emissions exceeding the allowances in the compliance account plus 10% of the exceedance. This allocation reduction does not preclude the executive director from initiating an enforcement action. If a compliance account does not have sufficient allowances to accommodate the reduction, it is the

responsibility of the owner or operator to purchase or transfer additional allowances within 30 days of the notice of deficiency from the executive director.

(f) Allowances will be allocated by the executive director, who will deposit allowances into each compliance account:

(1) initially, by March 31, 2006; and

(2) subsequently, by January 1 of each following year.

(g) The executive director may adjust the deposits for any control period to reflect new or existing state implementation plan requirements.

(h) The executive director may add or deduct allowances from compliance accounts based on the review of reports required under §101.400 of this title (relating to Reporting).

(i) To account for extenuating circumstances, the owner or operator of a site may request that the executive director approve a substitution as follows. In calculating the average level of activity, the level of activity from one calendar year may be replaced with the level of activity from the preceding or following calendar year. Applications for extenuating circumstances shall be submitted by the owner or operator of the site to the executive director no later than April 30, 2005. The executive director shall

consider the following circumstances as candidates for extenuating circumstances: production loss due to Acts of God, fire, power outages, or other circumstances not attributable to economic fluctuation.

(j) Allocations for the first control period, April 1, 2006 through December 31, 2006, shall be reduced by 25% from the total annual allocation.

§101.396. Allowance Deductions.

(a) On March 31 of each year after a control period, allowances representing the total highly-reactive volatile organic compounds (HRVOC) emissions from the covered facilities at a site during the previous control period will be deducted from the compliance account for the site. The amount of HRVOC emissions will be based upon the monitoring and testing protocols established in §115.725 and §115.764 of this title (relating to Monitoring and Testing Requirements), as appropriate.

(b) The amount of HRVOC emissions from covered facilities shall be calculated for each hour of the year and summed to determine the annual emissions for compliance. For emissions from emissions events subject to the requirements of §101.201 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements) or emissions from scheduled maintenance, startup, or shutdown activities subject to the requirements of §101.211 of this title (relating to Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements); the hourly emissions to be included in the summation shall not exceed the short-term limit of §115.722(c) and §115.761(c) of this title (relating to Site-wide Cap and Control Requirements; and Site-wide Cap).

(c) If the monitoring and testing data referenced in subsection (a) of this section does not exist or is unavailable, the site may determine its HRVOC emissions for that period of time using the following methods and in the following order: continuous monitoring data; periodic monitoring data; testing data; data from manufacturers; and engineering calculations. When determining the amount of HRVOC emissions under this subsection, the site shall include a justification for using the substitute method or methods in lieu of the methods referenced in subsection (a) of this section.

(d) When deducting allowances from the compliance account of a site for a control period, the executive director will deduct the allowances beginning with the most recently allocated allowances before deducting banked allowances.

§101.399. Allowance Banking and Trading.

(a) Allowances allocated for a control period that are not used for compliance in that control period may be banked for use in demonstrating compliance for the next control period or transferred.

(b) Allowances that have not expired or been used may be transferred at any time during a control period, except as provided in this section.

(1) The person desiring to transfer the allowances shall apply for approval of the transaction to the executive director by submitting a completed Form ECT-2, Application for Transfer of Allowances.

(2) The ECT-2 form must include the purchase price per allowance proposed to be paid, except for transactions between sites under common ownership or control.

(3) All information regarding the quantity and purchase price of the allowances will be immediately made available to the public.

(4) If the executive director approves the application, the executive director will send a letter to the seller and purchaser reflecting the transaction. The transaction is final upon issuance of the letter.

(c) A person receiving allowances on an annual basis may permanently transfer ownership of current and future allowances to any person in accordance with the following requirements.

(1) The person desiring to transfer the allowances shall apply for approval of the transaction to the executive director by submitting a completed Form ECT-4, Application for Permanent Transfer of Allowance Ownership.

(2) The ECT-4 form must include the purchase price per allowance proposed to be paid, except for transactions between sites under common ownership or control.

(3) All information regarding the quantity and purchase price of the allowances will be immediately made available to the public.

(4) If the executive director approves the application, the executive director will send a letter to the seller and purchaser reflecting the transaction. The transaction is final upon issuance of the letter.

(d) A person may transfer allowances that are scheduled to be allocated in a future control period but have not yet been deposited into an account.

(1) The person desiring to transfer the allowances shall apply for approval of the transaction to the executive director by submitting a completed Form ECT-5, Application for Transfer of Individual Future Year Allowances.

(2) The ECT-5 form must include the purchase price per allowance proposed to be paid, except for transactions between sites under common ownership or control.

(3) All information regarding the quantity and purchase price of the allowances will be immediately made available to the public.

(4) If the executive director approves the application, the executive director will send a letter to the seller and purchaser reflecting the transaction. The transaction is final upon issuance of the letter.

(e) Allowances generated from sites located in counties other than Harris County may not be used at sites located in Harris County. Allowances generated from sites located in Harris County may not be used at sites located in counties other than Harris County.

(f) Only authorized account representatives may transfer allowances.

(g) Allowances subject to an approved transaction will be deposited into the purchaser's broker or compliance account within 30 days of receipt of a completed transfer application.

§101.400. Reporting.

(a) No later than March 31 after each control period, each site shall submit a completed highly-reactive volatile organic compound (HRVOC) Emissions Cap and Trade Annual Compliance Report to the executive director, which shall include the following:

(1) the total amount of actual HRVOC emissions from covered facilities at the site during the preceding control period;

(2) the method or methods used to determine the actual HRVOC emissions, including, but not limited to, monitoring protocol and results, calculation methodologies, and emission factors; and

(3) a summary of all final transactions for the preceding control period.

(b) For sites failing to submit a HRVOC Emissions Cap and Trade Annual Compliance Report by the required deadline in subsection (a) of this section, the executive director may withhold approval of any proposed trades from that site involving allowances allocated for the control period for which the ECT-1 Form is due or to be allocated in subsequent control periods.

§101.401. Level of Activity Certification.

(a) No later than April 30, 2005, the owner or operator of each site subject to this division shall submit to the executive director a completed Level of Activity Certification Form.

(b) For each process unit subject to this division, the owner or operator shall certify in the Level of Activity Certification Form the level of activity for the five consecutive calendar year period of 2000 through 2004.

(c) The owner or operator shall attach to the Level of Activity Certification Form information and documentation necessary to support the proposed level of activity baseline.

(d) The owner or operator of the site may mark any portion of the Level of Activity Certification Form, or supporting information and documentation, relating to production and use of

highly-reactive volatile organic compounds, as confidential under Texas Health and Safety Code, §382.041.

§101.403. Program Audits and Reports.

(a) No later than three years after the effective date of this division, and every three years thereafter, the executive director will audit this program.

(1) The audit will evaluate the impact of the program on the state's ozone attainment demonstration, the availability and cost of allowances, compliance by the participants, and any other elements the executive director may choose to include.

(2) The executive director will recommend measures to remedy any problems identified in the audit. The trading of allowances may be limited or discontinued by the executive director in part or in whole and in any manner, with commission approval, as a remedy for problems identified in the program audit.

(3) The audit data and results will be completed and submitted to the United States Environmental Protection Agency and made available for public inspection within six months after the audit begins.

(b) No later than June 30, following the end of each control period, the executive director shall develop and make available to the general public and the United States Environmental Protection Agency, a report that includes:

(1) number of allowances allocated to each compliance account;

(2) total number of allowances allocated under this division;

(3) number of actual highly-reactive volatile organic compound allowances subtracted from each compliance account based on the actual highly-reactive volatile organic compound emissions from the site; and

(4) a summary of all trades completed under this division.