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CHAPTER 101

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 6: HRVOC EMISSIONS CAP AND TRADE PROGRAM

STATUTORY AUTHORITY

The amended 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 amended sections are 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 amended sections are 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.

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The proposed amended 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, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Allowance - The authorization to emit one ton of HRVOCs, 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 who opens an account under this division for the purpose of banking and trading allowances.

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(5) Broker account - The account in which 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) Control period - 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.

(8) Cooling tower heat exchange system - As defined in §115.760 of this title (relating to Applicability and Cooling Tower Heat Exchange Systems).

(9) Covered facilities - All vent gas streams, flares and cooling tower heat exchange systems subject to Subchapter H of Chapter 115 located at a site.

(10) Flare - As defined in § 101.1 (relating to Definitions).

(11) Houston/Galveston (HGA) ozone nonattainment area - As defined in §115.10 of this title (relating to Definitions).

(12) HRVOC - As defined in section §115.10 of this title (relating to Definitions).

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(13) Level of activity - The amount of HRVOCs in pounds produced or used by a process unit during a given period of time, but excluding any recycled HRVOCs internal to the process unit.

(14) Person - For the purpose of issuance of allowances under this division, a person includes an individual, a partnership of two or more persons having a joint or common interest, a mutual or cooperative association, or a corporation.

(15) Petroleum refinery - A collection of process units used at a site primarily engaged in petroleum refining as defined in the Standard Industrial Classification code for petroleum refining(2911). 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.

(16) Process unit - A collection of equipment assembled and connected by hardpiping or duct work, used to process raw materials and to manufacture a product.

(17) Site - As defined in §122.10 (relating to General Definitions).

(18) Vent gas stream - Any gas stream emitted from a vent.

(19) Vent - As defined in § 101.1(109) (relating to Definitions).

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§101.391. Applicability.

This division applies to each site in the HGA that is subject to Chapter 115, Subchapter H, Division 1 and/or 2 *Insert Title Here.*

§101.392. Exemptions

(a) Sites in the HGA that emit or have the potential to emit less than 10 tons per year of HRVOCs 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 used only for the purposes described in this division and may not be used to comply with any emission limitations imposed under Chapter 116, Subchapter B, of this title (relating to New Source Review Permits), or any other applicable rule or law.

(b) No later than March 1 after each control period, a site subject to this division shall hold a quantity of allowances in its compliance account that is equal to or greater than the total HRVOC

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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 is not 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.

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§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, allowances for the emissions of one or more of the following VOCs: 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, will be determined using the following equation.

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

where:

(1) S = the allocation for the site;

(2) I = each site located in Harris county and subject to this Division (relating to HRVOC Emissions Cap and Trade Program)

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(3) n = the total number of sites subject to this Division (relating to HRVOC Emissions Cap and Trade Program)

(4) LA = the level of activity baseline for a site, calculated as the average annual level of activity for a three-year consecutive period between 2000-2004 for the site, as certified by the executive director

(5) AC = _____ tons per year of HRVOCs

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

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

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where:

- (1) S ≡ the allocation for the site;
- (2) I ≡ each site located in Brazoria, Chambers, Fort Bend,
Galveston, Liberty, Montgomery, and Waller Counties
and subject to this Division (relating to HRVOC
Emissions Cap and Trade Program)
- (3) n ≡ the total number of sites subject to this Division
(relating to HRVOC Emissions Cap and Trade
Program)
- (4) LA ≡ the level of activity baseline for a site, calculated as the
average annual level of activity for a three-year
consecutive period between 2000-2004 for the site, as
certified by the executive director
- (5) AC ≡ _____ tons per year of HRVOCs

(b) The level of activity level of a site for a year shall be determined by summing the levels of

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activity for all process units located at the site that produce one or more HRVOCs as an intermediate, byproduct 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 a three-year consecutive period between 2000-2004.

(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 pursuant to this subsection proportionally to those sites receiving allocations pursuant to subsections (a) and (b) of this section.

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(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 following VOCs: 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, will be determined using the following equation.

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

where:

(1) S = the allocation for the petroleum refinery process units;

(2) I = each refinery located in Harris county and subject to this Division (relating to HRVOC Emissions Cap and Trade Program)

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(3) n = the total number of refineries subject to this Division (relating to HRVOC Emissions Cap and Trade Program)

(4) LA = the level of activity baseline for a refinery process unit, calculated as the average annual level of activity for a three-year consecutive period between 2000-2004 for the refinery, as certified by the executive director

(5) AC = _____ tons per year of HRVOCs

(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 refineries will be determined using the following equation.

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

where:

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- (1) S = the allocation for the petroleum refinery process units;
- (2) I = each refinery located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller Counties and subject to this Division (relating to HRVOC Emissions Cap and Trade Program)
- (3) n = the total number of refineries subject to this Division (relating to HRVOC Emissions Cap and Trade Program)
- (4) LA = the level of activity baseline for a petroleum refinery process unit, calculated as the average annual level of activity for a three-year consecutive period between 2000-2004 for the refinery, as certified by the executive director
- (5) AC = _____ tons per year of HRVOCs

(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

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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 an alternate, consecutive time period from 2000-2004 as the level of activity baseline for the site. Applications for extenuating circumstances shall be submitted by the

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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 outtages, or other circumstances not attributable to economic fluctuation.

(j) Allocations for April 1, 2006 through December 31, 2006 shall be reduced by 25% from the annual allocations to be distributed thereafter.

§101.396. Allowance Deductions.

(a) On March 31 of each year after a control period, allowances representing the total 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 of this title (relating to Monitoring and Testing Requirements), 115.764 of this title (relating to Monitoring Requirements) and 115.766 of this title (relating to 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 in compliance with §101.201 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements) or emissions from scheduled maintenance, startup, or shutdown activities in compliance with §101.211 of this title (relating to Scheduled Maintenance, Startup, and Shutdown

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Reporting and Recordkeeping Requirements); the hourly emissions to be included in the summation shall not exceed the short-term limit of §115.722(b) and §115.761(b).

(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 EPA Compilation of Air Pollution Emission Factors (AP-42), September 2000. 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 and 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.

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(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, Application for Transfer of Allowances shall 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; and

(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;

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(2) the ECT-4, Application for Permanent Transfer of Allowance Ownership shall 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; and

(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, Application for Transfer of Individual Future Year Allowances shall include the purchase price per allowance proposed to be paid, except for transactions between sites under common ownership or control;

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

(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.

No later than March 31 after each control period, each site shall submit a completed HRVOC Emissions Cap and Trade Annual Compliance Report to the executive director, which shall include the following:

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(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.

§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) The owner or operator shall certify in the Level of Activity Certification Form the level of activity for a consecutive three-year period from 2000-2004 and the level of activity for any alternate, consecutive time period from 2000-2004 for which the owner or operator seeks approval due to extenuating circumstances.

(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.

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(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 HRVOCs, as confidential pursuant to section 382.041 of the Texas Water Code.

§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.

(3) The audit data and results will be completed and submitted to the EPA 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 EPA, a report that includes:

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(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 (HRVOC) allowances subtracted from each compliance account based on the actual HRVOC emissions from the site; and

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