Texas Chapter 101 - General Air Quality Rules

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 2: EMISSIONS BANKING AND TRADING OF ALLOWANCES
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018.
Regulations.gov docket EPA-R06-OAR-2005-TX-0012 [Short ID: TX018]

Outline:

§101.330. Definitions. G-63, TXd123, TX018

§101.331. Applicability. G-63, TXd123, TX018

§101.332. General Provisions. G-63, TXd123, TX018

§101.333. Allocation of Allowances. G-65, TXd123, TX018

§101.334. Allowance Deductions. G-63, TXd123, TX018

§101.335. Allowance Banking and Trading. G-63, TXd123, TX018

§101.336. Emission Monitoring, Compliance Demonstration, and Reporting. G-63, TXd123, TX018

§101.338. Emissions Reductions Achieved Outside the United States. G-83, TXd123, TX018

§101.339. Program Audits and Reports. G-83, TXd123, TX018

**************************end outline****************************
SIP Approval Information:

§101.330. Definitions. G-63, TXd123, TX018
Adopted by TNRCC December 16, 1999, effective January 11, 2000 (G-63)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

§101.331. Applicability. G-63, TXd123, TX018
Adopted by TNRCC December 16, 1999, effective January 11, 2000 (G-63)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

§101.332. General Provisions. G-63, TXd123, TX018
Adopted by TNRCC December 16, 1999, effective January 11, 2000 (G-63)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

§101.333. Allocation of Allowances. G-65, TXd123, TX018
Adopted by TNRCC August 9, 2000, effective September 4, 2000 (G-65)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

§101.334. Allowance Deductions. G-63, TXd123, TX018
Adopted by TNRCC December 16, 1999, effective January 11, 2000 (G-63)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

§101.335. Allowance Banking and Trading. G-63, TXd123, TX018
Adopted by TNRCC December 16, 1999, effective January 11, 2000 (G-63)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

§101.336. Emission Monitoring, Compliance Demonstration, and Reporting. G-63, TXd123, TX018
Adopted by TNRCC December 16, 1999, effective January 11, 2000 (G-63)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

§101.338. Emissions Reductions Achieved Outside the United States. G-83, TXd123, TX018
Adopted by TCEQ October 4, 2006, effective October 26, 2006 (G-83)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

§101.339. Program Audits and Reports. G-83, TXd123, TX018
Adopted by TCEQ October 4, 2006, effective October 26, 2006 (G-83)
Approved by EPA January 3, 2011 (76 FR 00017) effective February 2, 2011 (TXd123) TX018

****************************** End SIP-Approval Information ******************************

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 nitrogen oxides (NOx) or sulfur dioxide (SO2) during a control period.

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

3) **Banked allowance** - An allowance which is not used to reconcile emissions in the designated year of allocation, but which is carried forward into future years and noted in the compliance or broker account as "banked."

4) **Broker** - 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 emissions 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) **Coal** - All solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials Designation ASTM D388-92 "Standard Classification of Coals by Rank" (as incorporated by reference in Title 40 Code of Federal Regulations, §72.13 (effective June 25, 1999)).

(7) **Coal-fired** - The combustion of fuel consisting of coal as defined in paragraph (6) of this section or any coal-derived fuel (except coal-derived gaseous fuels with a sulfur content no greater than natural gas), alone or in combination with any other fuel. The definition is independent of the percentage of coal or coal-derived fuel consumed during any control period.

(8) **Compliance account** - The account where allowances held by an EGF or multiple EGFS are recorded for the purposes of meeting the requirements of this division and Chapter 116, Subchapter I of this title (relating to Electric Generating Facility Permits). EGFs not under common ownership or control may have separate compliance accounts.

(9) **Control period** - The 12-month period beginning May 1 of each year and ending April 30 of the following year. Control periods begin May 1, 2003.
(10) **East Texas Region** - All counties traversed by or east of Interstate Highway 35 north of San Antonio or traversed by or east of Interstate Highway 37 south of San Antonio, and also including Bexar, Bosque, Coryell, Hood, Parker, Somerville, and Wise Counties.

(11) **Elected EGF** - An electric generating facility permitted under Chapter 116, Subchapter B of this title (relating to New Source Review Permits) which is not subject to the requirements of Texas Utility Code, §39.264 and elects to comply with Chapter 116, Subchapter 1 of this title (relating to Electric Generating Facility Permits).

(12) **Electric generating facility (EGF)** - A facility that generates electric energy for compensation and is owned or operated by a person in this state, including a municipal corporation, electric cooperative, or river authority.

(13) **El Paso Region** - All of El Paso County, Ciudad Juarez, Mexico, and Sunland Park, New Mexico.

(14) **Grandfathered EGF** - A facility that is not subject to the requirement to obtain a permit under TCAA, §382.0518(g), and that generates electric energy for compensation and is owned or operated by a person in this state, including a municipal corporation, electric cooperative, or river authority.
(15) **Heat input** - The heat derived from the combustion of any fuel at an EGF. Heat input does not include the heat derived from reheated combustion air, recirculated flue gas, or exhaust from other sources.

(16) **NO₉ allowance** - An authorization to emit is valid only for the purposes of meeting the requirements of this division and Chapter 116, Subchapter I of this title.

(17) **Person** - For the purpose of initial issuance of permits under Chapter 116, Subchapter I of this title, and for the 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, and a corporation, but does not include an electric cooperative.

(18) **SO₂ allowance** - An authorization to emit SO₂ valid only for the purposes for meeting the requirements of this division and Chapter 116, Subchapter I of this title.

(19) **West Texas Region** - All counties not contained in the East Texas Region or El Paso Region.
§101.331. Applicability.

This division applies only to the following:

(1) electric generating facilities permitted under Chapter 116, Subchapter I of this title (relating to Electric Generating Facility Permits); and

(2) brokers.


(a) Allowances are valid only for the purposes of meeting the requirements of this division and for meeting the requirements of Chapter 116, Subchapter I of this title (relating to Electric Generating Facility Permits), and cannot be used to meet or exceed the limitations of any annual emission limitation authorized under Chapter 116, Subchapter B of this title (relating to New Source Review Permits) or any applicable rule or law.

(b) On June 1 after every control period, a grandfathered or electing electric generating facility (EGF) shall hold a quantity of allowances in its compliance account that is equal to or greater than the total emissions of that air contaminant emitted during the prior control period. Compliance with the allowance system will begin with the control period beginning May 1, 2003.
(c) Emission reductions used to satisfy the requirements of the Emissions Banking and Trading of Allowances (EBTA) program cannot be used to generate emission reduction credits or discrete emission reduction credits.

(d) Allowances cannot be used for netting requirements to avoid the applicability of federal and state new source review (NSR) requirements.

(e) Allowances cannot be used to satisfy offset requirements for new or modified sources subject to federal nonattainment NSR requirements.

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

(g) All allowances will be allocated, transferred, or used as whole allowances. To determine the number of whole allowances, the number of allowances will be rounded down for decimals less than 0.50 and rounded up for decimals of 0.50 or greater.

(h) One compliance account shall be used for multiple EGFs permitted under Chapter 116, Subchapter I of this title located at the same property and under common ownership or control.

\$101.333. Allocation of Allowances.---

Allowances will be allocated according to the requirements of this section.

Allowances will be allocated according to the requirements of this section.

(1) Except as provided in paragraphs (2) and (3) of this section, allowances will be calculated for grandfathered electric generating facilities (EGF) using the following equation:

Figure: 30 TAC §101.333(1)
\[
A = \frac{ER \cdot HI}{2000 \text{ lb/allowance}}
\]

Where:

- \( A \) = Number of allowances
- \( HI \) = Total heat input (million British thermal units (MMBtu)) as listed in the 1997 Emissions Scorecard from EPA's Acid Rain Program, or if not listed in the 1997 Emissions Scorecard, by a method approved by the executive director, consistent with the emission reduction requirements of this division.
- \( ER \) = Emission rate, as defined in subparagraphs (A) and (B) of this paragraph;

(A) In the East Texas Region:

(i) 0.14 pound nitrogen oxides (NO\(_x\)) per MMBtu;

(ii) 1.38 pounds sulfur dioxide (SO\(_2\)) per MMBtu only for coal-fired grandfathered EGFs.

(B) In the West Texas and El Paso Regions, 0.195 pounds NO\(_x\) per MMBtu.

(2) For electing EGFs, the amount of allowances is equal to emissions as listed in the 1997 Emissions Scorecard from EPA's Acid Rain Program, or if not listed in the 1997 Emissions
Scorecard, by a method approved by the executive director, consistent with the emission reduction requirements of this division; and in both cases, shall not exceed any of the following:

(A) any annual emission limitation authorized under Chapter 116, Subchapter B of this title (relating to New Source Review Permits);

(B) an applicable state or federal requirement.

(3) The commission may invalidate any allowances allocated to an electing EGF that authorize emissions in excess of applicable state or federal requirements.

(4) If emissions of NO\textsubscript{x} or, if applicable, SO\textsubscript{2}, exceed the amount of allowances for a given control period, allowances for the next control period will be reduced in an amount equal to the emissions exceeding the allowances in the compliance account.

(5) Allowances will be allocated:

(A) initially, by:

(i) January 1, 2000, for grandfathered EGFs;

(ii) January 1, 2001, for electing EGFs; and municipal corporations, electric cooperatives, and river authorities that choose to obtain a permit under Chapter 116, Subchapter I of this title (relating to Electric Generating Facility Permits) for any grandfathered or
(B) subsequently, by May 1 of each year, beginning in 2004.

(C) allowances will be allocated:

(i) initially by commission order for all grandfathered and electing EGFs;

(ii) notwithstanding clause (iii) of this subparagraph, at the beginning of each control period, the commission will deposit the same amount of allowances into each grandfathered or electing EGF's compliance account;

(iii) for electing EGFs, the annual deposit for any control period may be adjusted to reflect new state or federal requirements.

(6) Allowances may be deducted from compliance accounts following the review of trading reports required under §101.336(b) of this title (relating to Emission Monitoring, Compliance, Demonstration, and Reporting.)

(7) The commission shall maintain a registry of the allowances in each compliance account. For each transfer, the registry shall include the price paid per allowance. The registry shall not contain proprietary information.
§101.334. Allowance Deductions.

Allowances will be deducted from a grandfathered or electing electric generating facility's (EGF) compliance account for a control period based upon the following.

(1) The following will have deducted from their compliance accounts allowances equal to the number of tons of air contaminant emitted during the control period as reported in compliance with §101.336 (relating to Emission Monitoring, Compliance Demonstration, and Reporting.

(A) grandfathered EGFs; and

(B) electing EGFs whose heat input for the control period is equal to or greater than its heat input for 1997;

(C) electing EGFs whose heat input for the control period is less than its heat input for 1997 where the reduced utilization or shutdown has been replaced by another EGF permitted under Chapter 116, Subchapter I of this title (relating to Electric Generating Facility Permits).
(2) For electing EGFs whose heat input for the control period is less than the heat input for 1997 and whose reduced utilization or shutdown has not been replaced by another EGF, allowances will be deducted from the compliance account according to the following equation: Figure: 30 TAC §101.334(2)

\[ A = \frac{H_{1997} \times EF_{cp}}{2000 \text{ lbs/allowance}} \]

Where:

- \( A \) = Allowances to be subtracted from the compliance account
- \( H_{1997} \) = Heat input from 1997
- \( EF_{cp} \) = The emission factor for the control period in terms of lbs/MMBtu, or if an emission factor for the control period is not available, the most recently available emission factor for that EGF.

(3) For electing EGFs whose heat input for the control period is less than the heat input for 1997 and whose reduced utilization or shutdown has been replaced by another EGF not permitted under Chapter 116, Subchapter I of this title, allowances will be deducted from the compliance account according to the following equation: Figure: 30 TAC §101.334(3)
\[ A = \frac{(H_{\text{ICP}} \times E_{\text{FCP}}) + [(H_{1997} - H_{\text{ICP}}) \times E_{\text{new}}]}{2000 \text{ lbs/allowance}} \]

Where:

- \( A \) = Allowances to be subtracted from the compliance account
- \( H_{\text{ICP}} \) = Heat input for the control period.
- \( E_{\text{FCP}} \) = The emission factor for the control period in terms of lbs/MMBtu.
- \( H_{1997} \) = Heat input from 1997
- \( E_{\text{new}} \) = The emission factor in terms of lbs/MMBtu for the EGF that replaced the thermal energy from the reduced utilization or shutdown. If the specific EGF that replaced the thermal energy is not identifiable, the emission factor shall be equal to the average emission factor for all EGFs in the state as listed in the 1997 Emissions Scorecard from EPA's Acid Rain Program.


(a) Allowances not used for compliance during a control period may be banked for use in subsequent control periods. Allowances may only be used for the control period for which they were allocated or subsequent control periods, and may only be used within the same region where they were originally allocated.
(b) Allowances may be traded at any time during the control period.

(1) Only authorized account representatives may trade allowances.

(2) Notification of trades must occur within 30 days after the trade.

(c) Allowance trades are prohibited prior to May 1, 2003.

(d) Traded allowances held in compliance accounts must have originated from electric generating facilities in the same region.

(e) Allowances may be held only in compliance accounts for use by EGFs located in the region in which the allowances were originally allocated or in broker accounts.


(a) Emission monitoring and reporting shall be conducted in accordance with §116.914 of this title (relating to Emissions Monitoring and Reporting Requirements).

(b) For each control period, grandfathered or electing electric generating facilities (EGF), must submit a report to the commission by June 30 of each year detailing the following:
(1) the amount of emissions of each allocated air contaminant during the preceding control period.

(2) a summary of all final trades for the preceding control period.

§101.337. El Paso Region. NOT IN SIP

(a) A grandfathered or electing electric generating facility (EGF) in the El Paso Region may meet the emissions allowances by using credits from emissions reductions achieved in the City of Juarez, United States of Mexico and from EGFs located in Sunland Park, New Mexico. Emission reductions under this section must meet the following criteria.

(1) The emission reduction must be:

(A) enforceable by the commission;

(B) permanent, meaning that the emission reduction is unchanging for the remaining life of the source;

(C) quantifiable, so that the emission reduction can be measured or estimated with confidence using replicable techniques;
(a) A grandfathered or electing electric generating facility (EGF) in the El Paso Region may use reductions achieved outside the United States of criteria pollutants or precursors of criteria pollutants to meet the allowance holding requirements of this division if the facility meets the requirements of subsection (c) of this section.

(b) A grandfathered or electing EGF may use reductions achieved outside the United States of criteria pollutants or precursors of criteria pollutants and substitute these reductions for reductions in other criteria pollutants or precursors of criteria pollutants to meet the allowance holding requirements of this division if the facility meets the requirements of subsection (c) of this section and the reduction is substituted for the reduction of another criteria pollutant and the substitution results in a greater health benefit and is of equal or greater benefit to the overall air quality of the area of substitution results in a greater health benefit and is of equal or greater benefit to the overall air quality of other criteria pollutants or precursors of criteria pollutants.

(c) The emission reduction must be reviewed and approved by the executive director of this division prior to converting the credits into allowances under this program.

(d) The emission reduction must be measured or estimated with confidence using replicable techniques.

(e) The emission reduction must be permanent, meaning that the emission reduction is not otherwise required of a facility by a state or federal law, regulation, or agreement, and the emission reduction is not required by the commission or federal authorities to be considered as a surplus, such that the emission reduction is not otherwise required of a facility by a state or federal law, regulation, or agreement, and the emission reduction is not required by the commission or federal authorities.

(f) The emission reduction must be quantifiable, so that the emission reduction can be measured or estimated with confidence using replicable techniques.

(g) The emission reduction must be reviewed and approved by the executive director of this division.

(h) The emission reduction must be approved by the commission.

(i) The emission reduction must be approved by the commission.

(j) The emission reduction must be approved by the commission.

(k) The emission reduction must be approved by the commission.

(l) The emission reduction must be approved by the commission.

(m) The emission reduction must be approved by the commission.

(n) The emission reduction must be approved by the commission.

(o) The emission reduction must be approved by the commission.

(p) The emission reduction must be approved by the commission.

(q) The emission reduction must be approved by the commission.

(r) The emission reduction must be approved by the commission.

(s) The emission reduction must be approved by the commission.

(t) The emission reduction must be approved by the commission.

(u) The emission reduction must be approved by the commission.

(v) The emission reduction must be approved by the commission.

(w) The emission reduction must be approved by the commission.

(x) The emission reduction must be approved by the commission.

(y) The emission reduction must be approved by the commission.

(z) The emission reduction must be approved by the commission.

(A) The emission reduction must be approved by the commission.

(B) The emission reduction must be approved by the commission.

(C) The emission reduction must be approved by the commission.

(D) The emission reduction must be approved by the commission.

(E) The emission reduction must be approved by the commission.

(F) The emission reduction must be approved by the commission.

(G) The emission reduction must be approved by the commission.

(H) The emission reduction must be approved by the commission.

(I) The emission reduction must be approved by the commission.

(J) The emission reduction must be approved by the commission.

(K) The emission reduction must be approved by the commission.

(L) The emission reduction must be approved by the commission.

(M) The emission reduction must be approved by the commission.

(N) The emission reduction must be approved by the commission.

(O) The emission reduction must be approved by the commission.

(P) The emission reduction must be approved by the commission.

(Q) The emission reduction must be approved by the commission.

(R) The emission reduction must be approved by the commission.

(S) The emission reduction must be approved by the commission.

(T) The emission reduction must be approved by the commission.

(U) The emission reduction must be approved by the commission.

(V) The emission reduction must be approved by the commission.

(W) The emission reduction must be approved by the commission.

(X) The emission reduction must be approved by the commission.

(Y) The emission reduction must be approved by the commission.

(Z) The emission reduction must be approved by the commission.
(2) A reduction of an air contaminant for which the area in which the facility is located has been designated as nonattainment or which leads to the formation of a criteria pollutant for which an area has been designated as nonattainment is substituted for any air contaminant for which the area has been designated as nonattainment or leads to the formation of any criteria pollutant for which the area has been designated as nonattainment.

(c) The use of reductions outside the United States must be approved by the executive director and the United States Environmental Protection Agency (EPA), and the user of the emission reduction must:

(1) Demonstrate to the executive director and EPA that the reduction is real, permanent, enforceable, quantifiable, and surplus to any applicable Mexican, federal, state, or local law;

(2) Demonstrate that the use of the reduction does not cause localized health impacts, as determined by the executive director and EPA;

(3) Submit all supporting information for calculations and modeling, and any additional information requested by the executive director and EPA; and

(4) Be located within 100 kilometers of the Texas - Mexico border.

(d) This section does not apply to reductions in emissions of lead.

Adopted October 4, 2006

§101.339. 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 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 (EPA) and made available for public inspection within six months after the audit begins.

(b) No later than September 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:
(1) number of allowances allocated to each compliance account;

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

(3) number of actual nitrogen oxides (NOₓ) and sulfur dioxide (SO₂) allowances subtracted from each compliance account based on the actual NOₓ and SO₂ emissions from the site; and

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

Adopted October 4, 2006

Effective October 26, 2006

End GH2 TXd123 TX018