TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

EMISSIONS BANKING AND TRADING OF ALLOWANCES PROGRAM AUDIT

CHAPTER 1: INTRODUCTION

The Texas Commission on Environmental Quality's (TCEQ or commission) Emissions Banking and Trading Program (EBTP) was established in 1993 to provide additional flexibility for complying with certain federal and state air quality requirements, while creating a net reduction in total air emissions. Originally outlined under 30 Texas Administrative Code (TAC) §101.29, the EBTP was designed to provide a market-based framework for trading reductions in volatile organic compounds (VOC), nitrogen oxides (NO_X), and certain other criteria pollutant emissions from stationary, area, and mobile sources. On December 6, 2000, the rules governing the EBTP were organized into four divisions and relocated to 30 TAC Chapter 101, Subchapter H. The Emissions Banking and Trading of Allowances (EBTA) Program, which is Division 2 of Subchapter H, is the program addressed in this audit.

Prior to discussing the trading activity and effects of the EBTA Program, a brief overview of the program's structure and intent is provided. The overview will also serve as a foundation for understanding the outcomes achieved.

The Texas Clean Air Act (TCAA) was created in 1971 to safeguard the state's air resources from pollution. The TCAA required facilities emitting air contaminants, including electric generating facilities (EGFs), to obtain permits for construction or modifications. However, EGFs and other facilities that existed at the time the TCAA was created were exempt from this new requirement and continued to be authorized to operate without a permit. These facilities are known as grandfathered facilities. In 1999, during the 76th Legislature, Senate Bill 7 was passed requiring the TCEQ to develop a cap and trade system to distribute emission allowances for use by applicable EGFs, as well as to provide applicable EGFs the opportunity to buy and sell allowances in order to respond to business needs. To implement the required program, Senate Bill 7 added Chapter 39, Restructuring of Electric Utility Industry to Texas Utilities Code, Title 2, Public Utility Regulatory Act, Subtitle B, Electric Utilities. The Texas legislature's intent was to reduce the annual emissions of NO_X by 50% and sulfur dioxide (SO_2) emissions by 25% from the total emissions reported to the commission in 1997 by grandfathered EGFs. From the requirements of Chapter 39, the commission developed and adopted the EBTA Program.

There are two categories of EGFs that participate in the EBTA Program. The first category consists of grandfathered EGFs that applied for a permit under 30 TAC Chapter 116, Subchapter I by September 1, 2000. The second category consists of non-grandfathered EGFs that elected to comply with the permitting requirements of Chapter 116, Subchapter I (known as Electing EGFs). These permits required participation in the EBTA Program.

In addition to the two types of EGFs, brokers are also allowed to participate in the EBTA Program. Brokers do not own any sources that emit NO_X or SO_2. They participate in the program exclusively as traders of allowances.

The EBTA Program is not limited in scope to EGFs in a specific geographic area but extends to all applicable EGFs located in the state of Texas. For the purpose of allocating allowances, the legislature divided the state of Texas into three regions: the East Texas region, the West Texas region, and the El Paso region.

In the EBTA Program, an allowance represents one ton of NO_X emissions or one ton of SO_2 emissions. Allowances are allocated, used, and traded as whole allowances. Allowances are deposited into compliance accounts on May 1 of each control period. A control period is from May 1 of one year to April 30 of the following year. Each compliance account includes allowance allocations from one or more applicable EGFs that are located at the same site. At the

completion of a control period, a site's compliance account must have allowances equal to or greater than the applicable EGF's emissions during the prior control period.

Allowances may be used by the site for which the allowances were allocated, traded to other sites within the same region, or banked for use in subsequent control periods. The allowances never expire. A site must hold sufficient allowances in its compliance account to cover actual emissions from its applicable EGFs by June 1 following the end of every control period. Allowances may be traded at any time during a control period, but a notification of each trade must occur within 30 days following the trade. An annual report is due by June 30 following the end of every control period. The annual report outlines monitoring and emissions data, any fuel oil use, the quantity of allowances allocated to each EGF, the emissions for the completed control period, and a summary of all the completed trades.

CHAPTER 2: ALLOWANCE ALLOCATION AND USE

2.1 ALLOWANCE ALLOCATION:

Allowances are placed into a site's compliance account at the beginning of each control period. Allowance allocations for grandfathered electric generating facilities (EGFs) are the product of their 1997 heat input, as reported in the United States Environmental Protection Agency (EPA) Acid Rain Program's (ARP) Emissions Scorecard, and the regional emission rate. The emission rate specified in the Texas Utilities Code, §39.264(h) for each region capped nitrogen oxides (NO_X) emissions from grandfathered EGFs at 50% of the emissions during 1997 as reported to the commission and capped sulfur dioxide (SO_2) emissions from coal-fired grandfathered EGFs at 75% of the emissions during 1997 as reported to the commission.

Table 2-1: *EBTA Program Regions and Emission Rates* displays the Emissions Banking and Trading of Allowances (EBTA) Program regions and the corresponding NO_X and SO_2 emission rates used to determine allowance allocations.

Table 2-1: EBTA Program Regions and Emission Rates

Region	Pollutant	Emission Rate Specified in Pounds per Million British Thermal Units
East Texas	NO_X	0.14
East Texas (coal-fired EGFs)	SO_2	1.38
West Texas and El Paso	NO_X	0.195
West Texas and El Paso (coal-fired EGFs)	SO_2	N/A*

*There are no coal-fired EGFs that are subject to the EBTA Program located in the West Texas region

For electing EGFs, the allowance allocation amount is equal to the emissions reported on the 1997 Emissions Scorecard or an amount approved by the executive director if emissions were not listed on the 1997 Emissions Scorecard. The EBTA Program has a constant NO_X and SO_2 cap of allowances, i.e., the total amount of allowances allocated in the program, remains constant for the life of the program at 103,666 NO_X allowances and 273,253 SO_2 allowances.

Table 2-2: *Annual NO_X Allowance Allocation for the HGB 1997 Eight-Hour Ozone Nonattainment Area* summarizes the allowance allocations for the counties in the Houston-Galveston-Brazoria (HGB) 1997 eight-hour ozone nonattainment area. Three of the eight counties in the HGB 1997 eight-hour ozone nonattainment area (Brazoria, Liberty, and Waller) do not have EGFs that are applicable to the EBTA Program.

Table 2-2: Annual NO_X Allowance Allocation for the HGB 1997 Eight-Hour Ozone Nonattainment Area, by County

County	NO_X Tons
Chambers	1,929
Fort Bend	1,536
Galveston	3,928
Harris	2,449
Montgomery	1,645
Total	11,487

Table 2-3: *Annual NO_X Allowance Allocation for the DFW 1997 Eight-hour Ozone Nonattainment Area, by County* summarizes the allowance allocations for the counties in the Dallas-Fort Worth (DFW) 1997 eight-hour ozone nonattainment area. Four of those counties (Ellis, Johnson, Kaufman, and Rockwall) do not have EGFs that are applicable to the EBTA Program.

Table 2-3: Annual NO_X Allowance Allocation for the DFW 1997 Eight-Hour Ozone Nonattainment Area, by County

County	NO_X Tons
Collin	597
Dallas	4,905
Denton	194
Parker	14
Tarrant	2,214
Total	7,924

There is only one site applicable to the EBTA Program in the Beaumont–Port Arthur (BPA) 1997 eight-hour ozone maintenance area. The site is located in Orange County and receives an annual NO_X allowance allocation of 4,319 tons. There are no EGFs, grandfathered or electing, in the HGB and DFW 1997 eight-hour ozone nonattainment areas, or the BPA 1997 eight-hour ozone maintenance area that receive an allocation of SO_2 allowances. There are only four counties in the state that have sites receiving an allocation of SO_2 allowances - Freestone, Milam, Rusk, and Titus.

2.2 ALLOWANCE USE:

Allowance use in the EBTA Program has been substantially lower than the total cap since the first control period of May 1, 2003, through April 30, 2004.

Table 2-4: *EBTA Program Allowance Use* provides details on total NO_X and SO_2 allowances used in the EBTA Program and the percentage of the cap utilized for each control period.

Table 2-4: EBTA Program Allowance Use

Allocation and Use	2003 Control Period*	2004 Control Period*	2005 Control Period*	2006 Control Period*	2007 Control Period*	2008 Control Period*	2009 Control Period*	Average
NO_X Allowances Used (tons)	69,041	60,275	62,894	62,257	57,416	54,113	53,439	59,919
Percentage of NO_X Cap Used	66	58	60	60	55	52	52	58
SO_2 Allowances Used (tons)	268,635	255,914	272,454	272,284	241,807	220,358	213,764	249,317
Percentage of SO_2 Cap Used	98	93	99	99	88	80	78	91

* A control period is from May 1 of one year to April 30 of the following year

Table 2-4 shows that a maximum of 66% of the NO_X cap was used, at the start of the program in the 2003 control period. Table 2-4 further illustrates that the latest control period, the 2009 control period, saw only 52% of the NO_X cap being used. In addition, the SO2 cap utilization decreased from 98% in the 2003 control period to 78% in the 2009 control period.

On average, 58% of the NO_X cap and 91% of the SO_2 cap have been used in the seven completed control periods of the EBTA Program's existence. Overall, the NO_X emissions from EGFs applicable to the EBTA Program have been reduced by nearly 71% and SO_2 emissions from EGFs applicable to the EBTA Program have been reduced by nearly 32% from the 1997 emissions reported to the commission.

Figure 2-1: *NO_X Allowance Use in the 1997 Eight-Hour Ozone Nonattainment and Maintenance Areas* shows the quantity of NO_X allowances allocated each control period to applicable EGFs in the HGB and DFW eight-hour ozone nonattainment areas and the BPA 1997 eight-hour ozone maintenance area, and the corresponding emissions for the last seven control periods.

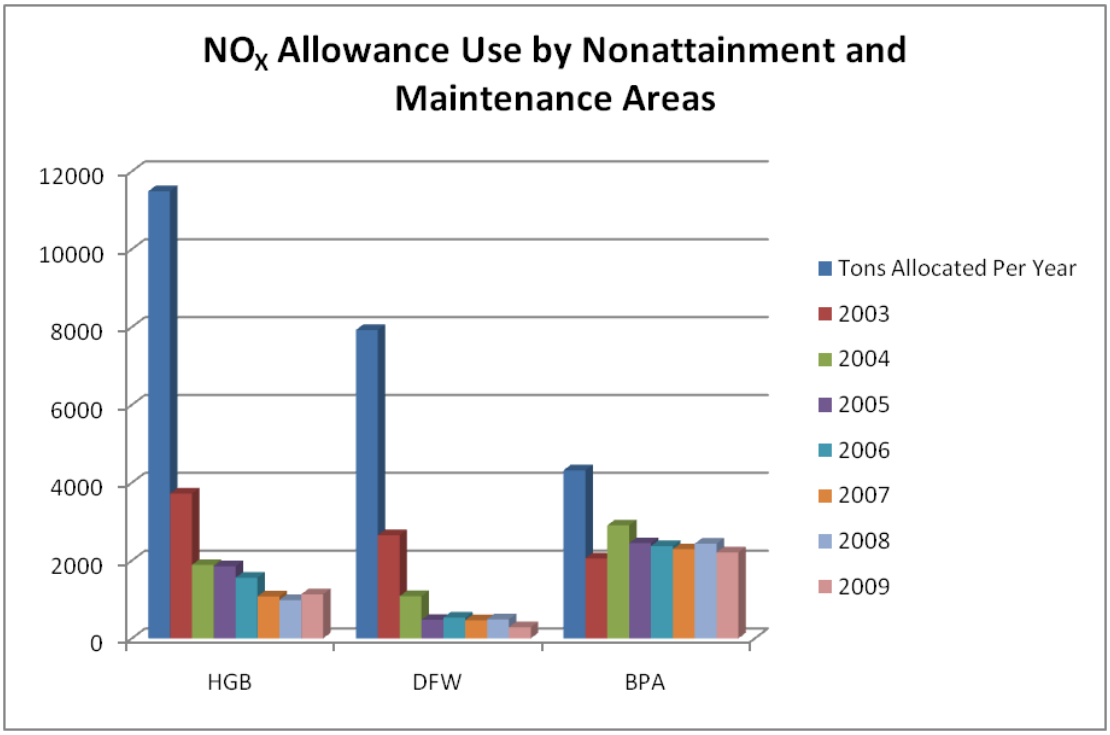

Figure 2-1: NO_X Allowance Use in the 1997 Eight-Hour Ozone Nonattainment and Maintenance Areas

Figure 2-1 illustrates a decreasing trend in the NO_X emissions from applicable EGFs in the HGB and DFW 1997 eight-hour ozone nonattainment areas since the start of the program. Figure 2-1 also illustrates that a significantly smaller portion of the NO_X allowances allocated to EGFs in these two nonattainment areas are being used.

On average, applicable EGFs in the HGB 1997 eight-hour ozone nonattainment area are using 15% of their annual allocation and 11% in the DFW 1997 eight-hour ozone nonattainment area. In the BPA eight-hour ozone maintenance area, the one applicable site on average uses 55% of the site's annual allocation.

CHAPTER 3: ALLOWANCE TRADING

There have been a total of 93 trades since the start of the Emissions Banking and Trading of Allowances (EBTA) Program. Of those 93 trades, 83 trades were for nitrogen oxides (NO_X) allowances and 10 trades were for sulfur dioxide (SO_2) allowances. Table 3-1: *Trading Activity in the EBTA Program by Pollutant and Control Periods* summarizes the trading activity in the EBTA Program.

Table 3-1: Trading Activity in the EBTA Program by Pollutant and Control Periods

Control Period*	Number of NO_X Allowances Trades	Total Tons of NO_X Allowances Traded	Average Tons of NO_X Allowances per Trade	Number of SO_2 Allowances Trades	Total Tons of SO_2 Allowances Traded	Average Tons of SO_2 Allowances per Trade
2003	21	14,389	685	2	37,160	18,580
2004	19	8,549	450	2	35,700	17,850
2005	11	8,154	741	2	39,976	19,988
2006	13	16,173	1,244	2	46,000	23,000
2007	9	15,488	1,721	1	20,000	20,000
2008	4	3,346	837	1	8,000	8,000
2009	6	9,878	1,646	0	0	N/A

* A control period is from May 1 of one year to April 30 of the following year

Table 3-1 further illustrates that there was a higher volume of trades at the beginning of the EBTA Program. As the program matured, the number of trades and the total tons traded decreased. Further analysis of the trades also shows that 92% of the trades were internal trades between sites under common ownership that reported a price per ton value of zero.

Allowance trading between the three program regions (East, West, and the El Paso regions) is not permitted. Analysis of the location of the seller and buyer sites demonstrated that interregional trading did not occur. Appendix A: *EBTA NO_X Allowance Trading* depicts the movement of allowances in the EBTA Program. Analysis of NO_X allowance trading in the Houston-Galveston-Brazoria (HGB) and Dallas-Fort Worth (DFW) 1997 eight-hour ozone nonattainment areas indicated that allowances were not transferred into these nonattainment areas. Table 3-2: *NO_X Allowance Trading Activity in the HGB 1997 Eight-Hour Ozone Nonattainment Areas* summarizes trading activity in the HGB 1997 eight-hour ozone nonattainment area.

Table 3-2: NO_X Allowance Trading Activity in the HGB 1997 Eight-Hour Ozone Nonattainment Areas

County	Tons Bought in the 2003 Control Period*	Tons Sold in the 2003 Control Period*	Net Trades in the 2003 Control Period*	Tons Bought in the 2004 Control Period*	Tons Sold in the 2004 Control Period*	Net Trades in the 2004 Control Period*
Chambers	0	1,000	-1,000	0	0	0
Fort Bend	0	200	-200	0	0	0
Galveston	200	2,500	-2,300	0	0	0
Harris	0	500	-500	70	70	0

* A control period is from May 1 of one year to April 30 of the following year

The values in the "Net Trades" column in Table 3-2 are either negative or zero. A negative value indicates that allowances allocated to sites in the specified county were transferred out of that county. In the HGB 1997 eight-hour ozone nonattainment area, in the 2003 control period, 95% of NO_X allowances that were traded were traded out of the nonattainment area. Also, no trading activity has occurred in the HGB 1997 eight-hour ozone nonattainment area since the 2004 control period.

Trading in the DFW 1997 eight-hour ozone nonattainment area followed a trend similar to HGB, with NO_X allowances moving out of the nonattainment area.

Table 3-3: *NO_X Allowance Trading Activity in the DFW 1997 Eight-Hour Ozone Nonattainment Areas for the 2008 and 2009 Control Periods* documents the NO_X trades in the area in the 2008 and 2009 control periods.

Table 3-3: NO_X Allowance Trading Activity in the DFW 1997 Eight-Hour Ozone Nonattainment Areas for 2008 and 2009 Control Periods

County	Tons Bought in the 2008 Control Period*	Tons Sold in the 2008 Control Period*	Net Trades in the 2008 Control Period*	Tons Bought in the 2009 Control Period*	Tons Sold in the 2009 Control Period*	Net Trades in the 2009 Control Period*
Dallas	0	1,000	-1,000	0	7,450	-7,450
Tarrant	0	558	-558	0	588	-588

* A control period is from May 1 of one year to April 30 of the following year

Appendix B: *NO_X Allowance Trading Activity in the DFW 1997 Eight-Hour Ozone Nonattainment Area from the 2003 Control Period through the 2007 Control Period* depicts the trading activity in the DFW 1997 eight-hour ozone nonattainment area from May 2003 through April 2008. There is no trading of NO_X allowances from attainment counties to eight-hour ozone nonattainment areas.

There have been a total of 10 SO_2 allowance trades during the life of the EBTA Program. The trades were between sites owned by the same parent company. No SO_2 allowance trades occurred in the 2009 control period. Trading activity of SO_2 allowances also followed the same trend as NO_X allowances, with a greater volume of trades at the start of the EBTA Program and a decline as the program matured. The site located in the BPA 1997 eight-hour ozone maintenance area did not participate in any trades.

3.1 PRICING OF ALLOWANCES:

There were only eight inter-company trades that had a non-zero dollar value. Two of those had a NO_X allowance price of $1.00/ton while the remaining six trades had a NO_X allowance price of $500.00/ton. Since all SO_2 allowance trades were intracompany trades, the allowance price was zero.

CHAPTER 4: COMPLIANCE AND PROGRAM PARTICIPATION

4.1 PROGRAM PARTICIPATION:

Table 4-1: *Participation in the EBTA Program* displays the various participants in the Emissions Banking and Trading of Allowances (EBTA) Program by providing the number of sites that were allocated allowances in the program, that reported zero emissions, and that participated in trades. The table also indicates the number of broker accounts.

Table 4-1: Participation in the EBTA Program

Category	Value
Sites receiving an allocation of nitrogen oxides (NO_X) allowances	75*
Sites receiving an allocation of sulfur dioxide (SO_2) allowances	4
Broker accounts	1
Inactive sites	16
Sites that have reported zero NO_X emissions since the 2007 control period	13
Sites participating in trading	28

*Five of those sites are receiving an allocation of zero allowances.

Table 4-1 shows that nearly 21% of the sites initially allocated allowances are inactive. Inactive sites are sites that have reported zero emissions since the start of the program. In addition, another 24% of the sites that were active at the beginning of the program have not reported any NO_X emissions since the 2007 control period.

There are four coal-burning grandfathered electric generating facilities (EGFs) applicable to the EBTA Program. These active sites continue to report SO_2 emissions.

4.2 COMPLIANCE:

Compliance in the EBTA Program involves two aspects:

- submission of the annual report from sites with applicable EGFs by June 30 following the end of a control period; and
- sites holding NO_X and/or SO_2 allowances equal to or greater than the emissions from applicable EGFs by June 1 following the end of a control period.

Participants in the EBTA Program have demonstrated 100% compliance on both aspects.

CHAPTER 5: IMPACTS OF THE PROGRAM

The Texas legislature's intent in mandating the Emissions Banking and Trading of Allowances (EBTA) Program was to reduce the annual emissions of nitrogen oxides (NO_X) by 50% and sulfur dioxide (SO_2) emissions by 25% from the total emissions reported to the commission in 1997.The reductions achieved by the EBTA Program are higher than what the legislature intended. On average, NO_X emissions have been reduced by 71% and SO_2 emissions by 32% from 1997 levels. The EBTA Program achieved these reductions while providing flexibility to its participants. The participants in the program also demonstrated 100% compliance.

5.1 IMPACTS OF THE PROGRAM ON OZONE ATTAINMENT:

When the EBTA Program was implemented on May 1, 2003, its requirements were more stringent than other existing regulations such as the Mass Emissions Cap and Trade (MECT) Program or the emission specifications of 30 Texas Administrative Code Chapter 117. However, in the 1997 eight-hour ozone nonattainment areas, those aforementioned regulations have now superseded the EBTA Program in stringency. In Houston-Galveston-Brazoria, the MECT Program started with a cap that was notably higher than the total EBTA allowances allocated to electric generating facilities (EGF) located in that area. In 2003 the total allocation of MECT allowances was 37,686.1 NO_X tons compared to the cap of 11,487 NO_X tons for the EGFs located in the HGB area in the EBTA program. However, the MECT Program's step down mechanism has since reduced the MECT cap by about 78% of the 2003 cap to 8,201.9 NO_X tons in 2008, while the EBTA cap remained the same. Similarly, in the Dallas Fort Worth 1997 eight-hour ozone nonattainment area and the BPA 1197 eight-hour ozone maintenance area, more stringent emission rate specifications in Chapter 117 have been adopted to advance attainment. The EBTA Program initially capped emissions but subsequent emission rate specifications and MECT allocation reductions now limit emissions beyond the EBTA cap. Therefore, the EBTA program initially advanced ozone attainment but now does not have an impact because NO_X emissions are substantially less than the NO_X cap. A cap reduction would be necessary for the program to substantially impact future emissions.

CHAPTER 6: PROGRAM RECOMMENDATIONS IDENTIFIED IN THIS AUDIT

The Emissions Banking and Trading of Allowances (EBTA) Program achieves reductions in nitrogen oxides (NO_X) and sulfur dioxide (SO_2) emissions from grandfathered and electing electric generating facilities (EGF). The goals set for the program by the Texas legislature was to reduce NO_X and SO2 emissions by 50% and 25%, respectively from the total emissions reported by these sites to the commission in 1997. As of December 2010, the EBTA Program has succeeded in reducing NO_X and SO_2 emissions by 71% and 32% respectively compared to the 1997 emission levels. Applicable EGFs have been 100% compliant and have achieved reduction levels higher than those set forward by the Texas legislature. No problems were identified and trading activity can continue at this time without restriction. However, this audit has identified the following:

1. Underutilization of the NO_X cap: From the start of the program, the NO_X emissions have been substantially lower than the NO_X cap. In the 1997 eight-hour ozone nonattainment areas especially, newer regulations have become more stringent since the implementation of the EBTA Program resulting in lower NO_X emissions from EGFs.
2. Minimal trading activity: Trading in the EBTA Program is minimal with most trades being intracompany in nature. Since allowances do not expire, the number of banked allowances is increasing. This process has made it unnecessary for participants to require trades for compliance. In addition, the more stringent requirements in the 1997 eight-hour ozone nonattainment areas result in EGFs achieving lower NO_X emission rates further reducing the need for trades.
3. Idle sites: More than 21% of the sites that were allocated allowances are shutdown or idle. Another 24% have been idle since the 2007 control period or earlier. Since applicable EGFs that are idle continue to receive an allocation of allowances, there is a surplus of NO_X allowances.

It is anticipated that the lowering of the National Ambient Air Quality Standard for ozone and SO2 will require reductions in NO_X and SO2 in existing and new nonattainment areas. Texas Utilities Code §39.264(s) does not limit the commission's authority to require further reductions from EGFs applicable to the EBTA Program. Therefore, if the commission requires additional NO_X and/or SO_2 reductions from applicable EGFs, it is recommended to propose replacement of the EBTA Program with a more stringent program. Further analysis would be required for the development of a new program to replace the EBTA Program. To ensure continued effectiveness of the new program, it should include regulations to address the items identified in this audit. Alternatively, since the EBTA program has met the goal set by the Texas legislature and has been surpassed by other programs, it can be proposed that the EBTA program be retired. Both of these alternatives would require approval from the Texas legislature.

APPENDIX A: EBTA NO_X ALLOWANCE TRADING

Table A-1: EBTA NO_X Allowance Trading for the 2003 Control Period through the 2005 Control Period*

Area	Tons Bought in the 2003 Control Period	Tons Sold in the 2003 Control Period	Net Trades in the 2003 Control Period	Tons Bought in the 2004 Control Period	Tons Sold in the 2004 Control Period	Net Trades in the 2004 Control Period	Tons Bought in the 2005 Control Period	Tons Sold in the 2005 Control Period	Net Trades in the 2005 Control Period
Broker Account/ No County	5,558	5,558	0	1,558	1,558	0	1,558	1,558	0
Dallas-Fort Worth 1997 Eight-hour Ozone Nonattainment Area	0	1,558	-1,558	0	1,558	-1,558	0	1,558	-1,558
East Texas#	6,182	624	5,558	5,193	3,635	1,558	5,458	3,900	1,558
Houston-Galveston-Brazoria 1997 Eight-Hour Ozone Nonattainment Area	200	4,200	-4,000	70	70	0	0	0	0
West Texas	2,449	2,449	0	1,728	1,728	0	1,138	1,138	0

* A control period is from May 1 of one year to April 30 of the following year

East Texas Regions includes the Houston-Galveston-Brazoria and Dallas-Fort Worth 1997 eight-hour ozone nonattainment areas.

Table A-2: EBTA NO_X Allowance Trading for the 2006 Control Period through the 2008 Control Period*

Area	Tons Bought in the 2006 Control Period	Tons Sold in the 2006 Control Period	Net Trades in the 2006 Control Period	Tons Bought in the 2007 Control Period	Tons Sold in the 2007 Control Period	Net Trades in the 2007 Control Period	Tons Bought in the 2008 Control Period	Tons Sold in the 2008 Control Period	Net Trades in the 2008 Control Period
Broker Account/ No County	1,558	1,558	0	1,558	1,558	0	1,558	1,558	0
Dallas-Fort Worth 1997 Eight-hour Ozone Nonattainment Area	0	1,558	-1,558	0	1,558	-1,558	0	1,558	-1,558
East Texas#	12,894	11,336	1,558	13,558	12,000	1,558	1,558	0	1,558
Houston-Galveston-Brazoria 1997 Eight-Hour Ozone Nonattainment Area	0	0	0	0	0	0	0	0	0
West Texas	2,449	2,449	0	1,728	1,728	0	1,138	1,138	0

* A control period is from May 1 of one year to April 30 of the following year

East Texas Regions includes the Houston-Galveston-Brazoria and Dallas-Fort Worth 1997 eight-hour ozone nonattainment areas.

Table A-3: EBTA NO_X Allowance Trading for the 2009 Control Period*

Area	Tons Bought	Tons Sold	Net Trades
Broker Account/ No County	1,588	1,558	30
Dallas-Fort Worth 1997 Eight-Hour Ozone Nonattainment Area	0	8,038	-8,038
East Texas#	8,008	0	8,008
Houston-Galveston-Brazoria 1997 Eight-Hour Ozone Nonattainment Area	0	0	0
West Texas	282	282	0

* A control period is from May 1 of one year to April 30 of the following year

East Texas Regions includes the Houston-Galveston-Brazoria and Dallas-Fort Worth 1997 eight-hour ozone nonattainment areas.

APPENDIX B: NO_X ALLOWANCE TRADING ACTIVITY IN THE DFW 1997 EIGHT-HOUR OZONE NONATTAINMENT AREA FROM THE 2003 CONTROL PERIOD THROUGH THE 2007 CONTROL PERIOD

Table B-1: NO_X Allowance Trading Activity in the DFW 1997 Eight-Hour Ozone Nonattainment Area for the 2003 Control Period through the 2005 Control Period*

County	Tons Bought in the 2003 Control Period	Tons Sold in the 2003 Control Period	Net Trades in the 2003 Control Period	Tons Bought in the 2004 Control Period	Tons Sold in the 2004 Control Period	Net Trades in the 2004 Control Period	Tons Bought in the 2005 Control Period	Tons Sold in the 2005 Control Period	Net Trades in the 2005 Control Period
Dallas	0	1,000	-1,000	0	727	-727	0	1,000	-1,000
Tarrant	0	558	-558	0	831	-831	0	558	-558

* A control period is from May 1 of one year to April 30 of the following year

Table B-2: NO_X Allowance Trading Activity in the DFW 1997 Eight-Hour Ozone Nonattainment Area for the 2006 and 2007 Control Periods*

County	Tons Bought in the 2006 Control Period	Tons Sold in the 2006 Control Period	Net Trades in the 2006 Control Period	Tons Bought in the 2007 Control Period	Net Trades in the 2007 Control Period	Net Trades in the 2007 Control Period
Dallas	0	558	-558	0	558	-558
Tarrant	0	1,000	-1,000	0	1,000	-1,000

* A control period is from May 1 of one year to April 30 of the following year