State of California
California Environmental Protection Agency

AIR RESOURCES BOARD

Emission Reduction Offset Transaction Cost Summary Report for 2001

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Prepared by

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ACKNOWLEDGMENTS

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The data for this report was compiled from information provided by
all Air Pollution Control/Quality Management Districts
in California

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EXECUTIVE SUMMARY

BACKGROUND

Since 1993, Health and Safety Code Sections 40709 and 40709.5 have required local air quality management districts / air pollution control districts (AQMDs / APCDs or districts) to collect information about the cost of offset transactions from stationary source owners who purchase offsets as required by district New Source Review programs. State law also requires districts to adopt emission reduction credit banking programs. Districts are required to collect specific information about offset transactions including the price paid in dollars per ton, the pollutant traded, the amount traded and the year of the transaction. Districts are also required to annually publish this information without revealing the identity of the parties involved with the transaction.
Some districts are exempt from these requirements, including districts that are not required to submit a plan for attainment of state ambient air quality standards and that also meet federal air quality standards.

SUMMARY OF 2001 DATA

The Air Resources Board (ARB) has compiled information regarding offset transactions collected from all 35 districts and has assembled it into this report summarizing statewide emission reduction offset transactions in California for the year 2001. All the districts reported to ARB regardless of whether they had any offset transactions or whether the reporting requirements apply. A total of 495 transactions were reported to have taken place in California in 2001. In this report we are not including information on seventeen reported transactions involving 13 asset transfer and 4 subsidiary transactions where there were no associated costs. Of the remaining 478 transactions , 111 were for NOx, 176 were for HC, 113 were for PM10, 30 were for CO, and 48 were for SOx.

Table 1 presents the average, median, high and low costs for NOx, HC, PM10, CO, and SOx offsets reported in 2001. For a specific breakdown of all transactions by district, see Table 2.

Table 1
2001 Prices Paid in Dollars Per Ton for Offsets

	NOx	HC	PM10	CO	SOx
Average (mean)	$27,074	$12,684	$46,148	$19,447	$12,809
Median	$22,000	$10,959	$25,000	$10,026	$7,500
High	$104,000	$66,000	$126,027	$43,836	$82,192
Low	$774	$967	$400	$45	$15

The districts that reported offset transactions included: Bay Area AQMD, Butte County AQMD, Feather River AQMD, Imperial County APCD, Mojave Desert AQMD, Monterey Bay Unified APCD, Placer County APCD, Sacramento Metropolitan AQMD, San Diego County APCD, San Joaquin Valley APCD, San Luis Obispo County APCD, Santa Barbara County APCD, Shasta County AQMD, South Coast AQMD, Tehama County APCD, Ventura County APCD, and Yolo-Solano AQMD.

DATA TRENDS

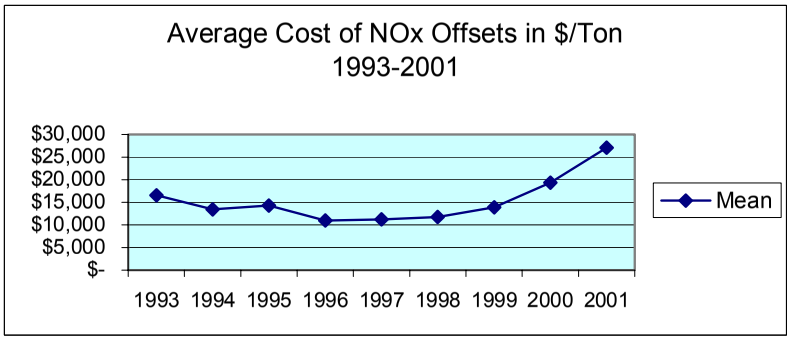
For the past nine years (1993-2001) the Air Resources Board has collected and reported Statewide data on the number and cost of offset transactions. The number of transactions has increased from 30 in 1993 to 495 in 2001. The number of districts reporting offset transactions during this period ranged from five to seventeen, with more districts reporting in recent years. The number of offset transactions and the amount of tons traded have also increased in recent years.

Summary Charts A, B, and C illustrate the trends that have occurred during the past nine years for the average (mean) cost per ton of the three most actively traded criteria pollutants (NOx, HC and PM10). Summary Chart A illustrates that the average cost of NOx emission credits generally decreased until 1996, but starting in 1997 the price of NOx has increased. The average cost of NOx emission credits has increased over the past two years to levels higher than those of the previous seven years. Summary Chart B shows that the average cost of HC emission credits has fluctuated over time, although costs generally decreased between 1993 and 2000. The average cost of HC emission credits in 2001 was similar to the average cost in 1993. Summary Chart C shows that average cost of PM10 emission credits has shown large fluctuations over the past nine years, with a large cost increase occurring in 1998 and a dramatic increase in 2001.

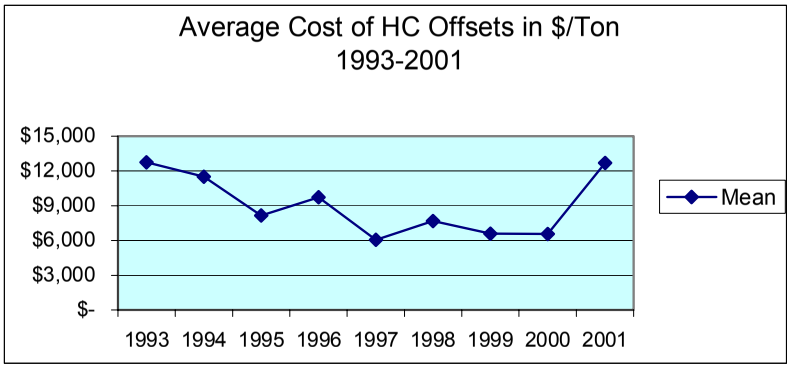
Summary Charts D and E illustrate the trends for the number of transactions and the number of tons traded during the past nine years for the three most traded pollutants (i.e. NOx, HC and PM10). Summary Chart D illustrates that the number of transactions since 1993 have generally increased with time for all three pollutants. The numbers of NOx and PM10 transactions have been similar to each other. Trades of HC emission credits have been the most numerous over the years. Summary Chart E shows that dramatic increases have occurred over the past several years in the number of tons traded. The largest increases have been for NOx and HC emission credits in 2000.

For information on past years' transactions, annual compilations of the offset transactions in California that occurred from 1993 through 2000 can be found on our website "Emission Reduction Credit Offsets," at *http://www.arb.ca.gov/erco/erco.htm*.

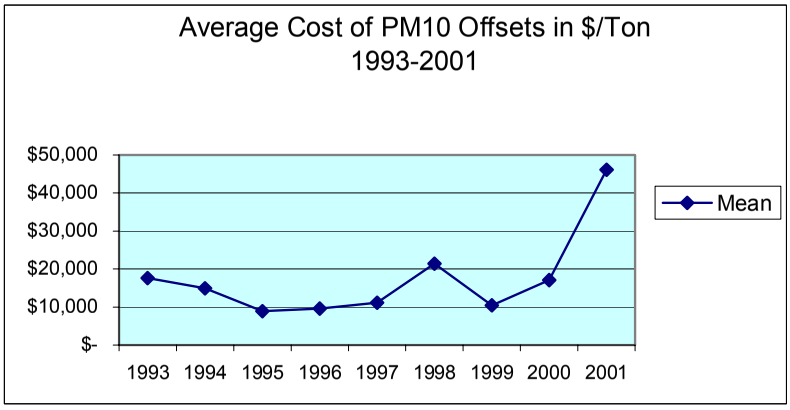
Summary Chart A



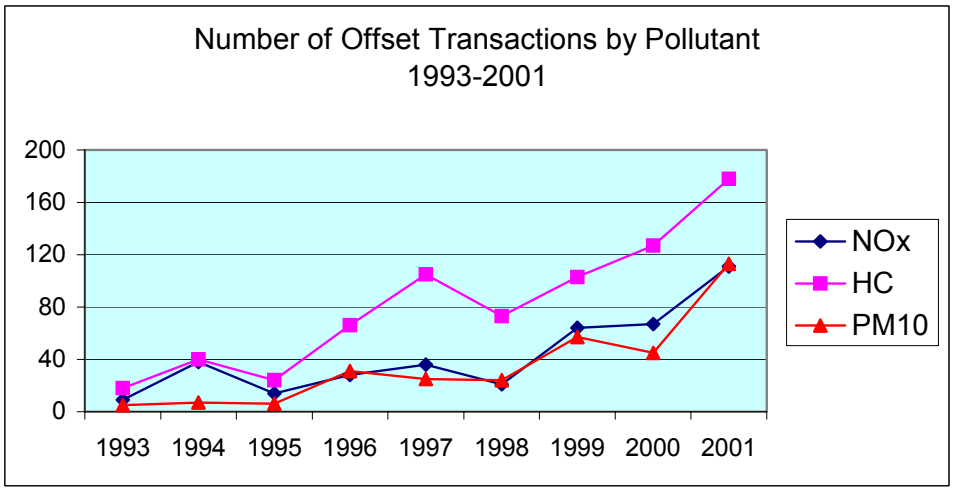
Summary Chart B



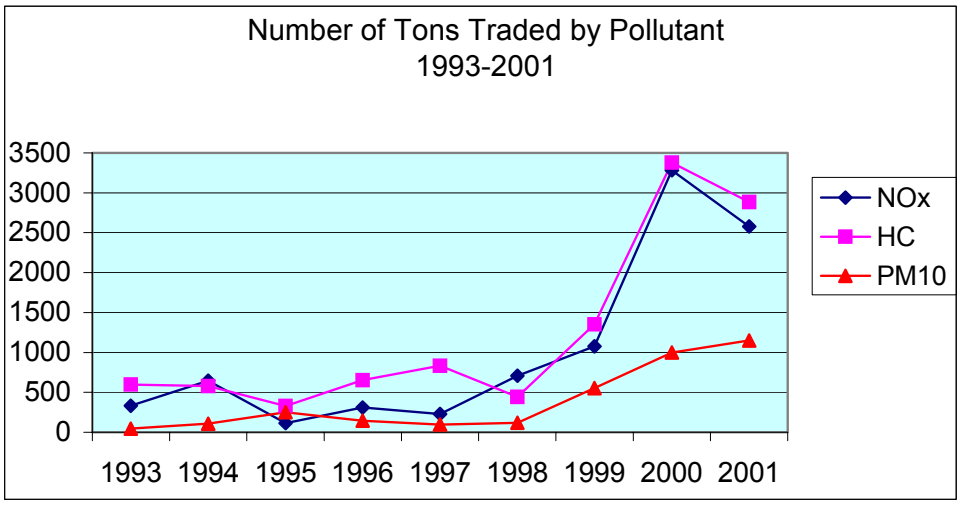
Summary Chart C



Summary Chart D



Summary Chart E



INTRODUCTION

Section 40709.5(e) of the Health and Safety Code mandates that local air quality management and air pollution control districts (districts), that are not exempted under Health and Safety Code Section 40709, collect information regarding the cost of offsets from stationary source owners who purchased offsets as required by district New Source Review programs. This report presents a compilation of the transactions in California from January 1 through December 31, 2001, as supplied by the districts.

This report does not attempt to analyze the cost data collected or attempt to predict future prices or offset availability. As required by Section 40709.5(e), this report does not contain information that identifies the parties involved in the transactions.

Emission reduction credit transactions play an important role in California's New Source Review program, which is designed to accomodate industrial growth while protecting public health and the environment. The use of emission reduction credits that are purchased from the open market to offset emissions from new or modified sources gives industry flexibility to mitigate emissions in the most cost-effective manner available.

This report may be used as a tool by interested parties to evaluate the prices paid for offsets. The report also gives a sense of the number and type of transactions taking place in California's emission credit market. By informing interested parties about emission reduction credit costs, future credit transactions may be facilitated.

We have not included Regional Clean Air Incentives Market (RECLAIM) Trading Credits from the South Coast Air Quality Management District's RECLAIM program because they are not directly comparable to emission reduction credits used to satisfy New Source Review requirements.

Also, our tables and calculations do not include data on the cost of leasing credits from the SEED (Solutions for the Environment and Economic Development) program of the Sacramento Metropolitan Air Quality Management District.

NEW SOURCE REVIEW AND CALIFORNIA'S AIR QUALITY MANAGEMENT PROGRAM

The responsibility for controlling emissions from stationary sources of air pollution rests with California's local districts. The California Clean Air Act requires districts to adopt a New Source Review program that results in no net increase in emissions from new and modified stationary sources which have the potential to emit over a specified amount of nonattainment pollutants or their precursors. As part of New Source Review, stationary sources are required to apply the Best Available Control Technology (BACT) to reduce emissions and, in some cases, to provide emission reduction offsets to mitigate the impact of emissions from the source remaining after the application of BACT. These emission reduction offsets are sometimes called emission reduction credits. To be used as mitigation, offsets must meet certain criteria: the emission reductions must be surplus to any federal, State or local laws or regulations; and must be real, enforceable,

quantifiable and permanent.

Emission Reduction Credit Banking and Trading:

Emission reduction credit banking is defined as "a system... by which reductions in emissions may be banked or otherwise credited to offset future increases... or a calculation method which enables internal emission reductions to be credited against increases" (Health & Safety Code Section 40709.5). Once created, emission reduction credits may be banked with the district for future use by the source that generated them, used concurrently to offset new projects, or sold to other sources for use as mitigation.

The most common method of creating emission reduction credits is to control or curtail the emissions from an existing stationary source. Control of emissions is generally from the application of emission control technology not required by any regulation or rule. Curtailment could be from a change in operating hours of a source, or through the shutdown of a source. Another method of creating emission reduction credits is to reduce emissions from mobile sources beyond what is required. Additionally, credits may be generated from the reductions in emissions from agricultural operations, for example from curtailing field burning of agricultural wastes or from using cleaner agricultural water pumps. In all cases, credits must be generated pursuant to district rules and regulations, and must be reviewed and certified by the district to be used as mitigation. The legal requirements of credit generating programs are specified in the Health and Safety Code and further defined by rules in place in each district.

Example: Siting a New Stationary Source in California:

A new stationary source that locates in California is required to apply for an authority to construct permit and a permit to operate from the local air quality district. As part of the district's New Source Review (NSR) process for granting permits, the source is required to demonstrate that it meets the district's NSR rules regarding Best Available Control Technology and emission offsets. Unlike the Federal NSR program which is based on net emission increases at a source, in California, if the potential to emit nonattainment pollutants or their precursors of a new or modified facility is equal to or above a level specified in State law, the facility will be required to provide offsets (e.g. no net increase in emissions are required for new or modified sources with the potential to emit 10 tons per year for a severe nonattainment district up to 25 tons per year in a moderate nonattainment district).

REQUIREMENTS TO REPORT COST OF OFFSETS

Sections 40709 and 40709.5 of the Health and Safety Code requires districts that are not exempted, to establish banking programs for emission reduction credits and establishes a mechanism for districts to collect data regarding the price paid for offsets. The text of Health and Safety Code Sections 40709 and 40709.5 and Government Code Section 6254.7 is in Appendix B. The following is a summary of the requirements of those sections of the Government Code and the California Health and Safety Code:

- Section 6254.7(f) of the Government Code authorizes districts to obtain information on cost of offsets from applicants.
- Section 40709 of the California Health and Safety Code makes an emission reduction

banking system mandatory in every district except any district that is not required to submit a plan for attainment of State ambient air quality standards and if

- o the district is not in a federal nonattainment area for any national ambient air quality standard unless the sole reason for nonattainment is air pollutant transport and
- o a source has not petitioned the district to establish a banking system.

- Section 40709(c) of the Health and Safety Code specifies that emission reductions proposed to offset simultaneous emissions increases within the same stationary source need not be banked prior to use as offsets.
- Section 40709.5(e) requires that any district that has established a banking system is required to develop a program which provides the following information as public record:
  - o Annual publication of the costs in dollars per ton, of emission offsets purchased for new and modified emission sources, excluding the identity of the parties involved
  - o The annual publication shall specify for each offset purchase transaction:
    - the date of the offset transaction (year only)
    - the amount of offset purchased by pollutant
    - the total cost, by pollutant of the offsets purchased
  - o Each application for use of emission reductions banked shall provide sufficient information, as determined by the district, to perform the cost analysis

DATA COLLECTION PROCESS

In 1994, a subcommittee of the California Air Pollution Control Officers Association (CAPCOA) Engineering Managers worked with ARB to develop a uniform reporting form for collecting data from the districts for this report. The reporting form was designed to transmit information to ARB in such a way as to make the information about the transaction available without disclosing the names of the transaction parties.

The form distinguishes between the methods of generating emission reduction credits. Possible generating methods include stationary, mobile and agricultural offsets. The prices paid for credits may be affected by the type of source from which reductions are obtained. This is particularly true with mobile sources that have a finite life span.

The lifespan of the credit may significantly affect the price paid for offsets. The form allows the district to identify length of useful life if the credit life is limited. Mobile source credits and lease agreement transactions can be distinguished using this section of the form.

The other major distinction on the reporting form involves the type of payment agreement. Possible situations include direct sale of the credit, barter for services or equipment, a transaction between subsidiary parties, or an assets transfer within a company. In each case the type of transaction agreement may affect the price of the transaction.

Knowing these facts about each transaction will aid in analysis of market values for credits by interested parties. A copy of the reporting form and instructions is in Appendix C.

DESCRIPTION OF 2001 DATA

Table 2 presents all of the reported pollutant transactions that took place in the State, listed by individual districts. There were a total of 495 transactions statewide in 2001. Seventeen of these transactions are not reported here because the trades involved 13 asset transfers and 4 subsidiary transactions for which there were no associated costs. These transactions are included in Table 2 only for information purposes. Because they do not represent the final cost paid by an end-user of the offsets, and only credits sold to an end-user are reflected in the data presented, they are not used in calculating the results of tables 4 through 13, and charts 1 through 5.

The majority of transactions reported involved emission reductions from stationary sources. Eight of these were agricultural offset transactions, and there was only one mobile source emission reduction transaction during 2001. Of the total reported 478 transactions, 111 were NOx transactions, 176 were HC transactions, 113 were PM10 transactions, 30 were CO transactions, and 48 were SOx transactions. All the districts reported to ARB regardless of whether they had any offset transactions. Table 3 lists the districts that reported no transactions in 2001.

Tables 4, 6, 8, 10 and 12 present information by district for NOx, HC, PM10, CO and SOx respectively. Each of these tables presents the cost per ton of pollutant, the total tons of pollutant traded, and additional explanatory notes. The price paid per ton was calculated by dividing the total cost of the transaction by the total tons traded. There is no assumption made about the number of years of operation of the facility or how the payment schedule is arranged. All of these tables group transactions by district since credit markets, and therefore cost per ton, may vary from district to district. Districts are reported alphabetically and the districts' transactions are ordered by increasing cost per ton of pollutant.

Tables 5, 7, 9, 11 and 13 summarize the data in each preceding table. The summary tables include the average (mean), the median, and the high and low of the price paid per ton of pollutant. (The median is the number in the middle of a set of numbers, i.e., half of the numbers have values greater than the median and half of the numbers have values less than the median.) These tables exclude asset transfer, subsidiary, barter, and other non-monetary transactions where there were no associated costs to include in the calculations.

TABLE 2
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
Bay Area	NOx	$6,750	1.8	
Total of 34 Transactions	NOx	$8,800	57.19	
	NOx	$9,000	7.1	
	NOx	$14,400	1.3	
	NOx	$15,000	1.2	
	NOx	$15,000	28.5	
	NOx	$15,000	48.96	
	NOx	$25,000	0.02	
	NOx	$30,332	4.96	
	NOx	$35,000	21	
	NOx	$37,000	38.99	
	NOx	$38,000	1.03	
	HC	$5,875	45	
	HC	$6,750	362.0	
	HC	$8,800	88.04	
	HC	$10,000	0.72	
	HC	$10,235	0.98	
	HC	$14,400	5.86	
	HC	$15,000	0.01	
	HC	$20,000	50.00	
	HC	$25,000	0.32	
	HC	$30,332	2.88	
	HC	$35,000	102.60	
	HC	$37,040	0.14	
	HC	$38,000	0.02	
	HC	$42,000	7.13	
	HC	$42,500	11.65	
	HC	$43,000	15.86	
	PM10	$8,800	9.97	
	PM10	$30,332	0.39	
	CO	$45	4.88	
	CO	$1,100	33.32	
	SOx	$1,100	1.03	
	SOx	$5,067	0.03	
Butte County	NOx	$20,000	23.5	
Total of 3 Transactions	HC	$20,000	55.6	
	PM10	$28,000	112	
Feather River	NOx	$18,240	25.45	Agricultural Offset
Total of 4 Transactions	HC	$19,200	30.3	Agricultural Offset
	PM10	$18,240	34.09	Agricultural Offset
	SOx	$4,800	7.01	Agricultural Offset

TABLE 2 (cont.)
2001 California

Emission Reduction Credit Transaction Costs By District

Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
Imperial County	HC	$967	20.28	1Yr 3rd Quarter Ag Offset
Total of 3 Transactions	HC	$1,000	1.25	1Yr 3rd Quarter Ag Offset
	PM10	$425	34.51	1Yr 3rd Quarter Ag Offset
Mojave Desert	NOx		113	Subsidiary Transaction
Total of 16 Transactions	NOx	$3,049	27	
	NOx	$9,161	27	
	NOx	$9,975	113	
	NOx	$11,750	5	
	NOx	$13,650	150	
	HC		148	Subsidiary Transaction
	HC		296	Subsidiary Transaction
	HC	$3,049	3	
	HC	$5,000	3	
	HC	$6,300	148	
	PM10		265	Subsidiary Transaction
	PM10	$400	125	
	PM10	$3,049	14	
	PM10	$5,000	1	
	CO	$3,049	38	
Monterey Bay Unified	NOx	$10,188	254.61	
Total of 5 Transactions	HC	$10,188	33.93	
	PM10	$10,188	213.948	
	CO	$10,188	443.34	
	SOx	$10,188	35.73	
Placer County	NOx	$32,079	10.1	
Total of 6 Transactions	HC	$32,079	67	
	PM10	$30,000	14.8	
	PM10	$30,000	28.4	
	PM10	$32,079	101.35	
	SOx	$6,000	45.8	
Sacramento Metropolitan	HC	$20,000	3.15	
Total of 9 Transactions	HC	$25,000	2.46	
	HC	$35,000	50	
	PM10	$19,000	0.271	
	PM10	$19,000	2.804	
	PM10	$19,000	4.06	
	PM10	$25,000	1.88	
	PM10	$27,500	2.9	
	SOx	$10,000	0.16	

TABLE 2 (cont,)
2001 California

Emission Reduction Credit Transaction Costs By District

Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
San Diego County	NOx	$104,000	2.71	
Total of 5 Transactions	HC	$1,613	0.62	1 Year Lease
	HC	$2,138	1.86	1 Year Lease
	HC	$66,000	15.2	
	HC	$66,000	15.2	
San Joaquin Valley	NOx	$774	1.9	
Total of 134 Transactions	NOx	$2,000	0.1	Credits Valid in Fourth Quarter
	NOx	$6,500	25.9	
	NOx	$12,650	0.9	Credits Valid in 2nd, 3rd, & 4th Qtr
	NOx	$12,650	2.4	Credits Valid in Third Quarter
	NOx	$12,650	4.5	
	NOx	$12,650	45.5	Credits Valid in 2nd, 3rd, & 4th Qtr
	NOx	$13,000	39.4	Credits Valid in 2nd & 3rd Quarter
	NOx	$14,000	0.3	
	NOx	$16,000	0.5	Credits Valid in First Quarter
	NOx	$16,000	0.5	Credits Valid in Fourth Quarter
	NOx	$16,000	0.6	Credits Valid in 2nd & 3rd Quarter
	NOx	$16,000	1.1	Credits Valid in 2nd & 3rd Quarter
	NOx	$16,000	2.4	
	NOx	$18,000	10.1	Credits Valid in Third Quarter
	NOx	$18,700	98.8	
	NOx	$18,700	159	
	NOx	$18,700	160.1	
	NOx	$18,700	385.7	
	NOx	$20,000	1	Credits Valid in Fourth Quarter
	NOx	$20,000	2.9	Credits Valid in Fourth Quarter
	NOx	$20,000	11.2	
	NOx	$20,000	11.3	Credits Valid in First Quarter
	NOx	$20,000	19.1	Credits Valid in Third Quarter
	NOx	$21,000	2.9	Credits Valid in First Quarter
	NOx	$21,000	5.8	Credits Valid in 3rd & 4th Quarter
	NOx	$21,000	13.1	
	NOx	$21,000	13.1	
	NOx	$24,500	24.7	
	NOx	$25,000	2.8	
	NOx	$25,000	9.7	Credits Valid in First Quarter
	NOx	$25,000	45.2	
	NOx	$25,000	70.3	
	NOx	$25,000	80	
	NOx	$28,000	1.7	Credits Valid in Second Quarter
	NOx	$30,000	3.6	
	NOx	$30,000	25.9	
	NOx	$31,000	28	
	NOx	$35,000	4.9	Credits Valid in Fourth Quarter

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
San Joaquin Valley (continued)	NOx	$35,000	10	Credits Valid in 1st & 2nd Quarter
	NOx	$38,000	2	
	NOx	$38,000	14.3	
	NOx	$40,526	24.7	
	NOx	$48,000	3.3	
	NOx	$48,000	11.7	
	NOx	$48,588	1.6	Credits Valid in Third Quarter
	NOx	$53,749	1.8	Credits Valid in First Quarter
	NOx	$54,225	1.8	Credits Valid in Fourth Quarter
	NOx	$60,189	2	Credits Valid in Second Quarter
	HC	$2,000	0.04	Credits Valid in Fourth Quarter
	HC	$4,000	0.04	
	HC	$4,000	19.5	
	HC	$4,400	0.1	
	HC	$6,000	2.7	
	HC	$6,500	5.6	
	HC	$6,500	20	
	HC	$6,500	20	
	HC	$6,500	107.5	
	HC	$6,600	10.9	
	HC	$6,969	0.1	Credits Valid in 3rd & 4th Quarter
	HC	$7,000	4.2	
	HC	$7,000	7.4	
	HC	$7,000	7.9	
	HC	$7,000	8.5	
	HC	$7,500	0.3	
	HC	$7,500	0.8	Credits Valid in First Quarter
	HC	$7,500	8.7	
	HC	$7,500	17.1	
	HC	$7,500	26.7	
	HC	$7,500	34.2	Credits Valid in 2nd & 3rd Quarter
	HC	$7,500	129.7	
	HC	$8,000	4.1	
	HC	$8,000	9.5	
	HC	$9,900	0.1	Credits Valid in Third Quarter
	HC	$9,900	0.4	Credits Valid in Third Quarter
	PM10	$646	0.1	Credits Valid in 3rd & 4th Quarter
	PM10	$703	0.04	Credits Valid in First Quarter
	PM10	$798	0.04	Credits Valid in Second Quarter
	PM10	$4,000	2.2	
	PM10	$4,400	0.5	Credits Valid in Third Quarter
	PM10	$4,400	1.6	Credits Valid in Third Quarter
	PM10	$9,900	0.2	
	PM10	$14,000	0.04	Credits Valid in Third Quarter

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
San Joaquin Valley (continued)	PM10	$14,000	5.8	Credits Valid in Fourth Quarter
	PM10	$14,000	7.1	
	PM10	$15,000	0.3	Credits Valid in First Quarter
	PM10	$15,000	0.7	
	PM10	$15,000	10.4	Credits Valid in Fourth Quarter
	PM10	$15,000	39.5	
	PM10	$16,360	9.1	Credits Valid in Fourth Quarter
	PM10	$16,500	0.5	Credits Valid in Fourth Quarter
	PM10	$18,800	2.2	
	PM10	$20,000	0.04	Credits Valid in First Quarter
	PM10	$20,000	0.2	Credits Valid in First Quarter
	PM10	$20,000	0.2	Credits Valid in First Quarter
	PM10	$20,000	0.3	Credits Valid in Third Quarter
	PM10	$20,000	0.4	Credits Valid in Fourth Quarter
	PM10	$20,000	0.6	
	PM10	$20,000	0.7	Credits Valid in First Quarter
	PM10	$20,000	0.7	Credits Valid in Fourth Quarter
	PM10	$20,000	0.9	Credits Valid in Fourth Quarter
	PM10	$20,000	1.3	Credits Valid in Fourth Quarter
	PM10	$20,000	1.4	Credits Valid in Fourth Quarter
	PM10	$20,000	1.5	Credits Valid in First Quarter
	PM10	$20,000	4.1	Credits Valid in Fourth Quarter
	PM10	$20,000	5.4	Credits Valid in 3rd & 4th Quarter
	PM10	$20,000	5.9	Credits Valid in Fourth Quarter
	PM10	$20,000	7.5	Credits Valid in 3rd & 4th Quarter
	PM10	$20,000	11.5	Credits Valid in Fourth Quarter
	PM10	$20,000	23.6	Credits Valid in 3rd & 4th Quarter
	PM10	$21,054	0.1	Credits Valid in Third Quarter
	PM10	$21,054	33.2	Credits Valid in Fourth Quarter
	PM10	$21,904	36.6	
	PM10	$25,000	0.9	
	PM10	$25,000	4.1	
	CO	$188	0.4	Credits Valid in Third Quarter
	CO	$188	0.4	Credits Valid in Fourth Quarter
	CO	$210	0.4	Credits Valid in First Quarter
	CO	$235	0.5	Credits Valid in Second Quarter
	CO	$912	35.4	
	CO	$2,000	0.04	Credits Valid in Fourth Quarter
	CO	$4,000	6.5	
	SOx	$15	0.04	Credits Valid in 3rd & 4th Quarter
	SOx	$19	0.04	Credits Valid in 1st & 2nd Quarter
	SOx	$2,000	0.04	Credits Valid in Fourth Quarter
	SOx	$2,500	676	
	SOx	$4,000	22.5	
	SOx	$5,500	20	

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
San Joaquin Valley continued	SOx	$5,500	34.1	
	SOx	$5,500	50.8	
	SOx	$6,000	3.8	Credits Valid in 2nd & 3rd Quarter
	SOx	$6,579	1.9	Credits Valid in Second Quarter
	SOx	$6,579	7.6	
	SOx	$7,476	22.5	
	SOx	$7,500	3.1	Credits Valid in 3rd & 4th Quarter
	SOx	$7,500	35	
	SOx	$7,500	50	
	SOx	$7,500	58	Credits Valid in 1st & 2nd Quarter
	SOx	$7,500	200	
	SOx	$8,000	7.5	Credits Valid in Second Quarter
	SOx	$8,000	20.6	
	SOx	$8,000	55	
	SOx	$8,200	6	
	SOx	$8,210	0.9	
San Luis Obispo County 1 Transaction	NOx	$8,975	1.62	7 Year Barter Transaction
Santa Barbara County 5 Transactions	NOx	$5,000	1.84	
	HC	$5,000	0.4	
	HC	$5,000	0.53	
	HC	$37,411	0.06	10 Year Mobile Source Credit
	SOx	$5,000	0.56	
Shasta County 8 Transactions	NOx	$12,000	7.6	
	NOx	$17,045	7.27	
	NOx	$25,000	8.74	
	HC	$7,000	9.7	
	HC	$7,680	1.77	
	HC	$20,000	25.1	
	PM10	$2,000	8.47	
	PM10	$2,500	5.7	
South Coast 213 Transactions	NOx	$10,959	12	
	NOx	$10,959	17.5	
	NOx	$24,658	1.1	
	NOx	$27,397	12.8	
	NOx	$27,945	0.7	
	NOx	$32,329	0.2	
	NOx	$32,329	0.7	
	NOx	$32,877	3.7	
	NOx	$34,247	12.8	
	NOx	$39,726	0.7	
	NOx	$50,411	3.1	

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast (continued)	NOx	$52,055	0.7	
	NOx	$52,055	0.9	
	NOx	$52,055	1.1	
	NOx	$52,055	8	
	NOx	$52,055	28.7	
	NOx	$53,375	5.5	
	NOx	$53,375	12	
	NOx	$54,795	3.1	
	NOx	$54,795	3.8	
	NOx	$54,795	3.8	
	NOx	$54,795	14.1	
	NOx	$54,795	14.1	
	NOx	$54,795	21	
	NOx	$54,795	21	
	NOx	$60,274	0.2	
	HC	$0	0.2	Asset Transfer Credits
	HC	$0	0.5	Asset Transfer Credits
	HC	$0	0.9	Asset Transfer Credits
	HC	$0	4.6	Asset Transfer Credits
	HC	$0	4.7	Asset Transfer Credits
	HC	$0	5.8	Asset Transfer Credits
	HC	$0	9.9	Asset Transfer Credits
	HC	$0	17	Asset Transfer Credits
	HC	$5,479	2.9	
	HC	$5,479	5.3	
	HC	$5,479	21.5	
	HC	$5,479	35.8	
	HC	$5,479	62.6	
	HC	$5,479	87.2	
	HC	$5,945	106.4	
	HC	$5,998	36.5	
	HC	$6,000	39.6	
	HC	$6,000	229	
	HC	$6,027	22.1	
	HC	$7,252	5.3	
	HC	$7,252	30.5	
	HC	$8,219	0.9	
	HC	$10,137	3.7	
	HC	$10,137	11.7	
	HC	$10,411	6.4	
	HC	$10,913	0.7	
	HC	$10,913	1.6	
	HC	$10,959	0.2	
	HC	$10,959	0.4	

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast	HC	$10,959	0.5	
(continued)	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.5	
	HC	$10,959	0.7	
	HC	$10,959	0.7	
	HC	$10,959	0.7	
	HC	$10,959	0.7	
	HC	$10,959	0.7	
	HC	$10,959	0.7	
	HC	$10,959	0.7	
	HC	$10,959	0.7	
	HC	$10,959	0.9	
	HC	$10,959	0.9	
	HC	$10,959	0.9	
	HC	$10,959	1.1	
	HC	$10,959	2.2	
	HC	$10,959	4	
	HC	$10,959	4.6	
	HC	$10,959	8	
	HC	$10,959	10.8	
	HC	$10,959	16.4	
	HC	$11,233	24.8	
	HC	$11,233	36.5	
	HC	$11,425	22.4	
	HC	$11,425	33.8	
	HC	$11,507	0.4	
	HC	$11,507	1.5	
	HC	$11,507	1.6	
	HC	$11,918	2	
	HC	$12,592	0.4	
	HC	$12,592	3.1	

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast (continued)	HC	$12,603	0.2	
	HC	$12,603	0.4	
	HC	$12,603	0.7	
	HC	$12,603	2	
	HC	$12,603	5.5	
	HC	$12,603	7.3	
	HC	$12,603	7.7	
	HC	$12,603	14.8	
	HC	$12,603	25.2	
	HC	$12,740	3.1	
	HC	$12,877	1.1	
	HC	$12,877	1.1	
	HC	$12,877	2.4	
	HC	$12,877	2.9	
	HC	$12,877	13.1	
	HC	$13,014	0.2	
	HC	$13,014	5.3	
	HC	$13,014	5.5	
	HC	$13,151	6.6	
	HC	$13,151	48.2	
	HC	$13,288	27.4	
	HC	$13,562	1.1	
	HC	$13,562	2.7	
	HC	$13,562	3.3	
	HC	$13,562	6.6	
	HC	$13,562	7.8	
	HC	$13,562	14.4	
	HC	$13,699	0.5	
	HC	$13,699	0.7	
	HC	$13,699	0.7	
	HC	$13,699	1.1	
	HC	$13,699	1.1	
	HC	$13,699	3.1	
	HC	$14,247	5.5	
	HC	$17,433	20.8	
	PM10		1.1	Asset Transfer Credits
	PM10		6.4	Asset Transfer Credits
	PM10	$13,151	1.8	
	PM10	$13,151	3.7	
	PM10	$35,616	0.2	
	PM10	$35,616	0.4	
	PM10	$42,466	0.5	
	PM10	$43,836	0.4	
	PM10	$43,836	0.5	
	PM10	$54,795	0.2	
	PM10	$54,795	0.4	
	PM10	$54,795	0.5	

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast (continued)	PM10	$54,795	1.3	
	PM10	$54,795	2	
	PM10	$57,534	2.4	
	PM10	$63,781	2.7	
	PM10	$63,781	2.7	
	PM10	$69,621	1.8	
	PM10	$69,621	1.8	
	PM10	$75,342	0.4	
	PM10	$75,342	0.5	
	PM10	$79,452	0.5	
	PM10	$82,192	0.2	
	PM10	$82,192	1.8	
	PM10	$87,671	0.4	
	PM10	$87,671	2.2	
	PM10	$90,959	0.2	
	PM10	$93,151	2	
	PM10	$98,630	0.4	
	PM10	$104,110	0.5	
	PM10	$106,849	1.6	
	PM10	$106,849	1.8	
	PM10	$109,589	0.4	
	PM10	$109,589	0.5	
	PM10	$109,589	0.5	
	PM10	$109,589	0.7	
	PM10	$109,589	0.9	
	PM10	$109,589	1.3	
	PM10	$109,589	1.8	
	PM10	$109,589	2	
	PM10	$109,589	4.2	
	PM10	$109,589	5.5	
	PM10	$109,589	8.4	
	PM10	$109,589	15.5	
	PM10	$113,425	8.2	
	PM10	$115,068	1.5	
	PM10	$120,548	0.4	
	PM10	$123,288	1.6	
	PM10	$126,027	0.4	
	PM10	$126,027	0.5	
	PM10	$126,027	0.9	
	CO		26.3	Asset Transfer Credits
	CO		37	Asset Transfer Credits
	CO	$5,479	3.1	
	CO	$5,479	7.1	
	CO	$5,512	18.8	
	CO	$8,219	0.5	
	CO	$9,863	2.4	
	CO	$10,959	52.7	

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast (continued)	CO	$21,682	18.3	
	CO	$29,452	10.2	
	CO	$35,616	2.6	
	CO	$38,356	0.9	
	CO	$40,000	36.5	
	CO	$43,836	0.5	
	CO	$43,836	1.1	
	CO	$43,836	7.3	
	CO	$43,836	9.5	
	CO	$43,836	26.3	
	CO	$43,836	31.9	
	CO	$43,836	41.1	
	CO	$43,836	56	
	SOx		9.9	Asset Transfer Credits
	SOx	$5,479	1.5	
	SOx	$7,252	3.3	
	SOx	$7,252	3.7	
	SOx	$8,219	3.3	
	SOx	$8,219	6.9	
	SOx	$10,411	0.2	
	SOx	$10,959	0.4	
	SOx	$23,288	0.2	
	SOx	$23,288	0.2	
	SOx	$32,877	0.9	
	SOx	$32,877	9.5	
	SOx	$38,356	2.6	
	SOx	$38,356	7.3	
	SOx	$42,740	1.5	
	SOx	$49,315	7.3	
	SOx	$82,192	1.5	
Tehama County 5 Transactions	NOx	$20,000	16.34	
	HC	$4,500	40	
	HC	$20,000	10.45	
	PM10	$28,000	37.97	
	SOx	$6,000	3.28	
Ventura County 10 Transactions	NOx	$2,700	2.22	1 Year Lease
	NOx	$3,333	0.06	
	NOx	$4,500	2.1	1 Year Lease
	NOx	$5,000	50	1 Year Lease
	NOx	$22,500	15.92	1.5 Year Lease
	HC	$1,750	7.7	6 Month Lease
	HC	$7,500	0.74	1.5 Year Lease
	HC	$10,000	0.1	
	HC	$13,750	5.44	
	PM10	$5,250	2.33	17 Month Lease

TABLE 2 (cont.)
2001 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
Yolo-Solano	NOx	$5,000	18.14	Agricultural Offset
11 Transactions	NOx	$22,000	1.8	
	NOx	$25,000	1	Credits Valid in 2nd, 3rd, & 4th Qtrs
	HC	$5,000	28.08	Agricultural Offset
	HC	$10,000	0.02	Credits Valid in 2nd, 3rd, & 4th Qtrs
	HC	$35,000	11.44	
	PM10	$10,000	5.97	Credits Valid in 2nd, 3rd, & 4th Qtrs
	PM10	$16,000	2.2	
	PM10	$30,000	73.11	Agricultural Offset
	SOx	$6,000	11.78	Agricultural Offset
	SOx	$10,000	0.01	Credits Valid in 2nd, 3rd, & 4th Qtrs

TABLE 3

Districts With No Offset Transactions to Report in 2001

Amador County Air Pollution Control District
Antelope Valley Air Pollution Control District
Calaveras County Air Pollution Control District
Colusa County Air Pollution Control District
El Dorado County Air Pollution Control District
Glenn County Air Pollution Control District
Great Basin Unified Air Pollution Control District
Kern County Air Pollution Control District
Lake County Air Quality Management District
Lassen County Air Pollution Control District
Mariposa County Air Pollution Control District
Mendocino County Air Pollution Control District
Modoc County Air Pollution Control District
North Coast Unified Air Quality Management District
Northern Sierra Air Quality Management District
Northern Sonoma County Air Pollution Control District
Siskiyou County Air Pollution Control District
Tuolumne County Air Pollution Control District

TABLE 4
2001 California
NOx Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$6,750	1.8	
	$8,800	57	
	$9,000	7.1	
	$14,000	1.3	
	$15,000	1.2	
	$15,000	28.5	
	$15,000	48.96	
	$25,000	0.02	
	$30,332	4.96	
	$35,000	21	
	$37,000	38.9	
	$38,000	1.03	
Butte County	$20,000	23.5	
Feather River	$18,240	25.45	Agricultural Offset
Mojave Desert	$3,049	27	
	$9,161	27	
	$9,975	113	
	$11,750	5	
	$13,650	150	
Monterey Bay Unified	$10,188	254.61	
Placer County	$32,079	10.1	
San Diego County	$104,000	2.71	
San Joaquin Valley	$774	1.9	
	$2,000	0.1	Credits Valid in Fourth Quarter
	$6,500	25.9	
	$12,650	0.90	Credits Valid in 2nd, 3rd, & 4th Qtr
	$12,650	2.4	Credits Valid in Third Quarter
	$12,650	4.5	
	$12,650	45.5	Credits Valid in 2nd, 3rd, & 4th Qtr
	$13,000	39.4	Credits Valid in 2nd, & 3rd Quarter
	$14,000	0.3	
	$16,000	0.5	Credits Valid in First Quarter
	$16,000	0.5	Credits Valid in Fourth Quarter
	$16,000	0.6	Credits Valid in 2nd, & 3rd Quarter
	$16,000	1.1	Credits Valid in 2nd, & 3rd Quarter
	$16,000	2.4	
	$18,000	10.1	Credits Valid in Third Quarter

TABLE 4 (cont.)
2001 California
NOx Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
San Joaquin Valley (continued)	$18,700	98.8	
	$18,700	159	
	$18,700	160.1	
	$18,700	385.7	
	$20,000	1	Credits Valid in Fourth Quarter
	$20,000	2.9	Credits Valid in Fourth Quarter
	$20,000	11.2	
	$20,000	11.3	Credits Valid in First Quarter
	$20,000	19.1	Credits Valid in Third Quarter
	$21,000	2.9	Credits Valid in First Quarter
	$21,000	5.8	Credits Valid in 3rd & Fourth Quarter
	$21,000	13.1	
	$21,000	13.1	
	$24,500	24.7	
	$25,000	2.8	
	$25,000	9.7	Credits Valid in First Quarter
	$25,000	45.2	
	$25,000	70.3	
	$25,000	80	
	$28,000	1.7	Credits Valid in Second Quarter
	$30,000	3.6	
	$30,000	25.9	
	$31,000	28	
	$35,000	4.9	Credits Valid in Fourth Quarter
	$35,000	10	Credits Valid in 1st, & 2nd Quarter
	$38,000	2	
	$38,000	14.3	
	$40,526	24.7	
	$48,000	3.3	
	$48,000	11.7	
	$48,588	1.6	Credits Valid in Third Quarter
	$53,749	1.8	Credits Valid in First Quarter
	$54,225	1.8	Credits Valid in Fourth Quarter
	$60,189	2	Credits Valid in Second Quarter
San Luis Obispo County	$8,975	1.62	7 Year barter Transaction
Santa Barbara County	$5,000	1.84	
Shasta County	$12,000	7.6	
	$17,045	7.27	
	$25,000	8.74	

TABLE 4 (cont.)
2001 California
NOx Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
South Coast	$10,959	12	
	$10,959	17.5	
	$24,658	1.1	
	$27,397	12.8	
	$27,945	0.7	
	$32,329	0.2	
	$32,329	0.7	
	$32,877	3.7	
	$34,247	12.8	
	$39,726	0.7	
	$50,411	3.1	
	$52,055	0.7	
	$52,055	0.9	
	$52,055	1.1	
	$52,055	8	
	$52,055	28.7	
	$53,375	5.5	
	$53,375	12	
	$54,795	3.1	
	$54,795	3.8	
	$54,795	3.8	
	$54,795	14.1	
	$54,795	14.1	
	$54,795	21	
	$54,795	21	
	$60,274	0.2	
Tehama County	$20,000	16.34	
Ventura County	$2,700	2.22	1 Year Lease
	$3,333	0.06	
	$4,500	2.1	1 Year Lease
	$5,000	50.0	1 Year Lease
	$22,500	15.92	1.5 Year Lease
Yolo-Solano	$5,000	18.14	Agricultural Offset
	$22,000	1.8	
	$25,000	1	Credits Valid in 2nd, 3rd, & 4th Qtrs

TABLE 5

2001 Summary Statistics For a Total of 111 NOx Transactions*

	$/ton	Tons
Total		2578.19
Average (mean)	$27,074	
Median	$22,000	
High	$104,000	
Low	$774	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 1

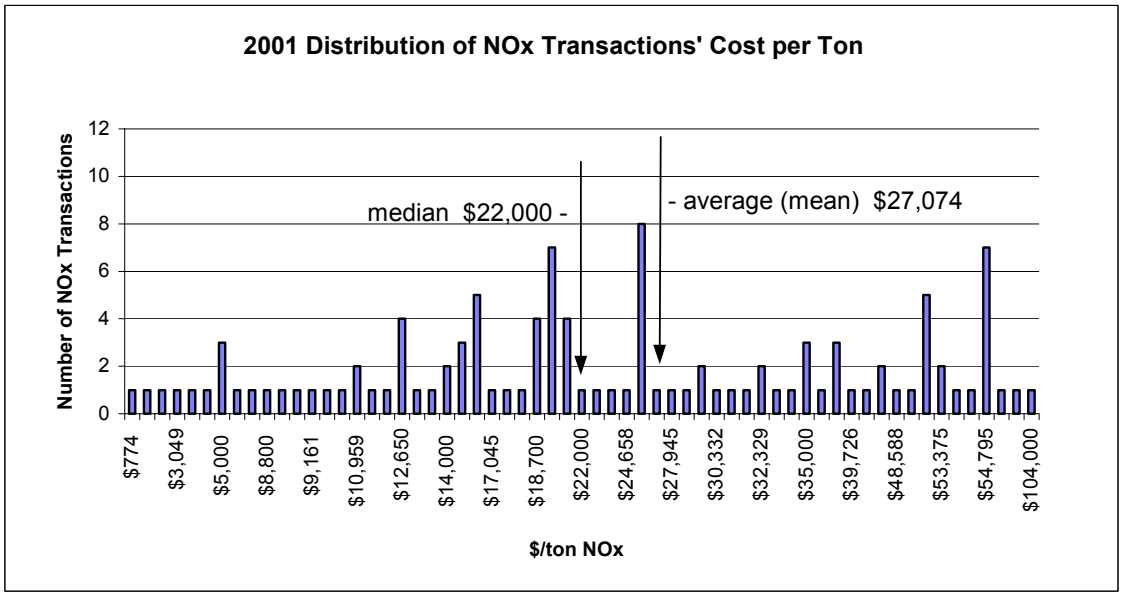


TABLE 6
2001 California
HC Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$5,875	45	
	$6,750	362	
	$8,800	88	
	$10,000	0.72	
	$10,000	0.72	
	$10,235	0.98	
	$14,000	5.86	
	$15,000	0.01	
	$20,000	50	
	$25,000	0.32	
	$30,332	2.88	
	$35,000	102.6	
	$37,040	0.14	
	$38,000	0.02	
	$38,000	1.03	
	$42,000	7.13	
	$42,500	11.6	
	$43,000	15.86	
Butte County	$20,000	55.6	
Feather River	$19,200	30.3	Agricultural Offset
Imperial County	$967	20.28	1Yr 3rd Quarter Ag Offset
	$1,000	1.25	1Yr 3rd Quarter Ag Offset
Mojave Desert	$3,049	3	
	$5,000	3	
	$6,300	148	
Monterey Bay Unified	$10,188	33.93	
Placer County	$32,079	67	
Sacramento Metropolitan	$20,000	3.15	
	$25,000	2.46	
	$35,000	50	
San Diego County	$1,613	0.62	1 Year Lease
	$2,138	1.86	1 Year Lease
	$66,000	15.2	
	$66,000	15.2	
San Joaquin Valley	$2,000	0.04	Credits Valid In Fourth Quarter
	$4,000	0.04	

TABLE 6 (cont.)
2001 California
HC Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
San Joaquin Valley (continued)	$4,000	19.5	
	$4,400	0.1	
	$6,000	2.7	
	$6,500	5.6	
	$6,500	20	
	$6,500	20	
	$6,500	107.5	
	$6,600	10.9	
	$6,969	0.1	Credits Valid in 3rd & 4th Quarter
	$7,000	4.2	
	$7,000	7.4	
	$7,000	7.9	
	$7,000	8.5	
	$7,500	0.3	
	$7,500	0.8	Credits Valid in First Quarter
	$7,500	8.7	
	$7,500	17.1	
	$7,500	26.7	
	$7,500	34.2	Credits Valid in 2nd & 3rd Quarter
	$7,500	129.7	
	$8,000	4.1	
	$8,000	9.5	
	$9,900	0.1	Credits Valid in Third Quarter
	$9,900	0.4	Credits Valid in Third Quarter
Santa Barbara County	$5,000	0.4	
	$5,000	0.53	
	$37,411	0.06	10 Year Mobile Source Credit
Shasta County	$7,000	9.7	
	$7,680	1.77	
	$20,000	25.1	
South Coast	$5,479	2.9	
	$5,479	5.3	
	$5,479	21.5	
	$5,479	35.8	
	$5,479	62.6	
	$5,479	87.2	
	$5,945	106.4	
	$5,998	36.5	
	$6,000	39.6	
	$6,000	229	
	$6,027	22.1	

TABLE 6 (cont.)
2001 California
HC Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
South Coast	$7,252	5.3	
(continued)	$7,252	30.5	
	$8,219	0.9	
	$10,137	3.7	
	$10,137	11.7	
	$10,411	6.4	
	$10,913	0.7	
	$10,913	1.6	
	$10,959	0.2	
	$10,959	0.4	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.5	
	$10,959	0.7	
	$10,959	0.7	
	$10,959	0.7	
	$10,959	0.7	
	$10,959	0.7	
	$10,959	0.7	
	$10,959	0.7	
	$10,959	0.7	
	$10,959	0.9	
	$10,959	0.9	
	$10,959	0.9	
	$10,959	1.1	
	$10,959	2.2	
	$10,959	4	
	$10,959	4.6	
	$10,959	8	

TABLE 6 (cont.)
2001 California
HC Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
South Coast (continued)	$10,959	10.8	
	$10,959	16.4	
	$11,233	24.8	
	$11,233	36.5	
	$11,425	22.4	
	$11,425	33.8	
	$11,507	0.4	
	$11,507	1.5	
	$11,507	1.6	
	$11,918	2	
	$12,592	0.4	
	$12,592	3.1	
	$12,603	0.2	
	$12,603	0.4	
	$12,603	0.7	
	$12,603	2	
	$12,603	5.5	
	$12,603	7.3	
	$12,603	7.7	
	$12,603	14.8	
	$12,603	25.2	
	$12,740	3.1	
	$12,877	1.1	
	$12,877	1.1	
	$12,877	2.4	
	$12,877	2.9	
	$12,877	13.1	
	$13,014	0.2	
	$13,014	5.3	
	$13,014	5.5	
	$13,151	6.6	
	$13,151	48.2	
	$13,288	27.4	
	$13,562	1.1	
	$13,562	2.7	
	$13,562	3.3	
	$13,562	6.6	
	$13,562	7.8	
	$13,562	14.4	
	$13,699	0.5	
	$13,699	0.7	
	$13,699	0.7	
	$13,699	1.1	
	$13,699	1.1	
	$13,699	3.1	

TABLE 6 (cont.)
2001 California
HC Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
South Coast (continued)	$14,247	5.5	
	$17,433	20.8	
Tehama County	$4,500	40	
	$20,000	10.45	
Ventura County	$1,750	7.7	
	$7,500	0.74	
	$10,000	0.1	
	$13,750	5.44	
Yolo-Solano	$5,000	28.08	Agricultural Offset
	$10,000	0.02	Credits Valid in 2nd, 3rd, & 4th Qtrs
	$35,000	11.44	

TABLE 7

2001 Summary Statistics For a Total of 178 HC Transactions*

	$/ton	Tons
Total		2,885.130
Average (mean)	$12,684	
Median	$10,959	
High	$66,000	
Low	$967	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 2

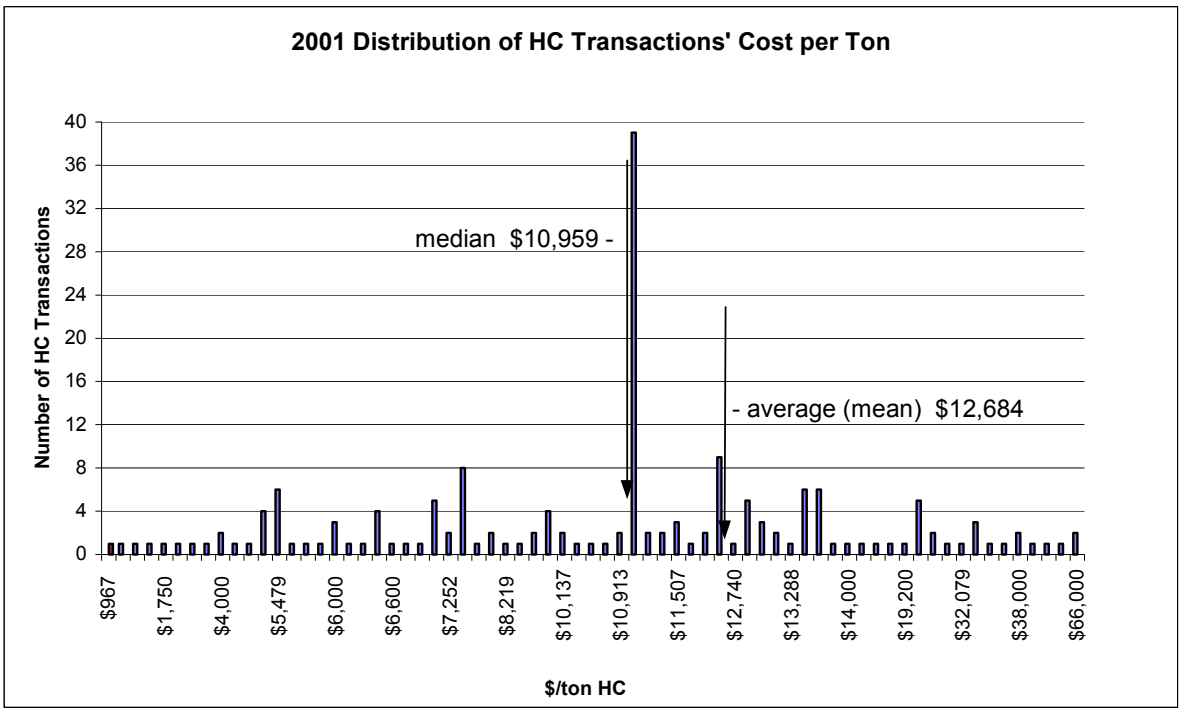


TABLE 8
2001 California
PM10 Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$8,800	10.00	
	$30,332	0.39	
Butte County	$28,000	112	
Feather River	$18,240	34.09	Agricultural Offset
Imperial County	$425	34.51	1 Year 3rd Quarter Ag Offset
Mojave Desert	$400	125	
	$3,049	14	
	$5,000	1	
Monterey Bay Unified	$10,188	213.948	
Placer County	$30,000	14.8	
	$30,000	28.4	
	$32,079	101.35	
Sacramento Metropolitan	$19,000	0.271	
	$19,000	2.804	
	$19,000	4.06	
	$25,000	1.88	
	$27,500	2.9	
San Joaquin Valley	$646	0.1	Credits Valid in 3rd & 4th Quarter
	$703	0.04	Credits Valid in First Quarter
	$798	0.04	Credits Valid in Second Quarter
	$4,000	2.2	
	$4,400	0.5	Credits Valid in Third Quarter
	$4,400	1.6	Credits Valid in Third Quarter
	$9,900	0.2	
	$14,000	0.04	Credits Valid in Third Quarter
	$14,000	5.8	Credits Valid in Fourth Quarter
	$14,000	7.1	
	$15,000	0.3	Credits Valid in First Quarter
	$15,000	0.7	
	$15,000	10.4	Credits Valid in Fourth Quarter
	$15,000	39.5	
	$16,360	9.1	Credits Valid in Fourth Quarter
	$16,500	0.5	Credits Valid in Fourth Quarter
	$18,800	2.2	

TABLE 8 (cont.)

2001 California

PM10 Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
San Joaquin Valley (continued)	$20,000	0.4	Credits Valid in First Quarter
	$20,000	0.2	Credits Valid in First Quarter
	$20,000	0.2	Credits Valid in First Quarter
	$20,000	0.3	Credits Valid in Third Quarter
	$20,000	0.4	Credits Valid in Fourth Quarter
	$20,000	0.6	
	$20,000	0.7	Credits Valid in First Quarter
	$20,000	0.7	Credits Valid in Fourth Quarter
	$20,000	0.9	Credits Valid in Fourth Quarter
	$20,000	1.3	Credits Valid in Fourth Quarter
	$20,000	1.4	Credits Valid in Fourth Quarter
	$20,000	1.5	Credits Valid in First Quarter
	$20,000	4.1	Credits Valid in Fourth Quarter
	$20,000	5.4	Credits Valid in 3rd & 4th Quarter
	$20,000	5.9	Credits Valid in Fourth Quarter
	$20,000	7.5	Credits Valid in 3rd & 4th Quarter
	$20,000	11.5	Credits Valid in Fourth Quarter
	$20,000	23.6	Credits Valid in 3rd & 4th Quarter
	$21,054	0.1	Credits Valid in Third Quarter
	$21,054	33.2	Credits Valid in Fourth Quarter
	$21,904	36.6	
	$25,000	0.9	
	$25,000	4.1	
Shasta County	$2,000	8.47	
	$2,500	5.7	
South Coast	$13,151	1.8	
	$13,151	3.7	
	$35,616	0.2	
	$35,616	0.4	
	$42,466	0.5	
	$43,836	0.4	
	$43,836	0.5	
	$54,795	0.2	
	$54,795	0.4	
	$54,795	0.5	
	$54,795	1.3	
	$54,795	2	
	$57,534	2.4	
	$63,781	2.7	
	$63,781	2.7	

TABLE 8 (cont.)

2001 California

PM10 Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
South Coast (continued)	$69,621	1.8	
	$69,621	1.8	
	$75,342	0.4	
	$75,342	0.5	
	$79,452	0.5	
	$82,192	0.2	
	$82,192	1.8	
	$87,671	0.4	
	$87,671	2.2	
	$90,959	0.2	
	$93,151	2	
	$98,630	0.4	
	$104,110	0.5	
	$106,849	1.6	
	$106,849	1.8	
	$109,589	0.4	
	$109,589	0.5	
	$109,589	0.5	
	$109,589	0.7	
	$109,589	0.9	
	$109,589	1.3	
	$109,589	1.8	
	$109,589	2	
	$109,589	4.2	
	$109,589	5.5	
	$109,589	8.4	
	$109,589	15.5	
	$113,425	8.2	
	$115,608	1.5	
	$120,548	0.4	
	$123,288	1.6	
	$126,027	0.4	
	$126,027	0.5	
	$126,027	0.9	
Tehama County	$28,000	37.97	
Ventura County	$5,250	2.33	17 Month Lease
Yolo-Solano	$10,000	5.97	Credits Valid in 2nd, 3rd & 4th Quarters
	$16,000	2.2	
	$30,000	73.11	Agricultural Offset

TABLE 9

2001 Summary Statistics For a Total of 113 PM10 Transactions*

	$/ton	Tons
Total		
Average (mean)	$46,148	
Median	$25,000	
High	$126,027	
Low	$400	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 3

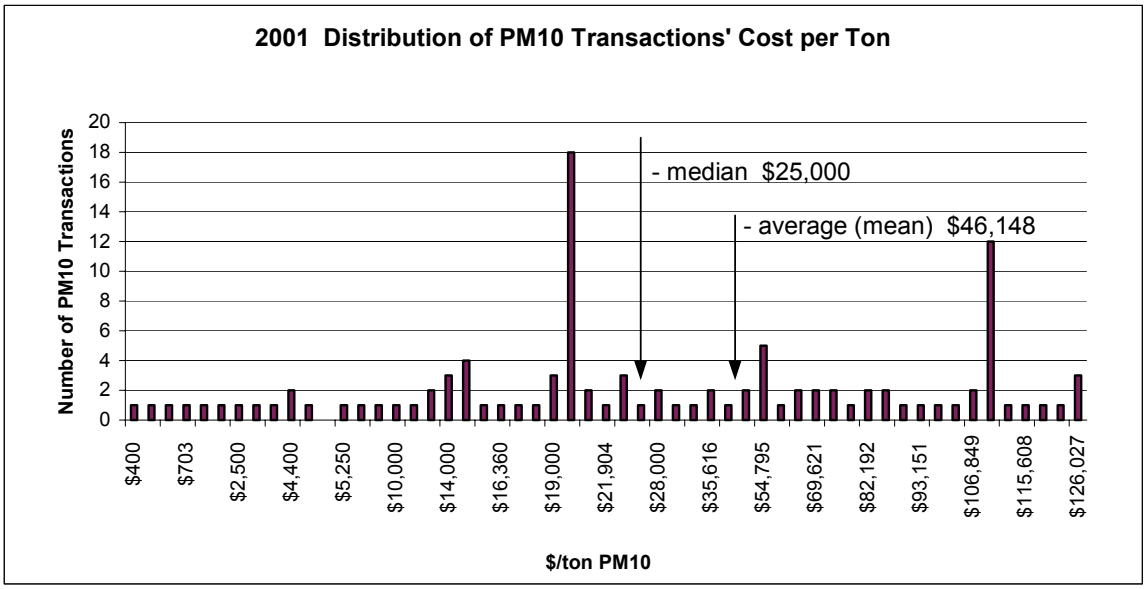


TABLE 10

2001 California

CO Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$45	4.88	
	$1,100	33	
Mojave Desert	$3,049	38	
Monterey Bay Unified	$10,188	443.34	
San Joaquin Valley	$188	0.4	Credits Valid in Third Quarter
	$188	0.4	Credits Valid in Fourth Quarter
	$210	0.4	Credits Valid in First Quarter
	$235	0.5	Credits Valid in Second Quarter
	$912	35.4	
	$2,000	0.04	Credits Valid in Fourth Quarter
	$4,000	6.5	
South Coast	$5,479	3.1	
	$5,479	7.1	
	$5,512	18.8	
	$8,219	0.5	
	$9,863	2.4	
	$10,959	52.7	
	$21,682	18.3	
	$29,452	10.2	
	$35,616	2.6	
	$38,356	0.9	
	$40,000	36.5	
	$43,836	0.5	
	$43,836	1.1	
	$43,836	7.3	
	$43,836	9.5	
	$43,836	26.3	
	$43,836	31.9	
	$43,836	41.1	
	$43,836	56	

TABLE 11

2001 Summary Statistics For a Total of 30 CO Transactions*

	$/ton	Tons
Total		889.66
Average (mean)	$19,447	
Median	$10,026	
High	$43,836	
Low	$45	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 4

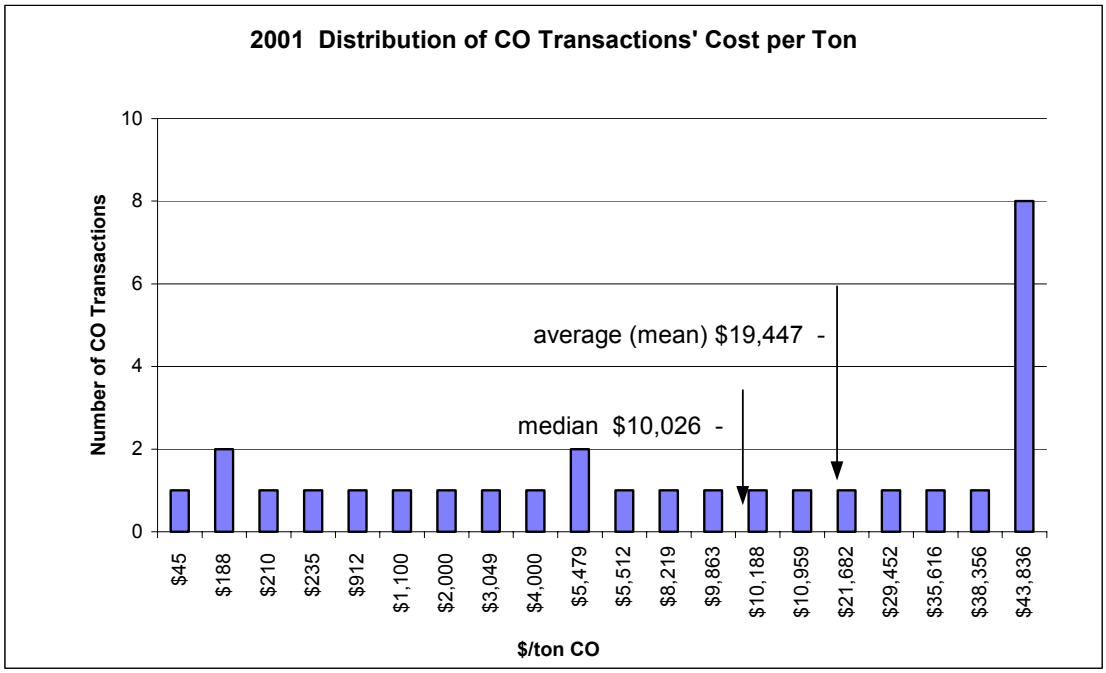


TABLE 12
2001 California
SOx Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$1,100	1	
	$5,067	0.03	
Feather River	$4,800	7.01	Agricultural Offset
Monterey Bay Unified	$10,188	35.73	
Placer County	$6,000	45.8	
Sacramento Metropolitan	$10,000	0.16	
San Joaquin Valley	$15	0.04	Credits Valid in 3rd & 4th Quarter
	19	0.04	Credits Valid in 1st & 2nd Quarter
	$2,000	0.04	Credits Valid in Fourth Quarter
	$2,500	676	
	$4,000	22.5	
	$5,500	20	
	$5,500	34.1	
	$5,500	50.8	
	$6,000	3.8	Credits Valid in 2nd & 3rd Quarter
	$6,579	1.9	Credits Valid in Second Quarter
	$6,579	7.6	
	$7,476	22.5	
	$7,500	3.1	Credits Valid in 3rd & 4th Quarter
	$7,500	35	
	$7,500	50	
	$7,500	58	Credits Valid in 1st & 2nd Quarter
	$7,500	200	
	$8,000	7.5	Credits Valid in Second Quarter
	$8,000	20.6	
	$8,000	55	
	$8,200	6	
	$8,210	0.9	
Santa Barbara County	$5,000	0.56	
South Coast	$5,479	1.5	
	$7,252	3.3	
	$7,252	3.7	

TABLE 12 (cont.)

2001 California
SOx Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	$/ton	Tons	Notes
South Coast (continued)	$8,219	3.3	
	$8,219	6.9	
	$10,411	0.2	
	$10,959	0.4	
	$23,288	0.2	
	$23,288	0.2	
	$32,877	0.9	
	$32,877	9.5	
	$38,356	2.6	
	$38,356	7.3	
	$42,740	1.5	
	$49,315	7.3	
	$82,192	1.5	
Tehama County	$6,000	3.28	
Yolo-Solano	$6,000	11.78	Agricultural Offset
	$10,000	0.01	Credits Valid in 2nd, 3rd, & 4th Qtrs

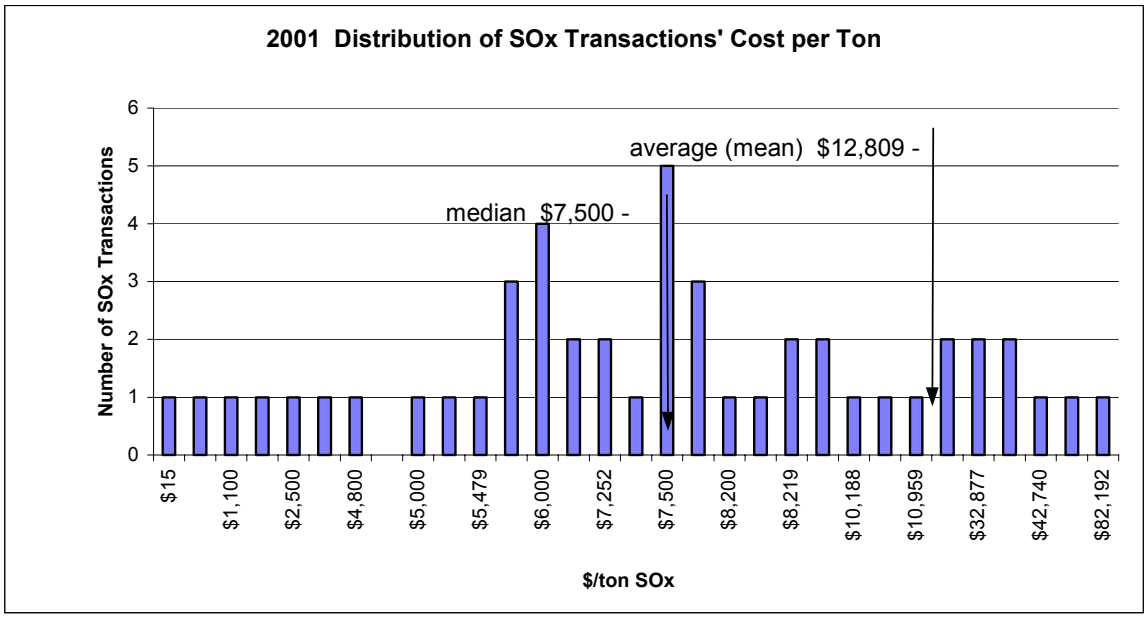
TABLE 13

2001 Summary Statistics For a Total of 48 SOx Transactions*

	$/ton	Tons
Average (mean)	$12,809	
Median	$7,500	
High	$82,192	
Low	$15	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 5



APPENDIX A: 2000 EMISSION REDUCTION CREDIT COSTS

DESCRIPTION OF 2000 DATA

Table 2 presents all of the reported pollutant transactions which took place in the State, listed by individual districts. There were a total of 341 transactions statewide in 2000. Five of these transactions are not reported here because the trades involved asset transfers for which there were no associated costs. These transactions are not included in Table 2 because they do not represent the final cost paid by an end-user of the offsets. Only credits sold to an end-user are reflected in the data presented.

The majority of transactions reported involved emission reductions from stationary sources. Seventeen of these were agricultural offset transactions, and there was only one mobile source emission reduction transaction during 2000. Of the total reported 336 transactions, 67 were NOx transactions, 172 were HC transactions, 45 were PM10 transactions, 20 were CO transactions, and 32 were SOx transactions. All the districts reported to ARB regardless of whether they had any offset transactions. Table 3 lists the districts that reported no transactions in 2000.

Tables 4, 6, 8, 10 and 12 present information by district for NOx, HC, PM10, CO and SOx respectively. Each of these tables presents the cost per ton of pollutant, the total tons of pollutant traded, and additional explanatory notes. The price paid per ton was calculated by dividing the total cost of the transaction by the total tons traded. There is no assumption made about the number of years of operation of the facility or how the payment schedule is arranged. All of these tables group transactions by district since credit markets, and therefore cost per ton, may vary from district to district. Districts are reported alphabetically and the districts' transactions are ordered by increasing cost per ton of pollutant.

Tables 5, 7, 9, 11 and 13 summarize the data of each preceding table. The summary tables include the average (mean), the median, and the high and low of the price paid per ton of pollutant. (The median is the number in the middle of a set of numbers, i.e., half of the numbers have values greater than the median and half of the numbers have values less than the median.) These tables exclude asset transfer, subsidiary, barter, and other non-monetary transactions where there were no associated costs to include in the calculations.

TABLE 2

2000 California

Emission Reduction Credit Transaction Costs By District

Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
Bay Area	NOx	$6,153	299	
Total of 66 Transactions	NOx	$6,500	6.5	
	NOx	$7,000	0.6	
	NOx	$7,000	14.56	
	NOx	$8,500	0.04	
	NOx	$8,800	6.42	
	NOx	$9,650	142.25	
	NOx	$9,650	468	
	NOx	$10,500	32.9	
	NOx	$10,995	1.17	
	NOx	$12,200	20.9	
	NOx	$12,245	1.310	
	NOx	$12,708	11.66	
	NOx	$12,708	32.24	
	NOx	$13,000	437.56	
	NOx	$15,000	48.96	
	HC	$5,000	50.2	
	HC	$5,448	5.14	
	HC	$6,153	5.3	
	HC	$6,600	23.72	
	HC	$7,000	1.6	
	HC	$7,000	43.82	
	HC	$7,000	94.34	
	HC	$8,000	1	
	HC	$8,000	2.1	
	HC	$8,000	7.08	
	HC	$8,000	14.97	
	HC	$8,000	85.86	
	HC	$8,520	5.87	
	HC	$8,800	0.91	
	HC	$8,800	52.27	
	HC	$9,650	2.7	
	HC	$10,995	0.39	
	HC	$12,000	10	
	HC	$12,245	0.1	
	HC	$12,708	0.2	
	HC	$12,708	0.46	
	HC	$13,000	125.88	
	HC	$15,000	17.37	
	HC	$15,500	49.9	
	PM10	$6,153	25	
	PM10	$6,500	12.33	

TABLE 2 (cont.)
2000 California

Emission Reduction Credit Transaction Costs By District

Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
Bay Area (continued)	PM10	$7,000	2.21	
	PM10	$8,800	7.64	
	PM10	$9,650	28	
	PM10	$10,995	6.44	
	PM10	$12,245	7.7	
	PM10	$12,708	0.67	
	PM10	$12,708	1.54	
	PM10	$13,000	209.9	
	CO	$1,000	15.66	
	CO	$7,000	9.8	
	CO	$8,800	1.65	
	CO	$9,650	33	
	CO	$9,650	70	
	CO	$12,708	1.13	
	CO	$12,708	2.61	
	CO	$13,000	450.6	
	SOx	$6,153	158.20	
	SOx	$8,800	0.03	
	SOx	$9,650	90	
	SOx	$9,650	465.27	
	SOx	$10,995	0.179	
	SOx	$12,708	0.04	
	SOx	$12,708	0.09	
	SOx	$13,000	321.9	
Butte County Total of 1 Transaction	HC	$1,053	40.84	
Imperial County Total of 15 Transactions	HC	$300	2.66	1Yr 4th Quarter Ag Offset
	HC	$300	3.01	1Yr 4th Quarter Ag Offset
	HC	$814	1.68	1Yr 3rd Quarter Ag Offset
	HC	$814	4.46	1Yr 3rd Quarter Ag Offset
	HC	$1,000	0.15	1Yr 3rd Quarter Ag Offset
	HC	$1,000	0.31	1Yr 3rd Quarter Ag Offset
	HC	$1,000	0.76	1Yr 3rd Quarter Ag Offset
	HC	$1,000	0.91	1Yr 3rd Quarter Ag Offset
	HC	$1,400	0.5	1Yr 3rd Quarter Ag Offset
	HC	$1,450	5.1	1Yr 3rd Quarter Ag Offset
	HC	$1,500	0.42	1Yr 4th Quarter Ag Offset
	HC	$1,500	0.69	1Yr 4th Quarter Ag Offset
	HC	$1,500	0.79	1Yr 4th Quarter Ag Offset
	HC	$1,500	1.77	1Yr 4th Quarter Ag Offset
	HC	$1,500	2.53	1Yr 4th Quarter Ag Offset

TABLE 2 (cont.)
2000 California

Emission Reduction Credit Transaction Costs By District

Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
Kern County	HC	$3,600	150	
Total of 2 Transactions	HC	$5,000	1.98	
Mojave Desert	PM10	$580	265	
Total of 1 Transaction				
Monterey Bay Unified	NOx	$2,894	52.62	
Total of 5 Transactions	HC	$2,894	1.97	
	PM10	$2,894	4.23	
	CO	$2,894	26.71	
	SOx	$2,894	0.85	
Placer County	HC	$25,000	135	
Total of 1 Transaction				
Sacramento Metropolitan	NOx	$6,160	12	
Total of 9 Transactions	NOx	$17,825	11.55	
	NOx	$20,000	5.04	
	PM10	$14,250	18	
	PM10	$17,825	2.91	
	PM10	$20,000	0.36	
	CO	$17,825	7.62	
	CO	$20,000	1.02	
	SOx	$17,825	0.035	
San Diego County	NOx	$29,494	17.5	
Total of 12 Transactions	NOx	$45,333	4.4	
	NOx	$72,000	1.3	
	HC	$1,000	15.2	1 Year Lease
	HC	$1,613	0.62	1 Year Lease
	HC	$1,613	0.62	1 Year Lease
	HC	$1,939	1.86	1 Year Lease
	HC	$2,415	1	1 Year Lease
	HC	$29,494	0.3	
	HC	$36,500	30.1	
	HC	$47,500	10.3	
	HC	$54,000	25	
San Joaquin Valley	NOx	$3,000	11.3	Credits Valid in Third Quarter
Total of 41 Transactions	NOx	$8,500	24.1	
	NOx	$11,000	23.3	
	NOx	$11,600	187.5	
	NOx	$12,500	12	Credits Valid in Third Quarter
	NOx	$12,500	133	

TABLE 2 (cont.)
2000 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
San Joaquin Valley (continued)	NOx	$13,000	4.5	Credits Valid in First Quarter
	NOx	$13,000	4.5	Credits Valid in Third Quarter
	NOx	$13,000	4.5	Credits Valid in Third Quarter
	NOx	$14,000	4.8	
	NOx	$14,000	24.1	
	NOx	$18,000	4	
	NOx	$18,000	21	Credits Valid in Fourth Quarter
	NOx	$18,000	111.7	
	NOx	$18,700	931	
	HC	$3,962	48.5	
	HC	$4,000	0.95	
	HC	$4,000	0.96	
	HC	$4,000	1.7	Credits Valid in Fourth Quarter
	HC	$4,000	4.8	
	HC	$4,000	9.8	
	HC	$6,000	1	
	HC	$6,200	28.3	
	HC	$6,600	42	
	HC	$7,500	7	
	HC	$7,500	23.2	
	HC	$7,500	190	
	HC	$16,000	1.5	Credits Valid in Fourth Quarter
	PM10	$8,250	4.8	
	PM10	$8,250	11.8	Credits Valid in 1st & 4th Quarter
	PM10	$12,600	23.8	Credits Valid in 1st, 2nd, & 4th Qtr
	PM10	$13,000	23.7	Credits Valid in Fourth Quarter
	PM10	$14,000	3.3	Credits Valid in Fourth Quarter
	PM10	$14,000	9.8	Credits Valid in 3rd & 4th Quarter
	PM10	$14,000	12.3	
	PM10	$14,000	18.7	Credits Valid in Fourth Quarter
	PM10	$16,500	0.5	Credits Valid in Fourth Quarter
	SOx	$5,000	1.9	Credits Valid in Second Quarter
	SOx	$5,200	1.4	
	SOX	$5,500	1.25	Credits Valid in Fourth Quarter
	SOx	$6,000	100	
Santa Barbara County Total of 7 Transactions	NOx	$5,000	7.2	
	NOx	$10,000	9	
	NOx	$40,083	0.4	10 Yr Mobile Source Offset Credit
	HC	$5,000	0.2	
	HC	$5,000	13.8	
	HC	$10,000	5	
	SOx	$5,000	3.8	

TABLE 2 (cont.)
2000 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast	NOx	$15,068	0.2	
Total of 168 Transactions	NOx	$15,068	0.2	
	NOx	$15,068	0.4	
	NOx	$15,068	0.4	
	NOx	$15,068	0.7	
	NOx	$15,068	0.7	
	NOx	$15,068	0.7	
	NOx	$15,068	0.7	
	NOx	$15,068	0.7	
	NOx	$15,068	0.7	
	NOx	$15,068	1.1	
	NOx	$15,068	3.8	
	NOx	$21,918	0.7	
	NOx	$27,397	3.1	
	NOx	$27,397	6.9	
	NOx	$27,397	21	
	NOx	$53,699	0.7	
	NOx	$54,795	3.8	
	NOx	$54,795	14.1	
	NOx	$54,795	21	
	NOx	$55,580	0.4	
	NOx	$55,580	0.4	
	NOx	$60,274	0.4	
	HC	$1,096	4.6	
	HC	$3,107	0.4	
	HC	$3,107	11	
	HC	$3,107	11	
	HC	$3,107	21.9	
	HC	$3,107	37	
	HC	$3,425	36.7	
	HC	$3,523	63.9	
	HC	$3,562	0.4	
	HC	$3,732	11.9	
	HC	$3,736	20.1	
	HC	$3,836	0.5	
	HC	$3,836	0.5	
	HC	$3,836	0.5	
	HC	$3,836	0.5	
	HC	$3,836	0.5	
	HC	$3,836	0.5	
	HC	$3,836	0.7	
	HC	$3,836	0.7	
	HC	$3,836	0.7	
	HC	$3,836	0.7	
	HC	$3,836	0.7	

TABLE 2 (cont.)
2000 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast continued	HC	$3,836	0.7	
	HC	$3,836	0.7	
	HC	$3,836	0.9	
	HC	$3,836	0.9	
	HC	$3,836	0.9	
	HC	$3,836	0.9	
	HC	$3,836	2.2	
	HC	$3,836	55.8	
	HC	$3,901	112.8	
	HC	$3,934	0.4	
	HC	$3,945	0.5	
	HC	$3,945	0.5	
	HC	$4,110	7.8	
	HC	$4,110	20.8	
	HC	$4,247	15.3	
	HC	$4,466	4.6	
	HC	$4,521	1.3	
	HC	$4,521	2.2	
	HC	$4,521	2.4	
	HC	$4,521	6.2	
	HC	$4,658	2.2	
	HC	$4,658	6.4	
	HC	$4,658	18.3	
	HC	$4,658	63.9	
	HC	$4,795	0.4	
	HC	$4,795	30.7	
	HC	$4,932	0.7	
	HC	$4,932	2.7	
	HC	$4,932	2.9	
	HC	$4,932	6.4	
	HC	$4,932	55.8	
	HC	$5,096	15.3	
	HC	$5,096	18.1	
	HC	$5,096	31.4	
	HC	$5,096	37	
	HC	$5,205	0.4	
	HC	$5,205	1.1	
	HC	$5,205	9.7	
	HC	$5,282	36.5	
	HC	$5,468	36.5	
	HC	$5,468	643.7	
	HC	$5,479	0.7	
	HC	$5,479	3.7	
	HC	$5,644	0.2	
	HC	$5,671	2.2	
	HC	$5,699	9.1	

TABLE 2 (cont.)
2000 California

Emission Reduction Credit Transaction Costs By District

Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast (continued)	HC	$5,699	18.3	
	HC	$5,907	30.5	
	HC	$6,027	2.7	
	HC	$6,027	6.4	
	HC	$6,027	8.2	
	HC	$6,301	4.6	
	HC	$6,301	12.4	
	HC	$6,301	36.7	
	HC	$6,312	14.4	
	HC	$6,575	0.9	
	HC	$6,575	1.1	
	HC	$6,575	7.3	
	HC	$6,849	0.7	
	HC	$6,849	63.9	
	HC	$7,123	0.9	
	HC	$7,123	0.9	
	HC	$7,123	7.8	
	HC	$7,534	6.4	
	HC	$9,041	6.4	
	HC	$9,315	0.9	
	HC	$9,315	5.5	
	HC	$9,315	48.2	
	HC	$10,274	6.6	
	HC	$10,411	6	
	HC	$10,411	8.6	
	HC	$10,685	12.8	
	HC	$10,877	9.1	
	HC	$10,913	5.5	
	HC	$10,959	12.4	
	HC	$11,507	13.9	
	HC	$12,055	2.7	
	HC	$12,603	1.1	
	HC	$12,603	1.1	
	PM10	$12,329	19.2	
	PM10	$15,890	0.9	
	PM10	$15,890	4.7	
	PM10	$16,438	0.2	
	PM10	$21,918	2	
	PM10	$23,014	0.2	
	PM10	$24,658	0.2	
	PM10	$24,658	0.2	
	PM10	$24,658	0.5	
	PM10	$24,658	0.5	
	PM10	$24,658	0.7	

TABLE 2 (cont.)
2000 California
Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	Pollutant	$/ton	Tons	Notes
South Coast (continued)	PM10	$26,658	19.2	
	PM10	$27,397	1.3	
	PM10	$27,397	2	
	PM10	$28,356	0.4	
	PM10	$30,137	0.7	
	PM10	$30,137	2.7	
	PM10	$34,247	0.2	
	PM10	$46,575	1.1	
	CO	$3,288	5.3	
	CO	$3,288	42.3	
	CO	$3,288	123.6	
	CO	$3,973	1.3	
	CO	$4,329	123.6	
	CO	$5,260	2.7	
	CO	$5,288	1.8	
	CO	$5,605	2.4	
	CO	$5,644	0.2	
	SOx	$9,041	9.1	
	SOx	$9,370	8.8	
	SOx	$9,370	20.8	
	SOx	$9,863	16.1	
	SOx	$10,411	0.5	
	SOx	$10,959	0.7	
	SOx	$10,959	1.6	
	SOx	$11,342	3.1	
	SOx	$14,247	69	
	SOx	$19,178	2.4	
	SOx	$19,178	3.1	
	SOx	$19,178	8.6	
	SOx	$20,137	2.6	
	SOx	$20,137	3.5	
	SOx	$20,137	11	
	SOx	$20,137	13.7	
Ventura County Total of 3 Transactions	NOx	$2,600	17	1 Year Lease
	NOx	$2,678	18.14	1 Year Lease
	HC	$2,600	7.7	1 Year Lease
Yolo-Solano Total of 5 Transactions	NOx	$6,814	18.14	
	HC	$2,584	28.08	
	PM10	$9,000	21.15	
	PM10	$9,000	218.36	
	SOx	$2,250	34.75	

TABLE 3

Districts With No Offset Transactions to Report in 2000

Amador County Air Pollution Control District
Antelope Valley Air Pollution Control District
Calaveras County Air Pollution Control District
Colusa County Air Pollution Control District
El Dorado County Air Pollution Control District
Feather River Air Quality Management District
Glenn County Air Pollution Control District
Great Basin Unified Air Pollution Control District
Lake County Air Quality Management District
Lassen County Air Pollution Control District
Mariposa County Air Pollution Control District
Mendocino County Air Pollution Control District
Modoc County Air Pollution Control District
North Coast Unified Air Quality Management District
Northern Sierra Air Quality Management District
Northern Sonoma County Air Pollution Control District
San Luis Obispo County Air Pollution Control District
Shasta County Air Pollution Control District
Siskiyou County Air Pollution Control District
Tehama County Air Pollution Control District
Tuolumne County Air Pollution Control District

TABLE 4

2000 California

NOx Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$6,153	299	
	$6,500	6.5	
	$7,000	0.6	
	$7,000	14.56	
	$8,500	0.04	
	$8,800	6.42	
	$9,650	142.25	
	$9,650	468	
	$10,500	32.9	
	$10,995	1.17	
	$12,200	20.9	
	$12,245	1.31	
	$12,708	11.66	
	$12,708	32.24	
	$13,000	437.56	
	$15,000	48.96	
Monterey Bay Unified	$2,894	52.62	
Sacramento Metropolitan	$6,160	12	
	$17,825	11.55	
	$20,000	5.04	
San Diego County	$29,494	17.5	
	$45,333	4.4	
	$72,000	1.3	
San Joaquin Valley	$3,000	11.3	Credits Valid in Third Quarter
	$8,500	24.1	
	$11,000	23.3	
	$11,600	187.50	
	$12,500	12	Credits Valid in Third Quarter
	$12,500	133.0	
	$13,000	4.5	Credits Valid in First Quarter
	$13,000	4.5	Credits Valid in Third Quarter
	$13,000	4.5	Credits Valid in Third Quarter
	$14,000	4.8	
	$14,000	24.1	
	$18,000	4	
	$18,000	21	Credits Valid in Fourth Quarter
	$18,000	111.7	
	$18,700	931	

TABLE 4 (cont.)
2000 California
NOx Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
Santa Barbara County	$5,000	7.2	
	$10,000	9	
	$40,083	0.4	10 Yr Mobile Source Offset Credit
South Coast	$15,068	0.2	
	$15,068	0.2	
	$15,068	0.4	
	$15,068	0.4	
	$15,068	0.7	
	$15,068	0.7	
	$15,068	0.7	
	$15,068	0.7	
	$15,068	0.7	
	$15,068	0.7	
	$15,068	1.1	
	$15,068	3.8	
	$21,918	0.7	
	$27,397	3.1	
	$27,397	6.9	
	$27,397	21	
	$53,699	0.7	
	$54,795	3.8	
	$54,795	14.1	
	$54,795	21	
	$55,580	0.4	
	$55,580	0.4	
	$60,274	0.4	
Ventura County	$2,600	17	
	$2,678	18.14	
Yolo-Solano	$6,814	18.14	

TABLE 5

2000 Summary Statistics For a Total of 67 NOx Transactions*

	$/ton	Tons
Total		3282.46
Average (mean)	$19,354	
Median	$15,000	
High	$72,000	
Low	$2,600	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 1

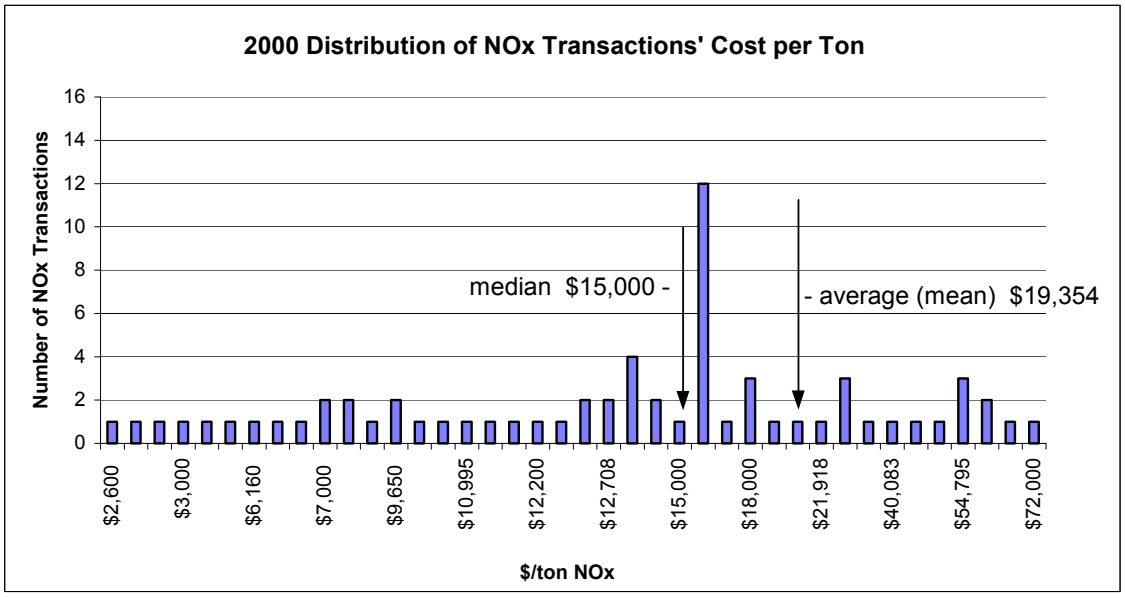


TABLE 6

2000 California

HC Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$5,000	50.2	
	$5,448	5.14	
	$6,153	5.30	
	$6,600	23.72	
	$7,000	1.6	
	$7,000	43.82	
	$7,000	94.34	
	$8,000	1	
	$8,000	2.1	
	$8,000	7.08	
	$8,000	14.97	
	$8,000	85.86	
	$8,520	5.87	
	$8,800	0.91	
	$8,800	52.27	
	$9,650	2.7	
	$10,995	0.39	
	$12,000	10	
	$12,245	0.1	
	$12,708	0.2	
	$12,708	0.46	
	$13,000	125.88	
	$15,000	17.37	
	$15,500	49.9	
Butte County	$1,053	40.84	
Imperial County	$300	2.66	1Yr 4th Quarter Ag Offset
	$300	3.01	1Yr 4th Quarter Ag Offset
	$814	1.68	1Yr 3rd Quarter Ag Offset
	$814	4.46	1Yr 3rd Quarter Ag Offset
	$1,000	0.15	1Yr 3rd Quarter Ag Offset
	$1,000	0.31	1Yr 3rd Quarter Ag Offset
	$1,000	0.76	1Yr 3rd Quarter Ag Offset
	$1,000	0.91	1Yr 3rd Quarter Ag Offset
	$1,400	0.5	1Yr 3rd Quarter Ag Offset
	$1,450	5.1	1Yr 3rd Quarter Ag Offset
	$1,500	0.42	1Yr 4th Quarter Ag Offset
	$1,500	0.69	1Yr 4th Quarter Ag Offset
	$1,500	0.79	1Yr 4th Quarter Ag Offset
	$1,500	1.77	1Yr 4th Quarter Ag Offset
	$1,500	2.53	1Yr 4th Quarter Ag Offset
Kern County	$3,600	150	
	$5,000	1.98	

TABLE 6 (cont.)
2000 California

HC Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
Monterey Bay Unified	$2,894	52.62	
Placer County	$25,000	135	
San Diego County	$1,000	15.2	1 Year Lease
	$1,613	0.62	1 Year Lease
	$1,613	0.62	1 Year Lease
	$1,939	1.86	1 Year Lease
	$2,415	1	1 Year Lease
	$29,494	0.3	
	$36,500	30.1	
	$47,500	10.3	
	$54,000	25	
San Joaquin Valley	$3,962	48.5	
	$4,000	0.95	
	$4,000	0.96	
	$4,000	1.7	Credits Valid in Fourth Quarter
	$4,000	4.8	
	$4,000	9.8	
	$6,000	1	
	$6,200	28.3	
	$6,600	42	
	$7,500	7	
	$7,500	23.2	
	$7,500	190	
	$16,000	1.5	Credits Valid in Fourth Quarter
Santa Barbara County	$5,000	0.2	
	$5,000	13.8	
	$10,000	5	
South Coast	$1,096	4.6	
	$3,107	0.4	
	$3,107	11	
	$3,107	11	
	$3,107	21.9	
	$3,107	37	
	$3,425	36.7	
	$3,523	63.9	
	$3,562	0.4	
	$3,732	11.9	
	$3,736	20.1	
	$3,836	0.5	

TABLE 6 (cont.)
2000 California
HC Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
South Coast (continued)	$3,836	0.5	
	$3,836	0.5	
	$3,836	0.5	
	$3,836	0.5	
	$3,836	0.5	
	$3,836	0.7	
	$3,836	0.7	
	$3,836	0.7	
	$3,836	0.7	
	$3,836	0.7	
	$3,836	0.7	
	$3,836	0.7	
	$3,836	0.9	
	$3,836	0.9	
	$3,836	0.9	
	$3,836	0.9	
	$3,836	2.2	
	$3,836	55.8	
	$3,901	112.8	
	$3,934	0.4	
	$3,945	0.5	
	$3,945	0.5	
	$4,110	7.8	
	$4,110	20.8	
	$4,247	15.3	
	$4,466	4.6	
	$4,521	1.3	
	$4,521	2.2	
	$4,521	2.4	
	$4,521	6.2	
	$4,658	2.2	
	$4,658	6.4	
	$4,658	18.3	
	$4,658	63.9	
	$4,795	0.4	
	$4,795	30.7	
	$4,932	0.7	
	$4,932	2.7	
	$4,932	2.9	
	$4,932	6.4	
	$4,932	55.8	
	$5,096	15.3	
	$5,096	18.1	
	$5,096	31.4	
	$5,096	37	

TABLE 6 (cont.)
2000 California
HC Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
South Coast (continued)	$5,205	0.4	
	$5,205	1.1	
	$5,205	9.7	
	$5,282	36.5	
	$5,468	36.5	
	$5,468	643.7	
	$5,479	0.7	
	$5,479	3.7	
	$5,644	0.2	
	$5,671	2.2	
	$5,699	9.1	
	$5,699	18.3	
	$5,907	30.5	
	$6,027	2.7	
	$6,027	6.4	
	$6,027	8.2	
	$6,301	4.6	
	$6,301	12.4	
	$6,301	36.7	
	$6,312	14.4	
	$6,575	0.9	
	$6,575	1.1	
	$6,575	7.3	
	$6,849	0.7	
	$6,849	63.9	
	$7,123	0.9	
	$7,123	0.9	
	$7,123	7.8	
	$7,534	6.4	
	$9,041	6.4	
	$9,315	0.9	
	$9,315	5.5	
	$9,315	48.2	
	$10,274	6.6	
	$10,411	6	
	$10,411	8.6	
	$10,685	12.8	
	$10,877	9.1	
	$10,913	5.5	
	$10,959	12.4	
	$11,507	13.9	
	$12,055	2.7	
	$12,603	1.1	
	$12,603	1.1	

TABLE 6 (cont.)
2000 California
HC Emission Reduction Credit Transaction Costs
Reported in Total Tons

District	$/ton	Tons	Notes
Ventura County	$2,600	17	
Yolo-Solano	$2,584	28.08	

TABLE 7

2000 Summary Statistics For a Total of 127 HC Transactions*

	$/ton	Tons
Total		3,380.250
Average (mean)	$6,567	
Median	$5,000	
High	$54,000	
Low	$300	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 2

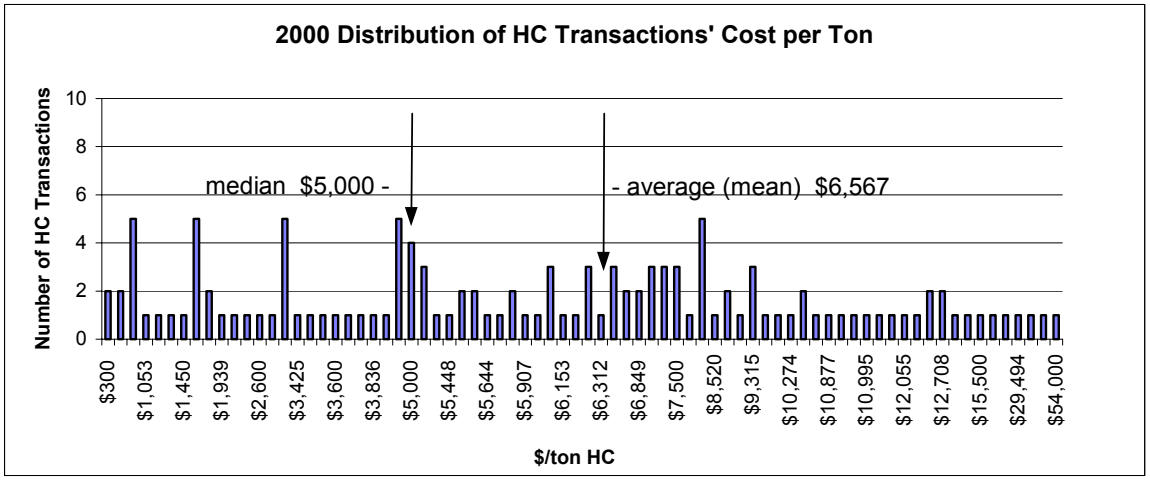


TABLE 8

2000 California

PM10 Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$6,153	25.00	
	$6,500	12.33	
	$7,000	2.21	
	$8,800	7.64	
	$9,650	28	
	$10,995	6.44	
	$12,245	7.7	
	$12,708	0.67	
	$12,708	1.54	
	$13,000	209.9	
Mojave Desert	$580	265	
Monterey Bay Unified	$2,894	4.23	
Sacramento Metropolitan	$14,250	18	
	$17,825	2.91	
	$20,000	0.36	
San Joaquin Valley	$8,250	4.8	
	$8,250	11.8	Credits Valid in 1st & 4th Quarter
	$12,600	23.8	Credits Valid in 1st, 2nd, & 4th Qtr
	$13,000	23.7	Credits Valid in Fourth Quarter
	$14,000	3.3	Credits Valid in Fourth Quarter
	$14,000	9.8	Credits Valid in 3rd & 4th Quarter
	$14,000	12.3	
	$14,000	18.7	Credits Valid in Fourth Quarter
	$16,500	0.5	Credits Valid in Fourth Quarter
South Coast	$12,329	19.2	
	$15,890	0.9	
	$15,890	4.7	
	$16,438	0.2	
	$21,918	2	
	$23,014	0.2	
	$24,658	0.2	
	$24,658	0.2	
	$24,658	0.5	
	$24,658	0.5	
	$24,658	0.7	
	$26,658	19.2	
	$27,397	1.3	

2000 California

PM10 Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
South Coast (continued)	$27,397	2	
	$28,356	0.4	
	$30,137	0.7	
	$30,137	2.7	
	$34,247	0.2	
	$46,575	1.1	
Yolo-Solano	$9,000	21.15	
	$9,000	218.36	

TABLE 9

2000 Summary Statistics For a Total of 45 PM10 Transactions*

	$/ton	Tons
Total		997.04
Average (mean)	$17,057	
Median	$14,000	
High	$46,575	
Low	$580	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 3

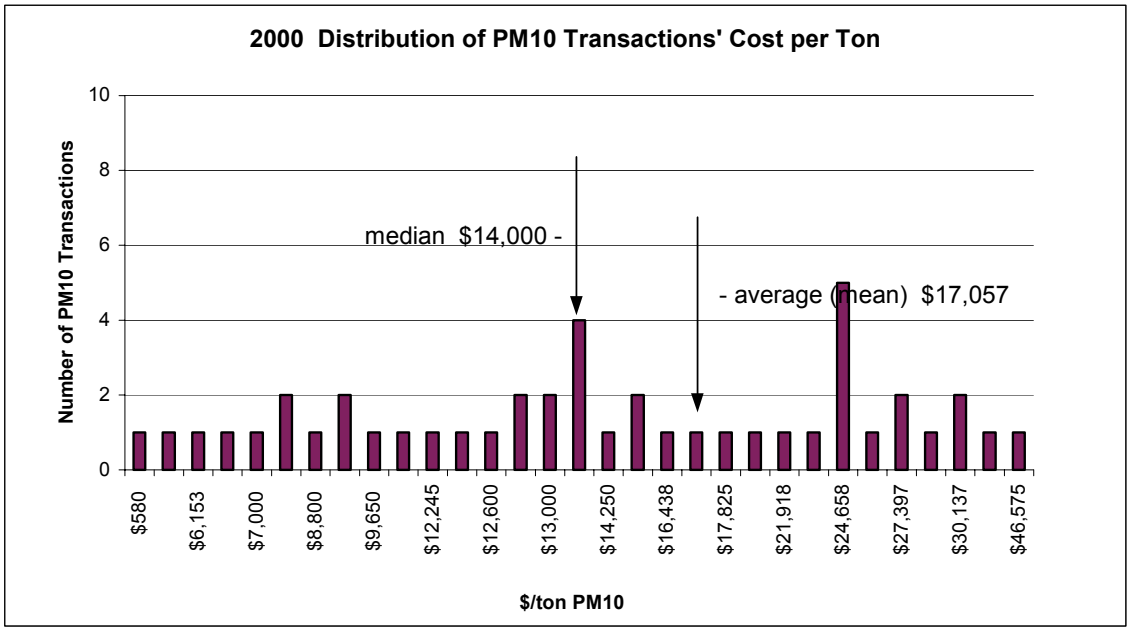


TABLE 10

2000 California

CO Emission Reduction Credit Transaction Costs

Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$1,000	15.66	
	$7,000	9.8	
	$8,800	1.65	
	$9,650	33	
	$9,650	70	
	$12,708	1.13	
	$12,708	2.61	
	$13,000	450.6	
Monterey Bay Unified	$2,894	26.71	
Sacramento Metropolitan	$17,825	7.62	
	$20,000	1.02	
South Coast	$3,288	5.3	
	$3,288	42.3	
	$3,288	123.6	
	$3,973	1.3	
	$4,329	123.6	
	$5,260	2.7	
	$5,288	1.8	
	$5,605	2.4	
	$5,644	0.2	

TABLE 11

2000 Summary Statistics For a Total of 20 CO Transactions*

	$/ton	Tons
Total		
Average (mean)	$7,760	
Median	$5,625	
High	$20,000	
Low	$1,000	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 4

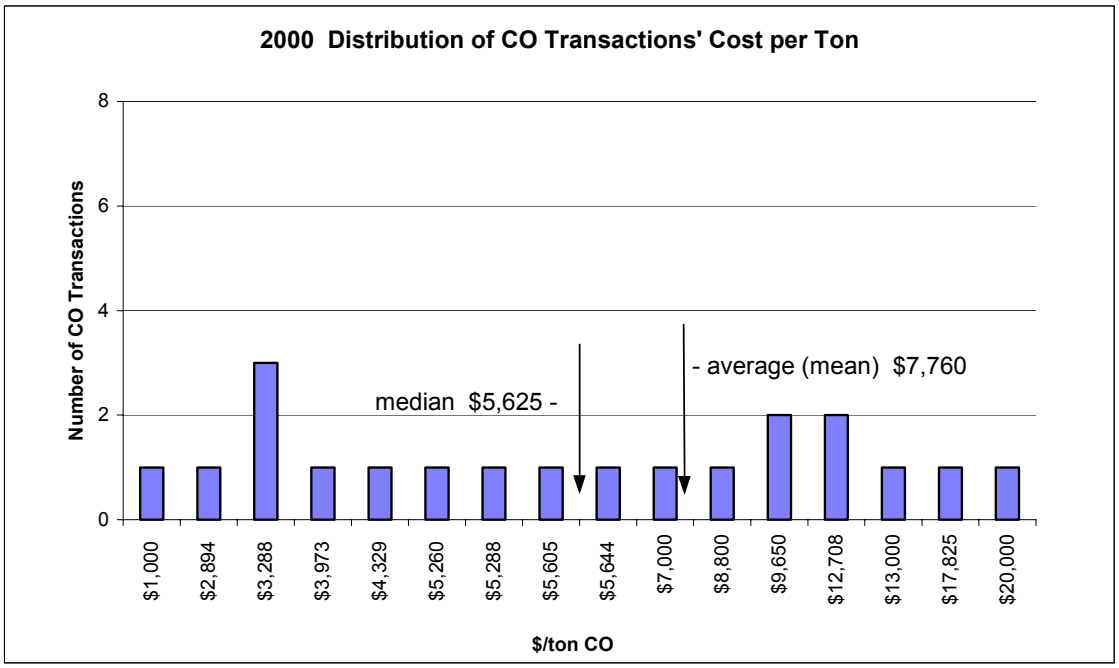


TABLE 12
2000 California
SOx Emission Reduction Credit Transaction Costs By District
Reported in Total Tons

District	$/ton	Tons	Notes
Bay Area	$6,153	158.2	
	$8,800	0.03	
	$9,650	90	
	$9,650	465.27	
	$10,995	0.179	
	$12,708	0.04	
	$12,708	0.09	
	$13,000	321.9	
Monterey Bay Unified	$2,894	0.85	
Sacramento Metropolitan	$17,825	0.035	
San Joaquin Valley	$5,000	1.9	
	$5,200	1.4	
	$5,500	1.25	
	$6,000	100	
Santa Barbara County	$5,000	3.8	
South Coast	$9,041	9.1	
	$9,370	8.8	
	$9,370	20.8	
	$9,863	16.1	
	$10,411	0.5	
	$10,959	0.7	
	$10,959	1.6	
	$11,342	3.1	
	$14,247	69	
	$19,178	2.4	
	$19,178	3.1	
	$19,178	8.6	
	$20,137	2.6	
	$20,137	3.5	
	$20,137	11	
	$20,137	13.7	
Yolo-Solano	$2,250	34.75	

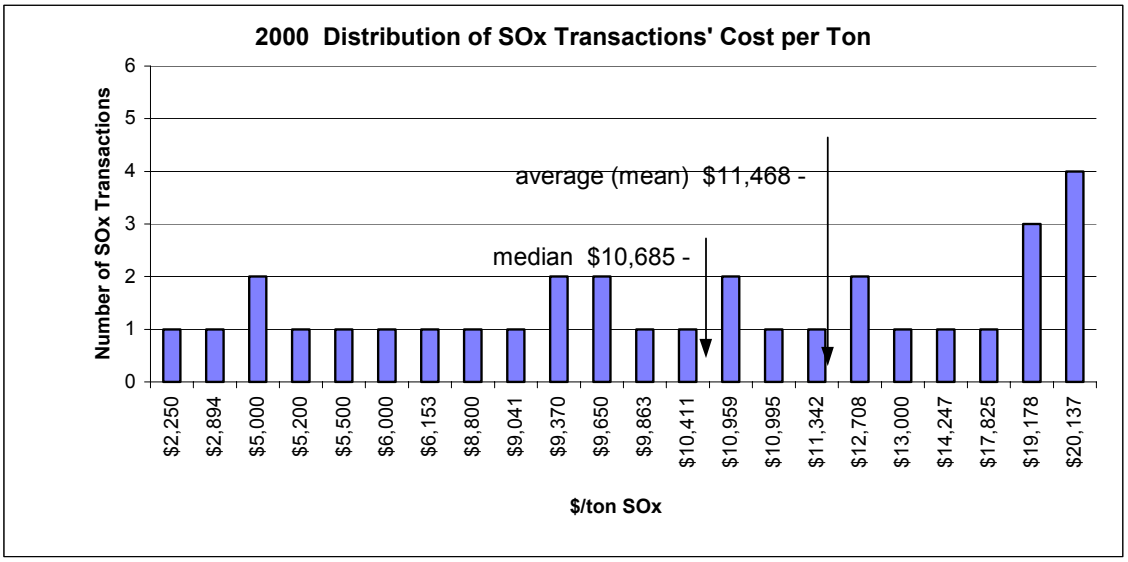
TABLE 13

2000 Summary Statistics For a Total of 32 SOx Transactions*

	$/ton	Tons
Average (mean)	$11,468	
Median	$10,685	
High	$20,137	
Low	$2,250	

* Excludes asset transfer, subsidiary, barter, and other non-monetary transactions with no cost data.

CHART 5



APPENDIX B:

H&SC: 40709 **District banking and Offset System**

H&SC: 40709.5 **Review of Emission Credit System**

Gov. Code: **Section 6254.7**

H&S; 40709 District Banking and Offset System

(a) Every district board shall establish by regulation a system by which all reductions in the emission of air contaminants that are to be used to offset certain future increases in the emission of air contaminants shall be banked prior to use to offset future increases in emissions. The system shall provide that only those reductions in the emission of air contaminants that are not otherwise required by any federal, state, or district law, rule, order, permit, or regulation shall be registered, certified, or otherwise approved by the district air pollution control officer before they may be banked and used to offset future increases in the emission of air contaminants. The system shall be subject to disapproval by the state board pursuant to Chapter 1 (commencing with Section 41500) of Part 4 within 60 days after adoption by the district.

(b) The system is not intended to recognize any preexisting right to emit air contaminants, but to provide a mechanism for districts to recognize the existence of reductions of air contaminants that can be used as offsets, and to provide greater certainty that the offsets shall be available for emitting industries.

(c) Notwithstanding subdivision (a), emissions reductions proposed to offset simultaneous emissions increases within the same stationary source need not be banked prior to use as offsets, if those reductions satisfy all criteria established by regulation pursuant to subdivision (a).

(d) This section does not apply to any district that is not required to prepare and submit a plan for attainment of state ambient air quality standards pursuant to Section 40911 if both of the following apply to the district:

(1) The district is not in a federal nonattainment area for any national ambient air quality standard unless the sole reason for the nonattainment is due to air pollutant transport.

(2) An owner or operator of a source or proposed source has not petitioned the district to establish a banking system.

(Amended by Stats. 2000, Ch. 729, Sec. 5.)

H&S; 40709.5 Review of Emission Credit Systems

40709.5. Any district which has established a system pursuant to Section 40709 by which reductions in emissions may be banked or otherwise credited to offset future increases in the emissions of air contaminants, or which utilize a calculation method which enables internal emission reductions to be credited against increases in emissions, and as of January 1, 1988, is within a federally designated nonattainment area for one or more air pollutants, shall develop and implement a program which, at a minimum, provides for all of the following:

(a) Identification and tracking of sources possessing emission credit balances accruing from the elimination or replacement of older, higher emitting equipment.

(b) Periodic analysis of the increases or decreases in emissions which occur when credits are used to bring new or modified emission sources into operation.

(c) Procedures for verifying the emission reductions credited to the bank or accruing to internal accounts, and for adjusting of credited emissions based on current district requirements.

(d) Periodic evaluation of the extent to which the system has contributed or detracted from the goal of allowing economic growth and modification of existing facilities, and has contributed to or detracted from the district's progress toward attainment of ambient air quality standards.

(e) Annual publication of the costs, in dollars per ton, of emission offsets purchased for new or modified emission sources, excluding information on the identity of any party involved in the offset transactions. This publication shall specify, for each offset purchase transaction, the year the offset transaction occurred, the amount of offsets purchased, by pollutant, and the total cost, by pollutant, of the offsets purchased. Each application to use emissions reductions banked in a system established pursuant to Section 40709 shall provide sufficient information, as determined by the district, to perform the cost analysis. The information shall be a public record.

(Amended by Stats. 1992, Ch. 612, Sec. 3. Effective January 1, 1993.)

Government Code Section 6254.7

(a) All information, analyses, plans, or specifications that disclose the nature, extent, quantity, or degree of air contaminants or other pollution which any article, machine, equipment, or other contrivance will produce, which any air pollution control district or air quality management district, or any other state or local agency or district, requires any applicant to provide before the applicant builds, erects, alters, replaces, operates, sells, rents, or uses the article, machine, equipment, or other contrivance, are public records.

(b) All air or other pollution monitoring data, including data compiled from stationary sources, are public records.

(c) All records of notices and orders directed to the owner of any building of violations of housing or building codes, ordinances, statutes, or regulations which constitute violations of standards provided in Section 1941.1 of the Civil Code, and records of subsequent action with respect to those notices and orders, are public records.

(d) Except as otherwise provided in subdivision (e) and Chapter 3 (commencing with Section 99150) of Part 65 of the Education Code, trade secrets are not public records under this section. "Trade secrets," as used in this section, may include, but are not limited to, any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it.

(e) Notwithstanding any other provision of law, all air pollution emission data, including those emission data which constitute trade secrets as defined in subdivision (d), are public records. Data used to calculate emission data are not emission data for the purposes of this subdivision and data which constitute trade secrets and which are used to calculate emission data are not public records.

(f) Data used to calculate the costs of obtaining emissions offsets are not public records. At the time that an air pollution control district or air quality management district issues a permit to construct to an applicant who is required to obtain offsets pursuant to district rules and regulations, data obtained from the applicant consisting of the year the offset transaction occurred, the amount of offsets purchased, by pollutant, and the total cost, by pollutant, of the offsets purchased is a public record. If an application is denied, the data shall not be a public record.

APPENDIX C: REPORTING FORM AND INSTRUCTIONS

Annual Emission Reduction Credit Transaction Report Instructions

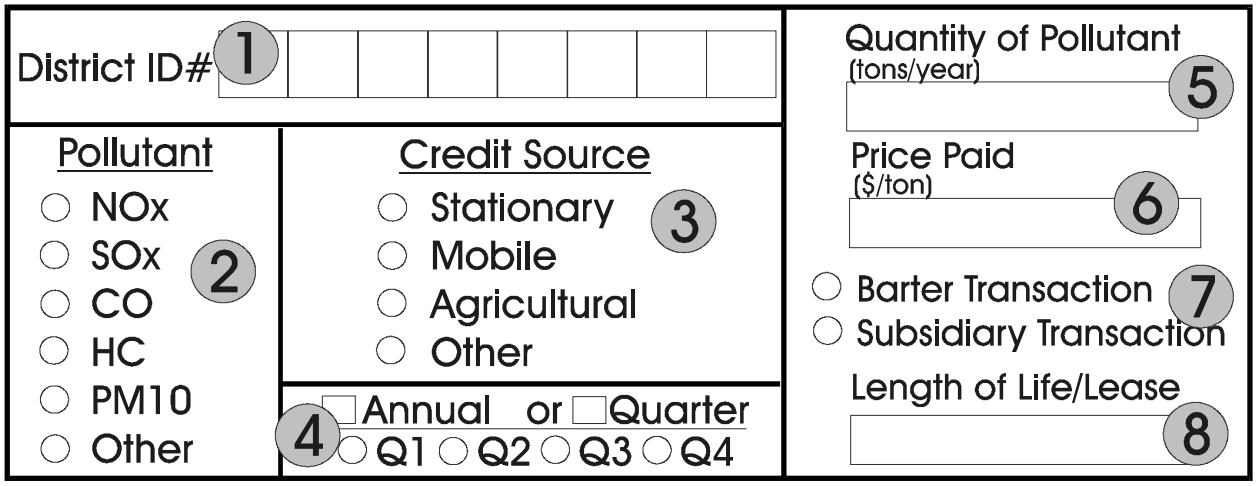
General:

1. **One transaction record per pollutant should be filled out for each transaction which takes place in the district between two or more parties.**

2. **Transactions should be reported in the year in which the final transaction occurs and money, or barter agreements are exchanged.**

3. **The annual report should be submitted to the Air Resources Board no later than January 31 of each year. The Air Resources Board will compile all data from the districts and publish a statewide report on the cost of offsets by the following April.**

4. **For cases of offset transactions which occur across district boundaries, transactions should be reported in the district in which the offsets are used. This is the district which will most likely have access to the transaction cost information necessary for reporting.**



District ID# | | | | | | | | |

Pollutant
- ○ NOx
- ○ SOx
- ○ CO
- ○ HC
- ○ PM10
- ○ Other

Credit Source
- ○ Stationary
- ○ Mobile
- ○ Agricultural
- ○ Other

☐ Annual or ☐ Quarter
○ Q1 ○ Q2 ○ Q3 ○ Q4

Quantity of Pollutant (tons/year)

Price Paid ($/ton)

○ Barter Transaction
○ Subsidiary Transaction

Length of Life/Lease

District ID# | | | | | | | | |

Pollutant
- ○ NOx
- ○ SOx
- ○ CO
- ○ HC
- ○ PM10
- ○ Other

Credit Source
- ○ Stationary
- ○ Mobile
- ○ Agricultural
- ○ Other

☐ Annual or ☐ Quarter
○ Q1 ○ Q2 ○ Q3 ○ Q4

Quantity of Pollutant (tons/year)

Price Paid ($/ton)

○ Barter Transaction
○ Subsidiary Transaction

Length of Life/Lease

District ID# | | | | | | | | |

Pollutant
- ○ NOx
- ○ SOx
- ○ CO
- ○ HC
- ○ PM10
- ○ Other

Credit Source
- ○ Stationary
- ○ Mobile
- ○ Agricultural
- ○ Other

☐ Annual or ☐ Quarter
○ Q1 ○ Q2 ○ Q3 ○ Q4

Quantity of Pollutant (tons/year)

Price Paid ($/ton)

○ Barter Transaction
○ Subsidiary Transaction

Length of Life/Lease

1. **<u>District ID #</u> The district ID # should be in the format:**

AAYYXXX

Where AA is a two letter district code (a list of district codes is attached), YY is a two digit year identifier (e.g. 95 for 1995), and XXX is a three-digit transaction number from 001 to 999.

This ID number will only be used to track the origin of data and for data validation. The assignment of a transaction number will ensure quality control of data transfer between the district and the Air Resources Board. Individual transactions will not be identified in Air Resources Board summary reports.

2. **<u>Pollutant</u> Please check one pollutant per transaction. If trade involved more than one pollutant, use separate transaction records for each pollutant traded. HC is equivalent to other acronyms used for hydrocarbons such as POC, ROC, ROG and VOC.**

3. **<u>Credit Source</u> Please indicate the source of emission reduction credits (ERC). This information will aid in the analysis of ERC prices paid. Stationary source credits typically do not have a finite useful life, whereas mobile and agricultural source ERCs have specific limiting conditions which limit useful life. It is important that a distinction be made between these kinds of offsets when analyzing the cost of offsets.**

4. **<u>Annual/Quarter:</u> Please indicate if credits are valid on an annual basis or quarterly. Additionally, if credits are valid quarterly, indicate which quarter they can be used for. This applies to seasonal credits or credits that are only valid in a specific quarter.**

5. **<u>Quantity of Pollutant</u> Regardless of district recording practices or the transaction agreement, please give the quantity of pollutant in tons/year.**

Example 1: For Single Quarter Transactions

$$1\frac{lb}{day} \cdot 1\frac{lb}{day} X 365\frac{days}{year} X \frac{1}{2000}\frac{ton}{lbs} \cdot 0.1825\frac{tons}{year}$$

Example 2: For Annual Transactions

$$1\frac{lb}{quarter} \cdot 1\frac{lb}{quarter} X 4\frac{quarters}{year} X \frac{1}{2000}\frac{ton}{lbs} \cdot 0.0020\frac{tons}{year}$$

Example 3: For Quarterly Credits Used to Offset Annual Sources

$$(Q_1 \% Q_2 \% Q_3 \% Q_4) \text{ ' } \frac{lbs}{year}$$ **Convert to tons per year**

6. **Price Paid** **This is the bottom line price paid by the purchaser to the owner of the credit. Government Code Section 6254.7 authorizes the district to obtain this information from applicants. Net present value should not be calculated for lease transactions. If price is given in dollars per pound, please convert to dollars per ton by multiplying by 2000 lb/ton.**

7. **Barter and Subsidiary Transactions** **If barter was involved and/or no money was exchanged for the offsets, the district should request the applicant to calculate a dollars/ton value for the credit transaction. Barters can include one company (A) placing controls on another (B) to generate credits. The price paid should then reflect what company A paid to install equipment on company B and any additional fees paid to company B as part of the agreement. The price paid for offsets should be the value of the offset at the time of the transaction.**

   If transaction occurred between two subsidiaries of the same parent company check the subsidiary transaction box. This also applies to transactions which occur between agencies of the same governmental system for example between two agencies of the county. Since the price charged in barter and subsidiary transactions may not reflect the market value of credits, this information will be helpful in analyzing prices paid for credits.

8. **Length of Use/Lease** **Please indicate the valid length of credit life for this transaction. This applies to stationary source credits that are sold as a limited life lease agreement, or to other types of credit which have a finite useful life. If no limit is placed on the useful life, leave this box blank.**

DISTRICT TWO-LETTER CODES

AM	**Amador County APCD**
AV	**Antelope Valley APCD**
BA	**Bay Area AQMD**
BT	**Butte County APCD**
CA	**Calaveras County APCD**
CO	**Colusa County APCD**
ED	**El Dorado County APCD**
FR	**Feather River AQMD**
GL	**Glenn County APCD**
GB	**Great Basin Unified APCD**
IM	**Imperial County APCD**
KE	**Kern County APCD**
LA	**Lake County AQMD**
LS	**Lassen County APCD**
MA	**Mariposa County APCD**
ME	**Mendocino County AQMD**
MO	**Modoc County APCD**
MD	**Mojave Desert AQMD**
MB	**Monterey Bay Unified APCD**
NC	**North Coast Unified AQMD**
NO	**Northern Sierra AQMD**
NS	**Northern Sonoma County APCD**
PL	**Placer County APCD**
SM	**Sacramento Metropolitan AQMD**
SD	**San Diego County APCD**

SJ	**San Joaquin Valley Unified APCD**
SL	**San Luis Obispo County APCD**
SB	**Santa Barbara County APCD**
SH	**Shasta County AQMD**
SI	**Siskiyou County APCD**
SC	**South Coast AQMD**
TE	**Tehama County APCD**
TU	**Tuolumne County APCD**
VE	**Ventura County APCD**
YS	**Yolo-Solano AQMD**