Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL USA 32653
Telephone (352) 336-5600
Fax (352) 336-6603
www.golder.com

April 11, 2007

063-7645

Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Northwest District
Tallahassee, Florida 32399-2400

Attention: Jeffery F. Koerner, P.E., Air Permitting North

RE: SMURFIT-STONE CONTAINER ENTERPRISES, INC.
PROJECT NO. 0050009-028-AC (PSD-FL-388)
PETCOKE FIRING IN LIME KILN
REQUEST FOR ADDITIONAL INFORMATION

Dear Mr. Koerner:

Smurfit-Stone Container Enterprises, Inc. (SSCE) and Golder Associates Inc. have received the Department's request for additional information (RAI) dated March 23, 2007, regarding the proposed petroleum coke (petcoke) firing in the Lime Kiln at the Panama City Mill. Each of the Department's requests is answered below, in the same order as they appear in the RAI letter. Note that the RAI indicated the project number as 0590005-028-AC. We believe this should instead be project no. 0050009-028-AC.

Alternate Fuel Blends – Petroleum Coke and natural Gas or Fuel Oil

Comment 1. **The application requests authorization to fire up to 90% petroleum coke with a maximum sulfur content of 7% as a substitute for fuel oil and natural gas. Please provide the "as-fired" specifications for petcoke including the ultimate and proximate analyses as well as metal concentrations.**

Response: Provided below is an ultimate/proximate analysis and metals analysis for a representative petcoke sample.

	As Received	Dry Basis
Moisture	6.84	----.---
Ash	0.47	0.50
Sulfur	6.90	7.41
Carbon	80.79	86.72
Hydrogen	3.17	3.40
Nitrogen	1.36	1.46
Oxygen by Diff	0.47	0.51

Other Analysis	Dry Basis (ppm):
Vanadium	1,402
Calcium	185
Iron	269
Nickel	258
Silicon	535
Sodium	69

NO_x Controls

Comment 2. **The vendor estimated NO_x emissions for a blend of 80% petroleum coke / 20% natural gas at 105 – 125 ppm. Please provide data to support the vendor estimate, such as actual stack test data for the burners firing petcoke blends.**

Response: Unfortunately, Coen could not locate copies of the actual stack test data from units firing the petcoke blends. However, Coen states the following in regards to the Department's comments:

> "The numbers have been provided in the proposal as estimates based on burner calculations. Please note, the NO_x emissions listed in the proposal are based on lime recovery kilns. In lime kilns used to make cements, typically natural gas has the highest NO_x emissions (as listed in the Arcadis report) with a very high flame temperature. With lime recovery kilns requiring lower flame temperatures, fuel nitrogen from oil contributes additional NO_x when compared to natural gas combustion. Hence, NO_x emissions for oil is greater than natural gas."

Comment 3. **The vendor estimated NO_x emissions for a blend of 80% petroleum coke / 20% natural gas at 165 – 185 ppm. Please provide data to support the vendor estimate, such as actual stack test data for the burners firing petcoke blends. The Department is aware of a report by Arcadis[1] stating, "For example, in the kiln, natural gas combustion with a high flame temperature and low fuel nitrogen generates a larger quantity of NO_x than does oil or coal, which have higher fuel nitrogen but which burn with lower flame temperatures." If this is true, then it would appear that NO_x emissions would decrease with the use of oil. Please comment.**

Response: Refer to response to Comment 2 above. Also, Arcadis is quoting AP-42, Section 11.6 for Lime Kilns. However, Coen states in their proposal, page 5 of 13, in regards to their Dual Zone gas gun: "In addition recirculation is produced by the spinner bringing in flue gases (internal flue gas generator) and since the heat is transferred efficiently the flame cools down, thereby reducing the thermal NO_x produced from our burner as compared to any other make burner." Therefore, it is the unique design of the Coen burner that produces lower NO_x emissions when burning natural gas compared to fuel oil.

Comment 4. **The PSD report indicates that the exhaust from the lime kiln is between 1600°F and 2700°F, which may provide a reasonable temperature window for SNCR (1600°F to 2000°F). However, the application states that load fluctuations and difficulties in maintaining the proper temperature window would preclude using a SNCR system for control of NO_x emissions.**

a. **Please explain why there is such a wide variation in loads for the lime kiln as suggested in the application. Describe the lime kiln operation and document the magnitude and frequency of the load fluctuations by providing hourly production rates for 2006.**

b. **The Department has discussed load variations with Fuel-Tech, an SNCR vendor. From these discussions, it appears that load fluctuations are simply another design consideration. In addition, new cement kilns are being permitted with SNCR systems that do not involve a complicated injection grid for ammonia or urea. Please provide data on the lime kiln**

[1] "Environmental Considerations and Permitting, use of Petroleum Coke as Supplemental Fuel in Lime Kilns", Arcadis report prepared for DTE Energy Services, December 2003.

exhaust temperature downstream of the lime kiln and upstream of the venturi scrubber. Provide dimensions and/or drawings of the exhaust duct from the lime kiln through the venturi scrubber. Indicate if any obstructions exist that would prohibit modifications to the existing duct to accommodate ammonia injection. Please provide a vendor quotation for an SNCR system.

Response: On page 5-4 of the PSD application, it is stated that "A lime kiln typically operates in the 1,600 to 2,700 °F range." This is a general statement, and not specific to SSCE's Lime Kiln. On page 5-5 in the discussion of SNCR, the application states, "The correct temperature window of 1,600°F to 2,100°F occurs inside the rotating body of the kiln. Locating injection nozzles in such an area is not technically feasible at the present time and has not been attempted on any lime kiln." SSCE measures flue gas temperature at two locations in the kiln: at the hot end, where the burner is located, and at the cold end where the combustion gases exit the kiln and where the lime mud enters the kiln.

Hourly hot end temperature data for the first quarter of 2007 is shown graphically in Figure 1 attached. The data reveal that the temperature at the hot end averages about 2,500°F, and rarely falls below 2,200°F.. Hourly cold end temperature data for the first quarter of 2007 is shown in Figure 2. The data shows that the temperature at the cold end is normally between 550°F and 600°F. Therefore, as stated in the application, the correct temperature window of 1,600°F to 2,100°F occurs inside the rotating body of the kiln

SSCE also examined Lime Kiln load variation. Hourly Lime Kiln throughput is shown graphically in Figures 3, 4, and 5 for the periods January, June, and December 2006. The data reveal significant load variations. These data are typical of year-around operation. The primary reason for the load variations is that the kiln is part of a larger production process and needs to be able to respond to fluctuations in that process due to limited storage capacity in the liquor cycle. The demands of the production process vary due to a number of reasons. These include: different product mixes, scheduled downtime, and unscheduled downtime. In addition, the kiln needs to have "catch up" capacity should it need to be down.

For all of the above reasons, SNCR is not technically feasible for application to the SSCE Lime Kiln. To confirm the correctness of this conclusion, FuelTech Inc. was contacted and their combustion survey form completed for the Lime Kiln. Additional information regarding the dimensions of the Lime Kiln and the temperature information was also provided. FuelTech's response was as follows:

Fuel Tech has reviewed the information you provided for the above referenced lime kiln application, but it does not appear feasible to release the chemical within the appropriate temperature window for the SNCR process.

The kiln is 375 ft long with a diameter of 12.5 ft. The hot end of the kiln is at 2,400°F and the cold end of the kiln is at 600°F. The appropriate temperature window is somewhere in between, but since the kiln is rotating we can only inject from either end. The baseline NO_x is between 165 and 185 ppm. In order for FTI to be able to produce any reduction in NO_x emissions, the chemical would have to be released at a temperature of 1950°F or below, assuming low CO. If we assume a linear temperature drop across the kiln, that would mean that the temperature gradient is 4.8°F per foot (a temperature drop of 1800°F – from 2400°F to 600°F – over a length of 375 feet). If we inject through the end at 2400°F, need to release at 1950°F, and use the gradient of 4.8°F/ft, the urea would have to travel 94 feet into the kiln before it reaches the temperature of interest. If we inject through the cold end at 600°F, the urea would have to travel over 200 feet to reach a minimum temperature of 1600°F where some NO_x reduction could take place. We do not believe that either approach is realistic.

This statement substantiates that SNCR is not technically feasible for the SSCE Lime Kiln. A copy of the combustion survey form and the email from FuelTech are provided in Attachment A.

Comment 5. **Please submit the 2006 NO_x emissions stack test report, including emissions data, operating conditions, etc.**

Response: The pertinent pages from the 2006 stack test report are provided in Attachment B.

SO_2 Controls

Comment 6. **The application estimates 80% SO_2 reduction in the lime kiln and 90% reduction in the wet scrubber for an overall reduction of approximately 98%. The Arcadis report[1] suggests an SO_2 reduction for the lime kiln alone may be as high as 99.5%. From historical permit records, this lime kiln is more than 300 feet in length, which would provide intimate contact with the exhaust gas and lime. Please provide data to support the low expected SO_2 reductions.**

Response: For purposes of the permit application, emission estimates must necessarily be conservative since an emission limit may be imposed which must be met on a continuous basis. Actual SO_2 reductions will likely be greater than the application estimates. However, the actual SO_2 reduction can not yet be quantified, until the project is implemented and emission testing is conducted.

Comment 7. **The application indicates that the venturi scrubber uses fresh water as the scrubber media and combined with the highly alkaline lime dust that exits the lime kiln acts as a virtual flue gas desulfurization system. Please discuss the option of adding lime to the scrubber media to increase SO_2 removal efficacy.**

Response: The pH of the scrubber water, as measured by SSCE, is already approximately 9, due to the lime dust captured in the venturi scrubber. Adding additional lime would not result in any higher pH, or any greater SO_2 control.

Comment 8. **Please submit the SO_2 stack test reports from 2002 and 2006 including emissions data, operating conditions, etc.**

Response: The pertinent pages from the 2002 and 2006 stack test reports are attached in Attachment B.

Air Quality Modeling Analysis

Comment 9. **Please revise Table 6-5 to show that the short-term SO_2 emission rates for Combination Boilers 3 and 4 represent an *actual* decrease in emissions and not an increase that should be included in the SO_2 PSD Class I and II significant impact analyses. From the table, it appears that you are requesting a new combined SO_2 emissions limit for these units. Please specify the new enforceable permit limit that formed the basis for the SO_2 air quality analysis.**

Response: The emissions shown in Table 6-5 were used in the ambient air quality standard (AAQS) analysis and PSD Class II increment analysis, and are not related to the significant impact analysis. The emissions used in the significant impact analysis are shown in Table 6-3. These emissions did not include the reductions from the Nos. 3 and 4 Combination Boilers. The emissions

used in the significant impact analysis did not include any emission reductions due to the Nos. 3 and 4 Combination Boilers because the Recovery Boilers building enclosure is not related to the Lime Kiln petcoke project. However, since the Lime Kiln petcoke project required modeling for AAQS and PSD Class II increments, it was decided to include the Recovery Boiler buildings modeling analysis in the petcoke application in order to expedite review of the modeling. Proposed wording for new enforceable permit conditions that form the basis of the SO_2 air quality analysis are provided below:

No. 3 Combination Boiler

B.5. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 887 pounds per hour based on a 24-hour average. Sulfur dioxide emissions shall be continuously monitored and recorded. The permittee shall maintain a scrubber pH of 7.0 or greater (24-hour average) during times when the continuous monitor is being repaired and/or calibrated. Monitoring records shall be maintain and available for inspection by the Department.

a. Beginning on the date that the permittee completes the enclosure of the east wall of the Recovery Boilers building, the combined total sulfur dioxide emissions from the Nos. 3 and 4 Combination boilers shall not exceed 1,350 pounds per hour based on a 24-hour average.

b. Beginning on the date that the permittee completes the enclosure of the east wall and one or more additional walls of the Recovery Boilers building, the combined total sulfur dioxide emissions from the Nos. 3 and 4 Combination boilers shall not exceed 1,100 pounds per hour based on a 24-hour average.

c. The permittee shall provide notification to the Department within 7 days of completion of activities authorized in condition B.5.a and B.5.b above.

No. 4 Combination Boiler

C.5. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 1,183 pounds per hour when incinerating NCG and SOG, 1,174 pounds per hour when burning SOG but not NCG, 1,183 pounds per hour when burning NCG but not SOG, and 772 pounds per hour when not incinerating NCG or SOG. Sulfur dioxide emissions shall be continuously monitored and recorded. The permittee shall maintain a scrubber pH of 8.0 or greater (24-hour average) during times when the continuous monitor is being repaired and/or calibrated. Monitoring records shall be maintain and available for inspection by the Department.

a. Beginning on the date that the permittee completes the enclosure of the east wall of the Recovery Boilers building, the combined total sulfur dioxide emissions from the Nos. 3 and 4 Combination boilers shall not exceed 1,350 pounds per hour based on a 24-hour average.

b. Beginning on the date that the permittee completes the enclosure of the east wall and one or more additional walls of the Recovery Boilers building, the combined total sulfur dioxide emissions from the Nos. 3 and 4 Combination boilers shall not exceed 1,100 pounds per hour based on a 24-hour average.

c. The permittee shall provide notification to the Department within 7 days of completion of activities authorized in condition C.5.a and C.5.b above.

Comment 10. **Rule 212.400(4)(e), F.A.C. requires an analysis of the air quality impacts as well as the nature and extent of any or all commercial, residential, industrial, and other growth which has occurred since August 7, 1977 in the area that the modification would affect. Please provide this information.**

Response: The requested analysis is provided in Attachment C.

Comment 11. **NO_x is an ozone precursor and, for any net increase of 100 tons per year, the federal rules require an ambient impact analysis for ozone. The predicted NO_x increase for this project is greater than 100 tons per year. Please provide this analysis.**

Response: The requested analysis is provided in Attachment D.

Also attached is the Professional Engineer certification statement. Thank you for consideration of this information. If you have any questions, please do not hesitate to call me at (352)336-5600.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff

David A. Buff, P.E., Q.E.P.
Principal Engineer

DB/all

Enclosure

Cc: Tom Clements, Smurfit-Stone

Y:\Projects\2006\0637645 SSCE Panama City PSD\4.1\RAI0407\RAI041007-645.doc

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **David A. Buff**
   Registration Number: **19011**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **6241 N.W. 23rd Street, Suite 500**
   City: **Gainesville** State: **Florida** Zip Code: **32653**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 336-5600** ext.**545** Fax: **(352) 336-6603**
4. Professional Engineer Email Address: **dbuff@golder.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☒, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

David A. Buff — Signature

4/11/07 — Date

(seal)

* Attach any exception to certification statement.

** **Board of Professional Engineers Certificate of Authorization #00001670**

FIGURE 1
SMURFIT-STONE LIME KILN HOT ENDTEMP
1st QUARTER 2007

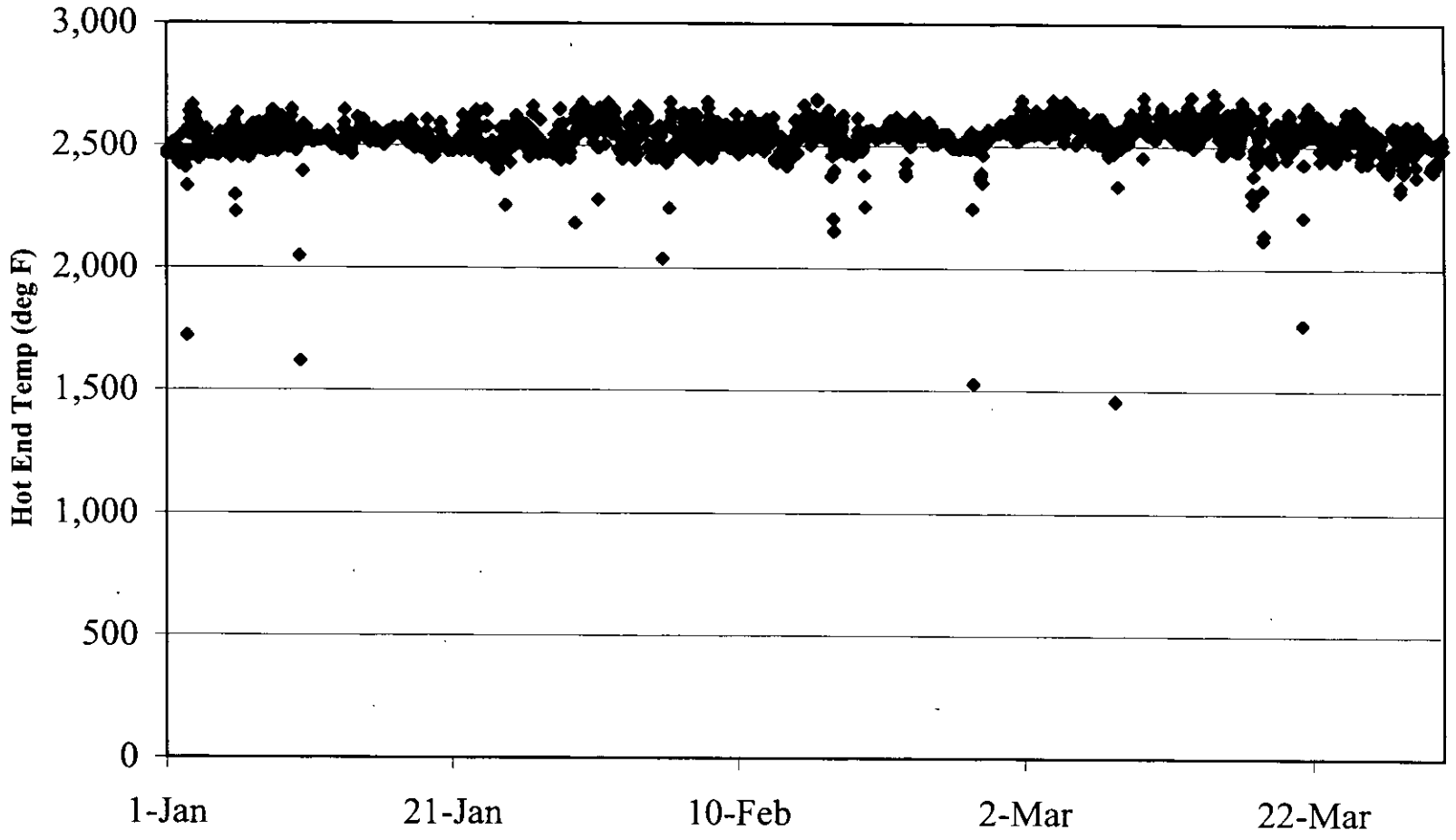


FIGURE 2
SMURFIT-STONE KILN COLD END TEMP
1st QUARTER 2007

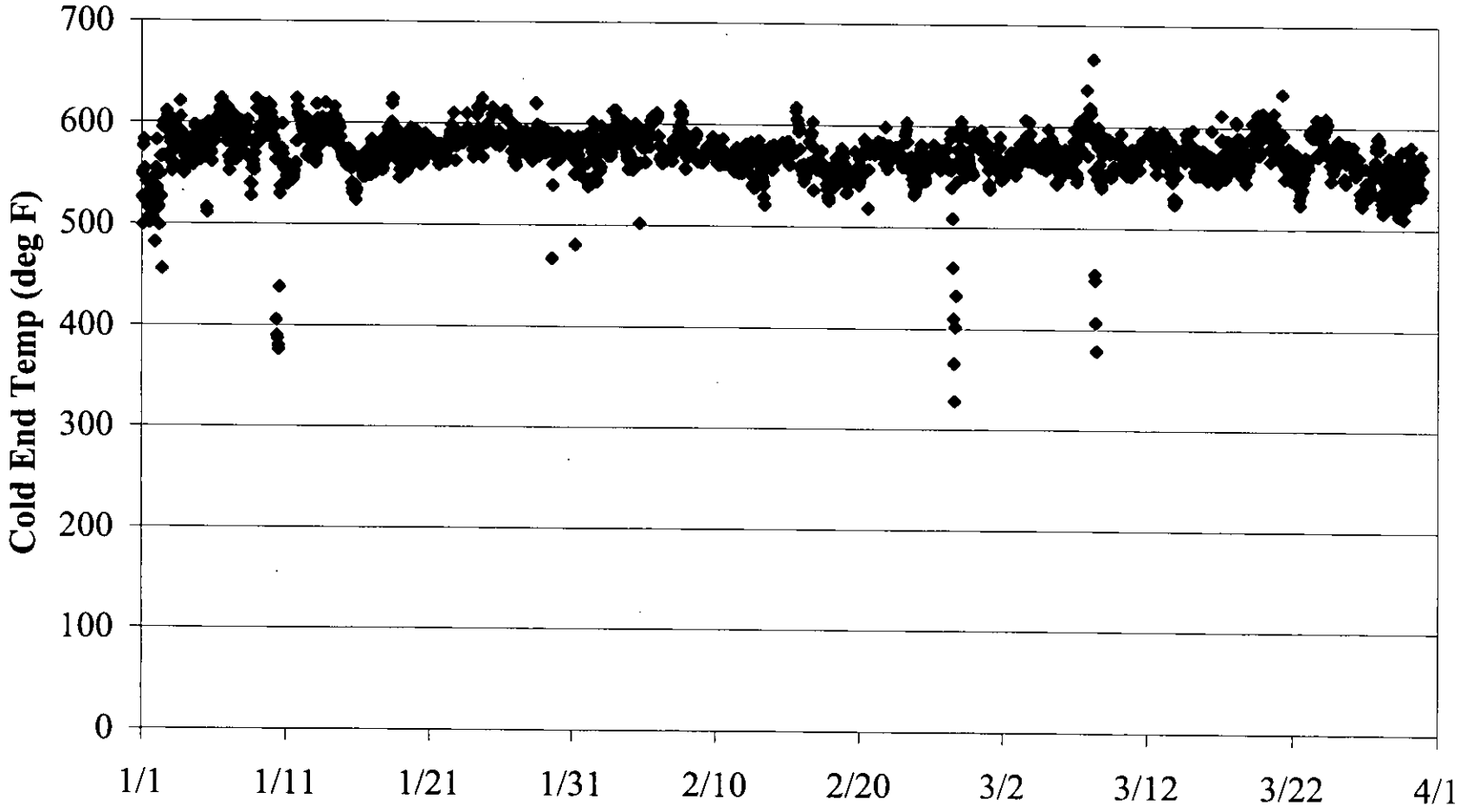


FIGURE 3
SMURFIT-STONE LIME KILN THROUGHPUT - JANUARY 2006

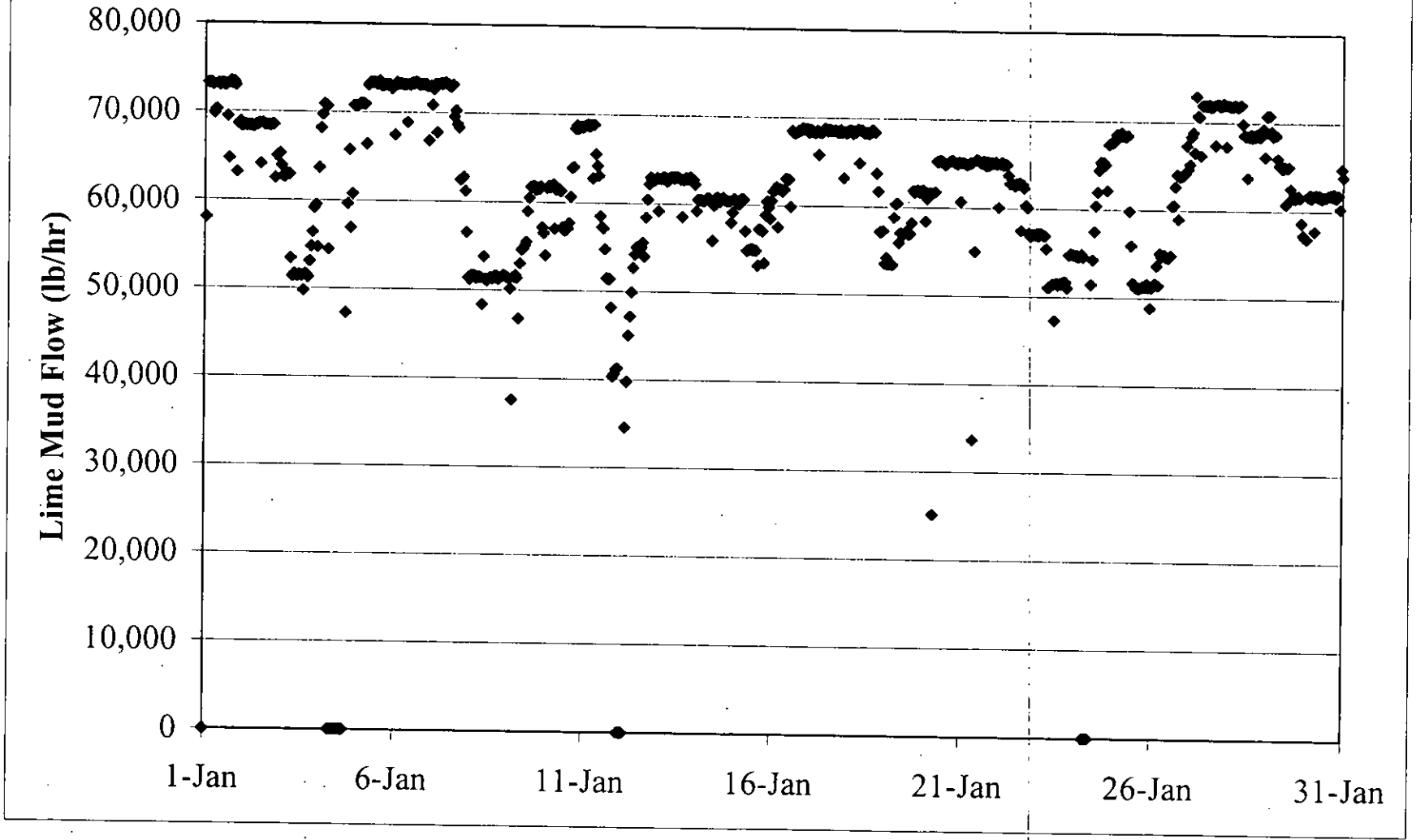


FIGURE 4
SMURFIT-STONE LIME KILN THROUGHPUT - JUNE 2006

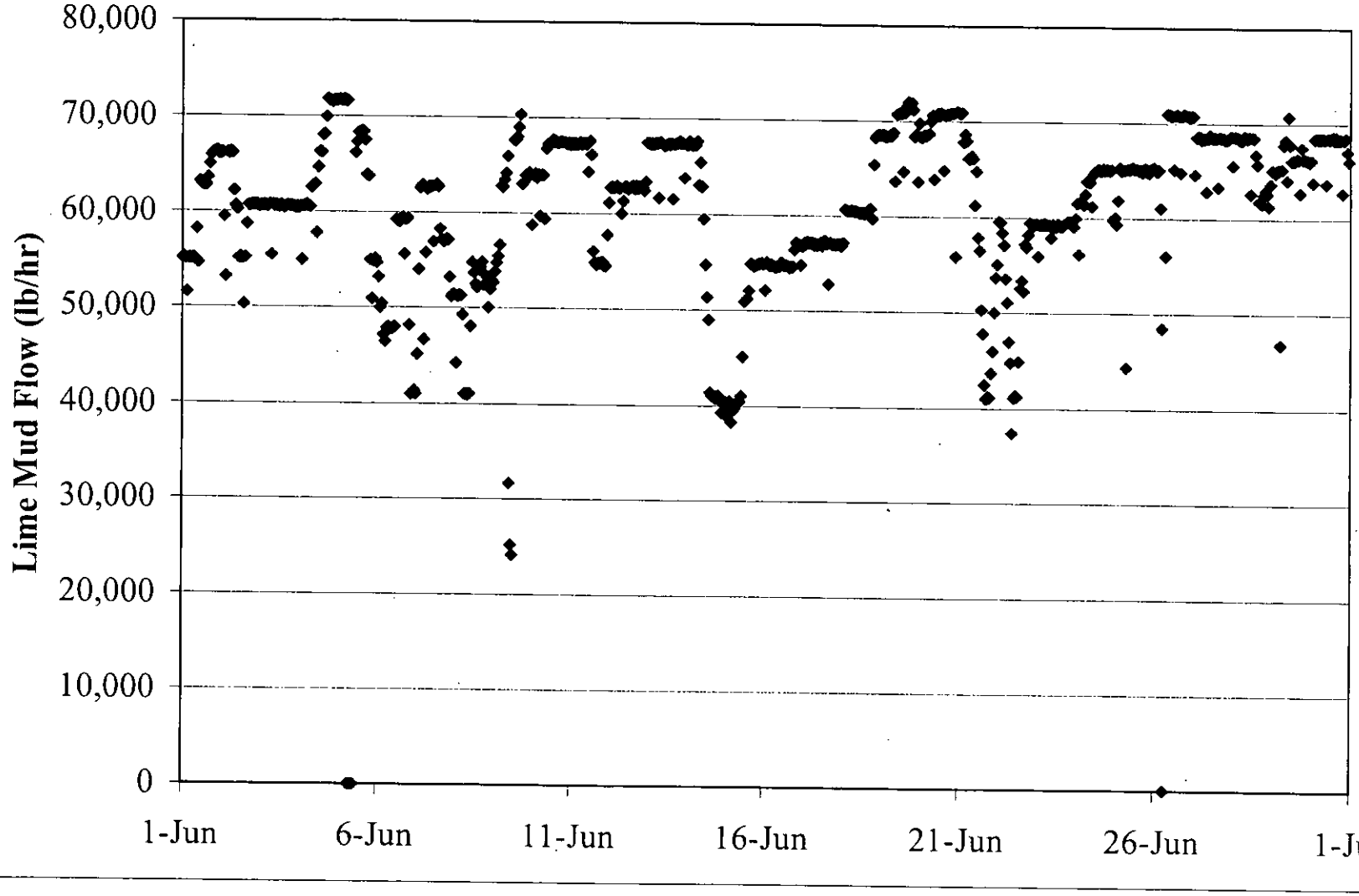
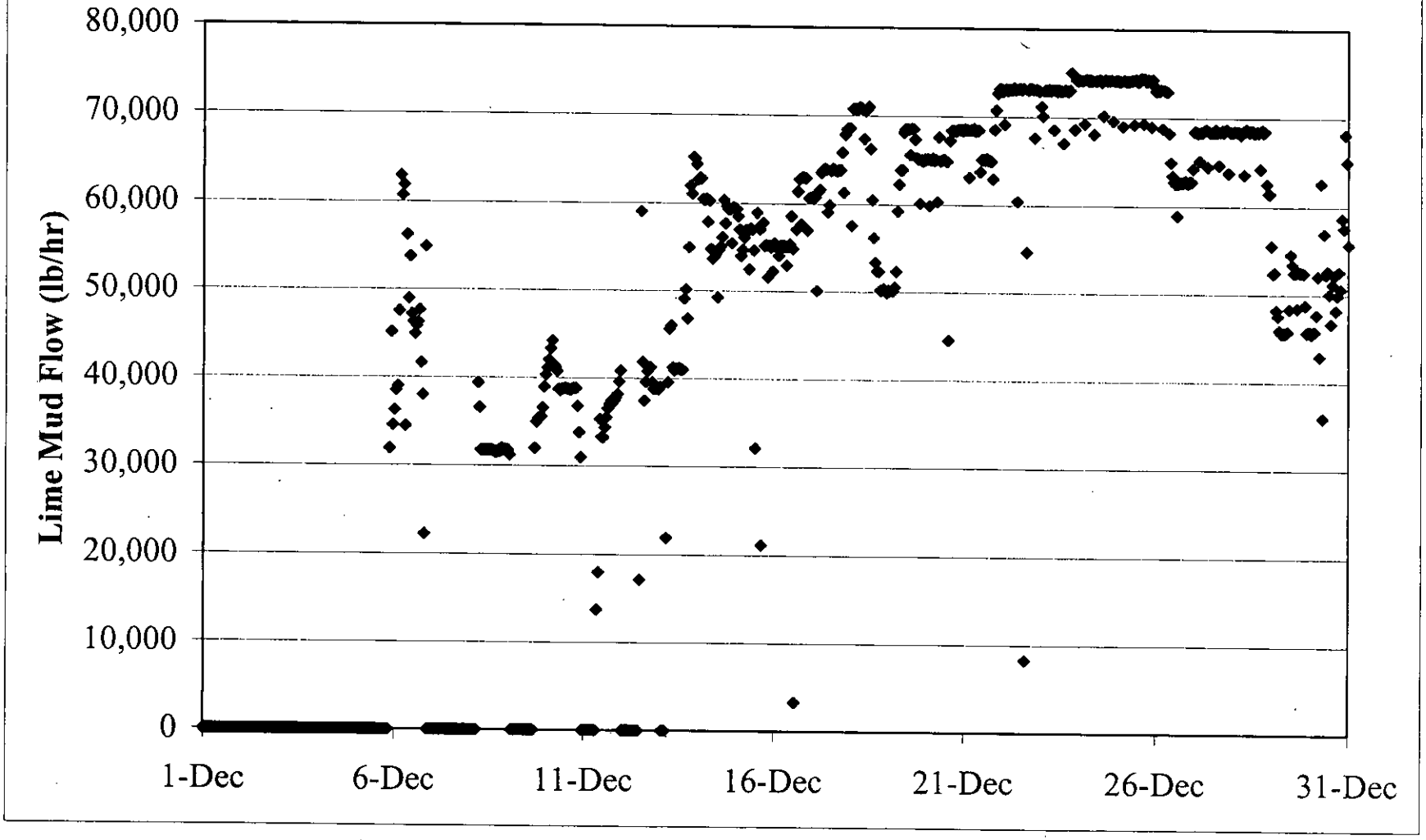


FIGURE 5
SMURFIT-STONE LIME KILN THROUGHPUT - DECEMBER 2006



ATTACHMENT A

SNCR INFORMATION FOR FUELTECH, INC.

Buff, Dave

From: Terry Brown [TBrown@ftek.com]
Sent: Tuesday, April 03, 2007 1:38 PM
To: Buff, Dave
Cc: Tex Quillian
Subject: SSCE Lime Kiln SNCR

Dave,

Fuel Tech has reviewed the information you provided for the above referenced lime kiln application, but it does not appear feasible to release the chemical within the appropriate temperature window for the SNCR process.

The kiln is 375 ft long with a diameter of 12.5 ft. The hot end of the kiln is at 2400°F and the cold end of the kiln is at 600°F. The appropriate temperature window is somewhere in between, but since the kiln is rotating we can only inject from the either end. The baseline NOx is between 165 and 185 ppm. In order for FTI to be able to produce any reduction in NOx emissions, the chemical would have to be released at a temperature of 1950°F or below, assuming low CO. If we assume a linear temperature drop across the kiln, that would mean that the temperature gradient is 4.8°F per foot (a temperature drop of 1800°F – from 2400°F to 600°F – over a length of 375 feet). If we inject through the end at 2400°F, need to release at 1950°F, and use the gradient of 4.8°F/ft, the urea would have to travel 94 feet into the kiln before it reaches the temperature of interest. If we inject through the cold end at 600°F, the urea would have to travel over 200 feet to reach a minimum temperature of 1600°F where some NOx reduction could take place. We do not believe that either approach is realistic.

Thank you for the opportunity to review this application for your client. Please let me know if you have any questions. Thank you.

Terry L. Brown
Regional Sales Manager

Fuel Tech, Inc.
110 Habersham Drive, Suite 108
Fayetteville, GA 30214-1381
770-371-5020 Office Phone
770-371-5021 Office Fax
770-560-1880 Mobile Phone
tbrown@ftek.com

ATTACHMENT B

2002 AND 2006 STACK TESTS ON LIME KILN

SOURCE TEST REPORT

ENGINEERING TESTS FOR SO_2
SMURFIT-STONE CONTAINER CORP.
PANAMA CITY, FLORIDA

LIME KILN

October 31, 2002

Prepared By:

AAS Inc.
Ambient Air Services, Inc.
106 Ambient Airway • Starke, FL 32091 • (904) 964-8440 • Fax (904) 964-6675

1.0 INTRODUCTION

Ambient Air Services, Inc. was engaged by Smurfit-Stone Container Corporation, Panama City, Florida to perform emissions test on the Lime Kiln for Sulfur Dioxide. This was an Engineering test for information only. The test was performed on October 31, 2002, and three runs of 1 hour each were made by AASI personnel with the assistance of the Smurfit-Stone operating crews.

Results for the SO2 emissions are reported on a mass emissions basis and therefore Volumetric flow rates were determined as well.

We wish to express our appreciation to Mr. Tom Clements and associates and the mill operating staff for their cooperation in the successful completion of this project. We also wish to thank the production staff for maintaining the required production rates and recording the operating data during the test period.

SOURCE	PARAMETERS	TEST METHOD
Lime Kiln	Sulfur Dioxide	EPA Method 6C

TABLE 2.1

SULFUR DIOXIDE EMISSIONS SUMMARY
LIME KILN

SMURFIT-STONE CONTAINER CORPORATION
PANAMA CITY, FLORIDA

DATE	RUN NUMBER	TIME PERIOD	LEVEL	SO2 PPM	VOLUMETRIC FLOW SCFMD	OXYGEN %	SO2 EMISSIONS LBS/DSCF	SO2 EMISSIONS LB/HR
10/31/02	1	1040-1140	MAX	299.93			4.979E-05	117.75
			MIN	0.00			0.000E+00	0.00
			AVG	58.30	54799	5.94	9.677E-06	22.89 **
10/31/02	2	1150-1250	MAX	36.16			6.003E-06	13.60
			MIN	0.00			0.000E+00	0.00
			AVG	17.11	52482	6.96	2.840E-06	6.43
10/31/02	3	1300-1400	MAX	32.07			5.324E-06	12.37
			MIN	0.00			0.000E+00	0.00
			AVG	12.27	53836	7.35	2.037E-06	4.73
			MEAN	29.23	53705.7	6.75	4.851E-06	11.35

ppm - Parts per million by volume

* Mean determined as arithmetic average of the results for each run of the runs

LBS/HR = 1.66E-07 x ppm x SCFMD x 60

* Process upset - invalid data. TRS emissions also unusually high (see next sheet)

SW

Date: 10-31-02

	Lime Kiln			Lime Kiln Scrubber				Slaker Flows				
	Mud Flow	Oil Flow	Gas Flow	Corrected TRS	Vent Diff	Bull Flow	Tangential Flow	Green Liquor	Lime	Scrubber	WHAT'S WRONG!	NOTE: When the out, identify the being taken to ge
UNITS	LBS/HR	GPM	MCFH	PPM	In	GPM	GPM	TPH	TPH	GPM		A
LIMIT	<69,000	<15.7	<203	<20	>18	>500	>500	<60.39	<21.18	>30		
6 am	43720	15.3	0	1.3	24	1085	597	41.8	14.3	35		
7	47590	14.7	0	.9	24	1070	776	41.7	14.2	35		
8	47790	14.7	0	1.1	24	1058	779	41.7	14.2	35		
9	50030	14.6	0	2.3	24	1062	772	0	0	35	Slaker PM	
10	51620	14.7	0	5.6	23	1056	788	41.2	14.3	35		
11	63390	15.7	0	16.8	23	1056	780	41.2	14.3	35		
12 pm	63520	15.7	0	4.5	20	1060	800	41.2	14.3	35	SO2 TESTING	
1	64190	15.7	0	4.0	20	1075	900	41.2	14.3	35		
2	47870	14.0	0	.7	20	1064	818	43.9	15.2	35		
3	44120	13.6	0	.2	23	1054	772	43.3	15.1	35		
4	41410	13.0	0	.0	24	1047	771	43.3	15.1	35		
5	44120	13.0	0	.0	24	1068	794	43.3	15.1	35		
6	43680	13.0	0	.0	24	1055	783	43.3	15.1	35		
7	44360	13.3	0	.6	24	1053	784	43.3	15.1	35		
8	38330	13.3	0	.5	25	1059	788	43.4	15.1	35		
9	41110	13.1	0	.4	25	1057	780	43.4	15.1	35		
10	39260	13.1	0	.6	25	1048	771	43.3	15.1	35		
11	34630	12.4	0	.4	26	1043	773	43.4	17.1	35		
12 am	33970	11.5	0	.5	28	1046	774	43.1	17.0	35		
1	34410	10.8	0	.3	27	1049	786	43.4	17.1	35		
2	34190	10.8	0	.7	27	1058	781	43.9	15.2	35		
3	34190	10.8	0	.3	27	1039	773	43.8	15.2	35		
4	34190	10.8	0	.3	27	1043	771	43.9	15.2	35		
5	33970	10.8	0	.3	27	1044	788	46.6	16.1	35		
	OPERATOR			Foreman				Superintendent				
7-3	CHEWNING											
3-11	SQUIRE											
11-7				LR								

J:\Forms\Bleach\LimeKilnScrubber (5-19-02)

Weston Solutions, Inc.
1625 Pumphrey Avenue
Auburn, Alabama 36832-4303
334-466-5600 • Fax 334-466-5660
www.westonsolutions.com

28 February 2006

Mr. Benny Raffield
Smurfit-Stone Container Corporation
1 Everitt Avenue
Panama City, Florida 32412-0560

Work Order No. 03939.009.006

Re: No. ~~3~~ (WE ONLY HAVE 1 KILN) Lime Kiln Emission Testing

Dear Mr. Raffield:

This letter with attachments constitutes our report of the nitrogen oxides (NO_x) and sulfur dioxide (SO_2) emission testing performed on the No. ~~3~~ Lime Kiln at the Panama City, Florida facility. Mr. Rodney Padgett and Mr. Paul Green of Weston Solutions, Inc. (WESTON®) performed the testing on 7 February 2006 for in-house engineering use by mill personnel.

Attachment A to this letter presents the results of the testing in tabular form. Attachment B includes copies of the field data.

Nitrogen oxides and SO_2 sampling and analysis were conducted according to EPA Reference Methods 7E and 6C, respectively. The source gas volumetric flow rate was determined during sampling according to EPA Reference Methods 1-4.

We appreciate the opportunity to serve you on this project. If you have any questions or require additional information, please call me at 334-466-5617.

Sincerely,

WESTON SOLUTIONS, INC.

Billy Routhier FOR
Project Manager

jb

Enclosure

Sincerely,

WESTON SOLUTIONS, INC.

Melanie Wright, Ph.D.
Quality Assurance Representative

TABLE A-1
NO. 3 LIME KILN
SUMMARY OF NO_x AND SO_2 EMISSION RESULTS

	Run 1	Run 2	Run 3	Mean
Date	2/7/06	2/7/06	2/7/06	----
Time Began	1201	1301	1401	----
Time Ended	1301	1401	1501	----
Stack Gas Data				
Temperature, °F	160	159	160	160
Velocity, ft/sec	48	48	50	48
Moisture, %	32	32	32	32
CO_2 Concentration, %	19.0	16.4	17.2	17.5
O_2 Concentration, %	6.7	8.0	7.7	7.5
VFR, x 10^4 dscfm	5.17	5.20	5.34	5.24
Nitrogen Oxides				
Concentration, ppm	99	96	90	95
Concentration, ppm @ 10% O_2	76	81	74	77
Emission Rate, lb/hr	37	36	34	36
Sulfur Dioxide				
Concentration, ppm	<1.0	<1.0	<1.0	<1.0
Concentration, ppm @ 10% O_2	<0.8	<0.8	<0.8	<0.8
Emission Rate, lb/hr	<0.5	<0.5	<0.5	<0.5

Smurfit Stone
Panama City, FL

03939.009.006
No. 3 Lime Kiln

VOLUMETRIC FLOW CALCULATIONS

Run Number	Run 1	Run 2	Run 3	Mean
Date	2/7/06	2/7/06	2/7/06	----
Time	1240	1320	1450	----
Volumetric Flow Data				
Velocity Head, in. H2O				
Point 1	1.45	1.50	1.45	1.47
Point 2	1.10	1.10	1.15	1.12
Point 3	0.66	0.60	0.62	0.63
Point 4	0.20	0.18	0.20	0.19
Point 5	0.06	0.05	0.24	0.12
Point 6	0.20	0.22	0.20	0.21
Point 7	0.72	0.73	0.74	0.73
Point 8	0.68	0.66	0.70	0.68
Point 9	0.66	0.66	0.70	0.67
Point 10	0.40	0.39	0.40	0.40
Point 11	0.04	0.05	0.06	0.05
Point 12	0.06	0.05	0.05	0.05
Point 13	0.84	0.84	0.85	0.84
Point 14	1.45	1.40	1.45	1.43
Point 15	1.45	1.45	1.50	1.47
Point 16	1.40	1.40	1.40	1.40
Square Root of Delta P, (in. H20)^½	0.767	0.763	0.789	0.773
Pitot Tube Coefficient (Cp)	0.84	0.84	0.84	0.84
Barometric Pressure (Pb), in. Hg	30.15	30.15	30.15	30.15
Static Pressure (Pg), in. H2O	-0.68	-0.66	-0.66	-0.67
Stack Pressure (Ps), in. Hg	30.10	30.10	30.10	30.10
Stack Diameter (I.D.), in.	75.1	75.1	75.1	75.1
Stack Cross-sectional Area, ft^2	30.76	30.76	30.76	30.76
Stack Gas				
Temperature (ts), °F	160	159	160	160
Moisture (Bws)	0.319	0.315	0.318	0.317
CO2 Concentration (CO2), %	19.0	16.4	17.2	17.5
O2 Concentration (O2), %	6.7	8.0	7.7	7.5
Molecular Weight (Ms), lb/lb-mole	27.1	26.9	26.9	26.9
Velocity (Vs), ft/sec	48.1	47.9	49.5	48.5
Volumetric Flow Rate,				
At Stack Conditions (Qa), ACFM	88703	88461	91415	89526
At Standard Conditions (Qs), DSCFM	51749	51955	53429	52378

Smurfit Stone
Panama City, FL

03939.009.006
No. 3 Lime Kiln

EMISSION CALCULATIONS

	Run 1	Run 2	Run 3	Mean
Date	2/7/06	2/7/06	2/7/06	---
Time Began	1201	1301	1401	---
Time Ended	1301	1401	1501	---
Volumetric Flow Rate, (Qs), DSCFM	5.17E+04	5.20E+04	5.34E+04	5.24E+04
BWS	0.319	0.315	0.318	0.317
% Oxygen	6.7	8.0	7.7	7.5
Oxygen Reference Concentration, %	10.0	10.0	10.0	10.0
Nitrogen Oxides MW= 46.01				
Concentration, ppm	99.0	96.0	90.0	95.0
Concentration, ppm @10%O2	76.0	81.1	74.3	77.1
Emission Rate, lb/hr	36.7 ✓	35.7	34.4	35.6
Sulfur Dioxide MW= 64.06				
Concentration, ppm	< 1.0	< 1.0	< 1.0	< 1.0
Concentration, ppm @10%O2	< 0.8	< 0.8	< 0.8	< 0.8
Emission Rate, lb/hr	< 0.5	< 0.5	< 0.5	< 0.5

LT

UNITS LIMIT	Date: 2-07-07			Caustic Room Environmental Log Sheet							Check ERS system	WHAT'S WRONG!	NOTE: When the environmental targets are Out, identify the problem and log the action Being taken to get it back within limits.
	Lime Kiln			Lime Kiln Scrubber				Slacker Flows					Action Taken To Fix It
	Mud Flow LBS/HR < 70,692	Oil Flow mmbtu <180	Gas Flow mmbtu <180	Corrected TRS PPM <20	Vent Diff in >28	Bail Flow GPM >752	Tangential Flow GPM >748	Green Liquor TPH <60.39	Lime TPH <21.18	Scrubber GPM >30			
TIME AVE>	Hour	Hour	Hour	12 Hour	Hour	Hour	Hour	Hour	Hour	Hour	Yes		
6 am	59830	106	✓	1.3	25	1082	1058	49.5	17.1	35	✓		
7	58930	106	–	1.0	23	1086	1060	49.4	17.1	35	✓		
8	59610	106	–	1.0	25	1088	1063	49.4	17.1	35	✓		
9	59830	106	–	1.4	25	1087	1059	49.4	17.1	35	✓		
10	50880	106	–	.7	26	1086	1059	49.5	17.0	35	✓		
11	46090	97	–	.5	27	1086	1058	49.4	17.1	35	✓		
12 pm	68430	87	–	.9	26	1084	1053	46.8	16.1	35	✓		
1	68300	115	–	1.1	24	1086	1070	46.7	16.2	35	✓		
2	68500	106	–	1.0	26	1088	1066	46.7	16.1	35	✓		
3	68450	106	–	1.2	26	1082	1061	43.8	15.2	35	✓		
4	57120	106	–	1.0	27	1087	1065	44.1	15.2	35	✓		
5	57290	106	–	1.4	27	1081	1059	44.0	15.2	35	✓		
6	56640	106	–	1.1	26	1075	1058	43.9	15.2	35	✓		
7	57330	106	✓	1.1	26	1076	1065	41.1	14.3	35	✓		
8	57220	106	✓	.8	26	1079	1070	41.2	14.3	35	✓		
9	57050	106	✓	.8	26	1075	1064	41.2	14.3	35	✓		
10	57180	106	✓	1.6	26	1085	1065	42.4	14.7	35	✓		
11	57190	106	✓	.8	27	1087	1071	42.4	14.7	34	✓		
12 am	57026	106	✓	.8	27	1080	1061	42.5	14.7	33	✓		
1	57150	106	✓	1.4	27	1086	1062	42.5	14.7	33	✓		
2	56950	106	✓	2.1	27	1079	1061	42.5	14.7	34	✓		
3	57440	106	✓	1.4	26	1086	1066	42.4	14.7	33	✓		
4	57620	106	–	1.1	26	1085	1070	42.5	14.7	33	✓		
5	57400	106	✓	1.1	26	1081	1074	42.6	14.7	35	✓		

	OPERATOR	Foreman	Superintendent
7 - 3	Earnest		
3 - 11	Earnest R. McCall Jr.		
11 - 7	Joshua McCall		

Green Liquor {THP} = GL Flow X 0.0549
Lime {THP} = GL Flow X 0.0190
Mud Flow {LBS/HR} = 450.6 X Mud Flow X Density X {1+ Density}

Note: Red Circle Any Limits That Are Out Of Target

ATTACHMENT C

AIR QUALITY IMPACTS OF ADDITIONAL GROWTH

1.0 IMPACTS DUE TO ASSOCIATED DIRECT GROWTH

1.1 Introduction

Rule 62-212.400(3)(h)(5), Federal Administrative Code (F.A.C.), states that an application must include information relating to the air quality impacts of, and the nature and extent of, all general, residential, commercial, industrial, and other growth that has occurred since August 7, 1977, in the area the facility or modification would affect. This growth analysis considers air quality impacts due to emissions resulting from the industrial, commercial, and residential growth associated with the Lime Kiln petcoke project proposed for the SSCE Panama City Mill. This information is consistent with the U.S. Environmental Protection Agency (EPA) guidance related to this requirement in the *Draft New Source Review Workshop Manual* (EPA, 1990).

The SSCE Mill is located in Bay County, which is bounded by Washington County to the north, Walton County to the west, Calhoun and Gulf Counties to the east, and the Gulf of Mexico to the south. The total area of Bay County is 1,033 square miles; 763 square miles of land and 270 square miles of water.

There should not be any increase in the workforce needed for the Lime Kiln petcoke project at the SSCE Mill. Therefore, there is not expected to be any increase in vehicular traffic in the area, with no effect on air quality levels.

There are also expected to be no air quality impacts due to associated commercial and industrial growth given the location of the Mill. The existing commercial and industrial infrastructure should be adequate to provide any support services that the project might require and would not increase with the operation of the Mill.

The following discussion presents general trends in residential, commercial, industrial, and other growth that has occurred since August 7, 1977, in Bay County. As such, the information presented is available from a variety of sources (i.e., Florida Statistical Abstract, FDEP, etc.) that characterize Bay County as a whole.

1.2 Residential Growth

1.2.1 Population and Household Trends

As an indicator of residential growth, the trends in the population and number of household units in Bay County since 1977 are shown in Figure 1. The County experienced a 68-percent increase in population for the years 1977 through 2004. During this period, there was an increase in population of about 64,000. Similarly, the number of households in the County increased by about 28,000, or 90 percent, since 1977.

Growth Associated with the Mill Modification

Because there will be no additional employees needed for the proposed modification, residential growth will not change.

1.3 Commercial Growth

1.3.1 Retail Trade and Wholesale Trade

As an indicator of commercial growth in Bay County, the trends in the number of commercial facilities and employees involved in retail and wholesale trade are presented in Figure 2. The retail trade sector comprises establishments engaged in retailing merchandise. The retailing process is the final step in the distribution of merchandise. Retailers are, therefore, organized to sell merchandise in small quantities to the general public. The wholesale trade sector comprises establishments engaged in wholesaling merchandise. This sector includes merchant wholesalers who buy and own the goods they sell; manufacturers' sales branches, and offices that sell products manufactured domestically by their own company; and agents and brokers who collect a commission or fee for arranging the sale of merchandise owned by others.

Since 1977, retail trade has increased by 121 establishments and 2,100 employees, or 19 and 27 percent, respectively. For the same period, wholesale trade has increased by about 55 establishments and 1,100 employees, or 44 and 95 percent, respectively.

1.3.2 Labor Force

The trend in the labor force in Bay County since 1977 is shown in Figure 3. The greatest number of persons employed in Bay County has been in the manufacturing, trade, and transportation industries

and education, health, and government services. Between 1977 and 2004, approximately 45,000 persons were added to the available work force, for an increase of 135 percent.

1.3.3 Tourism

Another indicator of commercial growth in Bay County is the tourism industry. As an indicator of tourism growth in the county, the trend in the number of hotels and motels and the number of units at the hotels and motels are presented in Figure 4.

This industry comprises establishments primarily engaged in marketing and promoting communities and facilities to businesses and leisure travelers through a range of activities, such as assisting organizations in locating meeting and convention sites; providing travel information on area attractions, lodging accommodations, restaurants; providing maps; and organizing group tours of local historical, recreational, and cultural attractions.

Between 1978 and 2004, there was a decrease of 40 percent in the number of hotels and motels. However, there was essentially no change in the total number of units at those facilities. In addition, the number of food establishments has more than doubled.

1.3.4 Transportation

As an indicator of transportation growth, the trend in the number of vehicle miles traveled (VMT) by motor vehicles on major roadways in Bay County is presented in Figure 5. The county's main arteries are Routes 98 and 231.

Between 1977 and 2005, there was an increase of more than 1,000,000 VMT, or 41-percent increase, on major roadways in the county.

1.3.5 Growth Associated with the Mill Modification

The existing commercial and transportation infrastructure should be adequate to provide any support services that might be required due to modification at the Mill.

1.4 Industrial Growth

1.4.1 Manufacturing and Agricultural Industries

As an indicator of industrial growth, the trend in the number of employees in the manufacturing industry in Bay County since 1977 is shown in Figure 6. As shown, the manufacturing industry experienced a slight decrease in the number of employees from 1977 through 2003.

As another indicator of industrial growth, the trend in the number of employees in the agricultural industry in Bay County since 1977 is also shown in Figure 6. As shown, the agricultural industry experienced a decrease in employment of 35 percent from 1977 through 2003.

1.4.2 Utilities

The existing power plants in Bay County are Gulf Power Company's Lansing Smith Plant and Bay County Energy Systems. The Gulf Power Company plant has an electrical nameplate generating capacity of nearly 1,000 megawatts (MW).

As an indicator of industrial growth, the change in electrical nameplate generating capacity in Bay County since 1977 is shown in Figure 7. As shown, the electrical nameplate generating capacity has increased by 524 MW, or 150 percent since 1977.

1.4.3 Growth Associated with the Mill Modification

Since the PSD baseline date of August 7, 1977, there have been only a few new major facilities built within a 35-km radius of the SSCE Mill. The nearest major sources are the Arizona Chemical Plant, Gulf Power Company's Lansing Smith Plant, and Bay County Energy Systems. Based on the locations of nearby air emission sources, there has not been a concentration of industrial and commercial growth in the vicinity of the SSCE Mill.

1.5 Air Quality Discussion

1.5.1 Air Emissions of Nearby Sources

Based on actual emissions reported for 2001 (latest year of available data) by EPA on its AIRSdata website, total emissions from stationary and area sources in Bay County are as follows:

- SO_2: 22,741 TPY
- PM_{10}: 10,009 TPY
- NO_x: 14,882 TPY
- CO: 87,660 TPY
- VOC: 12,743 TPY

1.5.2 Air Emissions from Mobile Sources

The trends in the air emissions of CO, VOC, and NO_x from mobile sources in Bay County are presented in Figure 8. Between 1977 and 2005, there were significant decreases in these emissions. The decrease in CO, VOC, and NO_x emissions were about 282, 26, and 10 tons per day (TPD), respectively, which represent decreases from 1977 emissions of 76, 79, and 45 percent, respectively.

1.5.3 Air Monitoring Data

Since 1977, Bay County has been classified as attainment or maintenance for all criteria pollutants. Air quality monitoring data have been collected in the county at monitoring stations located in the following cities:

- SO_2 concentrations - Panama City and Lynn Haven;
- PM_{10} concentrations – Panama City;
- NO_2 concentrations – Panama City and Lynn Haven; and
- O_3 concentrations – Panama City.

Data collected from these stations are considered to be generally representative of air quality in Bay County. Because these monitoring stations are generally located in more industrialized areas than at the SSCE Mill, the reported concentrations are likely to be somewhat higher than that experienced at the Mill.

These data indicate that the maximum air quality concentrations currently measured in the region comply with and are well below the applicable AAQS. These monitoring stations are located in areas where the highest concentrations of a measured pollutant are expected due to the combined effect of emissions from stationary and mobile sources, as well as the effects of meteorology. Therefore, the ambient concentrations in areas not monitored should have pollutant concentrations less than the monitored concentrations from these sites.

In addition, since 1988, PM in the form of PM_{10} has been collected at the air monitoring stations due to the promulgation of the PM_{10} AAQS. Prior to 1989, the AAQS for PM was in the form of TSP concentrations, and this form was measured at the stations.

SO_2 Concentrations

The trends in the annual, 24-hour, and 3-hour average SO_2 concentrations measured at the five Bay County monitoring stations since 1981 are presented in Figures 9 through 11, respectively. SO_2 concentrations have been measured at five stations for various time periods throughout these years. As shown in these figures, concentrations have been and continue to be well below the AAQS.

PM_{10}/TSP Concentrations

The trends in the annual and 24-hour average PM_{10} and TSP concentrations since 1977 for monitoring sites in the county are presented in Figures 12 and 13, respectively. TSP concentrations are presented through 1988 since the AAQS was based on TSP concentrations through that year. In 1988, the TSP AAQS was revoked and the PM standard was revised to PM_{10}.

As shown in these figures, measured TSP concentrations were below the TSP AAQS. Since 1988, when PM_{10} concentrations have been measured, the PM_{10} concentrations have been and continue to be below the AAQS.

NO_2 Concentrations

The trends in the annual average NO_2 concentrations measured at the nearest monitors to the Mill is presented in Figure 14. As shown in this figure, measured NO_2 concentrations at the monitors have been well below the AAQS.

Ozone Concentrations

The trends in the 1-hour average O_3 concentrations since 1977 are presented in Figure 15. The 8-hour average O_3 concentrations are presented in Figure 16. As shown in these figures, the measured O_3 concentrations have been below the AAQS.

Air Quality Associated with the Mill Modification

The air quality data measured in the region of the SSCE Mill indicate that the maximum air quality concentrations are well below and comply with the AAQS. Also, based on the trends of these maximum concentrations, the air quality has generally improved in the region since the baseline date of August 7, 1977. Because the maximum concentrations for the Mill are predicted to be below the AAQS, the air quality concentrations in the region are expected to remain below and comply with the AAQS after the modification occurs.

FIGURE 1
POPULATION AND HOUSEHOLD UNIT TRENDS IN BAY COUNTY

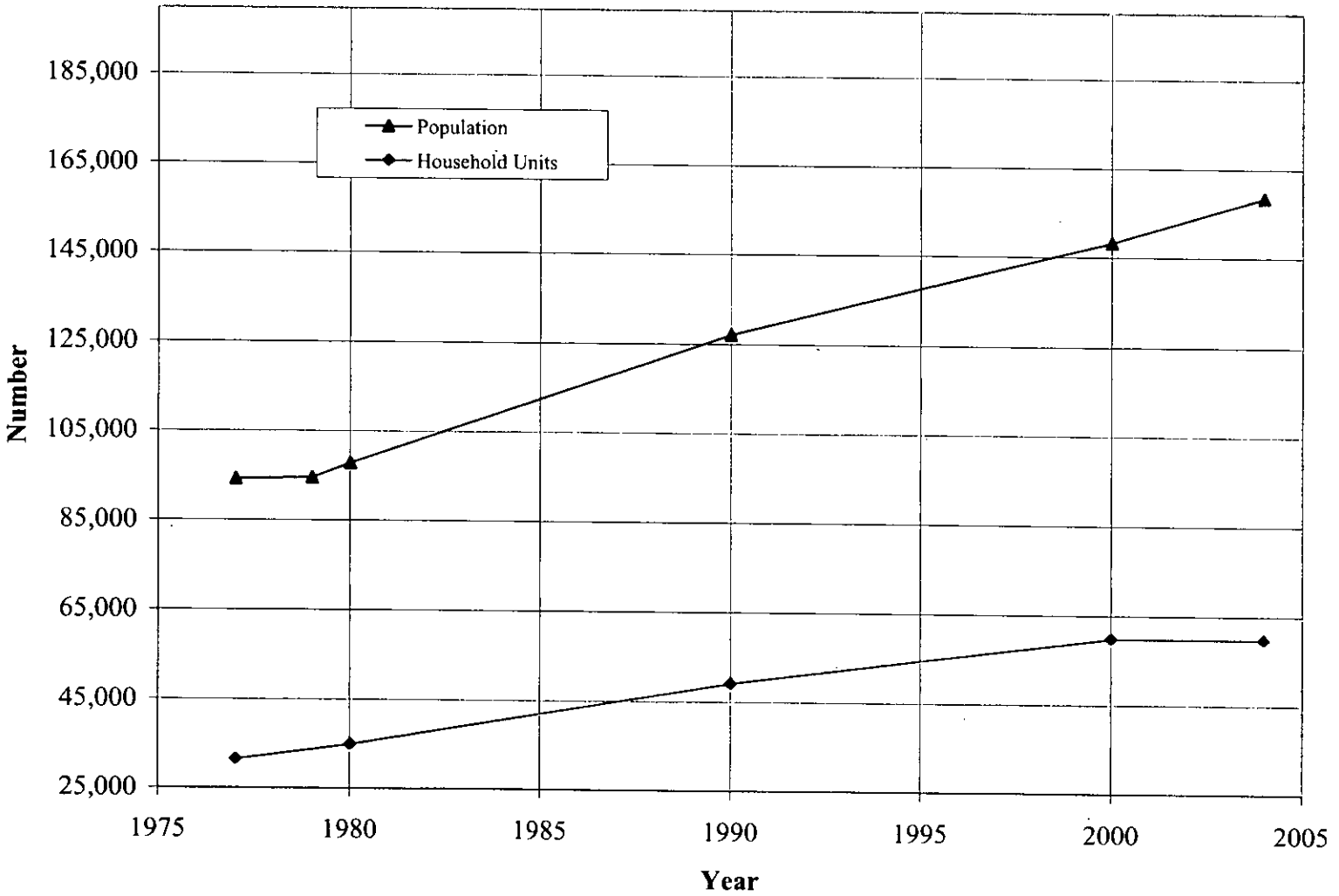


FIGURE 2
RETAIL AND WHOLESALE TRADE TRENDS IN BAY COUNTY

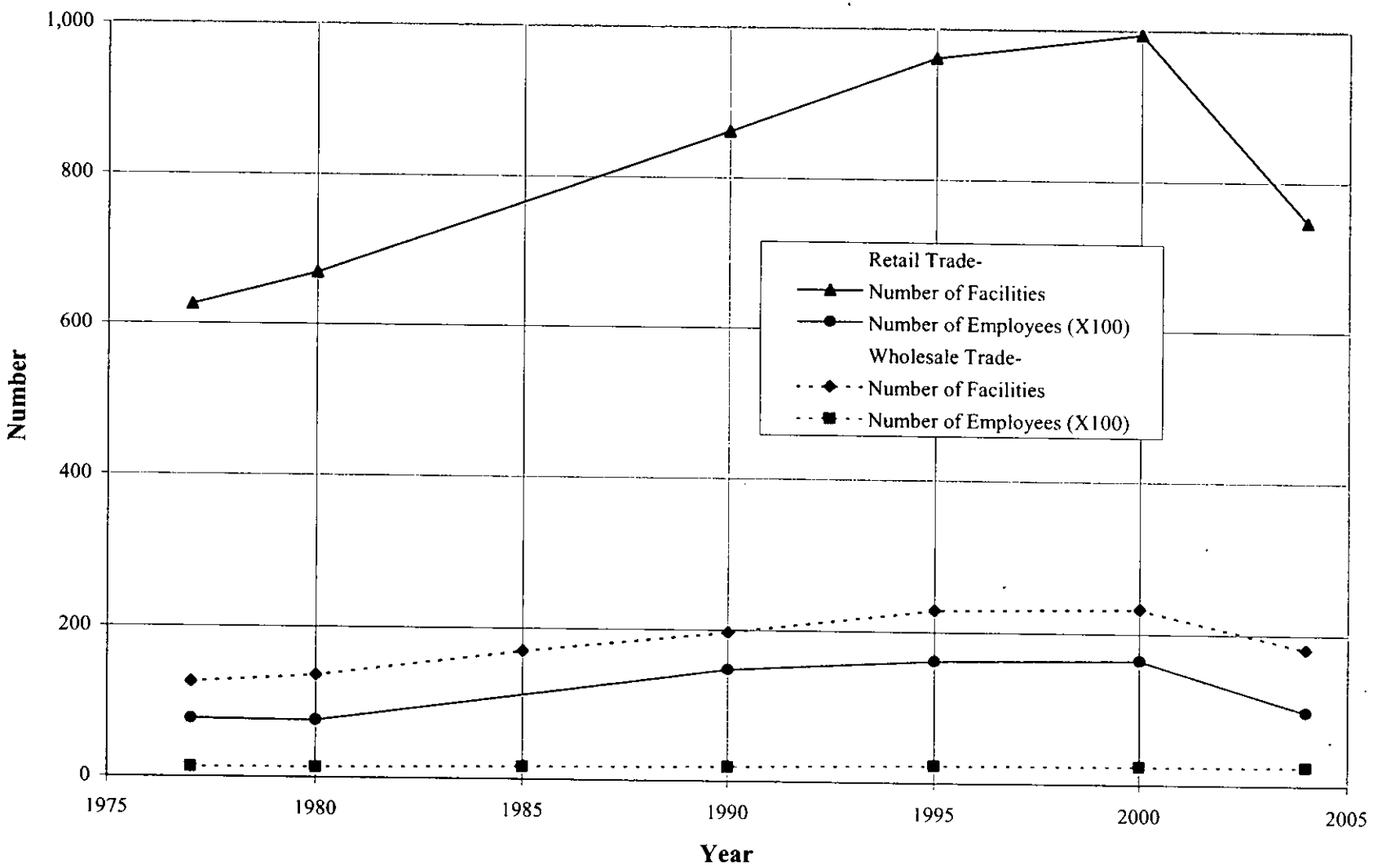


FIGURE 3

LABOR FORCE TREND IN BAY COUNTY

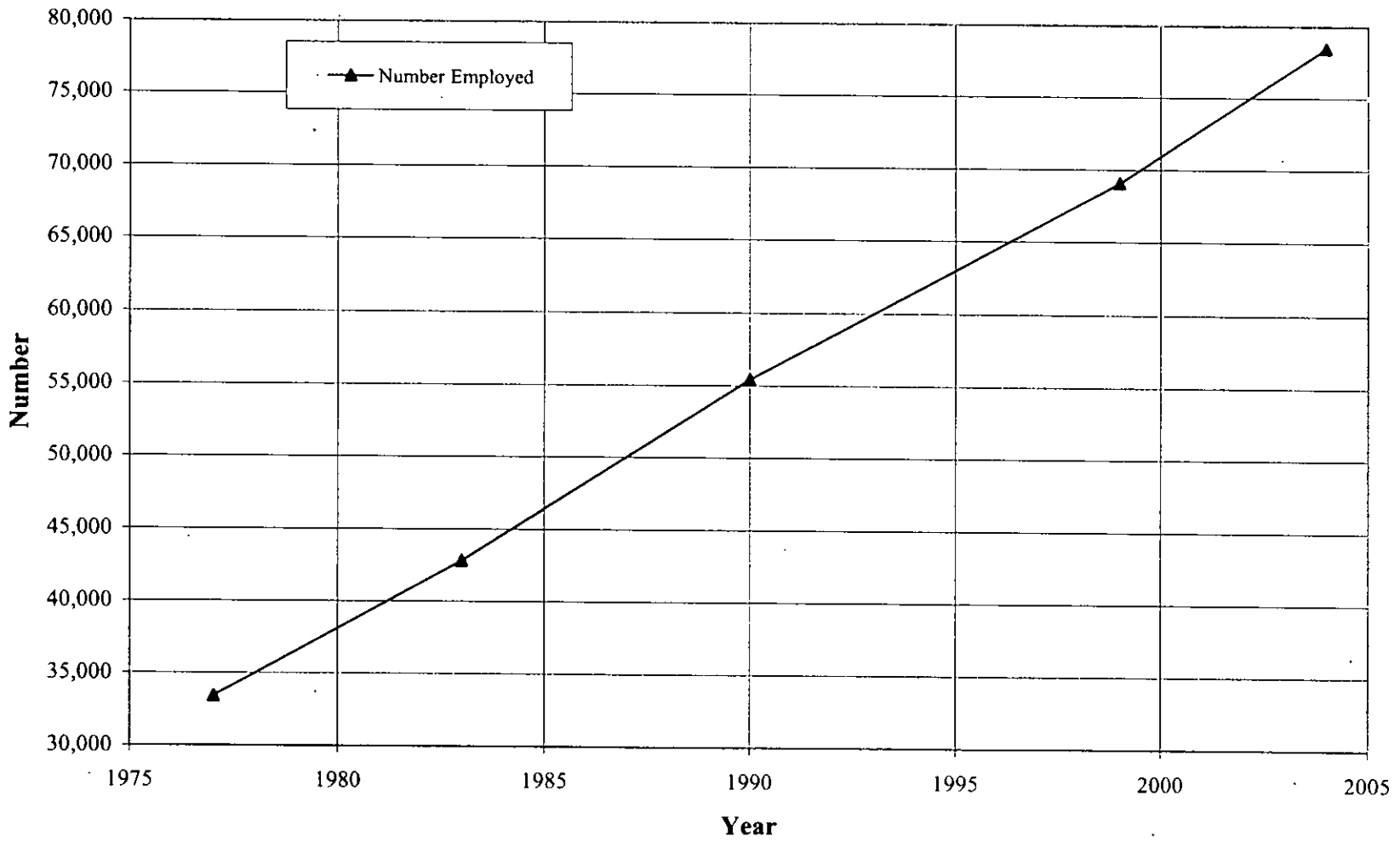


FIGURE 4

HOTEL, MOTEL, AND FOOD ESTABLISHMENT TRENDS IN BAY COUNTY

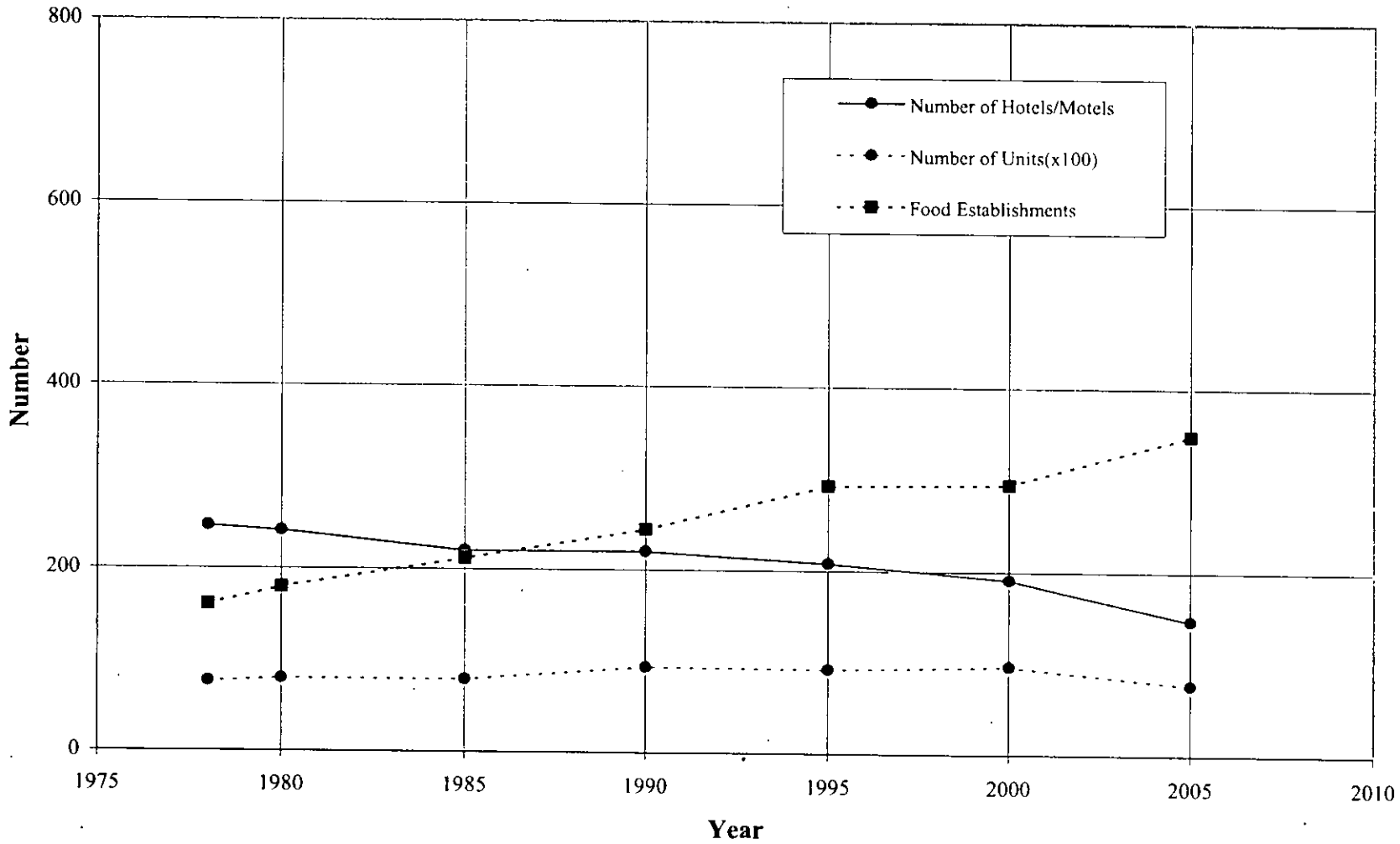


FIGURE 5
VEHICLE MILES TRAVELED (VMT) ESTIMATES FOR MOTOR VEHICLES FOR BAY COUNTY

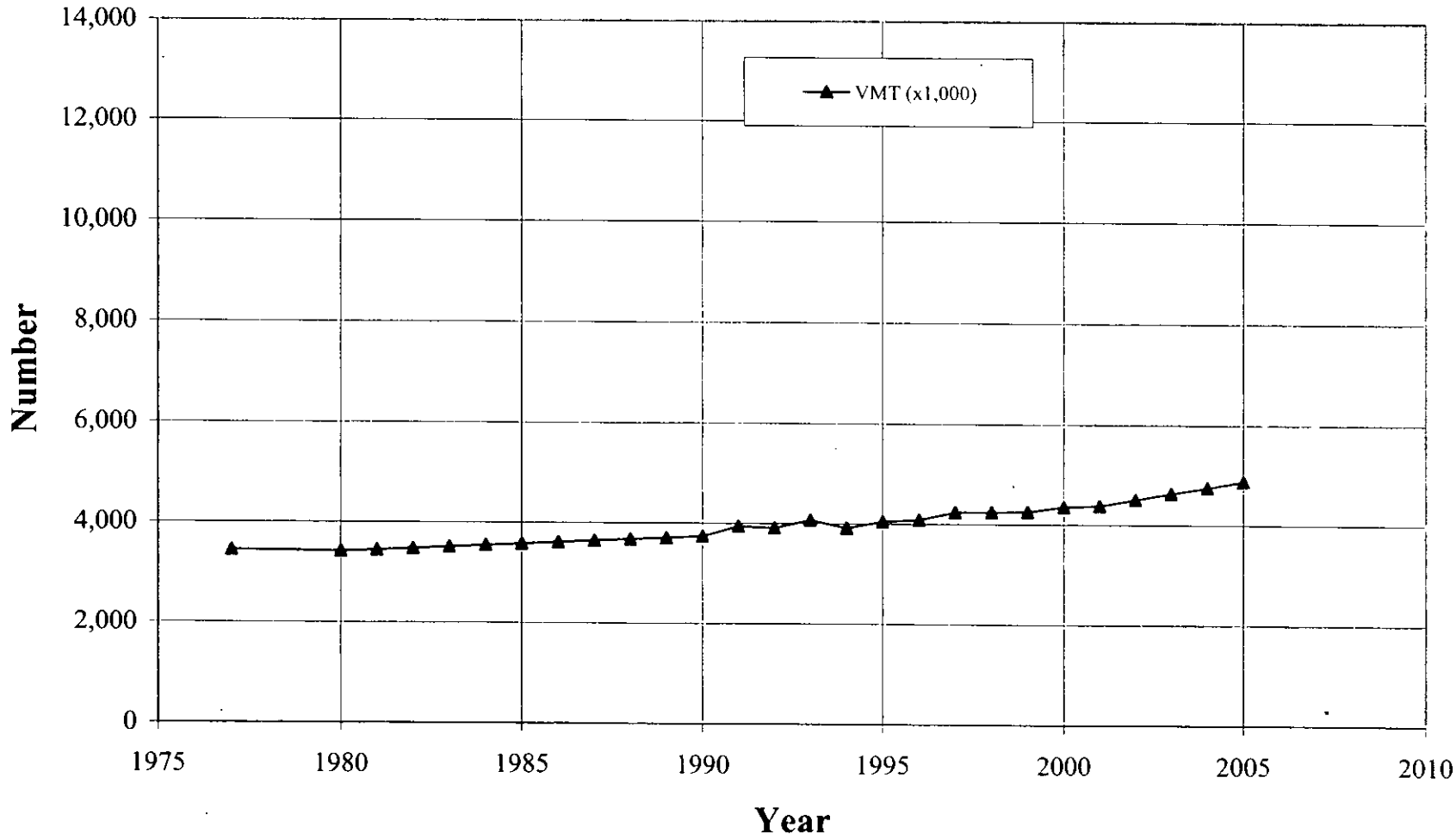


FIGURE 6
MANUFACTURING AND AGRICULTURE TRENDS IN BAY COUNTY

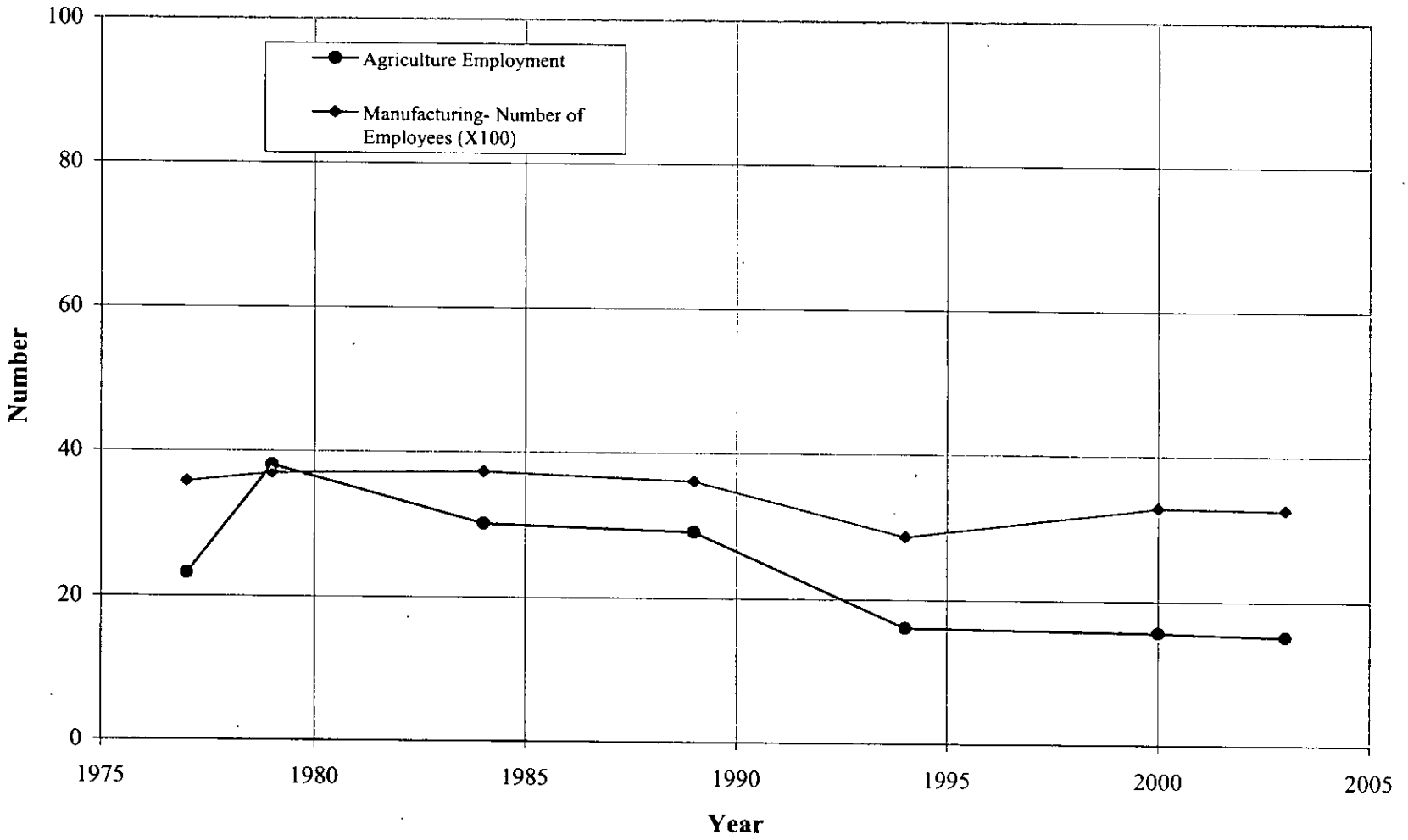


FIGURE 7
ELECTRICAL POWER GENERATION CAPACITY IN BAY COUNTY

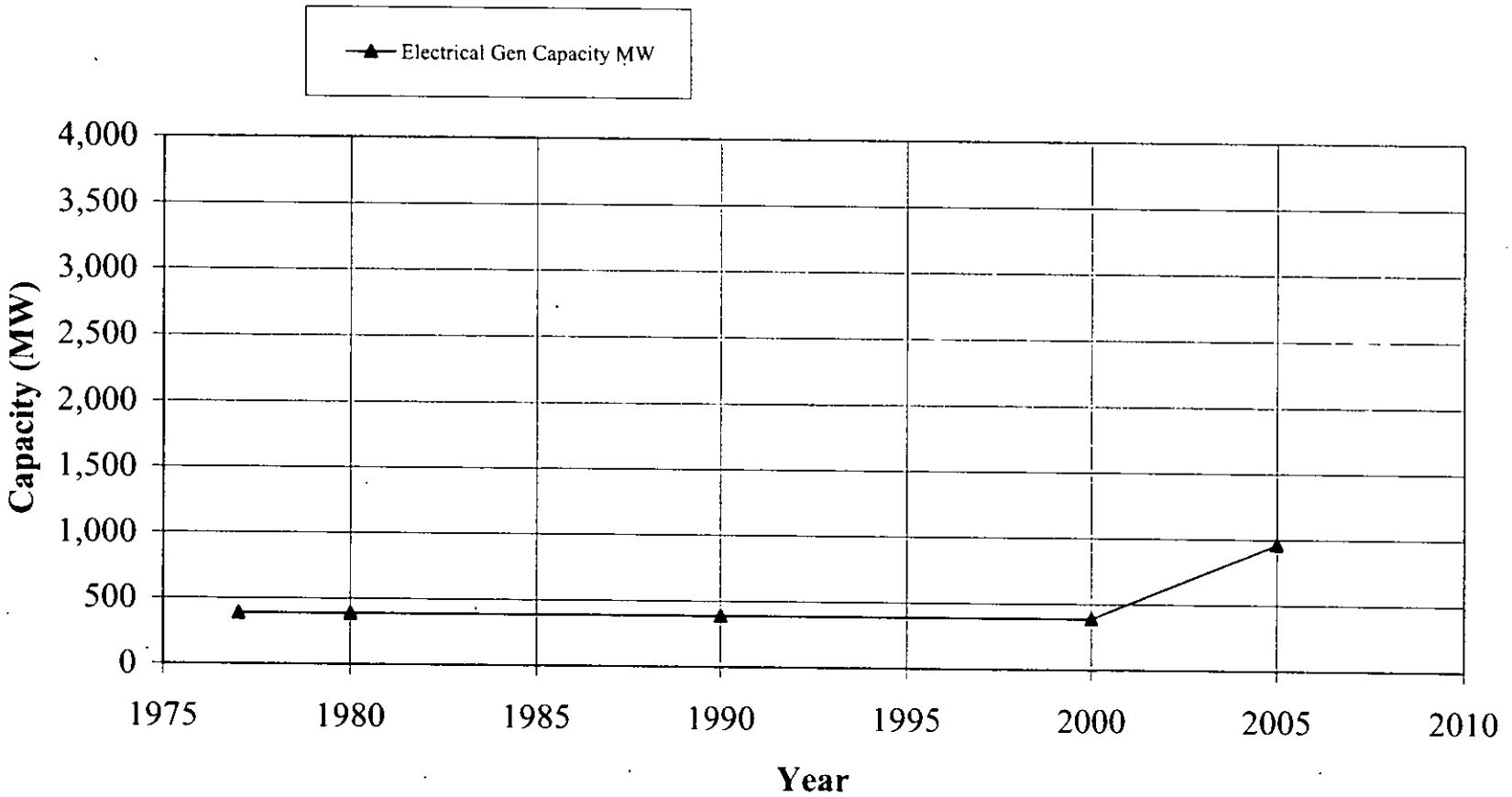


FIGURE 8
MOBILE SOURCE EMISSIONS (TONS PER DAY) OF CO, VOC, AND NOX IN BAY COUNTY

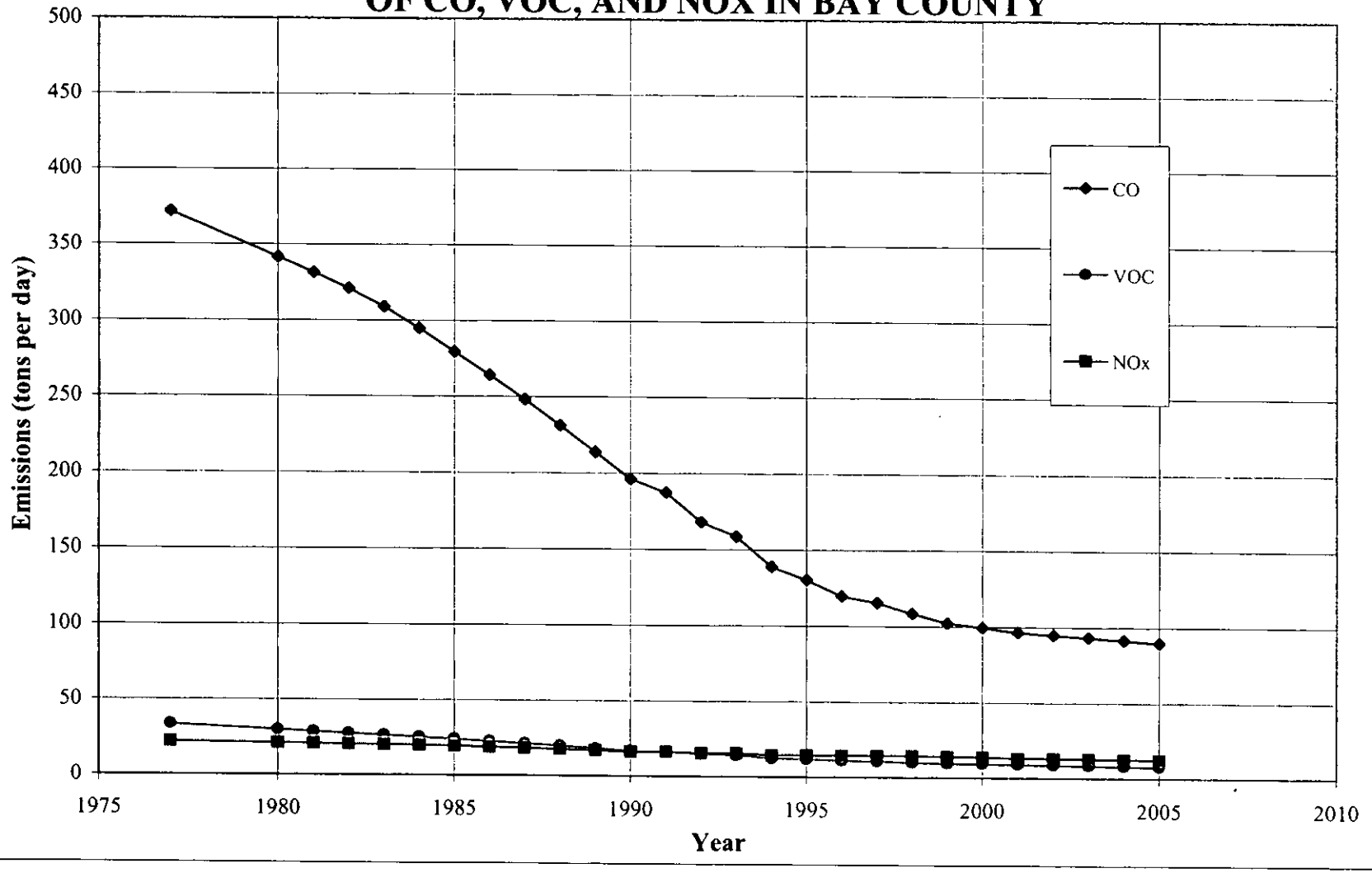


FIGURE 9
MEASURED ANNUAL AVERAGE SO_2 CONCENTRATIONS FROM 1981 TO 1992 - BAY COUNTY

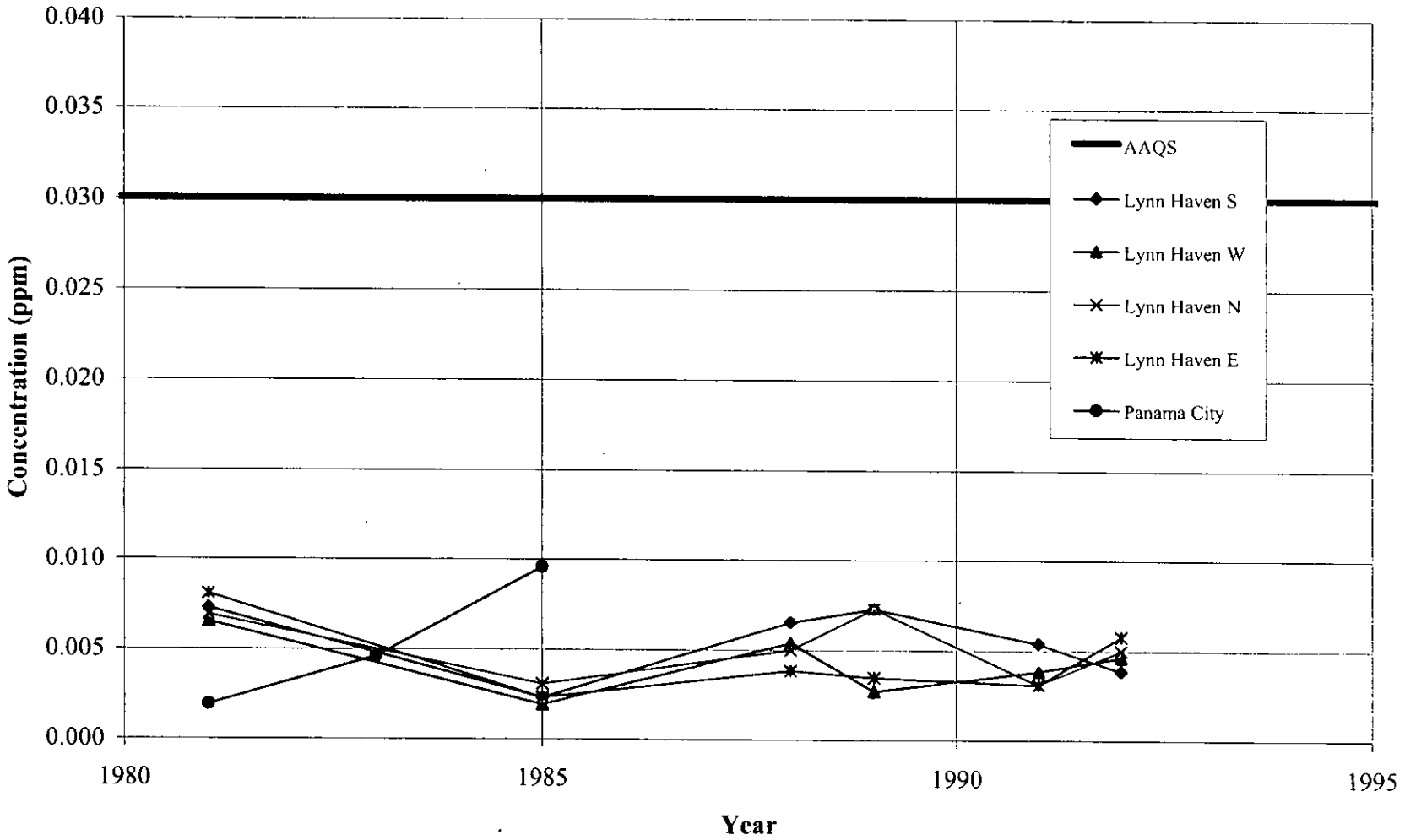


FIGURE 10
MEASURED 24-HOUR AVERAGE SO_2 CONCENTRATIONS (2ND HIGHEST) FROM 1981 TO 19922 - BAY COUNTY

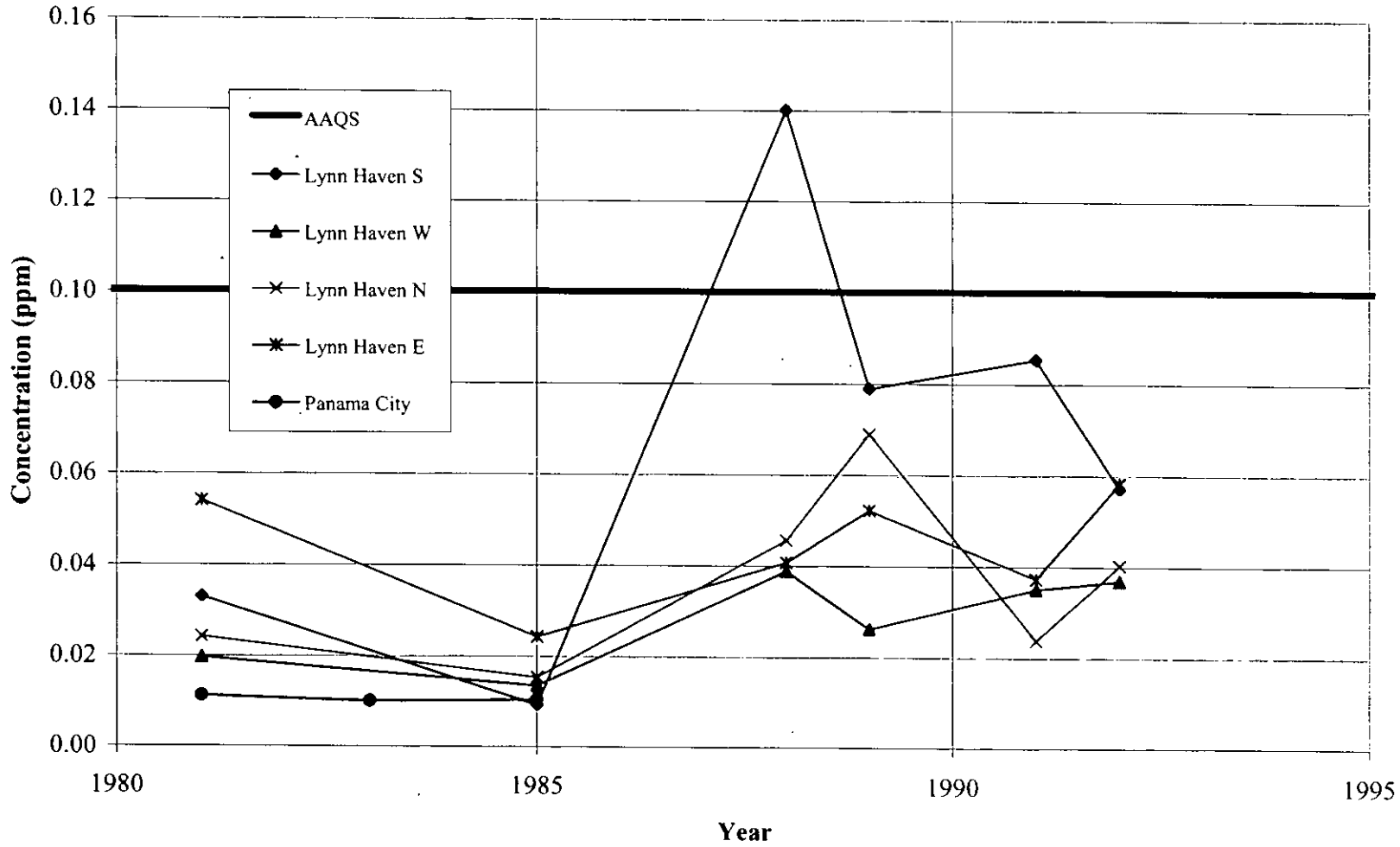


FIGURE 11
MEASURED 3-HOUR AVERAGE SO_2 CONCENTRATIONS
(2ND HIGHEST) FROM 1981 TO 1992 - BAY COUNTY

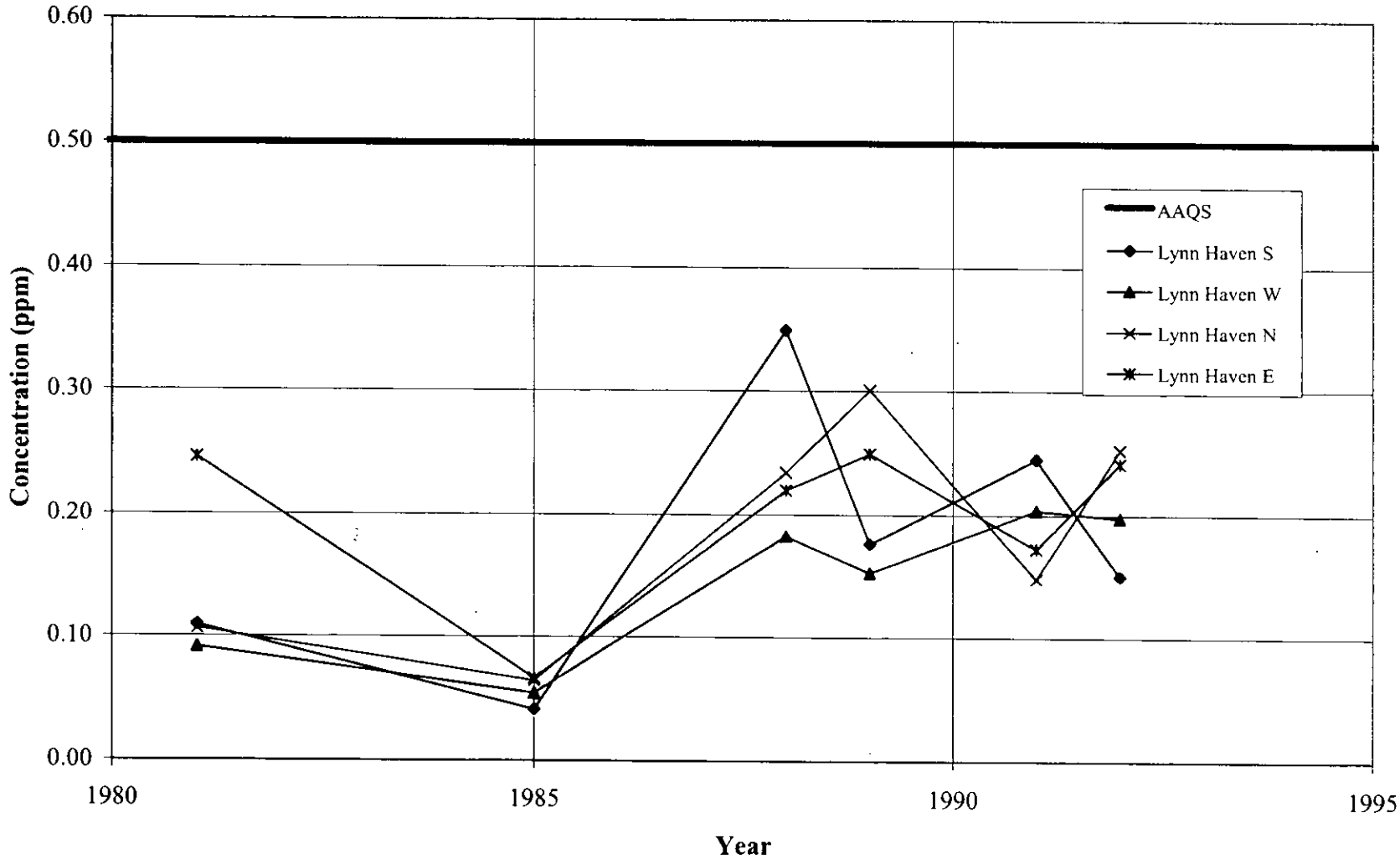


FIGURE 12
MEASURED ANNUAL AVERAGE PM_{10} AND TSP CONCENTRATIONS FROM 1981 TO 2005 IN PANAMA CITY, BAY COUNTY

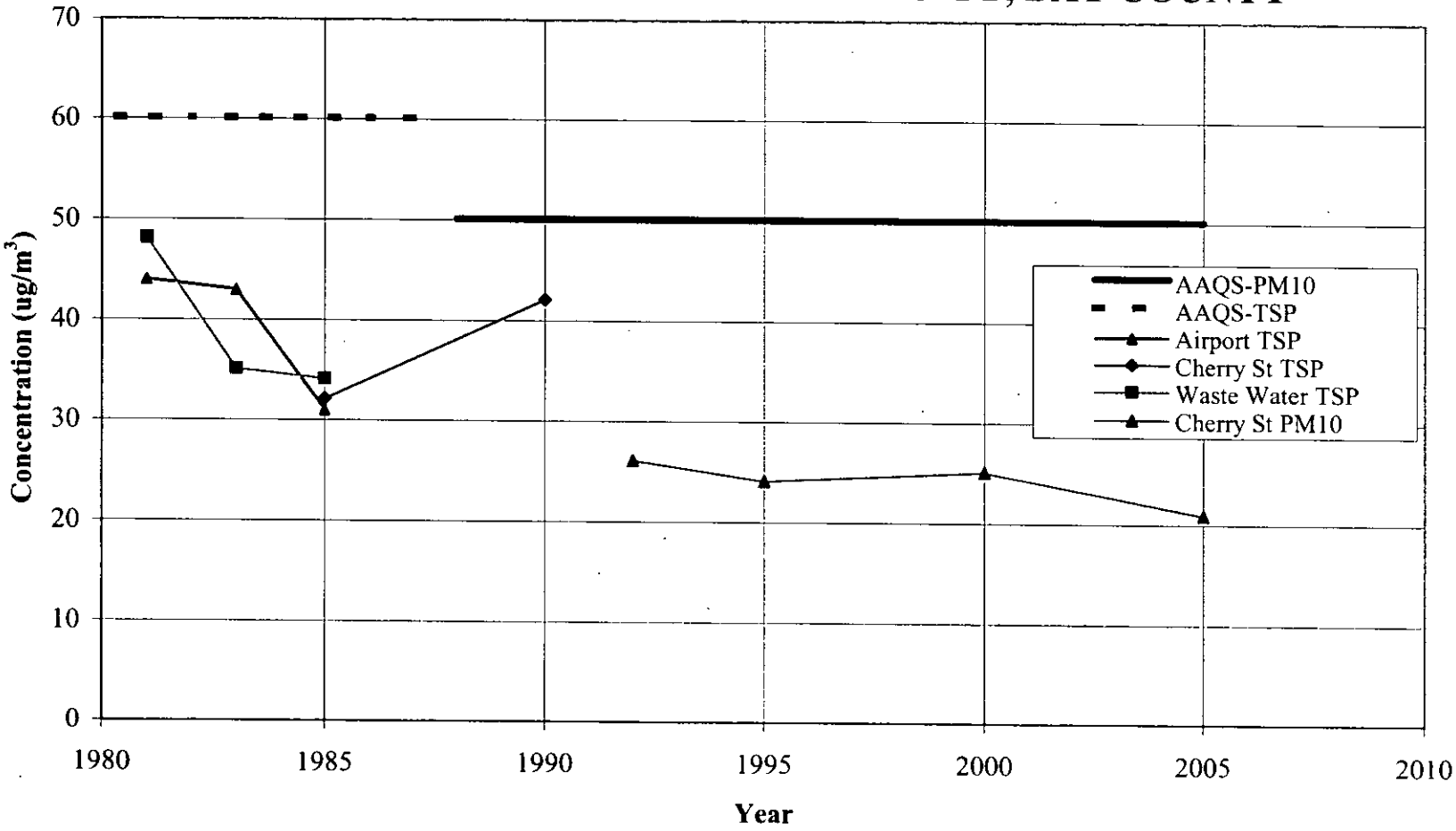


FIGURE 13
MEASURED 24-HOUR AVERAGE PM_{10} AND TSP CONCENTRATIONS
2ND HIGHEST FROM 1981-2005-PANAMA CITY, BAY COUNTY

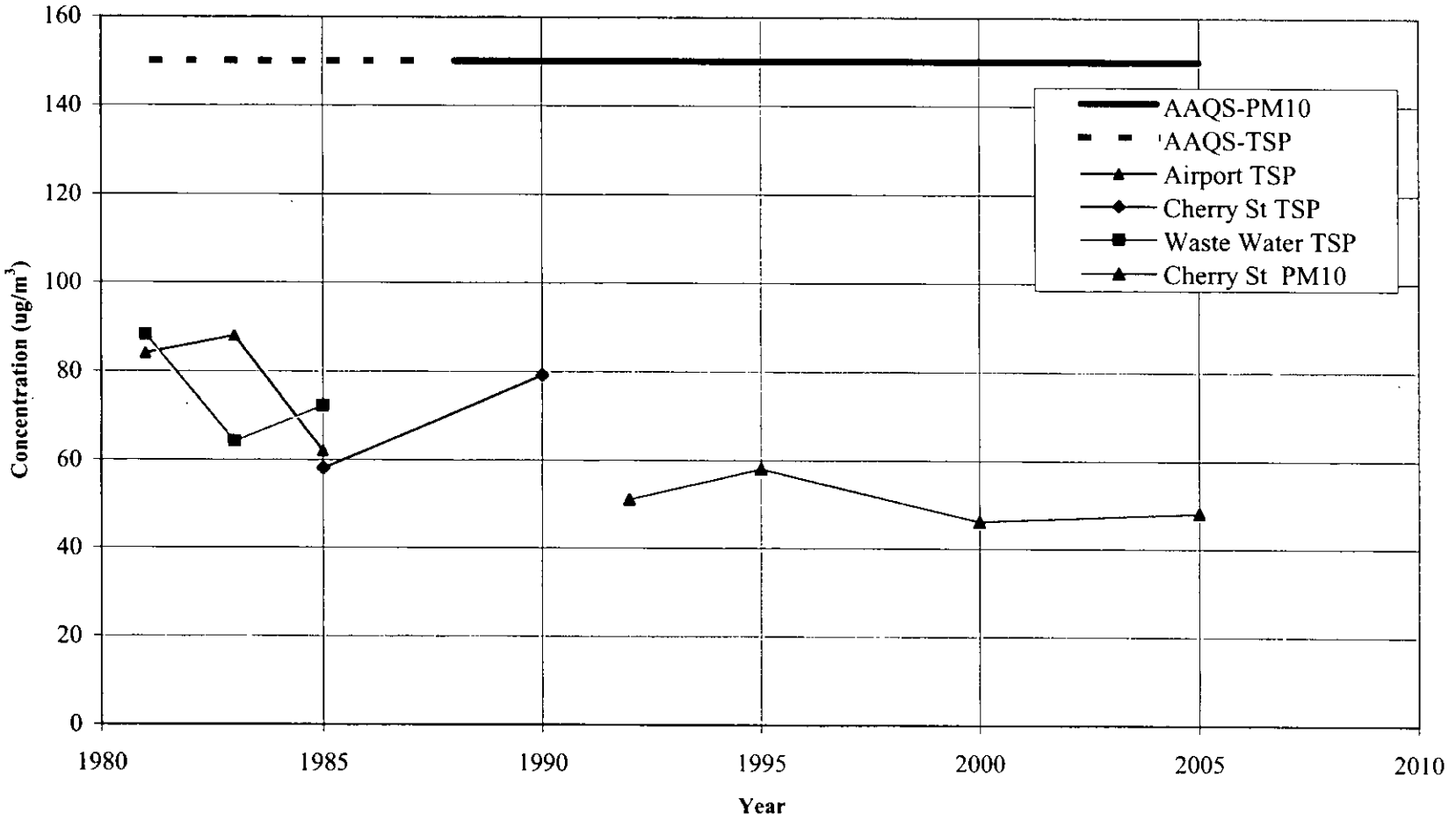


FIGURE 14
MEASURED ANNUAL AVERAGE NITROGEN DIOXIDE CONCENTRATIONS FROM 1981 TO 1992 IN BAY COUNTY

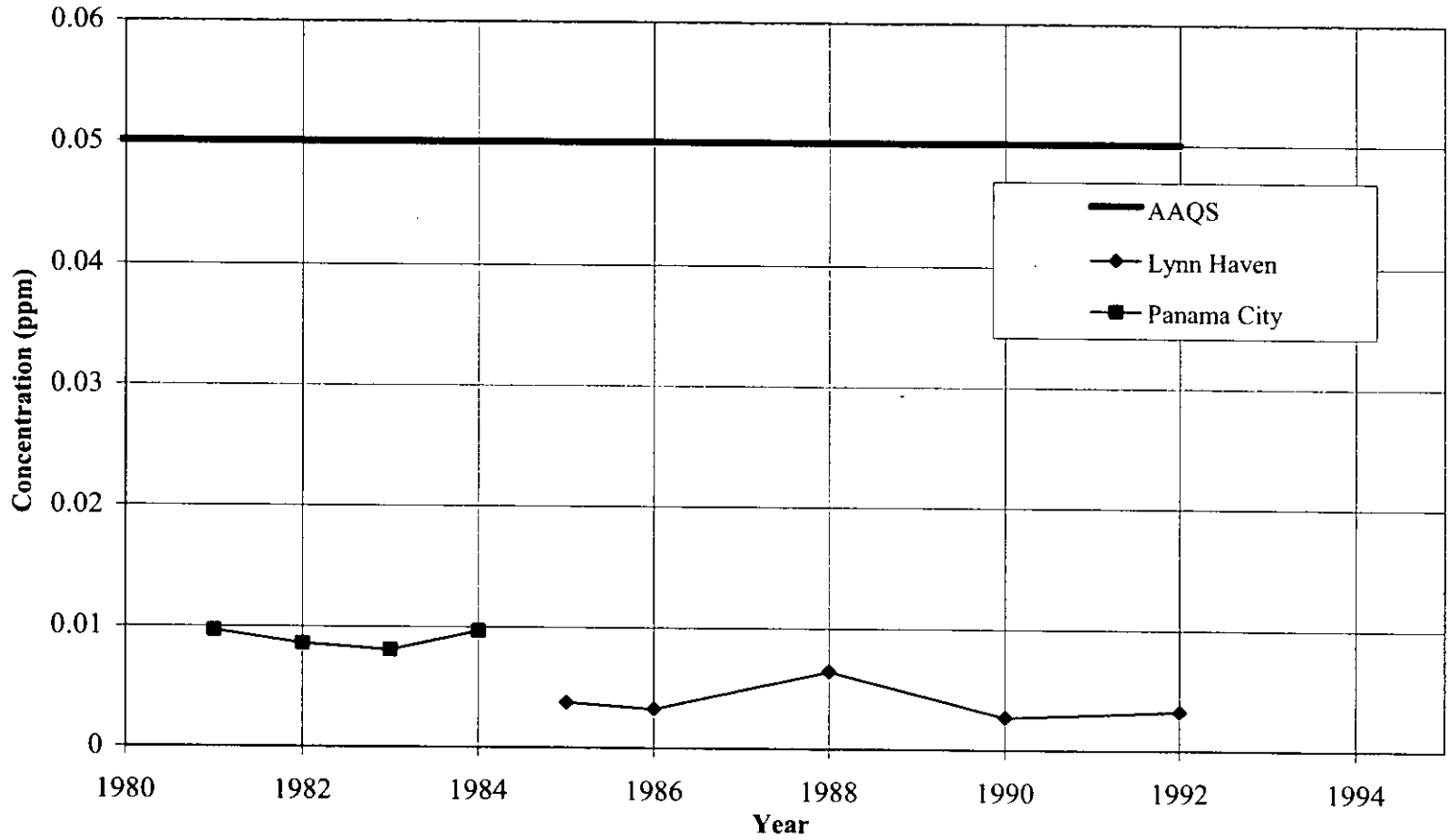


FIGURE 15
MEASURED 1-HOUR AVERAGE OZONE CONCENTRATIONS (2ND HIGHEST) FROM 2000 TO 2006- BAY COUNTY

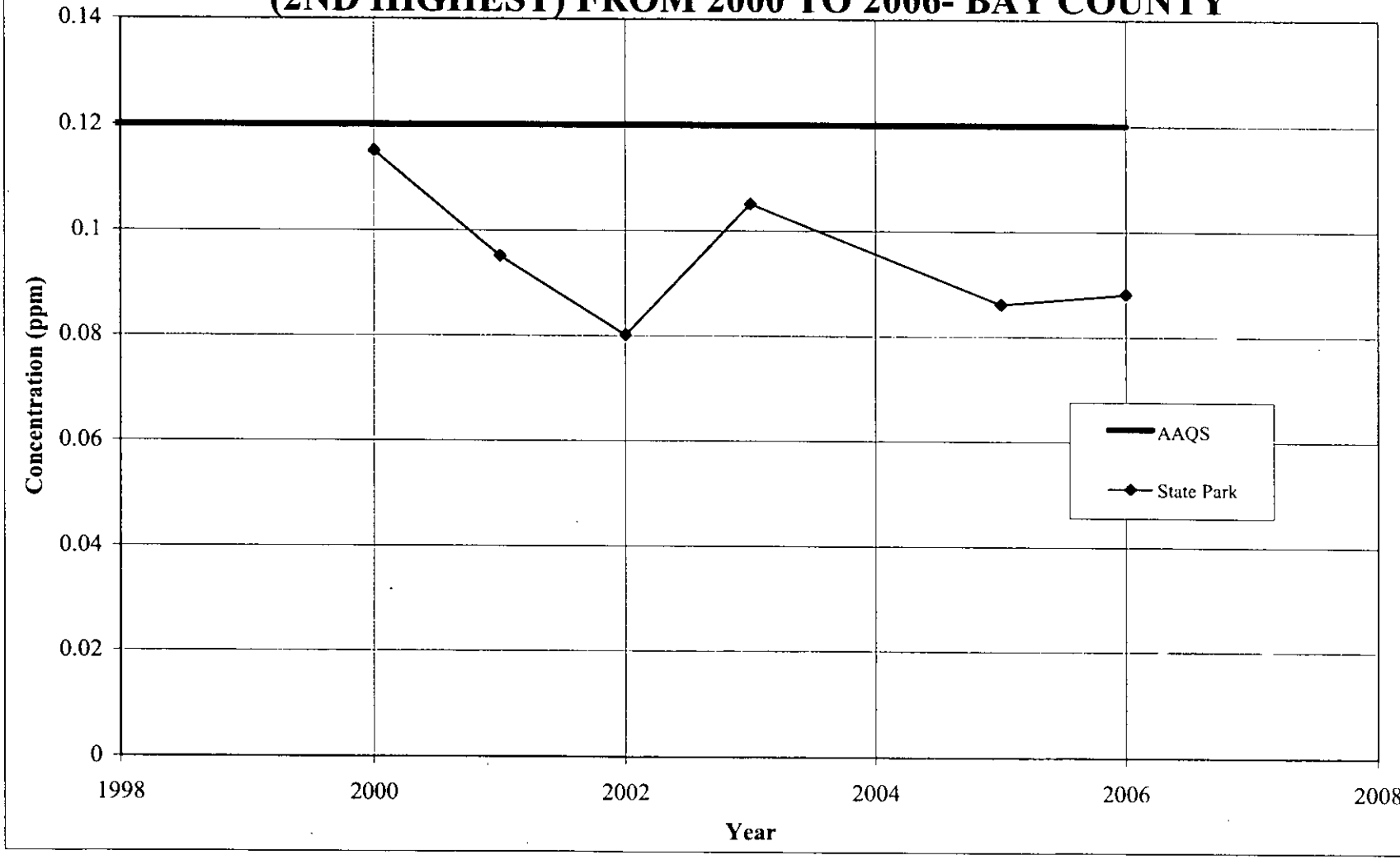
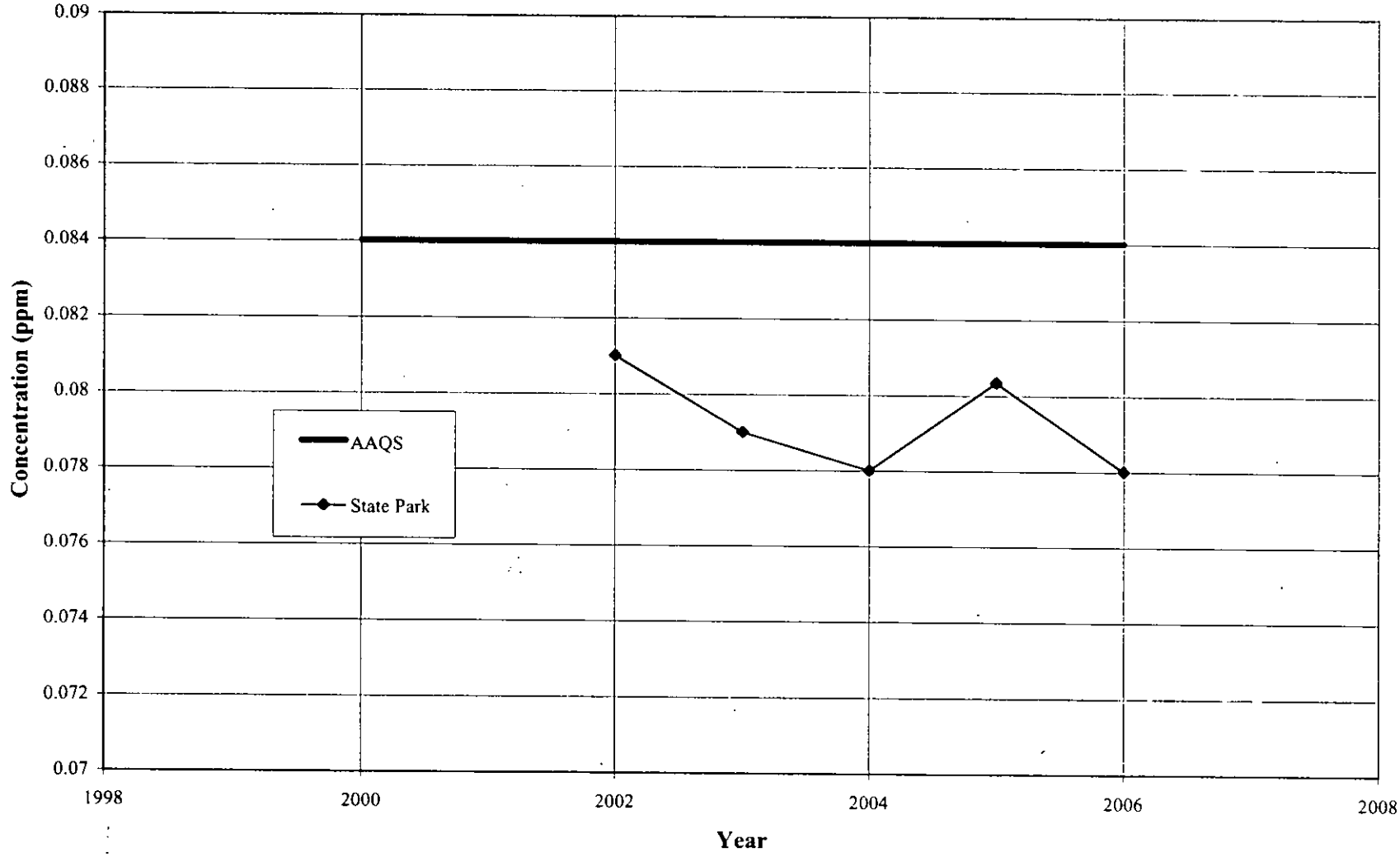


FIGURE 16
MEASURED 8-HOUR AVERAGE OZONE CONCENTRATIONS
(3-YEAR AVERAGE OF THE 4TH HIGHEST VALUES) FROM 2000 TO 2006- BAY COUNTY



ATTACHMENT D

AMBIENT IMPACT ANALYSIS FOR OZONE

AMBIENT MONITORING ANALYSIS FOR OZONE

INTRODUCTION

In accordance with requirements of Title 40 of the Code of Federal Regulations (CFR), Subpart 52.21(m) and Rule 62-212.400(5)(f), Florida Administrative Code (F.A.C.), any application for a Prevention of Significant Deterioration (PSD) permit must contain an analysis of continuous ambient air quality data in the area affected by the proposed major stationary facility or major modification. For a new major facility, the affected pollutants are those that the facility potentially would emit in significant amounts. For a major modification, the pollutants are those for which the net emissions increase exceeds the significant emission rate.

Ambient air monitoring for a period of up to 1 year is generally appropriate to satisfy the PSD monitoring requirements. A minimum of 4 months of data is required. Existing data from the vicinity of the proposed source may be used if the data meet certain quality assurance requirements; otherwise, additional data may need to be gathered. Guidance in designing a PSD monitoring network is provided in U.S. Environmental Protection Agency (EPA) Ambient Monitoring Guidelines for Prevention of Significant Deterioration (EPA, 1987).

An exemption from the preconstruction ambient monitoring requirements is also available if certain criteria are met. If the predicted increase in ambient concentrations due to the proposed modification is less than the specified *de minimis* concentration for a particulate pollutant, the modification can be exempted from the preconstruction air monitoring requirements for that pollutant.

A preconstruction air monitoring analysis is required for the Smurfit Stone Container Enterprises (SSCE) Panama City Mill Lime Kiln petcoke project for ozone, since the increase in nitrogen oxides (NO_x) emissions due to the project is greater than 100 tons per year (TPY). This analysis is presented in the following section.

AMBIENT OZONE CONCENTRATIONS

The PSD ambient monitoring guidelines allow the use of existing data to satisfy preconstruction review requirements. Presented in Table 1 is a summary of existing continuous ambient ozone data for the ozone monitor located in the vicinity of the Panama City facility. Data are presented for the last 3 years of record, 2004 to 2006. As shown, one ozone monitor was operational in the

vicinity of Panama City during this period. The nearest ozone monitoring station was located in Panama City Beach.

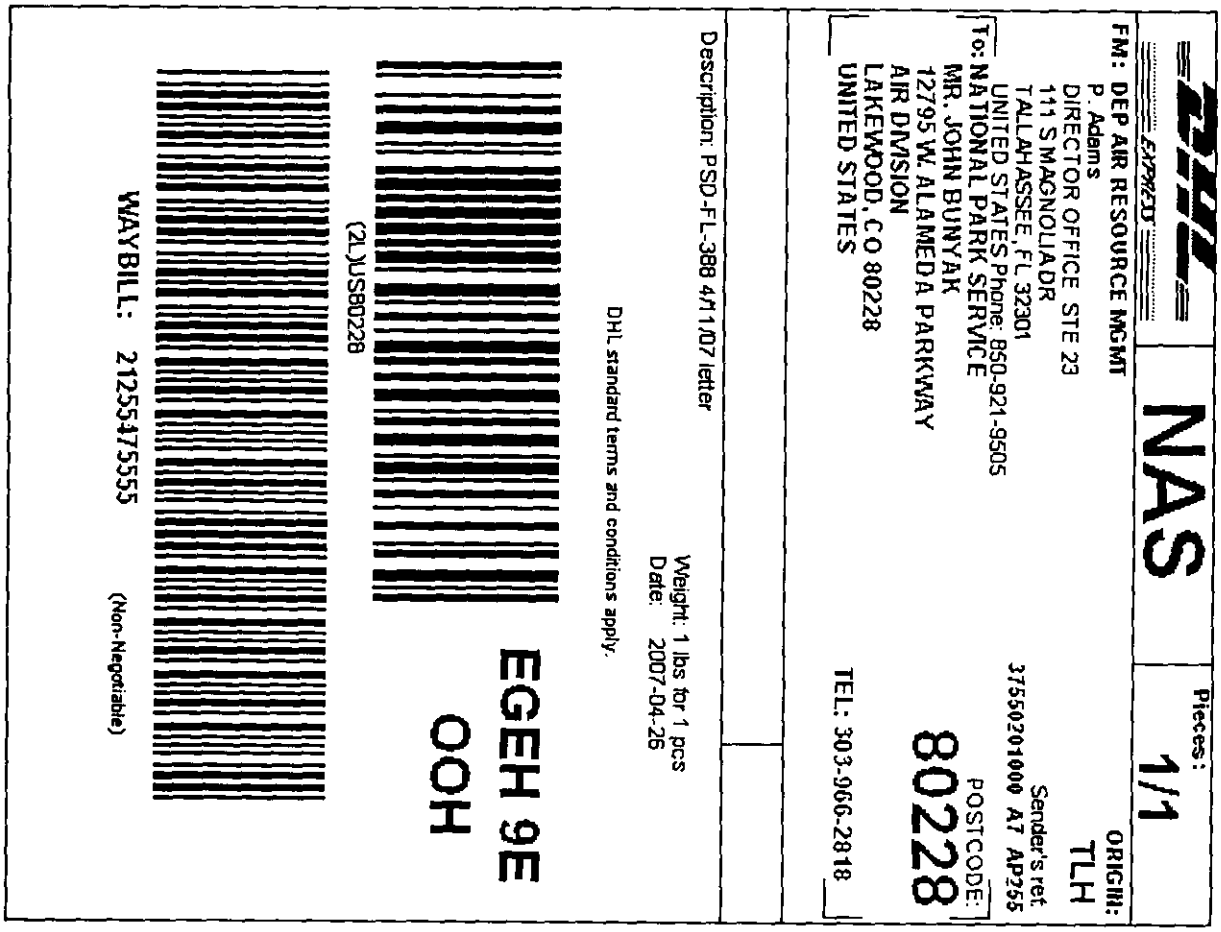
The ozone monitor shows that ambient ozone concentrations were below the ambient air quality standards of: 0.12 parts per million (ppm) [235 micrograms per cubic meter (mg/m^3)], maximum 1-hour average allowed to be exceeded on average one day per year; and 0.08 ppm (157 ug/m^3), average annual fourth highest 8-hour average concentration over a 3-year period. The monitor in Panama City Beach is considered to be representative of the SSCE mill site due to the proximity of the monitor to the mill.

TABLE 1
SUMMARY OF AMBIENT OZONE DATA COLLECTED NEAR THE SSCE PANAMA CITY MILL

Pollutant	City	Site ID No.	Location	Year	Valid Days Measured	2nd Maximum Concentration-1-Hour Average		4th Highest Concentration-8-Hour Average	
						ppm	$\mu g/m^3$	ppm	$\mu g/m^3$
Ozone (O_3)	Panama City	12-005-006	5401 State Park Lane	2006	243	0.088	173	0.077	151
				2005	229	0.086	169	0.078	153
				2004	236	0.091	179	0.081	159

Note: $\mu g/m^3$ = micrograms per cubic meter
ppm = parts per million
NA= not applicable

Source: FDEP Quick Look Reports, 2003, and 2004 (based on EPA's Air Quality System).



▲ PEEL HERE PEEL HERE ▲

Please fold or cut in half

DO NOT PHOTOCOPY

Using a photocopy could delay the delivery of your package and will result in additional shipping charge

SENDER'S RECEIPT
Waybill #: 21255475555

To(Company):
National Park Service
Air Division
12795 W. Alameda Parkway

Lakewood, CO 80228
UNITED STATES

Attention To: Mr. John Bunyak
Phone#: 303-966-2818

Sent By: P. Adams
Phone#: 850-921-9505

Rate Estimate: 10.25
Protection: Not Required
Description: PSD-FL-388 4/11/07 letter

Weight (lbs.): 1
Dimensions: 0 x 0 x 0

Ship Ref: 37550201000 A7 AP255
Service Level: Next Day 3:00 (Next business day by 3 PM)

Special Svc:

Date Printed: 4/25/2007
Bill Shipment To: Sender
Bill To Acct: 778941286

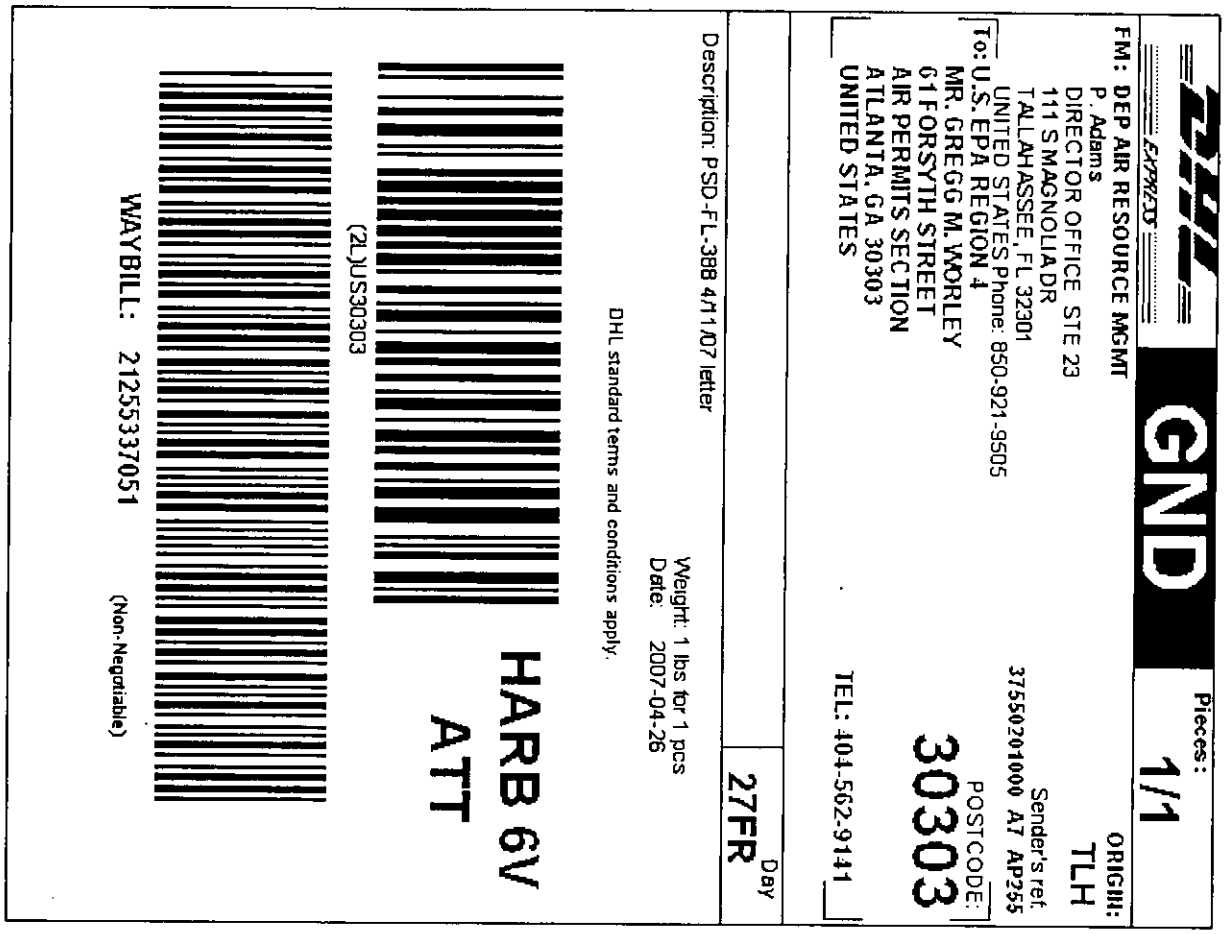
DHL Signature (optional) _____ Route _____ Date _____ Time _____

For Tracking, please go to www.dhl-usa.com or call 1-800-225-5345

Thank you for shipping with DHL

Create new shipment ▶ View pending shipments Print waybill

DHL EXPRESS



▲ PEEL HERE PEEL HERE ▲

Please fold or cut in half

DO NOT PHOTOCOPY

Using a photocopy could delay the delivery of your package and will result in additional shipping charge

SENDER'S RECEIPT
Waybill #: 21255337051

To(Company):
U.S. EPA Region 4
Air Permits Section
61 Forsyth Street

Atlanta, GA 30303
UNITED STATES

Attention To: Mr. Gregg M. Worley
Phone#: 404-562-9141

Sent By: P. Adams
Phone#: 850-921-9505

Rate Estimate: 3.06
Protection: Not Required
Description: PSD-FL-388 4/11/07 letter

Weight (lbs.): 1
Dimensions: 0 x 0 x 0

Ship Ref: 37550201000 A7 AP255
Service Level: Ground (Est. delivery in 1 business day(s))

Special Svc:

Date Printed: 4/25/2007
Bill Shipment To: Sender
Bill To Acct: 778941286

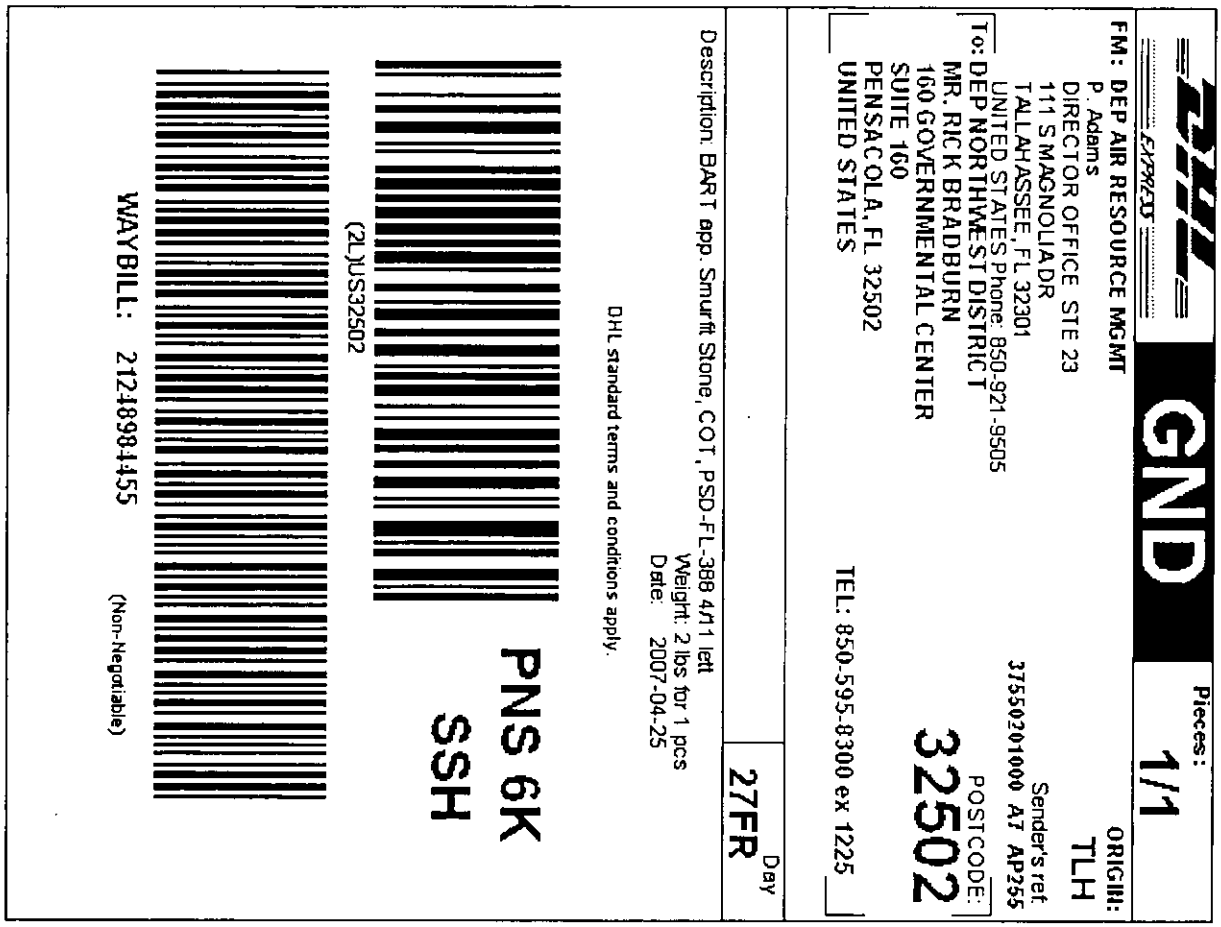
DHL Signature (optional) _____ Route _____ Date _____ Time _____

For Tracking, please go to www.dhl-usa.com or call 1-800-225-5345

Thank you for shipping with DHL

Create new shipment ▶ View pending shipments Print waybill

DHL EXPRESS



▲ PEEL HERE PEEL HERE ▲

Please fold or cut in half

DO NOT PHOTOCOPY

Using a photocopy could delay the delivery of your package and will result in additional shipping charge

SENDER'S RECEIPT
Waybill #: 21248984455

To(Company):
DEP Northwest District
Suite 160
160 Governmental Center

Pensacola, FL 32502
UNITED STATES

Attention To: Mr. Rick Bradburn
Phone#: 850-595-8300 ex 1225

Sent By: P. Adams
Phone#: 850-921-9505

Rate Estimate: 3.06
Protection: Not Required
Description: BART app. Smurfit Stone, COT, PSD-FL-388 4/11 lett

Weight (lbs.): 2
Dimensions: 0 x 0 x 0

Ship Ref: 37550201000 A7 AP255
Service Level: Ground (Est. delivery in 2 business day(s))

Special Svc:

Date Printed: 4/25/2007
Bill Shipment To: Sender
Bill To Acct: 778941286

DHL Signature (optional) _____ Route _____ Date _____ Time _____

For Tracking, please go to www.dhl-usa.com or call 1-800-225-5345

Thank you for shipping with DHL

Create new shipment ▶ ▶ View pending shipments Print waybill ▶

DHL EXPRESS