



2006 Ozone Season Summary

Presented to
Transportation & Environment
Committee
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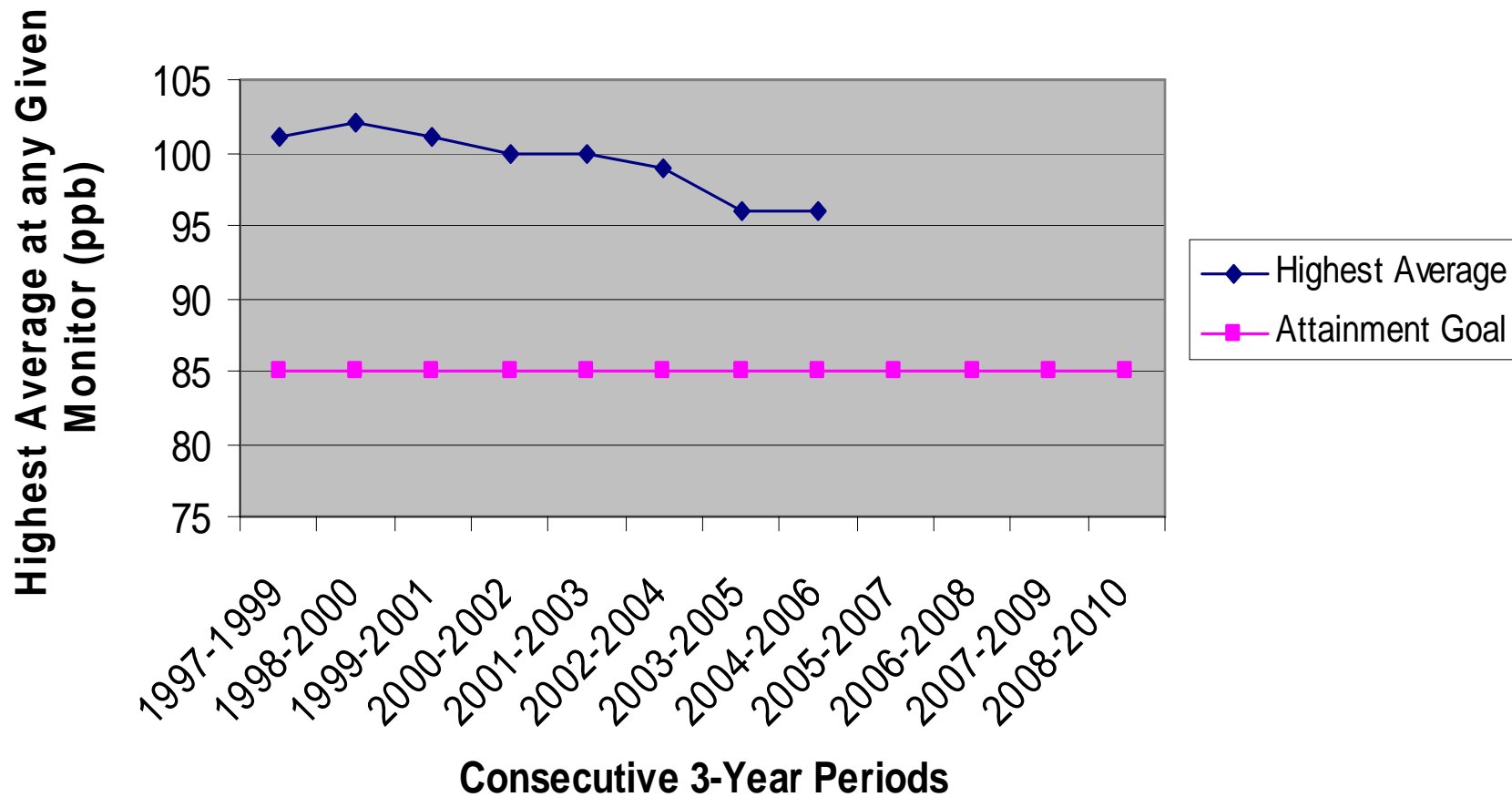
2006 Ozone Season

- 184 Days from May 1 through October 31
- DFW Area
 - 9 Counties: Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant
- 8-hour Ozone Standard
 - Attainment is reached when the 3-year average of the annual 4th highest daily maximum ozone concentration at each monitor is less than 85 parts per billion (ppb)
 - Current Status: Non-attainment for Ozone Standard
- 20 ozone monitors in region

2006 Season Area Results

- The 4th highest average (2006) is 100 ppb at the monitoring site located South of the Denton Airport
- The 4th highest 3 year average (2004-06) is 96 ppb at the monitoring site located at Eagle Mountain Lake in Tarrant County
- At least 12 monitoring sites have 3 year averages above the 85 ppb standard

Historical Trend for 8-Hour Ozone Standard



*Attainment Goal-According to the US EPA, attainment is reached when , at each monitor, the 3-year average of the annual 4th highest daily maximum 8-hour average ozone concentration is less than 85 ppb.

2006 Season Area Results

Air Quality Index	GOOD OZONE DAYS	HIGH OZONE DAYS	HIGH OZONE WATCH DAYS (forecast)
GOOD (green)	84 (45.7%)		
MODERATE (yellow)	69 (37.5%)		
UNHEALTHY FOR SENSITIVE GROUPS (Orange)		29 (15.8%)	34 (89.5%)
UNHEALTHY (red)		2 (1.0%)	4 (10.5%)
VERY UNHEALTHY (purple)		0	0
TOTAL (184 days)	153	31	38

2006 Season Area Results

- 153 good ozone days
- 31 high ozone days exceeded standard
 - 38 High Ozone Watch Days were forecast
 - June had most bad ozone days

	Exceeded Standard	Watch Days
May	1	1
June	14+2	15
July	8	10
August	4	7
September	2	5
October	0	0
TOTAL	31	38

2006 City of Dallas Ozone Plan

- Activities to reduce emissions of Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOC)
- Affecting all City Departments during six-month Ozone Season
- Season and Watch Day activities included guidelines for:
 - Hours of Work/Operations
 - Temporarily change hours of operations
 - Compressed work schedules
 - Employee commuting
 - Schedule meetings after 10:00 AM
 - Cancel non-essential vehicle trips or postpone to afternoon
 - Telework
 - Use of public transportation
 - Use a plan for carpools and public transportation traveling to and from workplace
 - Carpool to meetings
 - Encourage use of carpools and public transportation during lunch
 - Use of City vehicles and equipment
 - Defer gas/diesel vehicles use until after 10:00 AM
 - Refuel vehicles in late afternoon
 - Restrict maintenance/repair operations that require running vehicles or equipment before 10:00 AM
 - Prohibit idling city vehicles just to use air conditioner
 - Restrict use of small engines for City and contract crews before 10:00 AM
 - Restrict use of certain paints before 10:00 AM
 - Not allow or cause roadway construction lane closures before 10:00 AM

2006 City Ozone Plan Results

- Driving single occupant vehicles to and from the workplace was reduced by 7,082,820 miles
- Emissions prevented from entering City's ambient air
 - 8.4 tons NO_x
 - 4.0 tons VOC
 - 89.2 tons Carbon Monoxide (CO)
 - 3661.2 tons Greenhouse Gases (CO₂)
- Compressed schedules were worked by an average 1418 employees each month (17.8% of reduction)
- Average of 282 employees carpooled one or more days each month (9.6% of reduction)
- Average of 367 employees used DART one or more days each month (16.6% of reduction)
- Average of 57 employees Biked and Walked and Teleworked one or more days each month (2.2%)

2006 City Ozone Plan Results

for 6 month Ozone Season

- Overall, the City averaged an 11.5% reduction in vehicle miles and emissions from these activities and credit for days not driving due to leave taken
- In addition:
 - Average of 324 meetings were scheduled after 10:00 AM each month due to Ozone Season
 - Average of 186 employees carpooled to those meetings each month
 - Average of 211 gas/diesel vehicles were deferred for use until after 10:00 AM one or more days each month
 - Average of 498 employees walked, biked, used DART and carpooled to lunch one or more days each month
 - Average of 2339 employees ate lunch at their workplace one or more days each month (62% of additional activities)
 - Average of 181 employees worked flexible hours one or more days each month to avoid traveling during RUSH hours

City Equipment Emissions Inventory Completed 2005 Base Year

- 4,604 On-Road Vehicles; 3,566 Nonroad Equipment; 120 Stationary
- Annual and Ozone Season Daily Emissions-All Source Categories

	VOC	CO	NOx	PM	CO2
Annual-Tons/year					
On-Road	38	475	425	27	56,633
Nonroad	613	7,346	331	74	49,384
Stationary	1	31	22	6	96,906
Total	652	7,852	778	107	202,923
Ozone Season-Tons/day					
On-Road	0.10	1.16	1.24	0.08	165
Nonroad	2.3	27.6	1.2	0.27	177
Stationary	0.004	0.087	0.063	0.015	265
Total	2.41	28.85	2.50	0.36	607

DFW State Implementation Plan



- Significant steps toward finalization of the 2007 State Implementation Plan (SIP)
 - October:
 - North Texas Clean Air Steering Committee adopted 15 resolutions potentially affecting DFW air quality, as listed in Appendix A

DFW State Implementation Plan

- November:
 - SIP Rule Packages to be considered December 13, 2006 TCEQ Commissioner's Agenda
 - Recommended DFW Attainment Demonstration SIP Revisions include requirements for:
 - Major Industrial, Commercial, and Institutional Sources
 - Minor Sources
 - Electrical Generating Facilities
 - Cement Kilns
 - East Texas Combustion Sources
 - All apply to 9-county area except East Texas Combustion Sources, which applies only in specific counties in Northeast Texas

DFW State Implementation Plan

- Proposed revision also includes:
 - A Motor Vehicle Emissions Budget
 - VOC and NOx Reasonably Available Control Technology analyses
 - Reasonably Available Control Measures analysis
 - Contingency Measures
 - Emissions Inventories
- Recommended DFW Reasonable Further Progress (RFP) SIP Revision demonstrates a 15% Emissions Reduction requirement will be met for the period 2002-2008
- For the 4-core counties (Collin, Dallas, Denton, Tarrant) TCEQ has chosen to reduce NOx emissions by 15% between 2002 and 2008
- For the new counties (Ellis, Johnson, Kaufman, Parker, Rockwall) TCEQ must reduce VOC emissions by 15% between 2002 and 2008

DFW State Implementation Plan

- The DFW RFP SIP Revision demonstration:
 - Establishes Baseline Emission Levels
 - Calculates Reduction Targets
 - Identifies Control Strategies to meet Emission Target Levels
 - Tracks actual emission reduction against established emissions growth and control budgets
 - Includes a Motor Vehicle Emissions Budget for the milestone year of 2008
- December:
 - TCEQ Commissioners Approved Publication of New Clean Air Rules (SIP Packages) submitted in November
 - Scheduled Public Meetings for:
 - Dallas – January 31, 2007, 7:00 PM, Dallas Central Library
 - Arlington – February 1, 2007, 2:00 PM, Arlington City Hall
 - Midlothian – February 1, 2007, 6:00 PM, Midlothian Civic Center
 - Longview – February 6, 2007, 2:00 PM, Longview Public Library
 - Austin – February 8, 2007, 2:00 PM, TCEQ

Appendix A

- Resolutions adopted by the North Texas Clean Air Steering Committee and potentially affecting DFW air quality
 - Support Texas Emissions Reduction Plan (TERP)
 - Support Low Income Repair & Replacement Assistance Program Improvements
 - Support Selective Non-Catalytic Reduction Technology for Cement Kiln Emissions Reductions in Ellis County
 - Support LoTox and/or Selective Catalytic Reduction Technologies for additional Cement Kiln Emissions Reductions
 - Concerning Existing Electric Generating Units
 - Support Allocation of Funds for the Texas Clean School Bus Program
 - Support Various Energy Efficiency Measures
 - Support Preference in Purchasing Policies for Certain Cement
 - Support an Expanded Inspection & Maintenance Program to include Diesel Vehicles
 - Support Controls on East Texas Combustion Engines
 - Support Rail Efficiency through the Texas Rail Relocation and Improvement Fund
 - Support to Expedite EPA's "Highway Diesel Rule" finalized January 2001
 - Support Adoption of California's Low Emitting Vehicle II Standards
 - Support Statewide Portable Equipment Registration Program
 - Support Adoption of Truck Lane Restriction