

Clean Air Plan and 2006 Ozone Season Plan

Transportation and Environment
Committee

April 24, 2006

DFW Non-attainment

- EPA designated 9-DFW Counties as Moderate Non-attainment under the 8-Hour Ozone Standard
 - Dallas, Denton, Tarrant, Collin, Kaufman, Ellis, Rockwall, Johnson, Parker
- For Moderate Non-attainment, EPA requires a State Implementation Plan (SIP) to be submitted by June 2007, showing attainment by June 2010
- Since June 2010 is in the middle of Ozone Season, the SIP must show attainment by 2009
- Texas Commission on Environmental Quality (TCEQ) modeling determined the SIP will demonstrate attainment with an emphasis on the reduction of Nitrogen Oxides

Ozone Facts

- DFW Season
 - May 1 through October 31
- National Standard
 - 85 parts per billion (ppb)
- Chemical Reaction
 - from other pollutants called precursors; Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOC)
 - Reacting in heat and bright sunlight
 - Usually under conditions with light winds
 - Summertime conditions
- Controlling ozone is more responsive to NO_x reductions than to VOC reductions

8-Hour SIP

DFW Control Strategy DRAFT Results

	Area & Point ¹ (tpd)	Non-road (tpd)	On-road (tpd)	Total ^{2,3,4} Potential (tpd)	Amount Needed? (tpd)
NOx	11	30	22	16-33	166

The diagram shows a bracket labeled "Gap" positioned below the "Total Potential" and "Amount Needed?" columns for the NOx row. Two arrows point upwards from the "Gap" label to the "16-33" and "166" values, which are highlighted with light blue circles.

1. State evaluating Electric Generating Utilities, Cement Kilns, Small Boilers and Heaters
2. Certain reductions require Legislative Action, Double Counting, Emissions not in Inventory, etc.
3. Assumes Zero overlap between Source Categories
4. Other Strategies exist netting Small Reductions

Source: NCTCOG

City of Dallas Clean Air Plan

- OEQ and EHS Formed a City of Dallas Clean Air Steering Committee to Develop a Clean Air Plan for City Operations
- Committee Members –
 - City of Dallas Departments = Environmental Health Services, OEQ, PIO, IGS and EBS
 - North Central Texas Council of Governments
 - Sustainable Dallas
 - Representatives from the Environmental Health Commission

Draft Mission Statement

The City of Dallas, as a leader in air quality initiatives, strives to have a positive impact on the region's air quality, by systematically evaluating and reducing emissions from its operations and employee activities, and encouraging citizens to consider air quality impacts from their daily choices.

Components of Clean Air Plan

- State Implementation Plan (SIP)
 - Participation with TCEQ, EPA, and NCTCOG on development of the SIP
 - Education for City Departments
 - Identification/Review of SIP strategies
- Emissions Inventory
 - Conducting Emission Inventories City wide
 - Review with NCTCOG
 - Update Periodically

Components of Clean Air Plan

- Technologies
 - Review/Interview Technology Vendors for City Applications
 - Select Technologies for Demonstration Testing
 - Explore Partnerships with UTA for Mobile Emission Testing
 - Participate in Discussions with TCEQ and EPA on Encouraging Verification of Emission Control Devices
 - Implement a Strategic Fuel Plan for City of Dallas Fleet

Components of Clean Air Plan

- Education/Outreach
 - Hold Clean Air Day for City Employees Each year – May 18th
 - Coordinate with NCTCOG and Sustainable Dallas on Clean Air Events
 - Update Website
 - Evaluate Citizen Education Opportunities
 - Continue Ozone Season Activities

Components of Clean Air Plan

- Enforcement
 - EHS Air Pollution Control Program is an Extension of the TCEQ
 - Enforces State and Federal Regulations within the City of Dallas
 - TCEQ/EPA are Encouraging Cities to Adopt and Enforce Ordinances Related to Emission Reductions

Components of Clean Air Plan

- Grants
 - Seek Grant Funding for the Clean Air Plan
 - Partnered with Dallas County on an EPA Grant for Clean Air Activities
 - Two TCEQ Grants for \$20,000 each are pending for emission inventory activities
- Monitoring/Measurement
 - Develop Appropriate Objectives and Targets for Clean Air Plan
 - Measure Emission Reductions

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2006 Ozone Plan

- City Ozone Plan-developed to have a positive impact on the attainment status of DFW region, potentially affecting
- 13,000 City Employees
- 4,600 Pieces of City Equipment
- 4 Primary Components
 - Employee Awareness Campaign (1)
 - Briefings
 - Ozone Kick-Off Day for Employees
 - Ozone Watch and Warning Notifications
 - Ozone Coordinators Seminar
 - Regular announcements, brochures, posters, internet sites, etc.

City of Dallas

2006 Ozone Plan

- Implementation of Emissions Reduction Activities (Tiers I-III) of Ozone Plan (2)
 - Developed in 2005 and updated for 2006
 - Every Department to commit to mandatory and optional tiers
 - Tiers I-III Emissions Reduction Activities detailed on following pages:

2006 TIER I – Mandatory for City Departments during Ozone Season

TASK	BENEFIT
Department Director's Distribute Ozone Plan to Employees	Educate employees on the Ozone issue in Dallas and the City's efforts to reduce its contribution
Department Director's Assign One Contact Person (Ozone Coordinator) for Ozone Plan	Ensure Ozone Plan is implemented within the Department and a single Contact Person for Reporting and Notifications
EHS Department Ozone Coordinator will "announce" Ozone Watch Days through the City's email service.	Ensures that Department Ozone Coordinators and other interested parties are consistently notified when the level of Ozone is predicted to be unhealthy.
Department Ozone Coordinator notifies department personnel on Watch and Warning Days	Consistently Notifies Employees When Ozone Generation is Reaching Unhealthy Levels
Change hours of operation in all departments, as feasible, to reduce Employee Miles Traveled (EMT) <ul style="list-style-type: none"> • 8/80 schedule Flextime • 9/80 schedule Other 	Reduces Amount of Vehicle Emissions during Commute Times. Reduction of ozone precursors before 10:00 a.m. has been shown to reduce the potential for ozone build-up in the afternoon.
All Departments, as feasible, Use and Submit Carpool Plan	Reduces Amount of Vehicle Emissions during Commute Times
City provides DART passes at minimal cost to Employees	Encourages use of DART to reduce Vehicle Emissions during Commute Times
Report tracking of EMT Reduced	Allows City to Estimate Vehicle Emissions Reduced
Refuel gasoline vehicles later in the afternoon; <ul style="list-style-type: none"> • Do not top off tanks • After 3:00PM when possible 	Reduces Emissions Generated From Fueling Activities. Reduction of ozone precursors before 10:00 a.m. has been shown to reduce the potential for ozone build-up in the afternoon.
Prohibit unnecessary idling of City vehicles	Reduces Vehicle Emissions Emitted
Utilize Teleconferencing for meetings when possible	Reduces Amount of Vehicle Emissions while Commuting to Meetings
Car pool to meetings	Reduces Amount of Vehicle Emissions
Cancel all non-essential vehicle trips during the day	Reduces Amount of Vehicle Emissions

**2006 TIER II - Mandatory for City Departments on Ozone Watch Days,
Prefer during Ozone Season**

TASK	BENEFIT
Schedule meetings after 10:00AM	Reduces Amount of Vehicle Emissions during Commute Times
Delay use of Diesel and Gasoline fueled vehicles until after 10:00AM	Reduces Amount of Vehicle Emissions During Commute Times
Restrict vehicle/motor repair operations that require starting or idling of gasoline powered engines until after 10:00AM	Reduces Amount of NOx, VOCs and Vehicle Emissions
Restrict the use of and the opening of paints, solvents, cleaners, etc., containing VOCs until after 10:00AM	Reduces Amount of VOCs Emitted
Restrict the use of all diesel or gasoline powered equipment until after 10:00 a.m.	Reduces Amount of NOx and VOCs Emitted
Car pool, bike, walk or use DART during lunch	Reduces Amount of Vehicle Emissions

2006 TIER III – Optional - Minimum Watch Days, Prefer during Ozone Season

TASK	BENEFIT
Telework for designated employees	Reduces Amount of Vehicle Emissions during Commute Times
Bicycle and walk to work program	Reduces Amount of Vehicle Emissions during Commute Times
Allow Designated Employees to Park Fleet Vehicles at or Near Home	Reduces Amount of Vehicle Emissions during Commute Times
Reduce or Eliminate other Activities that create Vehicle and/or Other VOC/NOx Emissions	Allow Department Flexibility and Creativity to Reduce NOx and VOC Emissions

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2006 Ozone Plan

– Citywide Emissions Inventory (3)

- Identify City emissions sources, predict quantities of Particulate Matter, Nitrogen Oxides, Volatile Organic Compounds, Sulfur Dioxide, Carbon Monoxide and Carbon Dioxide
- Identify highest potential for reductions
- Research appropriate emissions control strategies
- Currently working with COG to develop emissions inventories for:
 - On-road fleet
 - Non-road fleet and equipment
 - Stationary sources
 - Lawn and Garden

City of Dallas 2006 Ozone Plan

- Tracking Emissions Reductions (4)
 - Each department to submit monthly data for Ozone Plan Activities and participation in plan

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2006 Ozone Plan

- Directors assign Ozone Coordinator for their department
- Ozone Coordinators work with EHS and OEQ to:
 - Act as a central point of contact for their department
 - Distribute notices, Ozone Watches and Warnings and other information to department personnel
 - Collect and report departmental data concerning emissions reduction activities

City Employees 2006 Ozone Season Kick-Off

- May 18, 2006
- 10:00 AM
- L1FN Auditorium/Plaza
 - Guest speakers
 - Videos
 - Presentations
 - Displays
 - Prizes
- May 18, 2006
- 1:00 PM
- L1FN Auditorium
 - Ozone Coordinators Seminar
 - EMT Reduction project review
 - Forms, Documentation, Gathering Data
 - Getting Ready for 1st Report
 - Ozone Watches and Warnings