NORTH TEXAS AIR QUALITY UPDATE

Volkswagen Settlement Stakeholder Meeting
July 25-26, 2017

Chris Klaus, Senior Program Manager
Lori Clark, Program Manager
CRITERIA POLLUTANTS

Carbon Monoxide
Lead
Nitrogen Dioxide
Particular Matter
Sulfur Dioxide
Ozone

How are we doing?
What is the focus?
What is being done?
OZONE MONITOR DESIGN VALUES

Current As of July 23, 2017

Legend
Counties Designated Nonattainment Under 2008 National Ambient Air Quality Standard for Ozone
Metropolitan Planning Area

2015-2017 Design Value (ppb)*

- 0 - 54 ppb
- 55 - 70 ppb
- 71 - 85 ppb

*2017 Design Value, not a full year of data. Current as of 7/23/2017

North Central Texas Council of Governments

July 2017
**Eight-Hour Ozone Exceedance Days Based on ≤70 ppb**

<table>
<thead>
<tr>
<th>Year</th>
<th>Orange (71-75 ppb)</th>
<th>Orange (76-85 ppb)</th>
<th>Red (85-105 ppb)</th>
<th>Purple (106+ ppb)</th>
</tr>
</thead>
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<td>27</td>
<td>21</td>
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<tr>
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<td>5</td>
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Exceedance Level indicates daily maximum eight-hour average ozone concentration.
Exceedance Levels are based on Air Quality Index (AQI) thresholds established by the EPA for the revised ozone standard of 70 ppb.

- Orange (71-75 ppb)
- Orange (76-85 ppb)
- Red (85-105 ppb)
- Purple (106+ ppb)

Exceedance Level includes additional level orange exceedance days under the revised standard that were not exceedances under the previous 75 ppb standard. (AQI level orange = 71-75 ppb)

*Not a full year of data.
Source: TCEQ, [http://www.tceq.state.tx.us/cgi-bin/compliance/monops/8hr_monthly.pl](http://www.tceq.state.tx.us/cgi-bin/compliance/monops/8hr_monthly.pl)

ppb = parts per billion
According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the Design Value (three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is equal to or less than 70 parts per billion (ppb).

As of July 23, 2017:

- **1997 Standard < 85 ppb (Revoked)**
- **2008 Standard ≤ 75 ppb**
- **2015 Revised Standard ≤ 70 ppb (TBD; Marginal by 2022)**

1. Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the Design Value (three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is equal to or less than 70 parts per billion (ppb).

^Not a full year of data; current as of 7/23/2017.

Source: NCTCOG TR Dept
Total NOX = 296.73 tons per day (tpd)

Source: TCEQ, 2017 Dallas-Fort Worth 8-hour Ozone Attainment Demonstration State Implementation Plan
ON-ROAD MOBILE NO$_X$ EMISSIONS SOURCES

Total On-Road Mobile NO$_X$ = 130.77 tpd

- Light-Duty Gas = 49.65 tpd (37.96%)
- Light-Duty Diesel = 1.15 tpd (0.89%)
- Medium-Duty Gas = 12.52 tpd (9.57%)
- Medium-Duty Diesel = 2.34 tpd (1.79%)
- Heavy-Duty Gas = 1.65 tpd (1.26%)
- Heavy-Duty Diesel = 63.46 tpd (48.53%)

Total Diesel Contribution = 66.95 tpd, or ~51%

Source: Texas Commission on Environmental Quality, 2017 Dallas-Fort Worth 8-hour Ozone Attainment Demonstration State Implementation Plan
CONFORMITY ANALYSIS YEAR

*2017 design value data current as of 07/12/2017
SEVEN AIR QUALITY EMPHASIS AREAS

Mobile Sources

- Low Speeds
- Idling
- Vehicle Miles Traveled (VMT)
- Energy and Fuel Use
- Cold Starts
- Hard Accelerations
- High Emitting Vehicles and Equipment
SAMPLE OF AIR QUALITY INITIATIVES
NCTCOG CLEAN VEHICLE FUNDING EFFORTS

Dollars Awarded from 2006-2016; Total = $159,429,148
Technology Improvements

AirCheckTexas Drive a Clean Machine Program

Alternative Fuel Initiatives

• Alternative Fuel Corridor Designations
• Dallas-Fort Worth Clean Cities Program
• Electric Vehicles North Texas

  Approximately 4 Tons NO\textsubscript{X} Reduced Each Year

• Fleets for the Future Cooperative Procurement

AQ Funding Website and Application Assistance

NCTCOG Clean Vehicle Funding Efforts 2006-2016

  Estimated 4,500 Tons NO\textsubscript{X} Reduced over Project Lifetimes
SELECT EXISTING AIR QUALITY INITIATIVES

Policies & Processes
- Clean Construction Specification
- Clean Fleet Policy
- Engine Off North Texas
- Go Solar Texas
- Preferential Parking for Alternative Fuel Vehicles

Outreach/Public Engagement
- Air North Texas
- Car Care Clinics
- Regional Emissions Enforcement Program
- Regional Smoking Vehicle Program
- EPA SmartWay Affiliate/Saving Money and Reducing Truck Emissions Program
SELECT EXISTING AIR QUALITY INITIATIVES

Transportation System Management

Intersection Improvements
High Occupancy Vehicle/Managed Lanes
Intelligent Transportation Systems
Freeway/Arterial Bottleneck Removals
Traffic Signal Improvements
Truck Lane Restrictions

Travel Demand Management

Active Transportation Programs
Park and Ride Projects
Rail Transit
Try Parking It
Vanpool Programs
GET INVOLVED

Air North Texas
- Sign Up for Blog Notices and Alerts
- Participate in Activities and Actions
- Showcase Efforts during Clean Air Action Day (June)
- Promote Efforts Online
  www.airnorthtexas.org

AirCheckTexas Drive a Clean Machine
- Apply for Financial Assistance
- Tell your Friends & Neighbors!
- Share Promotional Materials Available Online
  www.airchecktexas.org

Electric Vehicles North Texas (EVNT)
- Attend EVNT & DFW Clean Cities Meetings
- Sign Up to Receive Email Announcements
- Attend National Drive Electric Week Event
- Request Workplace Charging & EV-Ready Construction
  www.dfwcleancities.org/evnt
September 9 – Kickoff Event at Grapevine Mills Mall
   Over 100 EV Owners Available
   Unbiased, No-Pressure Opportunity to Ask Questions

September 11-16
   Webinar Series – Different EV Topic Each Day

www.DriveElectricDFW.org
Engine Off North Texas
Request Adoption of Local Ordinances
Report Idling Vehicles
www.EngineOffNorthTexas.org
WHAT’S NEXT??

Modernize Legacy Fleet

• 53% of Diesel Fleet >14,000 GVWR is Model Years 1992-2009

Nonprofit Vehicle Donation Partnership

Update Building Codes to Support Electrification and Solar Deployment

Improve/Enhance Effectiveness of Existing Initiatives

• Expand Adoption and Increase Enforcement of Anti-Idling Policies
• Standardize Clean Construction Specification Language
• Increase Electrification
Lori Clark, Program Manager  
(817) 695-9232  
lclark@nctcog.org

Chris Klaus, Senior Program Manager  
(817) 695-9286  
cklaus@nctcog.org

www.nctcog.org/airquality