



## MEMORANDUM

**TO:** Mayor and Council

**CC:** Marc A. Ott, City Manager  
Robert Goode, P.E., Assistant City Manager

**FROM:** Robert Spillar, P.E., Director, Austin Transportation Department

**DATE:** December 13, 2013

**SUBJECT: CIUR 1148 - Regional Ozone Advance Plan Reduction Measures  
City Council Resolution No. 20131024-057**

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Council Resolution No. 20131024-057 directs the City Manager to participate in the Capital Area Council of Governments' air quality program's Ozone Advance Program Action Plan and to implement the appropriate emission reduction measures. This memo to Council identifies specific City of Austin measures that will be incorporated into the regional Ozone Advance Program Action Plan. No new fiscal impacts are anticipated.

### **Background**

The Ozone Advance Program is a collaborative effort between the United States Environmental Protection Agency (EPA), states, tribes, and local governments. The program encourages expeditious emission reductions in ozone attainment areas to help these areas continue to meet the National Ambient Air Quality Standards (NAAQS). Participation in this plan would continue the City of Austin's long history of participation in proactive regional air quality initiatives. The City of Austin has been a key participant in the following efforts:

- 2002 Regional 1-hour O<sub>3</sub> Flex Agreement,
- 2004 Early Action Compact, and
- 2008 Regional 8-hour O<sub>3</sub> Flex Agreement.

The previous three voluntary emission reduction plans contributed to lower ozone levels, thus achieving regional compliance with the EPA NAAQS for ozone. The success of these planning efforts can largely be attributed to the regional collaborative efforts of the Clean Air Coalition (CAC) which is comprised of elected officials from the region, and facilitated by the Capital Area Council of Governments (CAPCOG).

### **Status of Air Quality in Central Texas**

At the completion of the 2012 ozone season the Austin-Round Rock Metropolitan Statistical Area (MSA) was still in compliance with the EPA NAAQS for ozone. The current NAAQS design value threshold, also called the standard, for ozone is 75 parts-per-billion (ppb). The Austin region ended the 2013 ozone season in attainment of the existing federal health-based ozone standard, with an ozone design value of 73 ppb.

As required by the Clean Air Act, the EPA is currently performing a scheduled review of its ozone standards. We anticipate this review will result in lowering the standard from 75 ppb to between 60-70 ppb. In 2012, there were seven days when the region experienced eight-hour

ozone averages at a regulatory monitor above the current standard of 75 ppb; 12 days over 70 ppb; and 61 days over 60 ppb. If a new lower standard goes into effect then it is reasonable to assume that the Austin area will be considered in non-attainment with the EPA NAAQS for ozone. A non-attainment designation requires the region to take additional measures as prescribed by the Texas Commission on Environmental Quality and EPA which would be documented in the State Implementation Plan.

### **Emission Reduction Measures**

Per council direction, the City of Austin will include the following emission reduction measures in the regional Ozone Advance Plan:

1. Evaluate and improve **Fleet and Fuel Efficiencies** to achieve greater efficiency of the City's fleet usage, focus on using the cleanest vehicle appropriate for the jobs, consolidate trips, and in general, set policies for fleet usage that reduce NO<sub>x</sub> emissions. Also, consider applying for grant funding for retrofits, repowering, and replacing older equipment when appropriate.
2. Implement a **Commuter Trip Reduction program** for City of Austin employees. These programs will include carpooling, vanpooling, the use of mass transit, flexible schedules, teleworking, guaranteed ride home assurances for transit commuters, parking cash-out programs, and other strategies. The City of Austin will also encourage local business to implement commuter trip reduction programs.
3. Regularly plan for **Transportation Emission Reduction Measures (TERMS)** within the community and report progress to CAMPO annually. These include projects such as improvements to roadway operations and performance, expanded transit systems, improved bike/pedestrian infrastructure, and other activities to reduce growth in vehicle miles traveled.
4. Re-commit to enforcement of **Heavy Duty Idling Restrictions**, adopt a written plan for implementation, and track compliance. This will require signing a new Memorandum of Agreement with the Texas Commission on Environmental Quality and revision to the Motor Vehicle Idling ordinance.
5. Implement **Ozone Action Day program**. The program measures will include an employee and community notification system, education programs, and departmental response planning.
6. Implement **Energy Efficiency, Renewable Energy, and Resource Conservation policies** that will result in reduced energy consumption within the City's operations, and the community at large.
7. Implement **Measures to Cool Developed Areas** and reduce the urban heat island effect. These measures include improving the canopy cover, promoting light colored roofing, and increased tree planting activity.
8. Implement **Special Event Emission Reduction** policies that would reduce the air quality impact of large special events by requiring inventory, reporting, and mitigation activities for Tier IV events.
9. Participate in **Regional Emission Reduction Measures** and activities more effectively implemented on a large regional scale. These activities will be coordinated by the Clean Air Coalition (CAC) and stated in the annual work plan.
10. Provide **annual tracking and reporting** of the status of emission reduction measures to CAPCOG for inclusion in Ozone Advance Plan report and performance evaluations. This evaluates the effectiveness of measures and modifies activities to maximize emission reductions.

### **Appendix**

Additional information is provided in the attached technical backup.

APPENDIX A:

**1. Fleet and Fuel Efficiencies Measures:**

- Create City procurement policy prioritizing purchases of low-emission (tier 2, bin 4 or better) light-duty vehicles
- Prioritize the purchase of alternative fuel and hybrid City fleet vehicles
- Increase the amount of alternative fuel usage in City fleet
- Apply for TERP/DERA funding to retrofit, repower, or replace older diesel vehicles and equipment owned and operated by the City
- Conduct business evaluation of City fleet usage, including operations and right sizing
- Provide employee training on City fleet fuel conservation policies
- Increase City fleet fuel efficiency
- Increase City fleet miles per gallon
- Purchase and use Texas low emission diesel (or equivalent additive) in on-road and non-road City vehicles and equipment
- Provide airport terminal infrastructure available to reduce the use of aircraft auxiliary power units (small jet engine) during passenger boarding and aircraft servicing
- Provide dedicated compressed natural gas (CNG) parking for shuttle buses at ABIA
- Provide alternative fuels opportunities for off-site parking companies at ABIA
- Use dedicated propane mowers to maintain the non-secure grounds of the airport
- Provide fast charge electric stations on the airport terminal ramp to support airline ground service equipment
- Maintain publicly accessible alternative fuel infrastructure at ABIA

**2. Commuter Trip Reduction Program Measures:**

- Encourage private sector commuter trip reduction programs
- Increase availability of alternative commute infrastructure to City employees
- Implement alternative work programs for City employees
- Provide free or subsidized transit and vanpool passes for City employees
- Implement commuter trip reduction program for City employees
- Educate and incentivize City employee trip reduction activity

**3. Transportation Emission Reduction Measures (TERMS):**

- Plan for and implement TERMS
- Invest in infrastructure to provide an alternative to single occupancy vehicle trips
- Make improvements to increase roadway performance
- Promote expanded transit options and improved non-motorized travel facilities

**4. Heavy Duty Idling Restrictions:**

- Re-commit to heavy-duty vehicle idling enforcement by the City
- Adopt City written protocol to enforce heavy duty vehicle idling
- Work with regional entities for promote and educate residents about heavy duty idling limitations

**5. Ozone Action Day Program Measures:**

- Provide City employee and community ozone action day notifications
- Educate City employees and community about appropriate actions to take on ozone action days
- Develop City departmental response plans for ozone action days

**6. Energy efficiency, renewable energy, and resource conservation policies:**

- Create development policies to reduce energy consumption from new developments
- Improve residential efficiency through incentives for appliances, weatherization, and thermostats

- Increase the use of electric vehicles and electric fueling stations
- Purchase additional Austin Energy electrical capacity from renewable sources

**7. Measures to Cool Developed Areas:**

- Increase existing urban canopy cover
- Create and urban forest plan that identifies tree canopy goals, establishes budget, and presents implementation measures.
- Revise tree planting and tree care standards to be more sustainable and reduce tree mortality

**8. Special Event Emission Reduction Policies:**

- Implement policies that would reduce the environmental impacts of large special events
- Require large special events to report emission sources and emission reduction activities

**9. Regional Emission Reduction Measures:**

- Promote and support the regional trip planning & ridesharing program
- Participate and support coordinated region-wide educational outreach and awareness efforts
- Assist in the development of resources for City emission reduction and planning measures
- Support regional research project that would improve development of emission reduction strategies
- Participate in the development of Regional Work plan

**10. Annual Tracking and Reporting:**

- Track and Report Details on Performance of Locally Adopted Measures