

It all adds up to cleaner air

FACT SHEET

Voluntary Emission Reduction for a Better Community

Quad City Mission

- ★ *To maintain clean air through voluntary emission reductions*
- ★ *To provide for communication between public and private agencies on voluntary emission reductions by sharing experiences and knowledge*
- ★ *To support individual and group voluntary measures/activities such as public education, and mobile/stationary source reduction initiatives*

Ozone

Ozone forms when pollutants such as hydrocarbons and nitrogen oxides react in sunlight. Motor vehicles, power plants, factories and fumes from paints and solvents are emission sources.

The Impact of Ground Level Ozone

Ground level ozone is a pollutant, unlike stratospheric ozone, which in the upper layers of the atmosphere protects the earth from ultraviolet rays. It is also a severe irritant, and at higher concentrations often inflames lung tissue and aggravates respiratory diseases. Sensitive groups, such as children and adults with respiratory ailments like asthma or bronchitis, are more prone to the effects of ground-level ozone. Symptoms may include reduced lung function, throat irritation and reduced immune function. When you consider that we breathe approximately 3,800 gallons of air per day compared to drinking one gallon of water, it is vital to be "Aware of Air"!

When Do Unhealthy Ozone Levels Occur?

Typical Weather Conditions:

Temperature - Upper 80s to low 90s

Wind - Light Breeze or Less

Precipitation - None to Slight Chance

Humidity - Low or Slight

Season - Typically spans May 1st through September 30th in our region

Did you know? If 100 cars in the Iowa Quad Cities with smoking tailpipes were repaired, that is the equivalent of removing the emissions of 2,800 vehicles. Source: Iowa Department of Natural Resources.

Did you know? New cars today are capable of emitting 90 percent less air toxins on a per-mile basis than the uncontrolled models of 1970. Source: U.S. Environmental Protection Agency.

Emission Standard

The emission standard is a limit placed on the amount of air pollutants that can be released into the air from a particular source.

What Nonattainment Means for the Quad Cities

If the Quad Cities Area is pushing the limits with ozone levels at 93% of the allowed standard, increased pollution could mean being declared a nonattainment area. The nonattainment classification carries with it an expensive price tag. Limitations could be placed on new industries coming into the area, and may create impacts for existing businesses and personal activities. Expensive air quality monitoring and modeling would be required. All of this means lost opportunities, more regulations and more money spent to get back into attainment!

Reducing Ground Level Ozone. . . Avoiding Non-attainment

Commute Solutions:

Reduce Vehicle Trips:

- Bring a Brown Bag Lunch
- Use Direct Deposit
- Report Iowa vehicles with smoking tailpipes to 1-888-END SMOG. The owner will receive materials and repair coupons to help them make

smart, voluntary choices about the benefits of repair.

Use Other Forms of Transportation:

- Bike, Walk, Take a Bus

Timing:

- Compressed work week
- Flexible work schedule
- Meetings during non-peak traffic times
- Non-peak hour deliveries
- Teleworking (Full time/Part time)

Did You Know? If 1,000 commuters were to use alternative means of transportation, instead of driving solo, there would be an annual reduction in volatile organic compounds (VOC) of 11 tons and nitrogen oxides (NOx) of 14. Source: Clean Air Counts.

Employer Incentives:

- Preferential parking for carpoolers
- Guaranteed ride home for carpoolers
- Carpool subsidies
- Parking pricing
- Ride matching
- Transit pass subsidies

Fleet Emission Reduction Solutions:

- Alternative fuel vehicles. For more information visit the Department of Energy website: www.afdc.doe.gov
- Recycle/Impound old vehicles
- Right sizing

(Please turn over)

Did You Know? If 1,000 low-emission new vehicles were chosen when purchasing a new vehicle, 5 tons of VOC and 7 tons of NOx emissions would be avoided each year. Source: Clean Air Counts.

Fleet Emission Reduction Solutions, continued:

- Vehicle/equipment maintenance
- Clean diesel/biodiesel
- Five minute limit on diesel idling
- Fueling vehicles in evening



Conservation Solutions:

- Purchase energy efficient items
- Reduce energy consumption
- Material recycling. Household hazardous materials (HHM), such as paints and solvents, can contribute to the formation of ozone.

Government Solutions:

- Vapor Recovery Ordinance
- Intelligent Transportation Systems: Technology is used to improve traffic flow and congestion through variable message signs, incident warning/management systems, automated weigh stations, pass-card tolling, etc.
- Intersection Improvements: Geometric or signal timing changes to facilitate better traffic flow and reduce vehicle idling and/or accidents.

Did You Know? Even though compact fluorescent light bulbs cost approximately 25 times more initially to purchase than standard incandescent light bulbs, over the lifetime of the compact fluorescent (10,000 hours of light) the approximate total savings will be \$30.00. Source: *New Light on Energy Conservation*, L. Hodges.

- Signal and Traffic Flow improvements: Traffic signal synchronization in corridors is utilized to facilitate better traffic flow and reduces congestion.
- Transit-Oriented Development: General patterns of land use favoring higher density development with a mix of residential and employment opportunities that are served by mass transit and greater pedestrian corridors.
- Lawn/Landscape care and maintenance postponement.

Did You Know? For every 1,000 old lawnmowers replaced with electric and manual lawnmowers annually, 17 tons of ozone-forming emissions will be avoided. Source: *Clean Air Counts*.

Other Solutions:

- Vapor recovery on pumps
- Use low VOC asphalt
- Use low VOC striping material
- Have detailed equipment specifications
- Plant Trees

Did You Know? Tree planting can reduce the heat island effect and VOCs & NOx pollutants from forming, especially when planted near parking lots and roadways. Trees also reduce air conditioning costs.

- Have/Use e-Government and/or e-Commerce
- Replace/Buy Low Emission Gas Cans

Employer Educational Options

Provide Employee Education Program: Distribute and convey information to employees on employer emission reduction efforts as well as individual activities that can reduce emissions.

Sponsor Public Education Programs: Participate in education of the public on activities that can reduce emissions, such as sponsoring an event or ad campaign, distributing information (e.g. brochures, flyers), participating in an event/program, promoting environmental awareness, etc.



**Breathe A Little Easier.
Report Smoking
Tailpipes.**

1-888-END SMOG
www.IowaCleanAir.com
Iowa Department of Natural Resources

Each voluntary activity an individual or organization implements is important, because - *It all adds up to cleaner air*

Take action today for a better community tomorrow!

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For more information contact:



(309) 793-6300

or visit the Bi-State website:
www.bistateonline.org
and look for "Aware of Air"