Quad Cities Ozone Flex Plan

A Voluntary Program for Emission Reductions

Intent

- ***To recognize and quantify education and emission reduction efforts***
- ***To continue voluntary measures and promote additional actions***
- ***To analyze the efforts of plan implementation***

Ozone Flex Planning

In June 2001, the U.S. Environmental Protection Agency (USEPA) issued guidelines for a one-time only program opportunity called the Ozone Flex Plan. The Ozone Flex Plan is a voluntary local approach to maintaining good air quality. It outlines activities, tailored to local conditions for the area, to reduce emissions that contribute to the formation of ground-level ozone. The purpose of the Ozone Flex Plan is to support and reward innovative, voluntary local strategies to reduce ground-level ozone. The Quad Cities Metropolitan Area is currently classified as in attainment for all National Ambient Air Quality Standards (NAAQS)*. Measures are being taken to help insure that attainment continues for the area. The Plan is effective for five years (2003-2008).

Program Purpose

- To determine voluntary strategies that have or will be taken by a variety of organizations to reduce precursor ozone emissions.
- To continue public education and awareness of the issues related to air pollution.
- To project or estimate the cumulative effect of reductions on emissions contributing to the formation of ground-level ozone.

Benefit

By participating in the USEPA Ozone Flex Plan, and to the extent that the voluntary measures are implemented and reductions from the measures can be quantified, the Quad Cities may receive credit toward future planning efforts for the ozone National Ambient Air Quality Standard (NAAQS). Through actions taken in this Plan, the Quad Cities stakeholders hope to maintain the 1-hour ozone standard and avoid designation for nonattainment under the 8-hour standard by proactively addressing potentially harmful emissions that lead to increases in the area's ozone levels. If this is unavoidable, then the Plan will be in place to enable the area to work with regulators on necessary control measures using a flexible approach.

* National Ambient Air Quality Standards (NAAQS) are Federally established standards for pollutant concentrations that states, cities and towns must meet by specified deadlines. NAAQS have been set for six criteria pollutants – carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter and sulfur dioxide. The NAAQS 1-hour standard is 125 ppb (parts per billion) and the 8-hour standard is 85 ppb. Monitoring for ozone levels in the Quad Cities Metropolitan Area currently shows attainment of the 1-hour standard, but ozone levels are within 93% of the 8-hour standard.

Concerns

- High levels of ozone can affect healthy people, but are especially harmful to children, the elderly and those already suffering from respiratory diseases like asthma.
- The Quad City Area experiences typically from one to three multi-day episodes per year of unhealthy ground-level ozone concentrations.
- There have been five or less exceedances per year, since 1999, of the 8-hour ozone standard in the planning area.
- Increases in ozone levels may make it difficult for the bi-state area to meet the proposed 8-hour standard for ozone.

Changes to Come

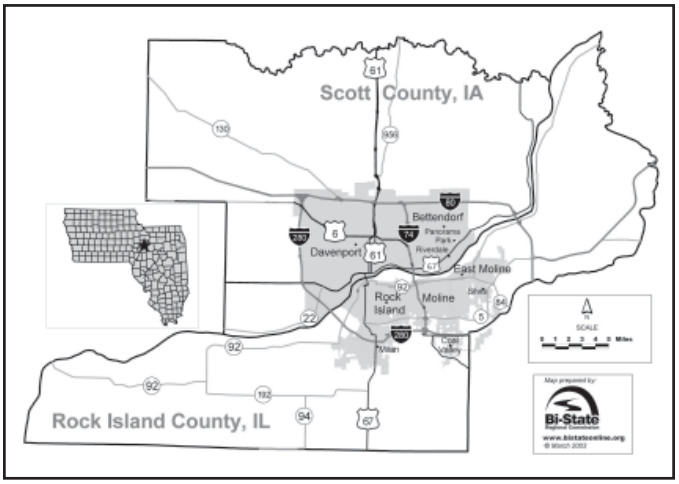
At present, the one-hour standard for ozone remains in effect. USEPA anticipates making designations for the 8-hour standard in 2004. Additionally, there are certain regulatory controls in or going into effect that will have a beneficial impact overall on precursor emission reductions. However, until they go into effect, local emission reduction efforts are very important.

Did You Know? *Removing 1,000 gallons of high-volatile organic compound (VOC) paint from the environment is equivalent to reducing one ton of smog-forming VOC emissions.* *Source: Clean Air Counts.*

Quad Cities Area Profile

The Quad Cities Metropolitan Area is located along the Mississippi River in eastern Iowa and western Illinois. For planning purposes, the Ozone Flex Plan focuses on both Scott and Rock Island Counties. The map illustrates the location of the planning area. The population of these two counties amounts to 308,042.

MAP
QUAD CITIES PLANNING AREA



Source: Bi-State Regional Commission

The following outlines demographic information by county from the 2000 Census.

DEMOGRAPHIC INFORMATION
ON PLANNING AREA

	Rock Island Co.	Scott Co.	Total
Population	149,374	158,668	308,042
Total Households	60,712	62,334	123,046
Total Housing Units	64,489	65,649	130,138
Labor Force	76,299	83,927	160,226
Median Income *(by Household)*	38,608	42,701	
Vehicles Available *(1 or more)*	55,493	57,711	113,204

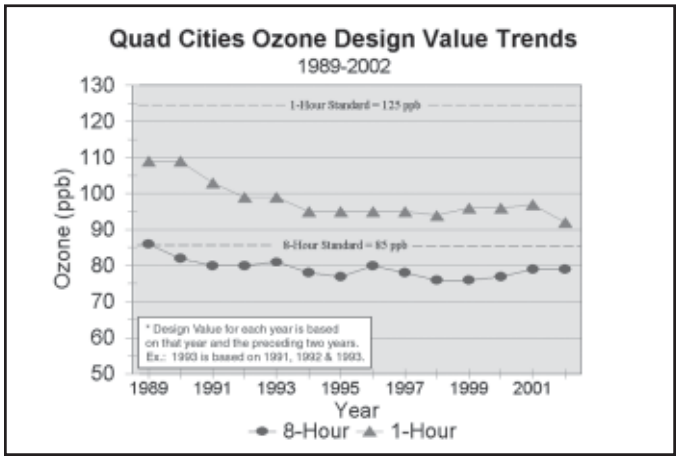
Source: U.S. Census Bureau, Census 2000

The Quad City Metropolitan Area, Iowa/Illinois is uniquely positioned in two states and bisected by the Mississippi River. With relatively equal populations in both Scott and Rock Island Counties, as well as major employers in each of these counties, commuting patterns illustrate the area functions as a unit. Of workers 16 years of age and over, 20% worked outside of their state of residence illustrating the significant amount of commuting between the two states. River crossings are a vital transportation link for the movement of goods and people. Efforts are underway to reduce congestion and improve traffic flow along the central river corridors. These efforts will contribute to improved air quality over time.

There are two ozone monitors in Scott County and one in Rock Island County. The two Scott County monitors are located at Argo and Scott County Park. Both monitors are north of the metropolitan area outside the urbanized area. The monitor in Rock Island County is located on Arsenal Island near Moline.

The chart below illustrates ozone trends in the Quad Cities Area for the 1-hour and 8-hour standards.

CHART
AREA OZONE TRENDS



Quad Cities Air Quality Task Force

The Quad Cities Air Quality Task Force is a subcommittee of the Quad Cities Urban Transportation Policy Committee, staffed by the Bi-State Regional Commission. It was formed in the fall of 1998 to address ozone issues, identify potential solutions, and initiate ozone education.

It is composed of the following stakeholders:

- Local City Engineers/Public Works Officials/Transit
- Chambers of Commerce Representatives
- Quad City Development Group Staff
- Representatives of Major Industries
- State Resource Agencies' Staff: Iowa Department of Natural Resources (IADNR), Illinois Environmental Protection Agency (ILEPA), Departments of Transportation (DOT's), Iowa Department of Economic Development (IDED), Illinois Department of Commerce and Economic Opportunity (DCEO)
- Interstate Resource, Conservation and Development (RC& D) Council and Quad Cities Conservation Alliance (QCCA)
- Education Representatives
- Interested Citizens

Action Plan - What Is It?

The Quad Cities Ozone Flex Plan describes specific air quality planning and discretionary control measures that the stakeholders are committed to undertake on a voluntary basis. The Action Plan includes efforts to help maintain attainment levels at both the 1-hour and 8-hour standards.

Action Efforts

Strategies to promote voluntary reductions in air emissions and further education include:

- Create a speakers bureau through Bi-State Regional Commission for awareness and education.
- Continue efforts to market voluntary measures through mailings, news releases, commission reports, meeting reports, website information, conferences, workshops, and advertising as opportunities and resources present themselves.
- Evaluate the effectiveness of establishing an ozone alert program if the frequency of unhealthy ozone episodes numbers more than five per year.
- Investigate designation in the Department of Energy's Clean Cities program to promote decreased dependence on foreign petroleum, the use of alternative fuels, and working with the Illinois Green Fleet Program and Iowa Bus Emission Education Program (BEEP).
- Work to reduce congestion at the river crossings and increase capacity by pursuing short and long range strategies outlined in the Mississippi River Crossing Strategy Implementation Plan. Examples include removal of tolls on the Centennial Bridge, and implementing Intelligent Transportation System (ITS) technology for early warning construction coordination and public relations programs.
- Monitor progress on voluntary efforts through monitoring and emission inventories.

Did You Know? *If 5,000 households were to replace five burned out incandescent light bulbs with five compact fluorescent light bulbs, four tons of ozone-forming pollutants would be removed from the air every year. Source: Clean Air Counts. With a total of 123,046 households in Scott and Rock Island Counties, this would represent a reduction of 96 tons of ozone-forming pollutants if each used this energy saving tip.*

Contingency Measures

To engage contingency measures, the Quad Cities would utilize a trigger, based on the Ozone Flex Plan. The trigger would immediately result in an issuance of a media release on ozone levels bordering on unhealthy levels and offer voluntary tips on reducing emissions. It would require convening the Quad Cities Air Quality Task Force to consider the measures noted below and identify a strategy for implementation within the twelve-month period. If no other occurrences were triggered in the twelve-month period, the Quad Cities could subsequently reconsider the contingency measures strategy and lessen the urgency of the strategies identified. Should designation of the Quad Cities as a non-attainment area become imminent, the following contingency measures may be considered:

- Reconsider an ozone alert program, assuming a program has not yet been established or if established, consideration of a more intensive program.
- Enhance employee education programs on travel demand management, commuter choice and other resource conservation options.
- Utilize low emission vehicle and equipment specifications for new fleets/small-spark engine equipment, any low emission engines and clean fuel fleets; and low VOC materials programs.

Stakeholder Assessment

An initial assessment was prepared and distributed to local Quad Cities officials from municipal/county governments and businesses in February 2002. The assessment asked which emission reduction measures organizations have in place or may consider implementing in the next five years. Seventeen organizations responded to the assessment. While the return on the assessment represented approximately 28% of those contacted, the respondents included both larger and smaller governments, firms, and transit systems. The assessment showed many organizations are already using commute solutions, fleet emission reduction measures or other types of emission reduction measures that contribute to improved air quality.

Voluntary Emission Reduction Highlights in Quad Cities

The Quad Cities stakeholder assessment identified a number of organizations already implementing activities that contribute to the reduction of ozone levels. These are highlights of a few leaders. There may be more not yet identified.

Fleet Emission Reduction Solutions:
MetroLINK, the Illinois Quad Cities Transit System, has 21 compressed natural gas (CNG) buses. They represent 38% of the traditional fleet that has been replaced with cleaner burning vehicles. Based on data from 2003, MetroLINK has realized emissions reductions due to CNG use by 29% in particulates and 29% in NOx.

Both Alcoa, Inc. and the City of Bettendorf's Public Works Department use biodiesel fuel for their vehicles. Clean fuel leads to cleaner air.

Government Solutions:
The Cities of Bettendorf, Davenport & Moline have converted to LED lights in traffic signals. Using this type of lighting results in a 90% reduction in energy consumption.

The Iowa Department of Transportation has installed cameras on the I-74 Bridge to act as an early crash warning system. Early response and clearing of incidents reduces secondary crashes and congestion, leading to cleaner air.

Conservation Solutions:
Both Scott & Rock Island Counties offer material recycling for their residents. Less energy in creating products from raw materials reduces emissions from power plants.

Other Reduction Solutions:
Scott County operates two sites to drop-off household hazardous materials (HHM). This is also available to residents of Rock Island County. Reducing evaporative fumes from solvents adds up to cleaner air.

Commute Solutions:
John Deere Davenport Works offers its employees direct deposit. This reduces vehicle trips and results in less emissions.

Kraft Foods North America – Davenport location has implemented a flexible work schedule for its employees. This can help decrease emissions during peak hours.

What Organizations Can Do

The purpose of this summary is to encourage your organization to join other voluntary emission reduction leaders in the ozone challenge.

- Create an assessment of your organization's emission sources
- Look at different options available and decide which work best for your organization
- Implement voluntary emission reductions within your organization

For details about what specific actions can be done, refer to the "It All Adds Up to Cleaner Air Fact Sheet".

Remember cumulative efforts work because . . .

It all adds up to cleaner air

Resources Available:

Iowa Department of Natural Resources (IDNR):	www/iowadnr.com (515) 281-5918
AIRNOW:	www.epa.gov/airnow
Illinois Environmental Protection Agency (ILEPA)/ Green Fleets:	www.epa.state.il.us (217) 782-7326

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For more information contact:
Bi-State Regional Commission
(309) 793-6300
or visit the Bi-State website:
www.bistateonline.org
and look for "Aware of Air"

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