



# Guide to the 8-Hour Ozone Designation Process

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The Clean Air Act requires the U.S. Environmental Protection Agency to set National Ambient Air Quality Standards for pollutants considered harmful to public health and the environment. The law also requires EPA to periodically review the standards and their scientific basis to determine whether revisions are appropriate. EPA recently reviewed the National Ambient Air Quality Standards for Ozone and proposed to strengthen them to a more protective level.

The new ozone standard is an 8-hour average concentration of 75 parts per billion. Based on this revised standard, all states must evaluate areas for compliance with the ozone standard. The outcome of the designation process will be a recommended list of counties in the state that currently monitor or are contributing to 8-hour ozone violations. The evaluation of counties under the new ozone standard is now underway.

## **Ozone Basics**

Ozone is a primary pollutant of concern in Kansas. Air quality measured against the National Ambient Air Quality Standards shows that areas across the state are not yet attaining the standard. If an area monitors or contributes to violations of the ozone standard, actions must be taken to help prevent the emissions that contribute to the formation of ground-level ozone.

Ground-level ozone, commonly known as smog, is an irritant that damages lung tissue, aggravates heart and respiratory disease and can even cause problems for healthy individuals who spend a lot of time outdoors. Typically, ozone pollution is a problem in the hot summer months from late May to early September when higher temperatures cause a chemical reaction to take place between volatile organic compounds and nitrogen oxides. Ozone levels from the combustion of fossil fuels tend to rise mid-morning, several hours after the rush-hour and peak in the late afternoon.

## **The Ozone Designation Process**

The Kansas Department of Health and Environment is charged with protecting the state's air resources. The department is evaluating areas of the state with monitoring violations of the ozone standard and/or are contributing to violations. In previous ozone designations, the department was asked to consider multiple factors to develop designation recommendations. It is important to note that ozone air quality data obtained from monitoring is only one factor used in determining which counties will be part of a nonattainment area under the new standard. In addition to actual monitoring data, the criteria used in the designation process include:

1. Emissions and air quality in adjacent areas.
2. Population density and commercial development in adjacent areas.
3. Location and size of emission sources.
4. Traffic and commuting patterns.

5. Extent, pattern and rate of growth for an area.
6. Weather and transport patterns.
7. Mountains or other air basin boundaries.
8. Jurisdictional boundaries.
9. Level of control of emission sources.
10. Enforceable regional emission reductions strategies.

The process for designating nonattainment area boundaries allows the department to make a recommendation to EPA, but only EPA has the authority to make the final decision.

### **Timeline for Final Ozone Designation**

The designation recommendations will be due to EPA by March 12, 2009, with the designations expected to be based on monitoring data from the 2006 through 2008 ozone seasons. EPA will then have until March 12, 2010, to make final designations of ozone attainment and nonattainment areas for the state.

The department will be hosting a series of public meetings across the state to discuss the designation process for the revised ozone standard. County officials, local government representatives and economic development staff are encouraged to attend. The meetings will begin with a discussion of what the revised ozone standard means for Kansas counties as well as the process the state will take in making a designation recommendation to EPA regarding each county.

County-specific information pertaining to economic, employment and population growth will be gathered to assist the department in making informed decisions about which counties will be recommended for an ozone nonattainment designation. Growth projection information helps in determining areas that are largely contributing to ozone formation due to their increasing area, mobile and point sources of ozone-forming pollutants (e.g. volatile organic compounds or nitrogen oxides).

After final designations are made, state implementation plans will be developed outlining how states will reduce pollution to meet the ozone standard. These plans will be due three years after final designations are made. After state plans are approved by EPA, Kansas will be required to meet the revised ozone standard, with emission controls and deadlines depending on the severity of the problem.

In the meantime, the department will continue its work to protect air quality in the state. Current air pollution control efforts and state plans will remain in place as the department evaluates what additional options may be necessary to reduce the harmful emissions that contribute to the formation of ground-level ozone. The department also encourages Kansas citizens to take voluntary actions. Simple steps can be taken everyday to protect air quality.

### **For More Information**

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