

asthma sufferers, people with bronchitis, emphysema and cardiovascular diseases, children and senior citizens. One reason why industry is leaving our area (or not deciding to move to Allen County) at such an alarming rate might be related to regulations that are becoming too costly and burdensome on companies, making it harder and harder for them to remain competitive in today's markets. Many companies are moving out of the US to locations that have fewer regulations to help protect people and the environment.

Perhaps citizens make a difference. Allen County is walking a very fine line along the threshold of the attainment designation. If we continue on the path that we have already achieved, we will remain an attainment area. Attainment designation is critical to our area and our economy. If we are labeled non-attainment, then we are limited in expansion of certain industries and new growth. Allen County has developed a maintenance plan to remain in attainment, and it is working. We are slightly under the limits set for us. If we have a hot, muggy summer, we could bounce over the threshold, placing us immediately under the constraints of the non-attainment designation.

Studies have shown that there are usually only four to six hot, muggy, summer days in our area that raise ozone levels to the point of being hazardous. During these days, there are several things that **you can do** to decrease these risks and help us stay in attainment:

- ◆ Reduce driving by using public transportation, carpooling, walking, or biking. CitiLink will let anyone ride the bus for free on ozone action days.

- ◆ Avoid painting, stripping, and refinishing during these days or use paints with little or no VOCs.

- ◆ Wait until evening to mow the lawn. Use a spill-proof, vent-free gas can to refuel at home.

- ◆ Reduce electricity use to lower power plant outputs.

- ◆ If you can't avoid driving, then don't speed, combine errands, turn off your engine if waiting longer than 30 seconds and refuel in the evening.

Listen for ozone alerts and then **do what you can do** from the list above. Even YOUR little effort can go a long way towards keeping Allen County in permanent ozone attainment.

The Advanced Environmental Science class at the University of Saint Francis this year investigated the issue of ozone attainment in Allen County. The importance of this issue can not be overstated; it affects our air quality, the health of those with respiratory problems, those who could develop them, and the economic well-being of our community.

Everybody has heard of ozone alerts that warn of being outside in the summer and breathing the air; this low-level ozone is generally known as “Bad” ozone. According to AIRNow, “Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. ‘Bad’ ozone also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue.”

High levels of ozone are more common when it is sunny with little or no wind. The sun provides ultraviolet energy that breaks some of the bonds that hold oxygen together. This bond breaking power is important in the formation of ozone because before ozone can form, there must be free particles of oxygen. On sunny days with no wind, air pollutants such as nitric oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) build up in the air that we breathe. NO<sub>x</sub> and VOCs have oxygen particles bonded to them that can be knocked off and often form ozone. Some of the worst producers of these pollutants are small engines on lawnmowers, leaf blowers, weed eaters, chain saws, and idling car engines.

Fortunately, Allen County does not have to issue ozone alerts very often.

The EPA (Environmental Protection Agency) has set up standards that create two designations for counties with regard to ozone in the air. Either a county meets the standards set that allow for the good general health of a population (Attainment) or the county does not (Non-attainment). Most people do not realize how heavily industry is regulated to conform to strict EPA guidelines concerning the release of NO<sub>x</sub> and VOCs. Although industry is a large contributor of pollutants, statistics indicate that automobiles account for 45-56 percent of the chemical precursors to ozone.

Rising costs associated with health care and insurance affect everyone. Also, according to a State of the Air report released by the American Lung Association, approximately 67 percent of the Allen County population is at risk for complications stemming from increased ozone. These at risk groups include