

Fewer Counties Caught in Ozone Dilemma



March/April 2004

The typical good news-bad news scenario is, in this case, reversed somewhat.

BizVoice® delivered the bad news in March-April 2004 when it detailed how upcoming U.S. Environmental Protection Agency (EPA) eight-hour ozone standards were likely to result in 25 Indiana counties being classified as non-attainment. In fact, 24 counties were on the final list in April of that year. Such designations make it particularly difficult to attract new or expanding businesses with any type of air emissions.

The good news is that six counties have already been removed from the list. Another eight counties, including some of the more populous areas of the state, are currently eligible for redesignation. The Indiana Department of Environmental Management looks to file petitions with the federal agency in the coming months, following a required public notice period.

Kathryn Watson, branch chief with IDEM's Office of Air Quality, explains that an average of three years of ozone monitoring data are used to determine an area's status. By the end of the 2004 ozone season – which runs from May 1 to September 30 – six counties (Vanderburgh and Warrick in the Evansville area, Vigo, Greene, Jackson and Delaware) fell below the 85 parts per billion standard over the three-year period.

As explained in the 2004 article, Indiana was already planning to implement several measures later that year that would reduce ozone levels. Those efforts included reduced power plant emissions (also mandated by the EPA) and other pollution control strategies put in place by business and industry.

Redesignations that most feared would take two years or longer were accomplished in much less time. Both IDEM and EPA were able to move forward more quickly than normal.

“We had our draft petition to EPA in the spring of 2005 and in final form by the summer,” Watson recalls. “EPA expedited the review (and those counties were reclassified) by the end of 2005. It was a combination of having measures already under way to improve our air quality and working together extremely hard to get this done.”

Unlike this area, Indiana has been able to reduce its emissions that contribute to high ozone levels.



Next phase

At the end of the 2005 ozone season, eight more counties were, according to Watson, eligible to be redesignated. They include the tandems of Clark-Floyd counties (part of the Louisville area with the state of Kentucky also seeking relief for its affected counties), St. Joseph-Elkhart, Lake-Porter and the individual counties of Allen and LaPorte.

Lake and Porter present the most interesting scenario. Gov. Mitch Daniels announced in November that the state will ask federal officials to separate those two counties from the Chicago-focused non-attainment area. Daniels and IDEM officials have said the two counties, on their own, meet the federal ozone standards.

Watson notes that when Lake and Porter (and the rest of the Chicago area) were classified as severe non-attainment, there were barriers to the potential separation. The reduction in 2004 to moderate non-attainment, however, opened the door to change.

She believes the eight counties “should follow the track of what we did last year. Lake and Porter present a little bit of a different question for EPA, but we’re confident we can put together a petition that will be approved.”

The local fears of lost economic development opportunities were hopefully reduced due to the relatively quick government action. Watson says the state tried to work to find emission offsets for companies that expressed interest in the designated counties.

“The time that they stayed in non-attainment was fairly short,” Watson says. “We tried to minimize the impact by moving quickly. I’m sure you’ll find the economic development folks in those counties are thrilled with the redesignation. It opens things up in those counties.”

The work, though, is never quite complete. Watson cautions that just because an area may have attainment status for ozone, it can still be classified as non-attainment for a separate standard on PM 2.5 (fine particles). Nineteen Indiana counties were included on that list which went into effect on April 15, 2005.

To view the March-April 2004 BizVoice® article on ozone standards, go to the archives section of www.bizvoicemagazine.com.

Stories by
Tom Schuman

RFID: Coming Soon to a Business Near You

If you aren't familiar with Radio Frequency Identification (RFID) already, you will be soon. Since *BizVoice*® featured the developing technology in September-October 2003, the advances in its development and use have only multiplied.

Consider the following:

- Medical community uses include everything from tracking wheelchairs and other equipment in hospitals to assistance in linking patients to their electronic medical records
- RFID tags were used in Mississippi to help record information about Hurricane Katrina victims, reduce identification errors and return the bodies to the families in a more timely manner
- A little closer to home, a team of students from the Indiana University School of Informatics experimented with RFID as a potential scoring system for the Little 500 bicycle race

RFID involves using tags, antenna, readers and software. A chip inside the tag stores information and communicates via radio frequency to one or more antennae. A reader converts the information into useable data and sends it to the software to be formatted and displayed.

Wal-Mart was an early adopter, requiring its suppliers to implement RFID technology. Elaine Cooney, a professor of electrical and computer engineering technology at Indiana University Purdue University Indianapolis, says you can add the Department of Defense to the aggressive users of RFID for inventory purposes. Suppliers, subject to these mandates, are also benefiting from the technology.

"Companies are saying, 'If I have to put a tag on, is there anything I can do to add value to my own business,'" Cooney declares, giving the example of a retailer putting tags on its clothing, allowing inventory to take place with a hand-held reader.

Cost was a prime challenge a few years ago. Development of a Generation 2 standard – tags that meet the standard can be used in conjunction with any reader – will dramatically lower prices. Cooney says tags are approaching a nickel apiece, compared to amounts five times or higher in the recent past.

Education and training

RFID is a new technology that is much more complicated than one first envisions. It is not, Cooney points out, taking an existing product and putting in a new application. The education – and the implications – required is extensive.

"Hundreds of thousands of RFID technologists are going to be needed," she asserts. "People need to know how to install readers, know how to install tags, which have to be placed (precisely) to be effective. It takes more knowledge than just training. It's a perfect fit for our students.

"It's appropriate for a two-year degree with a foundation in circuits and computers," Cooney continues. "People will need some networking skills, some understanding of RF. There's a real lack of understanding of what RF is. It requires a lot of math."

With Indiana's logistics focus, RFID systems on trucks and in warehouses will need to become commonplace. "This is going to be a big asset for our state," Cooney offers.

The professor worked with Fort Wayne-based Briljent (company president Kathy Carrier is a Chamber board member) to develop a study guide for those with some knowledge of RFID who are working in the field. CompTIA, an international association representing the information technology community, is offering a certification exam for those in the industry.

Cooney compares RFID today to the once quite difficult process of people receiving A+ certification for working on Microsoft products. The bar code was

also considered advanced technology in its early days.

"Right now, RFID is in its infancy. It takes a lot of skills to get a system installed. In the next 10 years, though, you'll see RFID everywhere. It will be as common as the bar code, and we won't even think about it anymore," she concludes.

To view the September-October 2003 *BizVoice*® article on RFID technology, go to the archives section of www.bizvoicemagazine.com.



September/October 2003



A recent experimental use for RFID — scoring in the Little 500 bicycle race.

Courtesy of Indiana University