

# Air Quality & Agriculture

## Air Quality In Action

Fall 2012 Newsletter

Contact me for more information or if you would like a site visit....

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### WINTER SEASON POLLUTION

October 1 – March 31 is typically the carbon monoxide and particulate matter pollution season. With cooler weather, we must monitor our particulate and carbon monoxide pollution. These pollutants build up to create the brown cloud during stagnant temperature inversions common in the winter months. Particulate matter, which include volatile organic compounds (VOC) and insoluble dusts are capable of penetrating the lungs and producing reductions in lung function. Traffic on unpaved roads, windblown dust, construction and agriculture are all contributors. Carbon monoxide is a colorless, odorless gas produced by automobiles, which hinders the body's ability to carry oxygen in the blood.

The following are ways that individuals, businesses, and other organizations can immediately reduce the threat of PM10:

- Reduce travel on days with poor air quality.
- Avoid using your wood stove and fireplace on days that have poor air quality.
- Avoid using leaf blowers and other dust-producing equipment.
- Drive slowly on unpaved roads and other dirt surfaces.
- Get involved with air quality improvement programs in your community by implementing Ag BMPs.

Early formation of the valley's brown cloud

### SIMPLE BMPs FOR PINAL COUNTY

Because of the Environmental Protection Agency's (EPA) designation of a moderate nonattainment area for western Pinal County, all agricultural activities will fall under the Ag BMP program. Producers must implement at least one BMP per each of their respective categories. Some simple BMPs from each category includes:

#### Tillage and Harvest

Chemical Irrigation  
Combining Tractor Operations  
Limited Harvest and Tillage activities  
During a High Wind Event

#### Non-Cropland

Access Restriction  
Reduced Vehicle Speed  
Wind Barrier

#### Cropland

Multi-Year Crop  
Residue Management  
Surface Roughening

Producers must document their BMPs and be able to provide a record of the BMPs implemented. If you need more information on BMPs or need a copy of the General Permit Record Form call Rusty Van Leuven in the Agricultural Consultation and Training Office at (602) 542-3484 or email at rvanleuven@azda.gov.

## FEATURED BMP: CHEMICAL IRRIGATION

Chemical irrigation or chemigation is applying fertilizer, pesticide, or other agricultural chemicals to cropland through an irrigation system. Chemigation has been practiced in agriculture for many years especially for fertilizer application. The major advantage is the ability of applying chemicals only when needed and in required amounts to minimize the possibility of environmental pollution. Chemical irrigation is a BMP in the tillage and harvest category. As a dust control measure, chemigation reduces the number of passes across a field with tractors, sprayers, fertilizer applicators and machinery. Reducing the number of field operations reduces the emissions associated with those activities.

All product application recommendations should be followed to ensure proper implementation. Make sure the chemicals used can be applied via irrigation and follow all instruction on the label. It is important to document when you chemigate so that you can demonstrate the operations eliminated by implementing chemical irrigation.



## ON-FARM ENERGY AUDIT IMPLEMENTATION PROGRAM



Energy has been a new concern with the cost of energy increasing. The Arizona Department of Agriculture, Agricultural Consultation and Training Program (ACT) have launched the On-Farm Energy Audit Implementation Pilot Program to assist in the completion of on-farm energy audits. This pilot program is a coordinated effort between ACT, the United States Department of Agriculture's, Natural Resources Conservation Service (NRCS) and the Arizona Governor's Office of Energy Policy. With the rising costs of energy, agricultural producers are trying to find ways to reduce energy consumption. The most efficient way to make this determination is with the completion of a professional energy audit. These audits may be completed on farms, nurseries, concentrated animal feeding operations and ranches to evaluate energy consumption. This is your first step in evaluating your energy use and qualify for possible cost share energy conservation programs. Through the Pilot Program agricultural operations are able to receive an energy audit with no out of pocket cost. For more information on the program call Rusty Van Leuven at (602) 542-3484 or Tiffany Ground at (602) 542-0873.

## ON-SITE VISIT

Just a reminder, the Agricultural Consultation and Training Office of the Arizona Department of Agriculture offers on-site visits to producers throughout the state on federal, state and local air quality regulations. Get up to date training on best management practices that fit your operation. To schedule a visit please give Rusty Van Leuven a call at (602) 542-3484. You can also email at [rvanleuven@azda.gov](mailto:rvanleuven@azda.gov).