



Valley Air News

A publication of the San Joaquin Valley Air Pollution Control District

September 2000

Central California Ozone Study— Utilizing Airship 1



Mark Boese, Deputy Air Pollution Control Officer, with Clean Airship 1, a Remotely Piloted Airship for Atmospheric Tracer Sampling. The CCOS is using scientific information gathered by the airship.

As previously reported in *Valley Air News*, the Central California Ozone Study (CCOS) was launched in June to record atmospheric observations and analyze ozone formation from air pollution. The ultimate goal of this study, one of the world's largest, is to determine the amount of emission reductions necessary to achieve ozone health standards in Central California.

Because of the regional nature of ozone and its formation, measurements are being taken throughout much of California, including the San Joaquin Valley, Sierra Nevada Mountains, Bay Area, as well as offshore areas. These measurements include surface and aloft pollutants and meteorological parameters. The parameters that play a significant role in ozone formation that are measured in CCOS include hydrocarbons, oxides of nitrogen, ozone, wind speed and direction, temperature, and solar radiation. Data is collected by various means, including radar, balloon packages, laser analysis, and aircraft.

Once the CCOS information is collected, it will be archived, quality assured, and formatted in such a way as to be useful in air quality models. These models are used to determine what emission controls are best suited to achieve health standards for ozone.

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Air Quality Trends Report

On August 7, the U.S. EPA released the third annual air quality trends report. The report shows that while air quality nationally continues to improve, in 1999, 62 million Americans lived in areas that had unhealthy air for at least one of the six criteria. The report also indicates that air pollution is a problem in many rural areas and some national parks, which have experienced high smog levels of resulting from emission sources many miles away.

The most recent 10 year period shows the following nationwide improvements in air quality concentrations (1990-1999):

- Carbon monoxide decreased 36 percent
- Lead decreased 60 percent
- Nitrogen dioxide decreased 10 percent
- Smog decreased 4 percent;
- Particulate matter decreased 18 percent, and
- Sulfur dioxide decreased 36 percent.

A full copy of the report may be found at the EPA's web site @ www.epa.gov/airtrends.

GOVERNING BOARD REVIEW

The Governing Board took the following action during the August 17th Governing Board Meeting:

- The Progress Report to the PM10 Attainment Demonstration Plan.
- Environmental Review Guidelines.
- Sending a letter to EPA supporting Eastern Kern County's position on reclassification.
- Received a Title 17 Briefing.
- Approved a contract for Emission Inventory Improvements for Selected Source Categories.
- Accepted Transportation and Community and Systems Preservation (TCSP) grant, approved resolution increasing District 2000/2001 Budget by \$228,559 and approved agreement with Council of Fresno County Governments to pass through TCSP grant funds to District.
- Approved and authorized Chair to execute agreement with Local Government Commission for TCSP project tasks for \$69,959.
- Approved amendments to REMOVE Program grant award contracts as follows:
 - with the City of Lodi, extending the term of the contract to December 31, 2000
 - with the San Joaquin Council of Governments, City of Ripon to extend the term of the contract to May 31, 2001.

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The next Governing Board meeting will be held on Thursday, September 14, at 9:00 AM in the District's Central office in Fresno, and via video-conference in the Modesto and Bakersfield offices.

Agricultural Practices PM10 Air Quality Survey



A recent Valley Air District survey indicates that the majority of farmers in the San Joaquin Valley Air Basin (SJVAB) use some type of dust suppressant treatment for their unpaved roads, have not changed their tilling land preparation practices since 1993, and continue to burn walnut and almond prunings. The survey was conducted earlier this year to identify selected agricultural practices that reduce PM10 emissions within the SJVAB.

The survey was designed and conducted by Sonoma Technology, Inc., in cooperation with the USDA Natural Resources Conservation Service (NRCS), local farm bureaus, the Nisei Farmers League, the California Cotton Ginners and Cotton Growers, and the Almond Hullers and Processors Association, and the Valley Air District to evaluate the current and historical practices of Valley farmers among other data parameters. A random sample of more than 600 farmers in the air basin were contacted in February to respond to questions related to PM10 emissions and the following categories: unpaved roads, farming tilling operations, waste burning and disposal with respect to post-harvest prunings, or field crops, and the use of harvesters.

An analysis of the final survey results found that more than seventy percent of farmers have used some type of dust suppression on all or part of their unpaved roads in the past year. Based on several additional survey questions regarding unpaved roads, the survey found that oil and/or water are the main dust suppressants typically used by farmers. About 90 percent of farmers reported no change to their tilling practices in the past seven years. Methods applied by farmers to reduce PM10 emissions from field operations include the use of pre-irrigating fields; limiting field operations to early morning and late in the evening, and on windy days; using cover crops; and using all-terrain vehicles for weed spraying. A majority of cereal crop farmers disc their post-harvest stubble, and a majority of walnut and almond farmers burn their prunings. When asked about walnut and almond orchard removals, however, a majority of farmers chipped rather than burned their waste. Cost was the greatest obstacle for those farmers who burned rather than chipped their waste.

The new information will be used by the NRCS as well as the District to identify emission reduction activities that have taken place since 1993. This information provides a better understanding of certain agricultural practices, which create PM10 emissions in the Valley.

Copies of the survey are available at the San Joaquin Valley Air Pollution Control District and local farm bureaus.

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They address such issues as transport of pollutants from neighboring air districts, local influence of emissions in Central California metropolitan areas, and can analyze various emission strategies. In addition to modeling, various statistical methods will be used on the data to determine the causes and reduction strategies for ozone in the San Joaquin Valley.

Armed with this information, the Valley Air District can then work with business, industry and the public to implement or expand effective regulatory and voluntary emission control programs. "This will be crucial for the Valley to meet the new federal ozone attainment deadline in 2005," said Mark Boese, deputy Air Pollution Control Officer.

A detailed California Air Resources Board and CCOS web site is available @ www.arb.ca.gov/airways/ccos/ccos/htm.

Kern County Schools Get \$1.4 Million for Natural Gas Superstation



The Transportation Division of the Kern County Superintendent of Schools office in Bakersfield has secured federal funds from the Congestion Mitigation Air Quality (CMAQ) program. In March, the Kern Council of Governments gave final approval to a \$1.4 million funding allocation for the Kern County Superintendent of Schools to design and construct a compressed natural gas and liquefied natural gas (CNG/LNG) fueling facility.

The new fueling facility will be a public access superstation designed to routinely serve the needs of several local government fleets and area school districts, as well as serving the fuel needs of other CNG/LNG vehicles passing through the area.

In addition to a state-of-the-art fuel dispensing system, the allocation will help fund property acquisition and site improvements. The dispensing system will feature an eight nozzle fast-fill system for CNG, a single dispensing nozzle for LNG, and up to 60 time-fill dispensing locations for fueling CNG vehicles that are parked overnight on the property.

Construction of the superstation has been placed on a fast-track schedule and should be completed by spring of 2001.



Request for Proposals—Advertising and Public Relations Agencies

The Valley Air District is seeking proposals from experienced advertising and public relations agencies to implement multi-media, multi-lingual outreach campaigns. The submission deadline is September 19.

Proposals are being solicited to implement English and Spanish outreach campaigns for the *Please Don't Light Tonight, Spare the Air* and particulate matter educational programs in the three regions of the District.

Full-service advertising and public relations agencies in Fresno, the Valley portion of Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare counties are invited to submit proposals for work in either or both languages.

Full details, including the budget allocation for each language, are available in the request for proposal. For more information and to request a packet, please contact Josette Merced Bello at (559) 230-5850 or via e-mail @ josette.mercedbello@valleyair.org.