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*Deputy Secretary*

January 5, 2007

Mr. Carl Edlund (6PD)
Multimedia Planning and Permitting Director
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Mr. Edlund,

I am pleased to submit the enclosed December 2006 Semi-annual Progress Report for the San Juan County, New Mexico Early Action Compact (EAC) for ozone. This report documents progress achieved with the EAC and other related work in San Juan County from June 2006 through December 2006. The report provides details about public outreach since June 2006, a new voluntary program for emissions reductions, related efforts, and next steps in this important project.

The State of New Mexico looks forward to your approval of this submittal and our continued work to protect air quality in San Juan County. If you have any questions about the enclosed report, please contact Andy Berger of my staff at (505) 955-8034.

Sincerely,

for Mary Uhl
Air Quality Bureau Chief

Enclosure

cc: Tom Diggs, EPA, Region 6 (6PD-L)
Carrie Paige, EPA, Region 6 (6PD-L)

# San Juan County, New Mexico
# Early Action Compact Progress Report
# December 2006

## Overview

This document reports on the progress made between June 2006 and December 2006 on the implementation of the San Juan County Clean Air Action Plan (CAAP) and related projects. The CAAP is the main deliverable from the Early Action Compact (EAC) for ozone. The signatories to the EAC, including the New Mexico Environment Department (NMED), are committed to ensuring that northwestern New Mexico remains in attainment of the 8-hour ozone National Ambient Air Quality Standard (NAAQS). The CAAP includes a public outreach campaign and a voluntary program for emissions controls, both of which are described below.

## State Implementation Plan

The NMED submitted to the Environmental Protection Agency (EPA) a State Implementation Plan (SIP) revision for an Early Action Compact for San Juan County. EPA approved this SIP revision on August 17, 2005 (70 FR 48285). The revisions approved by EPA incorporated the CAAP and the photochemical modeling conducted in support of the attainment demonstration for the 8-hour ozone standard within the San Juan County EAC area. These actions will strengthen the SIP in accordance with the requirements of sections 110 and 116 of the Federal Clean Air Act, and will result in emission reductions needed to help ensure continued attainment and maintenance for the 8-hour NAAQS for ozone.

## Public Outreach Since June 2006

ConocoPhillips San Juan Business Unit submitted a San Juan VISTAS voluntary agreement form to the New Mexico Environment Department pledging to continue Burlington's work and participate in the San Juan VISTAS program on September 25, 2006.

The Four Corners Air Quality Task Force held two public meetings: August 9, 2006 in Cortez with 75 participants; November 8, 2006 in Farmington with 70 participants.

The Four Corners Air Quality Task Force coordinated a field trip to Mesa Verde National Park August 10, 2006, to view monitoring equipment and overview visibility issues in the region. Another field trip was coordinated by the Task Force to the Milagro Cogeneration Plant, November 9, 2006, to see the gas treatment facility and 62 megawatt gas turbine. The Milagro plant manager led the tour, discussing plant efficiency and air emissions with the group.

The New Mexico Environment Department participated in 3 public information meetings for the Desert Rock Clean Air Act Proposed PSD Permit and testified at the October 3, 2006 public hearing. Staff from the New Mexico Environment Department also participated in the informational meeting on air actions for Four Corners Power Plant and Navajo Generating Station October 5, 2006.

NMED-AQB participated in the October 11-12, 2006 Climate Change and Variability Workshop in Durango at Fort Lewis College. The Conference purpose was to foster both information sharing and interaction between local stakeholders and scientists regarding the implications and potential impacts of climate variability and change in the San Juan Mountain region. NMED-AQB Farmington office staff also participated on a panel discussion at San Juan College on the climate change topic on November 15, 2006.

The New Mexico Environment Department has actively participated in the EPA Community Action for a Renewed Environment (CARE) project in Northwest New Mexico since its kick-off in early 2006. NMED staff attended and presented at the July 27, 2006 CARE meeting in the city of Farmington, San Juan County. On September 28, 2006 staff from the NMED Farmington Office participated in the EPA CARE San Juan County meeting as part of a panel, "Building Our Knowledge Base on Air Quality," with industry representatives. The meeting included a presentation by NMED staff on the New Mexico Air Quality Bureau's authority, responsibilities, delegations, monitoring and air quality in the Four Corners area. A presentation on our expanded VISTAS program was also given at the EPA CARE meeting. We also provided an overview of New Mexico's Climate Change Initiative at the November 3, 2006 EPA CARE meeting. Outreach materials on VISTAS and the Four Corners Air Quality Task Force were distributed at the EPA CARE meetings.

Public outreach in San Juan County is an ongoing process that includes the use of websites, public service announcements and educational outreach materials for children. Public outreach to date includes the distribution of the Tripper, Bear and the Air ozone activity books to local schools, museums, and national parks in San Juan County and the vicinity. "Anyone can fight against air pollution in San Juan County" posters were distributed at all Four Corners Air Quality Task Force meetings and at other public meetings and events in San Juan County.

In addition, the following NMED web sites contain outreach and educational materials, updated as they become available, related to the Clean Air Action Plan, the Four Corners Air Quality Task Force, VISTAS and the final approval of the SIP revision:

- http://www.nmenv.state.nm.us/aqb/4C/index.html,
- http://www.nmenv.state.nm.us/aqb/projects/Ozone.html,
- http://www.nmenv.state.nm.us/aqb/ozonetf/index.html,
- http://www.nmenv.state.nm.us/aqb/kids/index.html, and
- http://www.nmenv.state.nm.us/aqb/projects/SJV/index.html

Outreach materials are also available at the New Mexico Environment Department Farmington Office in San Juan County located at 724 West Animas Street, Farmington, NM 87401.

## Voluntary Program

The voluntary program for emissions controls, Voluntary Innovative Strategies for Today's Air Standards (VISTAS), recognizes companies and organizations for voluntarily reducing emissions of ozone precursors and greenhouse gases in northwestern New Mexico, including San Juan

County. To participate, companies each sign a voluntary agreement and then submit an implementation plan and annual reports to NMED. Participating companies are recognized for their reductions. Still in its initial stages, the program so far has one participating company. A second potential VISTAS partner is currently working with us to develop an implementation plan. The program website is available at: http://www.nmenv.state.nm.us/aqb/projects/SJV/index.html.

Funding for developing the VISTAS program has been acquired in the form of a grant. A strategic marketing campaign and plan was completed July 1, 2006.

VISTAS grant funds are now being used to develop outreach materials, including an incentive program for companies who participate in the program. The outreach materials will include a short video production about VISTAS. A VISTAS booklet, brochure, and presentation DVD will also be developed for outreach. A membership toolkit will be developed to help encourage more participation. This will strengthen the VISTAS program to create a more well-known and quantifiable program. Outreach materials are scheduled to be completed by Summer 2007.

**Related Projects**

The Four Corners Air Quality Task Force is a multi-entity effort analyzing air quality issues in the Four Corners region. The Task Force will develop a broad list of options for improving air quality in the region. Membership includes community members, interest groups, local governments, industry, tribes, and state and federal agencies. The Task Force will work over a two-year period, making its final report available by December 2007. The Task Force website is located at http://www.nmenv.state.nm.us/aqb/4C/. Five work groups within the Task Force focus on issues related to oil and gas development; power plants; other air pollution emission sources; cumulative effects; and air quality monitoring. Technical background information documents for Modeling; Monitoring; Emissions Inventories; Air Quality Effects; Legislative, Regulatory, and other initiatives in the Four Corners region were produced. Participation in the Task Force has increased to 96 Members and 110 Interested Parties. The Task Force will work over a two-year period, making its final report available by December 2007. The next meeting is scheduled for November 7, 2007 in Durango, Colorado.

The main product of the Task Force, the draft report is currently being developed and is available for review online: http://www.nmenv.state.nm.us/aqb/4C/DraftTaskForceReport.html. The draft report is a compilation of mitigation option papers written so far by members of the Four Corners Air Quality Task Force. The agencies involved have not reviewed or adopted these options. The options will be considered following the completion of the Task Force's work.

The New Mexico Environment Department contracted ENVIRON to conduct an Ozone Precursor Emissions Inventory for San Juan and Rio Arriba Counties. The inventory was completed August 31, 2006 and is available online at http://www.nmenv.state.nm.us/aqb/projects/San_Juan_Ozone/NM_Area_Emissions_report.pdf.

A pilot passive ammonia monitoring project was initiated in collaboration with EPA Region 6 in the summer of 2006. The passive monitors are located at 3 sites in San Juan County. Samples are being collected and analyzed. The pilot monitoring project will continue for 1 year.

A Four Corners air quality modeling project was initiated. A CAMx model will predict criteria pollutant (ozone and particle concentrations), visibility and sulfur and nitrogen deposition. A 2005 and 2018 base case and 5 mitigation options will be modeled. The modeling project will be completed in 2007.

**Next Steps**

- Continue design and development of San Juan VISTAS outreach and incentive materials
- Move forward using marketing plan as a road map to increase participation in San Juan VISTAS.
- Publicize San Juan VISTAS work through local media outlets.
- Implement new incentive program for VISTAS participants.
- Continue public outreach and coordination of the Four Corners Air Quality Task Force.
- Continue monitoring and reporting on ambient ozone concentration data.
- Strive to maintain ambient ozone levels below applicable National Ambient Air Quality Standard.
- Contract Four Corners CAMx modeling work. A 2005 and 2018 base case and 5 mitigation options will be modeled.

**Assess Improvements in Air Quality**

The 8-hour ozone design value in San Juan County was maintained below the National Ambient Air Quality Standard for ozone of 0.08 ppm. The final 8-hr ozone design value for 2005 for San Juan County (San Juan Substation and Bloomfield monitors) was 0.072 ppm. The 2006 8-hr ozone design value for San Juan County Substation monitor was 0.071 ppm. The 2006 8-hr ozone design value for the San Juan County Bloomfield monitor was 0.069 ppm.

San Juan VISTAS implemented technology has led to some Ozone precursor (VOC and $NO_x$) emissions reductions. The most significant NOx emissions reductions (116 TPY) were obtained by VISTAS participants by selectively downsizing some engines to better utilize the available horsepower of the engines for compressing natural gas. The most significant VOC reductions (308 TPY) were obtained by VISTAS participants through improved plunger lift optimization that resulted in reduced venting of natural gas. These reductions were observed for 2005. 2006 reports of emissions reductions will not be available until April 1, 2007.

ConocoPhillips San Juan Business Unit submitted a San Juan VISTAS Voluntary Agreement form to the New Mexico Environment Department pledging to continue Burlington's environmental stewardship work and participate in the San Juan VISTAS program on September 25, 2006. This increases the oil and gas facilities covered by San Juan VISTAS and may increase the air quality benefits of the program. A new compressor company is set to join VISTAS early in 2007 forecasting more quantifiable gas compressor emissions reductions for the future.