VICTORIA COUNTY NEAR NON-ATTAINMENT STRATEGY 2002-2003

INTRODUCTION

Victoria is preparing for the third two-year program to preserve the air quality throughout the county and the surrounding six counties which are represented by the EPA CAMS87 located in the city of Victoria. Under the Rider 17 Program (from the 1997 Texas Legislature) Victoria County received $437,000 which has been utilized to develop a 1996 Emission Inventory; establish an Ambient Air Monitoring Station (CAMS602); perform mobile monitoring throughout the county; episodic modeling; and establish an Interlocal Agreement with Victoria College for development of a Public Outreach Program.

In 1999, the Near Non-Attainment areas approached the Texas Legislature to seek continued funding for air quality research. The total amount requested by the Near Non-Attainment Areas was $4.075 million. The City of Victoria's portion was $440,000 to continue air quality research in the area. The 1999 Funding (Rider 13) is being utilized to continue and refine the technical programs established under the Rider 17 programs and to develop more precise modeling scenarios that best represent the Victoria area.

To oversee use of the Rider Funds, Victoria County has established the Victoria Ozone Action Committee that provides oversight on the technical aspects of the air quality programs and the Public Outreach Committee to give direction to development of a public awareness/education campaign. Both committees currently contribute approximately $68,500 a year in "In-Kind Services". However, that number continues to grow as more individuals get involved and as both committees begin working toward establishing an "Industry Coalition" to assist in the regional air quality studies and public awareness.

Victoria County continues to be classified as ATTAINMENT under the 8 hour EPA classification system since a three-year rolling average is used to determine attainment status. The ozone analysis trend by year is unfavorable, as the 1999 design value measured in Victoria was 87 ppb. This unfavorable trend increases the importance of continuing the technical studies to define action steps necessary to correct the high level of ozone being experienced in the area. The major parts of the program for 2002-2003 will be presented in two sections; the technical studies and the public education / program administration. The technical studies will be the basis for any required State Improvement Plans (SIP) which would be required by EPA and TNRCC if the area slips into Non-Attainment.

The Public Outreach (Education) program has increased in importance. The unfavorable trend indicates that a small improvement by the general public may allow the area to maintain attainment status. The major portion of the overall program funding will continue to be spent for technical studies, but the important Outreach Program will be adequately funded under this program.

TECHNICAL PROGRAM

The technical program will continue to focus on defining possible changes to decrease ozone levels in the surrounding area. The major divisions of the technical program will be Inventories; Monitoring; and Computer modeling.

INVENTORIES

A complete inventory of ozone precursors was completed in 1998. The final result was very complete and is believed to accurately describe the seven county area at that time. This inventory must be updated using 1999 data reflecting the increases in the major sources such as manufacturing facilities and increased traffic counts. This inventory data is critical to obtaining reliable results in the modeling programs.

Cost $115,000

MONITORING

An upstream monitor to measure ozone and other contaminants was installed on Rabbit Run Road in 1999. The monitor is located Southeast of the City of Victoria as the wind rose indicated that the prevailing winds during the ozone season are from that direction. The analyzer indicates the quantity of ozone being transported into our area compared to the ozone generated by local contaminant sources.

Random mobile monitoring is required to find other sources of Ozone precursors which were not identified in the inventory or the quantity of the precursors is greater than predicted. This random monitoring is critical for increased mobile emissions and unsuspected NOx concentrations that have been discovered.

Cost $150,000

MODELING

If Victoria is declared an ozone non-attainment area in the future, the United States Environmental Protection Agency (EPA) will require the development of a State Implementation Plan (SIP) for the area that proposes an emissions control program and demonstrates its effectiveness for achieving attainment. A SIP typically requires the use of a photochemical model, which simulates the emission, dispersion, chemical transformation, and physical removal of pollutants during a historical ozone episode, to demonstrate that proposed emissions control strategies will be effective. Therefore, photochemical modeling is critical for the planning and development of an attainment strategy. Several historical episodes must be modeled in order to demonstrate attainment under meteorological conditions that typically occur during high ozone events in the area.

To date, photochemical modeling for Victoria has been based on leveraging historical episodes developed for regional analyses or for other areas. Because of the complex meteorology along the

coast of the Gulf of Mexico, model performance in Central Texas, especially in coastal areas, has not been optimal. Future episode selection must focus on maximizing model performance in Central Texas and should include enhanced meteorological modeling for Central Texas, especially in coastal areas such as Victoria and Corpus Christi. Further modeling studies will be used to improve the understanding of atmospheric conditions that promote ozone formation in Victoria, assess the magnitude of regional transport, evaluate the effectiveness of emissions control strategies, and develop an attainment strategy, should it become necessary. It has been proposed that at least one of the episodes selected for modeling include both Victoria and Corpus Christi, because both areas face similar complexities with modeling coastal meteorological conditions. This will result in cost savings by both locations.

Cost $300,000

EMISSIONS REDUCTION STRATEGY / DEVELOPMENT

Based on the above-mentioned modeling and monitoring programs, Victoria will begin to establish or develop various controls strategies and plans for reducing local emissions that lead to the formation of ozone.

Cost $70,000

PUBLIC EDUCATION / ADMINISTRATION

OUTREACH

A new committee has been formed (2000) to guide our efforts to inform the general public about Air Quality. A new coordinator is being recruited to work with the committee to assure success. The committee has members from Victoria and Calhoun Counties. These two counties will be the prime targets for the start of the program, and the intent is to extend the program to the other 5 surrounding counties as the program develops. The Victoria program will compliment the increased emphasis by TNRCC in this area.

Cost $70,000

PROGRAM ADMINISTRATION

Overall management of the Rider Programs, with regards to contract development and amendments, work plans, status reports, contract amendments, various Interlocal Agreements with subcontractors and development of new funding requests.

Cost $60,000

TOTAL PROGRAM BUDGET = $765,000