

US EPA ARCHIVE DOCUMENT

Shreveport-Bossier City Metropolitan Statistical Area

Early Action Compact Progress Report

June 30, 2007

Prepared for
U.S. Environmental Protection Agency
Region 6
Dallas, Texas

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1. Introduction

The U.S. Environmental Protection Agency (EPA) requires signatories of Early Action Compacts (EAC) to prepare a progress report every six months that describes the progress made to date against the EAC milestones. This progress report will summarize activities related to the Shreveport – Bossier City Metropolitan Statistical Area’s EAC during the period from January 1, 2007 through June 30, 2007.

2. Progress Toward Completion of Control Measure Implementation

All EAC milestones have been fully implemented as planned.

3. Air Quality Improvements

Thus far during ozone season of 2007, no ozone action days have been declared and the Shreveport-Bossier City Metropolitan Statistical Area continues to be in attainment of the eight hour ozone standard.

4. Emissions Reductions

Preliminary information substantiates that significant emissions reductions continue to be achieved as a result of the implemented control measures. Initial reports received from Johnson Controls, Inc. indicate that energy

savings of approximately 17,283,360 kWh of electrical energy and 181,726 ccf of natural gas have been realized during the period from mid-2004 through March of 2007 resulting from the installation of energy conserving equipment in City of Shreveport buildings. According to the estimates provided to the City by JCI, emissions reductions attributable to these energy savings are in the vicinity of 33 million pounds of pollutants (largely consisting of greenhouse gas emissions such as CO₂), including approximately 58,000 pounds of NO_x. During this reporting period, we requested that the National Renewable Energy Laboratory (NREL) review the energy savings numbers presented by JCI in light of the methods discussed in NREL's 2005 report¹, cited in the revised SIP, in an effort to substantiate emissions reductions resulting from the energy savings. NREL's initial analysis confirms significant, although slightly lower, emissions reductions resulting from the documented energy savings.

Updated reports continue to confirm NO_x and VOC reductions resulting from the Centerpoint Energy plant modification and VOC reductions resulting from the GM plant modification. As previously reported, the Centerpoint Energy facility in Bossier Parish (historically one of the highest stationary source emitters of NO_x in Caddo and Bossier Parishes) was permitted to emit 1034.26

¹ A. Chambers, D. Sm. Kline, L. Vimmerstedt, A. Diem, D. Dismukes, and D. Mesyanzhinov (2005), "Comparisons of Methods for Estimating the NO_x Emission Impacts of Energy Efficiency and Renewable Energy Projects: Shreveport Louisiana Case Study (Revised)."

tons per year of NO_x and 89.41 tons per year of VOC in 2003, prior to implementation of the plant modification. By 2005, the permit for the facility had been modified to limit NO_x emissions to 67.17 tons per year and VOC emissions to 20.42 tons per year. Actual emissions reported for the facility for 2005 were 50.79 tons of NO_x and 17.89 tons VOC, and for 2006, actual emissions reported were 46.12 tons of NO_x and 17.71 tons of VOC.²

According to GM plant representatives, VOC emissions reductions of over 250 TPY (short of the goal of 500 TPY) were achieved in 2005 as a result of the GM plant modification. An additional 17.8% reduction in VOC emissions (representing 134 tons) was documented for 2006, which moves this facility closer to (although still somewhat less than) the initial stated goal of a 500 TPY emissions reduction goal.

5. Additional Updates

Stakeholders continue to be kept abreast of any pertinent issues during the period via as needed, and no meetings were necessary during the period. No updates or revisions to modeling, technical analyses, or planning activities occurred during the period.

² Centerpoint has filed for a new air permit to expand the facility, which will result in an increase in NO_x and VOC emissions beginning during 2007. NO_x permit limits are expected to increase to 156.62

The City of Shreveport is the government agency responsible for implementing the following control measures: landfill gas recovery project; energy conservation program; intelligent transportation systems implementation; and obtaining of the hybrid bus. The Louisiana Department of Environmental Quality has oversight, via permit, of emissions from the Centerpoint Energy natural gas processing plant and the General Motors plant.

tpy and VOC permit limits are expected to increase to 44.74 tpy. Despite the increase, these new proposed limits remain substantially below the pre-EAC permit limits.