

## Baton Rouge Post 1999 Rate of Progress

**Background** - Section 182(c)(2)(B) of the 1990 Amendments to the Clean Air Act (CAA) requires that the state implementation plan (SIP) contain a demonstration of reasonable further progress for milestone years and the attainment year. The CAA specifically states the following: “Reasonable further progress demonstration (hereinafter, ROP) – A demonstration that the plan, as revised, will result in VOC emissions reductions from the baseline emissions described in subsection (b)(1)(B) equal to the following amount averaged over each consecutive 3-year beginning 6 years after the date of the enactment of the Clean Air Act Amendments of 1990, until the attainment date: (i) at least 3 percent of baseline emissions each year; or...”

The State has previously submitted reasonable further progress plans for the milestone years 1996 and 1999. The following describes the plans for achieving Post 1999 ROP.

### **Section 1: Calculation of Post-1996 Target Levels and Required Reductions**

In order to determine if the current strategies are sufficient to achieve the required Rate-of-Progress (ROP) reductions of at least 3 percent per year from 1999 to 2005, the Louisiana Department of Environmental Quality (LDEQ) calculated the target level of emissions and the required reductions for the 2002 milestone year and the 2005 attainment year. Since guidance allows the use of reductions of volatile organic compounds (VOC), or oxides of nitrogen (NO<sub>x</sub>) or a combination thereof to satisfy ROP, a 2 percent per year NO<sub>x</sub> reduction and a 1 percent per year VOC reduction combination was chosen. This means that the total required NO<sub>x</sub> reduction from 1999 to 2005 will be 12 percent and the total required VOC reduction will be 6 percent. This section explains the procedures that were used to calculate the target levels of emissions and the required reductions for the years 2002 and 2005.

### **Section 2: Calculation of the 2002 and 2005 Target Levels of Emissions and Required Reductions**

The target level represents the maximum amount of emissions that a nonattainment area can emit for a target year while complying with the ROP plan. - There are six steps in calculating a target level. After the target level is calculated, the final step is to calculate the required reductions, which includes a reduction amount to offset growth for the target period. The following steps explain the procedures that were used to calculate the target levels and required reductions.

#### **Step 1: Develop the 1990 Base Year Inventory**

**(Refer to Appendix A -Target Level Calculations: Figure 1 – 2002 NO<sub>x</sub>, Figure 2 – 2005 NO<sub>x</sub>, Figure 3 – 2002 VOC, Figure 4 – 2005 VOC)** Emission estimates for NO<sub>x</sub> and VOC for the four major source categories for 1990 were taken from the previous ROP submittal titled “Post 1996 Rate of Progress Plan and Attainment Demonstration” dated January 2, 1997. These estimates were adjusted as follows: the Area /with Nonroad source category was re-calculated using the EPA Draft NONROAD 2002a Model (**Appendix B**) and the Mobile source category was re-calculated using the MOBILE6 Model (**Appendix**