

**Response to Comments**  
**Houston/Galveston/Brazoria Area Rate of Progress SIP**

The U.S. EPA comments that the 1990 base emissions inventory point source estimates for VOC and NO<sub>x</sub> are not likely to be explained by corrections to company questionnaires or improved technologies.

**TCEQ Response: The 1990 VOC value reflected in the table for point source was not adjusted for Rule Effectiveness (RE) nor correctly transcribed into the table. The proposed table entitled: “Data Entry Sheet 1 of 3: 1996-2007 ROP Target Level Emissions” has been modified by replacing the VOC value of 338.20 tpd with the correct RE adjusted number of 483.38 tpd VOC.**

**The commission has also determined that the 735.03 tpd value in the table entitled : “Data Entry Sheet 1 of 3: 1996-2007 ROP Target Level Emissions” was incorrect due to a transcription error. The commission has corrected the proposed value from 735.03 to the value previously adopted into the SIP of 794.85 tpd NO<sub>x</sub>.**

The Lone Star Chapter of the Sierra Club commented that they have major concerns about the underlying accuracy of the emissions inventory for the Houston/Galveston/Brazoria and Beaumont/Port Arthur areas. Based on studies such as TxAQS and airborne monitoring by the TCEQ, the chapter believes that there exist large amounts of unreported emissions of VOCs.

**TCEQ Response: The commission is confident that the process of quality assuring the emissions inventory information required by 30 TAC 101.10 to verify that approved emission factors and techniques have been applied and submitted by the regulated community to the agency results in an accurate accounting of emissions reported. The commission is also aware that the science studies of the last several years indicated that more highly reactive volatile organic compound emissions are being emitted into the atmosphere than can be accounted for in the inventory for the Houston/Galveston area. Sufficient evidence does not exist to support extending this conclusion to other volatile organic compounds or other industrialized areas such as BPA. In the years since the 2000 studies were conducted and conclusions drawn, the commission has strengthened the level of detail required to be reported by the regulated community for cooling towers, equipment fugitive emissions, and flares for all sites subject to the inventory requirements, regardless of where they occur in Texas. The commission has also increased focus on emissions from emissions events, startup, maintenance and shutdown events since that time. Specific emissions inventory reporting guidelines have included source specific reporting criteria for each of these three source categories since the calendar year 2002 reporting year. The purpose of the Rate of Progress SIPs is to assure that emissions reductions are steadily progressing towards the attainment deadlines of the Clean Air Act based on a “base year inventory.” The commission believes that the requirements of the base year inventory creation have been met. The present SIP revision does comply with the requirements and intent of the Rate-of-Progress requirements of the Act and will help assure that progress is steadily made toward attainment.**

The U.S. EPA comments that emissions from area sources have been recalculated based on a variety of improvements in methodologies. Studies and surveys were used for commercial vessels and locomotives (pp. 2-4 and 4-3). “Bottom-up” surveys were used for categories such as graphic arts, forest fires, and oil and gas production. The U.S. EPA would like the commission to provide documentation of the new methodologies.

**TCEQ Response: The commission has added Appendix 6, “Documentation of Area Source**

**Emission Inventory Improvements.” This new appendix documents the area source inventory updates since the last approved SIP.**

The U.S. EPA comments that the non-road NO<sub>x</sub> emissions in Table 4.2 appear different than the NO<sub>x</sub> emissions in Data Entry Sheet 1 in the associated appendix. (112.28 tons/day vs 63.94 tons/day).

**TCEQ Response: The commission has determined the correct value in both instances should be 112.28 tons per day and will update the Rate of Progress SIP to reflect this determination. An appendix has been added to the Rate of Progress SIP, Appendix 7, “Documentation of Nonroad Mobile Source Emission Inventory Improvements.” This appendix documents the nonroad mobile source inventory updates since the last approved SIP.**

The EPA commented that little documentation was provided of how the projected emissions were calculated, point out that it is insufficient to lump the various federal and state controls, and indicated that each control program should be listed with its associated reductions, and those reductions supported.

**TCEQ Response: Rate of progress SIPs are typically developed and adopted prior to ROP milestone years occurring and thus are estimating emissions reductions for all milestone years which are in the future. Because of the timing of this revision, we have actual point source emissions inventories for each year up through and including 2002, upon which to base emissions reductions for the various control programs in place. In this ROP, we have utilized this information to depict actual progress for the milestone years as opposed to projected progress on an individual control program by control program basis the years through 2002. In doing so, we utilized rule effectiveness (RE) adjusted inventories that depict actual reductions achieved in practice through 2002, not just projected reductions. Rule effectiveness adjusted inventories are necessary since the ROP emissions targets are calculated based on RE adjusted 1990 base year uncontrolled inventories projected to a future year and necessary percentage reductions, taking into account reductions attributable to pre-1990 controls. Rule effectiveness adjustments to the point source inventory were applied to each source in accordance with methods previously approved into the SIP. Values for these RE adjusted and non-RE adjusted inventories can be seen in Appendix 1 Sheet 13. Control programs for post 2002 are identified in the document.**