

Texas Air Quality Study 2000 Special Point Source Inventory

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Jocelyn Mellberg, Gabriel Cantu, Ron Thomas, Jim Neece, Jim Smith

Texas Commission on Environmental Quality

Overview

TCEQ surveyed the largest industrial sources of VOC and NOx in the Houston and Beaumont areas to account for specific operating conditions, upsets, startups, and shut-downs during the TexAQS2000 study period of August 15, 2000 through September 15, 2000. This data included episode-day and hourspecific point source emissions. 74 of the 83 companies surveyed responded and provided data. In the HGB area, companies that responded to the survey accounted for approximately 50% of the Ozone Season Daily (OSD) NOx emissions and 70% of the OSD VOC emissions. And in the BPA area. respondents accounted for 60% of OSD NOx emissions and 70% of the OSDVOC emissions. Many companies supplied daily or hourly chemical speciation and this data has been used to develop the CB-IV speciation profiles used in CAMx. As illustrated in the figures below, on an individual basis, the special inventory emissions may differ greatly from the reported annual emissions, however, overall, the differences are barely noticeable when looking at the overall emission inventory.

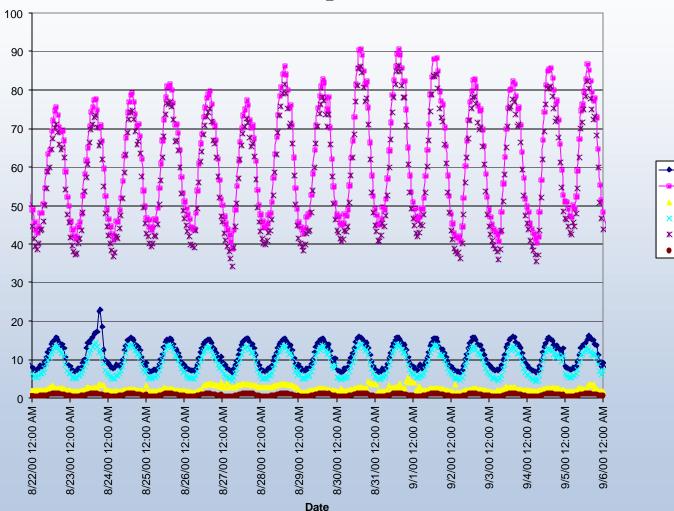


Comparison of Texas Emission Inventory preSI and postRE

CO w/SI tph NOx w/SI tph VOC w/SI tph

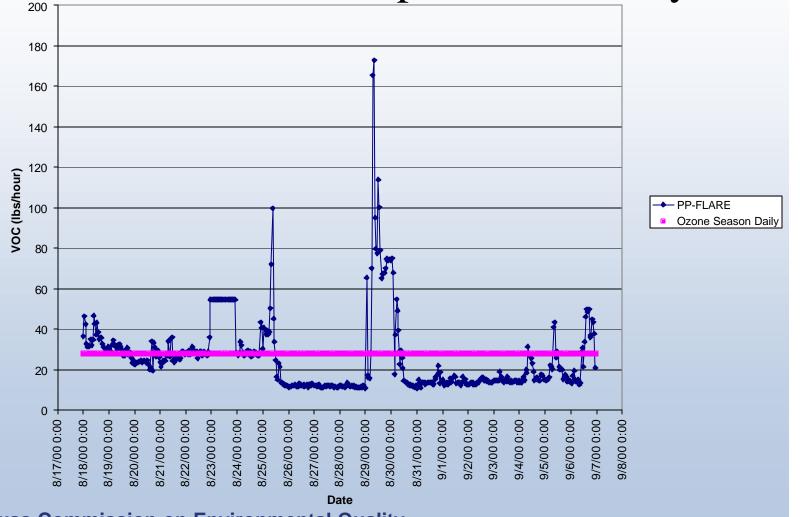
CO preSI tph Nox preSI tph

VOC preSI tph



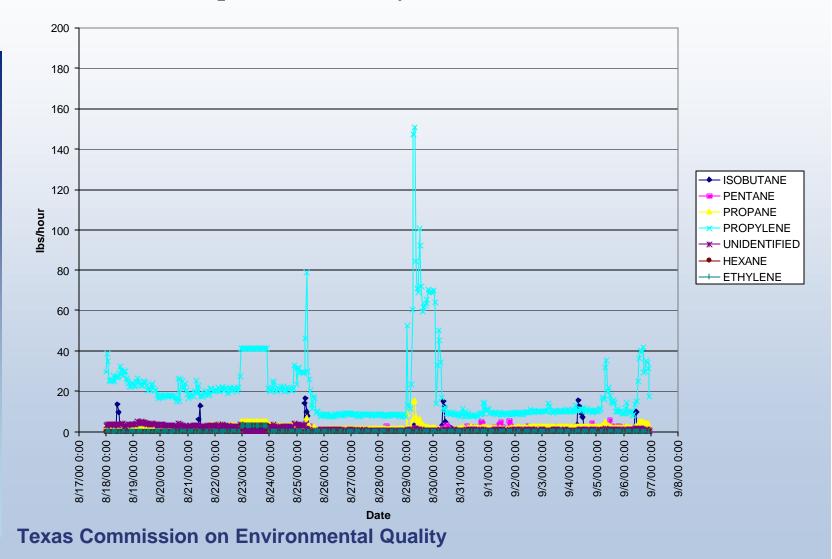
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Temporal Variability Improvement for a Flare in the Special Inventory



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Temporal Variability of Speciation for a Flare in the Special Inventory on a lb/hour basis



Temporal Variability of Speciation for a Flare in the Special Inventory on a Percentage Basis

