tables of the base year and projected maintenance year inventories. EPA's TSD contains more in-depth details regarding the base year inventory for the Tampa area.

## VOC EMISSIONS INVENTORY SUMMARY

[Tons per day]

	1990	1994	1997	2000	2005
Stationary Point Stationary Area On-Road Mobile Non-Road Mobile Biogenics	16.59 101.00 166.12 51.41 97.89	24.52 104.61 90.96 55.36 97.89	25.16 109.44 87.97 57.56 97.89	25.86 114.34 84.73 59.76 97.89	26.64 120.13 87.43 62.58 97.89
Total	433.01	373.07	378.02	382.59	394.67

#### NO<sub>x</sub> Emissions Inventory Summary

[Tons per day]

	1990	1994	1997	2000	2005
Stationary Point Stationary Area On-Road Mobile Non-Road Mobile	319.76 9.96 121.47 41.60	336.02 10.67 109.89 44.61	317.83 11.08 114.00 47.01	320.02 11.48 111.80 49.40	338.84 12.08 113.25 52.61
Total	492.79	501.19	489.92	492.70	516.78

# CO EMISSIONS INVENTORY SUMMARY

[Tons per day]

	1990
Stationary Point Stationary Area On-Road Mobile Non-Road Mobile	33.49 16.36 942.60 365.54
Total	1357.99

### *B. Demonstration of Maintenance— Projected Inventories*

Total VOC and NO<sub>X</sub> emissions were projected from 1990 base year out to 2005, with interim years of 1994, 1997, and 2000. These projected inventories were prepared in accordance with EPA guidance. The projections show that VOC emissions are expected to decrease 38.34 tons or 8.85% from the level of the base year inventory during this time period. The NOx emissions do show a slight increase of 23.99 tons or 4.87% from 1990 to 2005, but the State has demonstrated as discussed below that the projected increases will not adversely affect the maintenance of the O3 NAAQS.

The Empirical Kinetics Modeling Approach (EKMA) was used to demonstrate the impact of NO<sub>X</sub> emission increases on maximum O<sub>3</sub> formation. The EKMA analysis showed that the projected future mix of emissions will not cause a violation of the NAAQS. EPA EKMA guidance documents were used in developing

model inputs. The model was run using 1988 meteorological conditions and monitored  $O_3$ ,  $NO_X$  and nonmethane organic compound (NMOC) concentration data for May 16, 1988, June 3, 1988, and June 23, 1988, and was run in the EKMA calculate mode. These days had observed O3 maximum concentrations of 0.118, 0.113, and 0.115 parts per million (ppm) respectively. The monitored NMOC/ NO<sub>X</sub> ratios of 6.876, 8.298, and 5.180 were used as input. The EKMA predicted a minimum decrease in O<sub>3</sub> concentration of 1.5% from 1990 to 2005.

The model output indicated a continual decrease in the maximum model-predicted  $O_3$  with each increase in NO<sub>x</sub> emissions over the 1990 base case inventory. Additionally, the modeling indicated that the mix of emissions as indicated in the 2005 inventory (11.4% VOC reductions and 4.8% NO<sub>x</sub> increase over the 1990 inventory) produced lower O<sub>3</sub> levels than the base case. Thus, the analysis

indicates that, not withstanding the projected increase in  $NO_X$  emissions, the Tampa area should continue to maintain the standard throughout the maintenance period.

### C. Contingency Plan

The level of VOC emissions in the Tampa area will largely determine its ability to stay in compliance with the O<sub>3</sub> NAAQS in the future. Despite the State's best efforts to demonstrate continued compliance with the NAAQS, the ambient air pollutant concentrations may exceed or violate the NAAQS. Therefore, Florida has provided contingency measures with a schedule for implementation in the event of a future  $O_3$  air quality problem. In the case of a violation of the O<sub>3</sub> NAAQS, the plan contains a contingency to implement additional control measures such as reinstatement of NSR, less volatile or reformulated gasoline, expansion of control strategies to adjacent counties for VOC and/or NO<sub>X</sub> and to new CTG categories, or an