

## **Section 5: Ambient Air Quality Monitoring**

### **5.1 Attainment of the 1-Hour Ozone Standard**

The Morgan City monitoring site in St. Mary Parish (EPA AQS code 22 101 0003) has been in operation since October 1, 1988 and has been operated in accordance with the requirements of 40 CFR 58 and the EPA-approved Quality Assurance Program Plan. The NAAQS for 1-hour ozone is 120 ppb based on a 1-hour average sample. Because of rounding a 1-hour monitor reading of 125 ppb is considered an exceedance of the 1-hour ozone standard, whereas a reading of 124 ppb is considered as meeting the standard.

The Morgan City site continued to monitor attainment with the 1-hour ozone NAAQS through the end of calendar year 2005. EPA revoked the 1-hour ozone standard effective June 15, 2005. The most recent three years of ozone monitoring data (2003-2005) for St. Mary Parish indicate an ozone design value of 90 ppb for 2003, 86 ppb for 2004 and 94 ppb for 2005.

### **5.2 Attainment of the 8-Hour Ozone Standard**

The NAAQS for 8-hour ozone is 80 ppb based on the three-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area. An 8-hour monitor reading of 85 ppb is considered an exceedance of the 8-hour ozone standard and a reading of 84 ppb is considered as meeting the standard. A detailed list of these design values is contained in Table 5-1 at the end of this section.

### **5.3 Request for Network Change**

Considering that the Morgan City site continued to monitor attainment with the 1-hour ozone standard and had monitored attainment for the 8-hour ozone standard since 1998, the state discussed a monitoring network change with EPA. The discussion was followed with a written request (letter dated December 12, 2002) for change to the monitoring network. In correspondence dated May 9, 2003, EPA responded affirmatively to plans to discontinue operation of this monitor (See Appendix C). The department had planned to dismantle the monitoring site at the end of 2005 in conjunction with renewal of the Section 175a maintenance plan under the 1-hour ozone standard.

With implementation of the 8-hour ozone standard and revocation of the 1-hour ozone standard, the state is required to address the maintenance requirements in Section 110 (a)(1) of the CAA for areas designated unclassifiable/attainment for the 8-hour ozone NAAQS, such as St. Mary Parish. According to the guidance document for section 110(a)(1) maintenance plans, "a monitor

may be unnecessary when it...has monitored attainment for the latest five complete three-year periods. This time period is necessary to confirm that several non-overlapping data periods show sustained clean air due to strategic emission reductions rather than favorable meteorology.” The Morgan City site meets this guidance criteria and has monitored attainment with the 8-hour ozone NAAQS since 1998. (See Table 5-1)

In conclusion, the Morgan City site meets the guidance criteria and continued monitoring in the area is unnecessary. The state formally requests approval from the EPA Regional Administrator to delete the Morgan City monitoring site in St. Mary Parish from the state’s air quality monitoring network.

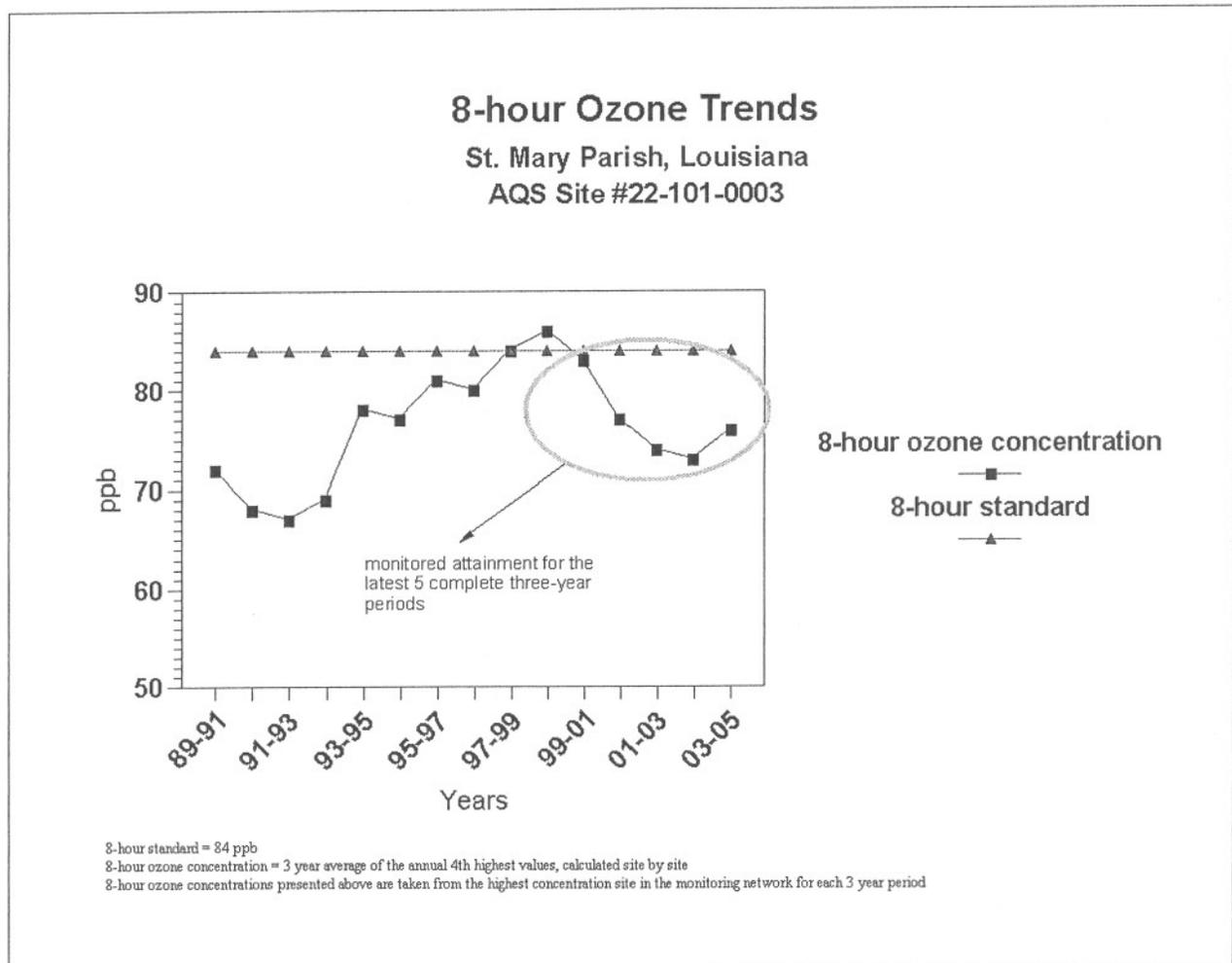


Figure 2: Morgan City Site 8-hour Ozone Trends

**Table 5-1 St. Mary Parish  
8-Hour Ozone Design Values 1998-2005**

	<b>Highest</b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b># of days</b>	<b>Design Value ppm*</b>
1998	0.095	0.091	0.088	0.085	7	0.080
1999	0.089	0.089	0.088	0.086	5	0.084
2000	0.101	0.093	0.090	0.088	5	0.086
1999	0.089	0.089	0.088	0.086	5	0.084
2000	0.101	0.093	0.090	0.088	5	0.086
2001	0.078	0.078	0.076	0.076	0	0.083
2000	0.101	0.093	0.090	0.088	5	0.086
2001	0.078	0.078	0.076	0.076	0	0.083
2002	0.072	0.071	0.071	0.069	0	0.077
2001	0.078	0.078	0.076	0.076	0	0.083
2002	0.072	0.071	0.071	0.069	0	0.077
2003	0.080	0.079	0.079	0.077	0	0.074
2002	0.072	0.071	0.071	0.069	0	0.077
2003	0.080	0.079	0.079	0.077	0	0.074
2004	0.087	0.083	0.079	0.073	1	0.073
2003	0.080	0.079	0.079	0.077	0	0.074
2004	0.087	0.083	0.079	0.073	1	0.073
2005	0.081	0.080	0.079	0.079	0	0.076

\*ppm=parts per million

## **Section 6: Verification of Continued Attainment**

Because emission projections established for the maintenance demonstration depend on assumptions of point, non-point and mobile source growth, the state must track the progress of the maintenance plan. The state will periodically update the emissions inventory in accordance with federal requirements. The progress of the maintenance demonstration will be tracked through annual and periodic evaluations of the emissions inventory. The annual evaluation will consist of review of emissions trends of quality-assured emission data of VOC and NO<sub>x</sub> from stationary point sources to indicate new source growth or increases/decreases in emissions.

During the periodic evaluations, the state will compare the actual emissions inventory for the interim years 2008 and 2011, and the last year of the maintenance plan 2014 to the 2002 baseline attainment inventory and the projected interim emissions inventories to verify continued attainment with the 8-hour ozone standard. Review of the actual emissions inventory for the years 2008, 2011 and 2014 will be made within twelve (12) months of the end of each three-year cycle reporting year.