

Section 5: Ambient Air Quality Monitoring

5.1 Attainment of the 1-Hour Ozone Standard

The Bentley monitoring site in Grant Parish (EPA AQS code 22 043 0001) has been in operation since 1989 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 parts per billion (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 Bentley site continued to monitor attainment with the 1-hour ozone NAAQS until the monitor was destroyed by fire on August 13, 2005. EPA revoked the 1-hour ozone standard effective June 15, 2005. The most recent three years of complete 1-hour ozone monitoring data (2002-2004) for Grant Parish indicate ozone design values of 92 ppb for 2002, 89 ppb for 2003 and 86 ppb for 2004. See Figure 2 below.

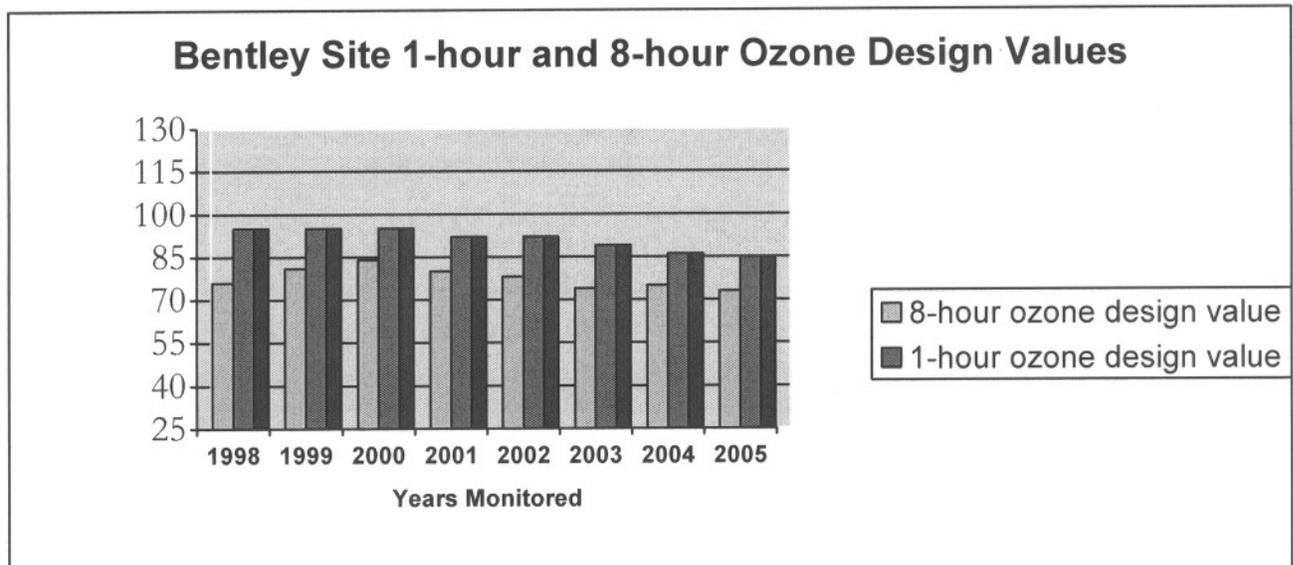


Figure 2: Bentley Site 1-hour and 8-hour Ozone Design Values

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 Bentley 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 D). 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. However, the Bentley monitoring site was completely destroyed by fire on August 13, 2005. The department has no plans to re-establish the monitoring site.

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 Grant 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.” As indicated in Table 5-1, the Bentley site met this guidance criteria and monitored attainment with the 8-hour ozone NAAQS from 1998 until the monitor was destroyed by fire on August 13, 2005.

In conclusion, continued monitoring in the Grant Parish is unnecessary. The state formally requests approval from the EPA Regional Administrator to delete the Bentley monitoring site in Grant Parish from Louisiana’s air quality monitoring network.

Table 5-1 Grant Parish 8-Hour Ozone Design Values 1998-2005

	Highest	2nd	3rd	4th	# of days	Design Value ppm*
1998	0.092	0.084	0.084	0.084	1	0.076
1999	0.087	0.084	0.083	0.083	1	0.081
2000	0.085	0.085	0.084	0.084	2	0.084
1999	0.087	0.084	0.083	0.083	1	0.081
2000	0.085	0.085	0.084	0.084	2	0.084
2001	0.082	0.076	0.074	0.073	0	0.080
2000	0.085	0.085	0.084	0.084	2	0.084
2001	0.082	0.076	0.074	0.073	0	0.080
2002	0.086	0.078	0.078	0.078	1	0.078
2001	0.082	0.076	0.074	0.073	0	0.080
2002	0.086	0.078	0.078	0.078	1	0.078
2003	0.086	0.080	0.074	0.072	1	0.074
2002	0.086	0.078	0.078	0.078	1	0.078
2003	0.086	0.080	0.074	0.072	1	0.074
2004	0.080	0.079	0.077	0.076	0	0.075
2003	0.086	0.080	0.074	0.072	1	0.074
2004	0.080	0.079	0.077	0.076	0	0.075
2005	0.076	0.073	0.072	0.071	0	0.073

*ppm=parts per million