



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

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March 26, 2010

Jen Daugherty
Associate Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

RE: 2009-2010 Mammoth PM10 and Meteorological Summary

Dear Ms. Daugherty:

The Great Basin Unified Air Pollution Control District has monitored air quality in the Town of Mammoth Lakes since 1984. We recently finalized the data completing the 2009-2010 air monitoring year ending March 15, 2010. We are pleased to provide you this summary of air quality measurements recorded by GBUAPCD between March 16, 2009 and March 15, 2010.

During this period, federal PM10 standards ($150 \mu\text{g}/\text{m}^3$ for a 24-hour average) were not exceeded. However, state PM10 standards ($50 \mu\text{g}/\text{m}^3$ for a 24-hour average) were exceeded on twenty-five (25) days, as follows. For comparison purposes, there were twenty (20) exceedances between March 16, 2008 and March 15, 2009.

11/11/2009	51	1/15/2010*	71	2/16/2010	76
12/18/2009*	55	1/28/2010	101	3/1/2010	63
12/19/2009*	104	1/29/2010*	100	3/5/2010*	76
12/25/2009*	62	1/31/2010*	89	3/6/2010*	53
1/2/2010*	99	2/1/2010	63	3/11/2010	64
1/3/2010*	79	2/2/2010	60	3/14/2010*	55
1/4/2010	88	2/13/2010*	87	3/15/2010	53
1/5/2010	51	2/14/2010*	55		
1/11/2010	53	2/15/2010*	63		

* - Denotes weekend or holiday exceedances.

Attached is a graph showing daily average PM10 values during 2009-2010.

It is interesting to note that 14 out of the 25 exceedance days (56%) occurred on weekends or holidays and an additional two (Jan 4 and Jan 5) occurred over the long New Year's weekend. Thus, almost two-thirds (64%) of the exceedance days were associated with days when a large number of visitors would be expected.

It is useful to examine the meteorological conditions on the days experiencing higher PM10 values. The day with the highest hourly average PM10 value in 2009-2010 was December 19, 2009 at $109 \mu\text{g}/\text{m}^3$. This was an exceptionally calm day with winds never gusting higher than 2.97 meters per second; conditions conducive to atmospheric inversion. Additionally, this was the first Saturday after a series of strong storms had released 1.5 meters of snow on Mammoth Mountain between December 11 and December 14. It is likely that the wood smoke and road cinder dust associated with a large visitor influx and inversion conditions contributed to relatively poor air quality on that day.

Besides December 19, 2009, the other two days to exceed $100 \mu\text{g}/\text{m}^3$ were January 28 and January 29, 2010 (Thursday and Friday). Meteorological conditions on these days were similar to those on December 19, 2009. Hourly average wind speed only reached 2.67 meters per second during these two days. These days also follow a series of winter storms that released 2.3 meters of snow on Mammoth Mountain. It appears inversion conditions and increased town population contributed to air pollution on these days.

Please contact me with any questions you may have.

Thank you,

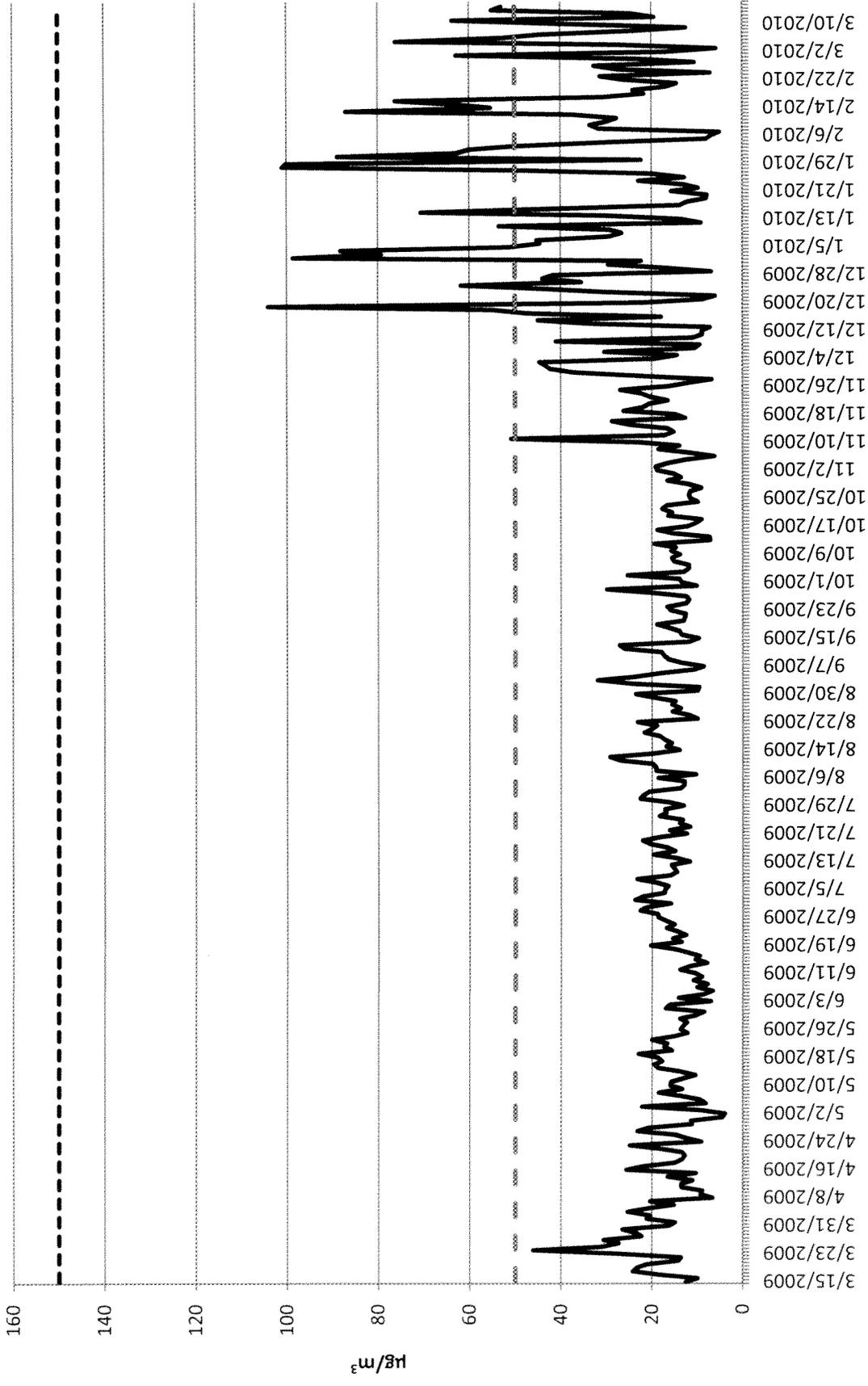


Theodore D. Schade
Air Pollution Control Officer

Enc.

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Town of Mammoth Daily Average PM10 Concentration



Observed Daily Average State Threshold ($50 \mu\text{g}/\text{m}^3$) Federal Threshold ($150 \mu\text{g}/\text{m}^3$)