



## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537  
760-872-8211 Fax: 760-872-6109

April 28, 2011

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

RE: 2010-2011 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 2010-2011 air monitoring year ending March 15, 2011. We are pleased to provide you this summary of air quality measurements recorded by GBUAPCD between March 16, 2010 and March 15, 2011.

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 thirty-three (33) days, as follows. For comparison purposes, there were twenty (25) exceedances between March 16, 2009 and March 15, 2010.

3/24/2010	53	1/7/2011	62	1/27/2011	59
4/7/2010	53	1/10/2011	102	1/28/2011	61
4/9/2010	76	1/14/2011	79	2/2/2011	72
11/25/2010*	61	1/15/2011*	59	2/3/2011	66
11/26/2010*	59	1/18/2011	71	2/4/2011	52
12/7/2010	60	1/20/2011	81	2/21/2011	66
12/12/2010*	53	1/21/2011	74	2/23/2011	57
12/24/2010	62	1/23/2011*	61	2/27/2011*	63
12/27/2010	55	1/24/2011	59	2/28/2011	81
1/5/2011	58	1/25/2011	57	3/4/2011	54
1/6/2011	67	1/26/2011	59	3/9/2011	66

\*-Denotes weekend or holiday exceedances.

Attached is a graph showing daily average PM10 values during 2010-2011 with 2009-2010 values in the background for comparison purposes.

It is interesting to note that 6 out of the 33 exceedance days (18%) occurred on weekends or holidays. When compared to the 14 out of the 25 exceedance days (56%) occurring on weekends or holidays in 2009-2010, this year was significantly less.

Examination of meteorological conditions on days experiencing higher PM10 values is useful for interpreting these results. The day with the highest hourly average PM10 value in 2010-2011 was January 10, 2011 at  $102 \mu\text{g}/\text{m}^3$ . This was a very cold morning with temperatures down to an hourly average of  $-12^\circ \text{C}$  ( $10.4^\circ \text{F}$ ) by 10 a.m. followed by exceptionally calm winds never reaching above an hourly average of 1.4 meters per second (3.1 miles per hour).

There were no other days to exceed  $100 \mu\text{g}/\text{m}^3$  in 2010-2011 and only 4 other days in exceedance of the state PM10 standard measured above  $75 \mu\text{g}/\text{m}^3$ . These days also follow the same pattern of cold temperatures followed by calm winds; conditions conducive to atmospheric inversion. It is likely that the wood smoke and road cinder dust associated with anthropogenic activities and meteorological inversion conditions contributed to relatively poor air quality on these days.

Please contact me with any questions you may have.

Thank you,



Theodore D. Schade  
Air Pollution Control Officer

Enc.

1104281



# Town of Mammoth Lakes - PM10

March 16, 2010 - March 15, 2011

— Federal PM10 Standard    ..... State PM10 Standard    — Previous Year Daily PM10 Average    —●— Daily PM10 Average

