



The State
of Wyoming



Department of Environmental Quality

Dave Freudenthal, Governor

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February 5, 2004

Mr. Robbie E. Roberts, Regional Administrator
US Environmental Protection Agency, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2466

RECEIVED

FEB 02 2004

Dear Mr. Roberts:

USEPA RA'S OFFICE

In response to 107(d)(1) of the Clean Air Act, the State of Wyoming is making recommendations on attainment or nonattainment classifications for the State of Wyoming for the 1997 PM_{2.5} ambient air standard including boundary designations.

The State has used the most recent three years of fine particulate matter monitoring available and summarized the data collection in attachments to this letter. There were no monitors in the state showing violations of the 24-hour or annual PM_{2.5} standards. The State used guidance issued by EPA on April 1, 2003 in a memorandum from Jeffrey Holmstead entitled "Designations for the Fine Particle National Ambient Air Quality Standards" when determining appropriate boundaries for the state designations. The guidance suggests harmonizing with ozone designation boundaries when possible and using statistical areas defined by the US Bureau of the Census. In following this guidance the State would like to designate the regions listed below as attainment/unclassifiable for 24-hour and annual PM_{2.5} ambient air quality standards:

<u>Region</u>	<u>24-Hour PM_{2.5} NAAQS Designation</u>	<u>Annual PM_{2.5} NAAQS Designation</u>
Albany County	Attainment/Unclassifiable	Attainment/Unclassifiable
Big Horn County	Attainment/Unclassifiable	Attainment/Unclassifiable
Campbell County	Attainment/Unclassifiable	Attainment/Unclassifiable
Carbon County	Attainment/Unclassifiable	Attainment/Unclassifiable
Converse County	Attainment/Unclassifiable	Attainment/Unclassifiable

<u>Region</u>	<u>24-Hour PM_{2.5} NAAQS Designation</u>	<u>Annual PM_{2.5} NAAQS Designation</u>
Crook County	Attainment/Unclassifiable	Attainment/Unclassifiable
Fremont County	Attainment/Unclassifiable	Attainment/Unclassifiable
Goshen County	Attainment/Unclassifiable	Attainment/Unclassifiable
Hot Springs County	Attainment/Unclassifiable	Attainment/Unclassifiable
Johnson County	Attainment/Unclassifiable	Attainment/Unclassifiable
Laramie County	Attainment/Unclassifiable	Attainment/Unclassifiable
Lincoln County	Attainment/Unclassifiable	Attainment/Unclassifiable
Natrona County	Attainment/Unclassifiable	Attainment/Unclassifiable
Niobrara County	Attainment/Unclassifiable	Attainment/Unclassifiable
Park County	Attainment/Unclassifiable	Attainment/Unclassifiable
Platte County	Attainment/Unclassifiable	Attainment/Unclassifiable
Sheridan County	Attainment/Unclassifiable	Attainment/Unclassifiable
Sublette County	Attainment/Unclassifiable	Attainment/Unclassifiable
Sweetwater County	Attainment/Unclassifiable	Attainment/Unclassifiable
Teton County	Attainment/Unclassifiable	Attainment/Unclassifiable
Uinta County	Attainment/Unclassifiable	Attainment/Unclassifiable
Washakie County	Attainment/Unclassifiable	Attainment/Unclassifiable
Weston County	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Casper	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Cheyenne	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Evanston	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Gillette	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Jackson	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Lander	Attainment/Unclassifiable	Attainment/Unclassifiable

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<u>Region</u>	<u>24-Hour PM_{2.5} NAAQS Designation</u>	<u>Annual PM_{2.5} NAAQS Designation</u>
City of Laramie	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Riverton	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Rock Springs	Attainment/Unclassifiable	Attainment/Unclassifiable
City of Sheridan	Attainment/Unclassifiable	Attainment/Unclassifiable

There are portions of the above-mentioned counties which are under the jurisdiction of Tribal Authorities. It is our understanding that Tribal designations will be made separately from State designations.

We look forward to your timely review and approval of this request. If you have any questions concerning the details of this recommendation, please feel free to contact the Air Quality Division Administrator, Dan Olson, at 307-777-3746.

Best regards,



Dave Freudenthal
Governor

Enclosures

cc: John V. Corra, Director DEQ
Dan Olson, Administrator, AQD
Robert Schick, AQD
Christine Anderson, AQD

Overview of the PM_{2.5} Monitoring Data in Wyoming

There are two National Ambient Air Quality Standards for PM_{2.5} (particulate matter 2.5 microns and smaller in diameter). The annual primary and secondary PM_{2.5} standards are met when the three year average of the annual arithmetic mean concentrations, as determined in accordance with 40 CFR part 50, Appendix N, is **less than or equal to 15** micrograms per cubic meter. The 24 hour primary and secondary PM_{2.5} standards are met when the three year average of the 98th percentile 24 hour concentrations, as determined in accordance with 40 CFR part 50, Appendix N, is **less than or equal to 65** micrograms per cubic meter.

	2001-2003 24-Hr 98 th % Average	2001 - 2003 PM _{2.5} Annual Average
AQD Monitoring Site 2001 - 2003	µg/m³	µg/m³
Cheyenne - Emerson Building ¹	13.0	4.87
Sheridan - Central Middle School	29.6	9.30
Sheridan - Police Dept.	31.3	10.43
Lander - Star Realty/Northside School ²	34.4	10.43
Jackson - 200 South Willow ³	21.5	7.57
PRB Monitoring Sites⁴ 2001 - September 2003	µg/m³	µg/m³
Black Thunder Mine - #26 Site	17.7	6.43
Belle Ayr Mine - East Site	14.5	5.43
Buckskin Mine - North Site	17.3	5.03
Antelope Mine - Site 3	12.9	4.00

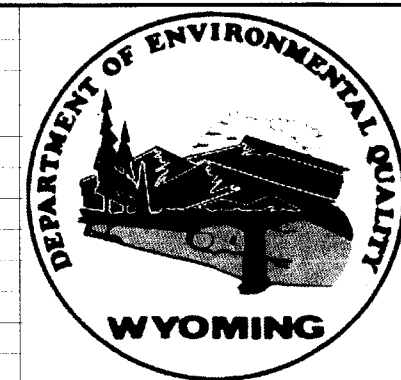
¹2001 1st quarter data recovery rate less than 75%.

²2001 annual average was obtained from the average of the Star Realty Site's January 1, to mid November PM_{2.5} data. The Northside data was from mid November to the end of 2001.

³This site did not come online until the end of June 2001. There was considerable data loss between late 2002 and early 2003, resulting in less than 75% data recovery.

⁴All Powder River Basin Mine data is 2001 through September 30, 2003.

The Sheridan spacial average 2001 - 2003 is 30.5 µg/m³.



	Calendar Year	Total # Obs.	Total # Possible	1 st 24 Hr Max. $\mu\text{g}/\text{m}^3$	2 nd 24 Hr Max. $\mu\text{g}/\text{m}^3$	3 rd 24 Hr Max. $\mu\text{g}/\text{m}^3$	4 th 24 Hr Max. $\mu\text{g}/\text{m}^3$	98 th % Value $\mu\text{g}/\text{m}^3$	Annual Arith Mean $\mu\text{g}/\text{m}^3$	Comments
AQD Monitoring Station										
Cheyenne - Emerson Building	1999	105	121	18.7	14.3	12.4	11.5	12.4	5.6	
	2000	112	121	15.0	14.5	13.2	12.8	13.2	5.6	
	2001	107	121	13.5	12.5	12.2	11.5	12.2	5.0	
	2002	108	121	15.2	15.0	13.8	13.5	13.8	4.7	
	2003	114	121	18.1	16.4	12.9	12.2	12.9	4.9	
Sheridan - Central Middle School	1999	117	121	34.4	32.8	25.0	23.2	25.0	8.5	
	2000	121	121	40.1	38.8	38.3	35.5	38.3	11.9	
	2001	119	121	47.8	40.7	35.8	34.9	35.8	10.1	
	2002	115	121	32.8	30.1	27.8	26.4	27.8	8.8	
	2003	113	121	31.9	25.2	25.1	23.7	25.1	9	
Sheridan - Police Dept.	1999	119	121	27.2	25.5	24.5	19.6	24.5	9.5	
	2000	121	121	45.0	39.7	34.8	31.9	34.8	12.1	
	2001	119	121	47.8	42.3	39.6	34.0	39.6	11.1	
	2002	119	121	37.4	35.3	27.9	27.4	27.9	10.1	
	2003	116	121	29.9	27.1	26.3	24.3	26.3	10.1	
Lander - Star Realty	2000	118	121	38.6	35.7	35.2	34.7	35.2	9.7	
	2001	105	107	55.5	49.4	46.4	39.7	46.4	9.9	Due to construction, station was relocated to N.Side Elementary in Nov. 2001
Lander - Northside School	2001	16	16	30.3	28.5	26.6	25.3	30.3	17.1	For November and December only
	2002	120	121	35.3	35.1	33.2	32.4	33.2	9.6	
	2003	119	121	36.0	26.0	25.7	25.4	25.7	8.2	
Jackson - 200 South Willow	2001	60	61	29.5	26.8	26.6	20.8	26.8	8.6	Jackson station was activated in late June of 2001.
	2002	65	121	17.8	15.1	14.4	13.5	15.1	7.4	Major equipment problems during both the 1st and 4th quarters 2002.
	2003	97	121	23.7	22.5	19.2	15.5	22.5	6.7	
	Calendar Year	Total # Obs.	Total # Possible	1 st 24 Hr Max. $\mu\text{g}/\text{m}^3$	2 nd 24 Hr Max. $\mu\text{g}/\text{m}^3$	3 rd 24 Hr Max. $\mu\text{g}/\text{m}^3$	4 th 24 Hr Max. $\mu\text{g}/\text{m}^3$	98 th % Value $\mu\text{g}/\text{m}^3$	Annual Arith Mean $\mu\text{g}/\text{m}^3$	Comments
PRB Monitoring Station										
Black Thunder Mine - #26 Site	1999	50	61	22.7	21.5	13.0	12.0	22.7	7.0	PM2.5 sampling was started in July 1999.
	2000	108	121	21.1	18.2	16.1	15.0	16.1	6.1	
	2001	112	121	17.3	17.3	16.2	14.7	16.2	6.5	
	2002	103	121	19.3	18.3	17.9	17.6	17.9	6.3	
	2003*	76	91	22.2	19.0	16.5	13.9	19.0	6.6	*2003 data is through September 30th.
Belle Ayr Mine - East Site	1999	29	31	10.1	10.0	6.8	6.5	10.1	4.6	PM2.5 sampling started July 1999. Sampling frequency was 1/6, not 1/3 day.
	2000	99	107	23.8	23.0	20.5	19.2	23.0	6.2	1/3 day sampling started in April 2000.
	2001	74	81	14.7	11.7	10.8	10.2	11.7	5.2	Sampling reverted back to 1/6 starting in May 2001
	2002	98	107	15.0	13.0	12.5	12.2	13.0	5.0	Sampling frequency changed from 1/6 to 1/3 in April.
	2003*	86	91	24.5	18.8	16.3	14.8	18.8	6.1	*2003 data is through September 30th.
Buckskin Mine - North Site	1999	23	31	8.7	7.8	7.2	6.6	8.7	4.3	PM2.5 sampling started July 1999. Sampling frequency was 1/6, not 1/3 day.
	2000	92	107	82.0	20.9	20.5	18.3	20.9	5.8	1/3 day sampling started in April 2000.
	2001	46	81	17.7	14.9	10.7	10.0	17.7	4.8	Sampling reverted back to 1/6 starting in May 2001
	2002	83	107	15.5	12.6	10.2	9.5	12.6	4.0	Sampling frequency was changed from 1/6 to 1/3 in April.
	2003*	80	91	24.4	21.5	16.4	15.8	21.5	6.3	*2003 data is through September 30th.
Antelope Mine - Site 3	1999	23	31	5.4	5.1	5.0	4.7	5.4	2.8	PM2.5 sampling started July 1999. Sampling frequency was 1/6, not 1/3 day.
	2000	83	107	14.5	13.7	13.5	12.8	13.7	3.3	1/3 day sampling was started in April 2000.
	2001	49	81	12.3	8.0	7.5	7.0	12.3	3.8	Sampling reverted back to 1/6 starting in May 2001
	2002	93	107	15.4	11.8	10.6	9.9	11.8	3.4	Sampling frequency was changed from 1/6 to 1/3 in April.
	2003*	83	91	28.7	15.8	15.5	12.7	15.8	4.8	*2003 data is through September 30th.