OFFICE OF THE GOVERNOR MT 40PRA have Copie STATE OF MONTANA

BRIAN SCHWEITZER GOVERNOR



JOHN BOHLINGER LT. GOVERNOR

R-P

September 30, 2009

Carol Rushin Acting Regional Administrator United States Environmental Protection Agency Region VIII, 8P-AR 1595 Wynkoop St. Denver, CO 80202-1129

Dear Ms. Rushin:

As you are aware, EPA finalized a revision to the National Ambient Air Quality Standard (NAAQS) for lead on November 12, 2008. Pursuant to 42 USC §7407, Congress directs governors to submit a list of areas designating as nonattainment, attainment, or unclassifiable with respect to a new or revised NAAQS. Such lists of designated areas ordinarily would be due no later than one year following the promulgation of a new or revised standard, or November 12, 2009. However, as a result of a court-ordered schedule pursuant to a lawsuit regarding the lead NAAQS, the due date for submission of these lists is October 15, 2009. 73 FR 66963 at 67031.

Montana designates all 56 counties in the state attainment or unclassifiable for the revised lead NAAQS. Based on the analysis in the enclosed technical memorandum and associated attachments, Montana's designation is appropriate for all counties. The memorandum also describes the significant change in circumstances regarding lead emissions and attainment status for East Helena, Lewis and Clark County, Montana, one of two existing nonattainment areas in the United States for the former 1978 NAAQS.

We anticipate working with you as we continue to meet the challenge of maintaining Montana's status with regard to the revised lead standard. If you have any questions regarding this action, please contact M. Eric Merchant, the Department's Air Quality Policy and Planning Supervisor, by telephone at (406) 444-1457 or by email at emerchant@mt.gov.

Sincerely,

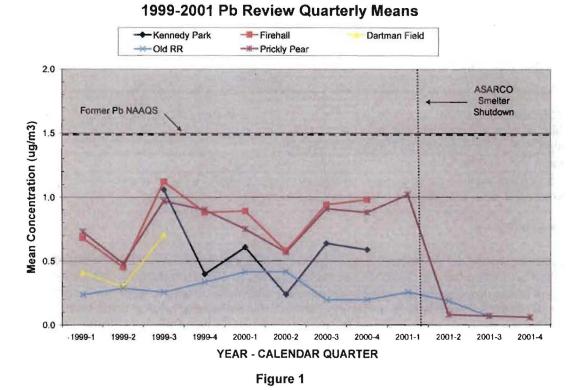
BRIAN SCHWEITZE Governor

Enclosure

C. Richard Opper, Director, Department of Environmental Quality Dave Klemp, Chief, Air Resources Management Bureau M. Eric Merchant, Air Resources Management Bureau

RECEIVED U.S. EPA Region 8 **RA's Office** 

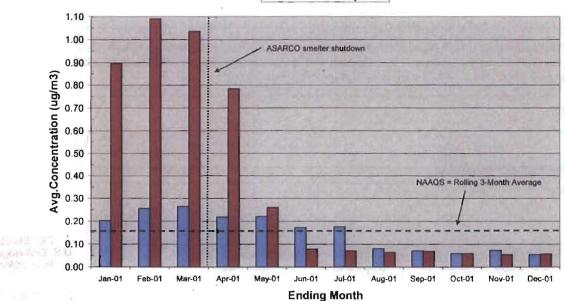
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# **ATTACHMENT 1**

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## 2001 Pb Review Rolling 3-Month Averages



Old RR Prickly Pear

Figure 2

# **ATTACHMENT 2**

	and the second	All of the second of the second of the				
Historical	E.Helena	<b>Pb Review</b>	1998-2001;	Calendar	Quarter	Means
					8	
	Kennedy		Dartman		Prickly	
Year	Park	Firehall	Field	Old RR	Pear	
1999-1		0.68	0.41	0.24	0.73	
1999-2		0.45	0.30	0.29	0.48	
1999-3	1.06	1.12	0.71	0.26	0.97	
1999-4	0.40	0.88		0.34	0.90	
2000-1	0.61	0.89		0.42	0.75	
2000-2	0.24	0.58		0.42	0.57	
2000-3	0.64	0.94		0.20	0.91	
2000-4	0.59	0.98		0.20	0.88	
2001-1				0.26	1.02	
2001-2				0.19	0.08	
2001-3				0.07	0.07	
2001-4				0.06	0.06	
setenting and the				97.00 R980		

Historical E.Helena Pb Review 2000-2001; Rolling 3-Month Means

		Prickly
Year	Old RR	Pear
Jan-01	0.202	0.897
Feb-01	0.256	1.09
Mar-01	0.265	1.036
Apr-01	0.218	0.785
May-01	0.221	0.261
Jun-01	0.172	0.079
Jul-01	0.176	0.071
Aug-01	0.081	0.064
Sep-01	0.071	0.069
Oct-01	0.059	0.059
Nov-01	0.073	0.054
Dec-01	0.054	0.057

## <u>Technical Memorandum</u> State of Montana – Lead Monitoring Data and Analysis Supporting attainment/unclassifiable designation

#### INTRODUCTION:

On November 12, 2008, EPA revised the national ambient air quality standards (NAAQS) for lead, lowering the level of the primary (health-based) standard from 1.5 micrograms per cubic meter ( $\mu$ g/m3) ("former NAAQS"), to 0.15  $\mu$ g/m3 averaged over a rolling 3-month period with a maximum (not-to-be-exceeded) form evaluated over a 3 year period ("new NAAQS"). Compliance with the former primary standard was evaluated on a calendar quarter average. The secondary lead standard has been revised to be identical to the primary standard. 73 FR 66963.

Montana is obliged, pursuant to 42 USC §7407, *et seq.*, to submit to EPA a list of geographic areas that attain the standard or that do not attain the standard or that are otherwise unclassifiable based on available information.

#### BACKGROUND:

Montana is a large state with relatively few large industrial sources of air pollution. Of the large industrial sources in Montana, no sources emit lead in excess of the 1 ton per year threshold referenced in EPA's promulgation of the lead NAAQS according to data submitted by the Department into the 2007 National Emissions Inventory. East Helena, Montana is a nonattainment area for the former NAAQS, because it was the site of the now-defunct ASARCO facility, a primary lead smelter. ASARCO ceased operations in 2001.

The ASARCO facility, including all production units and stacks, has since been razed and dismantled. The main stacks were felled on August 14, 2009 and the remaining small metal stack on September 15, 2009. ASARCO's emitting units and stacks neither emit any air pollutants nor have the potential to do so.

Sources in Montana are subject to permit requirements pursuant to Montana's New Source Review and Montana Air Quality Permit requirements. Montana law requires that any proposal modifying the ASARCO facility that has the potential to exceed an amount greater than 0.6 tons per year of lead emissions would be subject to the requirements of the Montana Air Quality Permit rules at ARM 17.8.740, *et seq.* ASARCO also would be prohibited from legally operating the lead smelter without first applying for and obtaining a major New Source Review permit under the provisions of ARM 17.8.801, *et seq.* 

In addition to controls that may be required under the Montana Air Quality Permitting program and New Source Review, sources would also be required to comply with control, emission limitations, and monitoring requirements under applicable Maximum Achievable Control Technology (MACT) and New Source Performance Standards that may minimize any lead emissions. These rules, current operating practices, and control equipment make it unlikely that sources in Montana emit lead in amounts that would influence Montana's lead NAAQS designation status.

Further, EPA recognizes the ASARCO facility is no longer in operation and that the area has subsequently achieved compliance with the revised NAAQS by stating "EPA notes that the most recent three years of available monitoring data for East Helena, MT, one of two current nonattainment areas, showed no violations of the current standard, although the monitors were shut down in December 2001 following the shutdown of the large stationary source of lead emissions there". 73 FR 66963 at 67031.

Attachment 1 of this memo sets forth the dramatic decreases in lead in the East Helena area following the shutdown of the ASARCO facility. The graph in Figure 1 (reflecting data contained in Attachment 2) indicates the East Helena Area, even before the shutdown, had come into attainment with the former standard. Once ASARCO shut down entirely, the ambient lead levels decreased to such an extent that the graph represented in Figure 2, using the data contained in Attachment 2 calculated according to the methodology of the new standard, shows the area to be well in attainment with the new standard<sup>1</sup>. This remains true, even in a worst-case scenario: When ASARCO was still operating, historical monitoring data collected during first and fourth quarters of any year generally reflected high concentrations, due in large part to poor atmospheric dispersion. The last three rolling averages in Figure 2 show the data in an historically worse dispersion period to be in attainment with the new standard.

#### PAST REGULATORY ACTIONS RELATING TO LEAD NAAOS:

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On September 29, 1983, Montana submitted to EPA the East Helena Lead Control Plan after ambient air monitoring indicated violations of the former 1978 lead NAAQS in East Helena. On July 9, 1984, EPA approved this submission. 49 FR 27944. However, following implementation of the lead control plan, East Helena continued violating the lead NAAQS. On December 2, 1988, EPA notified Montana that the East Helena lead control plan was inadequate and required revision. 53 FR 48642.

On November 6, 1991, EPA again designated East Helena as nonattainment for lead. 56 FR 56694. In 1993, EPA promulgated further requirements for lead control plans. Montana submitted to EPA a series of lead control plans from 1995 to 2000. On June 18, 2001, EPA partially approved and partially disapproved the East Helena lead control plan. 66 FR 32760. Montana was not required to revise the disapproved portions and EPA did not pursue sanctions and Federal implementation plan (FIP) actions pursuant to 42 USC §§7410 and 7509a.

In its discussion of implementation considerations, EPA notes, ". . .it may become necessary in some areas to also implement controls on . . . former industrial type sources." EPA will surely indicate circumstances that might, following some period of time, necessitate state evaluation of the reasonableness of imposing controls on former sources. 73 FR 66963 at 67030.

#### EXISTING SOURCE IMPACT ANALYSIS:

<sup>&</sup>lt;sup>1</sup> The bars in Figure 2 result from (a) the residual effect of including previous data in the rolling 3-month averages, and (b) the gradual cessation of lead-emitting activities of ASARCO following its April 10, 2001 announcement of curtailment of activities.

Montana has no sources of lead that would be anticipated to cause or contribute to a violation of the ambient standard for lead. In its analysis of available monitoring data, EPA concludes that a large percentage of recent Pb ambient air concentrations in excess of 0.15  $\mu$ g/m3 have occurred in locations with active industrial sources of lead emissions.

Montana conducted a thorough analysis, considering topography, meteorology, and emission release characteristics of predicted and actual Pb impacts from industrial sources during the development of the control plan implemented to reduce emissions at the ASARCO facility and to demonstrate compliance with the former 1978 Pb NAAQS. Based on these analyses, Montana agrees with EPA's assumption that facilities emitting less than 1 ton a year of lead are not sources of concern for the new NAAQS. Montana's worst-case assumption for sources of this size is that they would consume no more than 50 percent of the new NAAQS and that it would take several sources of this size in the same airshed to produce concentrations of Pb in ambient samplers sufficient to cause concern<sup>2</sup>.

## **CONCLUSION:**

Accordingly, all 56 Montana counties will attain the revised NAAQS as Montana law continues to require air pollution control measures on lead emitting industrial sources through implementation of the federally-enforceable Montana Air Quality Permitting program(s) and related regulations.

<sup>&</sup>lt;sup>2</sup> Demonstration of Attainment Modeling Report, Revised East Helena, Montana, Lead SIP, CPP Project 90-S-0264, Cermak, Peterka, Peterson, Inc., November 18, 1992.