

**Review of the National Ambient Air Quality Standards for Lead:  
Policy Assessment of Scientific and Technical Information  
OAQPS Staff Paper  
[EPA-452/R-07-013]  
November 2007**

**Errata – October 10, 2008**

1. p. 4-24, “Alternative NAAQS”, 1<sup>st</sup> bullet – The first sentence of this bullet should read: The current air Pb concentrations in the study areas of the three location-specific urban case studies fall near and within the upper end of the range of alternate NAAQS considered (i.e., 0.2  $\mu\text{g}/\text{m}^3$  maximum quarterly average to 0.5  $\mu\text{g}/\text{m}^3$  maximum monthly average).
2. p. 4-35, Tables 4-5 and 4-6, footnote a – The parenthetical phrase at the end of this footnote in both tables should be corrected to the following “(see Risk Assessment Report, Section 2.4.3)”.
3. Appendix 5.A – Some entries in this table are incorrect. A corrected table is provided on following page
4. Appendix 2B, Table 2B-5 (p. 2B-11) – Some of the values presented in this table are missing footnotes. The footnote should have been associated with entries for mean and 95<sup>th</sup> percentile ratio of max quarterly mean to annual mean and for mean ratio of max monthly mean to annual mean for urban sites in CBSAs  $\geq$  1M population. This footnote should have stated “These values rounded to 2.5, 7.6 and 4.0, respectively, in a preliminary analysis of 92 sites in this subset. Subsequent QA lead to a change in dataset and the statistical metric values.” Corrected Table 2B-5 shown below on page following corrected table from Appendix 5.A.

**Appendix 5.A. Predicted percent of counties with a monitor not likely to meet alternative standards & associated percent population.**

The values below were derived from the Pb-TSP dataset described in Chapter 2 and in Appendix 2.B.

	Total	Northeast	Southeast	Industrial Midwest	Upper Midwest	Southwest	Northwest	Southern California	Outlying areas
<b>Number of counties with monitors</b> (population in those counties) ►	86 (58,035)	11 (7,285)	27 (13,298)	30 (17,166)	4 (2,184)	3 (1,015)	6 (3,002)	3 (12,774)	2 (1,311)
<b>level / form ▼</b>	<b>Percent of counties with monitors not likely to meet stated standard and level</b> (percent of total or regional population in counties with monitors that reside in non-meeting counties)								
0.02, max quarterly	55% (69%)	64% (83%)	33% (37%)	73% (85%)	50% (25%)	33% (67%)	67% (78%)	67% (88%)	0% (0%)
0.02, max monthly	69% (81%)	64% (83%)	52% (68%)	87% (96%)	75% (49%)	67% (81%)	83% (78%)	67% (88%)	0% (0%)
0.02, 2nd max monthly	58% (71%)	64% (83%)	41% (40%)	73% (86%)	25% (16%)	67% (81%)	83% (78%)	67% (88%)	0% (0%)
0.05, max quarterly	41% (55%)	36% (21%)	33% (37%)	47% (62%)	25% (16%)	33% (67%)	67% (78%)	67% (88%)	0% (0%)
0.05, max monthly	47% (59%)	36% (21%)	33% (37%)	60% (77%)	50% (25%)	33% (67%)	67% (78%)	67% (88%)	0% (0%)
0.05, 2nd max monthly	40% (53%)	36% (21%)	33% (37%)	47% (62%)	25% (16%)	0% (0%)	67% (78%)	67% (88%)	0% (0%)
0.10, max quarterly	24% (13%)	36% (21%)	19% (14%)	30% (16%)	25% (16%)	0% (0%)	33% (31%)	0% (0%)	0% (0%)
0.10, max monthly	36% (52%)	36% (21%)	26% (30%)	43% (61%)	25% (16%)	0% (0%)	67% (78%)	67% (88%)	0% (0%)
0.10, 2nd max monthly	28% (24%)	36% (21%)	22% (14%)	30% (44%)	25% (16%)	0% (0%)	67% (78%)	0% (0%)	0% (0%)
0.20, max quarterly	17% (8%)	27% (11%)	15% (12%)	23% (12%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.20, max monthly	24% (15%)	27% (11%)	22% (30%)	30% (16%)	25% (16%)	0% (0%)	33% (31%)	0% (0%)	0% (0%)
0.20, 2nd max monthly	22% (11%)	27% (11%)	19% (14%)	27% (13%)	25% (16%)	0% (0%)	33% (31%)	0% (0%)	0% (0%)
0.30, max quarterly	13% (8%)	9% (5%)	15% (12%)	17% (12%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.30, max monthly	19% (9%)	27% (11%)	15% (12%)	27% (15%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.30, 2nd max monthly	14% (7%)	9% (5%)	15% (12%)	20% (11%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.40, max quarterly	9% (4%)	0% (0%)	15% (12%)	10% (2%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.40, max monthly	14% (8%)	9% (5%)	15% (12%)	20% (12%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.40, 2nd max monthly	13% (7%)	9% (5%)	15% (12%)	17% (10%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.50, max quarterly	9% (4%)	0% (0%)	15% (12%)	10% (2%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.50, max monthly	14% (8%)	9% (5%)	15% (12%)	20% (12%)	0% (0%)	0% (0%)	17% (12%)	0% (0%)	0% (0%)
0.50, 2nd max monthly	10% (4%)	9% (5%)	15% (12%)	13% (2%)	0% (0%)	0% (0%)	0% (0%)	0% (0%)	0% (0%)

Appendix 2B

Table 2B-5. Pb-TSP metric ratio distribution statistics

TSP Category	Ratio	Sites	min	pct5	pct10	pct15	pct20	pct25	pct30	pct35	pct40	pct45	median	mean	pct55	pct60	pct65	pct70	pct75	pct80	pct85	pct90	pct95	max
All sites	ratio of max quarterly mean to annual mean	189	1.0000	1.1135	1.2080	1.2852	1.3433	1.3848	1.4837	1.5299	1.6127	1.7079	1.7846	2.3541	1.8893	2.0025	2.1421	2.3164	2.5474	2.7853	3.2023	3.9233	5.9868	12.0000
	ratio of max monthly mean to annual mean		1.0000	1.3553	1.5556	1.8176	1.9537	2.1475	2.2817	2.4036	2.5471	2.6265	2.8310	4.4159	2.9634	3.5018	4.0128	4.4273	4.9871	5.7675	6.5038	8.5462	11.8424	39.0000
	ratio of 2nd max monthly mean to annual mean		0.0000	1.1211	1.3057	1.4296	1.5822	1.6784	1.7597	1.8311	1.9092	2.0346	2.1246	2.5728	2.2033	2.3015	2.4453	2.5908	2.7650	3.0986	3.5200	3.9800	6.6439	12.1935
Source-oriented sites	ratio of max quarterly mean to annual mean	60	1.0000	1.0787	1.2484	1.3167	1.3529	1.3966	1.5077	1.5205	1.5559	1.7079	1.7571	2.0471	1.8085	1.9070	1.9759	2.1285	2.3486	2.4706	2.7642	3.2865	3.8592	7.5516
	ratio of max monthly mean to annual mean		1.0000	1.4735	1.8318	1.9768	2.1641	2.2716	2.3528	2.5202	2.5824	2.7379	2.9086	3.7485	3.0625	3.5073	3.6900	4.0401	4.5092	4.6536	5.3012	6.2826	10.2029	13.5518
	ratio of 2nd max monthly mean to annual mean		1.0000	1.4088	1.6543	1.6815	1.7864	1.8292	1.8838	1.9438	2.0124	2.1000	2.1723	2.4356	2.2784	2.4017	2.5034	2.5293	2.6395	2.7960	3.3263	3.5193	3.8639	9.8590
Non-source-oriented sites	ratio of max quarterly mean to annual mean	129	1.0000	1.1368	1.2034	1.2648	1.3095	1.3826	1.4753	1.5591	1.6332	1.7079	1.8151	2.4980	1.9665	2.0293	2.2498	2.4153	2.6899	2.9390	3.4555	4.1647	7.3577	12.0000
	ratio of max monthly mean to annual mean		1.0000	1.3140	1.4769	1.6578	1.8680	2.0164	2.2496	2.3671	2.5200	2.5851	2.7967	4.7287	2.9508	3.4823	4.0858	4.5723	5.5927	6.3223	7.6473	9.1396	12.1935	39.0000
	ratio of 2nd max monthly mean to annual mean		0.0000	1.0746	1.2445	1.3294	1.4296	1.5582	1.6657	1.7556	1.8372	1.9200	2.1185	2.6371	2.1818	2.2633	2.3912	2.6316	2.8245	3.2174	3.8274	4.5000	7.5267	12.1935
Previous source-oriented sites	ratio of max quarterly mean to annual mean	13	1.0000	1.0000	1.0000	1.0000	1.0000	1.2844	1.2844	1.4961	1.4961	1.5195	1.5195	2.2049	1.5195	1.7266	1.7266	1.9492	1.9492	2.3170	2.3170	7.5516	7.5516	7.5516
	ratio of max monthly mean to annual mean		1.0000	1.0000	1.0000	1.0000	1.0000	1.7515	1.7515	1.8746	1.8746	2.7626	2.7626	3.4751	2.7626	2.7863	2.7863	3.7062	3.7062	4.6478	4.6478	11.7469	11.7469	11.7469
	ratio of 2nd max monthly mean to annual mean		1.0000	1.0000	1.0000	1.0000	1.0000	1.7759	1.7759	2.1414	2.1414	2.5969	2.5969	4.9066	2.5969	3.0986	3.0986	8.4131	8.4131	9.8590	9.8590	14.2747	14.2747	14.2747
Urban sites	ratio of max quarterly mean to annual mean	140	1.0000	1.1605	1.2504	1.3070	1.3536	1.4227	1.5010	1.5712	1.6427	1.7167	1.7773	2.3313	1.8683	2.0072	2.1508	2.3167	2.5890	2.7581	3.1770	3.9279	5.6878	12.0000
	ratio of max monthly mean to annual mean		1.0000	1.3391	1.5925	1.7771	1.9220	2.1133	2.2936	2.4105	2.5423	2.6341	2.8310	4.2395	2.9518	3.4976	4.0307	4.4998	5.1122	5.8364	6.6889	8.4122	11.7723	36.0000
	ratio of 2nd max monthly mean to annual mean		0.0000	1.1889	1.3271	1.4700	1.6053	1.6784	1.7660	1.8606	1.9967	2.1038	2.1650	2.6532	2.2452	2.3637	2.5051	2.6213	2.7859	3.0213	3.7220	4.1463	7.4078	12.1935
Urban sites in CBSAs ≥ 1M population	ratio of max quarterly mean to annual mean	91	1.0000	1.1077	1.2080	1.2745	1.3095	1.3759	1.4753	1.5167	1.6157	1.6829	1.7366	2.3159*	1.7900	1.8451	2.0496	2.3164	2.4317	2.7033	3.0063	3.8141	7.3577*	12.0000
	ratio of max monthly mean to annual mean		1.0000	1.3046	1.4769	1.6578	1.8346	1.9910	2.2676	2.3690	2.5370	2.5619	2.6726	4.0747*	2.8714	2.9508	3.5868	4.0253	4.6478	5.6357	6.4892	8.0000	9.3770	36.0000
	ratio of 2nd max monthly mean to annual mean		0.0000	1.0746	1.3057	1.4089	1.4965	1.5855	1.6553	1.7491	1.7890	1.8960	2.0982	2.4155	2.1414	2.2633	2.3912	2.5004	2.5969	2.7659	3.0986	3.6621	7.2888	9.8590
Urban sites in CBSAs < 1M population	ratio of max quarterly mean to annual mean	49	1.0000	1.2648	1.3522	1.3838	1.4152	1.5299	1.5608	1.6127	1.6901	1.9505	2.0025	2.3597	2.0091	2.1715	2.2498	2.6223	2.7241	3.1395	3.4555	3.9762	4.8718	7.6772
	ratio of max monthly mean to annual mean		1.0000	1.4392	1.7365	1.9615	2.0898	2.2033	2.3056	2.5035	2.6417	2.9528	3.1207	4.5456	3.5286	4.4055	4.5723	5.0000	5.5497	5.8680	7.3340	9.3326	12.1935	19.1113
	ratio of 2nd max monthly mean to annual mean		1.0000	1.3116	1.6698	1.7451	1.8787	1.9843	2.0346	2.1235	2.1673	2.2033	2.3435	3.0946	2.3684	2.6953	2.7642	2.9302	3.8199	3.9800	4.4010	5.5005	8.4269	12.1935

\* These values rounded to 2.5, 7.6 and 4.0 µg/m<sup>3</sup>, respectively, in a preliminary analysis based on 92 sites in this subset. Subsequent QA led to a change in the data set and the statistical metric values.