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INFORMATION
GPO

Pollutant	Concentration range, parts per million (ppm)	Simultaneous measurements required				Maximum discrepancy specification, parts per million
		1-hour		24-hour		
		First set	Second set	First set	Second set	
	Total	.....	.....	7	8	.....

[75 FR 35601, June 22, 2010]

TABLE C–2 TO SUBPART C OF PART 53—SEQUENCE OF TEST MEASUREMENTS

Measurement	Concentration range	
	First set	Second set
1	Low	Medium.
2	High	High.
3	Medium	Low.
4	High	High.
5	Low	Medium.
6	Medium	Low.
7	Low	Medium.
8	Medium	Low.
9	High	High.
10	Medium	Low.
11	High	Medium.
12	Low	High.
13	Medium	Medium.
14	Low	High.
15	.....	Low.
16	.....	Medium.
17	.....	Low.
18	.....	High.

TABLE C–3 TO SUBPART C OF PART 53—TEST SPECIFICATIONS FOR PB IN TSP AND PB IN PM_{10} METHODS

Concentration range equivalent to percentage of NAAQS in $\mu g/m^3$.	30% to 250%
Minimum number of 24-hr measurements	5
Maximum reference method analytical bias, D_q.	±5%
Maximum precision, P_R or P_C	≤15%
Maximum difference (D)	±20%
Estimated Method Detection Limit (MDL), $\mu g/m^3$.	5% of NAAQS level.

[73 FR 67059, Nov. 12, 2008]

TABLE C–4 TO SUBPART C OF PART 53—TEST SPECIFICATIONS FOR PM_{10}, $PM_{2.5}$ AND $PM_{10-2.5}$ CANDIDATE EQUIVALENT METHODS

Specification	PM_{10}	$PM_{2.5}$			$PM_{10-2.5}$	
		Class I	Class II	Class III	Class II	Class III
Acceptable concentration range (R_j), $\mu g/m^3$.	15–300	3–200	3–200	3–200	3–200	3–200
Minimum number of test sites.	2	1	2	4	2	4
Minimum number of candidate method samplers or analyzers per site.	3	3	3[1]	3[1]	3[1]	3[1]
Number of reference method samplers per site.	3	3	3[1]	3[1]	3[1]	3[1]
Minimum number of acceptable sample sets per site for PM_{10} methods:						
R_j <60 $\mu g/m^3$	3					
R_j >60 $\mu g/m^3$	3					
Total	10					
Minimum number of acceptable sample sets per site for $PM_{2.5}$ and $PM_{10-2.5}$ candidate equivalent methods:						
R_j <30 $\mu g/m^3$ for 24-hr or R_j <20 $\mu g/m^3$ for 48-hr samples.	.....	3				
R_j >30 $\mu g/m^3$ for 24-hr or R_j >20 $\mu g/m^3$ for 48-hr samples.	3					
Each season	10	23	23	23	23	
Total, each site	10	23	23 (46 for two-season sites)	23	23 (46 for two-season sites)	

Specification	PM_{10}	$PM_{2.5}$			$PM_{10-2.5}$	
		Class I	Class II	Class III	Class II	Class III
Precision of replicate reference method measurements, P_{Rj} or RP_{Rj}, respectively; RP for Class II or III $PM_{2.5}$ or $PM_{10-2.5}$, maximum.	5 μg/m[3] or 7%.	2 μg/m[3] or 5%.	10%[2]	10%[2]	10%[2]	10%[2]
Precision of $PM_{2.5}$ or $PM_{10-2.5}$ candidate method, CP, each site.	10%[2] ...	15%[2] ...	15%[2]	15%[2]		
Slope of regression relationship.	1 ±0.10	1 ±0.05	1 ±0.10	1 ±0.10	1 ±0.10	1 ±0.12
Intercept of regression relationship, μg/m[3].	0 ±5	0 ±1	Between: 13.55 − (15.05 × slope), but not less than −1.5; and 16.56 − (15.05 × slope), but not more than + 1.5	Between: 15.05 − (17.32 × slope), but not less than −2.0; and 15.05 − (13.20 × slope), but not more than + 2.0	Between: 62.05 − (70.5 × slope), but not less than −3.5; and 78.95 − (70.5 × slope), but not more than + 3.5	Between: 70.50 − (82.93 × slope), but not less than −7.0; and 70.50 − (61.16 × slope), but not more than + 7.0
Correlation of reference method and candidate method measurements.	≥0.97 ...	≥0.97 ...	≥0.93—for CCV ≤0.4; ≥0.85 + 0.2 × CCV—for 0.4 ≤CCV ≤0.5; ≥0.95—for CCV ≥0.5			

[1] Some missing daily measurement values may be permitted; see test procedure.
[2] Calculated as the root mean square over all measurement sets.

[72 FR 32203, June 12, 2007]

TABLE C–5 TO SUBPART C OF PART 53—SUMMARY OF COMPARABILITY FIELD TESTING CAMPAIGN SITE AND SEASONAL REQUIREMENTS FOR CLASS II AND III FEMS FOR $PM_{10-2.5}$ AND $PM_{2.5}$

Candidate method	Test site	A	B	C	D
$PM_{2.5}$	Test site location area.	Los Angeles basin or California Central Valley.	Western city such as Denver, Salt Lake City, or Albuquerque.	Midwestern city	Northeastern or mid-Atlantic city.
	Test site characteristics.	Relatively high $PM_{2.5}$, nitrates, and semi-volatile organic pollutants.	Cold weather, higher elevation, winds, and dust.	Substantial temperature variation, high nitrates, wintertime conditions.	High sulfate and high relative humidity.
	Class III Field test campaigns (Total: 5).	Winter and summer.	Winter only	Winter only	Summer only.
	Class II Field test campaigns (Total: 2).	Site A or B, any season		Site C or D, any season.	
$PM_{10-2.5}$	Test site location area.	Los Angeles basin or California Central Valley.	Western city such as Las Vegas or Phoenix.	Midwestern city	Large city east of the Mississippi River.
	Test site characteristics.	Relatively high $PM_{2.5}$, nitrates, and semi-volatile organic pollutants.	High $PM_{10-2.5}$ to $PM_{2.5}$ ratio, windblown dust.	Substantial temperature variation, high nitrates, wintertime conditions.	High sulfate and high relative humidity.
	Class III Field test campaigns (Total: 5).	Winter and summer.	Winter only	Winter only	Summer only.