

TABLE C-1 TO SUBPART C OF PART 53—TEST CONCENTRATION RANGES, NUMBER OF MEASUREMENTS REQUIRED, AND MAXIMUM DISCREPANCY SPECIFICATIONS

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	
Ozone	Low 0.06 to 0.10	5	6			0.02
	Med. 0.15 to 0.25	5	6			0.03
	High 0.35 to 0.46	4	6			0.04
	Total	14	18			
Carbon monoxide	Low 7 to 11	5	6			1.5
	Med. 20 to 30	5	6			2.0
	High 25 to 45	4	6			3.0
	Total	14	18			
Sulfur dioxide	Low 0.02 to 0.05	5	6	3	3	0.02
	Med. 0.10 to 0.15	5	6	2	3	0.03
	High 0.30 to 0.50	4	6	2	2	0.04
	Total	14	18	7	8	
Nitrogen dioxide	Low 0.02 to 0.08			3	3	0.02
	Med. 0.10 to 0.20			2	2	0.02
	High 0.25			2	2	0.03
	Total			7	8	

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 PM₁₀ METHODS

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

[73 FR 67059, Nov. 12, 2008]

TABLE C-4 TO SUBPART C OF PART 53—TEST SPECIFICATIONS FOR PM₁₀, 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_i), $\mu\text{g}/\text{m}^3$.	15-300	3-200	3-200	3-200	3-200	3-200
Minimum number of test sites.	2	1	2	4	2	4

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Specification	PM ₁₀	PM _{2.5}			PM _{10-2.5}	
		Class I	Class II	Class III	Class II	Class III
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 _i < 60 µg/m ³	3					
R _i > 60 µg/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 _i < 30 µg/m ³ for 24-hr or R _i < 20 µg/m ³ for 48-hr samples.	3				
R _i > 30 µg/m ³ for 24-hr or R _i > 20 µg/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)	
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.