UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, NC 27711

April 14, 2011

MEMORANDUM

SUBJECT: PM_{10} and $PM_{10-2.5}$ Air Quality Analyses

FROM: Mark Schmidt, OAR/OAQPS/AQAD /s/

TO: PM NAAQS Review Docket EPA-OAR-2007-0492

Overview

This memorandum documents updates (since the analyses described in Schmidt and Jenkins, 2010) to PM_{10} and $PM_{10-2.5}$ air quality analyses conducted to support the review of the Particulate Matter (PM) national ambient air quality standards (NAAQS). The purpose of these analyses is to inform staff conclusions on the current 24-hour PM_{10} standard as well as on potential alternative standards meant to protect against exposures to $PM_{10-2.5}$. The following are presented in this memo:

- Relationships between PM_{10} expected exceedance concentration-equivalent design values and 98th percentile PM_{10} concentration design values
- Comparison of the coefficients of variation for PM_{10} expected exceedance concentration-equivalent design values and 98th percentile PM_{10} concentration design values
- U.S. counties with monitors, and the population sizes in those counties, not likely to meet the current PM_{10} standard as well as different potential alternative standards
- Detailed distributions of PM_{10} air quality concentrations

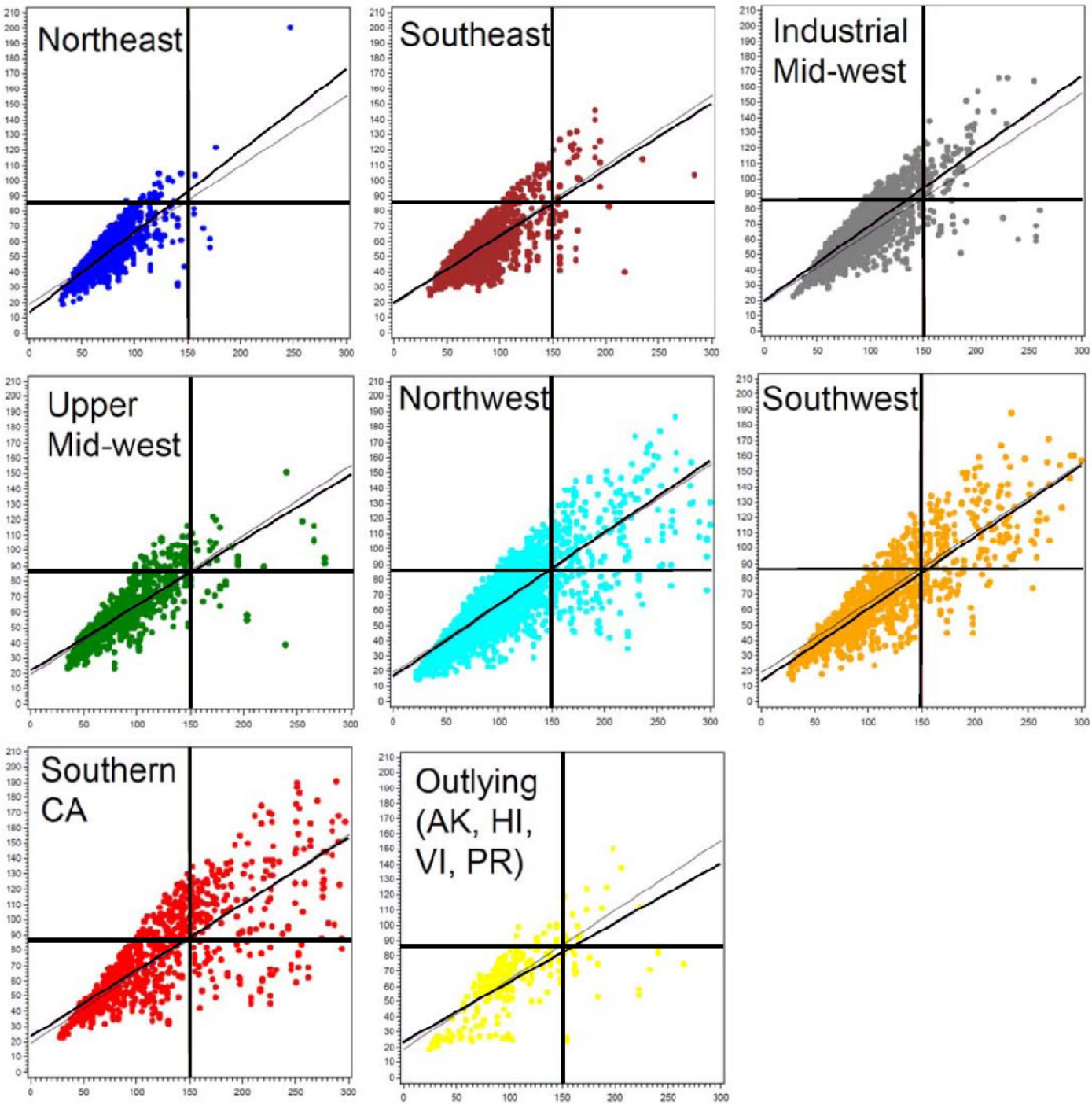
General data processing

As described in Schmidt and Jenkins (2010), the air quality data for this project originated from EPA's Air Quality System (AQS) data base, the official repository of NAAQS-comparable ambient measurements. See Schmidt and Jenkins (2010) for more detail.

Inter-Metric Comparability

The approach to comparing PM_{10} expected exceedance concentration-equivalent design values and 98th percentile PM_{10} concentration design values is the same as that described in Schmidt and Jenkins (2010). When the national analysis described by Schmidt and Jenkins (2010) was conducted using air quality data from 1988 to 2008, a 98th percentile PM_{10} concentration design value of 87 $\mu g/m^3$ was generally equivalent to the current standard level (Schmidt and Jenkins, 2010). Regional relationships from this analysis are presented below.

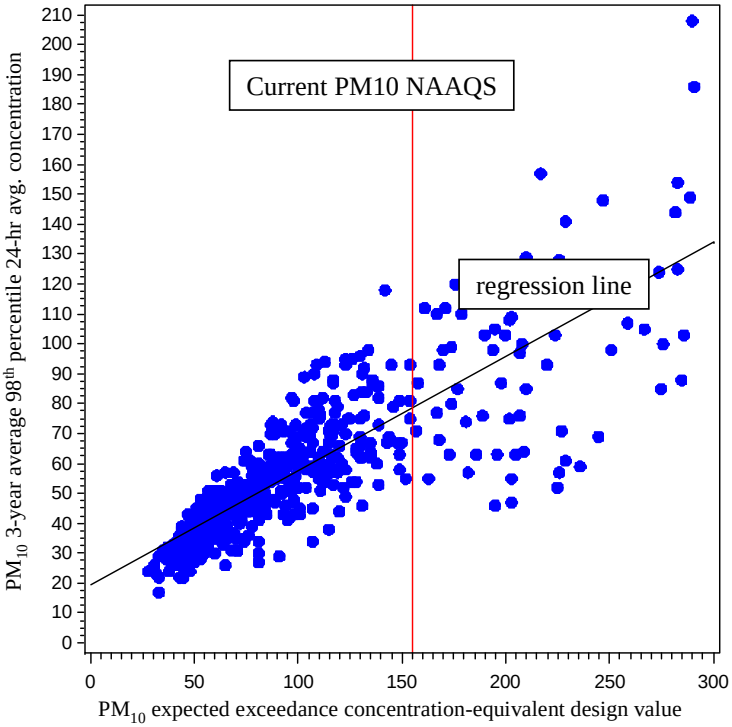
Figure 1: Regional 98th percentile PM_{10} concentration design values (y-axis) versus the PM_{10} expected exceedance concentration-equivalent design values (x-axis) using 1988-2008 data*



*Bold regression lines reflect region-specific relationships between 98th percentile PM_{10} concentration design values and PM_{10} expected exceedance concentration-equivalent design values. Non-bolded regression lines reflect the overall relationship across all regions, as illustrated by Schmidt and Jenkins (2010). In some areas (i.e., southeast, upper Midwest, northwest, southwest, and southern California), the two regression lines are almost indistinguishable. Vertical lines mark the level of the current standard and horizontal lines mark a 98th percentile concentration of 87 $\mu g/m^3$.

When the national analysis was repeated using only the most recent air quality data available (2007 to 2009), a 98th percentile PM_{10} concentration design value of 78 µg/m^3 was generally equivalent to the current standard level, on average across the U.S. as shown in Figure 2.

Figure 2: National 98th percentile PM_{10} concentration design values (y-axis) versus the PM_{10} expected exceedance concentration-equivalent design values (x-axis) using 2007-2009 data

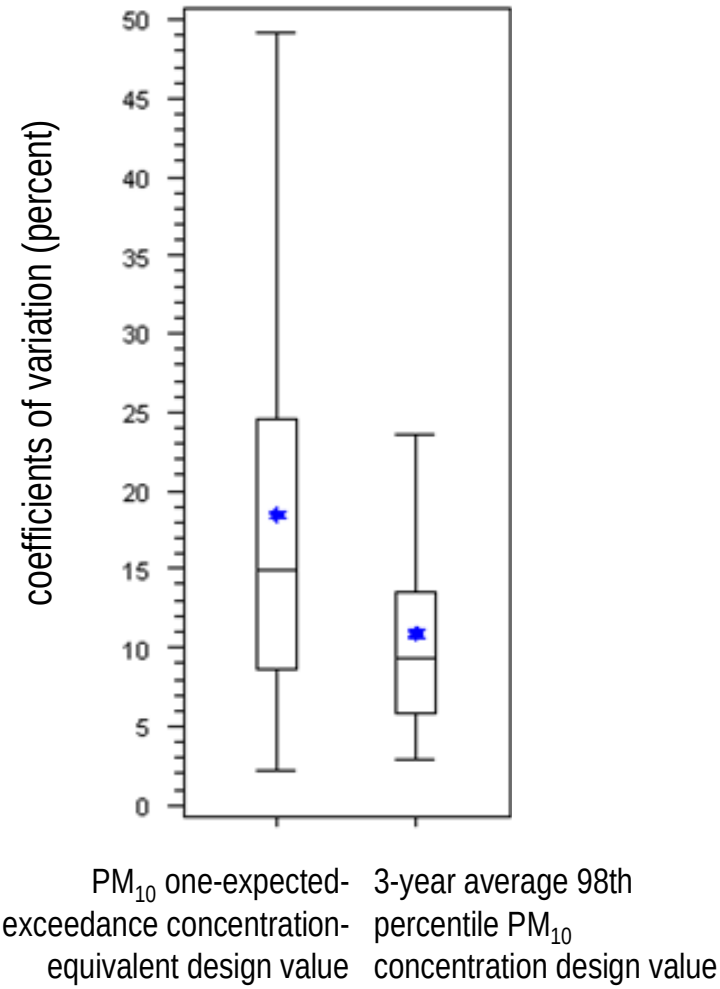


- Note that the only valid 2007-2009 data pairs (i.e., those composed of three complete years) were considered for this evaluation. Further, the model was constrained to data pairs where the expected exceedance equivalent design values did not exceed 300 µg/m^3.
- N = 596 (out of 613 valid pairs)
- R-square: 0.70
- Model equation: 3yr_P98 = 19.4 + (0.38 * EE_DV)
- PM_{10} 3yr P98 concentration equivalent to a 154 µg/m3 EE_DV is ~ **78 µg/m^3**
  - Lower bound of 95% confidence interval = **52 µg/m^3**
  - Upper bound of 95% confidence interval = **104 µg/m^3**

<u>Comparison of the coefficients of variation for PM_{10} expected exceedance concentration-equivalent design values and 98th percentile PM_{10} concentration design values</u>

Figure 3 below shows box-plots of the distributions of monitor-level coefficients of variation (COV) for PM_{10} expected exceedance concentration-equivalent design values (left plot) and 98th percentile PM_{10} concentration design values (right plot). Monitor-level design values were computed for all complete 3-year periods from 1988 through 2009. The COV in each of the the two types of design values were computed for all monitors that had at least 3 valid pairs of (3-year) design values; there were 952 such monitors. As seen in the figure, there is more variation in the expected exceedance concentration-equivalent design values than in the 98th percentile PM_{10} concentration design values. The mean COV of the expected exceedance concentration-equivalent design values is 70 percent higher than the mean COV of the 98th percentile PM_{10} concentration design values.

Figure 3: Distribution of monitor-level coefficients of variation for the PM_{10} expected exceedance concentration-equivalent design values and the 98th percentile PM_{10} concentration design values based on data from 1988 through 2009



Numbers of counties with monitors, and population sizes in those counties, not likely to meet the current PM_{10} standard as well as potential alternative standards

These analyses were conducted as described by Schmidt and Jenkins (2010), except that more recent air quality data were used (i.e., from 2007 to 2009) in this iteration.

Table 1: Estimates of the numbers and percentages of counties with monitors, and populations, which are not likely to meet various alternative PM_{10} NAAQS levels (based on 2007-2009 data)

Region >		All U.S.	Northeast	Southeast	Industrial Midwest	Upper Midwest	Southwest	Northwest	Southern California	Outlying areas
Total # of counties with monitors >		307	37	57	50	40	25	77	18	3
Total population (x 1000) >		120,090	15,397	27,181	21,352	5,917	11,112	15,270	22,695	1,167
Potential Alternative Standard ($\mu g/m^3$)	Statistic	Numbers of counties with monitors, populations (x 1000), and percentages of total								
87	# counties	37	0	2	2	2	11	10	9	1
	population	20,515	0	4,063	507	552	5,924	1,789	7,421	260
	% # counties	12%	0%	4%	4%	5%	44%	13%	50%	33%
	% population	17%	0%	15%	2%	9%	53%	12%	33%	22%
85	# counties	39	0	2	3	2	12	10	9	1
	population	21,887	0	4,063	1,789	552	6,014	1,789	7,421	260
	% # counties	13%	0%	4%	6%	5%	48%	13%	50%	33%
	% population	18%	0%	15%	8%	9%	54%	12%	33%	22%
80	# counties	45	0	2	4	3	13	11	11	1
	population	24,535	0	4,063	3,183	599	6,131	1,833	8,467	260
	% # counties	15%	0%	4%	8%	8%	52%	14%	61%	33%
	% population	20%	0%	15%	15%	10%	55%	12%	37%	22%
75	# counties	55	0	3	6	5	13	15	12	1
	population	35,703	0	4,626	3,491	637	6,131	2,570	17,986	260
	% # counties	18%	0%	5%	12%	13%	52%	19%	67%	33%
	% population	30%	0%	17%	16%	11%	55%	17%	79%	22%
70	# counties	71	0	4	7	7	13	27	12	1
	population	43,823	0	4,644	8,868	881	6,131	5,052	17,986	260
	% # counties	23%	0%	7%	14%	18%	52%	35%	67%	33%
	% population	36%	0%	17%	42%	15%	55%	33%	79%	22%
65	# counties	87	2	4	9	10	14	33	13	2
	population	49,394	775	4,644	10,421	1,029	7,507	5,989	18,739	290
	% # counties	28%	5%	7%	18%	25%	56%	43%	72%	67%
	% population	41%	5%	17%	49%	17%	68%	39%	83%	25%
Current Standard	# counties	41	0	3	0	1	11	13	12	1
	population	32,835	0	4,626	0	14	5,485	1,878	20,571	260
	% # counties	13%	0%	5%	0%	3%	44%	17%	67%	33%
	% population	27%	0%	17%	0%	0%	49%	12%	91%	22%

Identification of specific counties with monitors not likely to meet the current PM_{10} standard as well as potential alternative standards

The tables below present information on the counties with monitors that are not likely to meet the current PM_{10} standard, as well as potential alternative PM_{10} standards, based on the most recent air quality data that is available (i.e., 2007-2009) as well as historic air quality data. The purpose of these tables is to use available data to provide some perspective on the potential impacts of revising the current PM_{10} standard. The tables below do not reflect the official list of counties that have been designated as "non-attainment" for PM_{10}. That list can be found at the following website: http://www.epa.gov/airquality/greenbk/.

Table 2: Counties with monitors that are not meeting the current PM_{10} standard (based on 2007-2009 data)

PM region name	State	County	CBSA name
Northwest	CO	Archuleta	
Northwest	CO	Garfield	
Northwest	CO	Alamosa	
Northwest	WY	Albany	Laramie, WY
Northwest	WY	Sweetwater	Rock Springs, WY
Northwest	UT	Utah	Provo-Orem, UT
Northwest	CA	Yolo	Sacramento--Arden-Arcade--Roseville, CA
Northwest	CO	La Plata	Durango, CO
Northwest	CA	Shasta	Redding, CA
Northwest	UT	Salt Lake	Salt Lake City, UT
Northwest	WA	Stevens	
Northwest	CA	Siskiyou	
Northwest	CA	Trinity	
Not in PMREG Region	AK	Anchorage	Anchorage, AK
Southeast	AL	Jefferson	Birmingham-Hoover, AL
Southeast	OK	Tulsa	Tulsa, OK
Southeast	TX	Harris	Houston-Sugar Land-Baytown, TX
Southern California	CA	Orange	Los Angeles-Long Beach-Santa Ana, CA
Southern California	CA	Ventura	Oxnard-Thousand Oaks-Ventura, CA
Southern California	CA	Los Angeles	Los Angeles-Long Beach-Santa Ana, CA
Southern California	CA	Santa Barbara	Santa Barbara-Santa Maria-Goleta, CA
Southern California	CA	Kern	Bakersfield, CA
Southern California	CA	Kings	Hanford-Corcoran, CA
Southern California	CA	San Diego	San Diego-Carlsbad-San Marcos, CA
Southern California	CA	San Bernardino	Riverside-San Bernardino-Ontario, CA
Southern California	NV	Nye	Pahrump, NV
Southern California	CA	Imperial	El Centro, CA
Southern California	CA	Inyo	Bishop, CA
Southern California	CA	Riverside	Riverside-San Bernardino-Ontario, CA
Southwest	AZ	Cochise	Sierra Vista-Douglas, AZ
Southwest	AZ	Pima	Tucson, AZ
Southwest	AZ	Gila	Payson, AZ
Southwest	TX	El Paso	El Paso, TX
Southwest	AZ	Maricopa	Phoenix-Mesa-Scottsdale, AZ
Southwest	AZ	Yuma	Yuma, AZ
Southwest	CA	Imperial	El Centro, CA
Southwest	NM	Luna	Deming, NM
Southwest	AZ	Santa Cruz	Nogales, AZ
Southwest	NM	Dona Ana	Las Cruces, NM
Southwest	AZ	Pinal	Phoenix-Mesa-Scottsdale, AZ
Upper Midwest	CO	Prowers	

Table 3: Counties with monitors that are not meeting the current PM_{10} standard (based on 2006-2008 data)

PM region name	State	County	CBSA name
Industrial Midwest	MO	St. Louis City	St. Louis, MO-IL
Northeast	ME	Aroostook	
Northwest	UT	Utah	Provo-Orem, UT
Northwest	CO	Garfield	
Northwest	ID	Power	Pocatello, ID
Northwest	WY	Sweetwater	Rock Springs, WY
Northwest	CA	Yolo	Sacramento--Arden-Arcade--Roseville, CA
Northwest	CA	Shasta	Redding, CA
Northwest	CA	Mendocino	Ukiah, CA
Northwest	CO	Alamosa	
Northwest	UT	Salt Lake	Salt Lake City, UT
Northwest	CA	Siskiyou	
Northwest	CA	Trinity	
Not in PMREG Region	AK	Anchorage	Anchorage, AK
Not in PMREG Region	AK	Matanuska Susitna	Anchorage, AK
Southeast	AL	Jefferson	Birmingham-Hoover, AL
Southeast	TX	Harris	Houston-Sugar Land-Baytown, TX
Southern California	CA	Orange	Los Angeles-Long Beach-Santa Ana, CA
Southern California	CA	Ventura	Oxnard-Thousand Oaks-Ventura, CA
Southern California	CA	Los Angeles	Los Angeles-Long Beach-Santa Ana, CA
Southern California	CA	Santa Barbara	Santa Barbara-Santa Maria-Goleta, CA
Southern California	CA	Kern	Bakersfield, CA
Southern California	CA	Riverside	Riverside-San Bernardino-Ontario, CA
Southern California	CA	Kings	Hanford-Corcoran, CA
Southern California	NV	Nye	Pahrump, NV
Southern California	CA	San Diego	San Diego-Carlsbad-San Marcos, CA
Southern California	CA	San Bernardino	Riverside-San Bernardino-Ontario, CA
Southern California	CA	Imperial	El Centro, CA
Southern California	CA	Inyo	Bishop, CA
Southwest	NM	Sandoval	Albuquerque, NM
Southwest	AZ	Cochise	Sierra Vista-Douglas, AZ
Southwest	AZ	Pima	Tucson, AZ
Southwest	AZ	Gila	Payson, AZ
Southwest	CA	Imperial	El Centro, CA
Southwest	AZ	Yuma	Yuma, AZ
Southwest	TX	El Paso	El Paso, TX
Southwest	AZ	Maricopa	Phoenix-Mesa-Scottsdale, AZ
Southwest	NM	Dona Ana	Las Cruces, NM
Southwest	AZ	Santa Cruz	Nogales, AZ
Southwest	AZ	Pinal	Phoenix-Mesa-Scottsdale, AZ
Southwest	NV	Clark	Las Vegas-Paradise, NV

Table 4: Counties with monitors that are not meeting the current PM_{10} standard (based on 2005-2007 data)

PM region name	State	County	CBSA name
Industrial Midwest	MO	St. Louis City	St. Louis, MO-IL
Northeast	ME	Aroostook	
Northwest	WY	Campbell	Gillette, WY
Northwest	CO	Mesa	Grand Junction, CO
Northwest	CO	Alamosa	
Northwest	UT	Salt Lake	Salt Lake City, UT
Northwest	WY	Sweetwater	Rock Springs, WY
Northwest	CA	Siskiyou	
Not in PMREG Region	AK	Anchorage	Anchorage, AK
Not in PMREG Region	AK	Matanuska Susitna	Anchorage, AK
Southeast	AL	Jefferson	Birmingham-Hoover, AL
Southeast	TX	Harris	Houston-Sugar Land-Baytown, TX
Southern California	NV	Nye	Pahrump, NV
Southern California	CA	Orange	Los Angeles-Long Beach-Santa Ana, CA
Southern California	CA	Ventura	Oxnard-Thousand Oaks-Ventura, CA
Southern California	CA	Los Angeles	Los Angeles-Long Beach-Santa Ana, CA
Southern California	CA	Santa Barbara	Santa Barbara-Santa Maria-Goleta, CA
Southern California	CA	Riverside	Riverside-San Bernardino-Ontario, CA
Southern California	CA	San Bernardino	Riverside-San Bernardino-Ontario, CA
Southern California	CA	Imperial	El Centro, CA
Southern California	CA	Inyo	Bishop, CA
Southwest	AZ	Pima	Tucson, AZ
Southwest	NM	Sandoval	Albuquerque, NM
Southwest	AZ	Gila	Payson, AZ
Southwest	NM	Dona Ana	Las Cruces, NM
Southwest	AZ	Yuma	Yuma, AZ
Southwest	CA	Imperial	El Centro, CA
Southwest	TX	El Paso	El Paso, TX
Southwest	AZ	Maricopa	Phoenix-Mesa-Scottsdale, AZ
Southwest	AZ	Pinal	Phoenix-Mesa-Scottsdale, AZ
Southwest	AZ	Santa Cruz	Nogales, AZ
Upper Midwest	MO	Jasper	Joplin, MO

Table 5: Counties with monitors that are not likely to meet potential alternative PM_{10} standards with 98th percentile forms (based on air quality data from 2007 to 2009)

98th Percentile Standard Level	PM region name	State	County	CBSA name
85 µg/m^3	Industrial Midwest	PA	Allegheny	Pittsburgh, PA
	Industrial Midwest	IA	Scott	Davenport-Moline-Rock Island, IA-IL
	Industrial Midwest	MO	St. Louis City	St. Louis, MO-IL
	Upper Midwest	NE	Douglas	Omaha-Council Bluffs, NE-IA
	Upper Midwest	SD	Pennington	Rapid City, SD
	Southwest	NM	Bernalillo	Albuquerque, NM
	Southwest	NM	Sandoval	Albuquerque, NM
	Northwest	WY	Campbell	Gillette, WY
	Northwest	WY	Converse	
	Northwest	CO	Gunnison	
	Northwest	NV	Washoe	Reno-Sparks, NV
	Southern California	CA	Tulare	Visalia-Porterville, CA
	Not in PMREG Region	AK	Anchorage	Anchorage, AK
	Southeast	TX	Harris	Houston-Sugar Land-Baytown, TX
	Southeast	AL	Jefferson	Birmingham-Hoover, AL
	Southwest	NM	Dona Ana	Las Cruces, NM
	Southwest	TX	El Paso	El Paso, TX
	Southwest	AZ	Gila	Payson, AZ
	Southwest	CA	Imperial	El Centro, CA
	Southwest	NM	Luna	Deming, NM
	Southwest	AZ	Maricopa	Phoenix-Mesa-Scottsdale, AZ
	Southwest	AZ	Pima	Tucson, AZ
	Southwest	AZ	Pinal	Phoenix-Mesa-Scottsdale, AZ
	Southwest	AZ	Santa Cruz	Nogales, AZ
	Southwest	AZ	Yuma	Yuma, AZ
	Northwest	WY	Albany	Laramie, WY
	Northwest	UT	Salt Lake	Salt Lake City, UT
	Northwest	WA	Stevens	
	Northwest	WY	Sweetwater	Rock Springs, WY
	Northwest	CA	Trinity	
	Northwest	UT	Utah	Provo-Orem, UT
	Southern California	CA	Imperial	El Centro, CA
	Southern California	CA	Inyo	Bishop, CA
	Southern California	CA	Kern	Bakersfield, CA
	Southern California	CA	Kings	Hanford-Corcoran, CA
	Southern California	NV	Nye	Pahrump, NV
	Southern California	CA	Riverside	Riverside-San Bernardino-Ontario, CA
	Southern California	CA	San Bernardino	Riverside-San Bernardino-Ontario, CA
	Southern California	CA	San Diego	San Diego-Carlsbad-San Marcos, CA
80 µg/m^{3*}	Industrial Midwest	OH	Cuyahoga	Cleveland-Elyria-Mentor, OH
	Upper Midwest	IA	Cerro Gordo	Mason City, IA
	Southern California	CA	Fresno	Fresno, CA
	Southern California	CA	San Luis Obispo	San Luis Obispo-Paso Robles, CA
	Southwest	AZ	Cochise	Sierra Vista-Douglas, AZ
	Northwest	CO	Garfield	

75 µg/m^3*	Industrial Midwest	KY	Boyd	Huntington-Ashland, WV-KY-OH
	Industrial Midwest	IL	Madison	St. Louis, MO-IL
	Upper Midwest	NE	Cass	Omaha-Council Bluffs, NE-IA
	Northwest	MT	Flathead	Kalispell, MT
	Northwest	CO	Routt	
	Northwest	CA	Stanislaus	Modesto, CA
	Northwest	UT	Weber	Ogden-Clearfield, UT
	Southeast	OK	Tulsa	Tulsa, OK
	Upper Midwest	CO	Prowers	
	Southern California	CA	Los Angeles	Los Angeles-Long Beach-Santa Ana, CA
70 µg/m^3*	Southeast	TN	Union	Knoxville, TN
	Industrial Midwest	IL	Cook	Chicago-Naperville-Joliet, IL-IN-WI
	Upper Midwest	MO	Buchanan	St. Joseph, MO-KS
	Upper Midwest	KS	Wyandotte	Kansas City, MO-KS
	Northwest	CO	Adams	Denver-Aurora, CO
	Northwest	CA	Butte	Chico, CA
	Northwest	UT	Davis	Ogden-Clearfield, UT
	Northwest	CA	Glenn	
	Northwest	OR	Klamath	Klamath Falls, OR
	Northwest	WY	Lincoln	
	Northwest	CO	Mesa	Grand Junction, CO
	Northwest	CA	Mono	
	Northwest	CA	Sacramento	Sacramento--Arden-Arcade--Roseville, CA
	Northwest	MT	Silver Bow	Butte-Silver Bow, MT
	Northwest	CO	Alamosa	
	Northwest	CA	Yolo	Sacramento--Arden-Arcade--Roseville, CA
65 µg/m^3*	Not in PMREG Region	PR	Catano	San Juan-Caguas-Guaynabo, PR
	Northeast	NJ	Camden	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD
	Northeast	ME	Cumberland	Portland-South Portland-Biddeford, ME
	Industrial Midwest	OH	Franklin	Columbus, OH
	Industrial Midwest	IN	Lake	Chicago-Naperville-Joliet, IL-IN-WI
	Upper Midwest	SD	Codington	Watertown, SD
	Upper Midwest	MO	Jasper	Joplin, MO
	Upper Midwest	KS	Neosho	
	Southwest	NV	Clark	Las Vegas-Paradise, NV
	Northwest	ID	Canyon	Boise City-Nampa, ID
	Northwest	CA	Mariposa	
	Northwest	CA	Merced	Merced, CA
	Northwest	ID	Power	Pocatello, ID
	Northwest	CA	San Joaquin	Stockton, CA
	Northwest	CO	San Miguel	
	Southern California	CA	Ventura	Oxnard-Thousand Oaks-Ventura, CA

*Listed counties are those additional counties (i.e., in addition to the counties listed for higher 98th percentile standard levels) that are not likely to meet a potential alternative standard with a 98th percentile form. For example, all of the counties listed in this table are not likely to meet a 98th percentile standard with a level of 65 µg/m^3.

Table 6: Counties with monitors that are not likely to meet potential alternative PM_{10} standards with 98th percentile forms (based on air quality data from 2006 to 2008)

Standard Level	PM region name	State	County	CBSA name
85 µg/m^3	Industrial Midwest	PA	Allegheny	Pittsburgh, PA
	Industrial Midwest	IA	Scott	Davenport-Moline-Rock Island, IA-IL
	Industrial Midwest	MO	St. Louis City	St. Louis, MO-IL
	Northwest	WY	Campbell	Gillette, WY
	Northwest	WY	Converse	
	Northwest	MT	Flathead	Kalispell, MT
	Northwest	CO	Gunnison	
	Northwest	NV	Washoe	Reno-Sparks, NV
	Northwest	UT	Salt Lake	Salt Lake City, UT
	Northwest	WY	Sweetwater	Rock Springs, WY
	Northwest	CA	Trinity	
	Not in PMREG Region	AK	Anchorage	Anchorage, AK
	Southeast	TX	Harris	Houston-Sugar Land-Baytown, TX
	Southeast	AL	Jefferson	Birmingham-Hoover, AL
	Southern California	CA	Fresno	Fresno, CA
	Southern California	CA	San Luis Obispo	San Luis Obispo-Paso Robles, CA
	Southern California	CA	Tulare	Visalia-Porterville, CA
	Southern California	CA	Imperial	El Centro, CA
	Southern California	CA	Inyo	Bishop, CA
	Southern California	CA	Kern	Bakersfield, CA
	Southern California	CA	Kings	Hanford-Corcoran, CA
	Southern California	NV	Nye	Pahrump, NV
	Southern California	CA	Riverside	Riverside-San Bernardino-Ontario, CA
	Southern California	CA	San Bernardino	Riverside-San Bernardino-Ontario, CA
	Southern California	CA	San Diego	San Diego-Carlsbad-San Marcos, CA
	Southwest	NM	Bernalillo	Albuquerque, NM
	Southwest	NM	Dona Ana	Las Cruces, NM
	Southwest	TX	El Paso	El Paso, TX
	Southwest	AZ	Gila	Payson, AZ
	Southwest	CA	Imperial	El Centro, CA
	Southwest	AZ	Maricopa	Phoenix-Mesa-Scottsdale, AZ
	Southwest	AZ	Pima	Tucson, AZ
	Southwest	AZ	Pinal	Phoenix-Mesa-Scottsdale, AZ
	Southwest	NM	Sandoval	Albuquerque, NM
	Southwest	AZ	Santa Cruz	Nogales, AZ
	Southwest	AZ	Yuma	Yuma, AZ
	Upper Midwest	NE	Cass	Omaha-Council Bluffs, NE-IA
	Upper Midwest	IA	Cerro Gordo	Mason City, IA
	Upper Midwest	NE	Douglas	Omaha-Council Bluffs, NE-IA
	Upper Midwest	SD	Pennington	Rapid City, SD
	Upper Midwest	KS	Wyandotte	Kansas City, MO-KS
80 µg/m^{3*}	Industrial Midwest	KY	Boyd	Huntington-Ashland, WV-KY-OH
	Northwest	CO	Alamosa	
	Northwest	CO	Garfield	
	Southeast	TN	Union	Knoxville, TN
	Southern California	CA	Orange	Los Angeles-Long Beach, CA
	Upper Midwest	MO	Jasper	Joplin, MO

75 µg/m^{3*}	Northeast	ME	Aroostook	
	Northwest	CO	Adams	Denver-Aurora, CO
	Northwest	MT	Big Horn	
	Northwest	CA	Butte	Chico, CA
	Northwest	CO	Routt	
	Northwest	CA	San Joaquin	Stockton, CA
	Northwest	CA	Stanislaus	Modesto, CA
	Northwest	ID	Power	Pocatello, ID
	Northwest	UT	Utah	Provo-Orem, UT
	Northwest	CA	Yolo	Sacramento--Arden-Arcade--Roseville, CA
	Southeast	OK	Kay	Ponca City, OK
	Southeast	SC	Lexington	Columbia, SC
	Southern California	CA	Los Angeles	Los Angeles-Long Beach-Santa Ana, CA
	Southwest	NV	Clark	Las Vegas-Paradise, NV
	Southwest	AZ	Cochise	Sierra Vista-Douglas, AZ
70 µg/m^{3*}	Industrial Midwest	IL	Cook	Chicago-Naperville-Joliet, IL-IN-WI
	Industrial Midwest	OH	Cuyahoga	Cleveland-Elyria-Mentor, OH
	Industrial Midwest	IN	Lake	Chicago-Naperville-Joliet, IL-IN-WI
	Northwest	CA	Merced	Merced, CA
	Northwest	CO	Mesa	Grand Junction, CO
	Northwest	CA	Mono	
	Northwest	MT	Silver Bow	Butte-Silver Bow, MT
	Not in PMREG Region	PR	Catano	San Juan-Caguas-Guaynabo, PR
	Not in PMREG Region	PR	Guaynabo	San Juan-Caguas-Guaynabo, PR
	Not in PMREG Region	AK	Matanuska Susitna	Anchorage, AK
	Southeast	LA	West Baton Rouge	Baton Rouge, LA
	Southwest	AZ	Apache	
	Upper Midwest	MO	Buchanan	St. Joseph, MO-KS
	Upper Midwest	CO	Prowers	
65 µg/m^{3*}	Industrial Midwest	WV	Brooke	Weirton-Steubenville, WV-OH
	Industrial Midwest	OH	Franklin	Columbus, OH
	Industrial Midwest	PA	Lawrence	New Castle, PA
	Industrial Midwest	IL	Madison	St. Louis, MO-IL
	Industrial Midwest	IN	Perry	
	Industrial Midwest	MI	Wayne	Detroit-Warren-Livonia, MI
	Northeast	ME	Cumberland	Portland-South Portland-Biddeford, ME
	Northeast	VA	Frederick	Winchester, VA-WV
	Northeast	PA	Northampton	Allentown-Bethlehem-Easton, PA-NJ
	Northwest	ID	Canyon	Boise City-Nampa, ID
	Northwest	UT	Davis	Ogden-Clearfield, UT
	Northwest	OR	Klamath	Klamath Falls, OR
	Northwest	CA	Mariposa	
	Northwest	MT	Missoula	Missoula, MT
	Northwest	WY	Sheridan	Sheridan, WY
	Northwest	WA	Spokane	Spokane, WA
	Northwest	CA	Tehama	Red Bluff, CA
	Northwest	WA	Walla Walla	Walla Walla, WA
	Northwest	UT	Weber	Ogden-Clearfield, UT
	Northwest	CA	Shasta	Redding, CA
	Southeast	TX	Nueces	Corpus Christi, TX
	Southern California	CA	Ventura	Oxnard-Thousand Oaks-Ventura, CA
	Southwest	TX	Hidalgo	McAllen-Edinburg-Mission, TX
	Southwest	TX	Webb	Laredo, TX
	Upper Midwest	KS	Neosho	

*Listed counties are those additional counties (i.e., in addition to the counties listed for higher 98th percentile standard levels) that are not likely to meet a potential alternative standard with a 98th percentile form. For example, all of the counties listed in this table are not likely to meet a 98th percentile standard with a level of 65 µg/m^3.

Table 7: Counties with monitors that are not likely to meet potential alternative PM_{10} standards with 98th percentile forms (based on air quality data from 2005 to 2007)

Standard Level	PM region name	State	County	CBSA name
85 µg/m^3	Industrial Midwest	PA	Allegheny	Pittsburgh, PA
	Industrial Midwest	IA	Scott	Davenport-Moline-Rock Island, IA-IL
	Industrial Midwest	MO	St. Louis City	St. Louis, MO-IL
	Northwest	WY	Converse	
	Northwest	NV	Washoe	Reno-Sparks, NV
	Northwest	WY	Campbell	Gillette, WY
	Northwest	UT	Salt Lake	Salt Lake City, UT
	Northwest	WY	Sweetwater	Rock Springs, WY
	Not in PMREG	AK	Anchorage	Anchorage, AK
	Southeast	OK	Kay	Ponca City, OK
	Southeast	SC	Lexington	Columbia, SC
	Southeast	TX	Harris	Houston-Sugar Land-Baytown, TX
	Southeast	AL	Jefferson	Birmingham-Hoover, AL
	Southern California	CA	Fresno	Fresno, CA
	Southern California	CA	Kern	Bakersfield, CA
	Southern California	CA	Kings	Hanford-Corcoran, CA
	Southern California	CA	Tulare	Visalia-Porterville, CA
	Southern California	CA	Imperial	El Centro, CA
	Southern California	CA	Inyo	Bishop, CA
	Southern California	CA	Riverside	Riverside-San Bernardino-Ontario, CA
	Southern California	CA	San Bernardino	Riverside-San Bernardino-Ontario, CA
	Southwest	NM	Bernalillo	Albuquerque, NM
	Southwest	NM	Dona Ana	Las Cruces, NM
	Southwest	TX	El Paso	El Paso, TX
	Southwest	AZ	Gila	Payson, AZ
	Southwest	CA	Imperial	El Centro, CA
	Southwest	AZ	Maricopa	Phoenix-Mesa-Scottsdale, AZ
	Southwest	AZ	Pima	Tucson, AZ
	Southwest	AZ	Pinal	Phoenix-Mesa-Scottsdale, AZ
	Southwest	NM	Sandoval	Albuquerque, NM
	Southwest	AZ	Santa Cruz	Nogales, AZ
	Southwest	AZ	Yuma	Yuma, AZ
	Upper Midwest	NE	Cass	Omaha-Council Bluffs, NE-IA
	Upper Midwest	IA	Cerro Gordo	Mason City, IA
	Upper Midwest	NE	Douglas	Omaha-Council Bluffs, NE-IA
	Upper Midwest	SD	Pennington	Rapid City, SD
	Upper Midwest	MO	Jasper	Joplin, MO
80 µg/m^3*	Industrial Midwest	IN	Lake	Chicago-Naperville-Joliet, IL-IN-WI
	Northwest	CO	Adams	Denver-Aurora, CO
	Northwest	MT	Flathead	Kalispell, MT
	Northwest	CO	Gunnison	
	Not in PMREG region	PR	Catano	San Juan-Caguas-Guaynabo, PR
	Not in PMREG region	PR	Ponce	Ponce, PR
	Southeast	TN	Union	Knoxville, TN
75 µg/m^3*	Industrial Midwest	KY	Boyd	Huntington-Ashland, WV-KY-OH
	Industrial Midwest	IL	Cook	Chicago-Naperville-Joliet, IL-IN-WI
	Industrial Midwest	OH	Cuyahoga	Cleveland-Elyria-Mentor, OH
	Industrial Midwest	MI	Wayne	Detroit-Warren-Livonia, MI
	Northeast	PA	Northampton	Allentown-Bethlehem-Easton, PA-NJ
	Northwest	CA	Santa Clara	San Jose-Sunnyvale-Santa Clara, CA

	Northwest	WY	Sheridan	Sheridan, WY
	Northwest	CA	Stanislaus	Modesto, CA
	Northwest	CO	Alamosa	
	Not in PMREG region	AK	Matanuska Susitna	Anchorage, AK
	Southeast	SC	Georgetown	Georgetown, SC
	Southeast	FL	Manatee	Sarasota-Bradenton-Venice, FL
	Southern California	NV	Nye	Pahrump, NV
	Southwest	NV	Clark	Las Vegas-Paradise, NV
	Southwest	AZ	Cochise	Sierra Vista-Douglas, AZ
	Upper Midwest	KS	Wyandotte	Kansas City, MO-KS
70 µg/m^3*	Industrial Midwest	WV	Brooke	Weirton-Steubenville, WV-OH
	Industrial Midwest	OH	Franklin	Columbus, OH
	Northwest	UT	Davis	Ogden-Clearfield, UT
	Northwest	CA	Merced	Merced, CA
	Northwest	CO	Routt	
	Northwest	MT	Silver Bow	Butte-Silver Bow, MT
	Northwest	WA	Spokane	Spokane, WA
	Northwest	UT	Utah	Provo-Orem, UT
	Northwest	CO	Mesa	Grand Junction, CO
	Not in PMREG region	PR	Guaynabo	San Juan-Caguas-Guaynabo, PR
	Southeast	TX	Cameron	Brownsville-Harlingen, TX
	Southeast	TN	McMinn	Athens, TN
	Southeast	LA	West Baton Rouge	Baton Rouge, LA
	Southern California	CA	Los Angeles	Los Angeles-Long Beach, CA
	Southern California	CA	Orange	Los Angeles-Long Beach, CA
	Southwest	TX	Webb	Laredo, TX
65 µg/m^3*	Industrial Midwest	PA	Beaver	Pittsburgh, PA
	Industrial Midwest	OH	Columbiana	East Liverpool-Salem, OH
	Industrial Midwest	WV	Hancock	Weirton-Steubenville, WV-OH
	Industrial Midwest	PA	Lawrence	New Castle, PA
	Industrial Midwest	IL	Madison	St. Louis, MO-IL
	Industrial Midwest	IN	Perry	
	Industrial Midwest	IL	Saint Clair	St. Louis, MO-IL
	Industrial Midwest	OH	Scioto	Portsmouth, OH
	Northeast	ME	Aroostook	
	Northwest	OR	Klamath	Klamath Falls, OR
	Northwest	MT	Lincoln	
	Northwest	CA	Mono	
	Northwest	ID	Power	Pocatello, ID
	Northwest	CA	San Joaquin	Stockton, CA
	Northwest	CO	Summit	Silverthorne, CO
	Northwest	WA	Walla Walla	Walla Walla, WA
	Northwest	UT	Weber	Ogden-Clearfield, UT
	Not in PMREG region	PR	San Juan	San Juan-Caguas-Guaynabo, PR
	Southeast	FL	Hillsborough	Tampa-St. Petersburg-Clearwater, FL
	Southeast	OK	Muskogee	Muskogee, OK
	Southern California	CA	Ventura	Oxnard-Thousand Oaks-Ventura, CA
	Southwest	TX	Hidalgo	McAllen-Edinburg-Mission, TX
	Upper Midwest	MN	Ramsey	Minneapolis-St. Paul, MN-WI

*Listed counties are those additional counties (i.e., in addition to the counties listed for higher 98th percentile standard levels) that are not likely to meet a potential alternative standard with a 98th percentile form. For example, all of the counties listed in this table are not likely to meet a 98th percentile standard with a level of 65 µg/m^3.

Table 8: Counties with monitors that meet the current standard but are not likely to meet a potential alternative standard with a 98th percentile form (based on air quality from 2007 to 2009)#

Potential Alternative Standard	PM region name	State	County	CBSA name
85 µg/m^3	Industrial Midwest	IA	Scott	Davenport-Moline-Rock Island, IA-IL
		MO	St. Louis City	St. Louis, MO-IL
		PA	Allegheny	Pittsburgh, PA
	Northwest	CO	Gunnison	
		NV	Washoe	Reno-Sparks, NV
		WY	Campbell	Gillette, WY
		WY	Converse	
	Southern California	CA	Tulare	Visalia-Porterville, CA
	Southwest	NM	Bernalillo	Albuquerque, NM
		NM	Sandoval	Albuquerque, NM
	Upper Midwest	NE	Douglas	Omaha-Council Bluffs, NE-IA
		SD	Pennington	Rapid City, SD
80 µg/m^3*	Industrial Midwest	OH	Cuyahoga	Cleveland-Elyria-Mentor, OH
	Southern California	CA	Fresno	Fresno, CA
		CA	San Luis Obispo	San Luis Obispo-Paso Robles, CA
	Upper Midwest	IA	Cerro Gordo	Mason City, IA
75 µg/m^3*	Industrial Midwest	IL	Madison	St. Louis, MO-IL
		KY	Boyd	Huntington-Ashland, WV-KY-OH
	Northwest	CA	Stanislaus	Modesto, CA
		CO	Routt	
		MT	Flathead	Kalispell, MT
		UT	Weber	Ogden-Clearfield, UT
	Upper Midwest	NE	Cass	Omaha-Council Bluffs, NE-IA
70 µg/m^3*	Industrial Midwest	IL	Cook	Chicago-Naperville-Joliet, IL-IN-WI
	Northwest	CA	Butte	Chico, CA
		CA	Glenn	
		CA	Mono	
		CA	Sacramento	Sacramento--Arden-Arcade--Roseville, CA
		CO	Adams	Denver-Aurora, CO
		CO	Mesa	Grand Junction, CO
		MT	Silver Bow	Butte-Silver Bow, MT
		OR	Klamath	Klamath Falls, OR
		UT	Davis	Ogden-Clearfield, UT
		WY	Lincoln	
	Southeast	TN	Union	Knoxville, TN
	Upper Midwest	KS	Wyandotte	Kansas City, MO-KS
		MO	Buchanan	St. Joseph, MO-KS

65 µg/m^3*	Industrial Midwest	IN	Lake	Chicago-Naperville-Joliet, IL-IN-WI
		OH	Franklin	Columbus, OH
	Northeast	ME	Cumberland	Portland-South Portland-Biddeford, ME
		NJ	Camden	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD
	Northwest	CA	Mariposa	
		CA	Merced	Merced, CA
		CA	San Joaquin	Stockton, CA
		CO	San Miguel	
		ID	Canyon	Boise City-Nampa, ID
		ID	Power	Pocatello, ID
	Southwest	NV	Clark	Las Vegas-Paradise, NV
	Upper Midwest	KS	Neosho	
		MO	Jasper	Joplin, MO
		SD	Codington	Watertown, SD
	Not in PMREG Region	PR	Catano	San Juan-Caguas-Guaynabo, PR

#PM_{10} air quality in these counties is characterized in more detail in the appendix to this memo (see below).
*Listed counties are those additional counties (i.e., in addition to the counties listed for higher 98th percentile standard levels) that meet the current standard but are not likely to meet a potential alternative standard with a 98th percentile form. For example, all of the counties listed in this table are not likely to meet a 98th percentile standard with a level of 65 µg/m^3.

Table 9: Counties with monitors that do not meet the current standard but are likely to meet a potential alternative standard with a 98th percentile form (based on air quality from 2007 to 2009)#

98th Percentile Standard Level	PM region name	State	County	CBSA name
65 µg/m^3	Northwest	CA	Shasta	Redding, CA
		CA	Siskiyou	
		CO	Archuleta	
		CO	La Plata	Durango, CO
	Southern California	CA	Orange	Los Angeles-Long Beach-Santa Ana, CA
		CA	Santa Barbara	Santa Barbara-Santa Maria-Goleta, CA
70 µg/m^3*	Southern California	CA	Ventura	Oxnard-Thousand Oaks-Ventura, CA
75 µg/m^3*	Northwest	CA	Yolo	Sacramento--Arden-Arcade--Roseville, CA
		CO	Alamosa	
80 µg/m^3*	Southeast	OK	Tulsa	Tulsa, OK
	Southern California	CA	Los Angeles	Los Angeles-Long Beach-Santa Ana, CA
	Upper Midwest	CO	Prowers	
85 µg/m^3*	Northwest	CO	Garfield	
	Southwest	AZ	Cochise	Sierra Vista-Douglas, AZ

#PM_{10} air quality in these counties is characterized in more detail in the appendix to this memo (see below).
*Listed counties are those additional counties (i.e., in addition to the counties listed for lower 98th percentile standard levels) that are not likely to meet the current standard but meet a potential alternative standard with a 98th percentile form. For example, all counties listed in this table are likely to meet a 98th percentile standard with a level of 85 µg/m^3.

References

Schmidt, M., Jenkins S.M. (2010). Analyses of PM_{10} and $PM_{10-2.5}$ Data for the PM NAAQS Review. Memorandum to PM NAAQS review docket EPA-HQ-OAR-2007-0492.

Appendix: PM_{10} Air Quality Distributions

Table A-1: Average 24-Hour PM_{10} concentrations in counties with monitors that meet the current PM_{10} standard but are not likely to meet a potential alternative standard with a 98th percentile form and a level of 75 µg/m^3 (2007-2009)

County	3-year average PM_{10} concentration (µg/m^3)*	3-year average of the annual 98th percentile PM_{10} concentration (µg/m^3)*
Fresno	37.3	80.7
San Luis Obispo	24.5	78.7
Stanislaus	28.2	75.7
Tulare	43.2	88.7
Gunnison	28.4	90.0
Routt	24.7	77.7
Madison	33.0	76.0
Cerro Gordo	32.0	82.3
Scott	40.7	93.7
Boyd	31.2	76.7
St. Louis	36.9	97.3
Cass	27.5	79.7
Douglas	36.5	92.3
Washoe	40.0	96.7
Bernalillo	36.5	104.3
Sandoval	42.7	86.0
Cuyahoga	34.8	80.7
Allegheny	31.0	85.7
Pennington	33.5	95.3
Weber	26.5	75.7
Campbell	33.0	90.7
Converse	34.4	93.0
Flathead	28.8	78.0
Average	**33.3**	**85.9**

*Distributions of PM_{10} concentrations for the counties included in Tables A-1 and A-2 are presented below. For the 3-year average of 98th percentile PM_{10} concentrations, we averaged together 98th percentile concentrations for 2007, 2008, and 2009 (labeled "EPA_P98" in the tables below).

Table A-2: Average PM_{10} concentrations in counties with monitors that do not meet the current PM_{10} standard but are likely to meet a potential alternative standard with a 98th percentile form and a level of 75 µg/m^3 (2007-2009)

County	3-year average PM_{10} concentration (µg/m^3)*	3-year average of the annual 98th percentile PM_{10} concentration (µg/m^3)*
Orange	32.8	61.0
Santa Barbara	20.6	54.0
Shasta	17.0	59.0
Siskiyou	16.8	63.3
Ventura	26.1	69.3
Yolo	25.7	74.3
Alamosa	26.9	71.3
Archuleta	23.7	57.3
La Plata	20.7	48.3
Average	**23.4**	**62.0**

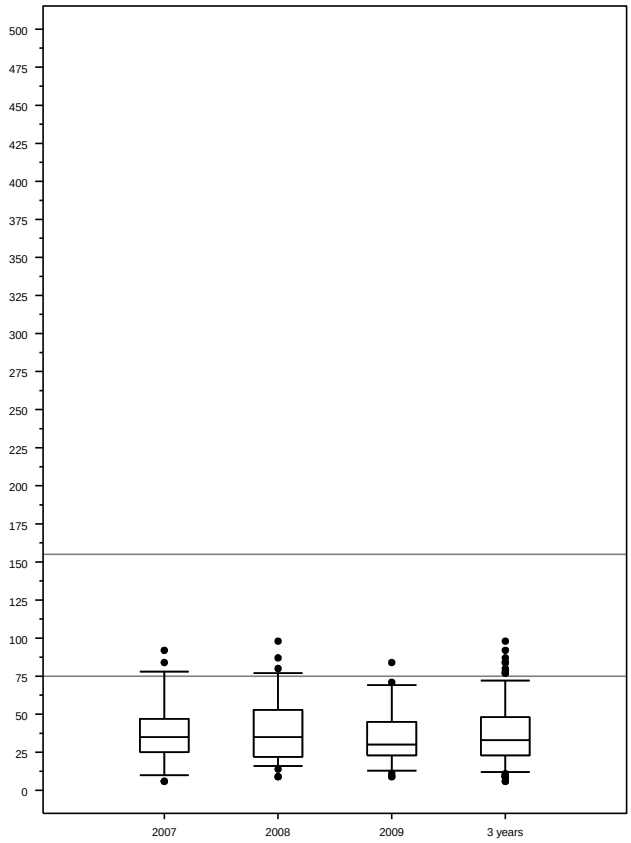
*Distributions of PM_{10} concentrations for the counties included in Tables A-1 and A-2 are presented below. For the 3-year average of 98th percentile PM_{10} concentrations, we averaged together 98th percentile concentrations for 2007, 2008, and 2009 (labeled "EPA_P98" in the tables below).

PM_{10} air quality distributions at monitors in counties that meet the current standard but are not likely to meet a potential alternative standard with a 98th percentile form and a level of 75 µg/m³

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
S CA	CA	Fresno	Fresno, CA	Fresno-Ma	San Joaquin Val	0.0	81	060190007-1	0.0	81

Meets EE-154, violates P98-75

SITE=060190007 POC=1



Site	POC	Statistic	2007	2008	2009	3 yrs
060190007	1	mean	37.66	39.64	34.55	37.26
060190007	1	median	35	35	30	33
060190007	1	n	59	61	62	182
060190007	1	n < 76	55	57	61	173
060190007	1	n 76 - 154	4	4	1	9
060190007	1	n > 154	0	0	0	0
060190007	1	Pct75	47	53	45	48
060190007	1	Pct80	48	55	50	52
060190007	1	Pct85	57	61	51	56
060190007	1	Pct90	70	69	63	67
060190007	1	Pct95	78	77	69	72
060190007	1	Pct96	78	80	69	77
060190007	1	Pct97	84	87	71	80
060190007	1	Pct98	84	87	71	84
060190007	1	Pct99	92	98	84	92
060190007	1	max	92	98	84	98
060190007	1	EPA_P98	84	87	71	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
S CA	CA	San Luis O	San Luis O			0.0	79	060792004-1	0.0	79

Meets EE-154, violates P98-75

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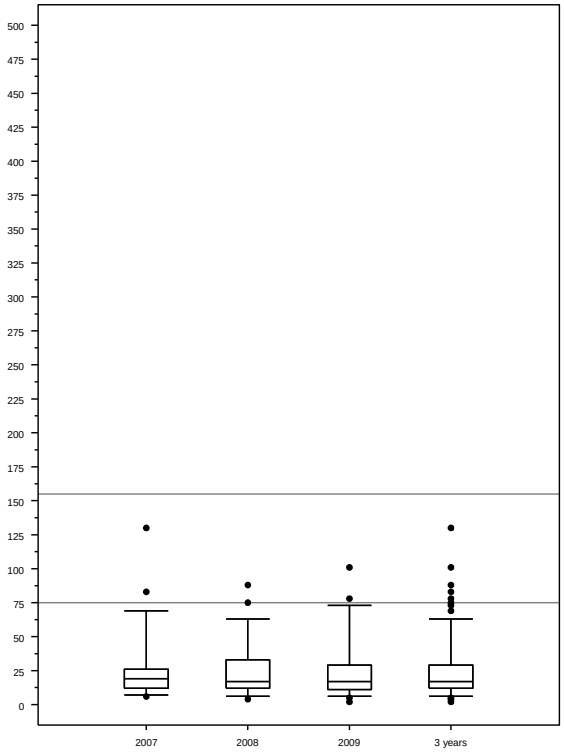

Site	POC	Statistic	2007	2008	2009	3 yrs
060792004	1	mean	24.59	24.09	24.86	24.52
060792004	1	median	19	17	17	17
060792004	1	n	59	56	59	174
060792004	1	n < 76	57	55	57	169
060792004	1	n 76 - 154	2	1	2	5
060792004	1	n > 154	0	0	0	0
060792004	1	Pct75	26	33	29	29
060792004	1	Pct80	29	35	45	35
060792004	1	Pct85	38	41	51	43
060792004	1	Pct90	57	50	56	54
060792004	1	Pct95	69	63	73	63
060792004	1	Pct96	69	63	73	73
060792004	1	Pct97	83	75	78	75
060792004	1	Pct98	83	75	78	83
060792004	1	Pct99	130	88	101	101
060792004	1	max	130	88	101	130
060792004	1	EPA_P98	83	75	78	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	CA	Stanislaus	Modesto,		San Joaquin Val	0.0	76	060990005-3	0.0	76

Meets EE-154, violates P98-75

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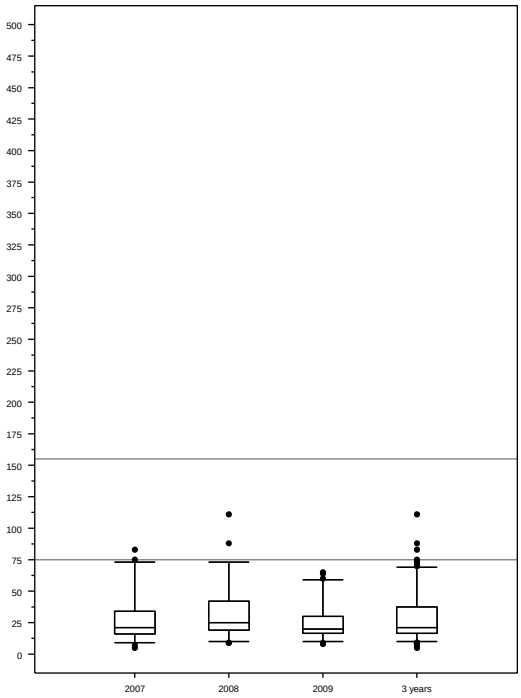

Site	POC	Statistic	2007	2008	2009	3 yrs
060990005	3	mean	26.81	32.28	25.57	28.16
060990005	3	median	21	25	20	21
060990005	3	n	59	57	60	176
060990005	3	n < 76	58	55	60	173
060990005	3	n 76 - 154	1	2	0	3
060990005	3	n > 154	0	0	0	0
060990005	3	Pct75	34	42	30	37.5
060990005	3	Pct80	39	48	36.5	40
060990005	3	Pct85	43	49	39.5	45
060990005	3	Pct90	50	69	51	53
060990005	3	Pct95	73	73	59	69
060990005	3	Pct96	73	73	60	70
060990005	3	Pct97	75	88	64	73
060990005	3	Pct98	75	88	64	75
060990005	3	Pct99	83	111	65	88
060990005	3	max	83	111	65	111
060990005	3	EPA_P98	75	88	64	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
S CA	CA	Tulare	Visalia-Po		San Joaquin Val	0.0	89	061072002-2	0.0	89

Meets EE-154, violates P98-75

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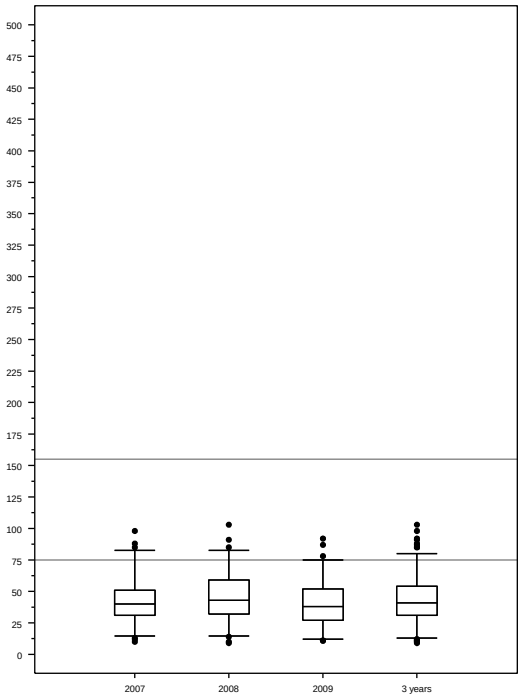

Site	POC	Statistic	2007	2008	2009	3 yrs
061072002	2	mean	42.12	46.35	41.23	43.22
061072002	2	median	40	43	38	41
061072002	2	n	60	60	61	181
061072002	2	n < 76	55	55	58	168
061072002	2	n 76 - 154	5	5	3	13
061072002	2	n > 154	0	0	0	0
061072002	2	Pct75	51	59	52	54
061072002	2	Pct80	54.5	63.5	53	58
061072002	2	Pct85	58	66.5	61	61
061072002	2	Pct90	65.5	72	66	68
061072002	2	Pct95	82.5	82.5	75	80
061072002	2	Pct96	85	85	78	85
061072002	2	Pct97	88	91	87	87
061072002	2	Pct98	88	91	87	91
061072002	2	Pct99	98	103	92	98
061072002	2	max	98	103	92	103
061072002	2	EPA_P98	88	91	87	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	CO	Gunnison				0.3	90	080510004-2	0.0	90

Meets EE-154, violates P98-75

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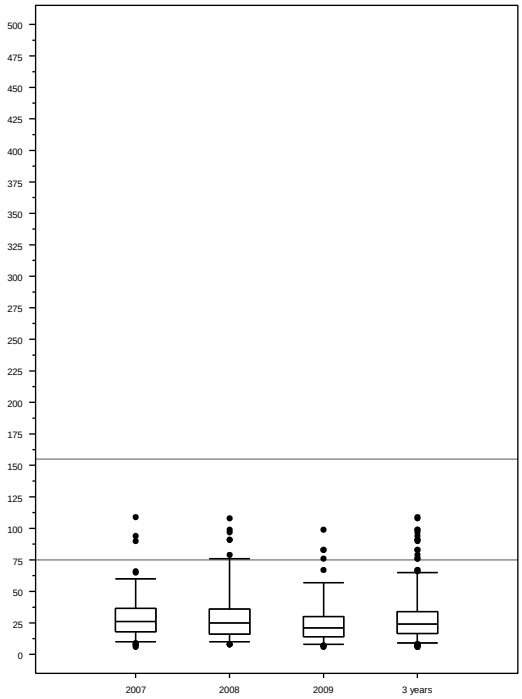

Site	POC	Statistic	2007	2008	2009	3 yrs
080510004	2	mean	29.59	30.34	25.1	28.36
080510004	2	median	26	25	21	24
080510004	2	n	116	122	118	356
080510004	2	n < 76	113	115	114	342
080510004	2	n 76 - 154	3	7	4	14
080510004	2	n > 154	0	0	0	0
080510004	2	Pct75	36.5	36	30	34
080510004	2	Pct80	39	43	33	38
080510004	2	Pct85	46	48	38	44
080510004	2	Pct90	49	58	42	51
080510004	2	Pct95	60	76	57	65
080510004	2	Pct96	65	91	67	67
080510004	2	Pct97	66	91	76	83
080510004	2	Pct98	90	97	83	91
080510004	2	Pct99	94	99	83	99
080510004	2	max	109	108	99	109
080510004	2	EPA_P98	90	97	83	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P90	Monitor	Monitor DV EE	Monitor DV P90
NW	CO	Routt			Steamboat Sprir	0.0	78	081070003-2	0.0	78

Meets EE-154, violates P98-75

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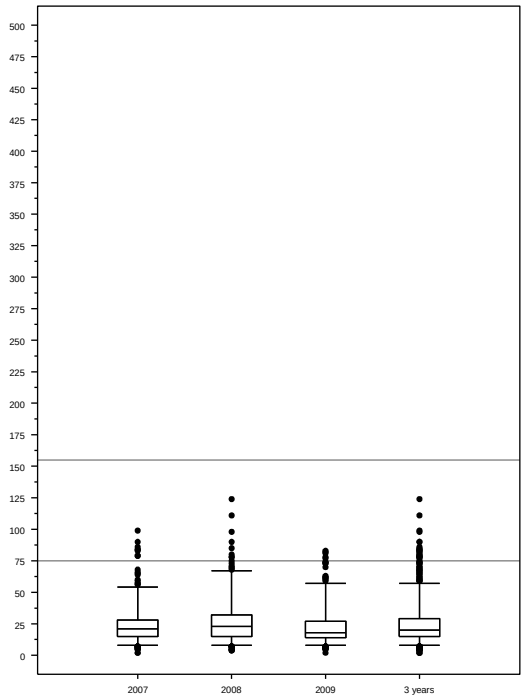
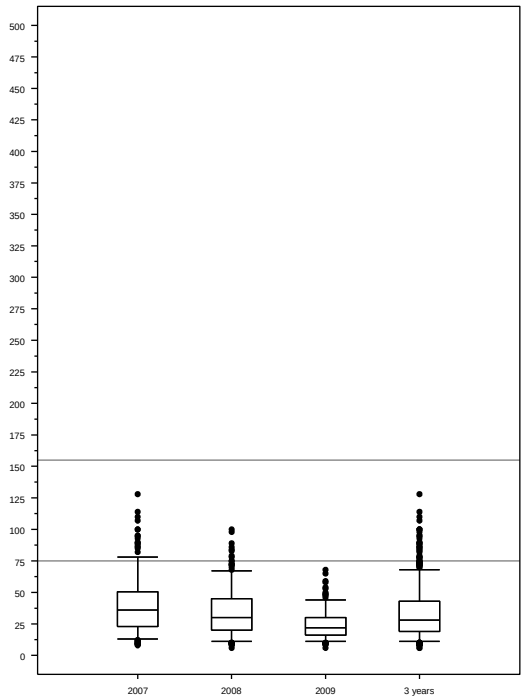


Site	POC	Statistic	2007	2008	2009	3 yrs
081070003	2	mean	23.93	26.91	23.51	24.67
081070003	2	median	21	23	18	20
081070003	2	n	357	298	350	1005
081070003	2	n < 76	349	290	345	984
081070003	2	n 76 - 154	8	8	5	21
081070003	2	n > 154	0	0	0	0
081070003	2	Pct75	28	32	27	29
081070003	2	Pct80	30	36	32	32
081070003	2	Pct85	32	40	42	37
081070003	2	Pct90	39	49	49.5	47
081070003	2	Pct95	54	67	57	57
081070003	2	Pct96	57	70	60.5	62
081070003	2	Pct97	65	75	63	69
081070003	2	Pct98	79	80	73.5	77
081070003	2	Pct99	84	98	78	83
081070003	2	max	99	124	83	124
081070003	2	EPA_P98	79	80	74	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P90	Monitor	Monitor DV EE	Monitor DV P90
Ind MW	IL	Madison	St. Louis, M	St. Louis-S	Granite City	0.0	76	171191007-4	0.0	76

Meets EE-154, violates P98-75

SITE=171191007 POC=4

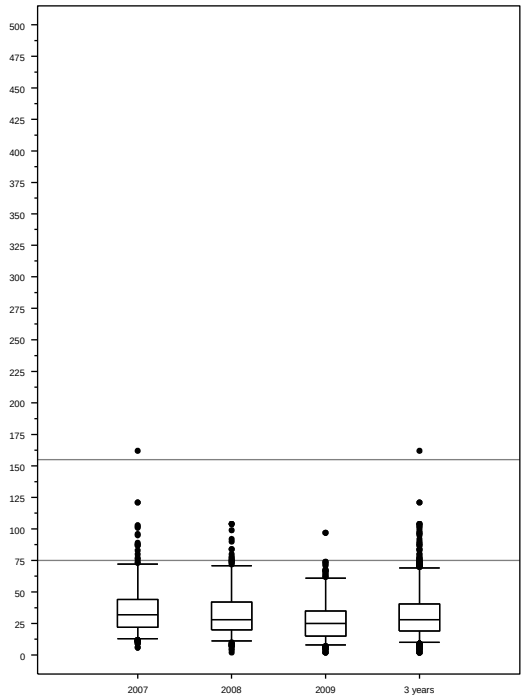


Site	POC	Statistic	2007	2008	2009	3 yrs
171191007	4	mean	39.27	33.26	24.23	32.99
171191007	4	median	36	30	22	28
171191007	4	n	324	336	243	903
171191007	4	n < 76	305	328	243	876
171191007	4	n 76 - 154	19	8	0	27
171191007	4	n > 154	0	0	0	0
171191007	4	Pct75	50.5	45	30	43
171191007	4	Pct80	53	47	33	48
171191007	4	Pct85	58	50	35	51
171191007	4	Pct90	67	57	38	56
171191007	4	Pct95	78	67	44	68
171191007	4	Pct96	87	72	48	72
171191007	4	Pct97	90	73	49	75
171191007	4	Pct98	95	79	54	85
171191007	4	Pct99	107	86	59	95
171191007	4	max	128	100	68	128
171191007	4	EPA_P98	95	79	54	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Up MW	IA	Cerro Gor	Mason Cit			0.8	82	190330018-1	0.3	82

Meets EE-154, violates P98-75

SITE=190330018 POC=1

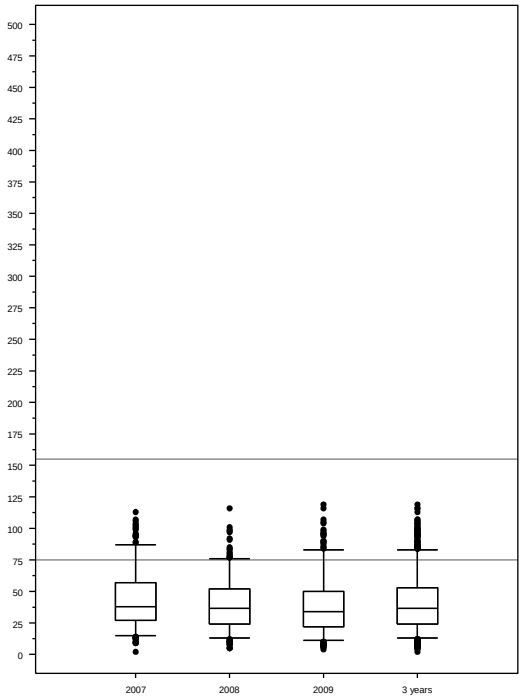


Site	POC	Statistic	2007	2008	2009	3 yrs
190330018	1	mean	35.92	32.52	27.43	31.96
190330018	1	median	32	28	25	28
190330018	1	n	365	366	365	1096
190330018	1	n < 76	349	354	363	1066
190330018	1	n 76 - 154	15	12	2	29
190330018	1	n > 154	1	0	0	1
190330018	1	Pct75	44	42	35	40.5
190330018	1	Pct80	47	46	38.5	45
190330018	1	Pct85	53	50	44	49
190330018	1	Pct90	61	59	50	56
190330018	1	Pct95	72	71	61	69
190330018	1	Pct96	77	74	63	71
190330018	1	Pct97	87	77	67	74
190330018	1	Pct98	95	84	68	84
190330018	1	Pct99	103	99	74	97
190330018	1	max	162	104	97	162
190330018	1	EPA_P98	95	84	68	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Ind MW	IA	Scott	Davenpor			0.0	94	191630017-2	0.0	94

Meets EE-154, violates P98-75

SITE=191630017 POC=2

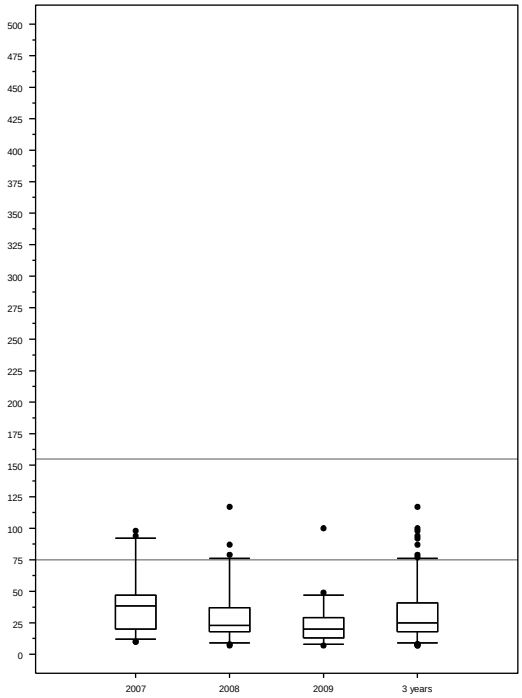


Site	POC	Statistic	2007	2008	2009	3 yrs
191630017	2	mean	44.02	39.33	38.61	40.65
191630017	2	median	38	36.5	34	36.5
191630017	2	n	363	364	365	1092
191630017	2	n < 76	317	344	337	998
191630017	2	n 76 - 154	46	20	28	94
191630017	2	n > 154	0	0	0	0
191630017	2	Pct75	57	52	50	53
191630017	2	Pct80	64	55	55.5	58
191630017	2	Pct85	71	60	60	63
191630017	2	Pct90	78	67	65	72
191630017	2	Pct95	87	76	83	83
191630017	2	Pct96	93	77	88	86
191630017	2	Pct97	95	81	94	91
191630017	2	Pct98	100	85	96	96
191630017	2	Pct99	104	98	105	103
191630017	2	max	113	116	119	119
191630017	2	EPA_P98	100	85	96	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Ind MW	KY	Boyd	Huntingtor			0.0	77	210190002-1	0.0	77

Meets EE-154, violates P98-75

SITE=210190002 POC=1

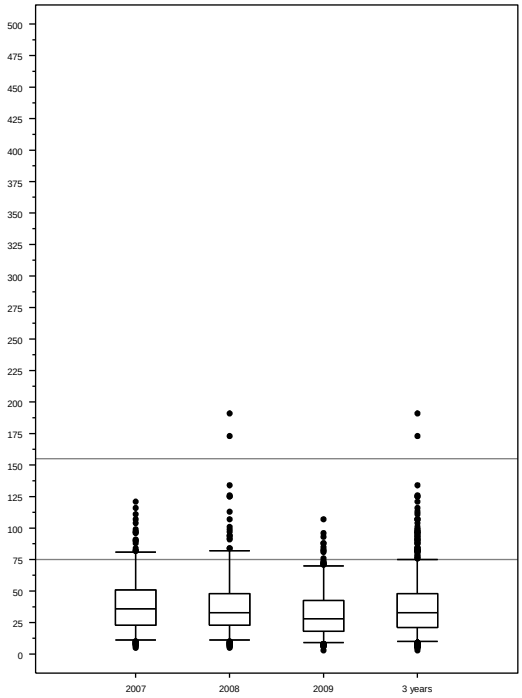


Site	POC	Statistic	2007	2008	2009	3 yrs
210190002	1	mean	38.95	30.56	24.02	31.2
210190002	1	median	38.5	23	20	25
210190002	1	n	58	61	57	176
210190002	1	n < 76	54	57	56	167
210190002	1	n 76 - 154	4	4	1	9
210190002	1	n > 154	0	0	0	0
210190002	1	Pct75	47	37	29	41
210190002	1	Pct80	50	39	32	45
210190002	1	Pct85	61	46	37	47
210190002	1	Pct90	69	54	43	54
210190002	1	Pct95	92	76	47	76
210190002	1	Pct96	92	79	47	77
210190002	1	Pct97	94	87	49	87
210190002	1	Pct98	94	87	49	94
210190002	1	Pct99	98	117	100	100
210190002	1	max	98	117	100	117
210190002	1	EPA_P98	94	87	49	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Ind MW	MO	St. Louis C	St. Louis, M	St. Louis-S		0.7	97	295100093-1	0.7	97

Meets EE-154, violates P98-75

SITE=295100093 POC=1

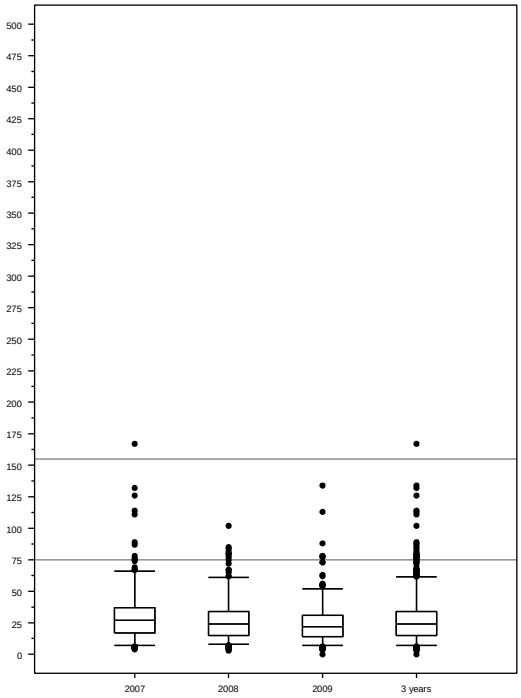


Site	POC	Statistic	2007	2008	2009	3 yrs
295100093	1	mean	39.62	38.49	32.6	36.85
295100093	1	median	36	33	28	33
295100093	1	n	354	345	364	1063
295100093	1	n < 76	335	324	354	1013
295100093	1	n 76 - 154	19	19	10	48
295100093	1	n > 154	0	2	0	2
295100093	1	Pct75	51	48	42.5	48
295100093	1	Pct80	55	54	46	52
295100093	1	Pct85	61	59	51	58
295100093	1	Pct90	67	67	61	65
295100093	1	Pct95	81	82	70	75
295100093	1	Pct96	82	92	72	82
295100093	1	Pct97	90	97	74	88
295100093	1	Pct98	97	113	82	96
295100093	1	Pct99	107	126	88	107
295100093	1	max	121	191	107	191
295100093	1	EPA_P98	97	113	82	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Up MW	NE	Cass	Omaha-Co	Omaha-Co		0.3	80	310250009-1	0.3	80

Meets EE-154, violates P98-75

SITE=310250009 POC=1

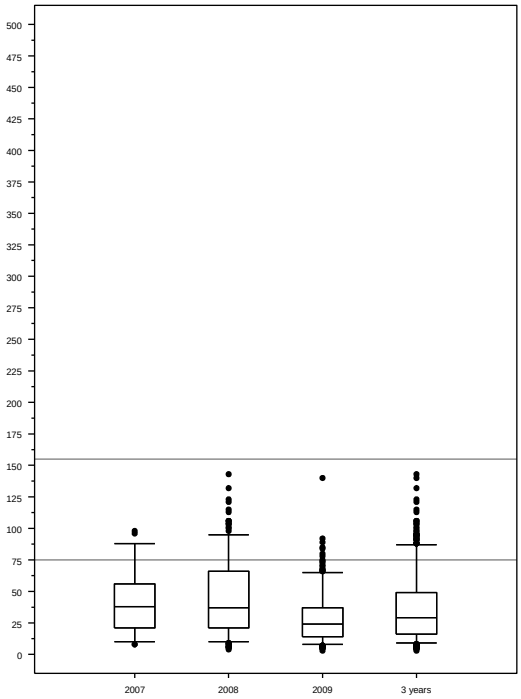


Site	POC	Statistic	2007	2008	2009	3 yrs
310250009	1	mean	30.27	27.22	24.93	27.52
310250009	1	median	27	24	22	24
310250009	1	n	339	316	325	980
310250009	1	n < 76	330	308	319	957
310250009	1	n 76 - 154	8	8	6	22
310250009	1	n > 154	1	0	0	1
310250009	1	Pct75	37	34	31	34
310250009	1	Pct80	42	37	34	37
310250009	1	Pct85	47	42	38	42
310250009	1	Pct90	53	49	43	49
310250009	1	Pct95	66	61	52	61.5
310250009	1	Pct96	67	65	55	64
310250009	1	Pct97	74	72	62	69
310250009	1	Pct98	87	79	73	78
310250009	1	Pct99	114	82	78	88
310250009	1	max	167	102	134	167
310250009	1	EPA_P98	87	79	73	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Up MW	NE	Douglas	Omaha-Co	Omaha-Co		0.0	92	310550045-1	0.0	92

Meets EE-154, violates P98-75

SITE=310550045 POC=1

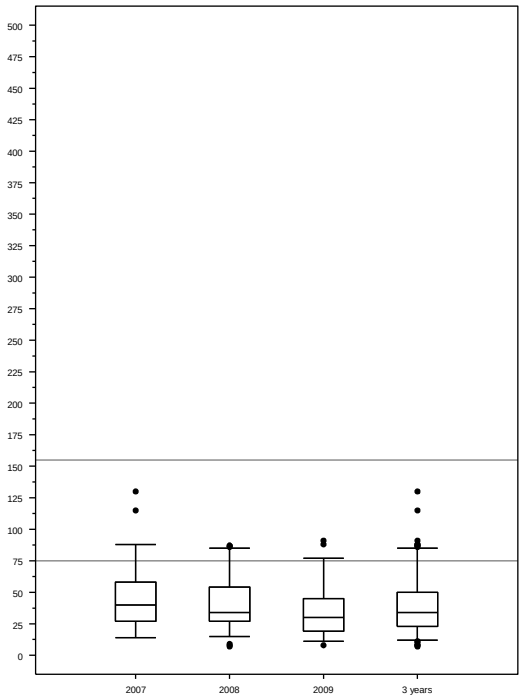


Site	POC	Statistic	2007	2008	2009	3 yrs
310550045	1	mean	40.62	44.43	28.18	36.52
310550045	1	median	38	37	24	29
310550045	1	n	58	355	365	778
310550045	1	n < 76	53	299	358	710
310550045	1	n 76 - 154	5	56	7	68
310550045	1	n > 154	0	0	0	0
310550045	1	Pct75	56	66	37	49
310550045	1	Pct80	67	71	40	58
310550045	1	Pct85	72	76	44	66
310550045	1	Pct90	75	86	51	73
310550045	1	Pct95	88	95	65	87
310550045	1	Pct96	88	98	67	91
310550045	1	Pct97	96	104	71	95
310550045	1	Pct98	96	106	75	98
310550045	1	Pct99	98	121	85	106
310550045	1	max	98	143	140	143
310550045	1	EPA_P98	96	106	75	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	NV	Washoe	Reno-Spa	Reno-Spa	Reno	0.0	97	320310022-1	0.0	97

Meets EE-154, violates P98-75

SITE=320310022 POC=1

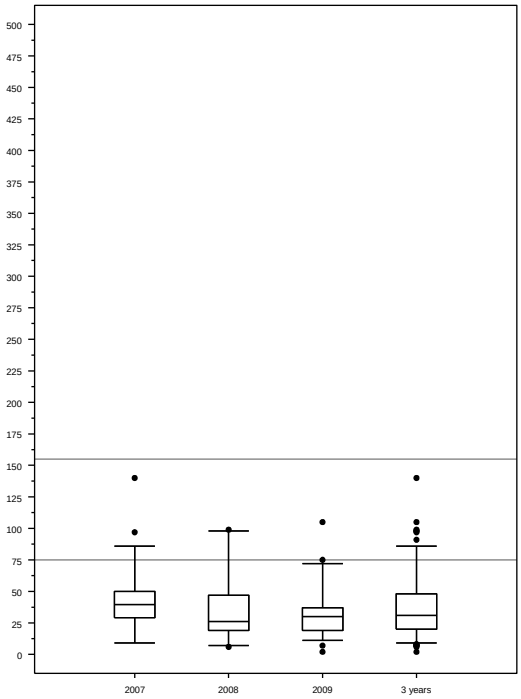


Site	POC	Statistic	2007	2008	2009	3 yrs
320310022	1	mean	43.97	41.11	34.9	40.03
320310022	1	median	40	34	30	34
320310022	1	n	59	61	58	178
320310022	1	n < 76	53	55	55	163
320310022	1	n 76 - 154	6	6	3	15
320310022	1	n > 154	0	0	0	0
320310022	1	Pct75	58	54	45	50
320310022	1	Pct80	64	61	50	58
320310022	1	Pct85	67	65	57	64
320310022	1	Pct90	76	73	67	71
320310022	1	Pct95	88	85	77	85
320310022	1	Pct96	88	86	77	86
320310022	1	Pct97	115	87	88	87
320310022	1	Pct98	115	87	88	88
320310022	1	Pct99	130	87	91	115
320310022	1	max	130	87	91	130
320310022	1	EPA_P98	115	87	88	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
SW	NM	Bernalillo	Albuquerq			1.0	104	350010026-2	0.0	104

Meets EE-154, violates P98-75

SITE=350010026 POC=2

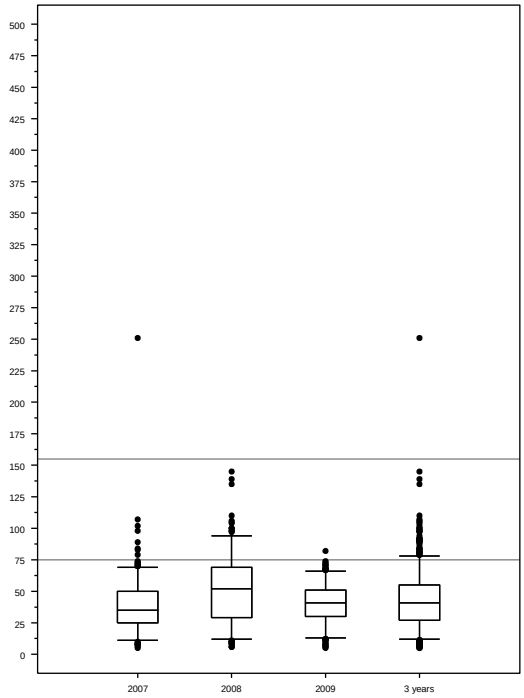


Site	POC	Statistic	2007	2008	2009	3 yrs
350010026	2	mean	43.06	33.37	33.45	36.48
350010026	2	median	39.5	26	30	31
350010026	2	n	50	54	53	157
350010026	2	n < 76	45	50	52	147
350010026	2	n 76 - 154	5	4	1	10
350010026	2	n > 154	0	0	0	0
350010026	2	Pct75	50	47	37	48
350010026	2	Pct80	57	53	52	52
350010026	2	Pct85	67	54	58	58
350010026	2	Pct90	77	60	64	67
350010026	2	Pct95	86	98	72	86
350010026	2	Pct96	91.5	98	72	91
350010026	2	Pct97	97	98	75	98
350010026	2	Pct98	118.5	98	75	98
350010026	2	Pct99	140	99	105	105
350010026	2	max	140	99	105	140
350010026	2	EPA_P98	140	98	75	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
SW	NM	Sandoval	Albuquerq			0.3	86	350439004-1	0.3	86

Meets EE-154, violates P98-75

SITE=350439004 POC=1

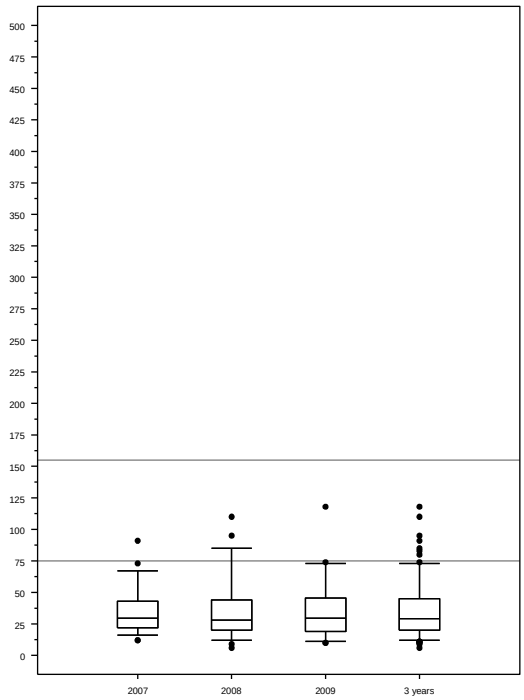


Site	POC	Statistic	2007	2008	2009	3 yrs
350439004	1	mean	38.22	51.09	40.46	42.67
350439004	1	median	35	52	41	41
350439004	1	n	347	266	315	928
350439004	1	n < 76	339	223	314	876
350439004	1	n 76 - 154	7	43	1	51
350439004	1	n > 154	1	0	0	1
350439004	1	Pct75	50	69	51	55
350439004	1	Pct80	53	72	53	60
350439004	1	Pct85	56	78	58	64
350439004	1	Pct90	62	84	62	69
350439004	1	Pct95	69	94	66	78
350439004	1	Pct96	71	98	67	81
350439004	1	Pct97	73	100	68	89
350439004	1	Pct98	83	105	70	92
350439004	1	Pct99	98	135	72	102
350439004	1	max	251	145	82	251
350439004	1	EPA_P98	83	105	70	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Ind MW	OH	Cuyahoga	Cleveland	Cleveland	Cuyahoga Count	0.0	81	390350065-1	0.0	81

Meets EE-154, violates P98-75

SITE=390350065 POC=1

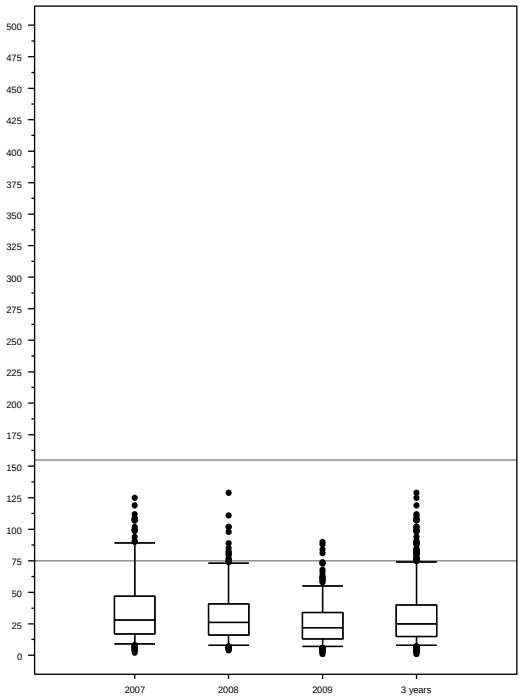


Site	POC	Statistic	2007	2008	2009	3 yrs
390350065	1	mean	34.1	35.96	34.21	34.76
390350065	1	median	29.5	28	29.5	29
390350065	1	n	58	57	56	171
390350065	1	n < 76	57	52	55	164
390350065	1	n 76 - 154	1	5	1	7
390350065	1	n > 154	0	0	0	0
390350065	1	Pct75	43	44	45.5	45
390350065	1	Pct80	46	57	48	48
390350065	1	Pct85	51	62	51	56
390350065	1	Pct90	61	71	59	61
390350065	1	Pct95	67	85	73	73
390350065	1	Pct96	67	85	73	80
390350065	1	Pct97	73	95	74	83
390350065	1	Pct98	73	95	74	91
390350065	1	Pct99	91	110	118	110
390350065	1	max	91	110	118	118
390350065	1	EPA_P98	73	95	74	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Ind MW	PA	Allegheny	Pittsburgh,	Pittsburgh	Clairton	0.0	86	420037004-5	0.0	86

Meets EE-154, violates P98-75

SITE=420037004 POC=5

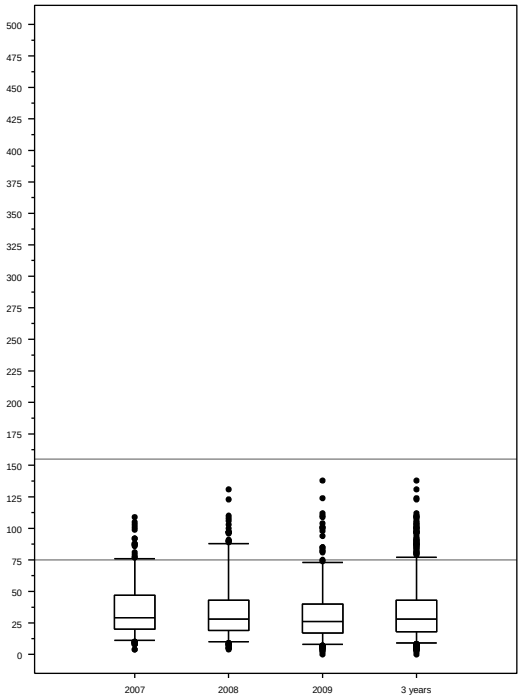


Site	POC	Statistic	2007	2008	2009	3 yrs
420037004	5	mean	35.51	31.99	25.49	31
420037004	5	median	28	26	22	25
420037004	5	n	358	359	358	1075
420037004	5	n < 76	326	346	354	1026
420037004	5	n 76 - 154	32	13	4	49
420037004	5	n > 154	0	0	0	0
420037004	5	Pct75	47	41	34	40
420037004	5	Pct80	54	46	38	45
420037004	5	Pct85	62	53	42	52
420037004	5	Pct90	73	66	47	62
420037004	5	Pct95	89	73	55	74
420037004	5	Pct96	91	75	59	78
420037004	5	Pct97	99	80	62	83
420037004	5	Pct98	107	82	68	90
420037004	5	Pct99	109	102	81	102
420037004	5	max	125	129	90	129
420037004	5	EPA_P98	107	82	68	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
Up MW	SD	Penningto	Rapid City			0.0	95	461030020-3	0.0	95

Meets EE-154, violates P98-75

SITE=461030020 POC=3

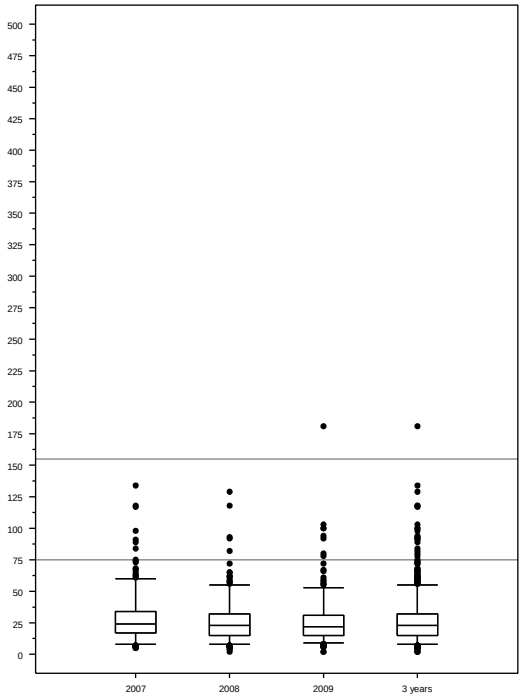


Site	POC	Statistic	2007	2008	2009	3 yrs
461030020	3	mean	35.03	34.09	31.42	33.5
461030020	3	median	29	28	26	28
461030020	3	n	360	363	363	1086
461030020	3	n < 76	341	339	347	1027
461030020	3	n 76 - 154	19	24	16	59
461030020	3	n > 154	0	0	0	0
461030020	3	Pct75	47	43	40	43
461030020	3	Pct80	53	47	46	47
461030020	3	Pct85	57	54	49	54
461030020	3	Pct90	64	66	59	63
461030020	3	Pct95	76	88	73	77
461030020	3	Pct96	77	90	82	85
461030020	3	Pct97	87	97	94	90
461030020	3	Pct98	88	97	101	98
461030020	3	Pct99	101	108	110	106
461030020	3	max	109	131	138	138
461030020	3	EPA_P98	88	97	101	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	UT	Weber	Ogden-Cl	Salt Lake	Ogden	0.3	76	490570002-1	0.3	76

Meets EE-154, violates P98-75

SITE=490570002 POC=1

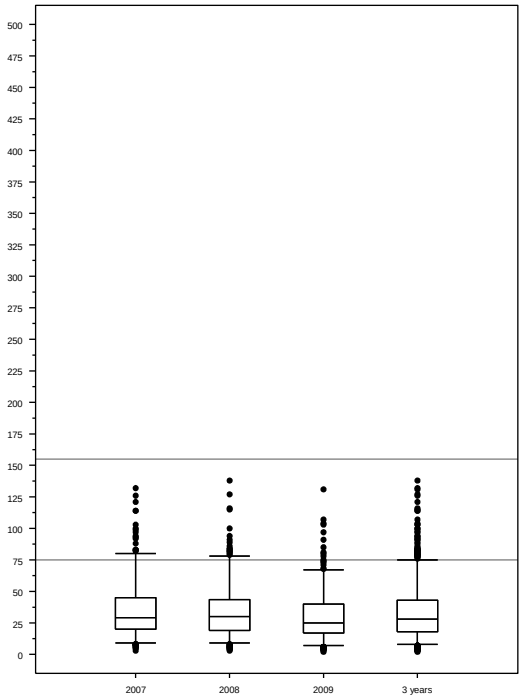


Site	POC	Statistic	2007	2008	2009	3 yrs
490570002	1	mean	28.08	25.66	25.7	26.47
490570002	1	median	24	23	22	23
490570002	1	n	348	352	359	1059
490570002	1	n < 76	341	347	351	1039
490570002	1	n 76 - 154	7	5	7	19
490570002	1	n > 154	0	0	1	1
490570002	1	Pct75	34	32	31	32
490570002	1	Pct80	39	35	34	35
490570002	1	Pct85	44	38	38	39
490570002	1	Pct90	50	40	44	46
490570002	1	Pct95	60	55	53	55
490570002	1	Pct96	64	57	56	60
490570002	1	Pct97	68	62	66	65
490570002	1	Pct98	84	65	78	74
490570002	1	Pct99	98	92	100	94
490570002	1	max	134	129	181	181
490570002	1	EPA_P98	84	65	78	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	WY	Campbell	Gillette, W			1.0	91	560050869-2	0.0	91

Meets EE-154, violates P98-75

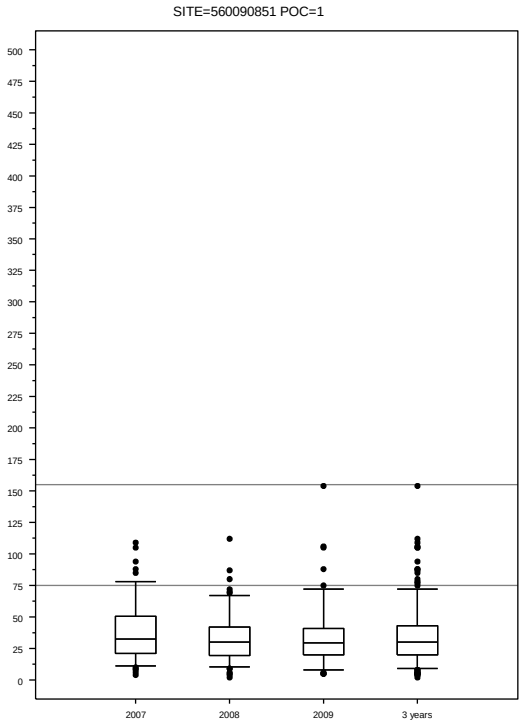
SITE=560050869 POC=2



Site	POC	Statistic	2007	2008	2009	3 yrs
560050869	2	mean	35.05	33.9	30.08	32.99
560050869	2	median	29	30	25	28
560050869	2	n	342	348	351	1041
560050869	2	n < 76	318	330	341	989
560050869	2	n 76 - 154	24	18	10	52
560050869	2	n > 154	0	0	0	0
560050869	2	Pct75	45	43.5	40	43
560050869	2	Pct80	50	50	45	47
560050869	2	Pct85	56	53	50	53
560050869	2	Pct90	64	63	56	61
560050869	2	Pct95	80	78	67	75
560050869	2	Pct96	83	82	68	80
560050869	2	Pct97	93	84	75	83
560050869	2	Pct98	100	91	81	94
560050869	2	Pct99	114	115	103	107
560050869	2	max	132	138	131	138
560050869	2	EPA_P98	100	91	81	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	WY	Converse				0.0	93	560090851-1	0.0	93

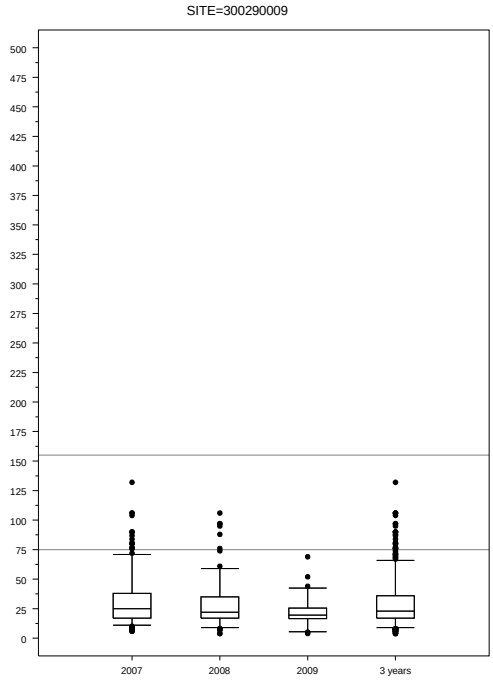
Meets EE-154, violates P98-75



Site	POC	Statistic	2007	2008	2009	3 yrs
560090851	1	mean	37.62	32.75	33.35	34.44
560090851	1	median	32.5	30	29.5	30
560090851	1	n	104	120	118	342
560090851	1	n < 76	97	117	114	328
560090851	1	n 76 - 154	7	3	4	14
560090851	1	n > 154	0	0	0	0
560090851	1	Pct75	50.5	42	41	43
560090851	1	Pct80	56	44	43	46
560090851	1	Pct85	63	47.5	47	54
560090851	1	Pct90	67	57	68	64
560090851	1	Pct95	78	67	72	72
560090851	1	Pct96	85	70	75	77
560090851	1	Pct97	88	72	88	85
560090851	1	Pct98	94	80	105	94
560090851	1	Pct99	105	87	106	106
560090851	1	max	109	112	154	154
560090851	1	EPA_P98	94	80	105	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	MT	Flathead	Kalispell, M		Whitefish	0.0	78	30029009-1/2	0.0	78

Meets EE-154, violates P98-75



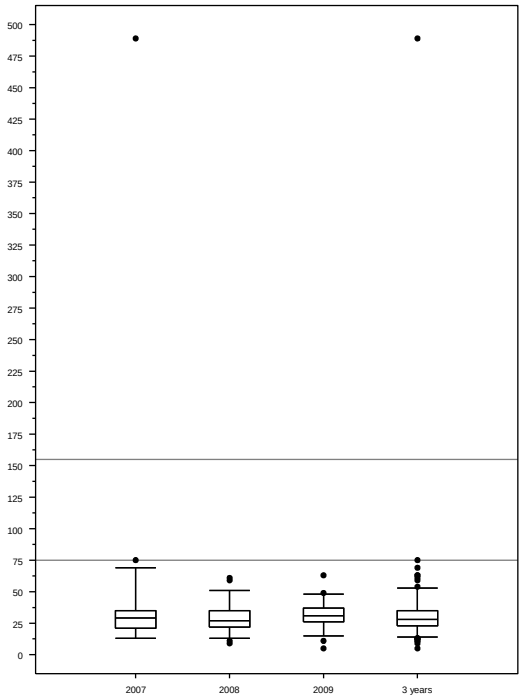
Site	Statistic	2007	2008	2009	3 yrs
300290009	mean	30.3894	27.8593	22.0500	28.7597
300290009	median	25	22	19.5	23
300290009	n	357	199	60	616
300290009	n < 76	342	193	60	595
300290009	n 76 - 154	15	6	0	21
300290009	n > 154	0	0	0	0
300290009	Pct75	38	35	25.5	36
300290009	Pct80	42	39	29	40
300290009	Pct85	49	41	33	44
300290009	Pct90	55	48	36.5	52
300290009	Pct95	71	59	42.5	66
300290009	Pct96	76	61	44	71
300290009	Pct97	80	76	52	76
300290009	Pct98	87	95	52	87
300290009	Pct99	104	97	69	97
300290009	max	132	106	69	132
300290009	EPA_P98	87	95	52	78

PM_{10} air quality distributions at monitors in counties that do not meet the current standard but are likely to meet a potential alternative standard with a 98th percentile form and a level of 75 µg/m³

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
S CA	CA	Orange	Los Angel	Los Angel	South Coast Air B	2.0	61	060590007-1	2.0	61

Violates EE-154, meets P98-75

SITE=060590007 POC=1

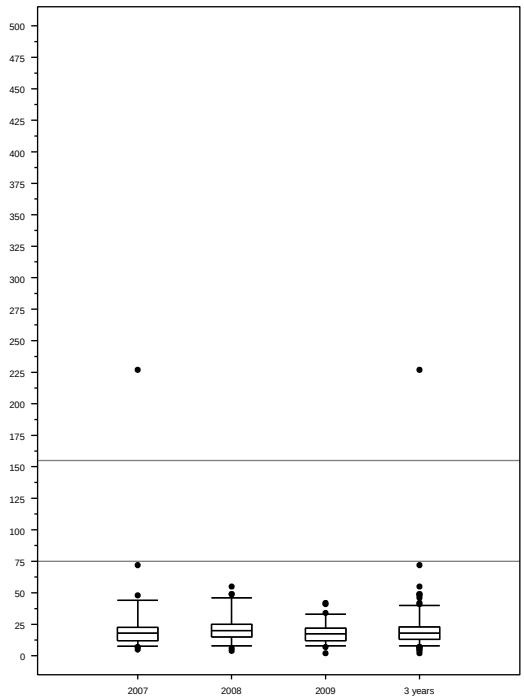


Site	POC	Statistic	2007	2008	2009	3 yrs
060590007	1	mean	38.69	28.64	30.79	32.76
060590007	1	median	29	27	31	28
060590007	1	n	59	58	56	173
060590007	1	n < 76	58	58	56	172
060590007	1	n 76 - 154	0	0	0	0
060590007	1	n > 154	1	0	0	1
060590007	1	Pct75	35	35	37	35
060590007	1	Pct80	39	36	39	39
060590007	1	Pct85	48	42	40	42
060590007	1	Pct90	53	45	43	46
060590007	1	Pct95	69	51	48	53
060590007	1	Pct96	69	51	48	59
060590007	1	Pct97	75	59	49	61
060590007	1	Pct98	75	59	49	63
060590007	1	Pct99	489	61	63	75
060590007	1	max	489	61	63	489
060590007	1	EPA_P98	75	59	49	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
S CA	CA	Santa Bar	Santa Bar			2.2	54	060830008-1	2.0	54

Violates EE-154, meets P98-75

SITE=060830008 POC=1

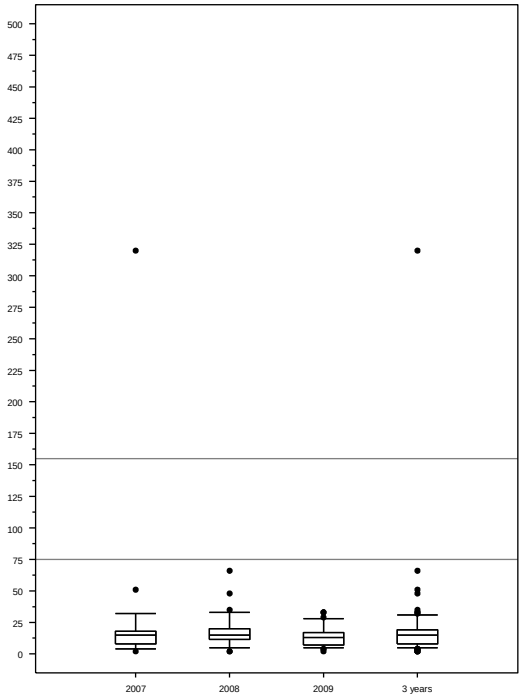


Site	POC	Statistic	2007	2008	2009	3 yrs
060830008	1	mean	22.48	21.21	18.16	20.6
060830008	1	median	18	20	17.5	18
060830008	1	n	60	61	62	183
060830008	1	n < 76	59	61	62	182
060830008	1	n 76 - 154	0	0	0	0
060830008	1	n > 154	1	0	0	1
060830008	1	Pct75	22.5	25	22	23
060830008	1	Pct80	24.5	25	22	25
060830008	1	Pct85	25.5	27	26	26
060830008	1	Pct90	32	33	30	31
060830008	1	Pct95	44	46	33	40
060830008	1	Pct96	48	49	34	42
060830008	1	Pct97	72	49	41	48
060830008	1	Pct98	72	49	41	49
060830008	1	Pct99	227	55	42	72
060830008	1	max	227	55	42	227
060830008	1	EPA_P98	72	49	41	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P90	Monitor	Monitor DV EE	Monitor DV P90
S CA	CA	Santa Bar	Santa Bar			2.2	54	060831025-1	2.2	44

Violates EE-154, meets P98-75

SITE=060831025 POC=1

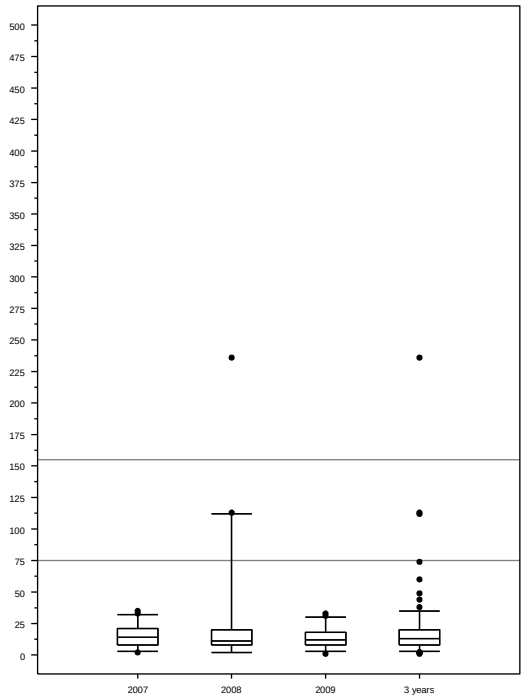


Site	POC	Statistic	2007	2008	2009	3 yrs
060831025	1	mean	19.64	16.78	13.36	16.56
060831025	1	median	15	15	13	15
060831025	1	n	59	60	61	180
060831025	1	n < 76	58	60	61	179
060831025	1	n 76 - 154	0	0	0	0
060831025	1	n > 154	1	0	0	1
060831025	1	Pct75	18	20	17	19
060831025	1	Pct80	19	22	19	20
060831025	1	Pct85	21	24	20	22
060831025	1	Pct90	27	26.5	26	26.5
060831025	1	Pct95	32	33	28	31
060831025	1	Pct96	32	35	29	32
060831025	1	Pct97	51	48	33	33
060831025	1	Pct98	51	48	33	48
060831025	1	Pct99	320	66	33	66
060831025	1	max	320	66	33	320
060831025	1	EPA_P98	51	48	33	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P90	Monitor	Monitor DV EE	Monitor DV P90
NW	CA	Shasta	Redding, (			2.2	63	060890004-2	2.2	59

Violates EE-154, meets P98-75

SITE=060890004 POC=2

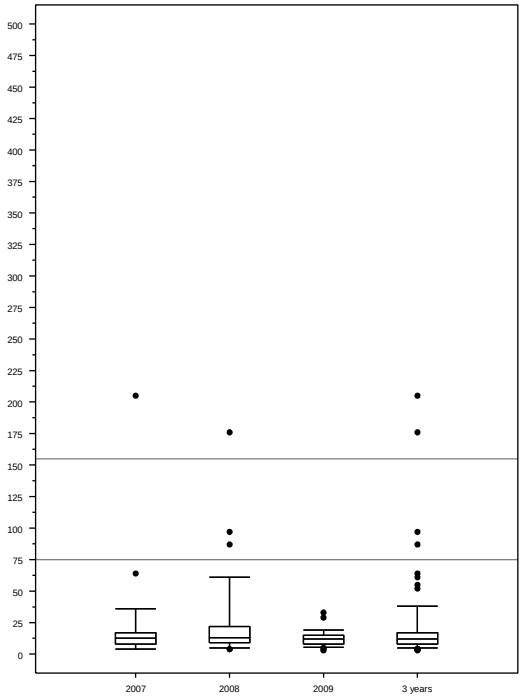


Site	POC	Statistic	2007	2008	2009	3 yrs
060890004	2	mean	15.14	22.67	13.37	17.03
060890004	2	median	14	11	12	13
060890004	2	n	59	58	59	176
060890004	2	n < 76	59	55	59	173
060890004	2	n 76 - 154	0	2	0	2
060890004	2	n > 154	0	1	0	1
060890004	2	Pct75	21	20	18	20
060890004	2	Pct80	22	23	20	21
060890004	2	Pct85	23	35	23	23
060890004	2	Pct90	27	49	23	29
060890004	2	Pct95	32	112	30	35
060890004	2	Pct96	32	112	30	38
060890004	2	Pct97	33	113	31	49
060890004	2	Pct98	33	113	31	74
060890004	2	Pct99	35	236	33	113
060890004	2	max	35	236	33	236
060890004	2	EPA_P98	33	113	31	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	CA	Siskiyou				4.6	63	060932001-2	4.6	63

Violates EE-154, meets P98-75

SITE=060932001 POC=2

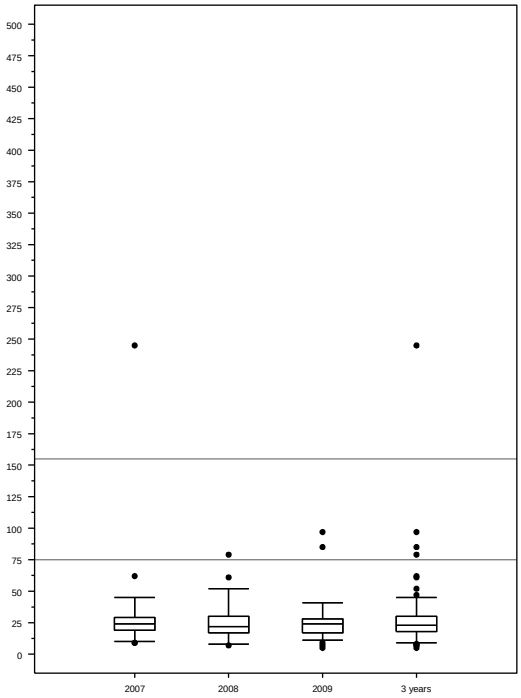


Site	POC	Statistic	2007	2008	2009	3 yrs
060932001	2	mean	16.79	21.57	12.05	16.83
060932001	2	median	12.5	13	12	12
060932001	2	n	58	61	60	179
060932001	2	n < 76	57	58	60	175
060932001	2	n 76 - 154	0	2	0	2
060932001	2	n > 154	1	1	0	2
060932001	2	Pct75	17	22	15	17
060932001	2	Pct80	18	25	16	18
060932001	2	Pct85	21	28	17	21
060932001	2	Pct90	22	38	17.5	26
060932001	2	Pct95	36	61	19	38
060932001	2	Pct96	36	87	19	52
060932001	2	Pct97	64	97	29	61
060932001	2	Pct98	64	97	29	87
060932001	2	Pct99	205	176	33	176
060932001	2	max	205	176	33	205
060932001	2	EPA_P98	64	97	29	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
S CA	CA	Ventura	Oxnard-Th	Los Angel		2.0	69	061113001-1	2.0	69

Violates EE-154, meets P98-75

SITE=061113001 POC=1

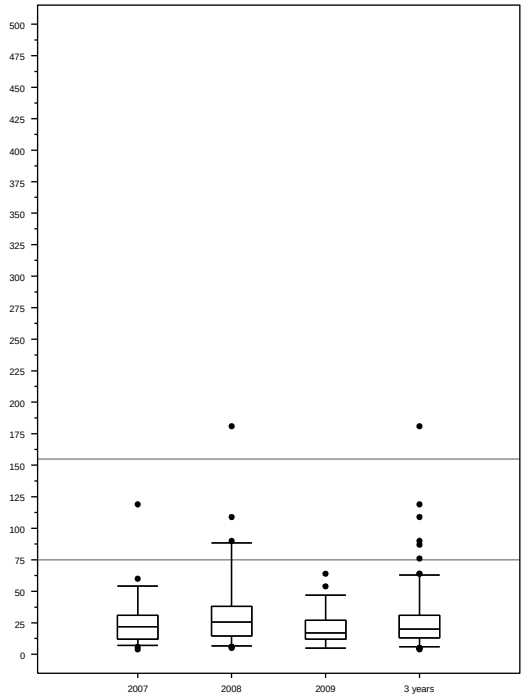


Site	POC	Statistic	2007	2008	2009	3 yrs
061113001	1	mean	28.6	25.19	24.61	26.1
061113001	1	median	24	22	24	23
061113001	1	n	58	59	61	178
061113001	1	n < 76	57	58	59	174
061113001	1	n 76 - 154	0	1	2	3
061113001	1	n > 154	1	0	0	1
061113001	1	Pct75	29	30	28	30
061113001	1	Pct80	30	32	31	31
061113001	1	Pct85	36	36	32	33
061113001	1	Pct90	40	41	33	39
061113001	1	Pct95	45	52	41	45
061113001	1	Pct96	45	52	41	47
061113001	1	Pct97	62	61	85	61
061113001	1	Pct98	62	61	85	79
061113001	1	Pct99	245	79	97	97
061113001	1	max	245	79	97	245
061113001	1	EPA_P98	62	61	85	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	CA	Yolo	Sacramen	Sacramen		2.0	74	061131003-1	2.0	74

Violates EE-154, meets P98-75

SITE=061131003 POC=1

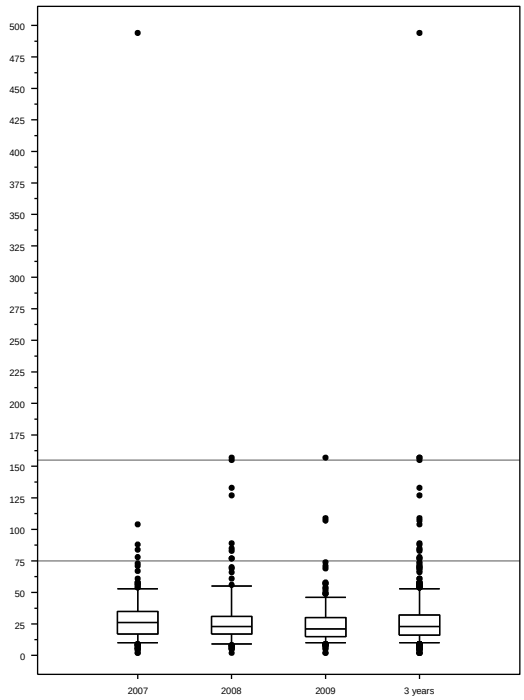


Site	POC	Statistic	2007	2008	2009	3 yrs
061131003	1	mean	24.56	32.35	20.2	25.74
061131003	1	median	22	25.5	17	20
061131003	1	n	59	60	59	178
061131003	1	n < 76	58	55	59	172
061131003	1	n 76 - 154	1	4	0	5
061131003	1	n > 154	0	1	0	1
061131003	1	Pct75	31	38	27	31
061131003	1	Pct80	36	40	30	36
061131003	1	Pct85	38	45.5	31	38
061131003	1	Pct90	40	63.5	36	42
061131003	1	Pct95	54	88.5	47	63
061131003	1	Pct96	54	90	47	64
061131003	1	Pct97	60	109	54	76
061131003	1	Pct98	60	109	54	90
061131003	1	Pct99	119	181	64	119
061131003	1	max	119	181	64	181
061131003	1	EPA_P98	60	109	54	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	CO	Alamosa				1.5	71	080030003-1	1.5	71

Violates EE-154, meets P98-75

SITE=080030003 POC=1

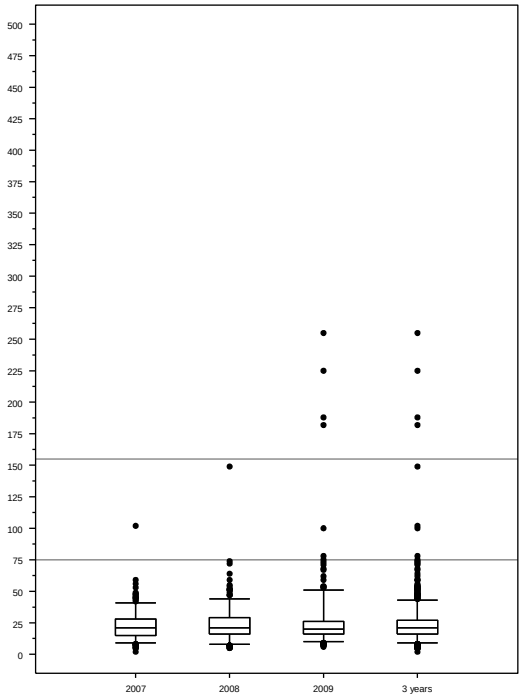


Site	POC	Statistic	2007	2008	2009	3 yrs
080030003	1	mean	28.95	27.19	24.49	26.91
080030003	1	median	26	23	21	23
080030003	1	n	330	294	314	938
080030003	1	n < 76	325	285	311	921
080030003	1	n 76 - 154	4	7	2	13
080030003	1	n > 154	1	2	1	4
080030003	1	Pct75	35	31	30	32
080030003	1	Pct80	38	35	32	35
080030003	1	Pct85	41	37	36	38
080030003	1	Pct90	45	42	40	43
080030003	1	Pct95	53	55	46	53
080030003	1	Pct96	56	66	49	55
080030003	1	Pct97	58	77	54	58
080030003	1	Pct98	71	85	58	73
080030003	1	Pct99	84	133	74	89
080030003	1	max	494	157	157	494
080030003	1	EPA_P98	71	85	58	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	CO	Archuleta			Pagosa Springs	1.4	57	080070001-3	1.4	57

Violates EE-154, meets P98-75

SITE=080070001 POC=3

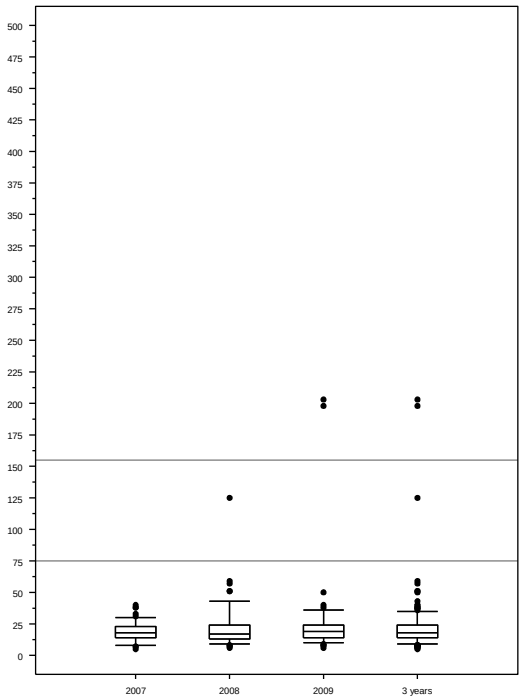


Site	POC	Statistic	2007	2008	2009	3 yrs
080070001	3	mean	22.56	23.61	24.93	23.69
080070001	3	median	21	21	20	21
080070001	3	n	359	354	354	1067
080070001	3	n < 76	358	353	348	1059
080070001	3	n 76 - 154	1	1	2	4
080070001	3	n > 154	0	0	4	4
080070001	3	Pct75	28	29	26	27
080070001	3	Pct80	31	32	27	30
080070001	3	Pct85	33	34	30	33
080070001	3	Pct90	35	37	37	37
080070001	3	Pct95	41	44	51	43
080070001	3	Pct96	42	47	54	47
080070001	3	Pct97	45	51	67	51
080070001	3	Pct98	47	52	73	55
080070001	3	Pct99	53	64	182	73
080070001	3	max	102	149	255	255
080070001	3	EPA_P98	47	52	73	

Reg	State	County	CBSA	CSA	Desig. PM10 Area	County DV EE	County DV P98	Monitor	Monitor DV EE	Monitor DV P98
NW	CO	La Plata	Durango, (			2.2	48	080670004-1	2.2	48

Violates EE-154, meets P98-75

SITE=080670004 POC=1



Site	POC	Statistic	2007	2008	2009	3 yrs
080670004	1	mean	18.61	20.22	23.2	20.66
080670004	1	median	18	17	19	18
080670004	1	n	115	119	113	347
080670004	1	n < 76	115	118	111	344
080670004	1	n 76 - 154	0	1	0	1
080670004	1	n > 154	0	0	2	2
080670004	1	Pct75	23	24	24	24
080670004	1	Pct80	24	25	26	25
080670004	1	Pct85	25	28	29	27
080670004	1	Pct90	27	31	31	29
080670004	1	Pct95	30	43	36	35
080670004	1	Pct96	31	51	38	38
080670004	1	Pct97	33	51	40	40
080670004	1	Pct98	38	57	50	51
080670004	1	Pct99	38	59	198	59
080670004	1	max	40	125	203	203
080670004	1	EPA_P98	38	57	50	