

Salt River Pima-Maricopa Indian Community (SRPMIC)



2015 Ambient Air Monitoring Network Report

June 2016

**Community Development Department (CDD)
Environmental Protection & Natural Resources (EPNR)
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INTRODUCTION

The Salt River Pima-Maricopa Indian Community (SRPMIC) has developed an air monitoring network for measuring ambient concentrations of criteria pollutants and associated meteorological parameters. The operation of these Tribal Monitoring Sites (TMS) follows the United States Environmental Protection Agency (USEPA) State and Local Air Monitoring Sites (SLAMS) guidance recommendations and documents. This Annual Air Monitoring Network Review for 2015 is being submitted by the SRPMIC Community Development Department (CDD) Environmental Protection & Natural Resources (EPNR) Division to the United States Environmental Protection Agency (USEPA) Region 9 as outlined in 40 CFR Part 58.10. In addition, changes made to the network design and special projects conducted during 2015 and a 3-year data summary are included in this document.

AMBIENT MONITORING NETWORK

The purpose of the SRPMIC air-monitoring network is to measure ambient concentrations of the selected criteria pollutants at various locations across the Community. These data are used to assess health and welfare effects and determine pollution source both on and off the Community. The criteria pollutants measured are ozone (O₃), PM₁₀ and PM_{2.5}; the meteorological parameters include wind speed, wind direction, ambient temperature, precipitation, delta temperature, solar radiation, relative humidity, and ambient pressure. The collection of these data began in 2002 and continues to date. The three basic monitoring objectives with six types of monitoring sites and five measuring scales were used to develop the monitoring network.

MONITORING OBJECTIVES

1. Provide air pollution data to the general public in timely manner;
2. Support compliance with ambient air quality standards and emission strategy development; and
3. Support for air pollution research studies.

TYPES OF MONITORING SITE OBJECTIVES

- Determine the highest concentrations expected to occur in the area covered by the network;
- Determine the representative concentrations in areas of high population density;
- Determine general background concentrations levels;
- Determine the impact of significant sources or source categories on air quality;
- Determine the extent of regional pollutant transport among populated areas, and in support of secondary standards; and
- Measure air pollution impacts on visibility, vegetation damage or other welfare-based impacts.

SPATIAL SCALES

This SLAMS (Tribal) network consists of ambient air monitoring sites that provide data to meet the required monitoring objectives. All SRPMIC air monitoring sites have the basic monitoring objective of NAAQS comparison. Monitoring sites generally correspond to a spatial scale identified in 40 CFR Part 58 Appendix D. The goal of locating monitors is to correctly match the spatial scale represented by the sample of monitored air with the spatial scale most appropriate for the monitoring site type, air pollutant to be measured, and the monitoring objective. Spatial scale of representativeness is described in terms of the physical dimension of the air parcel nearest to a monitoring station throughout which actual pollutant concentrations are reasonably similar. Table 1 lists these spatial scales.

Table 1: Spatial Scales

Spatial Scale	Dimension
Microscale	Several meters up to 100 meters
Middle Scale	100 meters up to 0.5 kilometers
Neighborhood Scale	0.5 kilometers to 4.0 kilometers
Urban Scale	4 kilometers to 50 kilometers
Regional Scale	Tens to hundreds of kilometers

40 CFR Part 58 Appendix D also describes the relationship between the site type and the spatial scales that are generally most appropriate for each site type. Table 2 summarizes this relationship.

Table 2: Site Type and Scales

Site Type	Appropriate Siting Scales
Highest Concentration	Micro, Middle, Neighborhood (Sometimes Urban)
Population	Neighborhood, Urban
Source Impact	Micro, Middle, Neighborhood
General / Background	Neighborhood, Urban, Regional
Regional Transport	Urban / Regional
Welfare-related Impact	Urban / Regional

NETWORK DESCRIPTION

Four monitoring sites were operated by the SRPMIC during 2015 at various locations and for various durations and purposes. The site name, abbreviation, AQS Code, Site Type, Site Scale and the Criteria Pollutants monitored are included in Table 3; the location of each site, including the longitude/latitude and major cross-streets is presented in Table 4. The monitoring network meets the monitoring objectives defined in Appendix D to 40 CFR Part 58. A location map of the Community and monitoring site locations are presented in Figures 1 and 2, respectively. Photographs of the sites and associated data summaries are included at the end of this report.

Table 3: SLAMS Summary

Site Name	AQS Code	Site Type	Site Scale	Pollutants
Senior Center (SC)	04-013-7020	Population Exposure	Neighborhood	PM ₁₀ , PM _{2.5} , O ₃
Red Mountain (RM)	04-013-7021	Regional Transport, Max Ozone Conc.	Urban	O ₃
Lehi (LE)	04-013-7022	Population Exposure	Neighborhood	PM ₁₀ , O ₃
High School (HS)	04-013-7024	Population Exposure	Neighborhood	PM ₁₀ , O ₃

Table 4: Site Locations

Site	Latitude	Longitude	Location
SC	33° 29.294'	111° 51.339'	Osborn Rd/ Alma School Rd
RM	33° 30.475'	111° 45.277'	SR87/ Arizona Canal
LE	33° 28.472'	111° 48.303'	Oak Street/Stapley Drive
HS	33° 30.483'	111° 50.268'	Chaparral Rd/ Country Club Dr

INSTRUMENTATION

40 CFR Parts 50 and 53 define Federal Reference Methods (FRMs) and Federal Equivalent Methods (FEMs), which provide precise methodology for quantifying ambient concentrations of air pollutants. FRMs are monitoring methods that are associated with the NAAQS for the pollutant described in the appendices to 40 CFR 50 and determined by EPA to be FRMs. FEMs are alternative monitoring methods that have been designated by EPA as obtaining equivalent results when compared to the FRM, as determined by 40 CFR 53. An additional option for air monitoring agencies is the Approved Regional Method (ARM). This designation requires the applying agency to conduct specific field testing and evaluation demonstrating that the method meets Class III precision and accuracy requirements listed in Subpart C of 40 CFR Part 53.

During 2015, SRPMIC used FRMs to collect filter based PM₁₀ and PM_{2.5} samples and FEMs for continuous PM₁₀ and ozone; a PM_{2.5} FEM is expected to be operational in 2016. SRPMIC does not have approval for any ARMs.

Two types of PM₁₀ monitors were used throughout the monitoring network: 1) filter-based low volume monitors, and 2) Tapered Element Oscillating Microbalance (TEOM) monitors which measure PM₁₀ continuously.

During 2015, the PM_{2.5} monitors used throughout the monitoring network were filter-based low volume monitors equipped with the appropriate size fractioning; a TEOM Filter Dynamics Measurement Systems (FDMS) FEM which measures PM_{2.5} continuously is planned to be operational in 2016.

A listing of the parameters and quantity of site instrumentation is presented in Table 5.



Locator Map
Salt River Pima-Maricopa Indian Community
(SRPMIC)

Figure 1

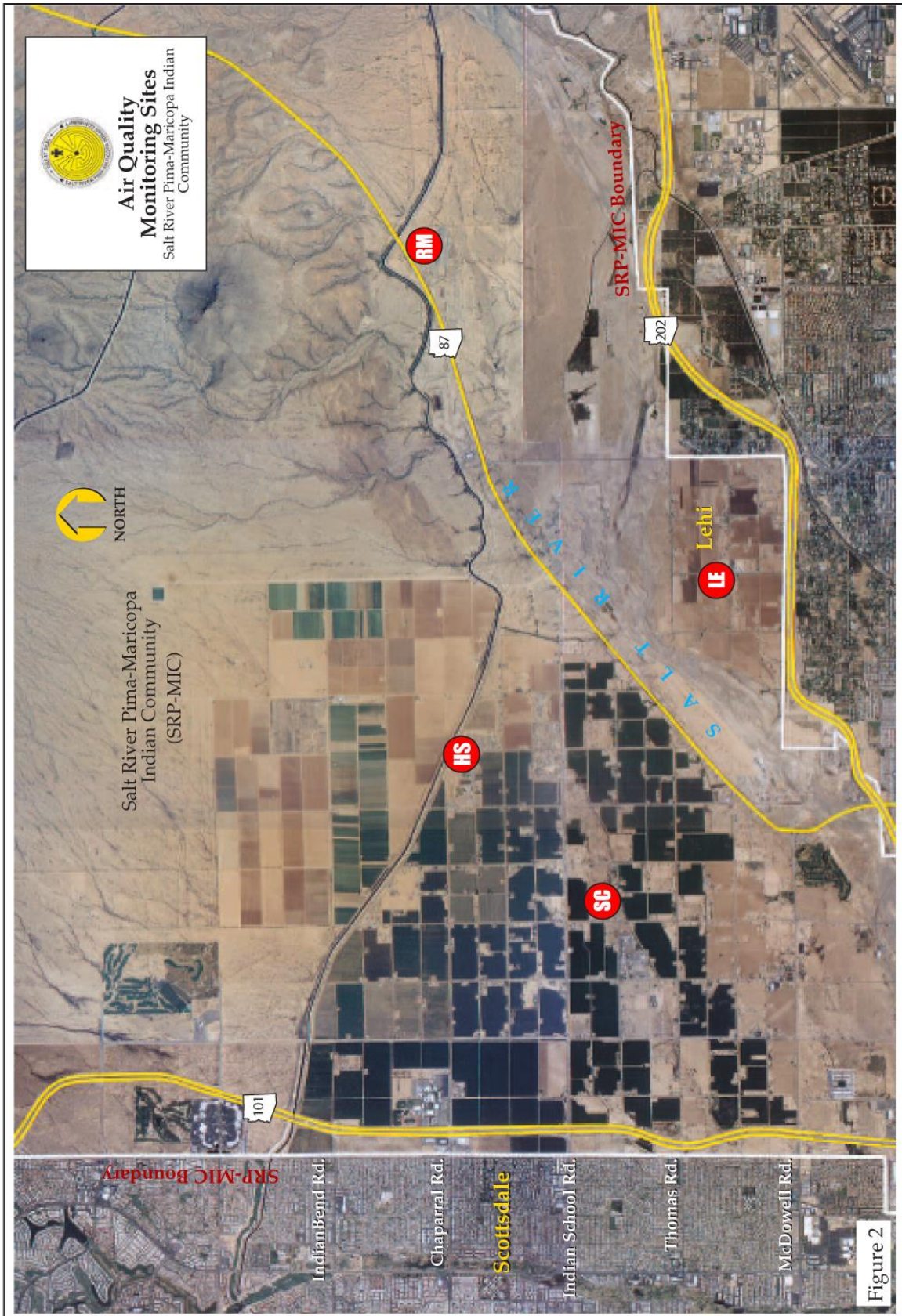


Figure 2

Table 5: Site Instrumentation

Site ID	PM ₁₀	PM _{2.5}	O ₃	Wind System	Temp / RH	Delta Temp	Ambient Pressure	Rain	Solar Rad.	Data Logger	Total
SC	1	2	1	1	1/1	1	1	1	1	1	12
RM			1	1	1/1		1			1	6
LE	2		1*	1	1/1		1			1	8
HS	1		1*							1	3
Total	4	2	4	3	6	1	3	1	1	4	29

* seasonal

DATA SUMMARIES

CRITERIA POLLUTANTS

The Federal Clean Air Act of 1970 established National Ambient Air Quality Standards (NAAQS) for six pollutants. These pollutants, referred to as the “Criteria Pollutants”, include carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), sulfur dioxide (SO₂), and lead (Pb). Two Federal Standards exist for most of the criteria pollutants. The primary standard defines levels deemed “. . . necessary, with an adequate margin of safety, to protect the public health.” The secondary standard defines levels “. . . necessary to protect the public welfare. . .” (40 CFR Part 50). The promulgation of these standards, however, does not prohibit any State or Tribal Community from establishing air quality standards that are more stringent. The Federal Standards are also subject to periodic review and revision as deemed necessary by the Administrator of the Environment Protection Agency (EPA). The following discussion summarizes the SRPMIC network results in relation to the monitoring objectives of the State and Local Air Monitoring Stations (SLAMS).

Ozone (O₃)

During 2015, four ozone monitors operated at various locations during various intervals. Two locations operated continuously; and two operated seasonally during the year. However, SRPMIC will not seek waivers for ozone seasonal monitoring for the two monitors and will operate year round starting 2016. SRPMIC submitted a letter to EPA Region 9 on December 18, 2015 regarding this information. Each location and operational period is listed in Table 5.

Table 6: Operational Schedule for Ozone

Site Name	Duration
Senior Center	January 1 – December 31
Red Mountain	January 1 – December 31
Lehi	April 1 – November 1
High School	April 1 – November 1

One-hour Average Concentrations

One-hour concentrations of ozone during 2015 were moderate; no exceedance of the former one-hour ozone standard was observed. A summary of the one-hour concentrations obtained at the four locations is presented in Table 7; the distribution of the one-hour concentrations is presented in Table 8.

Table 7: 1-Hour Summary

Site	Max. (ppm) Date Time	2 nd High (ppm) Date Time	3 rd High (ppm) Date Time	4 th High (ppm) Date Time	Number Of Exceedances	Number of Samples
RM	0.094 6/29 1400	0.093 6/22 1500	0.092 6/20 1400	0.089 6/24 1400	0	8713
SC	0.094 6/16 1500	0.094 6/29 1300	0.092 6/29 1400	0.091 6/22 1400	0	8709
LE	0.105 6/29 1400	0.096 6/29 1300	0.094 6/20 1400	0.091 6/22 1500	0	5135
HS	0.094 6/29 1400	0.089 6/29 1300	0.086 6/22 1400	0.085 6/12 1700	0	4986

Table 8: Distributions

Interval:	Number of 1-Hour Average Values (ppm)							
	0.000 to 0.040	0.041 to 0.080	0.081 to 0.120	0.121 to 0.160	0.161 to 0.200	0.201 to 0.240	0.241 to 0.280	>0.280
Site								
RM	5937	2749	26	0	0	0	0	0
SC	6246	2439	20	0	0	0	0	0
LE	3013	2094	28	0	0	0	0	0
HS	3125	1847	14	0	0	0	0	0

Eight-hour Average Concentrations

Eight-hour average concentrations of ozone were moderate to high. There were four exceedance-days of the eight-hour ozone standard and one violation of the standard. A summary of the eight-hour concentrations is presented in Table 9; the distribution of the concentrations is presented in Table 10.

Table 9: Eight-Hour Summary

Site	Max. (ppm) Date Time*	2 nd High (ppm) Date Time*	3 rd High (ppm) Date Time*	4 th High (ppm) Date Time*	Number Of Exceedances	Number of Samples
RM	0.079 6/20 1100	0.078 6/12 1200	0.078 6/20 1000	0.074 8/1 1200	3	8750
SC	0.079 6/12 1200	0.077 6/20 1000	0.077 6/29 1000	0.073 8/15 1100	3	8754
LE	0.082 6/29 1100	0.080 6/12 1200	0.080 6/20 1100	0.076 6/16 1000	4	5160
HS	0.078 6/12 1300	0.076 6/29 1000	0.075 6/20 1100	0.072 8/1 1100	2	5009

*Time - Time is beginning hour (Mountain Standard Time)

Table 10: Distribution

Interval:	Number of Eight-Hour Average Values (ppm)							
	0.000 to 0.030	0.031 to 0.060	0.061 to 0.075	0.076 to 0.095	0.096 to 0.115	0.116 to 0.135	0.136 to 0.155	>0.155
Site								
RM	3439	5000	301	10	0	0	0	0
SC	4432	4052	262	8	0	0	0	0
LE	1713	3112	321	14	0	0	0	0
HS	1914	2875	217	3	0	0	0	0

Particulate Matter (PM₁₀)

During 2015, PM₁₀ samplers operated at one location on a 1 in 6 day schedule throughout the year; two locations operated continuously throughout the year. Each location and operational period is listed in Table 11.

Table 11: Operational Schedule for PM₁₀

Site Name	Duration
Senior Center (continuous)	January 1 – December 31
Lehi Fire (6-day schedule)	January 1 – December 31
High School (continuous)	January 1 – December 31

One-hour Average Concentrations

During 2015, a continuous PM₁₀ sampler operated at the High School and Senior Center. A summary of the hourly average concentrations and distribution are provided in Tables 12 and 13, respectively. One-hour average concentrations of PM₁₀ generally were low. Negative and extremely high outliers did occur, although approximately 89% of the values were less than 50 µg/m³ and approximately 99% were less than 150µg/m³.

Table 12: One-Hour Average PM₁₀ Concentration Summary

Site	Max. (ug/m ³) Date	2 nd High (ug/m ³) Date	Min. (ug/m ³) Date	Annual Average (ug/m ³)	Number of Samples	% Recovery
HS	1394 7/31	898 8/31	-10 11/9	31.8	8688	99.2
SC	537 11/12	648 7/31	0.0 1/5	24.9	8706	99.4

Table 13: One-Hour Average PM₁₀ Concentration Distribution

Number of One-hour Average Concentrations (ug/m ³)									
Interval:	≤0	0 to 50	51 to 100	101 to 150	151 to 250	251 to 500	501 to 750	751 to 1000	>1000
Site									
HS	28	7444	852	219	99	38	4	3	1
SC	7	7933	612	101	37	15	1	0	0

Twenty-Four Hour Average Concentrations

Twenty-four hour average concentrations of PM₁₀ were generally low during 2015. There were no exceedances of the 24-hour standard and one violation of the twenty-four hour standard. A summary of the 24-hour average concentrations is presented in Table 14; the distribution of the concentrations is presented in Table 15.

Table 14: Twenty-Four Hour Average PM₁₀ Concentration Summary

Site	Max. (ug/m ³) Date	2 nd High (ug/m ³) Date	Number of Exceedances	Annual Average (ug/m ³)	Number of Samples
HS ^a	137 1/3	99 6/16	0	31.4	364
SC ^a	69 11/26	62 9/13	0	24.6	363
LE-P ^b	59 1/6	57 1/12	0	22.8	60
LE-C ^b	58 1/6	56 1/12	0	26.5 ^c	43

^aContinuous (TEOM)

^bFilter-based (6-day schedule)

^c <75% data

Table 15: Twenty-Four Hour Average PM₁₀ Concentration Distributions

Interval:	Number of Twenty-Four Hour Average Concentrations (ug/m ³)								
	0 to 25	26 to 50	51 to 75	76 to 100	101 to 125	126 to 150	151 to 175	176 to 200	>200
Site									
HS ^a	166	148	42	7	0	1	0	0	0
SC ^a	212	139	12	0	0	0	0	0	0
LE-P ^b	34	20	2	0	0	0	0	0	0
LE-C ^b	21	16	2	0	0	0	0	0	0

^aContinuous (TEOM)

^bFilter-based (6-day schedule)

Particulate Matter (PM_{2.5})

During 2015, PM_{2.5} samplers operated at one location; the operational period is listed in Table 16.

Table 16: Operational Schedule for PM_{2.5}

Site Name	Duration
Senior Center (6-day schedule)	January 1- December 31

Twenty-four hour average concentrations of PM_{2.5} were low during 2015. There was no exceedance or violation of the 24-hour or annual standards during 2015. A summary of the 24-hour average concentrations is presented in Table 17 for those concentrations obtained on a 6-day schedule; the distributions of the concentrations for the corresponding schedules are presented in Table 18.

Table 17: Twenty-Four Hour Average PM_{2.5} Concentration Summary

6-Day Schedule

Site	Max. (ug/m ³) Date	2 nd High (ug/m ³) Date	Number of Exceedances	98 th Percentile Value	Annual Average (ug/m ³)	Number of Samples
SC - P ^c	8.6 11/26	8.1 12/20	0	8.1	4.4	47
SC - C ^d	9.1 11/26	8.5 12/20	0	8.5	4.8	57

^cPrimary Sampler

^dCollocated Sampler

Table 18: 24-Hour Average Concentration PM_{2.5} Distributions

6-Day Schedule

Interval:	Number of 24-Hour Average Concentrations (ug/m ³)						
	0 to 15	16 to 30	31 to 50	51 to 70	71 to 90	91 to 110	>110
Site							
SC - P ^c	47	0	0	0	0	0	0
SC - C ^d	57	0	0	0	0	0	0

^cPrimary Sampler

^dCollocated Sampler

DATA COMPLETENESS

A summary of the annual data completeness for the criteria pollutants monitored during 2015 is presented in Tables 19-21. These tables represent the number of samples collected during each site's operation versus the number of scheduled samples during each site's operation.

Table 19: Ozone (O₃)

Interval Site	Number of Actual Samples	Number of Scheduled Samples	Data Completeness (Actual/Scheduled)
<u>One-Hour</u>			
RM	8713	8760	99.5%
SC	8709	8760	99.4%
LE*	5135	5160	99.5%
HS*	4986	5160	96.6%
<u>Eight-Hour</u>			
RM	8750	8760	99.9%
SC	8754	8760	99.9%
LE*	5160	5160	100.0%
HS*	5009	5160	97.1%
TOTAL	55216	55680	99.2%

* Seasonal

Table 20: Particulate Matter (PM)

PM ₁₀ <u>Interval</u> Site	Number of Actual Samples	Number of Scheduled Samples	Data Completeness (Actual/Scheduled)
<u>1 in 6 days</u>			
LE-P ^b	60	60	100.0%
LE-C ^b	43	60	71.7%
<u>Continuous</u>			
HS ^a	364	365	99.7%
SC ^a	363	365	99.4%
TOTAL PM₁₀	830	850	97.6%
PM _{2.5} <u>Interval</u> Site			
<u>1 in 6 days</u>			
SC - P ^c	47	60	78.3%
SC - C ^d	57	60	95.0%
TOTAL PM_{2.5}	104	120	86.7%

^aContinuous (TEOM)

^bFilter-based (6-day schedule)

^cPrimary Sampler

^dCollocated Sampler

Table 21: Data Completeness Summary

Pollutant	Number of Actual Samples	Number of Scheduled Samples	Data Completeness (Actual/Scheduled)
Ozone	55216	55680	99.2%
PM₁₀	830	850	97.6%
PM_{2.5}	104	120	86.7%
TOTAL	56150	56650	99.1%

EXCEEDANCE OF THE NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

Included in Table 22 is a summary of exceedances of the NAAQS during 2015.

Table 22: 2015 NAAQS Exceedances

Pollutant	Interval	Site	Concentration	Date
Ozone	1-Hour	None	-	-
	8-Hour	RM	0.079	6/20
			0.078	6/12
			0.078	6/20
		SC	0.079	6/12
			0.077	6/20
			0.077	6/29
		LE	0.082	6/29
			0.080	6/12
			0.080	6/20
			0.076	6/16
		HS	0.078	6/12
			0.076	6/29
	PM ₁₀	24-Hour	SC	-
LE			-	-
HS			-	-
Annual		None	-	-
PM _{2.5}	24-Hour	None	-	-
	Annual	None	-	-

VIOLATIONS OF THE NATIONAL AMBIENT AIR QUALITY STANDARDS

Ozone (O₃)

Table 23: Violations of the 8-hour Ozone Standard

Site	2013 4 th High (ppm)	2014 4 th High (ppm)	2015 4 th High (ppm)	3-Year Average of 4 th High (ppm)
RM	0.075	0.080	0.074	0.076
SC	0.074	0.073	0.073	0.073
LE	0.075	0.076	0.076	0.075
HS	0.074	0.071	0.072	0.072

Particulates - PM₁₀

Table 24: Violations of the Twenty-Four Hour PM₁₀ Standard

Site	2013		2014		2015		Rate of Expected Exceedances
	24-Hr Max (ug/m ³)	Expected Exceedances	24-Hr Max (ug/m ³)	Expected Exceedances	24-Hr Max (ug/m ³)	Expected Exceedances	
HS ^a	221 ^f	1.0	241 ^g	3.0	137	0	1.3
SC	111 ^b	0	106 ^a	0	69 ^a	0	0.0
LE ^b	69	0	147	0	59	0	0.0

Table 25: Violations the Annual PM₁₀ Standard

Site	2013 Annual Average (ug/m ³)	2014 Annual Average (ug/m ³)	2015 Annual Average (ug/m ³)	Three-Year Average (ug/m ³)
HS ^a	38.0	39.3	31.4	36.2
SC	34.2 ^b	31.8 ^a	24.6 ^a	30.2
LE ^b	28.2	29.9	22.8	27.0

^aContinuous (TEOM)

^bFilter-based (6-day schedule)

^cPrimary Sampler

^dCollocated Sampler

^e<75% data

^fData submitted to AQS as high winds pursuant to Exceptional Event

^gAgricultural operations

Particulates – PM_{2.5}

Table 26: Violations of the Twenty-Four Hour PM_{2.5} Standard

Site	2013 Annual 98 th Percentile (ug/m ³)	2014 Annual 98 th Percentile (ug/m ³)	2015 Annual 98 th Percentile (ug/m ³)	Three-Year Average 98 th Percentile (ug/m ³)
SC-P ^c	10.1	11.0	8.1	9.7

Table 27: Violations the Annual PM_{2.5} Standard

Site	2013 Annual Average (ug/m ³)	2014 Annual Average (ug/m ³)	2015 Annual Average (ug/m ³)	Three-Year Average (ug/m ³)
SC-P ^c	5.3	5.4	4.4	5.0

^cPrimary Sampler

NETWORK INFORMATION

The following is a list of information on SRPMIC monitoring network activities that occurred during 2015.

Ozone Monitoring:

During 2015, four ozone monitors were reported operational. Two site monitors from Lehi and the High School continue to operate April 1 to November 1 as seasonal monitors, while ozone monitors at the Senior Center and Red Mountain sites continue to operate year-round. On December 18, 2015 SRPMIC notified EPA Region 9 in a letter not to pursue waivers to operate ozone seasonal monitors at Lehi and High School but decided to operate both sites year-round beginning January 2016. This regards to recent ozone National Ambient Air Quality Standard (NAAQS) revisions that it was appropriate for SRPMIC to operate year-round as the area is in non-attainment and the network still exceeds the current standard. A prior separate letter was sent to EPA Region 9 on March 31, 2015 informing of SRPMIC to start ozone seasonal monitoring for 2015 but did not mention waivers for the Lehi and High School monitors.

There were four exceedance-days of the eight-hour primary standard for ozone and one violation of the eight-hour primary standard NAAQS for the three-year average of the fourth highest concentration. Tables 22 and 23 present the data summaries for the eight-hour ozone report.

On October 1, 2015, EPA updated the ozone NAAQS from .075 ppm to .070 ppm an effort to reduce the ozone pollution and to improve the public health protection. SRPMIC will continue the active efforts to implement the updated standards and reviewing the ozone designations process.

PM₁₀ Monitoring:

During 2015, three PM₁₀ monitors were reported operational. Two site monitors at the Senior Center and High School sites operated continuously, collecting hourly data while the PM₁₀ samplers at Lehi site were filter-based and operated on a 1 in 6-day schedule.

There were no exceedance-days of the 24-hour primary standard for PM₁₀ of 150ug/m³ and one violation of the 24-hour standard of expected number of exceedances. Tables 14 and 24 provide data summaries of PM₁₀ exceedances.

The Lehi PM₁₀ collocate monitor commenced operation on March 25, 2015. Lehi is the only collocated site since Senior Center manual PM₁₀ method collocation was removed on May 2014 in replacement of TEOM continuous monitor. The manual collocation sampling at Lehi is on a 1 in 6-day schedule for purposes of precision assessment for the network and both the primary and collocate samplers are FRM filter-based having the same EPA FRM method designation on standard condition collection.

On June 29, 2015 Air Quality Program (AQP) started sending the daily air quality PM₁₀ data from High School monitor and meteorological wind speed and wind direction data to Rousseau Farm Company at their request to keep track of their farming activities based upon the recorded data. Rousseau Farms in their past agricultural practices had exploited several high PM₁₀ concentrations from dust measured at High School monitor (three exceedances in 2014) that was a concern after noticeable elevated PM₁₀ started to appear. It was addressed by AQP staff at a meeting between Rousseau Farm Company and SRPMIC on June 26, 2015. By supporting Rousseau Farms the daily air quality data has enabled them to manage their activities better and have not observed any high concentrations of PM₁₀ measurement. Rousseau Farms is one of the four farming operators in SRPMIC.

PM_{2.5} Monitoring:

Two PM_{2.5} monitors were reported operational in AQS for 2015. Primary and collocate PM_{2.5} FRM filter-based low volume monitors both operated on 1 in 6-day schedules at the Senior Center site. There was no exceedance or violation of the 24-hour or annual NAAQS during 2015.

The primary sampler had issues of down-time in third quarter after lost power from thunderstorm that followed with multiple circuit card/component changes and affected the stability of filter temperature during the collection period. Several maintenance needs and calibrations followed for corrective action.

The modification of sampling frequency to PM_{2.5} FRM network at the Senior Center occurred after SRPMIC requested in a letter to EPA Region 9 on August 21, 2008 to reduce the sampling schedule of the primary monitor to a 1 in 6-day from a 1 in 3-day schedule due to lack of filter support from the laboratory (former laboratory) which created minimal data reports. This was critical to data completeness and AQP staffing issues. EPA Region 9 approved the request to reduce sampling frequency at the Senior Center site from 1 in 3-day schedule to a 1 in 6-day schedule in a written letter in October 2008.

Network and Non-Regulatory Information:

An independent auditor conducts a quarterly audit on SRPMIC air monitoring network. Criteria pollutants ozone, PM₁₀ and PM_{2.5} are audited quarterly and all meteorological parameters are done twice annually.

During each quarter, SRPMIC submitted the results of all valid measurement quality checks of precision and accuracy data to AQS. The SRPMIC monitoring network meets the minimum data assessment requirements for SLAMS sites of 40 CFR Part 58 Appendix A and 40 CFR Part 58.16 in reporting of all ambient air quality data and associated quality assurance data for criteria pollutant of ozone, PM₁₀ and PM_{2.5} to the AQS database.

The 2014 SRPMIC Data Certification document packet was sent to EPA Region 9 on April 17, 2015, which is a requirement of 40 CFR Part 58.15.

The following lists the EPA audits conducted in 2015:

- EPA Ozone National Performance Audit Program (NPAP) Through-the-Probe Audit conducted at Senior Center Air Monitoring Station on May 12, 2015; and
- EPA PM_{2.5} Performance Evaluation Program (PEP) Audits conducted: February 5 & 11, 2015, May 12, 2015, July 29, 2015, August 4, 2015 and November 2, 2015 at Senior Center Air Monitoring Station.

The final 2014 SRPMIC Air Monitoring Network Review report document was sent to EPA Region 9 on June 24, 2015.

On September 30, 2015 SRPMIC submitted their 5-Year Air Monitoring Assessment report document to the EPA Region 9.

AQP conducted an air quality equipment audit and equipment calibrations on September 8-9, 2015 at two locations for the White Mountain Apache Tribe to assist their air program by helping them remain in compliance with EPA standards.

Meteorological system (All-In-One) was installed in early 2016 at the High School site to monitor wind speed/wind direction, relative humidity, temperature and pressure. The parameters is not in the data collection network as the systems different application is being worked.

The AQP continues to submit hourly data (FTP) of ozone and PM₁₀ to AIRNow data center that was first established with ozone reports in 2007. SRPMIC relies on Sonoma Techs AIRNow reporting tools of navigational mapping of hourly data comparisons with local monitors and the site trajectory for source traces.

The AQP continues to provide public outreach using a Flag Communication Network in which colored flags are changed based upon daily air quality conditions that reflect air quality index (AQI) colors. They are setup at five different locations, including one at Salt River High School. AQP also

distributes public outreach information of air quality advisories through the SRPMIC website and digital signage displays that reports high pollution and health watch advisories.

Proposed Changes Within Next 18 Months:

AQP installed a continuous PM₁₀ Thermo 1405 monitor at Lehi air monitoring station in October 2015 to monitor side-by-side with the FRM samplers to compare the data results for several months then introduced as a reporting monitor. The 1405 will replace the collocated site, primary and collocated filter-based FRM samplers that eventually will have all SRPMIC PM₁₀ network a continuous monitors.

The new PM_{2.5} Thermo 1405 FDMS continuous FEM monitor was installed and projected to be operational in early 2017 as reporting monitor at Senior Center air monitoring station. The 1405 FDMS needs more time for data assessments with current FRM samplers and continuous monitor is not fully functional. The FEM will designated as primary monitor and shall be collocated with an FRM audit monitor that will be operate on a 1 and 12-day schedule. The site is the only location that monitors PM_{2.5} with a primary and collocated filter-based R&P FRM 2000 that collects in local conditions.

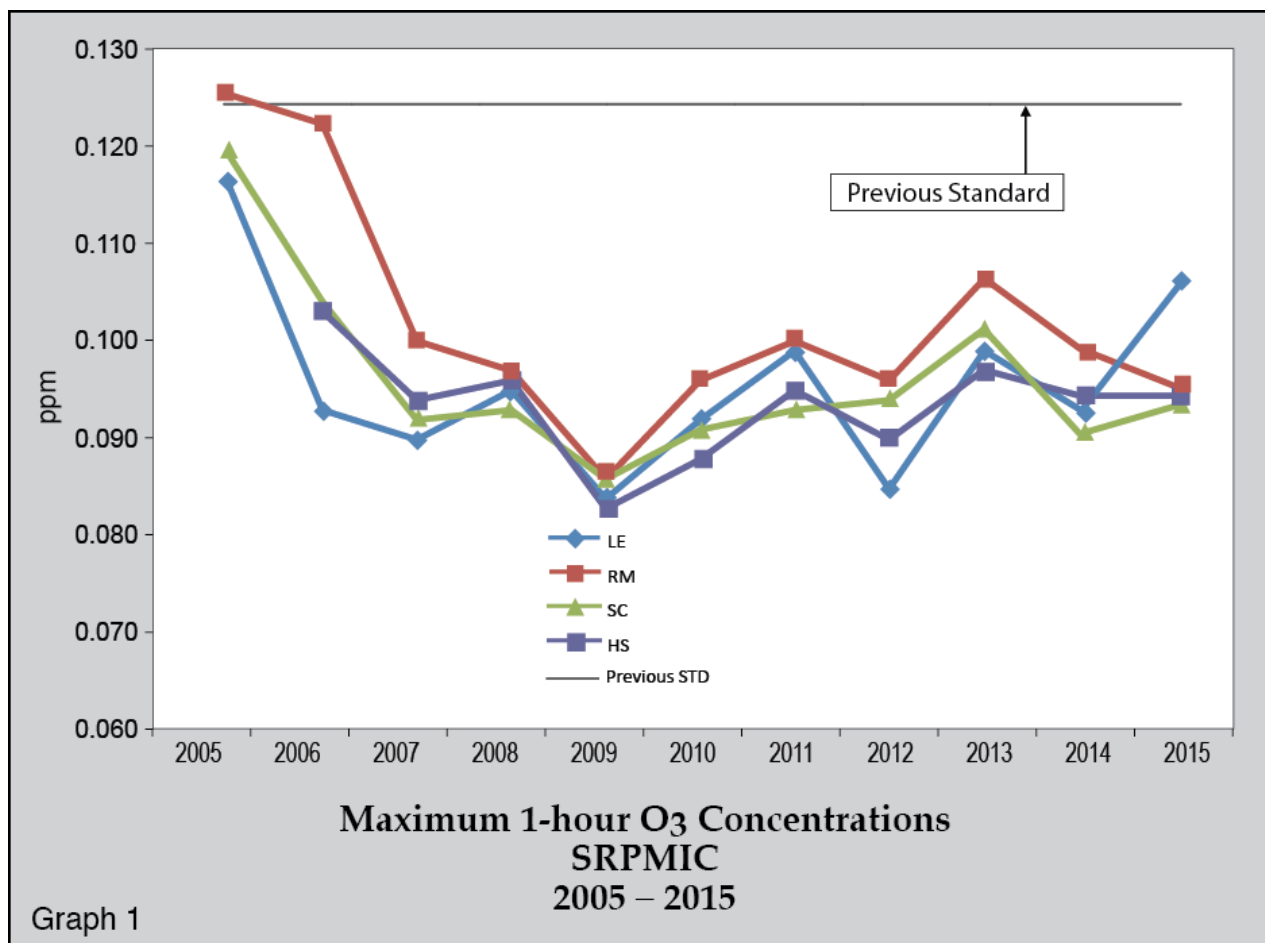
TRENDS

The air quality in the Phoenix Metropolitan Area is generally improving despite the tremendous growth experienced in the region. Since monitoring began in the 1960s, ambient concentrations for most of the criteria pollutants have been reduced to below the NAAQS. Graphs of the trends seen in those criteria pollutants that are monitored on the SRPMIC are illustrated in Graphs 1 through 7.

Ozone (O₃)

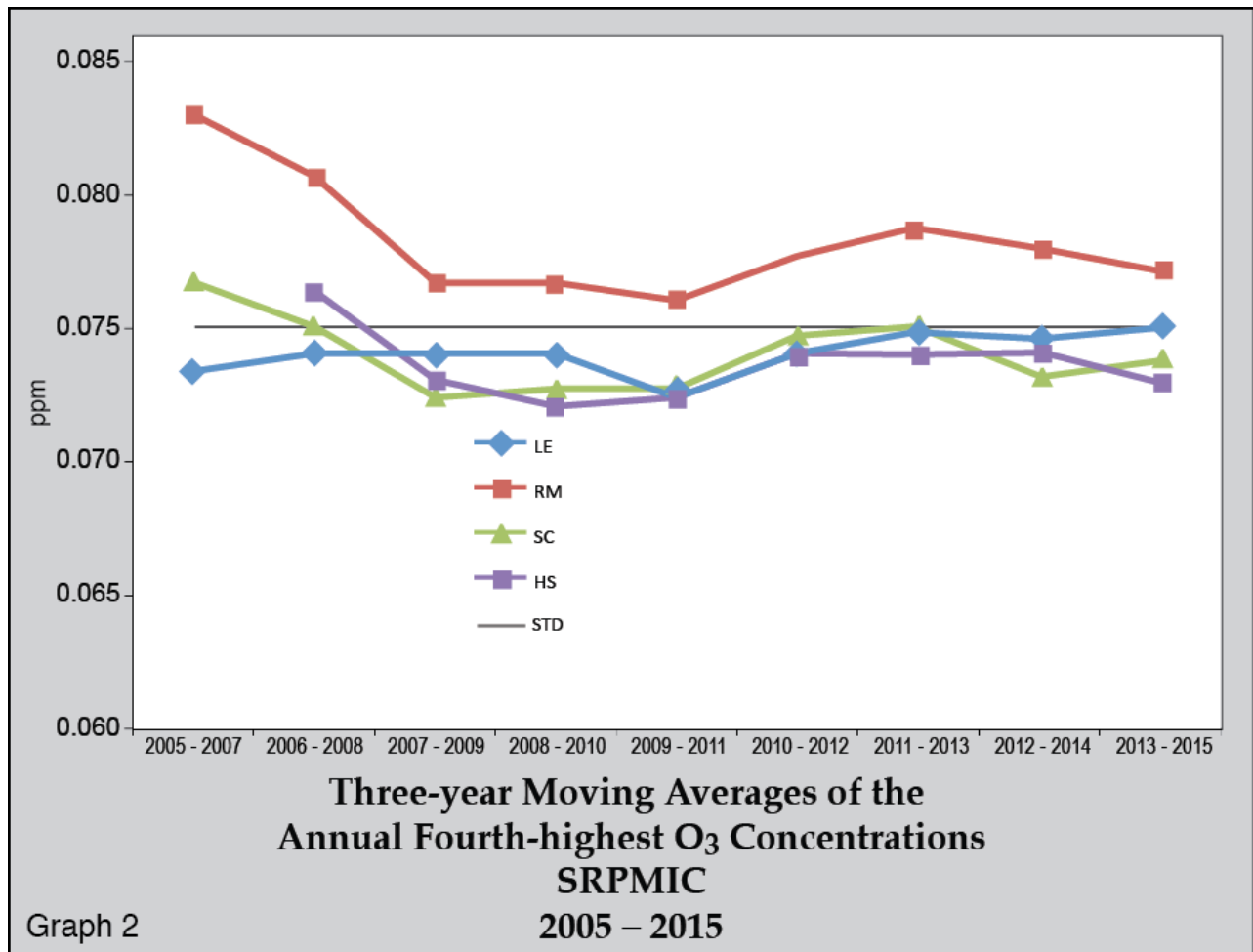
One-Hour Concentrations

Maximum 1-hour concentrations of O₃ at the SRPMIC monitoring locations have shown a large decline from 2005 to 2009 and a small overall increase occurring from 2009 to 2015. Between 2005 and 2015, maximum concentrations decreased approximately 20%. A graph of the maximum one-hour concentrations is provided in Graph 1.



Eight-Hour Concentrations

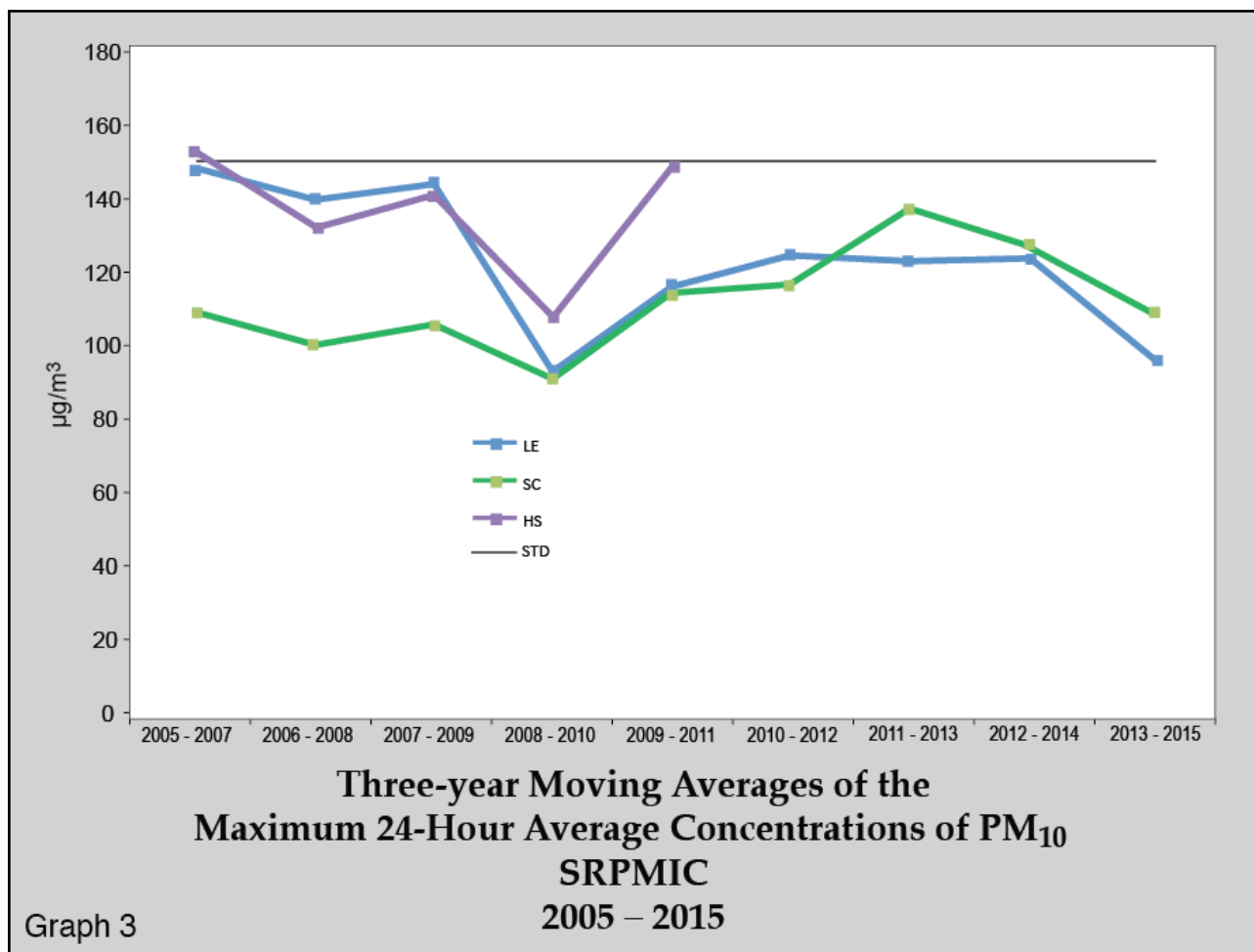
Eight-hour average concentrations of O₃ at the SRPMIC monitoring locations reflect the trend seen in the 1-hour concentrations. The three-year moving averages of the fourth-highest 8-hour concentration at the four locations are illustrated in Graph 2.



Particulate Matter (PM₁₀)

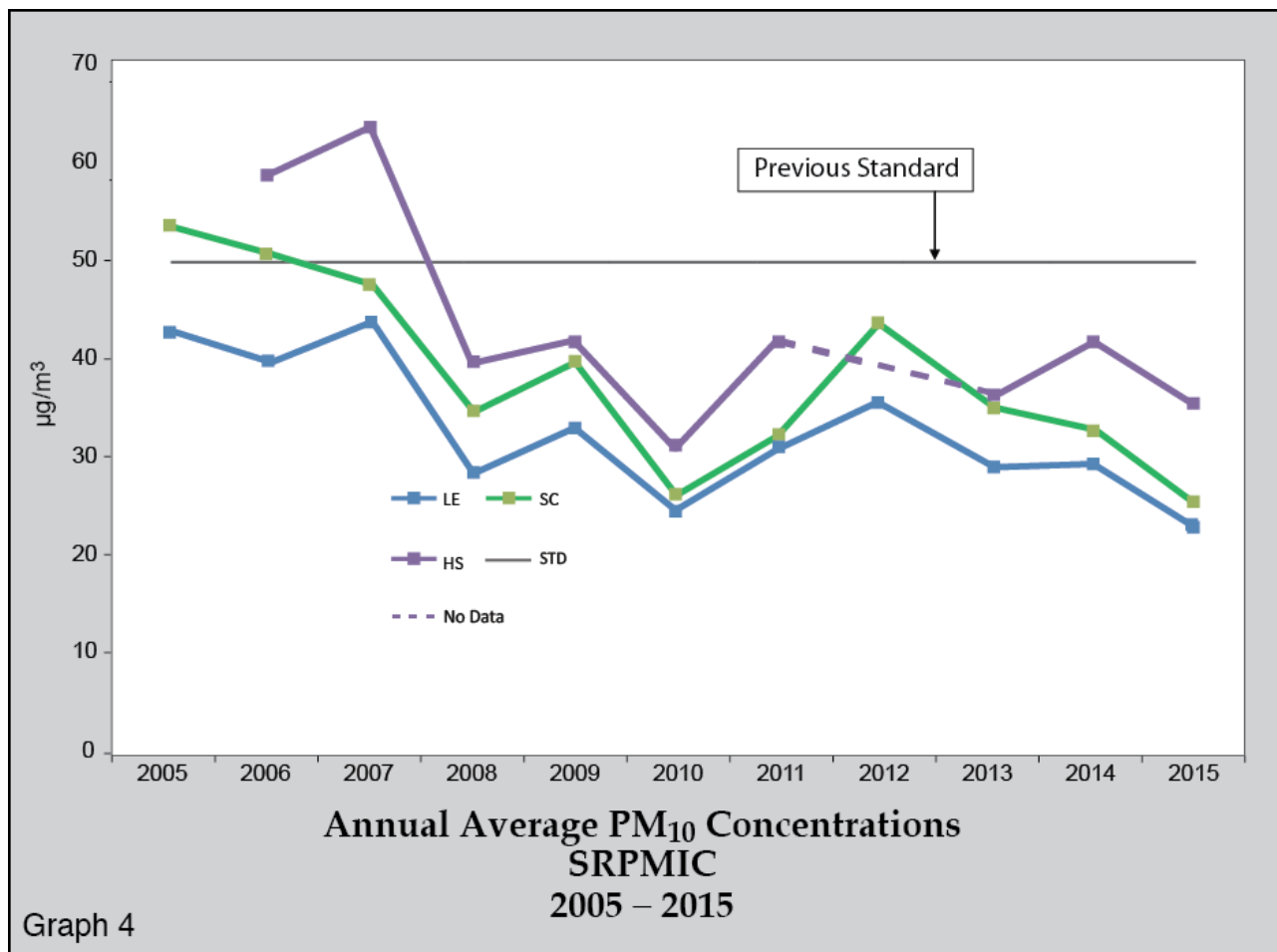
Twenty-Four Hour Concentrations

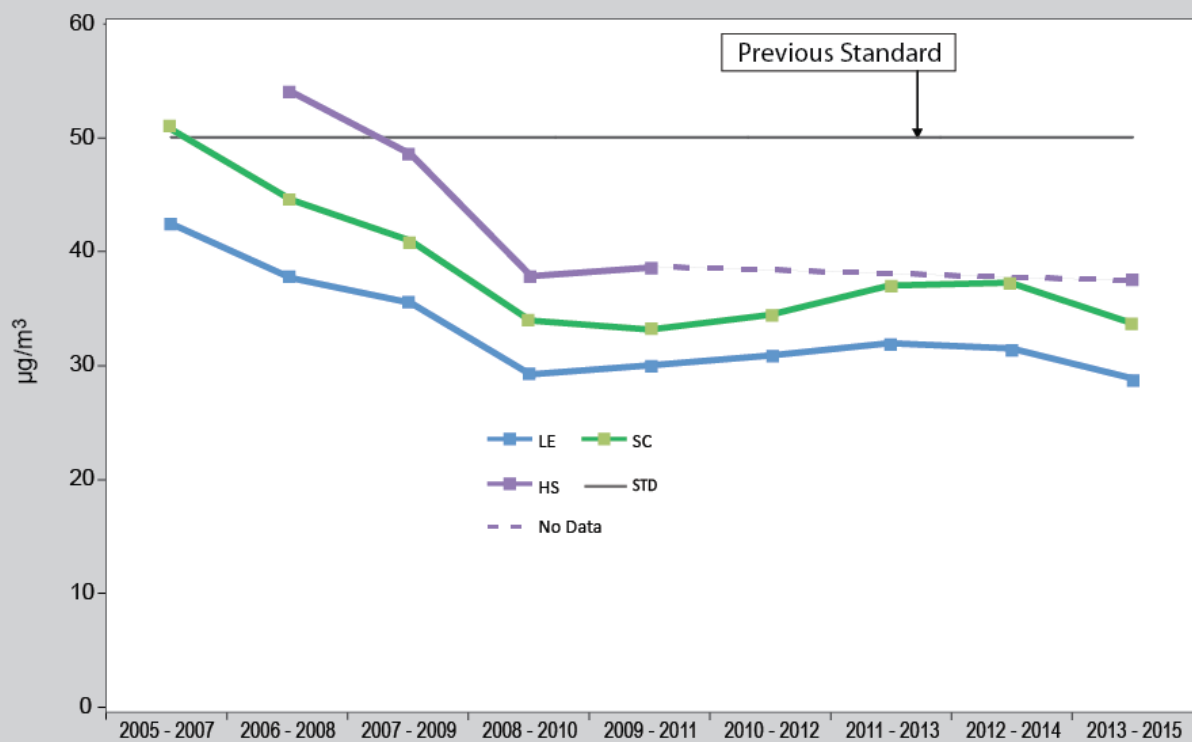
Maximum twenty-four hour average concentrations of PM₁₀ at the three monitoring locations have remained below the standard since 2006. A sharp decline occurred during 2008-2010, followed by a general increase through 2013 and a general decrease through 2015. A graph of the trend is provided in Graph 3.



Annual Concentrations

Annual average concentrations of PM₁₀ at the SRPMIC locations have shown a general decline between 2005 and 2015. There has been no exceedance of the previous annual standard since 2007; a graph is presented in Graph 4. A graph of the three-year moving averages of the annual PM₁₀ concentrations is provided in Graph 5. Data recovery at the High School (HS) location was less than 75% during 2012, therefore, data for 2012 were not included in Graphs 4 and 5.





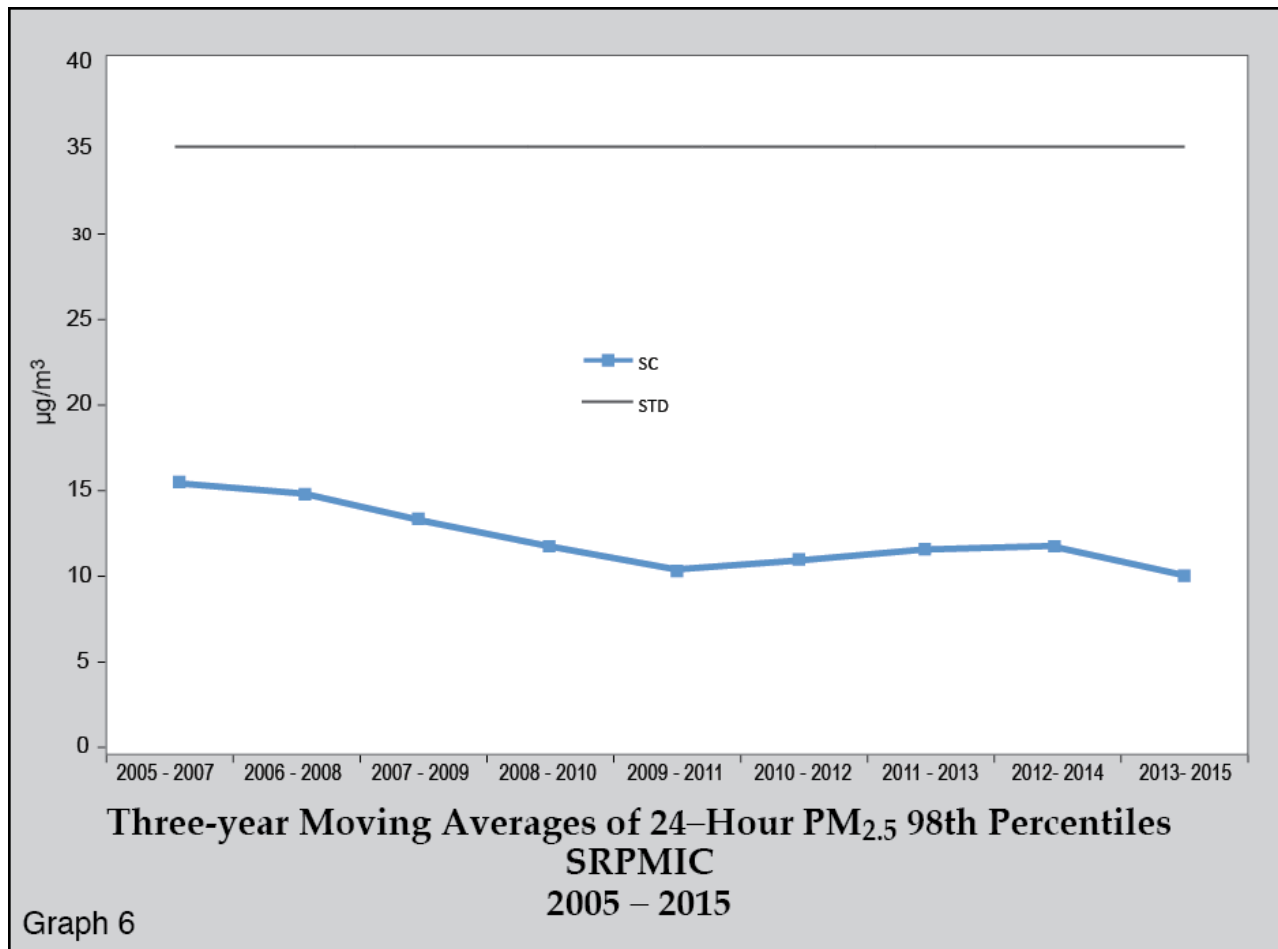
**Three-year Moving Averages of Annual PM₁₀ Concentrations
SRPMIC
2005 – 2015**

Graph 5

Particulate Matter (PM_{2.5})

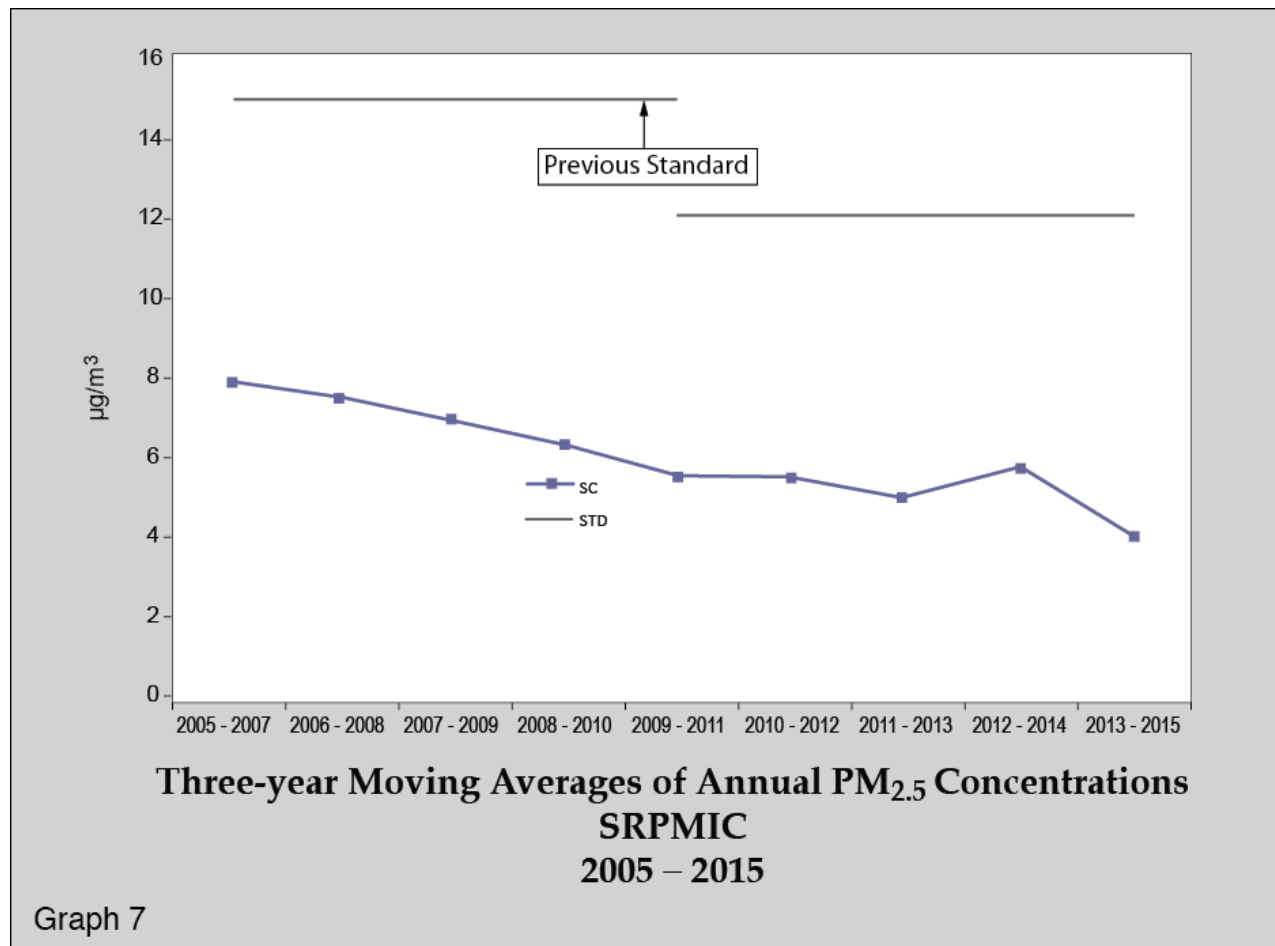
98th Percentiles

Concentrations of PM_{2.5} were well below the standard. A graph of the three-year moving averages of the 98th percentile of the 24-hour average concentrations is provided in Graph 6. Data collected during 2007 was included in the moving averages although data recovery for that year was less than 75%.



Annual Concentrations

Annual average concentrations of PM_{2.5} at the SRPMIC locations have shown a general decline since 2005, although a slight increase occurred during 2012-2014. A graph of the three-year moving averages of the annual PM_{2.5} concentrations is provided in Graph 7. Data collected during 2007 was included in the moving averages although data recovery for that year was less than 75%.



SITE DESCRIPTIONS

Senior Center (SC)



Site Name	Senior Center
AQS ID	04 013 7020
GPS Coordinates	33°29.294', 111°51.339'
Address	10844 East Osborn Road, Scottsdale, AZ 85356
County	Maricopa
Representative Area	CBSA Phoenix-Mesa-Scottsdale
Distance to Roadways (m)	Osborn Road (22.3), Alma School Road (156)
Traffic Count (AADT)	Rural road with no official traffic count available

Site Description: The Senior Center (SC) site commenced operation in October 2004 after being relocated from the Desert Eagle Secondary School Air Station. The site is located just west of the Senior Service Center at the northeast section of Osborn Road and Alma School Road approximately one half mile from the Two Waters Administration Tribal Complex. The site is situated in the midst of neighborhood homes with agricultural fields to the south and sparse open fields to the north.

The criteria pollutants of ozone and particulate matter of PM₁₀ and PM_{2.5} are monitored at this station. The network design for the FRMs PM₁₀ and PM_{2.5} monitoring was established as primary and collocated sample measurements until 2014 PM₁₀ continuous TEOM was installed as through-the-roof sampling and the PM₁₀ collocated monitor was removed. The meteorological parameter of wind speed, wind direction, atmospheric pressure, relative humidity, precipitation, ambient temperature and the delta temperature measurement are also monitored at this site. The data acquisition network of hourly data reports is in-house along with the ozone calibration monitors.

Table 28: Senior Center

Pollutant, POC	Ozone, 1	PM₁₀ (continuous), 3	PM_{2.5}, 1 & 2
Parameter code	44201	81102	88101
Monitor make & model	Thermo 49i	R&P TEOM 1400ab	R&P FRM 2000 (both)
Date started	February 10, 2011	January 1, 2014	May 2004 (both)
Basic monitoring objective(s)	NAAQS comparison, Public info	NAAQS comparison, Public info	NAAQS comparison, Public info
Monitor type(s)	SLAMS (tribal)	SLAMS (tribal)	SLAMS (tribal)
Spatial scale	Neighborhood	Neighborhood	Neighborhood
Site type(s)	Population exposure, regional transport	Population exposure	Population exposure
Primary, Collocated	Primary	Primary	Primary, Collocated
FRM/FEM/ARM	FEM	FEM	FRM/FRM
Method code	047	079	117/117
Collecting Agency	SRPMIC	SRPMIC	SRPMIC
Analytical lab	NA	NA	IML/IML
Reporting Agency	SRPMIC	SRPMIC	SRPMIC
Sampling Frequency	Continuous	Continuous	1 in 6/1 in 6
Sampling Season	Year-round	Year-round	Year-round (both)
Probe height (m)	4.2	4.3	3.1/3.1
Airflow arch (degrees)	360	360	360/360
Distance from drip line of nearest tree(s) (m)	14.6	16.7	17.7/14.7
Distance between QA collocated monitors (m)	NA	NA	2.9/2.9
Distance to furnace or incinerator (m)	NA	NA	NA/NA
Distance from supporting structure (m)	1.5	1.9	1.9/1.9
Distance from obstructions on roof-horizontal (m)	NA	NA	NA/NA
Distance from obstructions on roof - vertical height (m)	NA	NA	NA/NA
Distance from obstructions not on roof - horizontal (m)	NA	NA	NA/NA
Distance from obstructions not on roof - vertical height (m)	NA	NA	NA/NA
Probe material	Borosilicate glass	NA	NA/NA

Residence time (s)	10	NA	NA/NA
Ground cover	Gravel	Gravel	Gravel/Gravel
Will there be changes within next 18 months? (Y/N)	N	N	Y/Y
Is it suitable for comparison against annual PM _{2.5} ? (Y/N)	NA	NA	Y
Frequency of flow rate verification	NA	Biweekly	Biweekly (both)
Frequency of one-point QC check	Biweekly	NA	NA/NA
Dates of Audit Evaluation	3-26-15, 6-25-15, 9-24-15, 12-17-15	3-26-15, 6-25-15, 9-24-15, 12-17-15	3-26-15, 6-25-15, 9-24-15, 12-17-15 (both)

Meteorological measurements at the Senior Center site include wind speed, wind direction, ambient temperature, relative humidity, barometric pressure, precipitation, differential temperature and solar radiation.

Red Mountain (RM)



Site Name	Red Mountain
AQS ID	04 013 7021
GPS Coordinates	33°30.475', 111°45.277'
Address	15115 Beeline Highway, Scottsdale, AZ 85256
County	Maricopa
Representative Area	CBSA Phoenix-Mesa-Scottsdale
Distance to Roadways (m)	Beeline Highway (608)
Traffic Count (AADT)	Rural road with no official traffic count

Site Description: The monitoring site is located south of the old Red Mountain Trap & Skeet building. The Trap and Skeet facility was closed and all buildings that used to provide RV hookups were removed. A large portion of the area is open-range populated with creosote scrubs and desert plants and is approximately one-half mile southeast of State Route 87 Beeline Highway. The monitoring station was established in the summer of 2002 and monitoring immediately followed. In May 2010 the monitoring station was upgraded with a new monitoring shelter, new meteorological tower and the electrical connection was revamped.

The criteria pollutant ozone is monitored at this site to represent urban and regional scales. The meteorological system of wind speed, wind direction, atmospheric pressure, ambient temperature and relative humidity are also monitored at this station. The data acquisition instrument of hourly data reports is in-house along with the ozone monitor calibration system.

Table 29: Red Mountain

Pollutant, POC	Ozone, 1
Parameter code	44201
Monitor make & model	Thermo 49i
Date started	January 27, 2012
Basic monitoring objective(s)	NAAQS comparison, Public info
Monitor type(s)	SLAMS (tribal)
Spatial scale	Urban, regional
Site type(s)	Highest concentration, regional transport
Primary, Collocated	Primary
FRM/FEM/ARM	FEM
Method code	047
Collecting Agency	SRPMIC
Analytical lab	NA
Reporting Agency	SRPMIC
Sampling Frequency	Continuous
Sampling Season	Year-round
Probe height (m)	4.1
Airflow arch (degrees)	360
Distance from drip line of nearest tree(s) (m)	NA
Distance between QA collocated monitors (m)	NA
Distance to furnace or incinerator (m)	NA
Distance from supporting structure (m)	1.5
Distance from obstructions on roof -horizontal (m)	NA
Distance from obstructions on roof - vertical height (m)	NA
Distance from obstructions not on roof - horizontal (m)	NA
Distance from obstructions not on roof - vertical height (m)	NA
Probe material	Borosilicate glass
Residence time (s)	9
Ground cover	Gravel
Will there be changes within next 18 months? (Y/N)	N
Is it suitable for comparison against annual PM _{2.5} ? (Y/N)	N
Frequency of flow rate verification	NA
Frequency of one-point QC check	Biweekly
Dates of Audit Evaluation	3-26-15, 6-25-15, 9-24-15, 12-17-15

Meteorological measurements at the Red Mountain site include wind speed, wind direction, ambient temperature, relative humidity and barometric pressure.

Lehi (LE)



Site Name	Lehi
AQS ID	04 013 7022
GPS Coordinates	33°28.472', 111°48.303'
Address	3250 North Stapley Drive, Mesa, AZ 85203
County	Maricopa
Representative Area	CBSA Phoenix-Mesa-Scottsdale
Distance to Roadways (m)	Stapley Drive 18.3), Oak Street (81)
Traffic Count (AADT)	Rural road with no official traffic count available - east

Site Description: The Lehi monitoring site was situated primarily for ozone saturation studies during the summer months then developed into a monitoring station in January 2005. Community developed areas such as the Lehi Community Recreation Building is diagonally across the intersection. The monitoring site is inside the Police/Fire Substation building and also located on the roof for PM and meteorological monitoring. The site is bordered on the north and east by agricultural field, on the west by neighborhood homes, a Booster Pump Facility adjacently north and the Community Recreation Center directly south.

The SRPMIC monitors the ambient air quality particulate matter (PM₁₀) with the collocation starting March 2015 from this site and also monitors the meteorological system of wind speed, wind direction, relative humidity, barometric pressure, precipitation and ambient temperature along with the data acquisition system. The criteria pollutant ozone is monitored here seasonally from April 1 to November 1 each year.

Table 30: Lehi

Pollutant, POC	Ozone, 1	PM₁₀, 1	PM₁₀, 2
Parameter code	44201	81102	88101
Monitor make & model	Teledyne T400	R&P FRM 2000	R&P FRM 2000
Date started	May 21, 2014	December 2004	March 2015
Basic monitoring objective(s)	NAAQS comparison, Public info	NAAQS comparison, Public info	NAAQS comparison, Public info
Monitor type(s)	SLAMS (tribal)	SLAMS (tribal)	SLAMS (tribal)
Spatial scale	Neighborhood	Neighborhood	Neighborhood
Site type(s)	Population exposure, regional transport	Population exposure	Population exposure
Primary, Collocated	Primary	Primary	Collocated
FRM/FEM/ARM	FEM	FRM	FRM
Method code	087	098	098
Collecting Agency	SRPMIC	SRPMIC	SRPMIC
Analytical lab	NA	IML	IML
Reporting Agency	SRPMIC	SRPMIC	SRPMIC
Sampling Frequency	Continuous	1 in 6	1 in 6
Sampling Season	Seasonal	Year-round	Year-round
Probe height (m)	6.7	6.4	6.4
Airflow arch (degrees)	360	360	360
Distance from drip line of nearest tree(s) (m)	9.1	10	12.6
Distance between QA collocated monitors (m)	NA	2.6	2.6
Distance to furnace or incinerator (m)	Furnace (16.7)	Furnace (35.2)	Furnace (35.2)
Distance from supporting structure (m)	2.4	2.3	2.3
Distance from obstructions on roof-horizontal (m)	27.5	7	4.4
Distance from obstructions on roof - vertical height (m)	2.3	2.1	2.1
Distance from obstructions not on roof - horizontal (m)	NA	NA	NA
Distance from obstructions not on roof - vertical height (m)	NA	NA	NA
Probe material	Borosilicate glass	NA	NA

Residence time (s)	8.9	NA	NA
Ground cover	Pavement, gravel	Pavement, gravel	Pavement, gravel
Will there be changes within next 18 months? (Y/N)	N	Y	Y
Is it suitable for comparison against annual PM _{2.5} ? (Y/N)	N	N	N
Frequency of flow rate verification	NA	Biweekly	Biweekly
Frequency of one-point QC check	Biweekly	NA	NA
Dates of Audit Evaluation	6-25-15, 9-24-15	3-26-15, 6-25-15, 9-24-15, 12-17-15	6-25-15, 9-24-15, 12-17-15

Meteorological measurements at the Lehi site include wind speed, wind direction, ambient temperature, relative humidity and barometric pressure.

High School (HS)



Site Name	High School
AQS ID	04 013 7024
GPS Coordinates	33°30.483', 111°50.268'
Address	4827 North Country Club Drive, Scottsdale, AZ 85256
County	Maricopa
Representative Area	CBSA Phoenix-Mesa-Scottsdale
Distance to Roadways (m)	North Country Club Drive (141), Chaparral Road (172)
Traffic Count (AADT)	Rural road with no official traffic count

Site Description: The High School site was located on the property of Salt River High School in the annex of the Maintenance Electrical Facility room and then moved to an adjacent section in March 2012 to have better access for student outreach. The site was established in April 2006 after relocating from the Early Childhood Education Center Air Station because the ozone monitoring site did not meet the sitting criteria due to facility expansion to the adjacent building. The site has been operational since July 2002. The area had rapid facility growth which included the new High School that commenced in the fall 2006, an Elementary School to the southeast, residential homes constructed to the east, and several new school ballparks to the east. The Central Arizona Project Aqueduct Canal borders along the north section and surrounding the area are open agricultural fields to the north and south.

Particulate matter (PM₁₀) is one of the criteria pollutants monitored at this site. The ozone seasonal monitoring is monitored at this facility from April 1 to November 1 each year.

Table 31: High School

Pollutant, POC	Ozone, 1	PM₁₀ (continuous), 2
Parameter code	44201	81102
Monitor make & model	Thermo 49i	Thermo TEOM 1405
Date started	April 21, 2014	October 1, 2012
Basic monitoring objective(s)	NAAQS comparison, Public info	NAAQS comparison, Public info
Monitor type(s)	SLAMS (tribal)	SLAMS (tribal)
Spatial scale	Neighborhood	Neighborhood
Site type(s)	Population exposure, regional transport	Population exposure
Primary, Collocated	Primary	Primary
FRM/FEM/ ARM	FEM	FEM
Method code	047	079
Collecting Agency	SRPMIC	SRPMIC
Analytical lab	NA	NA
Reporting Agency	SRPMIC	SRPMIC
Sampling Frequency	Continuous	Continuous
Sampling Season	Seasonal	Year-round
Probe height (m)	7.3	6.7
Airflow arch (degrees)	360	360
Distance from drip line of nearest tree(s) (m)	12.2	16.1
Distance between QA collocated monitors (m)	NA	NA
Distance to furnace or incinerator (m)	Furnace (33.6)	Furnace (30.6)
Distance from supporting structure (m)	1.9	1.9
Distance from obstructions on roof - horizontal (m)	15	11.6
Distance from obstructions on roof - vertical height (m)	1.9	1.9
Distance from obstructions not on roof - horizontal (m)	NA	NA
Distance from obstructions not on roof - vertical height (m)	NA	NA
Probe material	Borosilicate glass	NA
Residence time (s)	10	NA
Ground cover	Pavement, gravel	Pavement, gravel
Will there be changes within next 18 months? (Y/N)	N	N
Is it suitable for comparison against annual PM _{2.5} ? (Y/N)	N	N
Frequency of flow rate verification	NA	Biweekly

Frequency of one-point QC check	Biweekly	NA
Dates of Audit Evaluation	6-25-15, 9-24-15	3-26-15, 6-25-15, 9-24-15, 12-17-15

There are no meteorological measurements at High School site.

PUBLIC NOTICE AND COMMENT

Public Notice Information

In accordance with the 40 CFR Part 58.10, the annual air monitoring network plan are made available for public comments for at least 30 days before submitting to the EPA. The Salt River Pima Maricopa Indian Community's Air Quality Program distributed information of the 2015 SRPMIC Ambient Air Monitoring Network Report out to public for comments on May 23, 2016 and the comment period ended on June 24, 2016. The following are the notifications and announcement made to the public.

- Posted the Public Notice for Comment on SRPMIC EPNR website www.srpmic-nsn.gov/epnr/
- Advertised the Notice for Public Comment in the Au-Authm Action News newspaper in two publications, the biweekly SRPMIC tribal newspaper
- Circulated the Public Notice for Comment in Community departments and businesses
- Presentation at SRPMIC Public Meeting on June 21, 2016

The copy of the released notification and announcement made to the public is included in Public Notice Advertisement.

Public Comments

The following are the verbal comments and questions received from public with the responses at the public meeting.

Table 32: SRPMIC Public Meeting on June 21, 2016

	Comments and Questions
1	<p>Why is the DOAS site not running anymore? Is it because of the funding or lack of interest?</p> <p>The DOAS site was a continuous air toxic monitoring station that began in 2007 as shared partner with ADEQ. The monitoring was not considered a regulatory program because the type of equipment and it was foreign made. Although it was registered as equivalent method for EPA but the equipment parts were expensive and the operation method and documentation were very different. ADEQ left the DOAS monitoring in late 2009 because of less staff coverage. SRPMIC approached EPA to consider DOAS site as a potential site for NO₂ Near-Road Monitoring in 2012. In October 2013 the DOAS site was retired due to cost operation, not much support and demand of getting certain supplies were lengthy because of vendor downsize.</p>
2	<p>Is there any reason why there is nothing (air monitoring station) on northwest corner of the reservation? What is it based on?</p> <p>AQP did discuss the siting before and High School site prove to be potential location because the school growth; Salt River High School, Elementary School and the Early Childhood Education Center all are close proximity and along with potential education and outreach to students. Other reason is the growth of Community housing close to the</p>

	<p>schools. The monitor siting were based on population density and the schools where we look for characteristic of sensitive groups. These were based on EPA approach to siting a location. If it was not of High School, we might have choose to consider the Fire Station facility near Talking Stick Resort.</p>
3	<p>Now the Community is growing having businesses on the northern edge and along the Freeway 101, is it possible to locate a monitor, a fifth monitoring station in that area? There are larger number of people coming to those area and they are in big tourist area.</p> <p>A good question. It is doubtful EPA will allow us install new monitoring station. Most likely it will not happen, there is funding issue to consider and we already have established four air monitoring stations. There was a consideration to move the High School site in the past but the site is appropriate of where it is.</p>
4	<p>So is the EPA wanting less monitoring because it can't fund the equipment, what is the reason or can't be necessary?</p> <p>This relates to funding issues and it could be staff support in cost of maintain operation.</p>
5	<p>It stated that two of ozone monitors only operates seasonally, is it also because of funding? Was it operated like pilot testing? The ozone monitors at Lehi and High School first started as special studies also known as Special Purpose Monitors that operated in months of April to October. When it became as reporting monitors in 2005 it remained operational as seasonal monitors April - October. During the winter months, ozone concentrations general is decreased and most agencies including SRPMIC's Lehi and High School monitors do not operate because the expected numbers would be low. That also provide a less operational cost and staff time. But the recent ozone NAAQS revisions on lengthening the ozone seasonal monitoring made SRPMIC's decision to operate year round monitoring starting 2016.</p>
6	<p>When we do have an exceedances what do you have to show or do you get a violations or able to just get inform them why there was an exceedances? Generally the exceedances are reported and posted in documented form to CDD-EPNR. The violations is based on the end of the year calculation of the ozone 8-hour fourth high annual average included with the 3-year average. The violations of annual PM10 is calculated same way but the 24-hour is calculated differently. There are some exceedances like PM10 caused by blowing dust that is recorded and coded differently as exceptional event.</p>
7	<p>Because we are in nonattainment, was there a deadline to meet to become into attainment for the whole Maricopa County that is already past. Is that why now they implementing new things for example for going seasonal to full year. Is that something to with that? That was a different case for ozone. Deadline you mentioned is the Phoenix-Mesa Ozone Nonattainment Plan that did not attain the Marginal Area by July 2015. EPA then determined the Phoenix-Mesa area 8-Hour Ozone to Moderate Nonattainment in May 2016, a one-step back. All these process of implementations will help towards the area plan.</p>
8	<p>On Table 23 of page 16, Lehi site. Is there miscalculation for 3-Year Average of 4th High .075? The numbers show .075, .076 and .076 for 2013 to 2015. EPA uses a truncated</p>

	method in rounding out the numbers to three decimal position. Example: a value of .0757 or .07599, the result will be .075.
9	Rousseau Farm requests and SRPMIC provided the data for particulate numbers and they got better in 2015. How have they been doing in 2016? We still provide daily air quality data to Rousseau Farms. What we are doing, on both sides appears to be working. We think they managed their activities based on the data we submitted to them. Sometimes we highlighted the elevated data showing the values are getting higher that made them aware what approach or plan they will do.
10	Has there been any idea to put up more air quality flags in other areas besides the schools and Senior Center? Is there have been thoughts of putting up flags up near northern edge and or western side of Community where businesses are? There are already five air quality flag locations throughout the Community. We have not discuss that because we feel that the five locations provide a good indicators at Lehi Recreation Center, by Senior Center homes, Salt River High School and by Tribal Complex Building A. I think the only other place that is an ok place is the Salt River Fire Station by Talking Stick Resort.
11	You have mentioned the purpose of this meeting. Is there a requirement from the EPA to do the 30-day public comments, is it because of the TAS? Yes, the 30-day public comments is part of the annual network report. It is stated in the 40 CFR Part 58 so it is regulatory requirements. The meeting is to invite the public to obtain verbal comments.

Public Comment Advertisement

Newspaper Advertisement:

Au-Authm Action News Adds Two to Staff

BY DODIE MANUEL
Au-Authm Action News
dodie.manuel@srpmic-nsn.gov

I am pleased to announce that the open Au-Authm Action News positions have been filled. We recently hired Salt River Pima-Maricopa Indian Community member Deborah Stoneburner as the newspaper assistant and Dalton Walker as the senior reporter.

Please take time to read their biographies and learn a little about our newest additions.

We hope to make positive changes to both the online and print editions of the newspaper and welcome your comments and input. You can submit feedback and ideas by emailing dodie.manuel@srpmic-nsn.gov or calling (480) 362-7731.

Hello!
My name is Deborah Stoneburner, and I was recently hired as the *Au-Authm Action News* newspaper assistant. I am a member of the Salt River Pima-Maricopa Indian Community; my parents are Maria and Steven Stoneburner and my grandparents are Marlene C. Johnson (Enos) and Raymond Enos Jr. (Johnny). I grew up and spent half of my life near the reservation and lived in different small towns in northern Arizona.

I moved back here in 2010 to attend Scottsdale Community College and worked for Talking Stick Resort as a server. I learned about the Community's Apprenticeship Program and decided it was a perfect opportunity to learn a career in office technology.

I graduated in 2014 from GateWay Community College with an Office Technology certificate and received my Journeyman certificate after completing 2,000 hours working with SRPMIC Community Relations and as an ambassador promoting the Talking



AAN Newspaper Assistant Deborah Stoneburner

Stick Cultural Entertainment Destination.

I currently live with my 2-year-old daughter, Victoria, who is my pride and joy.

Now, I look forward to better serving my Community as a newspaper assistant. I can help anyone with subscribing to our Community newspaper, as well as updating local business/church listings and adding new, fun events to our calendar.

If you have any questions, please don't hesitate to call me at (480) 362-7439 or email me at Deborah.Stoneburner@srpmic-nsn.gov.

Greetings!

My name is Dalton Walker, and I'm the new senior reporter for Au-Authm Action News. Please don't hesitate to stop and say hello when you see me around the Community.

I'm a tribal citizen of the Red Lake Ojibwe Nation. I grew up on my reservation in northern Minnesota and spent the majority of my life in the Midwest. I received my journalism degree from the University of Nebraska-Lincoln and have worked in newsrooms in Omaha, Neb., Sioux Falls, S.D. and Colorado Springs, Colo.

For the past three years, I served on the Native American Journalists Association board of directors.

I live in east Phoenix with my wife, daughter and 8-year-old beagle.

I look forward to providing you with valuable information as well as telling your stories.

Tips on staying cool in the 110-degree heat, the best Arizona hikes and any story ideas for the newspaper can be



AAN Senior Reporter Dalton Walker

sent to Dalton.Walker@srpmic-nsn.gov or by calling (480) 362-7252.

Miwgwech (Thank you)

HUUGAM KI MUSEUM
IS NOW OPEN ON SELECT SATURDAYS!
Due to popular demand and convenience, the Museum exhibit gallery and gift store will be open on the second Saturday of every month for the remainder of 2016.
Our new hours of operation on "2nd Saturdays" will be
9:30am-3pm
Put these dates in your calendar and let friends, family and visitors to the Salt River Community know about this exciting change
We now invite you to visit us on:
June 11th, July 9th, August 13th, September 10th, October 8th,
November 12th & December 10th
There is no admission fee for the museum
Call us for more details or if you have any questions (480) 362-6320

SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
Community Development Department
Environmental Protection & Natural Resources
10005 East Osborn Road, Scottsdale, AZ 85256 (480) 362-7500 EPNR@srpmic-nsn.gov

NOTICE FOR PUBLIC COMMENT AND MEETING
SALT RIVER PIMA MARICOPA INDIAN COMMUNITY
2015 AMBIENT AIR MONITORING NETWORK REPORT

COMMUNITY DEVELOPMENT DEPARTMENT
ENVIRONMENTAL PROTECTION & NATURAL RESOURCES DIVISION
AIR QUALITY PROGRAM

Purpose of Meeting: To provide an opportunity for public comments on Salt River Pima Maricopa Indian Community's 2015 Ambient Air Monitoring Network Report

SUMMARY: In accordance with the 40 Code of Federal Regulations (CFR) Part 58.10 Annual air monitoring network plan and periodic network assessment, The Salt River Pima Maricopa Indian Community, Community Development Department's (CDD) Environmental Protection & Natural Resources Division (EPNR) Air Quality Program (AQP) make its annual air monitoring network plan available for public comments before submission to the Environmental Protection Agency Region 9. The plan includes a statement of purposes for each monitor that provides detailed information about collection of monitoring data, network plan purposes and monitoring site information. The document is available for review at CDD/EPNR website www.srpmic-nsn.gov/government/epnr/ and hardcopy may be request at CDD/EPNR office at Two Waters Building, 3rd Floor, 10005 East Osborn Road, Scottsdale, AZ 85256. All public comments can be submitted to CDD/EPNR, 10005 East Osborn Road, Scottsdale, AZ 85256.

PUBLIC MEETING: This meeting invites all members of the public to a hearing on AQP SRPMIC 2015 Ambient Air Monitoring Network Report. CDD/EPNR AQP is providing an opportunity for interested parties to submit written or verbal comments. The deadline for comment period is June 24, 2016.

Meeting Date: June 21, 2016
Meeting Time: 5 - 7:30 pm
Meeting Location: Two Waters, Building A, 1st Floor, Mesquite Room
10005 East Osborn Road
Scottsdale, AZ 85256

Northeast Ambulatory Care Center Update

SUBMITTED BY SRPMIC HEALTH AND HUMAN SERVICES

The Northeast Ambulatory Care Center (NEACC) is part of an Area-wide Master Plan that was developed by the Phoenix Area Indian Health Service in partnership with the Phoenix Service Unit Tribes (SRPMIC, Fort McDowell, San Lucy, Tonto Apache, Yavapai Apache and Yavapai Prescott Tribes) and the Inter-Tribal Council of Arizona (ITCA). The plan was accepted by Tribal Leaders in November, 2002.

The Master Plan includes four facilities the first of which is the Komatke Health Center in Laveen. The second facility, Hau'pal Red Tail Hawk Health Center, is currently under construction in south Chandler on the northwest corner of Old Price and Queen Creek Roads. The third facility is the NEACC. The final facility planned might be a new PIMC hospital.

All of these facilities have been dependent upon Congressional funding, and the completion of other planned facilities by the Indian Health Service such as the new San Carlos and Kayenta hospitals.

Since 2002, the IHS requested the NEACC be built within the SRPMIC,

and several locations have been considered. The final site selected is the Southwest corner of Country Club Dr. (Beeline Highway) and McDowell Road. The Community Council approved the project to move forward in January, 2016.

Planning and Design funds are included in the 2016 federal budget and the IHS Office of Environmental Health and Engineering have started this process. Construction funds are to be included in the next several Presidential budgets. It is anticipated that construction will take 3-5 years to complete.

When completed, the facility will be approximately 200,000 sq. ft., and anticipated federal personnel will be approximately 500 positions. The NEACC will serve all IHS eligible residents of Salt River, Lehi, Scottsdale, Carefree, Care Creek, Mesa and Tempe. Services will include primary care, behavioral health, pharmacy, dental, podiatry, neurology and physical therapy. The Community Council has authorized staff to participate in the planning and design of the NEACC to ensure that the facility reflect and include the cultures of the Pima and Maricopa people.

SALT RIVER
FILM FESTIVAL
2016
JUNE 21, 22 & 23, 2016
LEHI GROUNDS
FILMS START AT 8:00PM NIGHTLY
FREE YOUR AUDIENCE

Community Notice Circulation:



SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

Community Development Department Environmental Protection & Natural Resources

10005 EAST OSBORN ROAD, SCOTTSDALE, AZ 85256 (480) 362-7500 EPNR@srpmic-nsn.gov

Notice for Public Comment and Meeting

Salt River Pima Maricopa Indian Community 2015 Ambient Air Monitoring Network Report

COMMUNITY DEVELOPMENT DEPARTMENT ENVIRONMENTAL PROTECTION & NATURAL RESOURCES DIVISION AIR QUALITY PROGRAM

Purpose of Meeting: To provide an opportunity for public comments on Salt River Pima Maricopa Indian Community's 2015 Ambient Air Monitoring Network Report

SUMMARY: In accordance with the 40 Code of Federal Regulations (CFR) Part 58.10 Annual air monitoring network plan and periodic network assessment. The Salt River Pima Maricopa Indian Community, Community Development Department's (CDD) Environmental Protection & Natural Resources Division (EPNR) Air Quality Program (AQP) make its annual air monitoring network plan available for public comments before submission to the Environmental Protection Agency Region 9. The plan includes a statement of purposes for each monitor that provides detailed information about collection of monitoring data, network plan purposes and monitoring site information. The document is available for review at CDD/EPNR website www.srpmic-nsn.gov/government/epnr/ and hardcopy may be request at CDD/EPNR office at Two Waters Building, 3rd Floor, 10005 East Osborn Road, Scottsdale, AZ 85256. All public comments can be submitted to CDD/EPNR, 10005 East Osborn Road, Scottsdale, AZ 85256.

PUBLIC MEETING: This meeting invites all members of the public to a hearing on AQP SRPMIC 2015 Ambient Air Monitoring Network Report. CDD/EPNR AQP is providing an opportunity for interested parties to submit written or verbal comments. The deadline for comment period is June 24, 2016.

Meeting Date: June 21, 2016
Meeting Time: 5:00 pm – 7:30 pm
Meeting Location: Two Waters, Building A, 1st Floor, Mesquite Room
10005 East Osborn Road
Scottsdale, AZ 85256

Presentation at the Public Meeting:

Public Meeting for Comments

Salt River Pima Maricopa Indian Community's draft 2015 Ambient Air Monitoring Network Report

June 21, 2016
5:00 pm – 7:30 pm
Mesquite Room
Two Waters Building B



This public comment meeting is to discuss the SRPMIC 2015 Ambient Air Monitoring Network Draft Report.

- The purpose of this meeting is to receive comments from public on the draft ambient air monitoring network report for 2015
- The report includes the air monitoring network design and statement of purposes, report of statistical analysis of criteria pollutants measured, and the summary of ambient air monitoring activities and monitoring site details
- 30-Days public comment period prior to submission to EPA. Comments end June 24, 2016
- The document is posted on the CDD-EPNR website www.srpmic-nsn.gov/government/epnr and hardcopies available at CDD-EPNR office
- Comment may also be submitted in writing via email or by telephone to: Chris Horan christopher.horan@spmic-nsn.gov or Stan Belone stan.belone@srpmic-nsn.gov

Milestone of Ambient Air Monitoring Program

- Program commenced in 1998
- Established sites and started collecting data in 2002
- Data submission to Air Quality Systems (AQS) in 2005
- Air toxics monitoring at Senior Center site 2005 – 2007
- DOAS monitoring 2007 – 2013
- FTP hourly data to AIRNow 2007
- Gained Treatment as State (TAS) recognition in 2008
- Developed drafted ordinances in 2011



SRPMIC Air Monitoring Sites

Senior Center

- Ozone
- PM10
- PM2.5
- Meteorological

Red Mountain

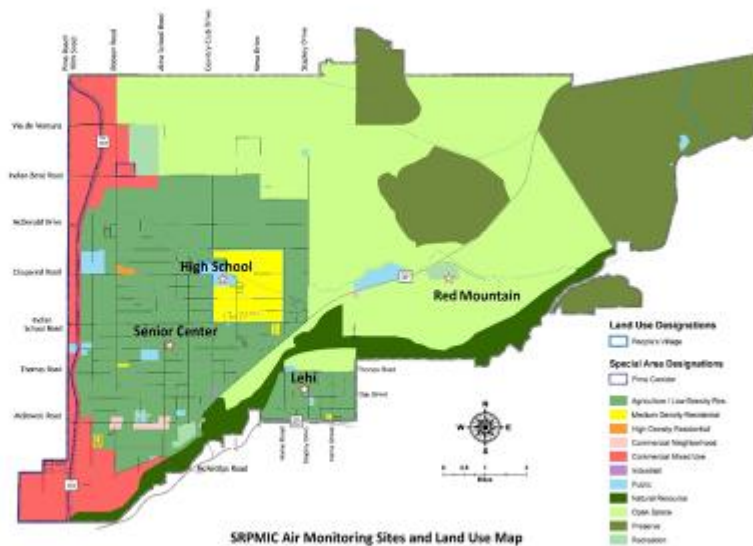
- Ozone
- Meteorological

Lehi

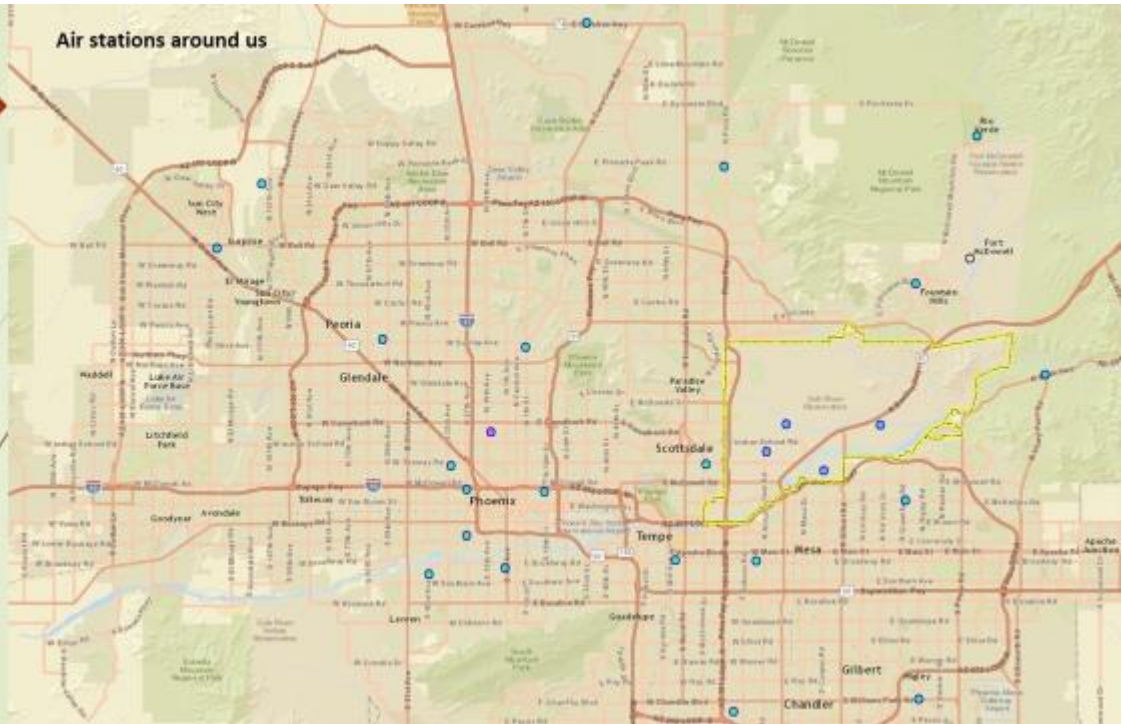
- Ozone
- PM10
- Meteorological

High School

- Ozone
- PM10



Air stations around us



SRPMIC Four Ambient Air Quality Stations



Senior Center Air Monitoring Station



High School Air Monitoring Station



Red Mountain Air Monitoring Station



Lehi Air Monitoring Station

Types of Monitoring Equipment Utilized



Overall 29 instrumentations are maintained

SRPMIC in nonattainment area for criteria pollutants ozone and PM_{10}

- An area continues to exceed the health standards of National Ambient Air Quality Standard (NAAQS) is designated as nonattainment
- In 2015, SRPMIC had four exceedance days of 8-Hour standard for ozone
- All of ozone exceedances occurred in the month of June 2015
- There were no exceedance days for the PM_{10}

Summary of Exceedances of the NAAQS during 2015

Pollutant	Interval	Site	Concentration	Date	Number of Exceed Days
Ozone	8-Hour	Senior Center	0.079	6/12/15	4
			0.077	6/20/15	
			0.077	6/29/15	
		Red Mountain	0.079	6/20/15	
			0.078	6/12/15	
			0.078	6/20/15	
		Lehi	0.082	6/29/15	
			0.080	6/12/15	
			0.080	6/20/15	
			0.076	6/16/15	
		High School	0.078	6/12/15	
			0.076	6/29/15	



2015 Network Report

- 2015 is the last year of ozone seasonal monitoring for Lehi and High School air station
- There were no exceedance days of 24-hour NAAQS for PM_{10} . Good News!
- SRPMIC 5-Year Air Monitoring Assessment Report was submitted September 2015
- The trend of annual average $PM_{2.5}$ concentration shown general decline from 2005 to 2016
- Ozone 8-hour 4th high, only Lehi monitor was above 0.075 ppm. However, Red Mountain monitor is still in violation of 8-hour 4th high of 3-year average
- EPA revised the 8-hour ozone NAAQS from 0.075 ppm to 0.070 ppm on October 1, 2015. It will be tough to obtain attainment



Salt River Pima Maricopa Indian Community
Community Development Department
Environmental Protection & Natural Resources Division
Air Quality Program
www.srpmic-nsn.gov/government/epnr/

Christopher "Chris" Horan
Stan Belone
Mangas Slinkey
Corwin "Shimmy" Smith
Gina Leverette

