# **Salt River Pima-Maricopa Indian Community (SRPMIC)**



# 5-Year Air Monitoring Network Assessment

Prepared by
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Environmental Protection and Natural Resources Division
Air Quality Program (AQP)
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#### Introduction

This document is the Salt River Pima-Maricopa Indian Community's (SRPMIC or Community) 5-year Air Monitoring Network Assessment. 40 Code of Federal Regulations (CFR) Part 58.10 (d) requires an air monitoring network assessment to be conducted on a 5-year cycle. This evaluation assessed the air quality monitoring system consisting of State and Local Air Monitoring Stations (SLAMS) operated under tribal authority. SRPMIC is not required to operate National Core (NCore), near-road, hazardous air pollutants (HAPs) or Photochemical Assessment Monitoring Station (PAMS) air monitoring sites.

# 1. Background Information

Before beginning a network assessment, the purposes of the network must be reviewed, assessed, and prioritized. The Air Quality Program (AQP) held meetings with network operators and decision makers to discuss the network's purpose. From these meetings, three general purpose network categories were created:

- Assess pollutant levels in the Community.
- Measure compliance with the NAAQS.
- Assess pollutant transport from the metro area.

The SRPMIC Annual Monitoring Network Plan provides information on any proposed changes to the network that are consistent with the findings of the 5-year Network Assessment. The most recent AQP Annual Network Plan (ANP) for 2024 was completed in June 2025.

## 1.1. History

SRPMIC is a sovereign tribe located in the Phoenix metropolitan area and was established by Executive Order on June 14, 1879. The Community is located approximately 7 miles northeast of Phoenix in Maricopa County, Arizona and is bordered by the cities of Scottsdale, Tempe, Mesa and Fountain Hills. The Community encompasses 52,600 acres and borders the Fort McDowell Yavapai Nation. Both reservations are adjacent to the Tonto National Forest.

The Community has an elevation of approximately 1,220 feet above sea level. More than 19,000 acres of the Salt River Pima-Maricopa Indian Community are held as a natural preserve, and approximately 12,000 acres are under cultivation with a variety of crops, including cotton, melon, and vegetables. Commercial development is reserved along the Community's western boundary, which is where the Talking Stick Entertainment District is located. The majestic Red Mountain can be seen throughout the Community and is located on the eastern boundary. The sight of this sacred mountain symbolizes the home of the Pima and Maricopa people.

With two distinct backgrounds and cultures, the Community is comprised of two Native American tribes: the "Akimel O'odham" (River People) and the "Xalychidom Piipaash" (Upriver people), also known as the Pima and Maricopa. Today, over 11,000 individuals are enrolled as Tribal members. The Salt River Pima-Maricopa Indian Community proudly owns and operates several successful enterprises, including Talking Stick Golf Club, Talking Stick Resort, Salt River Fields at Talking Stick, Casino Arizona, Salt River Materials Group, Saddleback Communications, and the Salt River Landfill.

## 1.2. Network Design

A State or Local Air Monitoring Site (SLAMS-Tribal) network consists of ambient air monitoring sites that provide data to meet required monitoring objectives. All SRPMIC air monitoring sites have the basic monitoring objective of National Ambient Air Quality Standard (NAAQS) comparison. Monitoring sites generally correspond to a spatial scale identified in 40 CFR Part 58 Appendix D. 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 1.1).

Table 1-1 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 1.2 summarizes this relationship.

Table 1-2 Site Type and Scales

Site Type	Appropriate Siting Scales
Highest Concentration	Micro, Middle, Neighborhood (Sometimes Urban or regional for secondarily formed pollutants)
Population	Neighborhood, Urban
Source Impact	Micro, Middle, Neighborhood
General / Background and Regional Transport	Urban, Regional
Welfare-related Impact	Urban / Regional

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 Environmental Protection Agency (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 Part 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.

SRPMIC uses FRMs to collect filter based  $PM_{2.5}$  samples and FEMs for continuous  $PM_{10}$  and ozone. SRPMIC does not have approval for any ARMs. The  $PM_{10}$  monitors used throughout the monitoring network are Tapered Element Oscillating Microbalance (TEOM) monitors which measure  $PM_{10}$  continuously. The  $PM_{2.5}$  monitors used currently in the monitoring network are filter based low volume monitors equipped with the appropriate size fractioning device. A Teledyne mass monitor which uses scattered light spectrometry (FEM) which measures  $PM_{2.5}$  continuously is planned to be operational in 2026.

As described in the SRPMIC "2024 SRPMIC Air Monitoring Network Plan Report," the monitoring network meets the monitoring objectives defined in Appendix D to 40 CFR Part 58. Table 1.3 is a

summary of SLAMS monitoring sites operated by SRPMIC. A map of the Community and monitoring site locations are included (Fig. 1).

Table 1-3 SLAMS Summary.

Site Name	AQS#	Site Type	Site Scale	Pollutants
Senior Center (SC)	04-013- 7020	Population Exposure	Neighborhood	PM <sub>10</sub> , PM <sub>2.5</sub> , O <sub>3</sub>
Red Mountain (RM)	04-013- 7021	Regional Transport, Highest Conc.	Urban	O <sub>3</sub>
Lehi (LE)	04-013- 7022	Population Exposure	Neighborhood	PM <sub>10</sub> , O <sub>3</sub>
High School (HS)	04-013- 7024	Population Exposure	Neighborhood	PM <sub>10</sub> , O <sub>3</sub>

Salt River Pima-Maricopa
Indian Community
(SRP-MIC)

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Figure 1-1 Air Monitoring Locations

# 1.3. Climatology

SRPMIC receives on average approximately seven inches of rainfall annually. The climate is warm, typically with low humidity. The Salt River Valley in Central Arizona typically has relatively calm winds but does occasionally experience significant winds that can result in blowing dust. The meteorology associated with these winds includes synoptic scale systems such as frontal passages, strong pressure gradients, and regional monsoon storms or microscale storm cells that form locally.

The frontal passages are typically associated with strong Pacific Northwest low pressure systems that develop over the northern Pacific Ocean and move southeast into the western US. Strong winds in advance of the cold fronts can reach speeds over 30 mph which cause significant areas of blowing

dust in central Arizona. Additionally, the duration of the strong, gusty winds can last up to 8 hours which contribute to elevated hourly  $PM_{10}$  concentrations.

Pressure gradient exceptional/natural events result from strong, high pressure building over the western US and low pressure to the east. As the high pressure builds, a pressure differential is created causing strong winds over Arizona. The result is blowing dust developing locally in addition to transported dust from neighboring areas surrounding SRPMIC. Also, like frontal passages, the duration of strong, gusty winds can last several hours. The combination of the long duration of transported dust and locally derived dust can overwhelm PM<sub>10</sub> monitors.

The monsoon is a seasonal wind that takes place in the southwestern U.S. and northern Mexico during the summer months. The typical diurnal winds along the Salt River in central Arizona are 'drainage' in nature: easterly winds originating from the mountains in the morning switch to westerly winds in the afternoon due to the heating of the desert floor. However, during the monsoon, winds will shift to an easterly to southeasterly direction. This is due to a ridge of high pressure that sets up over the 'four corners' area. The result is an influx of atmospheric moisture from the south and east and storm development. The storm development can be synoptic in nature as large lines of storms form either over the Mogollon Rim or northern Mexico/southern Arizona and move into the Salt River Valley. Additionally, monsoon storms can be local in nature with the formation of localized monsoon supported storm cells. Either monsoon setup can pack significant winds (reaching gusts over 60 mph) that cause dust storms to develop and transport dust tens to hundreds of miles (a.k.a. Haboob) and have similar dust causing effects as frontal passages, and strong pressure gradients.

The monsoon season, as defined by the National Weather Service, starts on June 15th and lasts through September 30th. The large scale Haboobs that form are more frequent at the beginning of the monsoon and subside as the monsoon progresses and measurable rainfall occurs. The typical times of year that each meteorological setup results in exceptional/high wind events in Central Arizona are:

- Frontal passage Spring (March-April)
- Strong pressure gradients Fall (September-November)
- Monsoon Summer (June-September)

The driest time of the year for the Salt River Valley is April through June followed by September through November. The two meteorological regimes which are enhanced by the lack of precipitation are frontal passages (especially in April) and monsoon.

#### 1.4. Site Land use

As of 2022, there are 10,815 enrolled tribal members, and 5,949 living within the Community. The four sites are surrounded by a variety of land uses including: agricultural, residential, commercial, and preserve (Fig. 2-1).

The LE Community Building is diagonally across the intersection from the Lehi monitoring site, which is inside the Police/Fire Substation. The site is bordered on the north and east by agricultural fields, on the west by neighborhood homes, a Booster Pump Facility to the north and directly south open land.

The SC site is in the middle of neighborhood homes with agricultural fields to the south and sparse open fields to the north. The site is located west of the Senior Service Center at the northeast section of Osborn Road/Alma School Road approximately one-half mile from the Two Waters Administration Tribal Complex.

The HS site is on the Salt River High School campus, which has an Elementary School to the southeast, and school ballparks and residential homes to the east. The Central Arizona Project Aqueduct Canal borders along the north, and surrounding the area are open agricultural fields to the north and south.

The RM site is an urban scale monitoring site for background and regional ozone transport. The site is in open desert and north of the dried Salt River bed.

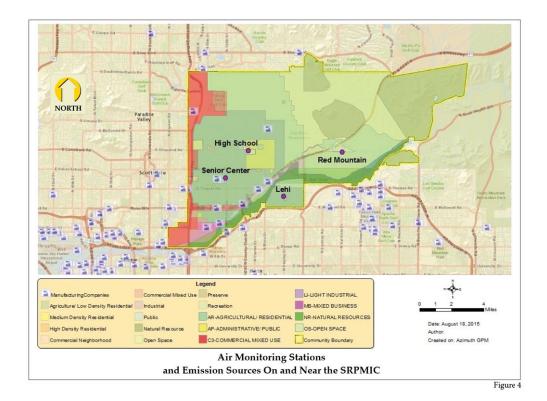


Figure 2-2 Land Use and Emission Sources

#### 1.5. Emissions

There are relatively few air pollution emission sources located on the Community. Most emissions come from on-road and point sources (Table 1-4). The major on-road emissions come from the 101 and 202 Freeways and the Interstate 87. The major point sources are the Salt River Landfill and sand and gravel facilities that are located along the banks of the Salt River. There are also on-road emissions from local paved and unpaved roads on the Community.

Table 1-4 Total Emissions

	NOx	СО	VOC	PM10	PM2.5	SO2
Total Point Source Emissions (tons)	61.26	95.39	28.7	111.2	2.91	6.17

NOx CO VOC PM10 PM2.5	SO2
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Total Non-Point Source Emissions 0.74 (tons)	0.16	49.81	54.38	10.91	0.05	
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	NOx	СО	VOC	PM10	PM2.5	SO2
Total On-Road Source Emissions (tons)	410.85	4,218.69	299.18	40.51	12.17	1.11

#### **Point Sources**

- The largest pollutant emitted from point sources was nitrogen oxides (NOx).
- The Salt River Landfill was the largest emitting point source for Carbon Monoxide (CO).
- Talking Stick Resort was the largest point source of NOx emissions.
- Salt River Sand & Rock-Dobson Facility was the largest point source of PM<sub>10</sub>.

#### Non-Point Sources

- Non-Point Sources consisted of seven gasoline/fuel service stations in the Community.
- Volatile Organic Compounds (VOCs) were the largest source of emissions.

#### **On-Road Sources**

 Urban Interstate (Loop 101 and 202) traffic was the major emitter of pollutants followed by Urban Principal Arterial traffic (Beeline Highway).

Sources outside the Community with potential air quality impacts include growth from Scottsdale, Mesa, and Tempe (Figure 2-1).

#### 2. Data Evaluation

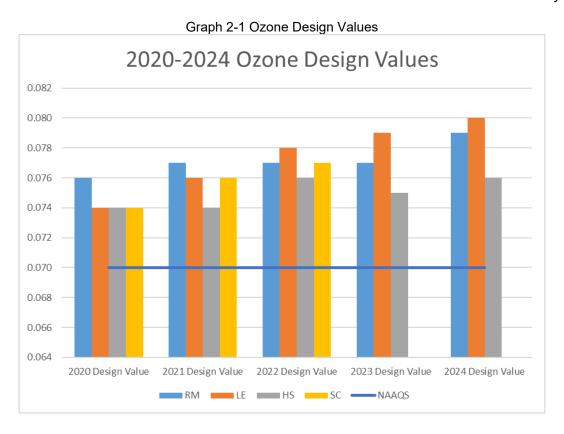
The purpose of the SRPMIC air monitoring network is to measure ambient concentrations of the selected criteria pollutants at various locations across the Community. These data are used to assess health and welfare effects, NAAQS comparison, and determine pollution sources both on and off the Community. The criteria pollutants measured are ozone, PM-10 and PM-2.5; the meteorological parameters include wind speed, wind direction, ambient temperature, and ambient pressure. The collection of air monitoring and meteorological data began in 2002 and continues to date.

#### 2.1. Ambient Trends

The air quality in the CBSA is generally improving despite the tremendous growth experienced in the region. Since air 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 pollutants that are monitored on the SRPMIC are illustrated (Graphs 2-1 through 2-4). The following sections provide a summary of pollutant concentration trends over several years. The purpose of including this section is to illustrate air quality improvement or declines over time. This information is valuable in the overall assessment of the monitoring network and its ability to represent population exposure.

## 2.1.1. Ozone Eight-Hour

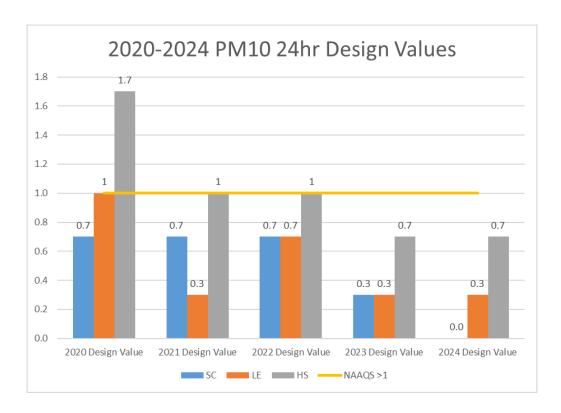
Eight-hour average concentrations of ozone at the SRPMIC monitoring locations show a general increase in concentrations (see Graph 2-1). The increase is most noticeable at the RM and LE sites. This general increase in concentration can be found in sites located outside the Community in the attached CBSA. All three of AQP ozone sites violated the NAAQS standard over the last five years.



### 2.1.2. PM10 24-Hour

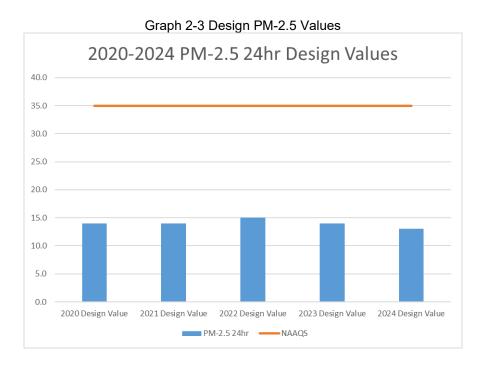
Overall, PM-10 values have decease over the last five years. Additionally, no site has violated the NAAQS over the last four years (Graph 2-2). This data for these graphs includes high wind exception events, so the values will be lower after they have been excluded (Graph 2-2).

Graph 2-2 PM-10 Design Values



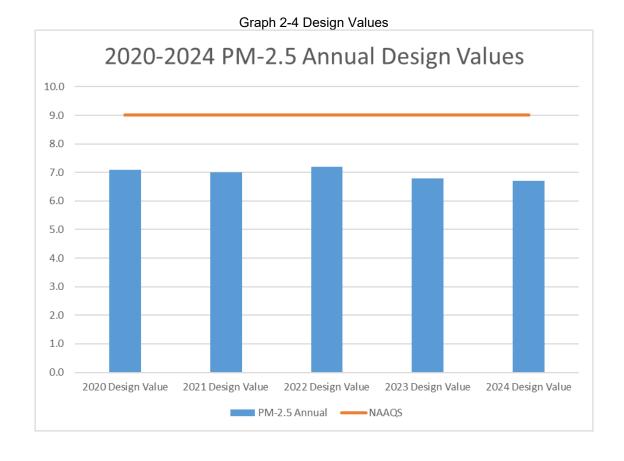
## 2.1.3. PM-2.5 24-hour

For the time period of 2020-2024, the PM-2.5 design value remained well below the NAAQS (Graph 2-3).



## 2.1.4. Annual PM-2.5

The Annual PM-2.5 design values remained well below the NAAQS (Graph 2-4). This remains true even though the standard was lowered from 12  $\mu/m^3$  to 9.0  $\mu/m^3$  (Graph 2-4).



## 3. Network Assessment/Prioritization

#### 3.1. Site Information

To assist States and Tribal monitoring agencies in preparing for their 2025 5-year Network Assessments as described in 40 CFR §58.10(d), EPA made available a Network Assessment application (Ambient Air Monitoring Network Assessment Tools "NetAssess2025").

The results for each Ozone, PM-10, and PM-2.5 network site analysis using the NetAccess2025 tool are provided. This information includes the area served by each monitoring site and exceedance probability (2019-2021). Demographic information was overwhelmingly skewed by the population outside the Community and were not used (Table 3-1 to 3-3).

Table 3-1 Ozone

	High School	Lehi	Red Mountain	Two Waters
Site ID	04-013-7024	04-013-7022	04-013-7021	04-013-7025
EPA Region	9	9	9	9
State	Arizona	Arizona	Arizona	Arizona
County	Maricopa	Maricopa	Maricopa	Maricopa
CDCA	Phoenix-Mesa-	Phoenix-Mesa-	Phoenix-Mesa-	Phoenix-Mesa-
CBSA	Scottsdale, AZ	Scottsdale, AZ	Scottsdale, AZ	Scottsdale, AZ

Area Served	*95 mi <sup>2</sup>	*14 mi <sup>2</sup>	*Data Unavailable	* **Data Unavailable
Population Served	*43,123*	*64,074	*Data Unavailable	* **Data Unavailable
Exceedance Probability (2019- 2021)	>90%	>90%	>90%	>90%

<sup>\*</sup>Note that the area and population served by each site is greatly influenced by the areas outside of the Community
\*\*The Senior Center site is being moved and renamed the Two Waters site

#### Table 3-2 PM-10

	High School	Lehi	Senior Center/Two Waters
Site ID	04-013-7024	04-013-7022	04-013-7025
EPA Region	9	9	9
State	Arizona	Arizona	Arizona
County	Maricopa	Maricopa	Maricopa
CBSA	Phoenix-Mesa-Scottsdale, AZ	Phoenix-Mesa- Scottsdale, AZ	Phoenix-Mesa-Scottsdale, AZ
Area Served	141 mi <sup>2</sup>	**50 mi <sup>2</sup>	**1 mi <sup>2</sup>
Population Served	**114,785	**183,737	**4,713
Exceedance Probability (2019- 2021)	NA	NA	NA

<sup>\*</sup>Note that the area and population served by each site is greatly influenced by the areas outside of the Community
\*\*The Senior Center site is being moved and renamed the Two Waters site

#### PM-2 5

1 101-2.5	T
	Senior Center/Two Waters
Site ID	04-013-7025
EPA Region	9
State	Arizona
County	Maricopa
CBSA	Phoenix-Mesa-Scottsdale, AZ
Area Served	545 mi <sup>2</sup>
Population Served	* **308,880
Exceedance Probability (2019-2021)	<10%

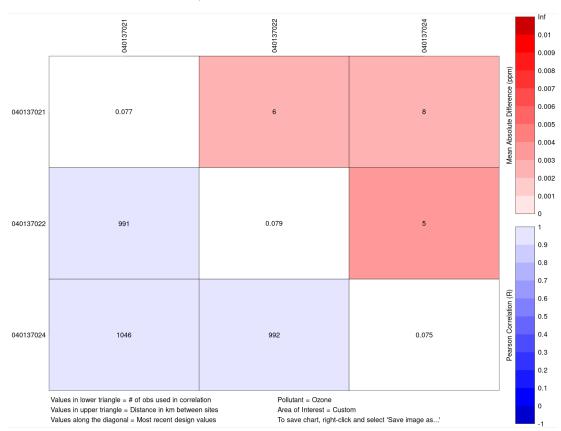
<sup>\*</sup>Note that the area and population served by each site is greatly influenced by the areas outside of the Community
\*\*The Senior Center site is being moved and renamed the Two Waters site

These data summaries have been heavily influenced by the metro area outside the Community. Therefore, any conclusions would be high suspect.

#### 3.2. Correlation Matrix

#### 3.2.1. Ozone

This correlation matrix graphic is used to compare each of the SRPMIC ozone monitors to one another. The blue squares in the bottom-left corner of the correlation matrix show the correlation between each pair of monitors, with text indicating the number of days used in the calculation. The red squares in the top-right corner show the mean absolute difference in concentrations between each pair of monitors, with text indicating the distance in kilometers between each pair of monitors. The numbers along the diagonal indicate the most recent design value for each monitor (Graph 3.1).

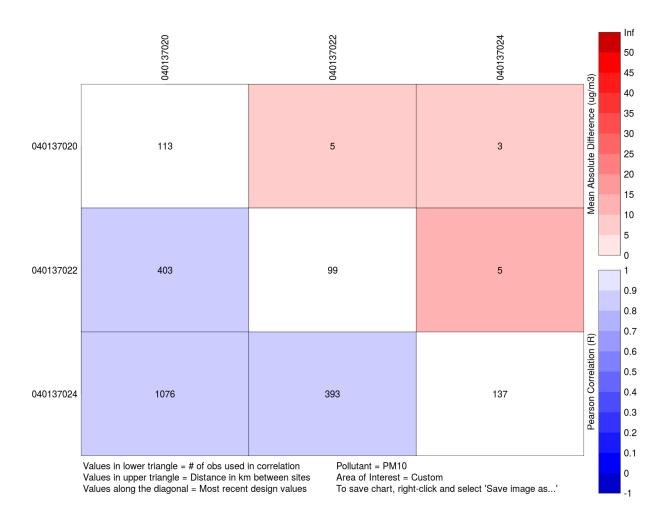


Graph 3-1 Ozone Correlation Matrix

The SRPMIC ozone monitors are highly correlated according to this assessment. To provide better special cover for the Community population areas, the ozone monitor that was temporarily shut down at the Senior Center site will be reestablished at the nearby Two Waters site.

#### 3.2.2. PM-10

This correlation matrix graphic is used to compare each of the SRPMIC PM<sub>10</sub> monitors to one another. The blue squares in the bottom-left corner of the correlation matrix show the correlation between each pair of monitors, with text indicating the number of days used in the calculation. The red squares in the top-right corner show the mean absolute difference in concentrations between each pair of monitors, with text indicating the distance in kilometers between each pair of monitors. The numbers along the diagonal indicate the most recent design value for each monitor (Graph 3-2).



Graph 3-2 PM10 Correlation Matrix

The SRPMIC PM-10 monitors are moderately correlated according to this assessment.

## 3.2.3. PM-2.5

Because there is only one  $PM_{2.5}$  site on SRPMIC, the NetAssess2025 tool was not used for this NAAQS pollutant.

# 3.3. Site-By-Site Analyses

A series of questions were developed to compare and rank the importance of each site and monitor. The Quality Assurance Officer (Ben Davis) and Environmental Programs Supervisor (Gina Mason) and Assistant Director (Chris Horan) answered the following questions, and an average was taken for each question.

- 1. How much population is covered by the monitor
- 2. Is the site in a non-attainment area
- 3. Do the site's monitors violate the NAAQS
- 4. Is it the only monitor in the network
- 5. Importance outside the Community
- 6. Importance inside the Community

Each question was assigned a number on a scale from 1 to 5 on level of importance by each member of the Network Assessment Group and an average was calculated (Table 3-1 to 3-3). This method allows the AQP to rank the importance of each monitor and can be used as a tool to determine which monitors can be added, moved, or removed.

Table 3-3 Ozone

1 4.510 0 0 0 2 0 10									
	Site Name	Population Coverage	Non- Attainment	Violate NAAQS	Only monitor	Outside Community	Inside Community	Total	
Importance Range 1-5	RM	4.7	3.7	4.3	3.3	3.7	4.7	24.3	
	LE	4.7	3.7	4.3	3.3	3.7	4.7	24.3	
	HS	4.7	3.3	4.3	3.3	3.7	4.3	23.7	

There are three active ozone monitors in the network. The fourth monitor was at the SC site and was shut down in 2022 until a new site could be constructed (end 2025).

Table 3-4 PM-10 Site Importance

	Site Name	Population Coverage	Non- Attainment	Violate NAAQS	Only monitor	Outside Community	Inside Community	Total
Importance Range 1-5	SC	4.3	3.0	3.7	3.3	3.3	4.3	22.0
	LE	4.3	3.0	3.7	3.3	3.3	4.7	22.3
	HS	4.3	3.3	4.0	3.3	3.7	4.3	23.0

Table 3-5 PM-2.5

	Site Name	Population Coverage	Non- Attainment	Violate NAAQS	Only monitor	Outside Community	Inside Community	Total	
Importance Range 1-5	<b>\</b> ()	4.0	3.3	3.0	4.3	3.3	5.0	23.0	

For the ozone sites, two measure equal importance, while the third is only 0.6 less than the other sites. The comparison of the ozone sites shows no clear deference in the importance of one site over the other. For the PM-10 sites, there is a slightly larger gap between the sites (1.0) compared to the

ozone sites. The ozone or PM-10 comparison does not show any clear difference in the importance of one site over the other. Since there was only one PM-2.5 site, no comparison was made.

# 4. Regulatory Summary

The EPA regulations (40 CFR Part 58.10 (d)) requires a monitoring network assessment to be conducted every five years and address seven areas. SRPMIC provides a list of each area and its corresponding summary:

- 4.1. EPA regulations require the agency to document that the network meets the monitoring objectives defined in Appendix D to 40 CFR Part 58.
  - 4.1.1. SRPMIC 2024 Air Monitoring Network Plan Report wherein compliance with App. D is affirmed for all current sites.
- 4.2. Evaluation of the need for new monitoring sites in the network.
  - 4.2.1. The temporarily shut down at the Senior Center ozone monitor will be reestablished at the nearby Two Waters site. This will provide better spatial cover of the Community's population areas.
  - 4.2.2. A new continuous PM-2.5 monitor will be established at the Lehi site to better represent pollution values in the far southeast parts of the Community.
- 4.3. Evaluation of Sites That Can Be Terminated.
  - 4.3.1. A site by site analyses (section 3.3) of the network showed only slight variations in the importance of each site. This shows that all sites are equally important and will remain active.
- 4.4. Consider if new technologies are appropriate for incorporation into the ambient air monitoring network.
  - 4.4.1. The AQP began implementing new technologies into the Network. These include:
    - 4.4.1.1. Replace all aging instruments and calibration equipment.
    - 4.4.1.2. Replace filter based PM-2.5 instruments with continuous.
    - 4.4.1.3. Set up a maintenance and repair area at the new Two Water and Lehi sites.
- 4.5. Point number five requires consideration of the ability of existing and proposed sites to support air quality characterization for areas with relatively high populations of susceptible individuals.
  - 4.5.1. A substantial portion of the Community population is represented by an existing air monitoring site. Currently PM2.5 is measured at Senior Center and represents potential impacts to children, the elderly, and the employee workforce nearby.
- 4.6. Consider the effect of closed site(s) on data users.
  - 4.6.1. No sites are currently being proposed for closure.
- 4.7. Point seven requires assessment to identify needed changes to PM2.5 population-oriented sites.

4.7.1. SRPMIC currently measures PM-2.5 at the Senior Center, the site will be moved less than a third of a mile to the southwest so it will still be near the large residential area. To provide better geographic cover for the Community a second PM-2.5 monitor will be installed at the new Lehi site.

There are several nearby Maricopa County Air Quality Monitoring sites for PM2.5 that would ensure maintenance of minimum monitoring requirements under 40 CFR Part 50.

#### 5. Conclusion

The process of developing and implementing this SRPMIC Air Quality 5-year monitoring network assessment leads to several conclusions regarding the current air monitoring network and potential changes in the future.

The CBSA is currently undergoing an evaluation process for the PM-2.5 standard. The AQP will be changing out its filter-based PM-2.5 monitors with continuous and add an additional monitor at the Lehi site to better monitor that part of the Community. All sites meet EPA requirements for NAAQS comparison.

AQP is requesting permission to shut down and move the Senior Center Air Monitoring Site approximately 580 yards southwest of the original site. The Ozone and PM-10 instruments are eligible to be shut down and moved under 40 CFR 58.14 (c) (6), because of the unforeseen building additions to the Senior Center complex, which were beyond AQP control. The PM-2.5 (filter) instruments are eligible to be relocated to the new location under 40 CFR 58.14 (c) (1) and will have a continuous data record with the old site. The Site name will be changed to the Two Waters Air Monitoring Site with site AQS ID of 04-013-7025 and will monitor for continuous PM2.5 and PM10, FRM Collocated PM2.5, Ozone, Temperature, Relative Humidity, Pressure, and Wind Speed and Direction.

AQP is requesting permission to shut down and move the Lehi Air Monitoring Site approximately 231 yards southwest of the original site. The Ozone and PM-10 instruments are eligible to be moved under 40 CFR 58.14 (c) (6), because of circumstances beyond AQP control. These include the building's HVAC system having difficulty maintaining room temperature within EPA regulations; the ozone monitor is inside a crowded communication room and is subject to being hit, moved, or unplugged; the PM-10 and anemometer are located on the roof of the building with no railing and is only accessible by ladder; the residence time for the site is 3X greater than the other sites at 9.8 seconds; and the large trees surrounding the Lehi site grow quickly and need to be continually monitored and trimmed to maintain compliance with EPA regulations.

The CBSA is facing ozone reclassification from Moderate to Serious Non-attainment. The AQP will provide better coverage of the Community from the downwind effects from the Metro area by reestablishing the Senior Center monitor when the Senior Center site is moved to the Two Waters site. The Red Mountain site continues to represent the downwind transport from the Metro Area. All sites meet EPA requirements for NAAQS comparison. This change will complement the Maricopa County and Fort McDowell Yavapai Nation ozone monitoring sites near the Community.

PAMS monitoring requirements for the ozone non-attainment area are implemented by the Arizona Department of Environmental Quality (ADEQ). ADEQ operates the required N-Core site and Maricopa County operates two near-road sites as required by EPA rules.

## References

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