

**Albuquerque Environmental Health Department
(EHD)
Air Quality Program (AQP)
2017 Annual Network Review**

May 31, 2017

Albuquerque Environmental Health Department (EHD)
Air Quality Programs (AQP)
Ambient Air Monitoring Section
2017 Annual Network Review for Ambient Air Monitoring

Introduction

Federal regulations require the City of Albuquerque Air Quality Programs (AQP) to submit an annual monitoring network review (ANR) to the Environmental Protection Agency (EPA) regional office in Dallas, Texas. AQP's objective, when reviewing the network and, if appropriate, proposing changes, is to optimally apply limited monitoring resources, while maximizing its effectiveness by choosing monitoring sites to capture places where air quality is likely to be most heavily impacted by certain criteria pollutants.

The network plan describes the framework of the local air quality surveillance system, presents monitoring results over the past three years, provides comparisons to National Ambient Air Quality Standards, and discusses AQP's future plans. The annual monitoring network plan must be made available for public inspection for at least 30 days prior to formal submission to EPA. (Anticipated dates are June 1 – June 30, 2017.) All City of Albuquerque State and Local Air Monitoring Stations (SLAMS) meet EPA guidance under 40 CFR, Part 58, Appendix E.

This document shows the network configuration since the 2016 Annual Network Review and proposed changes for the 2017 calendar year. It represents the commitment of the AQP to effectively measure air pollution in Albuquerque-Bernalillo County¹ through ambient air monitoring, by using the best affordable technology, and by communicating the data collected as quickly and accurately as possible.

The City of Albuquerque Air Quality Program operates its air monitoring network in accordance with the quality assurance requirements of 40 CFR Part 58, Appendix A and B, makes use of the methodology given for each monitor in accordance with Appendix C, implements and designs its monitoring network in accordance with Appendix D, and follows siting criteria provided in Appendix E.

Population Statistics

The counties of Bernalillo, Sandoval, Valencia and Tarrant make up the State's largest Metropolitan Statistical Area (MSA). The MSA contains 909,906 people as of 2016, which is almost half (43.6%) of the State's total population of 2,085,109.

As the regional center for employment, advanced education, retail commerce, and medical treatment, Albuquerque experiences non-local commuter traffic. The junction of major Interstate 25 (north/south) and Interstate 40 (east/west), adds significant heavy transport traffic between the port of Los Angeles and the East Coast, and between Denver, El Paso, and the US-Mexico Border.

¹ Excluding Native American and Pueblo Lands within the County which are overseen by EPA rather than AQP.

The map in Figure 1 shows the physical location of all current monitoring sites operated by the AQP. Two sites are within the city limits of Albuquerque (2ZM – Del Norte and 2ZS – Jefferson). Two other sites (2ZV - South Valley and 2ZF - Foothills) are in Bernalillo County.

2017 City of Albuquerque Ambient Air Monitoring Stations

Foothills – Double Eagle Elementary School (ZZF)
8901 Lowell Street NE
Lat: 35.185, Long: -106.5077
Ozone
PM_{2.5} (continuous)

Jefferson (ZZS)
3700 Singer Boulevard NE
Lat: 35.1441, Long: -106.6044
PM₁₀ (continuous/non-continuous, co-located)
Meteorology

NCore Multipollutant Monitoring Site
Del Norte High School (ZZM)
4700A San Mateo Boulevard NE
Lat: 35.134263, Long: -106.585197
Carbon Monoxide
Ozone
Nitrogen Dioxide (NO₂, NO, NO_x)
Total Reactive Nitrogen (NO_y, NO)
Sulfur Dioxide
Lead (non-continuous)
PM₁₀ (continuous)
PM_{2.5} (continuous/non-continuous, co-located)
PM_{10-2.5} (continuous)
PM_{2.5} Speciation
Nephelometer (Visibility)
Radiation Monitoring
Meteorology

South Valley (ZZV)
201 Prosperity Avenue SE
Lat: 35.0169, Long: -106.6572
Carbon Monoxide
Ozone
PM₁₀ (continuous)
PM_{2.5} (continuous)
Meteorology

Figure 1: Albuquerque Ambient Air Quality Monitoring Network

Table 1, found on the next page, shows the network configuration as EPA acknowledged it in the 2016 ANR and lists the monitoring equipment operated at each site. Column 1 is the “AQS Site ID#,” a unique identification number assigned to each monitoring site in the network. The Air Quality System (AQS) is a national air monitoring database maintained by the EPA. Data collected from monitoring sites are quality assured and input into the AQS database within 90 days following the end of each calendar quarter. <https://www.epa.gov/outdoor-air-quality-data>.

Column 2 gives the local site designation, name, location, and “affiliation.” Site longitude and latitude are in columns 3 and 4. Columns 5 through 9 list the monitors at each site and their associated parameters. During the public review period monitoring site photographs can be downloaded from the City of Albuquerque – Air Quality Programs website <http://www.cabq.gov/airquality/annual-network-review-for-ambient-air-monitoring>

Table 1 Albuquerque 2017 Ambient Air Monitoring Network

AQS Site ID#	Address/ Location	Longitude	Latitude	Pollutants Measured	Monitor Type	Sampling Method	Sampling Method	Sampling Method	AQS Analysis	Operating Schedule	Monitoring Objective	Spatial Scale	NAAQS Comparable	MSA
35-001-1012	22F Foothills 8901 Lowell NE	-106.508	35.1852	O3	SLAMS	UV Photometric	44201-1 087	UV Photometric	Ultra Violet Absorption	continuous	Highest Concentration	Urban	Yes	ABQ
				PM2.5	AQI Only	Beta Absorption	88502-1 170	Beta Absorption	Beta Attenuation Internal Only	continuous	General Background	Neighborhood	Not in AQS	ABQ
				O3	SLAMS	UV Photometric	44201-1 087	UV Photometric	Ultra Violet Absorption	continuous	Population Exposure	Neighborhood	Yes	ABQ
				HS CO	SLAMS	Non Dispersive IR	42101-1 593	Non Dispersive IR	Gas Filter Correlation Teledyne T300U	continuous	Population Exposure	Neighborhood	Yes	ABQ
				NO2	SLAMS	Chemiluminescence	42602-1 099	Chemiluminescence	Gas Phase Chemiluminescence	continuous	Population Exposure	Neighborhood	Yes	ABQ
	22M Del Norte 4700A San Mateo NE Affiliation: NCore	-106.586	35.13426	NOy	SLAMS	Chemiluminescence	42600 699	Chemiluminescence	Chemiluminescence Teledyne API T200U/501	continuous	Population Exposure	Neighborhood	NA	ABQ
				HS SO2	SLAMS	UV fluorescence	42406 600	UV fluorescence	UV Fluorescence T100U	continuous	General Background	Population Exposure	Yes	ABQ
35-001-0023				Lead	SLAMS	EQI-0710-192	14129-1 110	EQI-0710-192	Emission Spectra ICAP (ICP-OES) EPA	Daily 1/6	Population Exposure	Neighborhood	Yes	ABQ
				PM10 LC & PM10 STD *	SLAMS	Beta Absorption	81102-1 122/85101-1 122	Beta Absorption	Beta Attenuation	continuous	Population Exposure	Neighborhood	Yes	ABQ
				PM2.5 *	SLAMS	Beta Absorption	88101 170	Beta Absorption	Beta Attenuation	continuous	Population Exposure	Neighborhood	Yes	ABQ
	22S Jefferson 3700 Singer NE	-106.605	35.1443	PM2.5 collocated	SLAMS	Gravimetric	88101-2 145	Gravimetric	Gravimetric	Daily 1/3	Population Exposure	Neighborhood	Yes	ABQ
				Metals Speciation	Special Purpose	Multiple	68103	Multiple	810-MetOne SAS 811MetOne SAS Teflon 812-MetOne SAS Nylon	Daily 1/3	Population Exposure	Mixture of Other, Population Exposure, General Background	NA	ABQ
				Carbon Speciation	Special Purpose	Multiple	88320 88321	Multiple	826, 831, 839, 840, 841, 842 URG 300N w/Pall Quartz filter and cyclone inlet	Daily 1/3	Population Exposure	Mixture of Other, Population Exposure, General Background	NA	ABQ
				PM10-PM2.5 *	SLAMS	Beta Absorption	86101-185	Beta Absorption	Beta Attenuation	continuous	Population Exposure	Neighborhood	No	ABQ
35-001-0026				PM10	SLAMS	Gravimetric	81102-1 127	Gravimetric	Gravimetric	Daily 1/1	Significant Source	Middle	Yes	ABQ
	22V South Valley 201 Prosperity SE	-106.657	35.01708	PM10	SLAMS	Beta Absorption	81102-3 122	Beta Absorption	Beta Attenuation	continuous	Significant Source	Middle	Yes	ABQ
				O3	SLAMS	UV Photometric	44201-1 087	UV Photometric	Ultra Violet Absorption	continuous	Regional Transport	Regional	Yes	ABQ
				HS CO	SLAMS	Non Dispersive IR	42101-1 093	Non Dispersive IR	Gas Filter Correlation Teledyne T300U	continuous	Regional Transport	Regional	Yes	ABQ
35-001-0029				PM10	SLAMS	Beta Absorption	81102-3 122	Beta Absorption	Beta Attenuation	continuous	Population Exposure	Neighborhood	Yes	ABQ
				PM2.5	SLAMS	Beta Absorption	88101 170	Beta Absorption	Beta Attenuation	continuous	Population Exposure	Neighborhood	Yes	ABQ

* MetOne BAM 2.5 and MetOne BAM 10 at the NCore site are used to calculate PM Course (PM_{10-2.5})

Summary of changes

Table 2, found on the next page, represents changes made to the AQP since the 2016 ANR was approved. In addition it includes proposed changes we would like to make to the existing network. These changes, as well as reasoning behind the changes, will be discussed further below under the heading for each pollutant.

Table 2 Albuquerque 2017 Ambient Air Monitoring Network Proposed Site Changes

AQS Site ID#	Address/ Location	Longitude	Latitude	Pollutants Measured	Monitor Type	Sampling Parameter & Method	Sampling Method	AQS Analysis	Operating Schedule	Monitoring Objective	Spatial Scale	NAAQS Comparable	MSA	Change
35-001-0023	22M Del Norte 4700A San Mateo NE	-106.586	35.13426	Lead	SLAMS	14129-1 110	EQL-0710-192	Emission Spectra ICAP (ICP OES) EPA	Daily 1/6	Population Exposure	Neighborhood	Yes	ABQ	Discontinue 1/1/18
35-001-0026	22S Jefferson 3700 Singer NE	-106.605	35.1443	PM10	SLAMS	81102-3 122	Beta Absorption	Beta Attenuation	continuous	Population Exposure	Neighborhood	Yes	ABQ	Discontinue*
				PM10	SLAMS	81102-1 127	Gravimetric	Gravimetric	Daily 1/1	Significant Source	Middle	Yes	ABQ	Discontinue*
				PM10	SLAMS	81102-1 239	Broadband Spectroscopy	Broadband Spectroscopy	Continuous	Significant Source	Middle	Yes	ABQ	Add*
35-001-0029	22V South Valley 201 Prosperity SE	-106.657	35.01708	PM2.5	SPM	88101-3 238	Broadband Spectroscopy	Broadband Spectroscopy	Continuous	Significant Source	Middle	Yes	ABQ	Add*
				PM2.5	SLAMS	88101-2 145	Gravimetric	Gravimetric	1 in 3 Collocated	Population Exposure	Neighborhood	Yes	ABQ	Bring on line*
				PM10	SLAMS	81102-1 239	Broadband Spectroscopy	Broadband Spectroscopy	Continuous	Population Exposure	Neighborhood	Yes	ABQ	Bring on line*
35-001-1013	22H North Valley 9819A Second Street NW	-106.6136	35.193	PM10	SLAMS	81102-3 122	Beta Absorption	Beta Attenuation	continuous	Population Exposure	Neighborhood	Yes	ABQ	Discontinue*
				PM2.5	SLAMS	88101 170	Beta Absorption	Beta Attenuation	continuous	Population Exposure	Neighborhood	Yes	ABQ	Discontinue*
				PM2.5	SLAMS	88101-1 238	Broadband Spectroscopy	Broadband Spectroscopy	Continuous Collocated	Population Exposure	Neighborhood	Yes	ABQ	Bring on line*
Add*				PM2.5	SPM	88101-1 170	Beta Attenuation	Beta Attenuation	Continuous	Significant Source	Middle	Yes	ABQ	Add*

The intention of the AQP is to add this monitor to the indicated monitoring station during the 2017 calendar year, once proper resources and information become available.

Bring on line* The AQP program has already installed this monitor to the indicated monitoring station. Once proper data review and program information become available, we will assign the monitor proper designation and data will be submitted into AQS.

Discontinue* The AQP program has the intention to discontinue the monitor at the indicated monitoring station once proper data review, program information, and approval have taken place.

DISCUSSION OF INDIVIDUAL CRITERIA POLLUTANTS

Below, AQP discusses each criteria pollutant monitored at its various monitoring stations, how the concentration of each pollutant compares to the National Ambient Air Quality Standards (NAAQS), why AQP believes its monitoring network provides a fair assessment of the concentration for each pollutant in its jurisdiction or, if not, how AQP plans to modify its monitoring network to improve its assessment.

Ground Level Ozone (O3)

Based on population, Table D-2 of Appendix D to Part 58, 40 CFR requires a minimum of two (2) State and Local Air Monitoring Stations (SLAMS) ozone monitors.

Current – Per 40 CFR Part 58, Appendix D Section 4.1, the AQP exceeds EPA network design requirements for ambient air quality monitoring for Ozone. The AQP has three (3) ozone monitors, all categorized as SLAMS.

Table 3: Ozone Design Value by site, part per million (ppm)

	2014	2015	2016	
Site Name AQS #	4th highest 8-hr avg.	4th highest 8-hr avg.	4th highest 8-hr avg.	3 -year design value
Del Norte 0023	0.064	0.065	0.067	0.065
Foothills 1012	0.061	0.067	0.064	0.064
South Valley 0029	0.064	0.068	0.063	0.065

Table 4: Ozone Design Value, parts per million (ppm)

Site	2014 4 th Highest 8- hr (ppm)	2015 4 th Highest 8- hr (ppm)	2016 4 th Highest 8- hr (ppm)	3 year Design Value part per million (ppm)	2015 Federal Standard part per million (ppm)	% of the 2015 Federal Standard
Del Norte 0023	.064	.065	.067	.065	.070	92.9

AQP believes that three ozone monitoring locations are appropriate for its jurisdiction. AQP monitoring results show that the location of the maximum concentration of ozone changes over the year. Sometimes peak concentrations are observed at the foothills station, sometimes down in the south valley and sometimes at Del Norte. While the AQP meets EPA requirements for ozone monitoring, the AQP feels that a fourth ozone monitor is justified and should be expanded as described below.

Future - AQP will install an Ozone monitor to our 2ZH North Valley site (AQS 35-001-1013). The addition of this monitor will allow a more in depth review of Ozone trends and

patterns associated with the orographic effects of the Sandia Mountain Range and the drainage effect that occurs due to the Rio Grande Valley.

Fine Particulate Matter (PM)_{2.5}

According to Table D-5 of Appendix D to Part 58, 40 CFR one SLAM PM_{2.5} site (2 monitors are needed to accomplish collocation requirements) is required in Albuquerque-Bernalillo County. Between the requirement needs of the NCore site and the desire for the COA to have a PM_{2.5} monitor in its highest 2.5 concentration site, the COA feels that a minimum of 2 sites (3 monitors) should be considered. This highest concentration site would fulfill the requirement stated in 40 CFR Part 58 Appendix D, 4.7.1 (b). Updated federal guidance no longer requires the COA to conduct near road monitoring.

Current – AQP operates four PM_{2.5} monitors at three monitoring stations in Albuquerque-Bernalillo County.

- The Del Norte 2ZM site (AQS 35-001-0023) operates a continuous Met One Beta Attenuation Monitor (BAM) 1020 as the Primary monitor and a Partisol 2025 sequential sampler with 2.5 micron inlet cutoff to record 24-hour averages PM_{2.5} on a 1/3 schedule as a co-located sampler.
- The South Valley 2ZV site (AQS 35-001-0029) operates a Met One BAM 1020 PM_{2.5} monitor.
- The Foothills 2ZF site (AQS 35-001-1012) operates a Met One BAM 1020 and is classified for Air Quality Index (AQI) only. This monitor is not required by EPA but is maintained by the AQP to better understand PM_{2.5} trends as prevailing westerly winds cross the City of Albuquerque.

Table 5: PM_{2.5} Design Value, microgram per cubic meter (ug/m³)

Site Name AQS #	Sampling Schedule	24-hour design value	Annual Design Value	Design Value (% Daily NAAQS)	Design Value (% Annual NAAQS)	Collocated with continuous PM _{2.5}
Del Norte 0023	Continuous	18	6.1	51.4%	50.8%	Yes
South Valley 0029	Continuous	18	7.1	51.4%	59.2%	No

Future – The AQP has added a PM_{2.5} T640 FEM sampler to the South Valley site (AQS 35-001-0029) continuous monitor to compare against the existing BAM 1020 data. Further, we have added a Partisol 2025i FRM monitor for comparison to both the BAM 1020 and the T-640 found at the same site. After proper evaluation of data the COA intends to designate the T-640 and Partisol 2025i with vscc as SLAM's monitors and begin submitting data into AQS as a collocated pair. This action will accomplish three primary objectives at our South Valley site. First, it will provide real time PM data to better understand and evaluate PM concerns in the area. Second, it will fulfill the collocation requirement brought on by introducing a new FEM (238) method code into our network. Lastly, it will provide a collocation at one of our highest PM concentration sites.

The City would also like to add a T640 SPM to the 2ZS Jefferson (AQS 35-001-0026) site. Please note that since a single T-640 monitor can monitor for both PM₁₀ and PM_{2.5}, this monitor will be primarily used to fulfill the PM₁₀ requirement for the Jefferson site and the PM_{2.5} will be considered a Special Purpose Monitor (SPM). The real time data from the continuous T-640 PM 2.5 monitor will assist the COA in assessing wind events and possible contractor shutdown notices.

Finally, the City of Albuquerque would like to add a PM_{2.5} monitor to our currently inactive 2ZH North Valley site (AQS 35-001-1013). Due to several environmental justice concerns brought to the attention of the AQP, we would like to use the already established site to assist the community in proper coverage regarding PM_{2.5} related issues. The addition of this monitor would allow a more in depth review of particulate matter trends for the North Valley Community.

PM₁₀

PM data is used by the AQP to accurately measure PM in neighborhoods, to enforce our local fugitive dust control regulation, and to issue high wind advisory and health alerts. High PM values are the most common cause of AQI warning days in Albuquerque.

Current – AQP currently operates four PM₁₀ monitors at three sites. At this time, three of the sites and four monitors are NAAQS comparable and include a collocated set.

The Del Norte 2ZM NCore site (AQS 35-001-0023) operates a continuous Federal Equivalent Method (FEM) for PM₁₀.

The Jefferson 2ZS site (AQS 35-001-0026) has one PM₁₀ FRM (Primary- Partisol 2025) with a sampling frequency of 1/1 (daily) and a BAM FEM continuous monitor at 2ZS (35-001-0029) (Co-located) which are NAAQS comparable.

The South Valley 2ZV site (AQS 35-001-0029) operates a continuous Federal Equivalent Method (FEM) for PM₁₀.

Table 6 shows the calculation of the design values for each NAAQS comparable PM₁₀ site.

Table 6. 2016 PM₁₀ 24 Hour Design Value

	Site	COA-2016 24 Hour Design Value*	NAAQS	Is the average # of exceedance values >1
	Del Norte 2ZM	0	≥1	No
	Jefferson 2ZS	0	≥1	No
	South Valley 2ZV	0	≥1	No

*PM₁₀ Design Value is considered to be the number of expected exceedances based off of the last three years values. The AQP is expecting 0 exceedances of the PM₁₀ standard.

Future

The City of Albuquerque requests to discontinue the filter based FRM Partisol at the Jefferson 2ZS site (AQS 35-001-0026). The AQP would like to add a T640 to the Jefferson 2ZS site (AQS 35-001-0026) to compare against the existing BAM 1020. This addition would eliminate the collocation requirement and allow for cost savings in filters and labor. In addition it would provide a backup Partisol for emergency monitor down situations. Once enough data has been collected and the T-640 monitor found to be within tolerances, the BAM 1020 would be discontinued and the T-640 would become the primary continuous SLAMS PM10 monitor for the Jefferson site.

As noted in previous sections, the T-640 monitor is capable of producing PM_{2.5} and PM₁₀ data using a single monitor. As such, the COA would like to use the T-640 monitor proposed for PM_{2.5} at South Valley (AQS 35-001-0029) to also be used as a PM₁₀ monitor. The data will be compared against the existing BAM 1020 data and once proper review and program information become available, we will designate the monitor as a SLAMS monitor and data will be submitted into AQS. At that point the PM₁₀ BAM 1020 would be discontinued. The BAM 1020 could then be utilized for future studies or as a back-up to a monitor down situation.

Sulfur Dioxide (SO₂)

Current – AQP operates an SO₂ monitor at site Del Norte 2ZM site (AQS 35-001-0023), the NCore location. Table 5 shows that the SO₂ monitor is measuring only trace levels, less than 10% of the NAAQS.

Table 7: 2016 SO₂ Design Value, part per billion (ppb)

2ZM Del Norte	99th	
	year	percentile
35-001-0023	2014	6
35-001-0023	2015	5
35-001-0023	2016	6
Design Value		6

Future –No changes are planned in the coming year.

SO₂ Data Requirement Rule- The EPA Fact Sheet “Final Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide (SO₂) Primary National Air Quality Standards (NAAQS) states:

This final rule establishes that, at a minimum, air agencies must characterize air quality around sources that emit 2,000 tons per year (tpy) or more of SO₂. An air agency may avoid the requirement for air quality characterization near a source by adopting enforceable emission limits that ensure that the source will not emit more than 2,000 tpy of SO₂.

Bernalillo County does not have any sources that are over the 2,000 tons per year minimum therefore no characterization is necessary. The AQP will continue to follow this issue and adjust our plans as further information becomes available from the EPA.

The AQP is meeting the network design requirements for ambient air quality monitoring for SO₂ required by 40 CFR Part 58, App. D, § 4.4.

Oxides of Nitrogen (NO)

Current – The AQP monitors NO, NO₂, NO_x, and NO_{2y} at the Del Norte 2ZM site (AQS 35-001-0023, the NCore location) and is currently meeting the network design requirement for ambient air quality monitoring for NO₂ based on 40 CFR Part 58, Appendix D Section 4.3.3. Table 6 shows that NO₂ levels are low. (Annual 98th percentile 1-hour values averaged over 3 years = 43 ppb compared to a standard of 100.)

Table 8: NO₂ Design Value, ppb

2ZM Del Norte site 35-001-0023

98th Percentile	2014	2015	2016	3 year Design Value
1-Hr Concentration (PPB)	42.0	43.4	44.4	43

Monitoring near-road NO₂:

EPA has finalized the revisions to the near-road NO₂ requirements and AQP is not required to conduct near-road NO₂ monitoring.

Future –No changes are planned in the coming year.

Carbon Monoxide (CO)

Current –The AQP currently operates two (2) CO monitors. The COA is currently meeting the network design requirement for ambient air quality monitoring for CO per 40 CFR Part 58, Appendix D Section 4.2.

Table 9: 2016 CO Design Value, ppm

2ZM Del Norte 35-001-0023			1 Hour
Year	1st Max	2nd Max	
2015	1.7	1.7	
2016	2.1	1.8	

			8 Hour
Year	1st Max	2nd Max	
2015	1.4	1.4	
2016	1.4	1.2	

2ZV South Valley 35-001-0029			1 Hour
Year	1st Max	2nd Max	
2015	2.5	2.4	
2016	2.2	2.2	

			8 Hour
Year	1st Max	2nd Max	
2015	1.2	1.0	
2016	2.0	1.9	

The hourly high value over the past 2 years is 2.5 ppm (South Valley 2ZV site, 2015) which is 7.1% of the hourly NAAQS (35 ppm). The 8-hour high average is 1.9 ppm (Del Norte 2ZM site, 2014) which is 21.1% of the 8-hour NAAQS (9 ppm). Because of the low CO concentrations, both monitors are now ‘high sensitivity.’

Future –No changes are planned in the coming year.

Lead (Pb)

Current – A TSP (Total Suspended Particulate) monitor was installed and operational by December 18, 2011 at the Del Norte 2ZM site (AQS 35-001-0023). Three plus years of Lead data has been obtained since the installation of the sampler. Lead levels continue to be well below the NAAQS.

Table 10: Lead Design Values

2ZM Del Norte 35-001-0023	
Design Value Year	ug/m3
2014	0.01
2015	0.01
2016	0.00

Design Value Percentage 0.00%

Future –The City of Albuquerque has no sources of lead that exceed the 0.50 tons per year threshold. With 3 complete years of data and historically low values, the AQP requests that EPA authorize AQP to discontinue the Lead monitor at Del Norte 2ZM (AQS 35-001-0023) on or before 1/1/18. Per 40 CFR Part 58, Appendix D Section 4.5, the COA is meeting network design requirements for lead monitoring.

PM_{2.5} Chemical Speciation

Current – CFR Part 58 regulations require the operation of a speciation sampler at approved NCore sites. The Del Norte 2ZM site (AQS 35-001-0023) site in Albuquerque operates a MetOne Super Sass and a URG sampler for EC/OC (Elemental and Organic Carbon). Speciation filters are sent to the EPA national analysis contractor, and data is reported by the contractor to the AQS. The AQP also uses this data in local studies to correlate with data from other samplers.

Both samplers now operate on one-in-three day sampling schedule.

Community Scale Air Toxics Monitoring (CSM)

Current – The AQP has participated previously in CSM studies, but there were none in the past year. On March 22, 2017, the AQP applied for a 2017 CSM grant and is awaiting notice of the award.

National Core Monitoring Network (NCore)

The NCore site has been fully operational and compliant since the 2010 start-up date. Individual NCore instruments have been discussed in the appropriate sections above. The Del Norte 2ZM site also has NCore compliant meteorology.

Albuquerque – Bernalillo County Network

Table 11: Albuquerque-Bernalillo Co 2016 Air Monitoring Network as approved in prior ANR.

Station Name (Site Code), AQS #	Gases					TSP	PM10		PM2.5					Other		
	Ozone	CO	NO ₂	NOy	HS-SO ₂		Sequential	Continuous	Continuous	Continuous	Sequential	Speciation	Nephelometer	Aethalometer		
Foothills (2ZF), 35-001-1012	API T400									BAM 1020				McGee AE33		
Del Norte HS (2ZM), 35-001-0023	API T400	API T300U	API T200U	API T200U	API T100U	TE-5170		Met One BAM ** 1020 LC & STD	Met One BAM ** 1020	Thermo 2025 Col 1/3	MetOne Super SASS & URG Carbon 1/3		Optec NGN-2	McGee AE21		MET*
Jefferson (2ZS), 35-001-0026							Thermo 2025 1/1	Met One BAM 1020								
South Valley (2ZV), 35-001-0029	API 400E	API T300U						Met One BAM 1020	Met One BAM 1020					McGee AE21		
SLAMS/NCORE					SLAMS	AQI Purposes										

- * MET includes Wind Speed, Wind Direction, Solar Radiation, 2M Temp, 10M Temp, Precipitation, and Relative Humidity.
- ** MetOne BAM PM_{2.5} and MetOne BAM PM₁₀ at the NCore site are used to calculate PM Course (PM_{10-2.5})