



## **AIR POLLUTION CONTROL DISTRICT**

# Ambient Air Monitoring Annual Network Plan

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**FINAL**

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## I INTRODUCTION

The Clean Air Act (CAA) codified within the United States Code (U.S. Code) § 7403(c)(2) requires the establishment of a national network of monitors to collect and compile data that is comparable, within a measure of certainty, to air quality data collected in different States and if applicable to other countries. In order to properly meet the measure of certainty and to assure that data is comparable the United States Environmental Protection Agency (US EPA) adopted guidance for States and where applicable local and private agencies known as Ambient Air Quality Surveillance (AAQS). Title 40, of the Code of Federal Regulations (CFR), Part 58, specifically addresses “Ambient Air Quality Surveillance.”

40 CFR Part 58.10, requires states or where applicable local agencies to adopt and submit to the Regional Administrator of the US EPA an annual air monitoring network plan (Network Plan) which establishes and maintains an air quality surveillance system that consists of a network of State and Local Air Monitoring Station (SLAMS). By regulation an air quality surveillance system is composed of monitoring stations equipped with either, or a combination of Federal Reference Method (FRM), Federal Equivalent Method (FEM) or Approved Regional Method (ARM) monitors. These monitors measure ambient levels of gaseous and particulate (solid and liquid aerosol) air pollutants. Appendix A contains a listing of the requirements under 40 CFR Part 58.10.

This document represents the Imperial County Air Pollution Control District (Air District) Network Plan and is a fulfillment of the requirements found under 40 CFR Part 58.10. The Network Plan details the current monitoring network within the Air District for the criteria pollutants: ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), and particulate matter (PM<sub>10</sub> & PM<sub>2.5</sub>). Other non-mandated speciation and toxics are identified as supplemental for supporting trend analysis. Specific site information includes location information, site type, objectives, spatial scale, sampling schedule, equipment, sampling method and monitor objective. The Network Plan reviews actions that were taken during the previous year and serves to identify and report the needs for additions, relocations, or termination monitoring sites or instruments.

Finally, this Network Plan serves to identify the Primary Quality Assurance Organization (PQAO) for each criteria pollutant sampler/monitor within the Air District's AAQS program. The identified PQAO for Imperial County is the California Air Resources Board (CARB). While the Air District handles all the day to day operations for each criteria pollutant sampler/monitor, excluding Calexico Ethel, the PQAO is the monitoring organization that is responsible for pooled data quality assessments.

## II AIR MONITORING NETWORK OVERVIEW

### A Established SLAMS Network

Depending on the purpose and air quality designation of an area the monitoring station may be one of many different types of stations. Here in Imperial County all monitoring stations are designated as state or local air monitoring stations (SLAMS). Per CFR all SLAMS networks are ambient air quality monitoring sites that are primarily needed for National Ambient Air Quality Standards (NAAQS) comparisons. The NAAQS is established by US EPA to protect the public health and the environment. There are two types of NAAQS that an Air District must consider; the primary standard which provides for the protection of the public health and the secondary standard which provides for protection of the public welfare which includes protection against decreased visibility and damage to animals, crops, vegetation and buildings.

The SLAMS network for Imperial County includes a total of five monitoring stations located within the urban areas of Westmorland, Brawley, El Centro and Calexico and one station located in the rural area of Niland. The Air District operates four of the monitoring stations while the CARB operates the monitoring station in Calexico. All data and information concerning the Calexico monitoring station was obtained from CARB and is accurate to the best of our knowledge.

SLAMS exclude special purpose monitor (SPM) stations but include national core multipollutant monitoring stations (NCore), photochemical assessment monitoring stations (PAMS) and all other State or locally operated stations that have not been designated as SPM stations.<sup>1</sup> Currently, no NCore or PAMS are located in Imperial County.

Not all pollutants are monitored at all sites however meteorological parameters are monitored at each air monitoring station, excluding the Brawley station, in Imperial County. For a list of the different measured pollutants and parameters see page 29 Table 26 and section VIII Detailed site information. All data stemming from the network must abide by all applicable quality assurance requirements (40 CFR Part 58 Appendix A), ambient air quality monitoring methodology (40 CFR Part 58 Appendix C), network design criteria (40 CFR Part 58 Appendix D) and must meet all applicable monitoring probe and path siting criteria (40 CFR Part 58 Appendix E). This allows for the proper management of a quality system that assures monitoring information is produced in a systematic and organized way.

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<sup>1</sup> Code of Federal Regulations, Title 40 Part 58.1 Definitions of SLAMS  
Imperial County Air Pollution Control District  
Final Annual Air Monitoring Network Plan 2014

Figure 1  
Map of the Ambient Air Monitoring Stations in Imperial County



## B Statement of Purpose

As mentioned above all SLAMS in Imperial County are primarily for comparison to the NAAQS which is directly related to the development and implementation of programs to control emissions. Each program, listed below, is evaluated for effectiveness and improvements using monitored data compiled by the monitoring network.

- *Agricultural Burning* refers to the intentional use of fire to reduce or dispose of vegetative debris from an agricultural activity. Some common practices include:

field burning large areas of crop residue after harvest to reduce excess plant material, to control crop diseases, weeds or pests, or to maintain crop yields

disposing of piles of agricultural debris, such as orchard trees, limbs, or haystacks; and

clearing vegetation out of irrigation ditches and canals.

Monitors are used as part of the Smoke Management Program to help guide decisions by management regarding allowed burn days, burn time restriction and burn locations.

- *Residential Burning* is the open burning of yard waste, such as leaves, clippings, prunings and other yard and gardening refuse originating from residential property and burned on such land by the property owner and/or other responsible person.

- *Air Alert* is a notification that current or expected conditions within given areas of Imperial County are such that an exceedance of a health-based standard, such as ozone, PM<sub>10</sub> or PM<sub>2.5</sub> may occur. Air Alerts are issued for all of Imperial County. This program supports the voluntary flag program by schools in Imperial County.
- *Expected High Concentration* monitoring is used to measure pollutant concentrations in areas where air pollution is expected to be at its highest. This is used for short and long term planning efforts to meet the NAAQS and to address land use growth proposals. This type of monitoring helps the Air District guide local governments during their land use planning efforts.
- *Typical/Representative Concentration* monitoring is used to establish a geographical region with common topography and meteorology. This is used to help the district during Trend Analysis. Like the “Expected High Concentration” monitoring this type of monitoring allows the Air District guide local governments during their land use planning efforts.
- *Trend Analysis* monitoring is used for analyzing air pollution concentrations over time and distance. This type of analysis allows for a demonstration of air quality progress or lack of progress over a period of years. Locally, this type of monitoring not helps the Air District identify specific transport issues but helps the Air District direct special short or long term programs at an industry and local governmental level.
- *State Implementation Plan (SIP) and/or Maintenance Plan* monitoring demonstrates compliance with SIP requirements. A SIP is a plan that is prepared by a state that is submitted to the US EPA demonstrating how an area will attain and maintain the NAAQS, in California there is a cooperative effort between the State and the local air agency. Because SIPs are living documents continued monitoring is essential in demonstrating CAA compliance to a given non-attainment or attainment area.

While the use of the word “purpose” and “objective” may be interchangeable this document uses “purpose” solely in reference to established air programs and “objective” to the three federal objectives as defined in Appendix D of 40 CFR Part 58.

### C Monitoring Objectives

Appendix D of 40 CFR Part 58 requires all monitoring networks to be designed in such a way as to meet three basic monitoring objectives.

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

The stated purposes above clearly demonstrate that all established air monitoring

stations in Imperial County provide the three basic monitoring objectives required by Appendix D. These three basic monitoring objectives directly relate to public exposure (PE). PE requires that decision making bodies be well informed about peak air pollution levels, typical levels in populated areas, the impact of transport either basin wide or internationally, and any source specific air pollution levels. The Air District analyzed all the monitoring sites to identify if the site classifies as either a highest concentration site, typical concentration site, a general background concentration site, a regional transport site (includes international transport), a site to determine the impact of significant sources or source categories or a site which measures impacts to visibility, vegetation damage, or other welfare based impact.

The following tables identify the site classifications for each monitor in Imperial County.

**TABLE 1**

YEAR	SITE LOCATION	OZONE (44201)		8 HR MAX	NO2 (42602)	ANN 98%
		SITE TYPE		PPM	SITE TYPE	PPB
<b>MSA: 20940 El Centro, CA Metropolitan Statistical Area, Imperial County CA</b>						
2010	Calexico Ethel	Transport/Highest Concentration	(T/HC)	0.082	Highest Concentration	56.0 (HC)
	El Centro	Highest Concentration	(HC)	0.082	Typical Concentration	41.9 (TC)
	Niland	General Background	(GB)	0.075	No NO <sub>2</sub> Monitoring	N/A N/A
	Westmorland	Regional/Background	(R/B)	0.077	No NO <sub>2</sub> Monitoring	N/A N/A
2011	Calexico Ethel	Transport/Highest Concentration	(T/HC)	0.076	Highest Concentration	63.0 (HC)
	El Centro	Highest Concentration	(HC)	0.084	Typical Concentration	51.9 (TC)
	Niland	General Background	(GB)	0.074	No NO <sub>2</sub> Monitoring	N/A N/A
	Westmorland	Regional/Background	(R/B)	0.081	No NO <sub>2</sub> Monitoring	N/A N/A
2012	Calexico Ethel	Transport/Highest Concentration	(T/HC)	0.095	Highest Concentration	66.0 (HC)
	El Centro	Highest Concentration	(HC)	0.091	Typical Concentration	49.8 (TC)
	Niland	General Background	(GB)	0.076	No NO <sub>2</sub> Monitoring	N/A N/A
	Westmorland	Regional/Background	(R/B)	0.074	No NO <sub>2</sub> Monitoring	N/A N/A
2013	Calexico Ethel	Transport/Highest Concentration	(T/HC)	0.098	Highest Concentration	63.3 (HC)
	El Centro	Highest Concentration	(HC)	0.088	Typical Concentration	49.3 (TC)
	Niland	General Background	(GB)	0.083	No NO <sub>2</sub> Monitoring	N/A N/A
	Westmorland	Station currently out of service		*	No NO <sub>2</sub> Monitoring	N/A N/A

**TABLE 2**

YEAR	SITE LOCATION	CO (42101)		1 HR MAX	8 HR MAX	SULFUR DIOXIDE (42401)	99%	3 YR
		SITE TYPE		PPM	PPM	SITE TYPE	PPB	PPB
<b>MSA: 20940 El Centro, CA Metropolitan Statistical Area, Imperial County CA</b>								
2010	Calexico Ethel	Typical Concentration	(TC)	6.1	4.5	Typical Concentration	7	9 (TC)
	El Centro	Highest Concentration	(HC)	19.6	5.6	No SO <sub>2</sub> Monitoring	N/A	N/A N/A
2011	Calexico Ethel	Typical Concentration	(TC)	7.7	6.1	Typical Concentration	8	8 (TC)
	El Centro	Highest Concentration	(HC)	36.0	9.0	No SO <sub>2</sub> Monitoring	N/A	N/A N/A
2012	Calexico Ethel	Typical Concentration	(TC)	6.7	4.9	Typical Concentration	7	7 (TC)
	El Centro	Highest Concentration	(HC)	25.1	7.4	No SO <sub>2</sub> Monitoring	N/A	N/A N/A
2013	Calexico Ethel	Typical Concentration	(TC)	6.5	4.5	Typical Concentration	11	9 (TC)
	El Centro	Highest Concentration	(HC)	22.7		No SO <sub>2</sub> Monitoring	N/A	N/A N/A

**TABLE 3**

YEAR	SITE LOCATION	PM10 (81102)			PM2.5 (88101)			ANN
		SITE TYPE		24 HR μ/m <sup>3</sup>	SITE TYPE	24 HR μ/m <sup>3</sup>	μ/m <sup>3</sup>	
<b>MSA: 20940 El Centro, CA Metropolitan Statistical Area, Imperial County CA</b>								
2010	Calexico Ethel	Highest Concentrations	(HC)	112	Highest Concentration	50.9	12.8	(HC)
	El Centro	Typical Concentrations	(TC)	69	Typical Concentration	19.9	6.6	(TC)
	Brawley	Typical Concentrations	(TC)	61	Background/Transport	16.2	6.2	(B/T)
	Niland	General Background	(GB)	58	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
	Westmorland	Regional/Background	(R/B)	86	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
2011	Calexico Ethel	Highest Concentrations	(HC)	80	Highest Concentration	80.3	13.5	(HC)
	El Centro	Highest Concentration	(HC)	81	Typical Concentration	54.4	7.5	(TC)
	Brawley	Typical Concentrations	(TC)	85	Background/Transport	37.0	7.1	(B/T)
	Niland	General Background	(GB)	220	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
	Westmorland	Regional/Background	(R/B)	74	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
2012	Calexico Ethel	Highest Concentrations	(HC)	406	Highest Concentration	64.7	14.4	(HC)
	El Centro	Highest Concentration	(HC)	75	Typical Concentration	26.4	7.5	(TC)
	Brawley	Typical Concentrations	(TC)	127	Background/Transport	25.9	8.1	(B/T)
	Niland	General Background	(GB)	212	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
	Westmorland	Regional/Background	(R/B)	109	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
2013	Calexico Ethel	Highest Concentrations	(HC)	141	Highest Concentration	36.3	13.2	(HC)
	El Centro	Highest Concentration	(HC)	147	Typical Concentration	30.0	7.0	(TC)
	Brawley	Typical Concentrations	(TC)	196	Background/Transport	23.1	7.2	(B/T)
	Niland	General Background	(GB)	143	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
	Westmorland	Regional/Background	(R/B)	194	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A

## D Spatial Scales

As mentioned above, PE is the basic monitoring objective for all air monitoring stations in Imperial County. In order to determine whether a monitor has been properly sited monitors must be represented by its spatial scale. The relationship between the monitoring objective, site type and the geographic location is understood or interpreted by the spatial scale of representativeness. In some cases, the physical location of a monitor is determined by considering the affect of identified emission patterns and not the spatial scale of representativeness. In these situations the spatial scale of representativeness is a result of the site location.

The spatial scale is described in the CFR as "...the physical dimensions of the air parcel nearest to a monitoring site throughout which actual pollutant concentrations are reasonably similar."<sup>2</sup> Listed below are the general spatial scales identified as the most appropriate for the monitoring site types. Depending on the monitored pollutant the description may change slightly because of the behavior of the pollutant. Nonetheless, generally the spatial scales are as follows:

Microscale (MCS) – Defines the concentrations in air volumes associated with area dimensions ranging from several meters up to about 100 meters.

<sup>2</sup> Code of Federal Regulation Appendix D to Part 58 – Network Design Criteria for Ambient Air Quality Monitoring, section 1.2 Spatial Scales, subsection (b).

Middle Scale (MS) – Defines the concentration typical of areas up to several city blocks in size with dimensions ranging from about 100 meters to 0.5 kilometer.

Neighborhood Scale (NS) – Defines concentrations within some extended area of the city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometer range. The neighborhood and urban scales have the potential to overlap in applications that concern secondarily formed or homogeneously distributed air pollutants.

Urban Scale (US) – Defines concentrations within an area of city-like dimensions, on the order of 4 to 50 kilometers. Within a city, the geographic placement of sources may result in there being no single site that can be said to represent air quality on an urban scale.

Regional Scale (RS) – Defines usually a rural area of reasonably homogeneous geography without large sources, and extends from tens to hundreds of kilometers.

National and Global Scales (NGS) – These measurement scales represent concentrations characterizing the nation and the globe as a whole. (There are no National or global scales monitoring stations in Imperial County.)

**TABLE 4**  
SITE TYPE RELATIONSHIP TO SCALES OF REPRESENTATIVENESS

	<b>SITE TYPE</b>	<b>APPROPRIATE SITING SCALES</b>
1	Highest Concentration	Micro, middle, neighborhood and sometimes urban or regional for secondarily formed pollutants
2	Population Oriented	Neighborhood, urban
3	Source Impact	Micro, middle, neighborhood
4	General/Background & regional transport	Urban, regional
5	Welfare-related Impacts	Urban, regional

The following tables demonstrate the spatial scales for each monitor in Imperial County.

**TABLE 5**

YEAR	SITE LOCATION	OZONE (44201)		8 HR MAX	NO <sub>2</sub> (42602)		ANN 98%
		SITE TYPE	SCALE	PPM	SITE TYPE	SCALE	PPB
2010	Calexico Ethel	Transport/Highest Concentrations	Neighborhood	0.082	Highest Concentration	Neighborhood	56.0
	El Centro	Highest Concentration	Neighborhood	0.082	Typical Concentration	Neighborhood	41.9
	Niland	General Background	Regional	0.075	No NO <sub>2</sub> Monitoring	N/A	N/A
	Westmorland	Regional Background	Regional	0.077	No NO <sub>2</sub> Monitoring	N/A	N/A
2011	Calexico Ethel	Transport/Highest Concentration	Neighborhood	0.076	Highest Concentration	Neighborhood	63.0
	El Centro	Highest Concentration	Neighborhood	0.084	Typical Concentration	Neighborhood	51.9
	Niland	General Background	Regional	0.074	No NO <sub>2</sub> Monitoring	N/A	N/A
	Westmorland	Regional Background	Regional	0.081	No NO <sub>2</sub> Monitoring	N/A	N/A
2012	Calexico Ethel	Transport/Highest Concentrations	Neighborhood	0.095	Highest Concentration	Neighborhood	66.0
	El Centro	Highest Concentration	Neighborhood	0.091	Typical Concentration	Neighborhood	49.8
	Niland	General Background	Regional	0.076	No NO <sub>2</sub> Monitoring	N/A	N/A
	Westmorland	Regional Background	Regional	0.074	No NO <sub>2</sub> Monitoring	N/A	N/A

**TABLE 5**

YEAR	SITE LOCATION	OZONE (44201)		8 HR MAX	NO <sub>2</sub> (42602)		ANN 98%
		SITE TYPE	SCALE	PPM	SITE TYPE	SCALE	PPB
2013	Calexico Ethel	Transport/Highest Concentration	Neighborhood	0.098	Highest Concentration	Neighborhood	61.7
	El Centro	Highest Concentration	Neighborhood	0.088	Typical Concentration	Neighborhood	44
	Niland	General Background	Regional	0.083	No NO <sub>2</sub> Monitoring	N/A	N/A
	Westmorland	Station currently out of service		*	No NO <sub>2</sub> Monitoring	N/A	N/A

The scale of representativeness for O<sub>3</sub> monitoring would not occur under small but rather large volumes of air. Therefore, neighborhood, urban and regional spatial scales would be appropriate for O<sub>3</sub>. Data trends seem to indicate that the Calexico monitor meets the neighborhood spatial scale while the El Centro monitor meets the neighborhood spatial scale. Both the Niland and Westmorland monitors meet the regional spatial scale. Although data indicates that both the Calexico and El Centro monitors measure both regional and urban mixing the Calexico monitor measures downwind transport concentrations from an international source. While the Niland and Westmorland monitors typically measure transported O<sub>3</sub> from other air basins in California.

The El Centro monitor most closely meets the neighborhood spatial scale as the site is located away from immediate Nitrogen Dioxide (NO<sub>2</sub>) sources. The Calexico monitor however provides transport impact information for trend analysis. This is because the monitor is approximately 2.5 miles away from a major international port of entry, where high volumes of mobile source emissions are present. However, unlike a major roadway the majority of the mobile sources are idling for significant periods of time and little to no heavy duty vehicles are present. The Calexico monitor most closely meets the neighborhood spatial scale.

**TABLE 6**

YEAR	SITE LOCATION	CO (42101)		1 HR MAX	8 HR MAX	SULFUR DIOXIDE (42401)		99%	3 YR
		SITE TYPE	SCALE	PPM	PPM	SITE TYPE	SCALE	PPB	PPM
2010	Calexico Ethel	Typical Concentration	Neighborhood	6.1	4.5	Typical Concentration	Neighborhood	7	9
	El Centro	Highest Concentration	Neighborhood	19.6	5.6	No SO <sub>2</sub> Monitoring	N/A	N/A	N/A
2011	Calexico Ethel	Typical Concentration	Neighborhood	7.7	6.1	Typical Concentration	Neighborhood	8	8
	El Centro	Highest Concentration	Neighborhood	36.0	9.0	No SO <sub>2</sub> Monitoring	N/A	N/A	N/A
2012	Calexico Ethel	Typical Concentration	Neighborhood	6.7	4.9	Typical Concentration	Neighborhood	7	7
	El Centro	Highest Concentration	Neighborhood	25.1	7.4	No SO <sub>2</sub> Monitoring	N/A	N/A	N/A
2013	Calexico Ethel	Typical Concentration	Neighborhood	6.5	4.9	Typical Concentration	Neighborhood	11	9
	El Centro	Highest Concentration	Neighborhood	22.7		No SO <sub>2</sub> Monitoring	N/A	N/A	N/A

Because CO is primarily occurring in areas near major roadways and intersections with high traffic density the El Centro and Calexico monitors meet the neighborhood and middle spatial scales, respectively. It may be argued that the Calexico Ethel monitor

may also fit the neighborhood scale because of the proximity of international roadway emissions.

The most appropriate spatial scale for the Sulfur Dioxide (SO<sub>2</sub>) monitor in Calexico is the neighborhood spatial scale. The Calexico monitor is located away from stationary point and area sources of SO<sub>2</sub> however, this site is unique in that it is located just north of a major international metropolitan and as such is ideal for identifying trends and background concentrations.

**TABLE 7**

YEAR	SITE LOCATION	PM <sub>10</sub> (81102)			PM <sub>2.5</sub> (88101)			ANN
		SITE TYPE	SCALE	24 HR μ/m <sup>3</sup>	SITE TYPE	SCALE	24 HR μ/m <sup>3</sup>	
2010	Calexico Ethel	Highest Concentrations	Neighborhood	112	Highest Concentration	Neighborhood	50.9	12.8
	El Centro	Typical Concentrations	Neighborhood	69	Typical Concentration	Neighborhood	19.9	6.6
	Brawley	Typical Concentrations	Neighborhood	61	Background/Transport	Neighborhood	16.2	6.2
	Niland	General Background	Middle	58	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
	Westmorland	Regional Background	Middle	86	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
2011	Calexico Ethel	Highest Concentrations	Neighborhood	80	Highest Concentration	Neighborhood	80.3	13.5
	El Centro	Highest Concentration	Neighborhood	81	Typical Concentration	Neighborhood	54.4	7.5
	Brawley	Typical Concentrations	Neighborhood	85	Background/Transport	Neighborhood	37.0	7.1
	Niland	General Background	Middle	220	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
	Westmorland	Regional Background	Middle	74	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
2012	Calexico Ethel	Highest Concentrations	Neighborhood	406	Highest Concentration	Neighborhood	64.7	14.4
	El Centro	Highest Concentration	Neighborhood	75	Typical Concentration	Neighborhood	26.4	7.5
	Brawley	Typical Concentrations	Neighborhood	127	Background/Transport	Neighborhood	25.9	8.1
	Niland	General Background	Middle	212	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
	Westmorland	Regional Background	Middle	109	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
2013	Calexico Ethel	Highest Concentrations	Neighborhood	141	Highest Concentration	Neighborhood	36.3	13.2
	El Centro	Highest Concentration	Neighborhood	147	Typical Concentration	Neighborhood	30.0	7.0
	Brawley	Typical Concentrations	Neighborhood	196	Background/Transport	Neighborhood	23.1	7.2
	Niland	General Background	Middle	143	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A
	Westmorland	Regional/Background	Middle	194	No PM <sub>2.5</sub> Monitoring	N/A	N/A	N/A

In Imperial County size selective inlet high volume samplers are operated at 5 sites Brawley, Calexico, El Centro, Niland and Westmorland. Three of the monitors for PM<sub>10</sub> sampling in Imperial County can be categorized as neighborhood scale, while two can be categorized as middle scale. Both the particulate matter concentrations and the land use and land surface characteristics can be said to be homogeneous among all the monitoring stations albeit in their own unique way. The Brawley, Calexico and El Centro monitors can be said to represent conditions where people commonly live and work for extended periods and provide comparisons between cities. The Niland and Westmorland monitors help provide short-term exposure to public health effects as these monitors tend to provide PM<sub>10</sub> emissions on outlying rural areas.

In addition to the high volume samplers two designated FEM PM<sub>10</sub> BAM units are operated in Niland and Brawley. These BAM units are utilized primarily for research, public advisory purposes and compliance.

and El Centro. The Brawley and El Centro PM<sub>2.5</sub> monitors (which are not collocated) represent a reasonably homogeneous urban sub-region with similar land use and land surface characteristics. These sites provide information about trends and compliance with the NAAQS. The Calexico site includes collocated FRM PM<sub>2.5</sub> monitors and collocated SPM FEM continuous PM<sub>2.5</sub> analyzers, combined these monitors are intended to capture those characteristic concentrations associated with heavy mobile emissions and their exposure to the general public.<sup>3</sup> Because of the close proximity of the international port of entry the Calexico PM<sub>2.5</sub> monitors combined are appropriate for the evaluation of possible short-term PE, population exposure, trends and compliance with the NAAQS. Finally, the Calexico monitors consistently record the highest concentrations for PM<sub>2.5</sub> within the Imperial County air monitoring network. Therefore, the most appropriate spatial scale for Brawley, Calexico and El Centro is the neighborhood scale.

The pollutants of primary interest here in Imperial County are listed in detail under section VI Overall Summary of the Imperial County Ambient Air Monitoring Network. The following tables describe the monitoring objective per monitor in Imperial County.

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<sup>3</sup> As a result of a PM<sub>2.5</sub> assessment conducted for the 2013 Annual Network Plan CARB installed two FEM BAM units to compliment the required daily PM<sub>2.5</sub> sampling by FRM samplers at the Calexico Ethel site.

**TABLE 8**

NETWORK MONITORING OBJECTIVE (GASEOUS CRITERIA POLLUTANTS)

	<b>Name</b>	<b>El Centro</b>	<b>Brawley</b>	<b>Westmorland</b>	<b>Niland</b>	<b>Calexico</b>
	<b>Address</b>	150 S. 9th St. N 32.79215	220 Main St. N 32.97831	570 Cook St. N 33.03239	7711 English Rd. N 33.21383	1020 Belcher St. N 32.67618
	<b>Lat/Long.</b>	W -115.56299	W -115.53904	W -115.62362	W -115.54448	W -115.48307
	<b>AQS ID</b>	06 025 1003	06 025 0007	06 025 4003	06 025 4004	06 025 0005
	<b>ARB ID</b>	13694	13701	13697	13997	13698
	<b>Operator</b>	ICAPCD	ICAPCD	ICAPCD	ICAPCD	CARB
<b>O3</b>	Monitor Designation	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
	Sampling Method	API T400 44201		API 400A 44201	API 400A 44201	API 400E 44201
	Spatial Scale	NEIGHBORHOOD		REGIONAL	REGIONAL	NEIGHBORHOOD
	Monitor Objective	PUBLIC EXPOSURE		PUBLIC EXPOSURE	PUBLIC EXPOSURE	PUBLIC EXPOSURE
<b>CO</b>	Monitor Designation	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
	Sampling Method	API T300 42101				DASIBI 3008 42101
	Spatial Scale	NEIGHBORHOOD				NEIGHBORHOOD
	Monitor Objective	PUBLIC EXPOSURE				PUBLIC EXPOSURE
<b>NO2</b>	Monitor Designation	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
	Sampling Method	API 200A 42602				API 200E 42602
	Spatial Scale	NEIGHBORHOOD				NEIGHBORHOOD
	Monitor Objective	PUBLIC EXPOSURE				PUBLIC EXPOSURE
<b>SO2</b>	Monitor Designation	SLAMS	SLAMS	SLAMS	SLAMS	SLAMS
	Sampling Method					TECO 43 42401
	Spatial Scale					NEIGHBORHOOD
	Monitor Objective					PUBLIC EXPOSURE

**TABLE 9**  
**NETWORK MONITORING OBJECTIVE**  
**(PARTICULATE POLLUTANTS)**

	<b>Name</b>	<b>Brawley</b>		<b>Niland</b>	
	<b>Address</b>	<b>220 Main St.</b>		<b>7711 English Rd.</b>	
	<b>Operator</b>	<b>ICAPCD</b>		<b>ICAPCD</b>	
<b>PM10</b>	Monitor Designation	SLAMS	SLAMS	SLAMS	SLAMS
	Sampling Method	GMW/SA 1200 81102	MET ONE BAM1020 85101	GMW/SA 1200 81102	MET ONE BAM1020 85101
	Spatial Scale	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD
	Monitor Objective	PUBLIC EXPOSURE	SUPPORT/PUBLIC EXPOSURE	PUBLIC EXPOSURE	SUPPORT/PUBLIC EXPOSURE
	Sampling Frequency	1-6	CONTINUOUS	1-6	CONTINUOUS

**TABLE 10**  
**NETWORK MONITORING OBJECTIVE**  
**(PARTICULATE POLLUTANTS)**

	<b>Name</b>	<b>EI Centro</b>	<b>Calexico</b>	<b>Westmorland</b>
	<b>Address</b>	<b>150 S. 9th St.</b>	<b>1020 Belcher St.</b>	<b>570 Cook St.</b>
	<b>Operator</b>	<b>ICAPCD</b>	<b>CARB</b>	<b>ICAPCD</b>
<b>PM10</b>	Monitor Designation	SLAMS	SLAMS	SLAMS
	Sampling Method	GMW/SA 1200 81102	GMW/SA 1200 81102	GMW/SA 1200 81102
	Spatial Scale	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD
	Monitor Objective	PUBLIC EXPOSURE	PUBLIC EXPOSURE	PUBLIC EXPOSURE
	Sampling Frequency	1-6	1-6	1-6

**TABLE 11**  
**NETWORK MONITORING OBJECTIVE**  
**(PARTICULATE POLLUTANTS)**

	<b>Name</b>	<b>Brawley</b>	<b>EI Centro</b>
	<b>Address</b>	<b>220 Main St.</b>	<b>150 S. 9th St.</b>
	<b>Operator</b>	<b>ICAPCD</b>	<b>ICAPCD</b>
<b>PM2.5</b>	Monitor Designation	SLAMS	SLAMS
	Sampling Method	R&P 2025 (WINS) 88101	R&P 2025 (WINS) 88101
	Spatial Scale	NEIGHBORHOOD	NEIGHBORHOOD
	Monitor Objective	PUBLIC EXPOSURE	PUBLIC EXPOSURE
	Sampling Frequency	1-3	1-3

**TABLE 12**  
**NETWORK MONITORING OBJECTIVE**  
**(PARTICULATE POLLUTANTS)**

	<b>Name</b>	<b>Calexico</b>			
	<b>Address</b>	<b>1020 Belcher St.</b>			
	<b>Operator</b>	<b>CARB</b>			
<b>PM2.5</b>	Monitor Designation	SLAMS	SLAMS	SPM	SPM
	Sampling Method	R&P 2025 (VSCC) 88101 POC1	R&P 2025 (VSCC) 88101 POC2	MET ONE BAM 1020 88501 POC3	MET ONE BAM 1020 88501 POC4
	Spatial Scale	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD
	Monitor Objective	PUBLIC EXPOSURE	PUBLIC EXPOSURE	SUPPORT	SUPPORT
	Sampling Frequency	EVERYDAY	1-6	CONTINUOUS	CONTINUOUS

### III MONITORING REQUIREMENTS

As mentioned in section II Monitoring Network Overview, there are no NCore or PAMS located in Imperial County. Because there are no NCore stations there is no coarse particulate matter (PM<sub>10-2.5</sub>) monitoring or lead (Pb) monitoring. In addition, the Imperial County Airport was not one of the 15 airports selected by the US EPA for study, nor are there any stationary sources in Imperial County meeting the 0.5 tons per year (tpy) threshold established by US EPA. There is however, lead monitoring used for State and local purposes only at the Calexico Ethel site that is not required under any federal monitoring requirement.

Federal regulation requires a minimum number of monitors per pollutant and grants discretionary authority to the Regional Administrator, under certain conditions, to require additional monitors above and beyond that required by the minimum standards. To determine the total minimum number of required monitor's specific consideration is given to the pollutant of interest, purpose and population. To address population the CFR utilizes a statistical-based definition of a metropolitan area provided by the Office of Management and Budget and the Census Bureau. Pertinent to Imperial County is the metropolitan statistical area (MSA) which has been defined as a Core Based Statistical Area (CBSA) associated with at least one urbanized area with a population of 50,000 or more. Imperial County is part of the EI Centro MSA, referenced as 20940. It covers the major cities in our county and has a population count of 174,528 (2010 U.S. Census Bureau information).

Overall, Imperial County meets or exceeds US EPA's minimum requirements. Depending on the monitoring objective, state and local agencies will operate more monitors than are required by law. Typically, additional monitors are used to fulfill state and local purposes for monitoring that are in addition to federal purposes. California air quality standards are more stringent than federal standards and require more ambient air monitoring to show compliance with the state standards. Monitors are also used to keep the public informed of the actual air quality conditions where they live and work.

area size (in terms of population and geographic characteristics) and typical peak concentrations, either below or near the NAAQS. For other pollutants, no monitoring is required unless an area exceeds or is close to exceeding a NAAQS.

### A Ozone (O<sub>3</sub>)

Currently, under federal regulation there are two Ozone NAAQS to be met. Although the US EPA determined, on December 3, 2009, that the Imperial County "moderate" 8-hour ozone non-attainment area attained the 1997 8-hour Ozone standard the Imperial County is classified by US EPA as a "moderate" non-attainment area. For the new 2008 8-hour ozone standard Imperial County has been classified as a "marginal" non-attainment area.

**TABLE 13**  
SLAMS MINIMUM O<sub>3</sub> MONITORING REQUIREMENTS

MSA POPULATION	MOST RECENT 3-YEAR DESIGN VALUE	MOST RECENT 3-YEAR DESIGN VALUE
	CONCENTRATION ≥85% OF ANY O <sub>3</sub> NAAQS	CONCENTRATIONS <85% OF ANY O <sub>3</sub> NAAQS
> 10 million	4	2
4-10 million	3	1
350,000-<4 million	2	1
50,000-<350,000	1	0

In designing an O<sub>3</sub> monitoring network factors such as geographic size, population density, complexity of terrain, meteorology and air pollution transport must be considered.

Up until November of 2012, four (4) ozone monitors functioned in Imperial County. Because of an electrical fire, the Westmorland ozone monitor was placed out of commission. Monitoring for O<sub>3</sub> in Imperial County is year round with forecasting capabilities during the "ozone season". For the three year period 2010-2012 El Centro recorded the highest concentration among all sites within the monitoring network. El Centro's 8 hour design value is 0.081ppm<sup>4</sup>. Although El Centro is considered the highest concentration site all sites are used to keep the public informed of air quality utilizing the Air Quality Index (AQI) reporting framework and air quality mapping.

<sup>4</sup> In 2012 Calexico had the highest daily concentration, 0.095 vs. El Centro concentration of 0.091 however the design value of El Centro remained the highest of the four stations.

**TABLE 14**  
Summary of Minimum Monitoring Requirements Ozone

MSA	County	Population (year 2010)	8-hr design value (years)	Min # of monitors required	Number of active monitors	Monitors needed
20940 El Centro	Imperial	174,528	0.081 ppm 2010 2012	1	4*	0

MSA 20940 El Centro	Monitor Site	8-hr design value(years) 2010 2012	≥85% of 2008 O <sub>3</sub> NAAQS (.075 ppm)	Min # of monitors required	Number of active monitors	Monitors needed
Population (year 2010) 174,528	El Centro Calexico Westmorland Niland	0.081 ppm 0.075 ppm 0.071ppm 0.070 ppm	YES YES NO NO	1	4*	0

\*The Westmorland Station experienced an electrical fire November of 2012. Currently, the station does not monitor for Ozone.

## B Carbon Monoxide (CO)

Population density is the significant trigger for CO monitoring. High population densities of 1 million and above trigger the requirement of a single CO monitor along with a near-road NO<sub>2</sub> monitor. Imperial County does not meet the population requirement under the CFR for required CO monitoring. However, continued operation of existing SLAMS CO sites using FRM or FEM is required until discontinuation is approved by the US EPA Regional Administrator. There are two SLAMS CO monitors operating within the Imperial County monitoring network. For 2012, the maximum 1-hour CO concentration for El Centro was 25.1 ppm, and for Calexico Ethel 6.7 ppm.

**TABLE 15**  
Summary of Minimum Monitoring Requirements CO

MSA	County	Population (year 2010)	8-hr max value (years)	Min # of monitors required	Number of active monitors	Monitors needed
20940 El Centro	Imperial	174,528	7.5 ppm 2010 2012	0	2	0

## C Nitrogen Dioxide (NO<sub>2</sub>)

Regulation requires the establishment of one microscale near-road NO<sub>2</sub> monitoring station within CBSA's with a population of 500,000 or more. Regulation further requires that there be one NO<sub>2</sub> monitoring station within CBSA's with a population of 1,000,000 or more. The Imperial County does not meet either requirement. Nevertheless, continued operation of existing SLAMS NO<sub>2</sub> sites is required until discontinuation is approved by the US EPA Regional Administrator. There are two SLAMS NO<sub>2</sub> monitors operating within the Imperial County monitoring network. The highest concentration site is the Calexico Ethel site with an 8 hour design value of 62 ppb (2010 2012 data) and the 2012 98<sup>th</sup> percentile of 66 ppb. For 2012 the maximum 1-hr concentration of 91 ppb was recorded at the Calexico Ethel monitoring station.

**TABLE 16**  
Summary of Minimum Monitoring Requirements NO<sub>2</sub>

MSA	County	Population (year 2010)	8-hr design value (years)	Min # of monitors required	Number of active monitors	Monitors needed
20940 El Centro	Imperial	174,528	62 ppb 2010 2012	0	2	0

**D Sulfur Dioxide (SO<sub>2</sub>)**

Regulation requires States for each CBSA to calculate the Population Weighted Emissions Index (PWEI) in millions persons-tons per year of SO<sub>2</sub>. Thresholds for the SO<sub>2</sub> monitoring requirements begin at a PWEI of 1,000,000 down to 5,000. At a PWEI equal to or greater than 5,000 but less than 100,000 a minimum of one SO<sub>2</sub> monitor is required. At a PWEI equal to or greater than 100,000 but less than 1,000,000 a minimum of two SO<sub>2</sub> monitors are required. The only SO<sub>2</sub> monitor operating within the Imperial County is located in Calexico. For 2012, the maximum concentration for Calexico Ethel for 1-hr was 15 ppb the 99<sup>th</sup> percentile is 7 ppb (2010 2012). PEWI calculated using 2008 emission inventory data for Sulfur Oxide (SO<sub>x</sub>) result in a value of 0.07 million persons-tons/yr.

**TABLE 17**  
Summary of Minimum Monitoring Requirements SO<sub>2</sub>

MSA	County	Population (year 2010)	Min # of monitors required	Number of active monitors	Monitors needed
20940 El Centro	Imperial	174,528	1	1	0

**E Particulate Matter (PM<sub>10</sub>)**

According to regulation the number of PM<sub>10</sub> stations must range between 2 and 10 stations in areas where MSA populations exceed 1,000,000. Low population urban areas are not required to have more than two (2) PM<sub>10</sub> stations. Regulation further assesses the minimum monitoring requirement for PM<sub>10</sub> according to levels of concentration. For those areas with a MSA population equal to or less than 250,000 but greater than 100,000 the minimum required number of PM<sub>10</sub> monitors is summarized below.

**TABLE 18**  
PM<sub>10</sub> MINIMUM REQUIRED MONITORS PER CONCENTRATION LEVEL

<b>HIGH CONCENTRATION</b>	<b>MEDIUM CONCENTRATION</b>	<b>LOW CONCENTRATION</b>
1-2	0-1	0

High concentration areas are those areas in which the ambient PM<sub>10</sub> concentrations exceed the PM<sub>10</sub> NAAQS by 20 percent or more (180µ/m<sup>3</sup>). Medium concentration

areas are those areas where ambient PM<sub>10</sub> concentrations exceed 80% percent of the PM<sub>10</sub> NAAQS (>127.5µ/m<sup>3</sup>). Low concentration areas are those areas where ambient PM<sub>10</sub> concentrations are less than 80% of the PM<sub>10</sub> NAAQS (<127.5µ/m<sup>3</sup>). Because each area has its own unique sources of pollutants and controls the number of stations is ultimately determined jointly by US EPA and the State.

Imperial County is classified by US EPA as a “serious” non-attainment area for PM<sub>10</sub>. All PM<sub>10</sub> monitors operate on a one in six day schedule. On annual average, Brawley and Calexico record the highest concentrations within the monitoring network. Calexico’s annual measurement is 63.6µ/m<sup>3</sup> while Brawley’s annual measurement is 37.9µ/m<sup>3</sup>.

**TABLE 19**

2012	Calexico	Brawley	EI Centro	Westmorland	Niland	
Annual Max.	406	127	75	109	212	µg/m <sup>3</sup>
Annual Mean	63.6	37.9	32.9	35.9	37.8	µg/m <sup>3</sup>

**TABLE 20**

Summary for Minimum Monitoring Requirements PM<sub>10</sub>

MSA 20940 EI Centro	County Imperial	Population (year 2010) 174,528	Min # of monitors required	Number of active monitors	Monitors needed
SITE	Max	Avg.Mean			
Calexico	406	63.3			
Niland	212	37.8	2	5	0
Brawley	127	37.9			
Westmorland	109	35.9			
EI Centro	75	32.9			

**F Particulate Matter (PM<sub>2.5</sub>)**

Federal regulation requires that all State, and where applicable, local agencies operate the minimum number of required PM<sub>2.5</sub> monitoring sites. The minimum required PM<sub>2.5</sub> monitoring sites is determined by MSA population and the most recent 3-year design value. See Table 9 for a summary below.

**TABLE 21**

PM<sub>2.5</sub> MINIMUM MONITORING REQUIREMENTS

MSA POPULATION	MOST RECENT 3-YEAR DESIGN VALUE CONCENTRATION ≥85% OF ANY PM <sub>2.5</sub> NAAQS	MOST RECENT 3-YEAR DESIGN VALUE CONCENTRATIONS <85% OF ANY PM <sub>2.5</sub> NAAQS
	> 1 million	3
500,000 - 1 million	2	1
50,000 - <500,000	1	0

Regulation further requires all required monitoring sites to be sited to represent community-wide air quality. The community-wide site must be located in a population-oriented area of expected maximum concentration. In addition, the regulation requires State, or where appropriate, local agencies to operate continuous PM<sub>2.5</sub> analyzers equal to at least one-half (round up) the minimum required monitoring sites. On this point, the

regulation further explains that at least one required continuous analyzer in each MSA must be collocated with one of the required FRM/FEM/ARM monitors unless the monitor is itself a continuous FEM or ARM monitor in which case no collocation requirement applies. Finally, the regulation requires States to establish PM<sub>2.5</sub> background and transport sites, as well as conduct PM<sub>2.5</sub> chemical speciation utilizing Speciation Trends Network (STN).

**TABLE 22**  
Summary for Minimum Monitoring Requirements PM<sub>2.5</sub>

MSA	County	Population (year 2010)	8-hr design value (2010-2012)	Min # of monitors required	Number of active monitors	Monitors needed
20940 El Centro	Imperial	174,528	32µ/m <sup>3</sup>	1	3	0

#### SPATIAL AVERAGING APPROACHES FOR PM<sub>2.5</sub>

The PM<sub>2.5</sub> NAAQS as specified in 40 CFR part 50 allows State and local air monitoring agencies to spatially average PM<sub>2.5</sub> air quality data for comparison to the annual PM<sub>2.5</sub> NAAQS. This approach is not however comparable with the daily PM<sub>2.5</sub> NAAQS and is directly related to epidemiological studies. The Air District has not opted to use spatial averaging nor has the State included spatial averaging in Calexico. Consultation with CARB and US EPA will occur should circumstances change such that the Air District would consider spatial averaging as necessary in the future.

#### COLLOCATION REQUIREMENTS

Appendix A of 40 CFR 58 includes requirements for collocation of samplers as part of quality checks for the PM<sub>2.5</sub> continuous PM<sub>2.5</sub>, PM<sub>10</sub> and Pb monitoring networks. The requirements are to be met by each PQAO. Currently, there are four PQAO's in California, San Francisco Bay Area AQMD, San Diego County APCD, South Coast AQMD and CARB. The respective requirements for collocation PM<sub>2.5</sub> is discussed by each PQAO in their respective Network Plans. CARB's 2014 Annual Monitoring Network Report for Small Districts in California contains information regarding the collocation requirements on pages 34 through 37.

#### IV SAMPLING FREQUENCY REVIEW

The 2013 Network Plan for Imperial County included a PM<sub>10</sub> five year assessment that concluded in no changes to current sampling frequencies for PM<sub>10</sub> in Imperial County. Although the assessment is required every 5 years by regulation the next scheduled frequency evaluation will be conducted in 2015. This will allow the Air District to be on schedule and consistent with the whole of the State of California. Below are the results from last years assessment.

**TABLE 23**  
PM10 Sampling Frequency Calculations

1/6 Schedule  
Design conc. = Highest  
Ratio to Standard -->

CALEXICO 0005					BRAWLEY 0007				
2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
110	275	112	80	406	137	196	61	85	127
0.7	1.8	0.7	0.5	2.7	0.9	1.3	0.4	0.6	0.8

Ratio to Standard -->

EL CENTRO 1003					WESTMORLAND 4003				
2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
88	243	69	81	75	136	161	86	74	109
0.6	1.6	0.5	0.5	0.5	0.9	1.1	0.6	0.5	0.7

Ratio to Standard -->

NILAND 4004				
2008	2009	2010	2011	2012
121	202	58	220	212
0.8	1.3	0.4	1.5	1.4

Methodology: Highest value of each month/each year.

A similar assessment of PM<sub>2.5</sub> was similarly conducted for the 2013 Network plan as a result CARB has instituted PM<sub>2.5</sub> everyday sampling as of January 1, 2014.

**TABLE 24**  
PM2.5 Sampling Frequency Calculations

STATION	YEAR	24 hour Design Value	Annual Design Value	24 Hour Std	Annual Std	Within +/- 5% of Std?		Daily sampling Required?
				35	12	24 hour	Annual	
<b>Calexico</b>	<b>2012</b>	32	14	8.57	16.67	NO	NO	NO
<b>Brawley</b>	<b>2012</b>	18	7	48.57	41.67	NO	NO	NO
<b>El Centro</b>	<b>2012</b>	20	7	42.86	41.67	NO	NO	NO
<b>Calexico</b>	<b>2011</b>	35	14	0.00	16.67	YES	NO	YES
<b>Brawley</b>	<b>2011</b>	19	7	45.71	41.67	NO	NO	NO
<b>El Centro</b>	<b>2011</b>	20	7	42.86	41.67	NO	NO	NO
<b>Calexico</b>	<b>2010</b>	32	13	8.57	8.33	NO	NO	NO
<b>Brawley</b>	<b>2010</b>	19	8	45.71	33.33	NO	NO	NO
<b>El Centro</b>	<b>2010</b>	16	8	54.29	33.33	NO	NO	NO
<b>Calexico</b>	<b>2009</b>	34	13	2.86	8.33	YES	NO	YES
<b>Brawley</b>	<b>2009</b>	21	8	40.00	33.33	NO	NO	NO
<b>El Centro</b>	<b>2009</b>	18	8	48.57	33.33	NO	NO	NO
<b>Calexico</b>	<b>2008</b>	36	12	2.86	0.00	YES	YES	YES
<b>Brawley</b>	<b>2008</b>	19	8	45.71	33.33	NO	NO	NO
<b>El Centro</b>	<b>2008</b>	21	8	40.00	33.33	NO	NO	NO

References: AQS AMP480 Design Value Report (05.20.2013)

40 CFR 58.12(d)(iii) Required SLAMS whose measurements determine the design value for their area and that are within plus or minus 5 percent of the daily PM2.5 NAAQS must have an FRM or FEM operate on a daily schedule. A continuously operating FER or ARM PM2.5 monitor satisfies this requirement.  
Final Network Plan memo (Region IX; May 08, 2012); Attachment E: % formula used – 24 hour standard ABS $((35-x)/(35)*100)$  Annual Standard ABS  $((12-y)/(12)*100)$

## V PROPOSED MODIFICATIONS TO THE NETWORK DESIGN

### Calexico East

CARB discontinued monitoring activities at the Calexico East site since July 2010. US EPA formally approved the closure of Calexico East site April 2013. See Appendix B

### Calexico Ethel

Both the Air District and CARB are currently evaluating the relocation of the Calexico Ethel site. The current site has been overrun by development and tree growth creating potential noncompliance with siting criteria. The proposed relocation is within a 1 mile perimeter from the current location. No actual changes will occur until US EPA formally approves the newly proposed site.

### Westmorland

An electrical fire resulted in the determination that the current shelter is in need of replacement. Damage from the fire resulted in the loss of the data logger and ozone monitor. After inspection by Facilities Management personnel the electrical system was deemed outdated and in need of replacement. A replacement shelter is expected by third quarter 2014.

## VI QUALITY SYSTEM REQUIREMENTS

### A Quality Management Plans (QMP) and Quality Assurance Project Plans (QAPP)

Federal regulation requires all organizations to develop a quality system which allows for the proper management of monitoring information in a systematic and organized manner. The quality system, when well developed, provides a framework for planning, implementing, assessing, reporting and for carrying out required quality assurance and quality control activities. Developing a Quality management plan (QMP) and a quality assurance project plan (QAPP) assures that monitoring results are well-defined for need, use, purpose, monitoring objective, as well as, compliance with applicable standards and statutory requirements.

The QMP describes the quality system in terms of the organizational structure, functional responsibilities of management and staff, lines of authority, and required interfaces for those planning, implementing, assessing and reporting activities involving environmental data operations. The QMP must be approved by the Regional Administrator. The QAPP is a formal document describing the quality system in such a manner as to assure that the results of work performed will satisfy the stated objectives. Ultimately, the monitoring quality system must have a demonstration of adequate resources both in personnel and funding.

Currently, the Air District is developing its QMP and QAPP and expects to have a draft version of both by fall for review by CARB and US EPA. In addition, all Standard

Operating Procedures, station site visit logs, troubleshooting and check logs have been updated and are in use by field technicians and reviewers.

## B DATA REVIEW AND SUBMITTAL

Currently, all quality control and assurance procedures are in place, despite the fact that the QMP and QAPP have not been finalized. In practice, field technicians review and document all checks, flows, visits and troubleshooting evidence onto logs which are maintained at each station. All data is reviewed and all instrument systems are verified in working order on a daily basis. In order to maintain quality control prior to submitting certified data to CARB all data is reviewed by staff that is not tied to the data generation activity. Once all data points are checked and verified then staff submits the data in a formalized manner as certified data to CARB. In addition to certified data the Air District remits raw uncertified data for Air Quality Index advisories and forecasts.

Certified data submitted to CARB includes, all 1 hour ozone concentrations, all 1 hour NO, NO<sub>2</sub> and NO<sub>x</sub> concentrations, all CO 1 hour concentrations, all PM<sub>10</sub> continuous 1 hour concentrations, all precision and accuracy data and all 1 hour meteorological concentrations. In addition, the Air District remits all PM<sub>10</sub> filter samples to CARB, via a chain of custody protocol and PM<sub>2.5</sub> filter samples to the San Diego Air Pollution Control District (SDAPCD) utilizing the accepted chain of custody protocol for PM<sub>2.5</sub>. All data is submitted either by CARB or SDAPCD on to the US EPA Air Quality System (AQS) after certification by the appropriate agency. Once in AQS US EPA will then affirm completeness and accuracy on an annual basis.

## VII OVERALL SUMMARY OF THE IMPERIAL COUNTY AMBIENT AIR MONITORING NETWORK

The following tables and figures summarize the content of information provided within the descriptive sections of the Network Plan. Figure 1 on page 7 is a map listing the current operating ambient air monitoring stations in Imperial County. Table 25 is a list of all the Air Quality Monitoring Site locations. Table 26 lists the pollutants and other parameters monitored by site. Table 27 lists the criteria pollutant spatial scale and monitoring objective. All of the monitors operating in Imperial County are part of the SLAMS network.

The tables in this section give detailed information relating to the sites and monitors. They are presented to show compliance with the monitoring requirements found in 40 CFR58.10.

**TABLE 25**  
Ambient Air Quality Monitoring site locations in Imperial County

Location	Address	ARB No.	AIRS No.	Latitude	Longitude
Niland	7711 English Road, Niland, CA 92257	13997	060254004	33°12'49"	115°32'43"
Westmorland	570 Cook St., Westmorland, CA 92281	13697	060254003	33°01'57"	115°37'25"
Brawley	220 Main St., Brawley, CA 92227	13701	060250007	32°58'42"	115°32'21"
El Centro	150 S. 9th St., El Centro, CA 92243	13694	060251003	32°47'32"	115°33'47"
Calexico Ethel	1029 Belcher St., Calexico, CA 92231	13698	060250005	32°40'34"	115°28'59"

**TABLE 26**  
Pollutants and Parameter Monitored per site

Location	Pollutants Monitored	Parameters Monitored
Niland	O <sub>3</sub> , PM <sub>10</sub>	OT, RH, WD, HWS, BP
Westmorland	O <sub>3</sub> , PM <sub>10</sub>	OT, RH, WD, HWS, BP
Brawley	PM <sub>10</sub> , PM <sub>2.5</sub>	OT, BP
El Centro	CO, NO <sub>2</sub> , O <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub>	OT, WD, HWS, BP
Calexico Ethel	CO, SO <sub>2</sub> , NO <sub>2</sub> , O <sub>3</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , Pb	OT, RH, WD, HWS, BP, SR

**Pollutant**

O<sub>3</sub> Ozone  
 PM<sub>10</sub> Particulate Matter <10 microns  
 PM<sub>2.5</sub> Particulate Matter <2.5 microns  
 NO<sub>2</sub> Nitrogen Dioxide  
 CO Carbon Monoxide  
 SO<sub>2</sub> Sulfur Dioxide  
 Pb Lead (TSP)

**Parameter**

OT Outside Temperature  
 RH Relative Humidity  
 WD Wind Direction  
 HWS Horizontal Wind Speed  
 BP Barometric Pressure  
 SR- Solar Radiation

**TABLE 27**

## Summary of Site Types, Spatial Scales and Purpose

Location	CO	NO <sub>2</sub>	SO <sub>2</sub>	O <sub>3</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Niland				G/B/RS/PE	GB/MS/PE	
Westmorland				R/B/RS/PE	R/B/MS/PE	
Brawley					TC/NS/PE	B/T/NS/PE
EI Centro	HC/NS/PE	TC/NS/PE		HC/NS/PE	TC/NS/PE	TC/NS/PE
Calexico Ethel	TC/MS/PE	HC/US/PE	TC/US/PE	R/TC/US/PE	HC/NS/PE	HC/NS/PE

Site Type		Spatial Scale	Monitoring Purpose
R/TC	Regional/Typical Concentrations	US Urban Scale	PE Public Exposure
HC	Highest Concentrations	NS Neighborhood Scale	
GB	General Background	RS Regional Scale	
R/B	Regional/Background	MS Middle Scale	
TC	Typical Concentrations		
B/T	Background/Transport		

## VIII DETAILED SITE INFORMATION

The following tables and figures were downloaded from the CARB Monitoring Network webpage. The detailed information is a product of State assessment and does not necessarily reflect the findings within this document. In any event, this section provides evidence in addition to the previous pages that all established monitoring sites meet minimum federal requirements.

### Niland Monitoring Station Details

<b>Site Name</b>	<b>Niland</b>		
AQS ID	60254004		
GIS Coordinates	Lat 33° 12' 49" Long 115° 32' 43"		
Location	Located in remote setting near the community of Niland		
Address	7711 English Road, Niland, CA 92257		
County	Imperial County		
Dist. to road	20 meters		
Traffic count	50 vehicles per day		
Ground Cover	Dirt		
Representative area	MSA (El Centro)		
<b>Pollutant</b>	<b>O3</b>	<b>PM10</b>	<b>PM10</b>
Sampling Method	API/Teledyne 400A (087)	Anderson 1200 (063)	Met One BAM1020 (122 )
Analysis Method	N/A	Weighed by ARB	N/A
Start Date	6/1/1996	6/1/1996	1/7/2009
Operation Schedule	Continuous	1 in 6day	Continuous
Sampling Season	All year	All year	All year
Probe height	4.5m	4.5 m	5.0m
Dist. from supporting structure	1. 5m	1.5 m	1.5 m
Dist. from obstructions on roof	None	None	None
Distance from trees	None	None	None
Unrestricted airflow	360°	360°	360°
Probe Material	Glass & Teflon	N/A	N/A
Residence Time	5.1 sec	N/A	N/A
Is it suitable for comparison against the annual PM2.5?	N/A	No	No
Frequency of flow rate verification for manual PM samplers audit	N/A	Monthly	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	Bi-Monthly
Frequency of 1-point QC check (gaseous)	Daily	N/A	N/A
Last annual performance evaluation (gaseous)	02/05/2014	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	8/12/13-2/5/14	8/12/13-2/5/14

# Site Information for Niland-English Road



AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code
060254004	13997	6/1/96	<a href="#">Imperial County APCD (009)</a>

Site Address	County	Air Basin	Latitude (N)	Longitude (W)	Elevation (m)
7711 English Road, Niland CA 92257	<a href="#">Imperial</a>	<a href="#">Salton Sea</a>	33.21349	-115.54514	-57

**Pollutants Monitored (click on parameter link for real-time data)**  
**Note: multiple monitors may be available through the [AQMIS query tool](#).**  
[O<sub>3</sub>](#), [PM<sub>10</sub>](#), [BAM<sub>PM10</sub>](#), [Outdoor Temperature](#), [Relative Humidity](#), Wind Direction, [Horizontal Wind Speed](#), [Barometric Pressure](#)

# Niland Site Survey Report

## Siting Information

Site Name: Niland-English Road	Audit Date: 2014-02-05	ARB Number: 13997	AIRS Number: 060254004
Address: 7711 English Road Niland, CA 92257	Latitude: N 33.21349	Longitude: W -115.54514	Elevation (m): -57
	Auditors: Laura Niles Harnek Nijjar	Site Technician: Michael Green	Site Phone:
Operating Agency: Imperial County APCD		Site Report: Yes	Site Photos: Yes

## General Siting Conditions

<b>Station Temperature</b>	<b>Traffic</b>	<b>Topography</b>	Predominant Wind Direction: West
Controlled: Yes	Description: Remote	Site: Level	Arc Air Flow (Deg): 360 Degrees
Recorded: Yes	Distance: 20 meters	Region: Valley	Probe Clean: Yes
Inside Temp: 21.19 Degrees Celsius	Count (Veh/Day): 50	<b>QA Manual</b>	Manifold Clean: N/A
<b>Meteorology</b>	<b>Non-vehicular Local Sources</b>	Approved: Yes	Cleaning Schedule: As Needed
Located With Instruments: Yes	Description: Agriculture	Agency: Imperial County APCD	Autocalibrator Type: API 400A IZS
Shadowing: No	Distance: 50 meters	Urbanization: Remote	Site Survey Complete: Yes
Boom Orientation (Deg): 347	Direction: 360	Ground Cover: Gravel	Logbook Up To Date: Yes
Temp(Motor/Natural): Natural			

## Action Items

## Comments

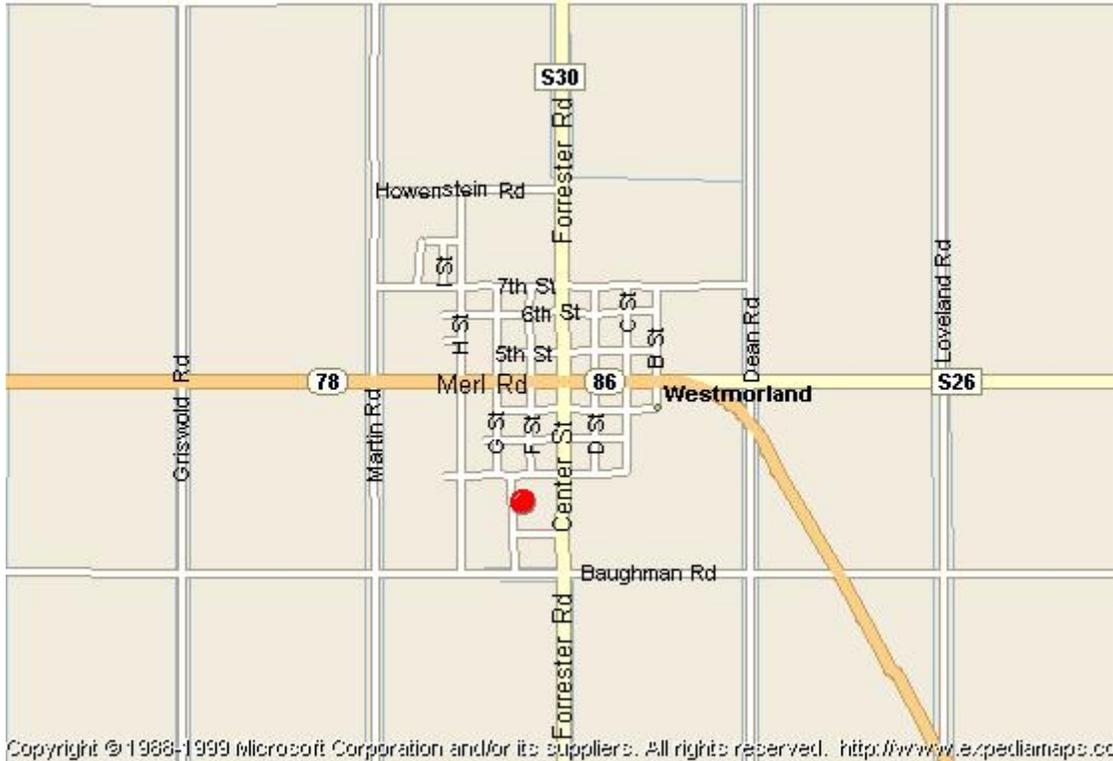
# Niland Site Survey Report (Cont.)

Monitor Type	Ozone	PM10-SSI	BAM	Outdoor Temperature
Manufacturer/Model	API/Teledyne 400	Anderson 1200	Met One BAM 1020	MET ONE 064-2
Serial Number	30333	7377	20005420	X4805
POC	1	1	1 (POC 3) ?	1
Data For Record?	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SPM	SLAMS
Objective	POPULATION EXPOSURE/TRANSPORT	POPULATION EXPOSURE/TRANSPORT	POPULATION EXPOSURE	-
Scale	REGIONAL	MIDDLE	MIDDLE	-
Height Above Ground	4.6	4.5	5.2	4.2
Height Above Platform	1.6	1.5	2.2	1.2
Sampler Spacing	N/A			N/A
Current Manual Available?	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes
In-line Filter Change Date	2014-02-04	N/A	N/A	N/A
Cal. Gas Cert. Date	N/A	N/A	N/A	N/A
Calibration Current?	Yes	Yes	Yes	Yes
Calibration Date	2014-01-15	2014-01-30	2014-01-30	2013-01-30
Cal. Equipment Cert. Date		2013-07-18	2013-03-19	2013-01-09
Obstacle Description	None	None	None	None
Distance to Obstacle	-	-	-	-
Obs. Height Above Inlet	-	-	-	-
Distance to Walls, etc.	-	-	-	-
Distance to Dripline	-	-	-	-
Dominant Influence	Agriculture	Agriculture	Agriculture	-
Residence Time (sec)	5.1	N/A	N/A	N/A
Monitor Type	Wind Direction	Horizontal Wind Speed		
Manufacturer/Model	MET ONE 020-C	MET ONE 010-C		
Serial Number	A6023	A6045		
POC	1	1		
Data For Record?	Yes	Yes		
Purpose	SLAMS	SLAMS		
Objective	-	-		
Scale	-	-		
Height Above Ground	8.5	8.5		
Height Above Platform				
Sampler Spacing	N/A	N/A		
Current Manual Available?	Yes	Yes		
Instrument Log Up-to-date?	Yes	Yes		
In-line Filter Change Date	N/A	N/A		
Cal. Gas Cert. Date	N/A	N/A		
Calibration Current?	Yes	Yes		
Calibration Date	2013-12-04	2013-12-04		
Cal. Equipment Cert. Date	N/A	2013-07-19		
Obstacle Description	None	None		
Distance to Obstacle	-	-		
Obs. Height Above Inlet	-	-		
Distance to Walls, etc.	-	-		
Distance to Dripline	-	-		
Dominant Influence	-	-		
Residence Time (sec)	N/A	N/A		

## Westmorland Monitoring Station Details

<b>Site Name</b>	Westmorland	
AQS ID	060254003	
GIS Coordinates	Lat 33° 01' 57" Long 115° 37' 25"	
Location	Located in suburban setting in the City of Westmorland	
Address	570 Cook St., Westmorland, CA 92281	
County	Imperial County	
Dist. to road	20 meters	
Traffic count	100 vehicles per day	
Ground Cover	Dirt	
Representative area	MSA (EI Centro)	
<b>Pollutant</b>	<b>O3</b>	<b>PM10</b>
Sampling Method	API/Teledyne 400 (087)	Anderson 1200 (063)
Analysis Method	N/A	Weighed by ARB
Start Date	4/1/93	4/1/93
Operation Schedule	Continuous	1in 6day
Sampling Season	All year	All year
Probe height	4.3	4.6
Dist. from supporting structure	1.2	1.5
Disl. from obstructions on roof	None	None
Distance from trees	None	None
Unrestricted airflow	360°	360°
Probe Material	Glass & Teflon	N/A
Residence Time	N/A	N/A
Is it suitable for comparison against the annual PM2.5?	N/A	No
Frequency of flow rate verification for manual PM samplers audit	N/A	Monthly
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A
Frequency of 1-point QC check (gaseous)	Daily	N/A
Last annual performance evaluation (gaseous)	01/31/12	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	8/12/13-2/5/14

# SITE INFORMATION FOR WESTMORLAND



AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code
060254003	13697	4/1/93	<a href="#">Imperial County APCD (009)</a>

Site Address	County	Air Basin	Latitude (N)	Longitude (W)	Elevation (m)
570 Cook St., Westmorland CA 92281	<a href="#">Imperial</a>	<a href="#">Salton Sea</a>	33.03239	-115.62362	-43

Pollutants Monitored (click on parameter link for real-time data) Note: multiple monitors may be available through the <a href="#">AQMIS query tool</a> .
<a href="#">O<sub>3</sub></a> , <a href="#">PM<sub>10</sub></a> , <a href="#">Outdoor Temperature</a> , <a href="#">Relative Humidity</a> , <a href="#">Wind Direction</a> , <a href="#">Horizontal Wind Speed</a> , <a href="#">Barometric Pressure</a>

# Westmorland Site Survey Report

## Siting Information

Site Name: Westmorland	Audit Date: 2014-02-05	ARB Number: 13697	AIRS Number: 060254003
Address: 570 Cook St. Westmorland, CA 92281	Latitude: N 33.03239	Longitude: W -115.62362	Elevation (m): -43
	Auditors: Laura Niles Harnek Nijjar	Site Technician: Michael Green	Site Phone:
Operating Agency: Imperial County APCD		Site Report: Yes	Site Photos: Yes

## General Siting Conditions

<b>Station Temperature</b>	<b>Traffic</b>	<b>Topography</b>	Predominant Wind Direction: West
Controlled:	Description: Rural	Site: Level	Arc Air Flow (Deg): 360 Degrees
Recorded:	Distance: 20 meters	Region: Level	Probe Clean: Yes
Inside Temp: N/A	Count (Veh/Day): 100	<b>QA Manual</b>	Manifold Clean: N/A
<b>Meteorology</b>	<b>Non-vehicular Local Sources</b>	Approved: Yes	Cleaning Schedule: As Needed
Located With Instruments: Yes	Description: None	Agency: Imperial County APCD	Autocalibrator Type: API 400A IZS
Shadowing: No	Distance: N/A	Urbanization: Rural	Site Survey Complete: Yes
Boom Orientation (Deg): 347	Direction: N/A	Ground Cover: Gravel	Logbook Up To Date: Yes
Temp(Motor/Natural): Natural			

## Action Items

## Comments

# Westmorland Site Survey Report (Cont.)

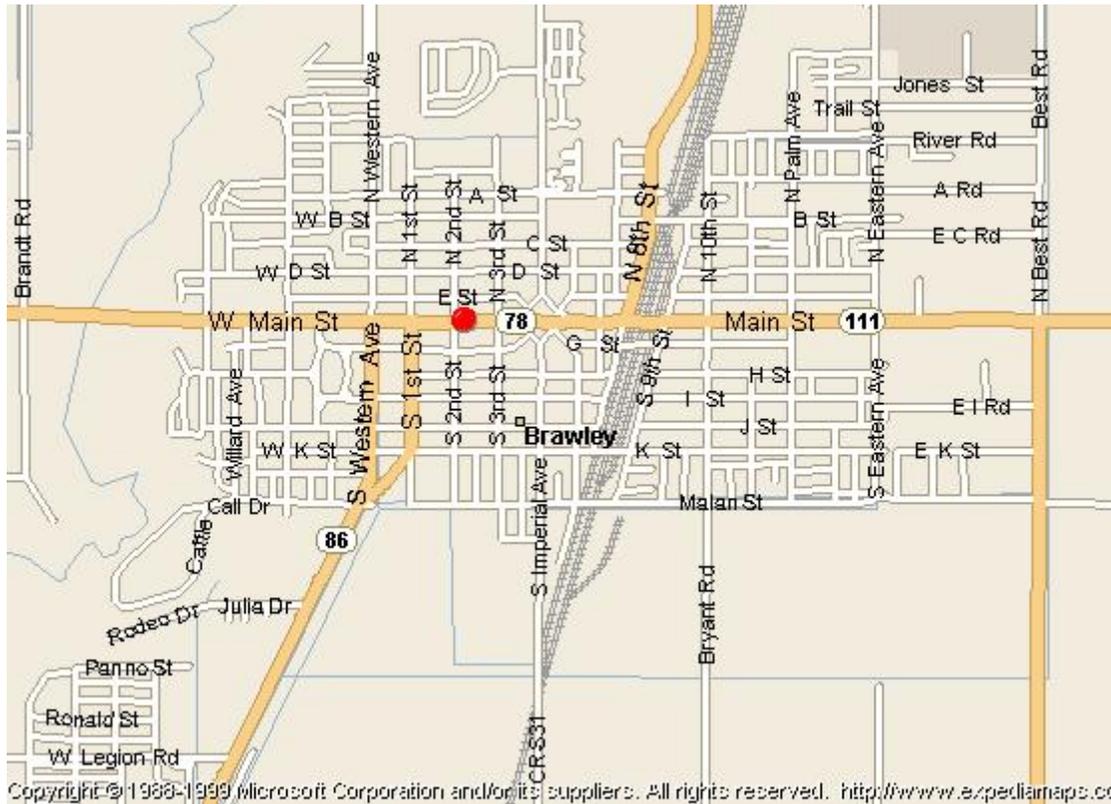
Monitor Type	Ozone	PM10-SSI	Outdoor Temperature
Manufacturer/Model	API/Teledyne 400	Anderson 1200	MET ONE 064-2
Serial Number	30331	10179	X4808
POC	1	1	1
Data For Record?	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS
Objective	PUBLIC EXPOSURE/TRANSPORT	PUBLIC EXPOSURE/TRANSPORT	-
Scale	REGIONAL	MIDDLE	-
Height Above Ground	4.3	4.6	4
Height Above Platform	1.2	1.5	0.9
Sampler Spacing	N/A		N/A
Current Manual Available?	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes
In-line Filter Change Date	1/27/2012	N/A	N/A
Cal. Gas Cert. Date	N/A	N/A	N/A
Calibration Current?	No	Yes	No
Calibration Date	3/3/2011	2014-01-30	1/26/2011
Cal. Equipment Cert. Date	12/15/2010	2013-07-13	1/11/2011
Obstacle Description	None	None	None
Distance to Obstacle	-	-	-
Obs. Height Above Inlet	-	-	-
Distance to Walls, etc.	-	-	-
Distance to Dripline	-	-	-
Dominant Influence	Vehicular	Vehicular	-
Residence Time (sec)	6.5	N/A	N/A

Monitor Type	Horizontal Wind Speed
Manufacturer/Model	MET ONE 010-C
Serial Number	X4246
POC	1
Data For Record?	Yes
Purpose	SLAMS
Objective	-
Scale	-
Height Above Ground	8.5
Height Above Platform	
Sampler Spacing	N/A
Current Manual Available?	Yes
Instrument Log Up-to-date?	Yes
In-line Filter Change Date	N/A
Cal. Gas Cert. Date	N/A
Calibration Current?	Yes
Calibration Date	11/30/2011
Cal. Equipment Cert. Date	12/28/2010
Obstacle Description	None
Distance to Obstacle	-
Obs. Height Above Inlet	-
Distance to Walls, etc.	-
Distance to Dripline	-
Dominant Influence	-
Residence Time (sec)	N/A

## Brawley Monitoring Station Details

<b>Site Name</b>	<b>Brawley</b>		
ADS 10	060250007		
GIS Coordinates	Lat 32° 58' 42" Long 115° 32' 21"		
Location	Located in city center setting in the City of Brawley		
Address	220 Main St., Brawley, CA 92227		
County	Imperial County		
Dist. to road	30 meters		
Traffic count	5000 vehicles per day		
Ground Cover	ASPHALT		
Representative area	MSA (El Centro)		
<b>Pollutant</b>	<b>PM 2.5</b>	<b>PM10</b>	<b>PM10</b>
Sampling Method	R&P seq. WINS (118)	Anderson 1200 (063)	BAM 1020 (122)
Analysis Method	Weighed by SDAPCD	Weighed by ARB	N/A
Start Date	01/01/04	01/01/04	01/07/09
Operation Schedule	1 in 3 day	1 in 6 day	Continuous
Sampling Season	All year	All year	All year
Probe height	10.0 m	10.0m	10.0 m
Dist. from supporting structure	1.5 m	1.7 m	2.4 m
Dist. from obstructions on roof	None	None	None
Distance from trees	None	None	None
Unrestricted airflow	360°	360°	360°
Probe Material	N/A	N/A	N/A
Residence Time	N/A	N/A	N/A
Is it suitable for comparison against the annual PM2.5?	Yes	No	No
Frequency of flow rate verification for manual PM samplers audit	Monthly	Monthly	N/A
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	Monthly
Frequency of 1-point QC check (gaseous)	N/A	N/A	N/A
Last annual performance evaluation (gaseous)	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	08/13/13 02/05/14	08/13/13 02/05/14	08/13/13 02/05/14

# Site Information for Brawley-Main Street



AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code
060250007	13701	1/1/04	<a href="#">Imperial County APCD (009)</a>

Site Address	County	Air Basin	Latitude (N)	Longitude (W)	Elevation
220 Main St., Brawley CA 92227	<a href="#">Imperial</a>	<a href="#">Salton Sea</a>	32° 58' 42"	115° 32' 21"	-15

Pollutants Monitored (click on parameter link for real-time data)
PM <sub>10</sub> , <a href="#">BAM<sub>PM10</sub></a> , PM <sub>2.5</sub> , <a href="#">Outdoor Temperature</a>

# Brawley Site Survey Report

## Siting Information

Site Name: Brawley-Main Street #2	Audit Date: 2014-02-05	ARB Number: 13701	AIRS Number: 060250007
Address: 220 Main St. Brawley, CA 92227	Latitude: N 32.97831	Longitude: W -115.53904	Elevation (m): -15
	Auditors: Laura Niles Harnek Nijjar	Site Technician: Mike Green	Site Phone:
Operating Agency: Imperial County APCD		Site Report: Yes	Site Photos: Yes

## General Siting Conditions

<b>Station Temperature</b>  Controlled: Yes  Recorded: Yes  Inside Temp: 23 Degrees Celsius	<b>Traffic</b>  Description: Commercial  Distance: 30 meters  Count (Veh/Day): 5000	<b>Topography</b>  Site: Level  Region: Level	Predominant Wind Direction: South  Arc Air Flow (Deg): 360 Degrees  Probe Clean: N/A		
		<b>Meteorology</b>  Located With Instruments: Yes  Shadowing: No  Boom Orientation (Deg): N/A  Temp(Motor/Natural):	<b>Non-vehicular Local Sources</b>  Description: None  Distance: N/A  Direction: N/A	<b>QA Manual</b>  Approved: Yes  Agency: Imperial County APCD	Manifold Clean: N/A  Cleaning Schedule: N/A  Autocalibrator Type: N/A
				Urbanization: City Center	Site Survey Complete: Yes
Ground Cover: Asphalt	Logbook Up To Date: Yes				

## Action Items

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## Comments

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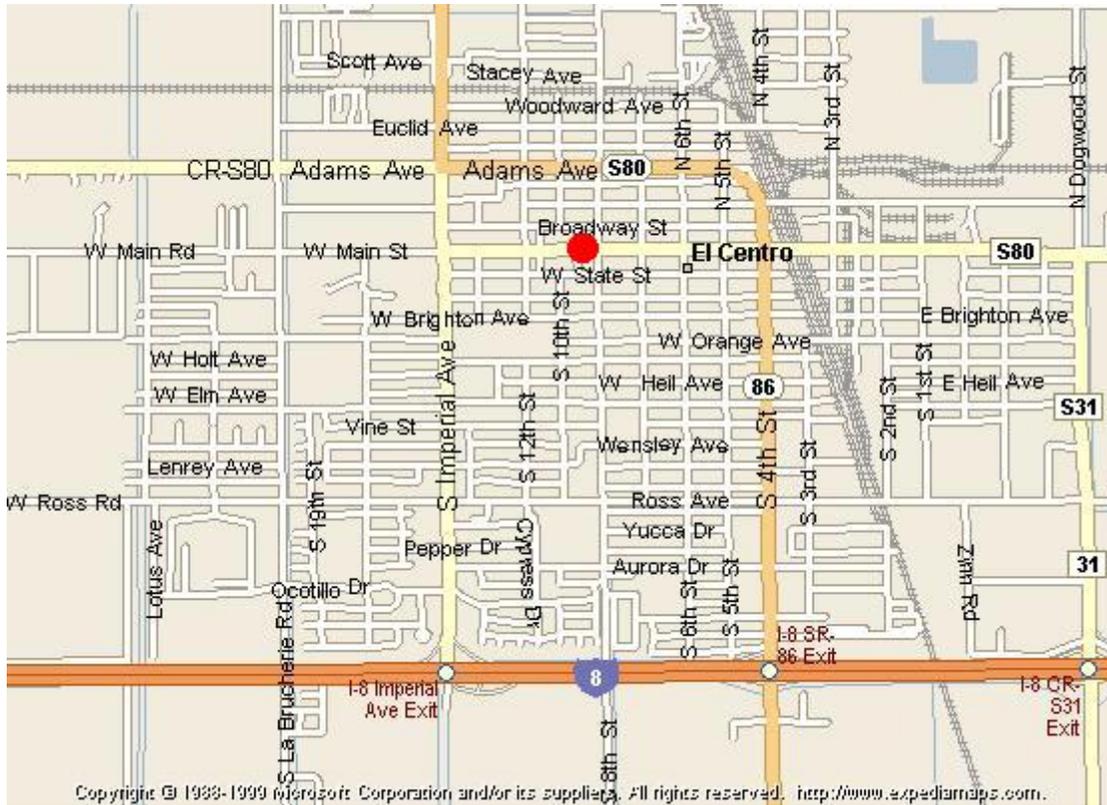
# Brawley Site Survey Report (Cont.)

Monitor Type	PM10-SSI	BAM	PM2.5	Outdoor Temperature
Manufacturer/Model	GMW 1200	Met One BAM 1020	R&P 2025	MET ONE 064-2
Serial Number	7346	20021472	20020954	B1681
POC	1	1 (POC 3)	1	1
Data For Record?	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	SLAMS
Objective	POPULATION EXPOSURE	POPULATION EXPOSURE	POPULATION EXPOSURE	-
Scale	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD	-
Height Above Ground	10	10	10	10
Height Above Platform	1.7	2.4	1.5	1
Sampler Spacing				N/A
Current Manual Available?	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes
In-line Filter Change Date	N/A	N/A	N/A	N/A
Cal. Gas Cert. Date	N/A	N/A	N/A	N/A
Calibration Current?	Yes	Yes	Yes	no
Calibration Date	2014-01-07	2013-12-23	2013-12-17	2013-01-31
Cal. Equipment Cert. Date	2013-07-18	2013-03-19	2013-03-19	2013-01-09
Obstacle Description	None	None	None	None
Distance to Obstacle	-	-	-	-
Obs. Height Above Inlet	-	-	-	-
Distance to Walls, etc.	-	-	-	-
Distance to Dripline	-	-	-	-
Dominant Influence	Vehicular	Vehicular	Vehicular	-
Residence Time (sec)	N/A	N/A	N/A	N/A

## EI Centro Monitoring Station Details

<b>Site Name</b>	<b>EI Centro</b>				
AQS ID	06025 1003				
GIS Coordinates	Lat 32° 47' 32" Long 115° 33' 47"				
Location	Located in city center setting in the City of EI Centro				
Add ress	150 S. 9th St., EI Centro, CA 92243				
County	Imperial County				
Dist. to road	30 meters				
Traffic count	2500 vehicles per day				
Ground Cover	ASPHALT				
Representative area	MSA (EI Centro)				
<b>Pollutant</b>	<b>NO2</b>	<b>O3</b>	<b>CO</b>	<b>PM2.5</b>	<b>PM10</b>
Sampling Method	API 200A (099)	API/Teledyne T400 (087)	API T300 (093)	R&P seq. WINS (118)	Anderson 1200 (063)
Analysis Method	N/A	N/A	N/A	Weighed by SDAPCD	Weighed by ARB
Start Date-Date	2/1/88	2/1/88	2/1/88	2/1/88	2/1/88
Operation Schedule	Continuous	Continuous	Continuous	1 in 3 day	1 in 6 day
Sampling Season	All year	All year	All year	All year	All year
Probe height	11.1 m	11.1 m	9.3 m	11.9 m	11.2 m
Dist. from supporting structure	1.8 m	1.8m	1.8 m	2.1 m	1.5m
Dist. from obstructions on roof	None	None	None	None	None
Distance from trees	None	None	None	None	None
Unrestricted airflow	360°	360°	360°	360°	360°
Probe Material	Glass & Teflon	Glass & Teflon	Glass & Teflon	N/A	N/A
Residence Time	8.7 sec	8.2 sec	8.3 sec	N/A	N/A
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	Yes	No
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A	N/A
Frequency of 1-point QC check (gaseous)	Daily	Daily	Daily	N/A	N/A
Last annual performance evaluation (gaseous)	02/06/14	02/06/14	02/06/14	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	08/13/13 02/06/14	08/13/13 02/06/14

## Site Information for El Centro-9th Street



AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code
060251003	13694	2/1/88	<a href="#">Imperial County APCD (009)</a>

Site Address	County	Air Basin	Latitude (N)	Longitude (W)	Elevation (m)
150 9th St, El Centro CA 92243	<a href="#">Imperial</a>	<a href="#">Salton Sea</a>	32.79215	-115.56299	9

<b>Pollutants Monitored (click on parameter link for real-time data)</b> <b>Note: multiple monitors may be available through the <a href="#">AQMIS query tool</a>.</b>
<a href="#">CO</a> , <a href="#">NO<sub>2</sub></a> , <a href="#">O<sub>3</sub></a> , <a href="#">PM<sub>10</sub></a> , <a href="#">PM<sub>2.5</sub></a> , <a href="#">Outdoor Temperature</a> , Wind Direction, <a href="#">Horizontal Wind Speed</a> , <a href="#">Barometric Pressure</a>

# El Centro Site Survey Report

## Siting Information

Site Name: El Centro-9th Street	Audit Date 2014-02-06	ARB Number: 13694	AIRS Number: 060251003
Address: 150 9th St El Centro, CA 92243	Latitude: N 32.79215	Longitude: W -115.56299	Elevation (m): 9
	Auditors: Laura Niles Harnek Nijjar	Site Technician: Mike Green	Site Phone:
Operating Agency: Imperial County APCD		Site Report: Yes	Site Photos: Yes

## General Siting Conditions

Station Temperature	Traffic	Topography	Predominant Wind Direction: South
Controlled: Yes	Description: Residential	Site: Level	Arc Air Flow (Deg): 360 Degrees
Recorded: Yes	Distance: 30 meters	Region: Level	Probe Clean: Yes
Inside Temp: 22 Degrees Celsius	Count (Veh/Day): 2500	QA Manual	Manifold Clean: Yes
Meteorology	Non-vehicular Local Sources	Approved: Yes	Cleaning Schedule: As Needed
Located With Instruments: Yes	Description: None	Agency: Imperial County APCD	Autocalibrator Type: Environics 9100
Shadowing: No	Distance: N/A	Urbanization: City Center	Site Survey Complete: Yes
Boom Orientation (Deg): 348 360	Direction: N/A	Ground Cover: Asphalt	Logbook Up To Date: Yes
Temp(Motor/Natural): Natural			

## Action Items

## Comments

# El Centro Site Survey Report (Cont.)

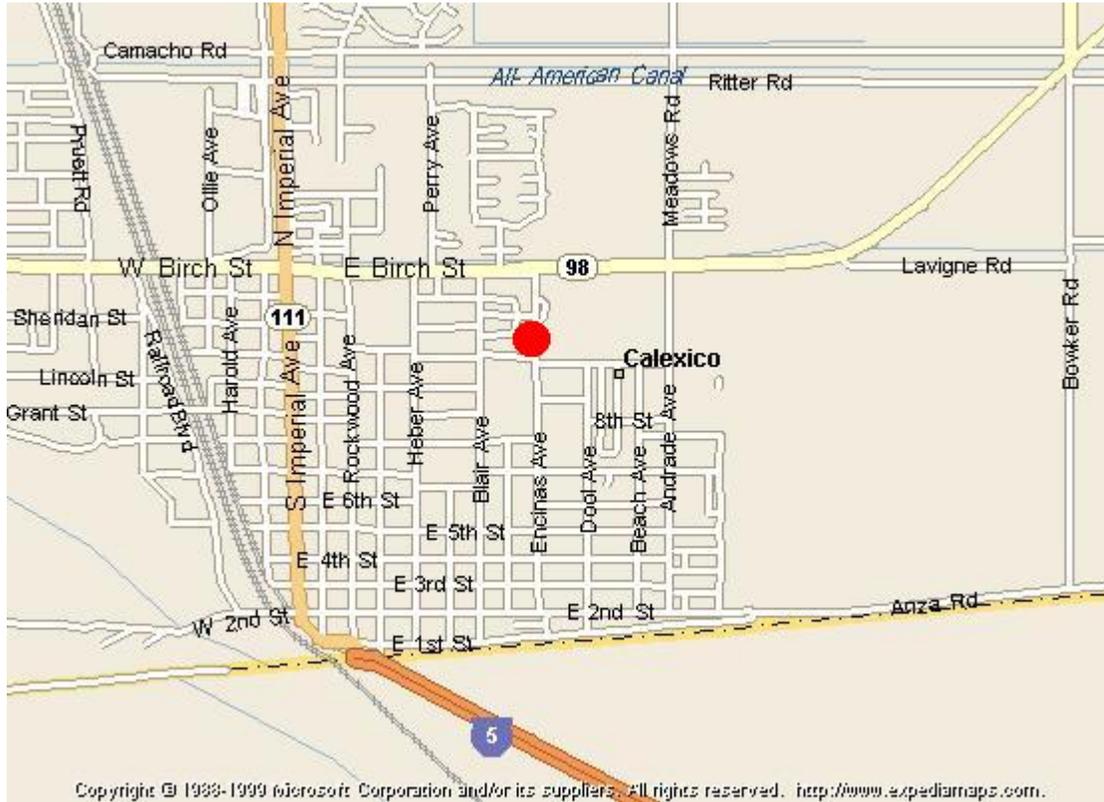
Monitor Type	Carbon Monoxide	Nitrogen Dioxide	Ozone	PM10-SSI
Manufacturer/Model	API 300	API 200A	API/Teledyne 400	SA 1200
Serial Number	30490	2350	30332	7661
POC	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	SLAMS
Objective	POPULATION EXPOSURE	POPULATION EXPOSURE	POPULATION EXPOSURE	POPULATION EXPOSURE
Scale	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD
Height Above Ground	9.3	11.1	11.1	9.8-11.2
Height Above Platform	1.8	1.8	1.8	1.4 1.5
Sampler Spacing	N/A	N/A	N/A	
Current Manual Available?	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes
In-line Filter Change Date	2014-02-04	2014-02-04	2014-02-04	N/A
Cal. Gas Cert. Date	2016-01-19	2016-01-19	N/A	N/A
Calibration Current?	Yes	Yes	Yes	Yes
Calibration Date	2014-01-16	2014-01-16	2014-01-16	2014-01-30
Cal. Equipment Cert. Date	2013-08-15	2013-08-15	2013-08-15	2013-07-18
Obstacle Description	None	None	None	None
Distance to Obstacle	-	-	-	-
Obs. Height Above Inlet	-	-	-	-
Distance to Walls, etc.	-	-	-	-
Distance to Dripline	-	-	-	-
Dominant Influence	Vehicular	Vehicular	Vehicular	Vehicular
Residence Time (sec)	8.3	8.7	8.2	N/A

Monitor Type	PM2.5	Outdoor Temperature	Wind Direction	Horizontal Wind Speed
Manufacturer/Model	R&P 2025	MET ONE 064-2	MET ONE 020-C	MET ONE 010-C
Serial Number	20020959	X4806	X-4360	X4243
POC	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	SLAMS
Objective	POPULATION EXPOSURE	-	-	-
Scale	NEIGHBORHOOD	-	-	-
Height Above Ground	9.8 11.9	9.3	9.3	9.3
Height Above Platform	2.1	1.8	2.7	2.7
Sampler Spacing		N/A	N/A	N/A
Current Manual Available?	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes
In-line Filter Change Date	N/A	N/A	N/A	N/A
Cal. Gas Cert. Date	N/A	N/A	N/A	N/A
Calibration Current?	Yes	Yes	Yes	Yes
Calibration Date	2013-12-17	2013-02-05	2013-12-04	2013-12-04
Cal. Equipment Cert. Date	2013-03-19		N/A	2013-11-06
Obstacle Description	None	None	None	None
Distance to Obstacle	-	-	-	-
Obs. Height Above Inlet	-	-	-	-
Distance to Walls, etc.	-	-	-	-
Distance to Dripline	-	-	-	-
Dominant Influence	Vehicular	-	-	-
Residence Time (sec)	N/A	N/A	N/A	N/A

## Calexico-Ethel Monitoring Station Details

<b>Site Name</b>	<b>Calexico-Ethel</b>							
AQS ID	060250005							
GIS Coordinates	Lat 32° 40' 34" Long 115° 28' 59"							
Location	Located in suburban (residential) area next to a school in City of Calexico							
Address	1020 Belcher St., Calexico, CA 92231							
County	Imperial County							
Dist. to road	20 meters							
Traffic count	7000 vehicles per day							
Ground Cover	Asphalt							
Representative area	MSA (EI Centro)							
<b>Pollutant</b>	<b>NO2</b>	<b>O3</b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM2.5</b>	<b>PM2.5</b>	<b>PM10</b>	<b>TSP</b>
Sampling Method	API 200e (099)	API 400e (087)	API 300eu (067)?	Thermo 43i-TLE (009)	R&P seq. WINS (145)	BAM 1020 (731) ?	Anderson 1200 (063)	Anderson 1200 (803)
Analysis Method	N/A	N/A	N/A	N/A	Weighed by ARB	N/A	Weighed by ARB	Weighed by ARB
Start Date	3/1/94	3/1/94	3/1/94	3/1/94	3/1/94	3/1/94	3/1/94	3/1/94
Operation Schedule	Continuous	Continuous	Continuous	Continuous	1 in 3day	Continuous	1 in 6 day	1 in 6 day
Sampling Season	All year	All year	All year	All year	All year	All year	All year	All year
Probe height	5.7 m	5.7 m	5.7m	5.7m	2.5m	2.5m	6.0m	6.0m
Dist. from supporting structure	2.2m	2.2 m	2.2m	2,2m	1.5m	1.5m	1.5m	1.5 m
Dist. from obstructions on roof	None	None	None	None	None	None	None	None
Distance from trees	None 3.6 m	None3.6 m	None3.6 m	None3.6 m	3.5 m	3.5 m	5 m	-
Unrestricted airflow	360°	360°	360°	360°	360°	360°	360°	360°
Probe Material	Glass & Teflon	Glass & Teflon	Glass & Teflon	Glass & Teflon	N/A	N/A	N/A	N/A
Residence Time	9.6 sec	6.3 sec	7.1 sec	10.3 sec	N/A	N/A	N/A	N/A
Is it suitable for comparison against the annual PM2.5?	N/A	N/A	N/A	N/A	Yes	yes	No	No
Frequency of flow rate verification for manual PM samplers audit	N/A	N/A	N/A	N/A	Monthly	N/A	Monthly	Monthly
Frequency of flow rate verification for automated PM analyzers audit	N/A	N/A	N/A	N/A	N/A	Monthly	N/A	N/A
Frequency of 1-ponit QC check (gaseous)	Bi-Weekly	Bi-Weekly	Bi-Weekly	Bi-Weekly	N/A	N/A	N/A	N/A
last annual performance evaluation (gaseous)	2/6/14	2/6/14	2/6/14	2/6/14	N/A	N/A	N/A	N/A
Last two semi-annual flow rate audits for PM monitors	N/A	N/A	N/A	N/A	8/13/13 02/6/14	8/13/13 02/6/14	8/13/13 02/06 /14	8/13/13 02/06/14

## Calexico-Ethel Monitoring Station Details



AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code
060250005	13698	3/1/94	<a href="#">California Air Resources Board (001)</a>

Site Address	County	Air Basin	Latitude (N)	Longitude (W)	Elevation
1029 Belcher St, Calexico CA 92231	<a href="#">Imperial</a>	<a href="#">Salton Sea</a>	32° 40' 34"	115° 28' 59"	6

Pollutants Monitored (click on parameter link for real-time data)
<a href="#">CO</a> , <a href="#">SO<sub>2</sub></a> , <a href="#">NO<sub>2</sub></a> , <a href="#">H<sub>2</sub>S</a> , <a href="#">O<sub>3</sub></a> , PM <sub>10</sub> , <a href="#">BAM<sub>PM2.5</sub></a> , PM <sub>2.5</sub> , TSP, Toxics, Cr <sup>6+</sup> , <a href="#">Outdoor Temperature</a> , <a href="#">Relative Humidity</a> , Wind Direction, <a href="#">Horizontal Wind Speed</a> , <a href="#">Barometric Pressure</a> , Solar Radiation

# Calexico Site Survey Report

## Site Survey Report

### Siting Information

Site Name: Calexico-Ethel Street	Audit Date: 2013-01-29	ARB Number: 13698	AIRS Number: 060250005
Address: 1029 Belcher St Calexico, CA 92231	Latitude: N 32.67618	Longitude: W -115.48307	Elevation (m): 3
	Auditors: Leena Khangura Alvin Danque	Site Technician: Tony Royer	Site Phone:
Operating Agency: California Air Resources Board		Site Report: Yes	Site Photos: Yes

### General Siting Conditions

<p style="text-align: center;"><b>Station Temperature</b></p> <p>Controlled: Yes</p> <p>Recorded: Yes</p> <p>Inside Temp: 22 Degrees Celsius</p>	<p style="text-align: center;"><b>Traffic</b></p> <p>Description: Residential</p> <p>Distance: 20 meters</p> <p>Count (Veh/Day): 7000</p>	<b>Topography</b>	Predominant Wind Direction: West
		Site: Level	Arc Air Flow (Deg): 360 Degrees
		Region: Level	Probe Clean: Yes
		<b>QA Manual</b>	Manifold Clean: Yes
<p style="text-align: center;"><b>Meteorology</b></p> <p>Located With Instruments: Yes</p> <p>Shadowing: No</p> <p>Boom Orientation (Deg): 348</p> <p>Temp(Motor/Natural): Motor</p>	<p style="text-align: center;"><b>Non-vehicular Local Sources</b></p> <p>Description: Parking lot</p> <p>Distance: 3 meters</p> <p>Direction: 270</p>	Approved: Yes	Cleaning Schedule: Annually
		Agency: Air Resources Board	Autocalibrator Type: Environics 9100
		Urbanization: Rural	Site Survey Complete: Yes
		Ground Cover: Asphalt	Logbook Up To Date: Yes

### Action Items

### Comments

# Calexico Site Survey Report (Cont.)

Monitor Type	Nitrogen Dioxide	Ozone	PM10-SSI	TSP
Manufacturer/Model	API 200E	API/Teledyne 400	SA 1200	Tisch TSP
Serial Number	20071346	1302	20004783	20081137
POC	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes
Purpose	SLAMS	SLAMS	SLAMS	SLAMS
Objective	HIGHEST CONCENTRATION	REGIONAL/TYPICAL CONCENTRATIONS	HIGHEST CONCENTRATION	STATE REQUIREMENT
Scale	NEIGHBORHOOD	NEIGHBORHOOD	NEIGHBORHOOD	-
Height Above Ground	5.7	5.7	6	5.4
Height Above Platform	1.7	1.7	1.5	1.4
Sampler Spacing	N/A	N/A		2
Current Manual Available?	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes
In-line Filter Change Date	1/24/2013	1/24/2013	N/A	N/A
Cal. Gas Cert. Date	2/2/2012	N/A	N/A	N/A
Calibration Current?	Yes	Yes	No	No
Calibration Date	7/19/2012	6/27/2012	8/7/2011	1/28/2010
Cal. Equipment Cert. Date	7/19/2012	3/2/2012	Not Available	Not Available
Obstacle Description	None	None	None	None
Distance to Obstacle	-	-	-	-
Obs. Height Above Inlet	-	-	-	-
Distance to Walls, etc.	-	-	-	-
Distance to Dripline	-	-	-	-
Dominant Influence	Vehicular	Vehicular	Vehicular	
Residence Time (sec)	9.9	6.3	N/A	N/A

Monitor Type	BAM-PM2.5	BAM-PM2.5	PM2.5	PM2.5
Manufacturer/Model	Met One BAM 1020	Met One BAM 1020	R & P 2025	R & P 2025i
Serial Number	20020893	20021151	20020964	20103888
POC	3	4	1	2
Data For Record?	Yes	Yes	Yes	Yes
Purpose	SPM	SPM	SLAMS	Collocation
Objective	SUPPORT	SUPPORT	HIGHEST CONCENTRATION	HIGHEST CONCENTRATION
Scale	Neighborhood	Neighborhood	Neighborhood	Neighborhood
Height Above Ground	5.7	5.7	3	3
Height Above Platform	1.7	1.7	2	2
Sampler Spacing	2	2	1	1
Current Manual Available?	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes
In-line Filter Change Date	N/A	N/A	N/A	N/A
Cal. Gas Cert. Date	N/A	N/A	N/A	N/A
Calibration Current?	Yes	Yes	Yes	Yes
Calibration Date	11/30/2012	11/30/2012	10/16/2012	1/17/2013
Cal. Equipment Cert. Date	9/20/2012	9/20/2012	9/20/2012	9/20/2012
Obstacle Description	None	None	None	None
Distance to Obstacle	-	-	-	-
Obs. Height Above Inlet	-	-	-	-
Distance to Walls, etc.	-	-	-	-
Distance to Dripline	-	-	-	-
Dominant Influence	Residential	Residential	Vehicular	Vehicular
Residence Time (sec)	N/A	N/A	N/A	N/A

## Calexico Site Survey Report (Cont.)

Monitor Type	Xontech	Outdoor Temperature	Wind Direction	Horizontal Wind Speed	Barometric Pressure
Manufacturer/Model	Xontech 924	MET ONE 060A	MET ONE 020	MET ONE 010	MET ONE 090C
Serial Number	20021009	P8795	P3078	E1112	60250005
POC	7	1	1	1	1
Data For Record?	Yes	Yes	Yes	Yes	Yes
Purpose	SUPPORT	SLAMS	SLAMS	SLAMS	Other
Objective	SUPPORT	-	-	-	-
Scale		-	-	-	-
Height Above Ground	5.5	8	10	10	6
Height Above Platform	1				
Sampler Spacing		N/A	N/A	N/A	N/A
Current Manual Available?	Yes	Yes	Yes	Yes	Yes
Instrument Log Up-to-date?	Yes	Yes	Yes	Yes	Yes
In-line Filter Change Date	N/A	N/A	N/A	N/A	N/A
Cal. Gas Cert. Date	N/A	N/A	N/A	N/A	N/A
Calibration Current?	Yes	No	No	No	No
Calibration Date	6/7/2012	2/2/2010	2/2/2010	2/2/2010	2/2/2010
Cal. Equipment Cert. Date	3/2/2012	Not Available	N/A	Not Available	Not Available
Obstacle Description	None	None	None	None	None
Distance to Obstacle	-	-	-	-	-
Obs. Height Above Inlet	-	-	-	-	-
Distance to Walls, etc.	-	-	-	-	-
Distance to Dripline	-	-	-	-	-
Dominant Influence	Vehicular	-	-	-	-
Residence Time (sec)	N/A	N/A	N/A	N/A	N/A

**APPENDIX A**  
**40 CFR §58.10 (Appendix D)**

SECTION	SECTION REQUIREMENT	2014
(a)(1)	Beginning July 1, 2007, the State, or where applicable local, agency shall adopt and submit to the Regional Administrator an annual monitoring network plan which shall provide for the <u>establishment and maintenance</u> of an air quality surveillance system that consists of a network of <u>SLAMS</u> monitoring stations including <u>FRM, FEM, and ARM monitors</u> that are part of SLAMS, NCore stations, STN stations, State speciation stations, SPM stations, and/or, in serious, severe and extreme ozone nonattainment areas, PAMS stations, and SPM monitoring stations.	Page 7 – Section II “A”
	The plan shall include a statement of purposes for each monitor and evidence that siting and operation of each monitor meets the requirements of appendices A, C, D, and E of this part, where applicable.	Pages 8-9
	The annual monitoring network plan must be made available for public inspection for at least 30 days prior to submission to EPA.	Publish date May 30, 2014
(a)(2)	Any annual monitoring network plan that proposes SLAMS network modifications including new monitoring sites is subject to the approval of the EPA Regional Administrator, who shall provide opportunity for public comment and shall approve or disapprove the plan and schedule within 120 days.	Pages 26-27
	If the State or local agency has already provided a public comment opportunity on its plan and has made no changes subsequent to that comment opportunity, and has submitted the received comments together with the plan, the Regional Administrator is not required to provide a separate opportunity for comment.	Submitted for Public Review in the Imperial Valley Press – no comments were received by the public.
(a)(3)	The plan for establishing required NCore multipollutant stations shall be submitted to the Administrator not later than July 1, 2009. The plan shall provide for all required stations to be operational by January 1, 2011.	Page 19 – Not Applicable no NCORE/PAMS sites
(a)(4)	A plan for establishing source-oriented Pb monitoring sites in accordance with the requirements of appendix D to this part for Pb sources emitting 1.0 tpy or greater shall be submitted to the EPA Regional Administrator no later than July 1, 2009, as part of the annual network plan required in paragraph (a)(1) of this section.	Page 19 – Pb monitoring in Calexico not required by CFR
(a)(4)	The plan shall provide for the required source-oriented Pb monitoring sites for Pb sources emitting 1.0 tpy or greater to be operational by January 1, 2010. 1.0 tpy or greater to be operational by January 1, 2010.	Not Applicable
(a)(4)	A plan for establishing source-oriented Pb monitoring sites in accordance with the requirements of appendix D to this part for Pb sources emitting equal to or greater than 0.50 tpy but less than 1.0 tpy shall be submitted to the EPA Regional Administrator no later than July 1, 2011.	Not Applicable
(a)(4)	The plan shall provide for the required source-oriented Pb monitoring sites for Pb sources emitting equal to or greater than 0.50 tpy but less than 1.0 tpy to be operational by December 27, 2011.	Not Applicable
(a)(5)	A plan for establishing NO <sub>2</sub> monitoring sites in accordance with the requirements of appendix D to this part shall be submitted to the Administrator by July 1, 2012. The plan shall provide for all required monitoring stations to be operational by January 1, 2013.	Pages 21-22 Section III C, Imperial does not meet requirement
(a)(6)	A plan for establishing SO <sub>2</sub> monitoring sites in accordance with the requirements of appendix D to this part shall be submitted to the EPA Regional Administrator by July 1, 2011 as part of the annual network plan required in paragraph (a) (1).	Page 22 Section III D
	The plan shall provide for all required SO <sub>2</sub> monitoring sites to be operational by January 1, 2013.	Page 22 Section III D
(a)(7)	A plan for establishing CO monitoring sites in accordance with the requirements of appendix D to this part shall be submitted to the EPA Regional Administrator. Plans for required CO monitors shall be submitted at least six months prior to the date such monitors must be established as required by section 58.13.	Page 21 Section III B- Imperial does not meet requirement

SECTION	SECTION REQUIREMENT	2014
(b)	The annual monitoring network plan must contain the following information for each existing and proposed site:	Page 6 Section I Page 7 Section II
(b)(1)	The AQS site identification number.	Page 26 Section VII Table 25
(b)(2)	The location, including street address and geographical coordinates.	Page 26 Section VII Table 25
(b)(3)	The sampling and analysis method(s) for each measured parameter.	Pages 29-45 Section VIII
(b)(4)	The operating schedules for each monitor.	Pages 29-45 Section VIII
(b)(5)	Any proposals to remove or move a monitoring station within a period of 18 months following plan submittal.	Pages 26- 27
(b)(6)	The monitoring objective and spatial scale of representativeness for each monitor as defined in appendix D to this part.	Pages 9-10 Section II C – Tables 1-12 Pages 10-19
(b)(7)	The identification of any sites that are suitable and sites that are not suitable for comparison against the annual PM <sub>2.5</sub> NAAQS as described in §58.30.	Page 8 Section II B
(b)(8)	The MSA, CBSA, CSA or other area represented by the monitor.	Section II Tables 1-3
(b)(9)	The designation of any Pb monitors as either source-oriented or non-source-oriented according to Appendix D to 40 CFR part 58.	Page 19 Section III – Not applicable
(b)(10)	Any source-oriented monitors for which a waiver has been requested or granted by the EPA Regional Administrator as allowed for under paragraph 4.5(a)(ii) of Appendix D to 40 CFR part 58.	Not Applicable
(b)(11)	Any source-oriented or non-source-oriented site for which a waiver has been requested or granted by the EPA Regional Administrator for the use of Pb-PM <sub>10</sub> monitoring in lieu of Pb-TSP monitoring as allowed for under paragraph 2.10 of Appendix C to 40 CFR part 58.	Not Applicable
(b)(12)	The identification of required NO <sub>2</sub> monitors as either near-road or area-wide sites in accordance with appendix D, section 4.3 of this part.	Page 21 Section III C – Not applicable
(c)	The annual monitoring network plan must document how States and local agencies provide for the review of changes to a PM <sub>2.5</sub> monitoring network that impact the location of a violating PM <sub>2.5</sub> monitor	Page 25 Section IV
(c)	or the creation/change to a community monitoring zone, including a description of the proposed use of spatial averaging for purposes of making comparisons to the annual PM <sub>2.5</sub> NAAQS as set forth in appendix N to part 50 of this chapter.	Page 23
(c)	The affected State or local agency must document the process for obtaining public comment and include any comments received through the public notification process within their submitted plan.	Minute Order Included as Appendix C
(d)	The State, or where applicable local, agency shall perform and submit to the EPA Regional Administrator an assessment of the air quality surveillance system every 5 years to determine, at a minimum, if the network meets the monitoring objectives defined in appendix D to this part, whether new sites are needed, whether existing sites are no longer needed and can be terminated, and whether new technologies are appropriate for incorporation into the ambient air monitoring network	Page 23 Section IV

SECTION	SECTION REQUIREMENT	2014
(d)	The network assessment must consider the ability of existing and proposed sites to support air quality characterization for areas with relatively high populations of susceptible individuals (e.g., children with asthma), and, for any sites that are being proposed for discontinuance, the effect on data users other than the agency itself, such as nearby States and Tribes or health effects studies.	Page 23 Section IV
(d)	For PM2.5, the assessment also must identify needed changes to population-oriented sites.	Pages 23-24 Section IV
(d)	The State, or where applicable local, agency must submit a copy of this 5-year assessment, along with a revised annual network plan, to the Regional Administrator. The first assessment is due July 1, 2010.	Page 23-24 Section IV
(e)	All proposed additions and discontinuations of SLAMS monitors in annual monitoring network plans and periodic network assessments are subject to approval according to §58.14.	Page 27-28 Acknowledged

## APPENDIX B



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105  
APR 24 2013

RECEIVED

APR 26 2013

AIR POLLUTION  
CONTROL DISTRICT

Kenneth Stroud, Chief  
Air Quality Surveillance Branch  
Monitoring and Laboratory Division  
California Air Resources Board  
1001 I Street  
P.O Box 2815  
Sacramento, CA 95812

Dear Mr. Stroud:

This letter is in response to the California Air Resources Board's (CARB) request for approval for the discontinuation of SLAMS (State/Local Air Monitoring Station) ozone monitoring at Calexico-East (AQS site ID: 06-025-0006) in Imperial County. Imperial County Air Pollution Control District (ICAPCD) documented the discontinuation of monitoring activities at the Calexico-East site since July 2010 in the most recent *Annual Network Plan for Ambient Monitoring* for 2012 (Page 17). ICAPCD made the plan available for public inspection prior to its submittal to EPA and received no public comments on this proposed monitoring network change.

Per 40 CFR §58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors. In a letter to EPA dated July 22, 2010, CARB explained that although the resources are available to continue monitoring at Calexico-East, the site requires substantial maintenance and the resources required to operate, maintain and upgrade it are limited. There are four ambient ozone monitors operating in Imperial County, exceeding EPA's minimum monitoring requirements for ozone. CARB provided to EPA a comparative analysis of both ozone 8-hour design values and 24-hour average PM<sub>2.5</sub> (non-FEM BAM) concentrations for Calexico-East and Calexico-Ethel, another station located approximately 8 miles west of Calexico-East that collects ozone and PM<sub>2.5</sub> data. While official approval of the non-regulatory non-FEM PM<sub>2.5</sub> BAM is not necessary, EPA acknowledges the shutdown of PM<sub>2.5</sub> monitoring at the Calexico-East site.

Based on our evaluation of ambient ozone monitoring data at Calexico-East and Calexico-Ethel between 2005 and 2009, EPA approves CARB's discontinuation of SLAMS ozone monitoring at Calexico-East pursuant to 40 CFR §58.14(c)(3). The discontinuation of Calexico-East meets the criteria of 40 CFR §58.14(c)(3) since the site has not measured violations of the National Ambient Air Quality Standards (NAAQS) in the previous five years and the approved State Implementation Plan (SIP) provides for a specific, reproducible approach to representing air quality in the absence of monitoring data. Ozone concentrations at the Calexico-East and

Calexico-Ethel sites are highly correlated, with Calexico-Ethel reporting higher concentrations the majority of the time. Enclosed are plots of daily maximum 8-hour ozone concentrations for Calexico-East and Calexico-Ethel examined during EPA's analysis.

If you have any questions, please feel free to contact me at (415) 972-3851 or Michael Flagg of my staff at (415) 947-3372.

Sincerely,



Matthew Lakin, Manager  
Air Quality Analysis Office

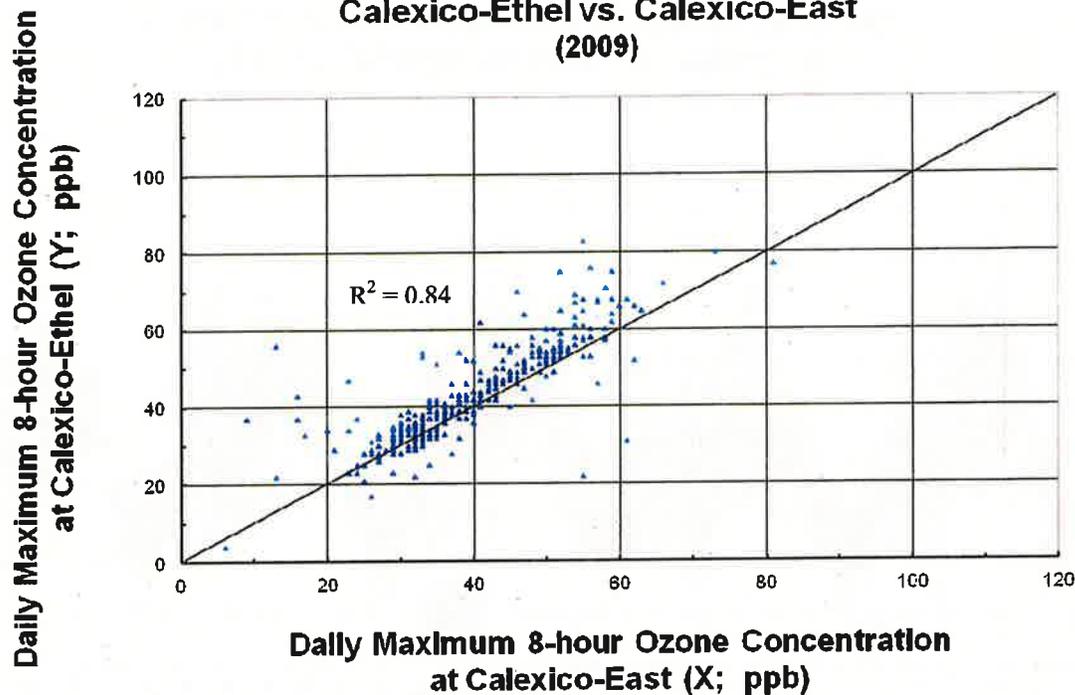
**Enclosures**

- A. Correlation between 2009 Calexico-East and Calexico-Ethel 8-hour ozone daily maximum values for 2009
- B. 2005-2009 daily maximum 8-hour ozone concentration (ppb) at Calexico-East and Calexico-Ethel

cc: Brad Poiriez, ICAPCD  
Monica Soucier, ICAPCD  
Michael Benjamin, CARB  
Fernando Amador, CARB  
Karen Magliano, CARB  
Michael Miguel, CARB

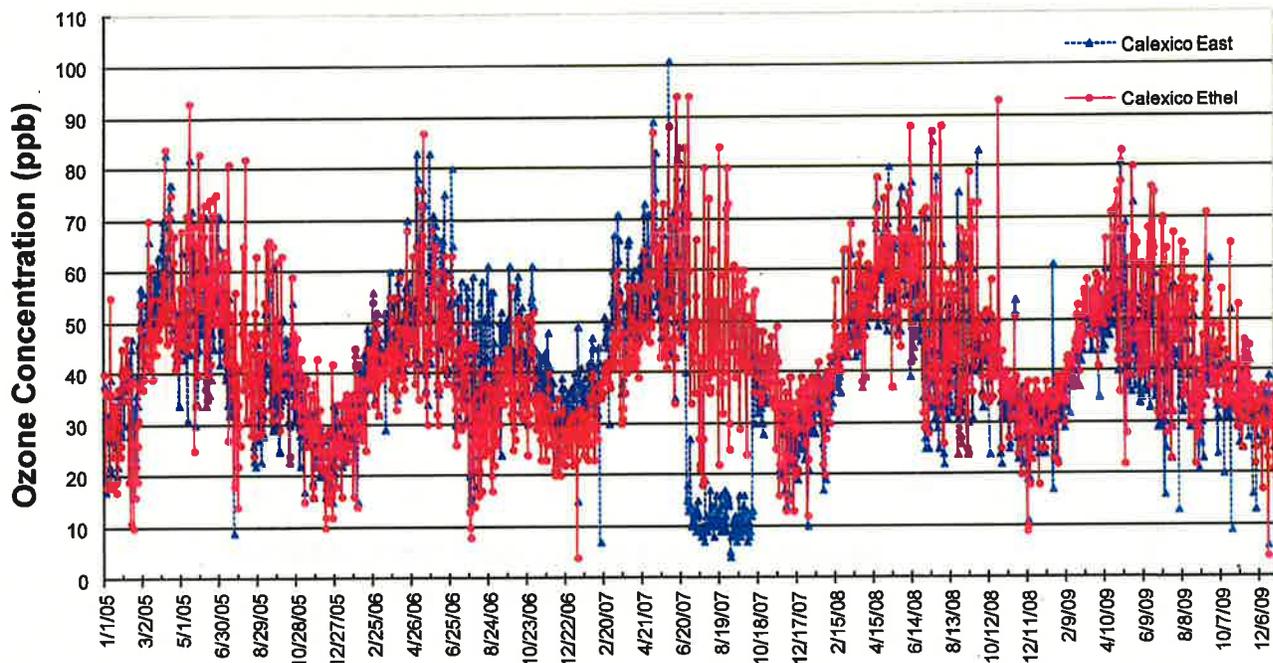
**Attachment A: Correlation between 2009 Calexico-East and Calexico-Ethel 8-hour ozone daily maximum values for 2009**

**Scatter Plot of Daily Maximum 8-hour Ozone Concentration  
Calexico-Ethel vs. Calexico-East  
(2009)**



**Attachment B: 2005-2009 daily maximum 8-hour ozone concentration (ppb) at Calexico-East and Calexico-Ethel**

**Daily Maximum 8-hour Ozone Concentration for Calexico Sites in Imperial County**



**AFFIDAVIT OF PUBLICATION  
(2015.5 C.C.P.)**

**APPENDIX C**

This space is for the County Clerk's  
Filling Stamp:

**STATE OF CALIFORNIA**

**County of Imperial**

I am a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk\* of the printer of the

**Imperial Valley Press**

a newspaper of general circulation, printed and published daily in the City of El Centro, County of Imperial and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Imperial, State of California, under the date of October 9, 1951, Case Number 26775; that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

05/30 .

all in the year 2014

I certify (or declare) under penalty of perjury that the foregoing is true and correct.



SIGNATURE

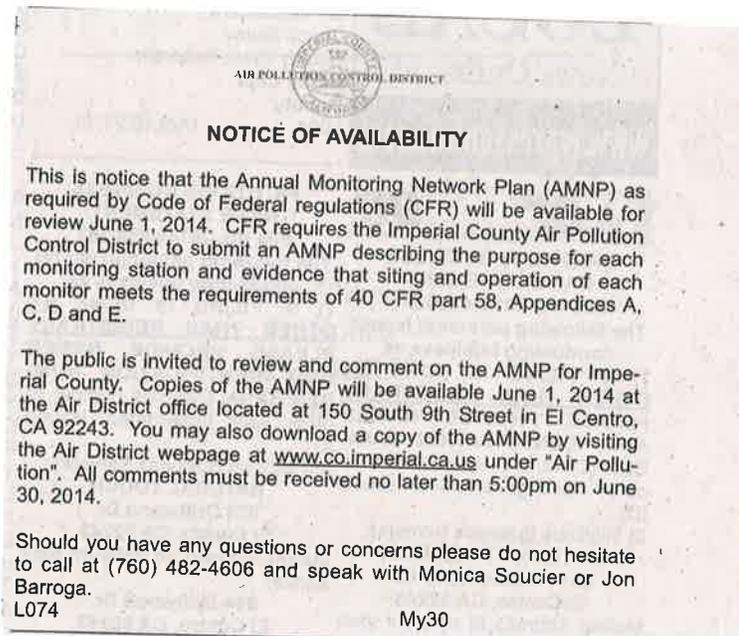
Name of Account: I C Air Pollution Control  
Order Number: 10708015  
Ad Number: 30854475

\* Printer, Foreman of the Printer, or Principal Clerk of the Printer

Date: 30 th day of May, 2014.  
at El Centro, California.

Imperial County Air Pollution Control District  
Final Annual Air Monitoring Network Plan 2014

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Proof of Publication of:  
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**JUN 02 2014**

**AIR POLLUTION  
CONTROL DISTRICT**

## Glossary of Acronyms

AQI	Air Quality Index
AQS	Air Quality System
ARM	Approved Regional Method
BAM	Beta Attenuation Mass Monitor
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CO	Carbon monoxide
FEM	Federal equivalent method
FRM	Federal reference method
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standard
Ncore	National Core Ambient Monitoring Network
NO <sub>2</sub>	Nitrogen Dioxide
O <sub>3</sub>	Ozone
PAMS	Photochemical Assessment Monitoring Sites
Pb	Lead
PE	Public Exposure
PM <sub>10</sub>	Particulate Matter less than 10 microns in diameter
PM <sub>2.5</sub>	Particulate Matter less than 2.5 microns in diameter
PM <sub>10-2.5</sub>	Coarse Particulate Matter
ppm	Parts per million
PQAO	Primary Quality Assurance Organization
PWEI	Population Weighted Emission Index
SDAPCD	San Diego Air Pollution Control District
SIP	State implementation plan
SLAMS	State and Local Air Monitoring Station

SO <sub>2</sub>	Sulfur Dioxide
SPM	Special Purpose Monitor
SSI	Size Selective Inlet
TCP	Transmission Control Protocol
US EPA	United States Environmental Protection Agency