Resolution Baseline Report

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1.0 INTRODUCTION

Resolution Copper Mining LLC (RCML) has collected meteorological and air quality data to support several efforts during the pre-feasibility and other mine development phases for the Resolution Copper project, located three miles east of Superior, Arizona. Air quality and meteorological data are necessary to support environmental assessments, impact analyses, acquisition of air permits, and in the preparation of documents required by the National Environmental Policy Act (NEPA).

In 2012, RCML began operating a more robust meteorological and air quality monitoring program to support the efforts listed above. This monitoring effort will supplement the data collected thus far and will provide meteorological and air quality baseline data for use in the AERMOD (American Meteorological Society/Environmental Protection Agency Regulatory Model) dispersion modeling analyses. These data will also be used to support RCML's application to the Pinal County Air Quality Control District (PCAQCD) for air permit(s).

This report characterizes baseline air quality and meteorological conditions for the project site and the nearby region. Summaries and assessment of the on-site data collected in 2005 (the year with the best data recovery rates) and data collected from surrounding stations are presented.

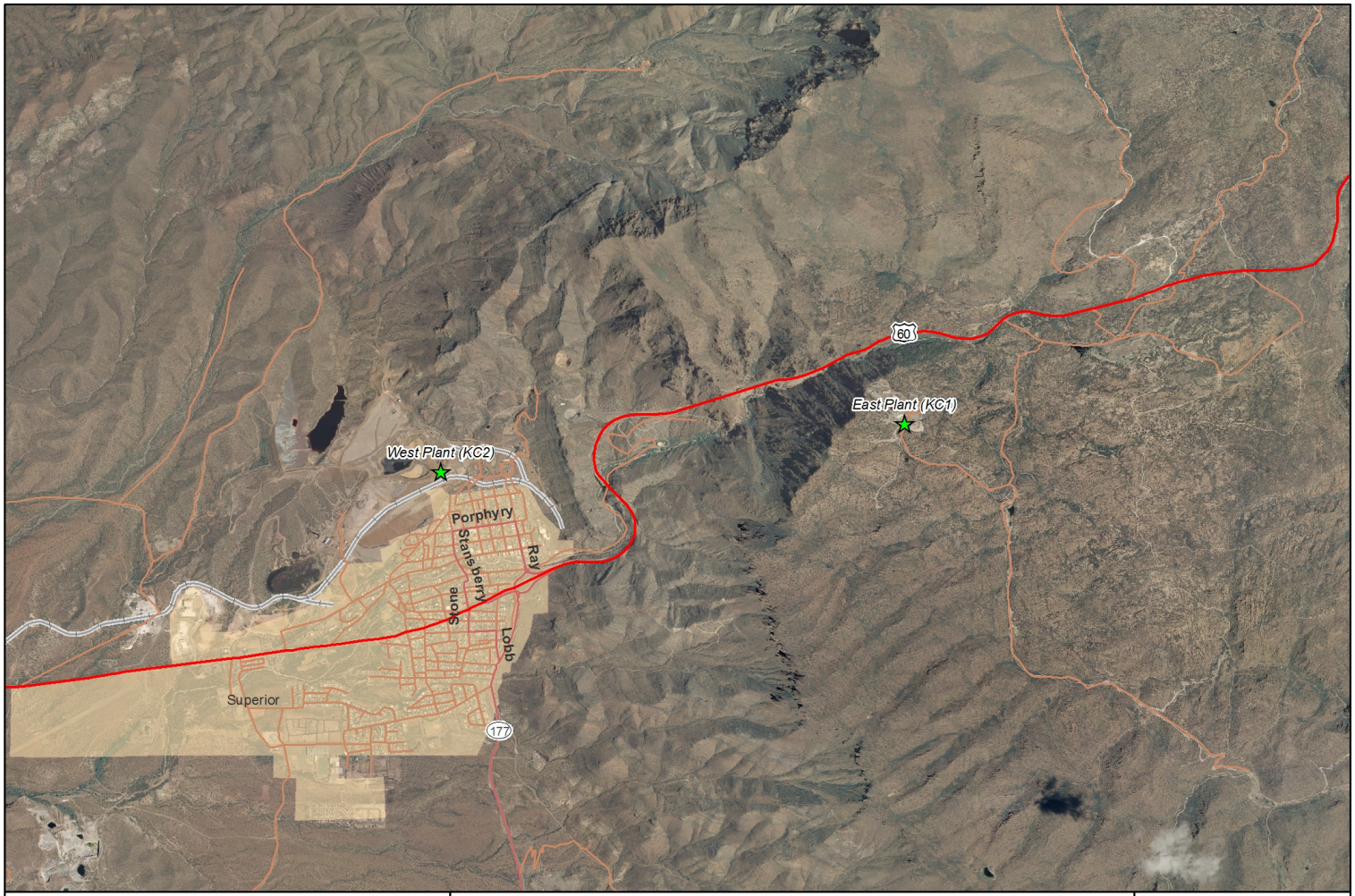
1.1 Project Data

From 2002 through 2007, RCML collected on-site meteorology and air quality data from two stations, known as KC1 (East Plant) and KC2 (West Plant). The locations of the stations are listed in Table 1 and shown in Figure 1. The stations were sited to characterize conditions at two distinct areas where site operations will occur during the life of the project.

Table 1. Station Locations

Station	Location	Latitude (Deg)	Longitude (Deg)	Elevation (f)	Method of Determination
KC1 - East Plant	01S13E32SWNW	33.3030	-111.0676	4,199	GPS
KC2 - West Plant	01S12E35NWSE	33.2994	-111.1021	2,949	GPS

Figure 1. Project Location Map – East Plant (KC1) and West Plant (KC2) Station Locations



1.2 Program Description

1.2.1 Meteorological Monitoring

KC1 and KC2 were equipped with similar instrumentation. The meteorological and air quality parameters (particulate matter less than 10 microns in diameter (PM_{10})) collected and the sensor heights are shown in Table 2. The tower heights at both meteorological sites were 35 feet.

Table 2. Approximate Sensor Heights (meters above ground)

Parameter	Height (meters)
Wind speed	10
Wind direction	10
Ambient temperature	2
Solar radiation	2
Relative humidity	2
Precipitation	Ground
Barometric pressure	1
PM_{10}	2

1.2.2 PM_{10} Monitoring

PM_{10} was measured using Graseby General Metal Works IP-1070 (or similar) PM_{10} samplers. Ambient air was drawn through the selective size inlet of the sampler by a high-volume motor at a constant flow rate controlled by a feedback mass flow controller. The mass flow controller maintained a flow rate of 1.13 (±10 percent) actual cubic meters per minute, which is the flow rate specified by the manufacturer. The inlet had a designed particle size cut-point of 10 ±0.5 micrometers, with those particles less than 10 micrometers being drawn through the inlet and impacted on a pre-weighed quartz-microfiber filter. The samplers were scheduled to operate on the EPA one-in-six day schedule for 24 hours from midnight-to-midnight Arizona Standard Time. An elapsed timer or similar method of time tracking was used to observe the actual sampling time, and a manometer was used to observe before-and-after sampler flow rates. The exposed filters were post-weighed in order to determine the particulate mass loaded onto the filter during the 24-hour sampling day. These data were used to calculate the PM_{10} concentrations in micrograms per cubic meter (ug/m^3).

1.3 Data Recovery

The quarterly data recovery rates for 2002 - 2006 for both sites are presented in Table 3. With the exception of one calendar quarter (third quarter 2002) The data recovery rate was 91 percent or greater for the wind speed and wind direction channels for the duration of the monitoring period, which is above the quarterly data recovery rate of 90 percent recommended by the Environmental Protection Agency (EPA). The third quarter 2002 was below 90% (71%) as the station was not on-line until July 13, 2002. Recovery rates for all other meteorological parameters were similar to recovery rates for wind speed and wind direction

The PM_{10} data recovery rate at both stations was 93 percent or greater for all four quarters during the 2005 year, which is above the EPA-recommended recovery rate of 75 percent for PM_{10} data. Other years (2002, 2003, 2004 and 2006) did not always have four quarters that met the 75 percent data recovery requirements. All particulate data that met the requirements in 40 CFR with regard to sample time, flow rates, and compliance with the EPA sampling schedule are discussed in this report regardless of quarterly data recovery rates.

Table 3. Data Recovery Rates
2002-2006

Calendar Quarter	East Plant (KC1)		West Plant (KC2)	
	Met[1]	PM_{10}	Met	PM_{10}
1Q 2002	NA	40%	NA	40%
2Q 2002	NA	100%	NA	100%
3Q 2002	99%	100%	71%[2]	81%
4Q 2002	100%	93%	100%	93%
1Q 2003	99%	93%	99%	60%
2Q 2003	99%	80%	99%	100%
3Q 2003	100%	94%	98%	88%
4Q 2003	99%	100%	100%	100%
1Q 2004	100%	67%	100%	60%
2Q 2004	99%	100%	98%	87%
3Q 2004	98%	94%	94%	88%
4Q 2004	96%	93%	100%	100%
1Q 2005	100%	100%	100%	100%
2Q 2005	94%	93%	99%	100%
3Q 2005	100%	93%	96%	93%
4Q 2005	99%	88%	100%	100%
1Q 2006	96%	93%	96%	100%
2Q 2006	99%	40%	99%	33%
3Q 2006	91%	33%	99%	20%
4Q 2006	97%	63%	99%	69%

[1]Wind data recovery.
[2] Station on-line July 13, 2002

1.4 Meteorological Data Summaries

Meteorological data for 2005 have been compiled and summarized in graphical and tabular form for the East Plant and West Plant stations in a series of meteorology data summary sheets. A schematic of the meteorology data summary sheet is shown in Figure 2. Summary sheets are comprised of the following:

Wind Rose – Graphically depicts the frequency of occurrence and intensity of winds that come from each of the 16 directions for the monitored period (in this case, nearly five years). Wind speeds are divided into three subcategories: less than 0.447 meters/second (m/s) (the measurement threshold of the instrument), greater than 0.447 m/s and less than 3 m/s, and above 3 m/s.

Wind Frequency Table – A two-part table. The left part of the Wind Frequency Table shows the percentage of occurrence of winds for each of the 16 directions that occur in each of the six Wind Speed Class Intervals. The right part shows the percentage of occurrence of winds for each of the 16 directions that occur in each of the six Stability Classes. Stability is a measure of the turbulence of the surface layer of the atmosphere ranging from A (very unstable; extensive mixing) to F (very stable; little mixing).

Meteorology Charts – Graphically summarize recorded meteorological parameters by month. Chart types include stock-ticker charts (with high, low, and average values for each month) and bar charts.

Figure 2. Schematic of Meteorology Data Summary Sheet

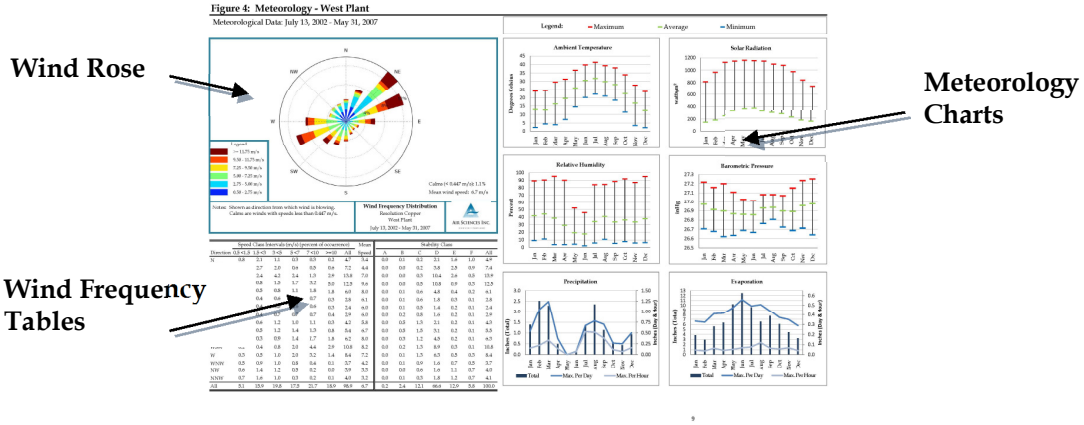
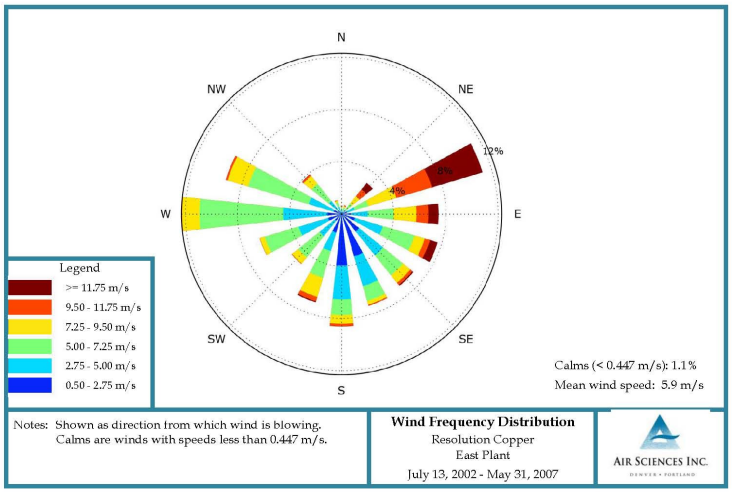


Figure 3: Meteorology - East Plant

Meteorological Data: July 13, 2002 - May 31, 2007



	Speed Class Intervals (m/s) (percent of occurrence)							Mean	Stability Class						
Direction	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed	A	B	C	D	E	F	All
N	0.0	0.1	0.2	0.2	0.1	0.0	0.6	4.8	0.0	0.0	0.2	0.3	0.1	0.2	0.8
NNE	0.0	0.1	0.1	0.2	0.2	0.0	0.7	5.6	0.0	0.0	0.2	0.4	0.1	0.1	0.7
NE	0.1	0.1	0.2	0.5	1.0	1.1	3.1	8.8	0.0	0.1	0.3	2.5	0.1	0.1	3.1
ENE	0.2	0.3	0.6	0.9	3.0	6.3	11.3	10.6	0.0	0.1	0.5	10.3	0.3	0.1	11.3
E	0.2	0.6	1.2	1.7	2.3	1.4	7.4	7.2	0.0	0.2	0.8	5.9	0.4	0.2	7.5
ESE	0.4	0.8	2.1	2.3	1.1	0.9	7.7	5.9	0.0	0.2	1.6	5.1	0.6	0.2	7.8
SE	0.6	1.2	2.2	1.8	1.0	0.2	7.1	4.7	0.0	0.2	1.2	4.4	1.0	0.4	7.2
SSE	1.1	2.6	2.1	1.1	0.4	0.1	7.3	3.4	0.0	0.1	0.7	3.8	1.9	0.9	7.5
S	1.1	3.2	2.2	1.0	0.9	0.1	8.6	3.7	0.0	0.1	0.7	4.7	2.3	1.0	8.7
SSW	0.5	1.1	1.4	1.8	2.0	0.3	7.1	5.5	0.0	0.2	0.9	4.6	1.0	0.5	7.2
SW	0.2	0.6	1.4	1.9	0.8	0.0	4.9	5.1	0.0	0.2	1.1	2.8	0.6	0.3	5.0
WSW	0.3	1.0	2.2	2.5	0.6	0.0	6.5	4.7	0.0	0.3	1.9	3.0	0.9	0.4	6.6
W	0.2	1.1	3.2	5.7	2.0	0.0	12.3	5.4	0.0	0.3	3.7	6.9	1.0	0.4	12.3
WNW	0.2	0.6	1.9	4.3	2.2	0.1	9.3	5.8	0.0	0.3	2.6	5.7	0.5	0.2	9.3
NW	0.1	0.3	0.9	1.5	1.0	0.1	3.9	5.8	0.0	0.1	0.8	2.6	0.3	0.1	3.9
NNW	0.1	0.2	0.3	0.3	0.2	0.0	1.1	5.0	0.0	0.1	0.2	0.5	0.2	0.1	1.1
All	5.3	13.9	22.1	27.9	18.8	10.8	98.9	5.9	0.3	2.5	17.4	63.5	11.2	5.1	99.9

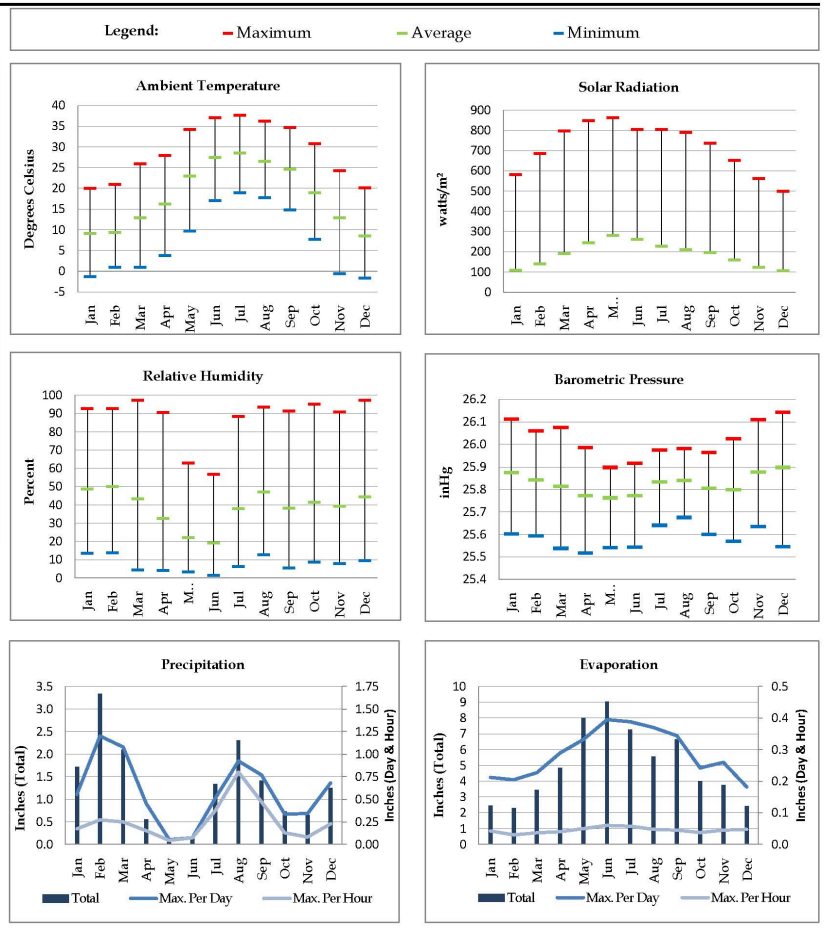
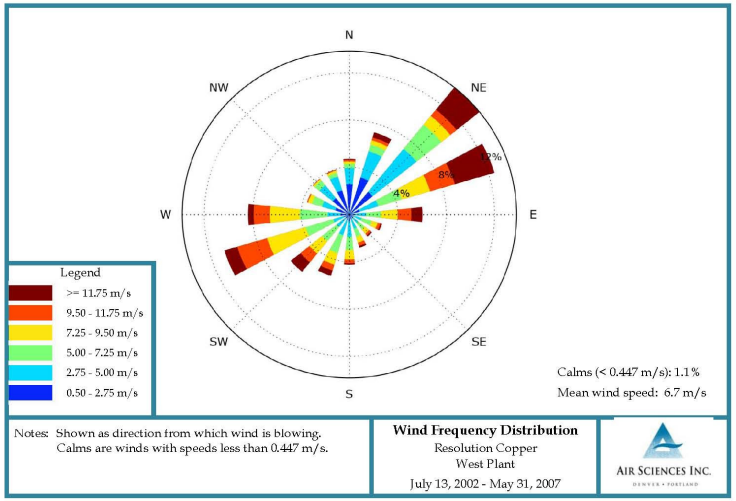
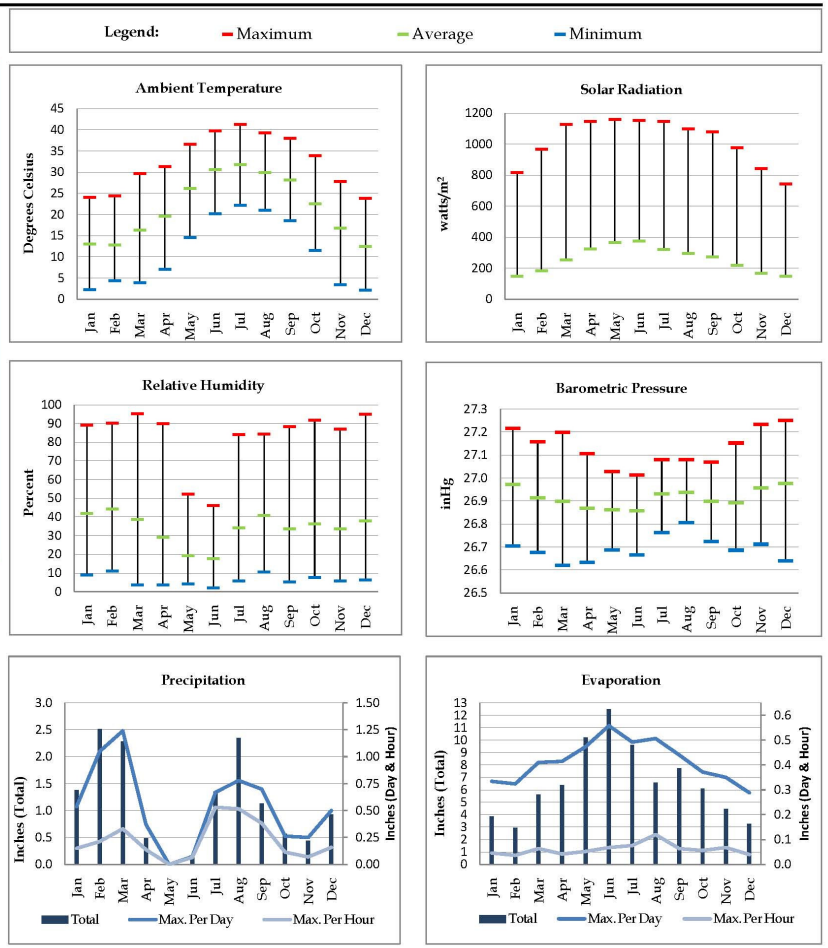


Figure 4: Meteorology - West Plant

Meteorological Data: July 13, 2002 - May 31, 2007



	Speed Class Intervals (m/s) (percent of occurrence)							Mean	Stability Class						
Direction	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed	A	B	C	D	E	F	All
N	0.8	2.1	1.1	0.3	0.3	0.2	4.7	3.4	0.0	0.1	0.2	2.1	1.6	1.0	4.9
NNE	0.9	2.7	2.0	0.6	0.5	0.6	7.2	4.4	0.0	0.0	0.2	3.8	2.5	0.9	7.4
NE	0.5	2.4	4.2	2.4	1.3	2.9	13.8	7.0	0.0	0.0	0.3	10.4	2.6	0.5	13.9
ENE	0.2	0.8	1.5	1.7	3.2	5.0	12.5	9.6	0.0	0.0	0.5	10.8	0.9	0.3	12.5
E	0.1	0.5	0.8	1.1	1.8	1.8	6.0	8.0	0.0	0.1	0.6	4.8	0.4	0.2	6.1
ESE	0.1	0.4	0.6	0.8	0.7	0.3	2.8	6.1	0.0	0.1	0.6	1.8	0.3	0.1	2.8
SE	0.1	0.4	0.5	0.6	0.6	0.3	2.4	6.0	0.0	0.1	0.5	1.4	0.2	0.1	2.4
SSE	0.1	0.4	0.7	0.7	0.7	0.4	2.9	6.0	0.0	0.2	0.8	1.6	0.2	0.1	2.9
S	0.1	0.6	1.2	1.0	1.1	0.3	4.2	5.8	0.0	0.5	1.3	2.1	0.2	0.1	4.3
SSW	0.1	0.5	1.2	1.4	1.3	0.8	5.4	6.7	0.0	0.5	1.5	3.1	0.2	0.1	5.5
SW	0.1	0.3	0.9	1.4	1.7	1.8	6.2	8.0	0.0	0.3	1.2	4.5	0.2	0.1	6.3
WSW	0.2	0.4	0.8	2.0	4.4	2.9	10.8	8.2	0.0	0.2	1.3	8.9	0.3	0.1	10.8
W	0.3	0.5	1.0	2.0	3.2	1.4	8.4	7.2	0.0	0.1	1.3	6.3	0.5	0.3	8.4
WNW	0.5	0.9	1.0	0.8	0.4	0.1	3.7	4.2	0.0	0.1	0.9	1.6	0.7	0.5	3.7
NW	0.6	1.4	1.2	0.5	0.2	0.0	3.9	3.3	0.0	0.0	0.6	1.6	1.1	0.7	4.0
NNW	0.7	1.6	1.0	0.3	0.2	0.1	4.0	3.2	0.0	0.1	0.3	1.8	1.2	0.7	4.1
All	5.1	15.9	19.8	17.5	21.7	18.9	98.9	6.7	0.2	2.4	12.1	66.6	12.9	5.8	100.0



1.5 Particulate Data Summaries

Both monitoring sites collected particulate data from 2002 through 2006. Table 4 and **Error! Reference source not found.** show the particulate monitoring data for each quarter. The PM_{10} National Ambient Air Quality Standard (NAAQS) for a 24-hour averaging time is 150 ug/m^3. During the five year monitoring program, there was one measured PM_{10} concentration that was above the NAAQS for a 24-hour monitored concentration. This high monitored concentration was 174.3 ug/m^3, and was measured on August 20, 2005 at the West Plant site near the town of Superior. (Note: The concentration measured at the East plant, only about 2.5 miles to the east, for the same run day of August 20, 2005 was 11.2 ug/m^3. The source(s) of the emissions that significantly contributed to the elevated concentration at the West Plant is unknown.)

Table 4. East Plant (KC1) PM_{10} Monitoring Summary 2002-2006

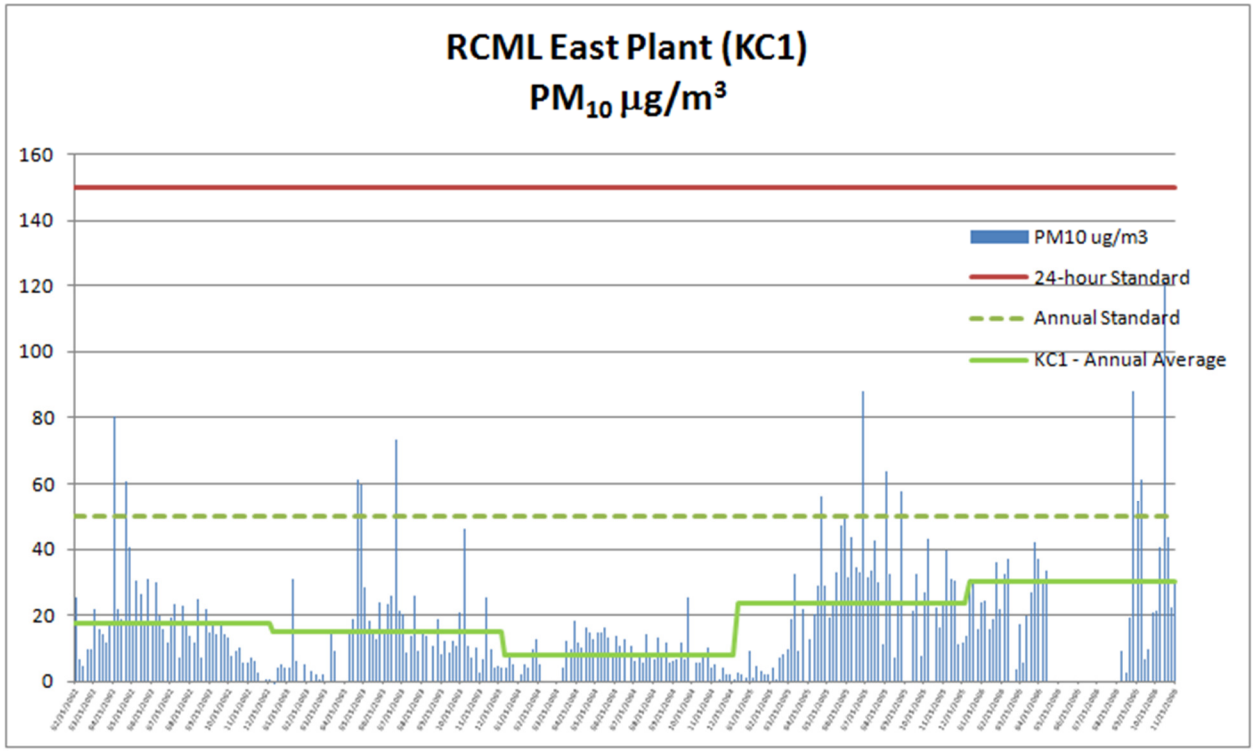


Figure 6. West Plant (KC2) PM10 Monitoring Summary 2002-2006

Figure 5 and Figure 6 are graphs which show the particulate concentrations over the duration of the monitoring period as compared to the 24-hour standard of 150 µg/m3 (which is still in place) and to the annual standard of 50 µg/m3 (which has since been abandoned).

For the duration of this monitoring period, the NAAQS for the annual arithmetic mean for PM_{10} was 50 ug/m^3[1]. The total average from the sampling period of 2002 through 2006 for the East Plant and West Plant respectively was 19.1 ug/m^3 and 13.7 ug/m^3 (in actual temperature and pressure). Both averages are below the annual average standard which was in place during the monitoring period.

[1] This Annual NAAQS for PM_{10} was revoked on December 17, 2008.

Figure 5. East Plant (KC1) PM_{10} Monitoring Summary 2002 – 2006

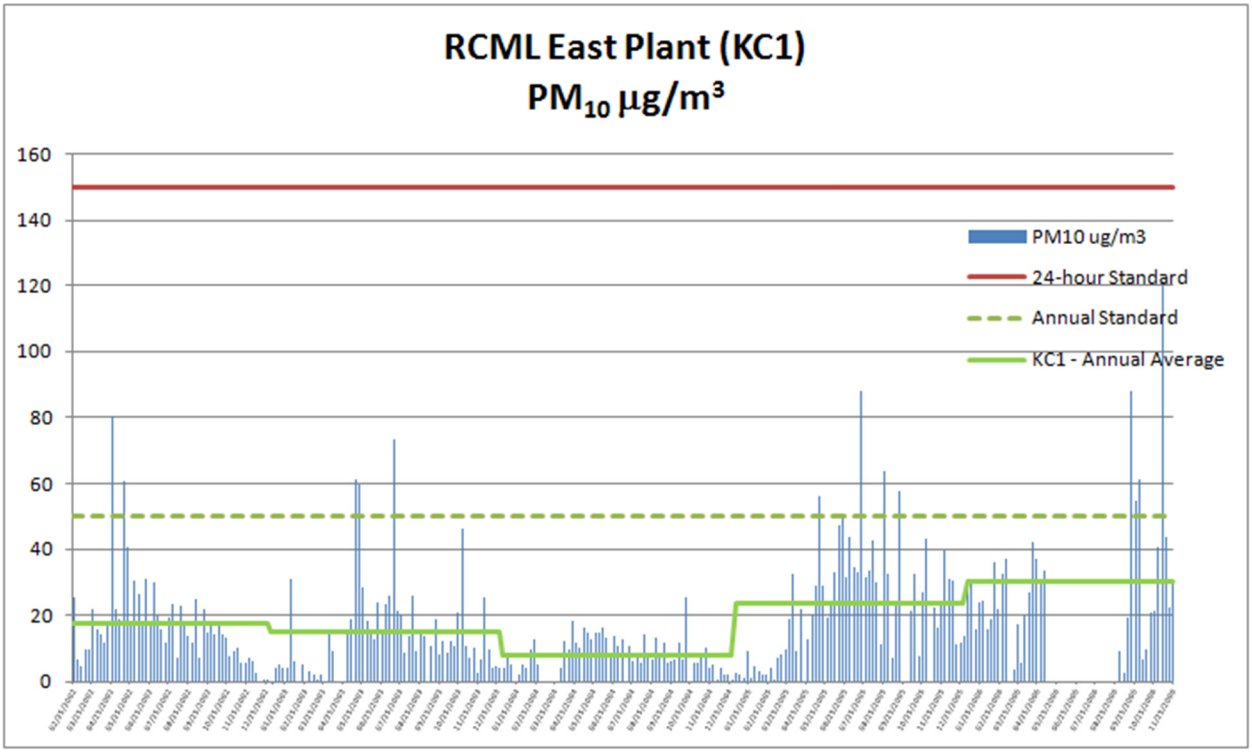
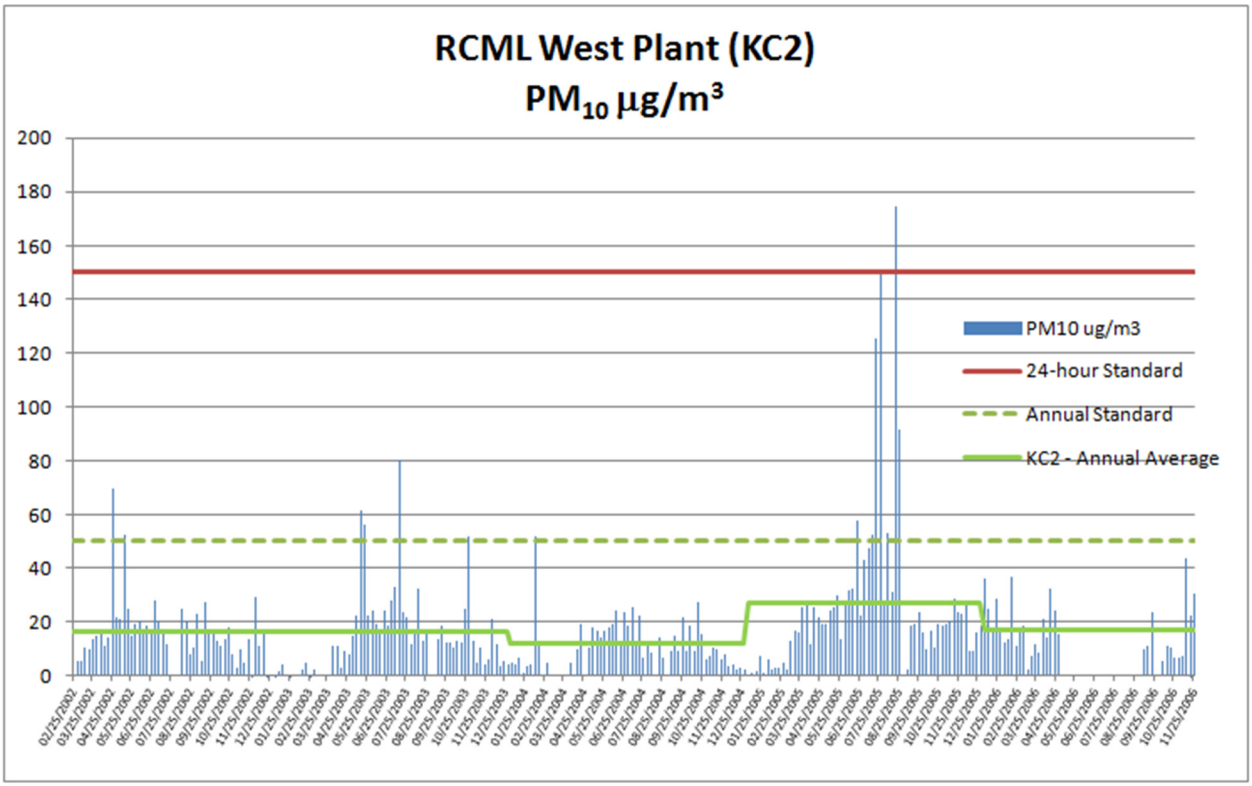


Figure 6. West Plant (KC2) PM_{10} Monitoring Summary 2002-2006



2.0 REGIONAL DATA

2.1 Regional Climate Summary

Arizona is classed as semiarid, and long periods often occur with little or no precipitation. The air is generally dry and clear, with low relative humidity and a high percentage of hours of sunshine. The greatest number of clear days occurs in spring, while summer and winter have the lowest percent of possible sunshine. Precipitation throughout Arizona primarily varies by elevation and the season of the year. Winter storms, usually originating in the Pacific Ocean, occur frequently in the higher mountains of the central and northern parts of the state and sometimes bring heavy snows. In a portion of the summer (aka, "the monsoon season"), moisture-bearing winds from the Gulf of Mexico or the Gulf of California create thunderstorm systems in south and southeast Arizona. These thunderstorms are often accompanied by strong winds and brief periods of blowing dust prior to the onset of rain. Due to high temperatures, the dryness of the air, and the high percentage of sunshine, evaporation rates in Arizona are high. The total average annual precipitation is approximately 19 in (48 cm). Mean annual lake evaporation varies from about 80 inches in the southwestern part of the state to about 50 inches in the northeast.

2.2 Local Climate Characteristics

Error! Reference source not found. lists the location information for three weather stations located near the project area. Data from these stations are maintained by the National Oceanic and Atmospheric Administration's National Climatic Data Center (NOAA NCDC) and can be accessed through the Western Regional Climate Center (WRCC) online data summaries.[2] The location of the project sites and the meteorological stations are shown in **Error! Reference source not found.**.

Table 5. Weather Stations in the Region

Meteorological Station	Elevation (ft)	Latitude	Longitude
Miami	3,560	33°24'N	110°52'W
Superior	2,859	33°18'N	111°06'W
Roosevelt	2,205	33°40'N	111°09'W

Source: NOAA NCDC 2010

Daily weather averages by month based on data from the three weather stations in the project area are provided in **Error! Reference source not found.**. The data were derived from WRCC (2010). The Miami, AZ station data record is from the years 1914–2011, the Superior, AZ station data record runs from 1920–2006, and the Roosevelt, AZ station data record is from 1905–2011.

Between the three historical meteorological stations summarized in Table 7, the annual average temperature range is between 54 °F and 81 °F. The site specific data ranges between 46° F and 86 °F between 2003 and 2006. The four year average of the annual perception total is 16.89 inches from the site

[2] http://www.wrcc.dri.edu/

specific data and the mean of the 30 year average annual perception totals from the three stations is 17.6 inches.

Figure 7. Meteorological Stations in Project Vicinity

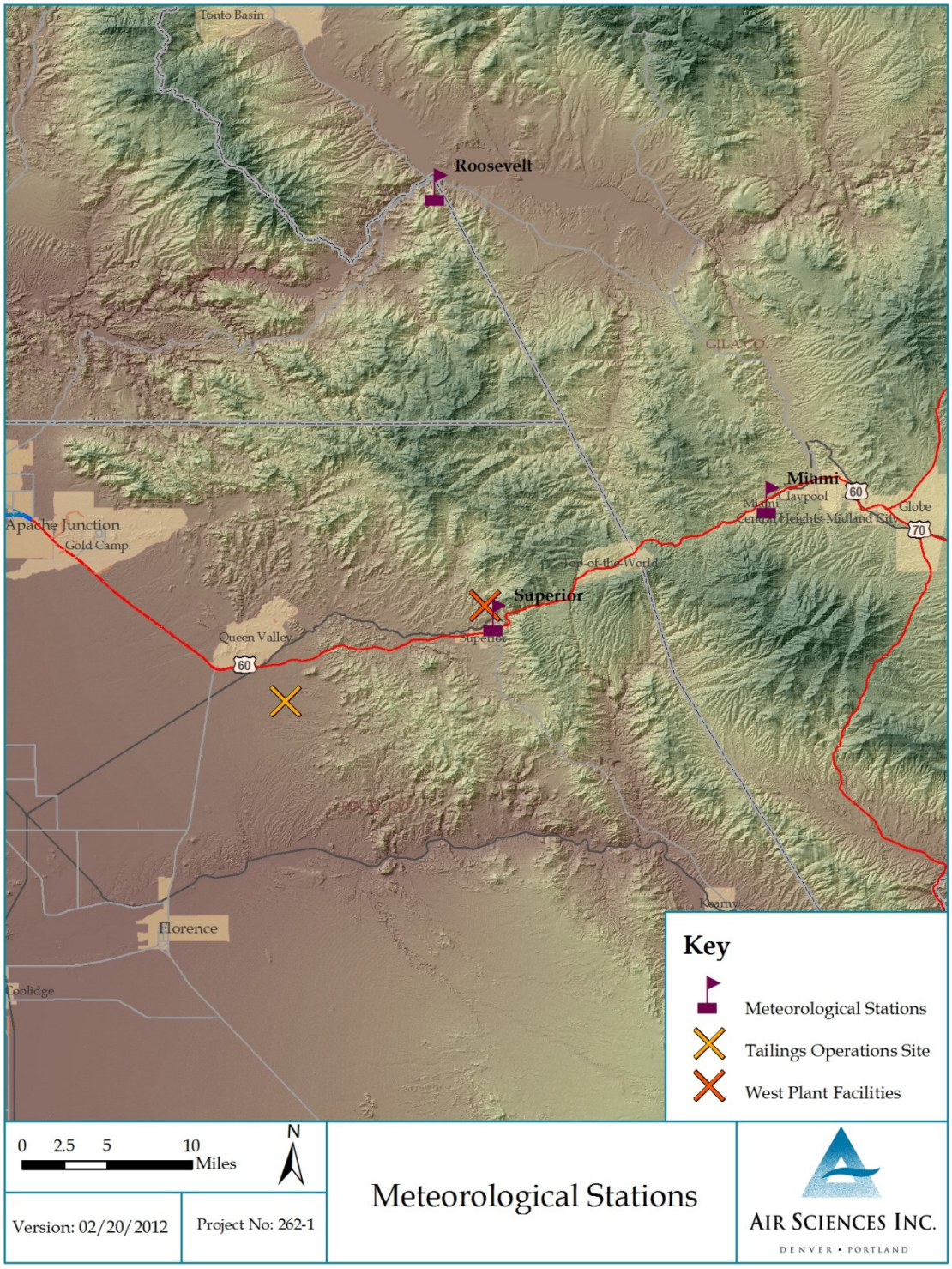


Table 6. Daily Weather Averages by Month from Three Stations in Project Area

Station	Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
ROOSEVELT 1 WNW, ARIZONA (027281)	Average Max. Temperature (F)	59.2	64.2	70.7	79.7	89.2	99.4	102.2	99.6	94.8	83.4	69.8	59.9	81
	Average Min. Temperature (F)	37	40	44.7	51.6	60.1	69.1	75.2	73.6	67.8	56.5	45.1	37.8	54.9
	Average Total Precipitation (in.)	1.92	1.79	1.76	0.67	0.34	0.25	1.47	1.96	1.29	1.1	1.21	2.02	15.78
	Average Total Snow Fall (in.)	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1
	Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0
SUPERIOR, ARIZONA (028348)	Average Max. Temperature (F)	60.9	64.1	68.5	76.4	86.1	95.6	97.7	95.4	92.3	82.5	69.8	61.6	79.2
	Average Min. Temperature (F)	43.2	45.4	48.2	54.4	62.7	72	75.7	74.2	71.2	62	51.1	44	58.7
	Average Total Precipitation (in.)	2	1.98	2.02	0.8	0.34	0.26	1.91	2.8	1.48	1.18	1.41	2.11	18.3
	Average Total Snow Fall (in.)	0.3	0.5	0.3	0.1	0	0	0	0	0	0	0	0.2	1.4
	Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0
MIAMI, ARIZONA (025512)	Average Max. Temperature (F)	56.6	60.9	66.6	74.7	84.2	94.2	96.7	94.3	90.1	79.4	66.3	57.5	76.8
	Average Min. Temperature (F)	33.8	36.7	41.1	47.7	56.1	65.2	70.7	68.6	63.4	52.4	41	34.6	50.9
	Average Total Precipitation (in.)	2.15	1.86	1.77	0.71	0.38	0.33	2.46	2.92	1.48	1.21	1.29	2.24	18.79
	Average Total Snow Fall (in.)	0.8	0.5	0.4	0.1	0	0	0	0	0	0	0.2	0.8	2.8
	Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

2.3 Regional Air Quality

Air quality is protected at the Project area (and throughout Arizona) with National Ambient Air Quality Standards (NAAQS) (health based) for seven criteria pollutants. Air permitting and development of State Implementation Plans (SIPs) for Arizona is generally regulated by the Arizona Department of Environmental Quality (ADEQ) under the EPA's delegation of authority to the state, while air permitting in Pinal County is delegated to the Pinal County Air Quality Control District.

The study area lies within a combination of rugged mountainous terrain (the Pinal Mountains, Dripping Spring Mountains, and Superstition Mountains) to the north and east, and nearly flat terrain to the west. The study area elevations range from 1,990 ft to 4,820 ft above mean sea level (amsl) based on the United States Geological Survey (USGS) 7.5-minute quadrangle topographic maps. The closest major metropolitan area is the city of Phoenix, which is located 65 miles to the west of the project area. Major metropolitan areas are potential sources of mobile and industrial sources of pollution, including carbon monoxide (CO), particulate matter (PM_{10} and $PM_{2.5}$), and emission precursors (such as volatile organic compounds (VOC) and oxides of nitrogen (NOx)) to ozone pollution (O_3). Regional transport of emissions from the Phoenix metropolitan area to the Project area is possible.

Other sources of air pollution that are more proximate to the Project area include mining activities which can contribute to ambient concentrations of particulate matter, O_3, and sulfur dioxide (SO_2). The Miami-Globe mining district is approximately 25 miles to the east of Superior Mining operations (including copper recovery and, in the case of ASARCO's operation, copper smelting) are regulated and permitted by ADEQ and or local air districts. Significant contributions from these mining operations to air pollution levels at the West and East Plant sites are not expected due to prevailing meteorological conditions and emission controls as enforced by permits and the Hayden Area State Implementation Plan for SO_2.[3]

2.4 Local Air Quality

Error! Reference source not found. details the attainment and maintenance status of each of the alternative sites for the criteria pollutants. **Error! Reference source not found.** shows the boundaries of designated non-attainment areas for Pinal County and Gila County in the vicinity of the project area.

[3] http://www.azdeq.gov/environ/air/plan/download/haydensip.pdf

Figure 8. Designated Non-Attainment Areas in Project Vicinity

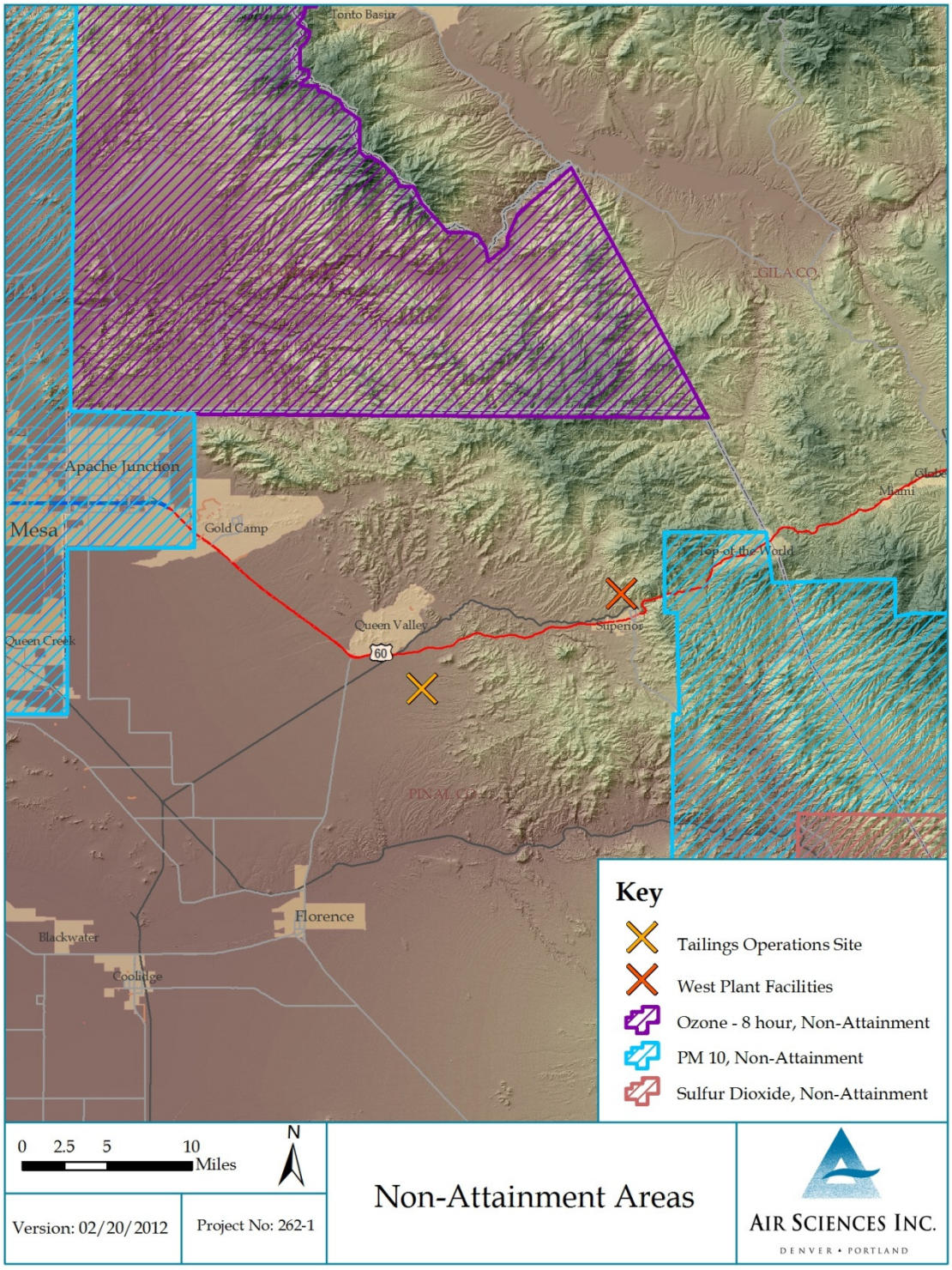


Table 7. Attainment and Maintenance Status for Criteria Pollutants by Site

	CO	SO_2	PM_{10}	$PM_{2.5}$	O_3	NO_2	Pb
Mine Site	Attainment	Attainment	Non-Attainment	Attainment	Attainment	Attainment	Attainment
West Plant Site	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Pinto Valley	Attainment	Non-Attainment/ Maintenance	Non-Attainment	Attainment	Attainment	Attainment	Attainment
MARRCO Corridor	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment	Attainment
Conveyor Corridor	Attainment	Non-Attainment/ Maintenance (Portions)	Non-Attainment (Portions)	Attainment	Attainment	Attainment	Attainment

Source: ADEQ e-maps, 2011

The Mine Site, Pinto Valley, and portions of the Conveyor Corridor are located in a PM_{10} non-attainment area, and Pinto Valley and portions of the Conveyor Corridor are in an SO_2 non-attainment/maintenance area.

In July 2008, the state of Arizona submitted a Final Plan to the EPA requesting the re-designation of the Miami PM_{10} Non-Attainment Area to Attainment status, which was still pending as of January 2012.

2.5 Ozone

Ground-level ozone is a secondary pollutant, created by sunlight acting on emissions from various sources including vehicles, and the utility industry. Since ozone is a secondary pollutant, it is typical to see the highest concentration downwind from locations where precursors are emitted. This is especially true for areas downwind of major metropolitan centers. A portion of Pinal County is located in an ozone non-attainment area. The project site is downwind of the Phoenix metropolitan area in Pinal county, about 10 miles outside of the ozone non-attainment area. The closest regulatory monitor to the site is AQS Site number 04-021-8001 located in Queen Valley, AZ at Latitude 33.293465 and Longitude -111.285594. While this site is not part of the non-attainment area, ozone concentrations have been steadily increasing and in 2011, the high fourth high 8-hour ozone value was above the federal NAAQS value of 75 ppb. Since April 2012, site specific ozone has been monitored and the measures concentrations indicate a similar trend to the Queen Valley monitor. A pollution rose for site specific data from April 2012 through June 2012 shows that the highest concentrations of ozone are measured when the winds were from the west and southwest.

2.6 Nearby Federal Class I Areas

The closest federal Class I areas to the project sites are the Superstition Wilderness Area (within 7 to 17 miles of Project operations) and the Sierra Ancha Wilderness Area (within 53-68 miles of Project operations). **Error! Reference source not found.** shows the locations of the federal Class I areas. Federal clean air law and regulations provide Class I areas (mostly National Parks and Wilderness Areas) with unique (and stringent) levels of air quality protection. Ambient monitoring networks sponsored and/or operated by Federal Land Managers are utilized to characterize air quality in these protected areas. The National Park Service has a long term air quality dataset (accessible online at http://views.cira.colostate.edu/web/) for the Tonto National Monument (TNM) located approximately 25 miles north of Superior, AZ. While not a mandatory federal Class I area, the long term air quality data record from TNM should serve to characterize the air quality in the Superstition and Sierra Ancha Wilderness Areas.

In general, air quality in these areas continues to be good and air pollution levels are considerably lower than in the populated areas of metropolitan Phoenix. The long term average PM_{10} concentration at TNM is below 20 ug/m^3 and other metrics of air quality and regional transport of air pollution (such as visibility conditions) indicate consistently good air quality with no marked trends of degradation or improvement.

Figure 9. Federal Class I Areas within 50 km and 250 km of the Project Sites