

US EPA ARCHIVE DOCUMENT



TABLE MOUNTAIN RANCHERIA

TRIBAL GOVERNMENT OFFICE

February 29, 2012

Mr. Jared Blumenfeld
Regional Administrator, Region IX
Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Leanne Walker-Grant
Tribal Chairperson

Beverly J. Hunter
Tribal Vice-Chairperson

Craig Martinez
Tribal Secretary/Treasurer

Ray Barnes
Tribal Council Member

Matthew W. Jones
Tribal Council Member

Re: Table Mountain Rancheria Request for Separate Designation for 2008 Revised Ozone National Ambient Air Quality Standards

Dear Mr. Blumenfeld:

The Sovereign Tribal Government of Table Mountain Rancheria (hereinafter, the "Tribe"), a federally-recognized Indian tribe, formally requests that its land that is being held in trust by the United States Government, near Friant, California ("trust land") be designated "unclassifiable" for purposes of the 2008 revised National Ambient Air Quality Standard ("NAAQS") for ozone.

The Tribe's trust land is located near the unincorporated community of Friant, California. The land is in the Sierra Nevada foothills and ranges in elevation from about 600 feet above mean sea level to about 1,100 feet above mean sea level. The area surrounding the Tribe's trust land is primarily rural open space (including the 2960-acre McKenzie Table Mountain Preserve), but also includes some low-density residential properties and a large (approximately 8 square miles) reservoir known as Millerton Lake.

As explained in greater detail below, the Tribe's trust land cannot be classified on the basis of available information as meeting or not meeting the NAAQS for ozone. In addition, the Tribe wishes to exercise its sovereignty in air quality management matters by, among other things, installing a regulatory air quality monitor on its trust land. Accordingly, the Tribe respectfully requests that (1) its trust land be designated "unclassifiable" pending the initiation of air quality monitoring on trust land and (2) the results of such monitoring be used to determine the appropriate attainment designation for the Tribe's trust land.

23736
Sky Harbour Road
Post Office
Box 410
Friant
California
93626

(559) 822-2587

Fax

(559) 822-2693

1. The Tribe's Trust Land Cannot Be Designated On The Basis Of Existing Information

Each of the five factors identified in the Environmental Protection Agency's December 20, 2011 "Policy for Establishing Separate Air Quality Designations for Areas of Indian Country" demonstrates that existing information is not sufficient to allow the Tribe's trust land to be designated as an "attainment" or "non-attainment" area.¹

A. Air Quality Data

There is no air quality monitor on the Tribe's trust land. The Tribe is not aware of any other technical information that specifically evaluates or characterizes air quality on its trust land.

The nearest air quality monitor to the Tribe's trust land is located in the City of Clovis, an urbanized area adjacent to the City of Fresno. The monitor — known as "Clovis North Villa Avenue" — is approximately 12 miles from the Tribe's trust land.

There are several reasons why the Clovis North Villa Avenue Monitor is not representative of air quality on the Tribe's trust land:

- The Clovis North Villa Avenue Monitor is located near the floor of the San Joaquin Valley, whereas the Tribe's trust land is located in the Sierra Nevada foothills;
- The Clovis North Villa Avenue Monitor is separated from the Tribe's trust land by a range of rugged hills;
- The Clovis North Villa Avenue Monitor is located in an urban area, whereas the Tribe's trust land is located in a rural area dominated by an extensive nature preserve and a large lake/reservoir;
- The Clovis North Villa Avenue Monitor is located adjacent to State Route 168, which has an average daily vehicle count of 71,500, whereas the largest arterial in the vicinity of the Tribe's trust land has an average daily vehicle count of approximately 4,000; and

¹ This analysis is supported by a February, 2012 Technical Memorandum prepared by Analytical Environmental Services, a copy of which is attached hereto for your convenient reference.

- The Clovis North Villa Avenue Monitor is located near the Fresno Air Terminal, whereas the Tribe's trust land is not located near any airport or other major transportation infrastructure.

There are three other monitors located within 25 miles of the Tribe's trust land. But none of the three is representative of air quality on the Tribe's trust land:

- None of the three monitors is located within 15 miles of the Tribe's trust land;
- All three monitors are located in dense, urban areas on floor of the San Joaquin Valley; and
- All three monitors are located south and east of the Tribe's trust land within the SR-99 corridor, an area in which several major stationary sources of ozone precursors (food processing facilities, electricity generation facilities, etc.) are located.

In contrast, there are no monitors located in the Sierra Nevada foothills north and east of the Tribe's trust land. The Tribe believes that its air quality is far more similar to these rural, un-monitored foothill areas than to the urban, monitored areas in and around Fresno on the floor of the San Joaquin Valley.

B. Emissions Related Data

There are virtually no stationary sources of ozone precursors located on the Tribe's trust land. Nor are there any major stationary sources of emissions in the area surrounding the Tribe's trust land. Minor stationary sources of ozone precursors near the Tribe's trust land include a few gas stations.

Mobile sources of ozone precursors near the Tribe's trust land include Millerton and Auberry Roads. These two rural arterial roads have average daily vehicle counts of approximately 4,000. In contrast, the major roadways along the floor of the San Joaquin Valley (closer to the monitors referenced above) have a combined 191,000 daily vehicle trips.

It is worth repeating that the area near the Tribe's trust land is predominantly rural in character. As noted above, the Tribe's land is immediately surrounded by a significant nature preserve and a large lake. The population density, degree of urbanization, and

extent of commercial development near the Tribe's trust land is quite different from that found in the more urban areas of Clovis, Fresno, and Madera.

C. Meteorology

The San Joaquin Valley and the Sierra Nevada foothills are very large areas with complex meteorology. The San Joaquin Valley Air Pollution Control District has prepared a schematic map of wind patterns in the area.² The map shows a pattern of exiting south winds in the southern portion of the San Joaquin Valley and recirculating north winds in the middle of the Valley.

Unfortunately, the map does not provide meaningful information about the meteorological conditions relevant to the Tribe's trust land, which is located in the Sierra Nevada foothills. And the absence of monitors in the foothill area (noted above) makes it impossible to obtain additional meteorological information about the fate and transport of emissions on or near the Tribe's trust land.

In short, meteorological information is not sufficient to allow the Tribe's trust land to be designated as an "attainment" or "non-attainment" area.

D. Geography/Topography

The Tribe's trust land is located in a rugged, steep area of the Sierra Nevada foothills characterized as "a maze of foothill ranges and valleys which range in elevation from 600 feet amsl to 1,100 feet amsl."³ This topography may create important differences between the air quality on the Tribe's trust land and the air quality on the San Joaquin Valley floor. Indeed, as explained in the attached Technical Memorandum, similar topography near the City of Visalia (located approximately 40 miles south of Fresno) appears to create a natural barrier to ozone transport and is associated with foothill ozone concentrations much lower than those on the San Joaquin Valley floor.⁴

Unfortunately, as noted above, there is no air quality data available for the foothill region near the Tribe's trust land. In light of the geography/topography of the Tribe's trust land, the absence of such data makes it impossible to classify the land as "attainment" or "non-attainment."

² See Technical Memorandum at 10.

³ See Technical Memorandum at 14.

⁴ See *id.*

E. Jurisdictional Boundaries

Finally, the Tribe notes that the boundaries of the Tribe's trust land provide an appropriate jurisdictional boundary for area designations under the 2008 revised NAAQS for ozone. The boundaries are clear and undisputed. They separate land within the jurisdiction of the San Joaquin Valley Air Pollution Control District from land outside of the District's jurisdiction. And, most importantly, EPA's own "guiding principles" provides that the agency must "recognize[] and work[] directly with federally recognized tribes as sovereign entities with primary authority and responsibility for each tribe's land and membership, and not as political subdivisions of states or other governmental units."⁵

F. Conclusion

In sum, there is no air quality monitor on the Tribe's trust land, the nearest monitors are not representative of the Tribe's air quality, the area near the Tribe's trust land has comparatively few emission sources, and relevant meteorological and topographical information indicates that air quality on the Tribe's trust land may be better than that found in monitored parts of the surrounding area. Moreover, the boundaries of the Tribe's trust land provide an appropriate (indeed, in light of the government-to-government relationship between the Tribe and the United States, perhaps the *only* appropriate) jurisdictional boundary.

Under these circumstances, the Tribe's trust land should be designated "unclassifiable." Such a designation would be consistent with EPA's Policy for Establishing Separate Air Quality Designations for Areas of Indian Country," which provides that "Indian country that is lacking a regulatory monitor, and is located within a multi-jurisdictional area with a violating regulatory air monitor that is not representative of the Indian country could be designated unclassifiable."⁶

2. The Tribe Seeks To Install A Regulatory Monitor On Tribal Trust Land

The Tribe has long sought to exercise its sovereignty in air quality management matters. In recent years, it has performed a preliminary air quality assessment and has explored the possibility of establishing an air quality monitoring program on its trust land.⁷ Cliff

⁵ See "EPA Policy on Consultation and Coordination with Indian Tribes" at 3.

⁶ See Memorandum from Stephen Page to Regional Air Directors: "Policy for Establishing Separate Air Quality Designations for Areas of Indian Country" (December 20, 2011) at 3.

⁷ See Technical Memorandum, Attachment 1.

Raley, the Tribe's environmental compliance specialist has been working with EPA staff to identify funding opportunities for such a project.

Given the absence of air quality data from the foothill area near the Tribe's trust land, the installation of a regulatory monitor is the only way to accurately classify air quality on the Tribe's land. Accordingly, the Tribe respectfully requests that (1) its trust land be designated "unclassifiable" pending the initiation of air quality monitoring on trust land and (2) the results of such monitoring be used to determine the proper attainment designation.

Such an approach would accurately reflect the fact that existing information is insufficient to designate the Tribe's trust land as "attainment" or "non-attainment," would fill a significant hole in the existing air quality monitoring network, would increase the transparency of future designation processes, and would be consistent with the Environmental Protection Agency's stated desire to recognize tribal sovereignty in air quality management matters affecting Indian country.⁸

We look forward to working with you and your staff on this matter and we would be happy to address any questions you may have.

Respectfully submitted,



Leanne Walker-Grant, Tribal Chairperson
Table Mountain Rancheria

cc: Amy Zimpfer, EPA
Cliff Raley, Table Mountain Rancheria
Matthew Adams, SNR Denton LLP

⁸ See Memorandum from Stephen Page to Regional Air Directors: "Policy for Establishing Separate Air Quality Designations for Areas of Indian Country" (December 20, 2011) at 1.

TECHNICAL MEMORANDUM

Date: February 16, 2012

Subject: NAAQS Ozone Designation for the Table Mountain Rancheria

1.0 INTRODUCTION

In accordance with the Clean Air Act, the U.S. Environmental Protection Agency (EPA) informed the Governor of California in a letter dated December 9, 2011 of the EPA's decision to designate portions of California as nonattainment for the 2008 National Ambient Air Quality Standard (NAAQS) for ozone. The EPA's letter indicates that it intends to designate the Table Mountain Rancheria (Rancheria) as nonattainment for ozone based on monitoring data compiled from the San Joaquin Valley Air Basin (SJVAB).

This memorandum has been prepared for the Tribe as a technical reference to support consultation with the EPA regarding the pending NAAQS designation for the Rancheria. EPA guidance issued on December 4, 2008 specifies five factors that should be considered by governments when making their designation recommendations to the EPA. The results of this memorandum indicate that based on the EPA factors a designation of unclassified for the Rancheria is appropriate given the lack of applicable monitoring data for the Rancheria. Following a review of the regulatory background and existing setting (**Sections 2.0 and 3.0**), and a discussion of the Tribe's plans to pursue treatment as a state and implement a monitoring program for ozone on the Rancheria (**Section 4.0**), a detailed discussion of the findings and consideration of each factor is presented in **Section 5.0**.

2.0 REGULATORY BACKGROUND

The Federal Clean Air Act (CAA) was enacted in 1970 and last amended in 1990 (42 USC §7401 et seq.) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. The CAA establishes a framework for national, state, and local air pollution control efforts. Basic components of the CAA and its amendments include NAAQS for criteria air pollutants, requirements for state implementation plans (SIPs) to meet the NAAQS, motor vehicle emissions standards, stationary source emissions standards and permits, and enforcement provisions. The EPA is the Federal agency responsible for establishing the NAAQS, overseeing state air programs as they relate to the CAA, approving SIPs, and setting emissions standards for mobile sources under Federal jurisdiction.

National Ambient Air Quality Standards

In 1971, the EPA, under authority of the CAA, developed primary and secondary NAAQS. Primary NAAQS were established to protect public health with an adequate margin of safety and secondary

standards were established to protect public welfare from known or anticipated adverse effects (aesthetics, crops, architecture, etc.) (42 USC §7409[b]).

The EPA designated six pollutants of primary concern as criteria air pollutants (CAPs): carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), ozone, lead (Pb), and particulate matter (PM). The NAAQS are time-averaged maximum ambient air concentrations. For various CAPs, more than one time-averaged maximum concentration has been established by the EPA in order to address typical exposures to the population from natural and anthropogenic sources in the environment. Concentrations above these time-averaged maximum concentrations are anticipated to cause adverse health effects to sensitive receptors, such as inflammation of airways, induction of respiratory symptoms, and decrements in lung functions. The violation criteria established by the EPA are based upon these time-averaged maximum concentrations specific to each CAP. For example, a violation of the NAAQS for ozone would occur if the fourth highest 8-hour concentration in a year, averaged over 3 years, is exceeded at each monitoring station within an area. **Table 1** shows the NAAQS standards along with violation criteria.

TABLE 1
NATIONAL AMBIENT AIR QUALITY STANDARDS AND VIOLATION CRITERIA

Year	Pollutant	Averaging Time	Standard		Violation Criteria
			parts per million	microgram per cubic meter	
1997	Ozone	8-Hour	0.080	157	If fourth highest 8-hour concentration in a year, averaged over 3 years, is exceeded at each monitoring station within an area
2008			0.075	147	
2010 ¹			0.060	118	

¹ In the January 19, 2010, Federal Register, EPA proposed to revise the 2008 ozone NAAQS. As of February 2012, the EPA has not finalized the 2010 ozone NAAQS.
Source: CARB, 2012; Federal Register, 2010.

In 2008, the EPA lowered the NAAQS for ozone. The propagation of the 2008 NAAQS initiated a process for redesignating the attainment status of regions, areas, and air basins throughout the United States. In accordance with the CAA, the EPA is required to provide states with the opportunity to comment on the EPA's redesignation of a region, area, or air basin.

The EPA issued guidance on December 4, 2008 that identified five factors it would consider in determining nonattainment area boundaries and recommended that states consider these factors in making their designation recommendations to the EPA. These factors are listed below:

- Factor 1: Air quality data
- Factor 2: Emissions and emissions-related data (including location of sources and population, amount of emissions and emissions controls, and urban growth patterns)
- Factor 3: Meteorology (weather/transport patterns)

- Factor 4: Geography and topography (mountain ranges or other basin boundaries)
- Factor 5: Jurisdictional boundaries (e.g. counties, air districts, existing nonattainment areas, Indian county, metropolitan planning organizations)

All data used in the evaluation of a nonattainment designation is the latest available to the EPA and/or provided to the EPA by the states or tribes (EPA, 2011).

3.0 EXISTING SETTING

TABLE MOUNTAIN RANCHERIA

The Table Mountain Rancheria of California is a federally recognized Tribe located in northeastern Fresno County, in the unincorporated community of Friant in the foothills of the Sierra Nevada Mountain Range. **Figure 1** shows the regional location of the Rancheria with respect to the SJVAB and adjacent air basin boundaries. The boundaries of the Rancheria and nearby land uses are shown in **Figures 2 and 3**. Land uses located within the Rancheria boundaries are listed below.

Tribal Administrative Offices	Casino and Events Center
Day Care Facility	Parking Garage
Dental Clinic	Parking Lot
Gaming Commission Office	Church
Tribal Police Station	Residences (16)
Learning Center	Wastewater Treatment Plant and Effluent Storage
Tribal Medical Administration Office and Clinics	Potable Water Storage Tanks
Tribal Meeting Hall	Woodland
Youth Center	Pasture Land

The Rancheria is located in a rural setting, with the elevation varying from approximately 600 feet above mean sea level (amsl) to 1,100 feet amsl. The surrounding land is mainly open space with some residential developments. The nearest metropolitan areas to the Rancheria include Clovis and Fresno, located approximately 12 and 17 miles, respectively to the south of the Rancheria.

ATMOSPHERIC CONDITIONS

Regional climate and topography play a large role in ambient air pollution concentrations. The Rancheria lies within the foothills of the central portion of the San Joaquin Valley (SJV). Airflow patterns within the SJV can generally be characterized by one of four directional types: northwesterly up-valley winds, marine winds from the San Francisco Bay Area, down-valley and foothill drainage (down sloping) winds, and northerly (non-marine) winds resulting from the exiting of a low pressure system. During the winter, down-sloping winds from the Sierra Nevada Mountains predominate because of high-pressure systems to the east, and during the summer, northwesterly winds predominate because of the entrance and exit of low-pressure systems (WRCC, 2012).

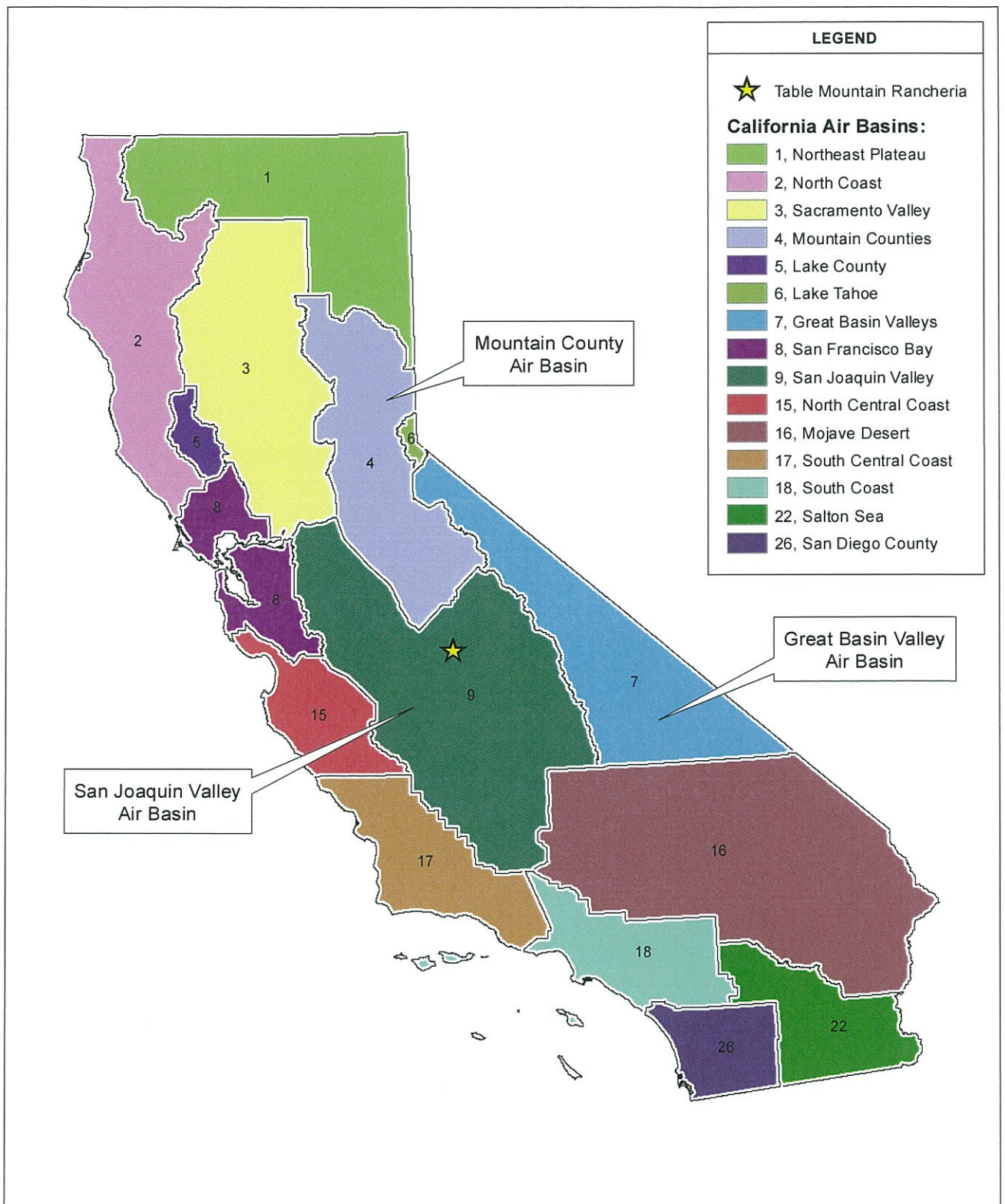
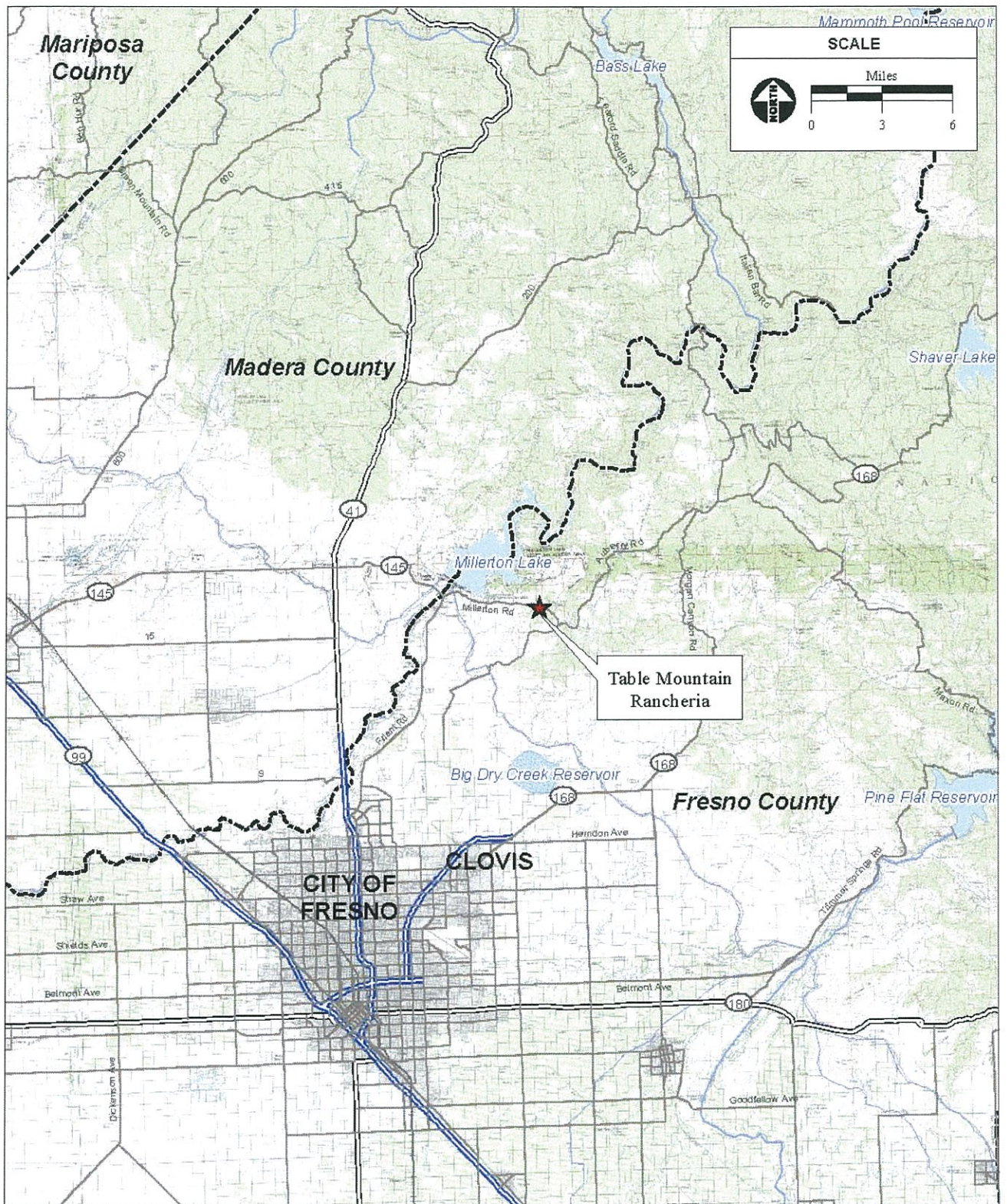


Figure 1
Regional Location and Air Basin Boundaries



SOURCE: ESRI Data, 2007; San Joaquin Valley APCD, 2009; AES 2012

Table Mountain Ozone Technical Study / 212500 ■

Figure 2
Site and Vicinity

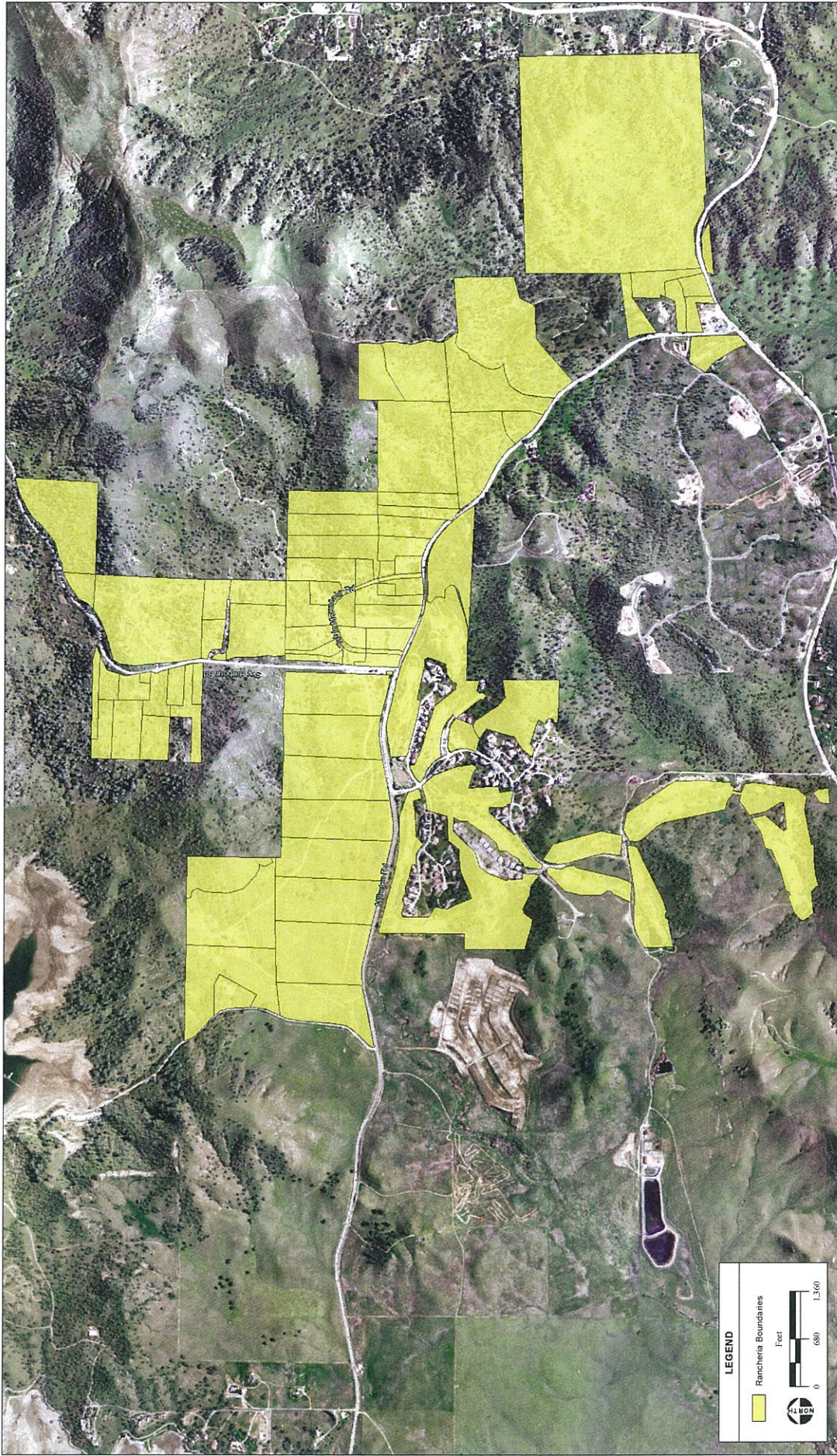


Table Mountain Ozone Technical Study / 212501 ■

Figure 3

Table Mountain Rancheria

SOURCE: Dale G. Meli & Associates, 2005; AES, 2012

The SJVAB is approximately 300 miles long and shaped like an oblong bowl, allowing air pollutants such as the ozone precursors nitrogen oxides (NO_x) and reactive organic gases (ROG) to be retained near the valley floor. On average, near the SJV floor there are 35-40 days each year that exceed the federal health-based standards for ground-level ozone (CARB, 2012a). The boundaries of the designated SJVAB encompass eight counties and several federally recognized Tribes. Non-Tribal lands located within the basin are under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD), California Air Resource Board (CARB), and the EPA, while Tribal lands are only subject to EPA jurisdiction.

EXISTING AIR QUALITY

The EPA determines whether the SJVAB and Tribal lands are designated nonattainment, attainment, or unclassified for ozone under the CAA. **Table 2** shows the ozone attainment status for the SJVAB, as well as for the two air basins located east and northeast of the SJVAB, the Great Basin Valley Air Basin (GBVAB) and the Mountain Counties Air Basin (MCAB) (refer to **Figure 1**).

**TABLE 2
NATIONAL OZONE ATTAINMENT STATUS**

Air Basin	Pollutant	NAAQS
San Joaquin Valley	Ozone	Nonattainment (serious eight-hour)
Great Basin Valley		Unclassified
Mountain Counties		Nonattainment (except Plumas and Sierra counties are designated unclassified)
CARB, 2012b.		

In accordance with the CAA, the EPA designated and classified the SJVAB serious nonattainment for 8-hour ozone in 1997. The SJVAPCD petitioned the EPA to change the SJVAB’s classification from serious to extreme. The EPA approved the SJVAPCD request for reclassification on May 5, 2010, with an effective date of June 4, 2010.

RANCHERIA, AREA, AND REGIONAL EMISSION SOURCES

There are very few stationary emissions sources of ozone precursors on the Rancheria. Land uses on the Rancheria do not include any major ozone emitters. A major emitter in the SJVAB is defined as emitting 10 tons per year of ozone precursors (SJVAPCD, 2002). The Rancheria has very few paved and unpaved roads and thus mobile emissions of ozone precursors on the Rancheria are not considered to be a major influence on air quality in the SJVAB. There are no major stationary sources of ozone precursors within the immediate vicinity of the Rancheria.

Minor stationary sources of ozone emissions in the area are four gas stations, the nearest located at the intersection of Millerton and Auberry Road, two in the town of Prather, and one in the town of Friant. Millerton and Auberry Roads are the major regional arterials in the area of the Rancheria, with an average

of 4,000 vehicles per day (FCG, 2011) travelling along these roadways. Vehicle traveling on Millerton and Auberry Roads are the main source of ozone precursors in the area.

Regionally, the SJVAB has two major roadways, Interstate 5 (I-5) and State Route 99 (SR-99). These roadways have 191,000 combined daily vehicle trips and are located approximately 18 and 55 miles from the Rancheria, respectively. There are numerous food processing and electricity generation plants operating within the I-99 corridor near Madera and Fresno, which are major stationary sources of ozone precursors.

POLLUTANT TRANSPORT

The SJVAB has a complex pollution transport system due to the winds discussed above and shown in **Figure 4**. Winds from the north during the summer months transport pollutants from the Bay Area and Sacramento region south along the western portion of the SJVAB and cycle the pollutants along the southern portion of the SJVAB. Pollutants are then transported either out of the SJVAB to the south or north along the eastern portion of the SJVAB. Pollutants are sometimes carried east up the foothill valleys during the summer. Due to high pressure system in the east during the winter months, winds transport pollution west out of the foothills.

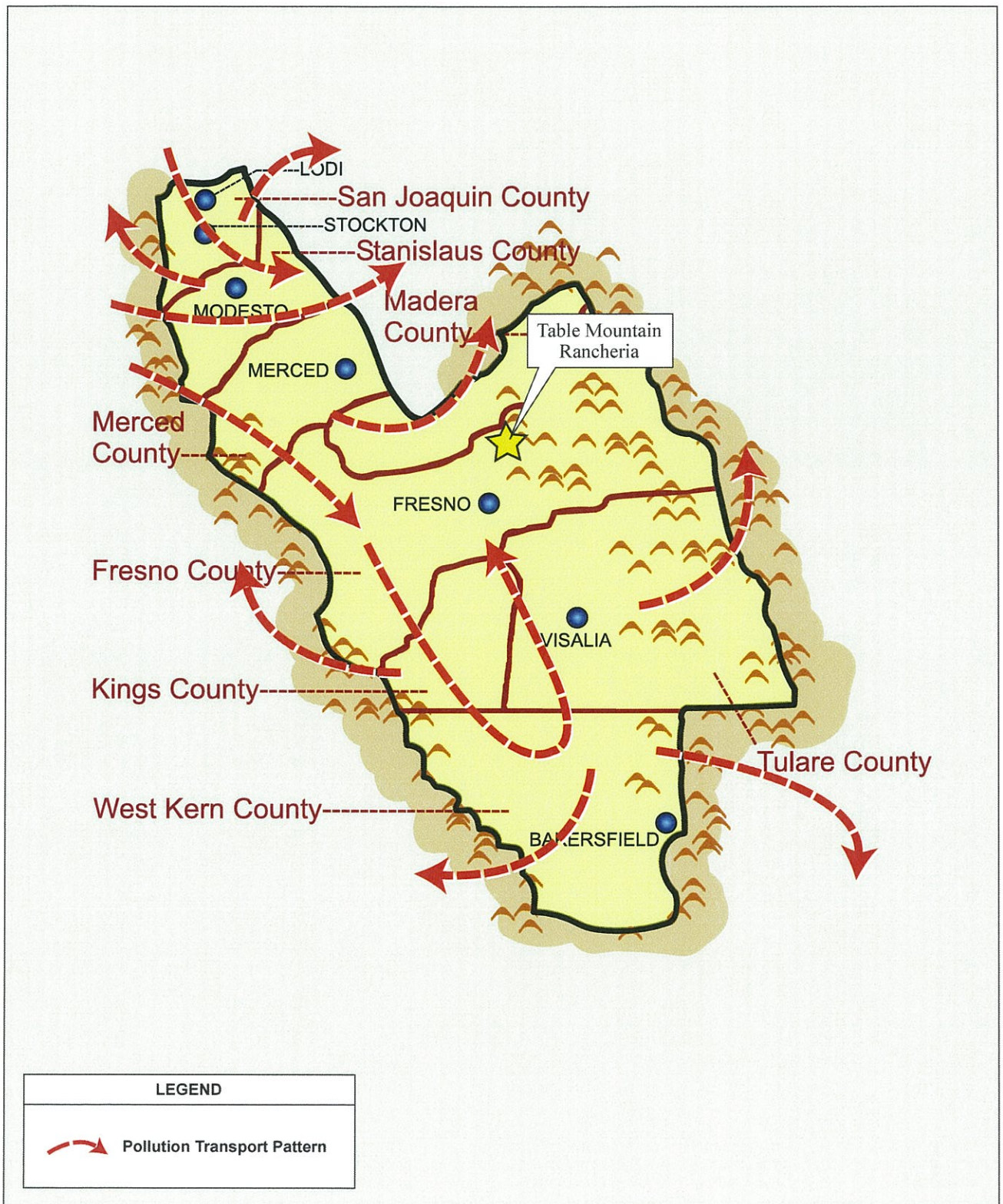
GROUND- LEVEL OZONE PRECURSOR REACTION

Photochemical reactions involving ROG and NO_x resulting from the incomplete combustion of fossil fuels are the largest source of ground-level ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. As a photochemical pollutant, ozone is formed only during daylight hours under appropriate conditions, but is destroyed throughout the day and night. Ozone is considered a regional pollutant, as the reactions forming ozone take place over time and are often most noticeable downwind from the sources of the emissions.

OZONE MONITORING

Ozone monitoring stations are located throughout the SJVAB. Generally, these monitoring stations are located in urban areas or along heavily traveled roadways. Monitoring data from these stations are used to determine the attainment status of the air basin or region within the air basin. If a region within the air basin does not have sufficient monitoring data or the region lacks monitoring stations to obtain sufficient data the region is designated unclassified, unless the region is determined to be located within an unattainment urban core area or the region is determined to contribute to the emissions of an unattainment area.

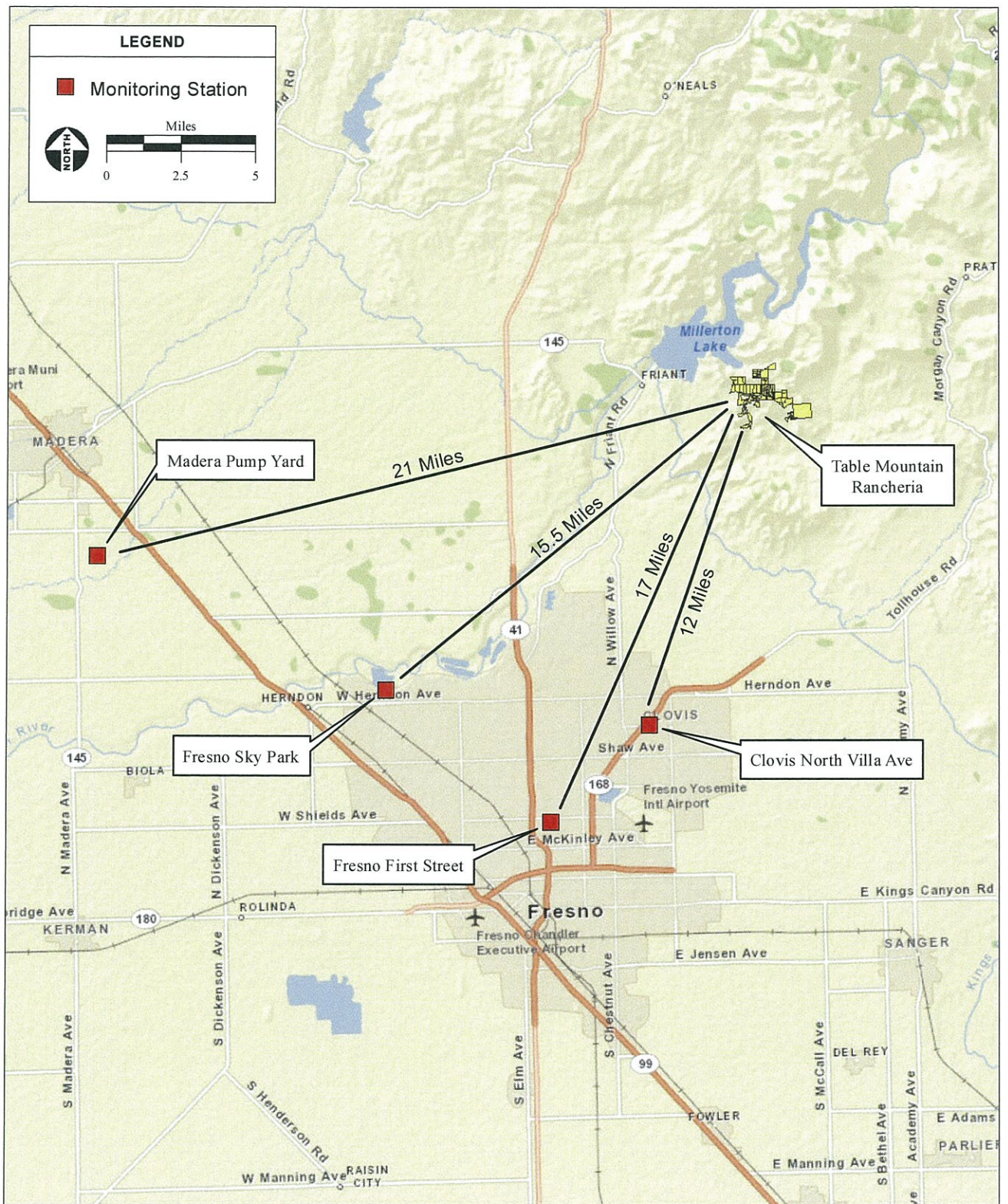
Monitoring data for 2008, 2009, and 2010 from the five ozone monitoring stations closest to the Rancheria is provided in **Table 3**. As shown in **Figure 5** the closest ozone monitoring station is approximately 12 miles south of the Rancheria located in the town of Clovis at North Villa Avenue, approximately 350 feet above mean sea level (amsl). The Clovis-North Villa Avenue monitoring station



SOURCE: San Joaquin Valley APCD, 2009; AES 2012

Table Mountain Ozone Technical Study / 212500 ■

Figure 4
San Joaquin Air Basin Wind Patterns



is adjacent to State Route 168, which has an average daily count of 71,500 vehicles and is approximately 2.3 miles from the Fresno Air Terminal. The four other monitoring stations shown in **Table 3** are between 15.5 and 21 miles from the Rancheria and located at approximately 300 feet amsl, near the SR-99 corridor, and/or in a densely populated urban area.

There are no ozone monitoring stations within 35 miles north or east of the Rancheria. For comparison, **Table 3** also shows monitoring data for the Visalia – North Church Street monitoring station located at approximately 320 feet amsl, in a densely populated urban area, and the Sierra National Park (SNP) – Lower Kaweah monitor station located at approximately 1,300 feet amsl, and in a sparsely populated area.

TABLE 3
FRESNO AND MADERA COUNTY MONITORING RESULTS

Miles from Rancheria	Monitoring Station Locations	2008	2009	2010
12	Clovis-North Villa Avenue			
	Highest 8-hour Measurement	0.127	0.105	0.105
	Number of Day NAAQS Exceeded	44	48	39
15.5	Fresno-Skypark			
	Highest 8-hour Measurement	0.122	0.104	0.114
	Number of Day NAAQS Exceeded	39	34	35
17	Fresno-First Street			
	Highest 8-hour Measurement	0.132	0.104	0.107
	Number of Day NAAQS Exceeded	62	51	26
21	Madera-Pump Yard			
	Highest 8-hour Measurement	0.107	0.096	0.096
	Number of Day NAAQS Exceeded	24	13	8
Miles from I-99 Corridor	Monitoring Station Locations	2008	2009	2010
2	Visalia-North Church Street			
	Highest 8-hour Measurement	0.130	0.120	0.133
	Number of Day NAAQS Exceeded	44	24	15
28	SNP - Lower Kaweah			
	Highest 8-hour Measurement	0.125	0.098	0.091
	Number of Day NAAQS Exceeded	32	3	0
Source: CARB, 2012a.				

4.0 TRIBAL AIR QUALITY MONITORING PLAN

The Tribe is committed to developing and operating a fully functioning air quality program. In 2010, the Tribe performed particulate matter 10 microns in size (PM₁₀) monitoring at various sites on the Rancheria to determine a suitable location to construct a permanent monitoring station. The preliminary results of this monitoring effort are provided in **Attachment 1**. The Tribe is currently seeking grants to fund its continuing efforts to construct and operate a monitoring station on the Rancheria and will move forward with applying for treatment as a state with regards to air quality as permitted under the CAA.

Treatment as a State

The Tribe is federally recognized and performs significant governmental duties on the Rancheria. The Tribal Council operates a Health Center including dentistry services, police department, wastewater treatment facility, casino, and an environmental department among other Tribal uses.

As a sovereign government, the Tribe desires to govern air quality within the exterior boundaries of the Rancheria. The Tribal Public Works Department is responsible for environmental compliance and is in the process of developing air quality reduction plans and goals to reduce ozone precursors from on- and off-Rancheria sources. Emission reductions would come from programs to reduce on-Rancheria waste streams, encourage the use of alternative fuels in Tribal vehicles, and provide additional shuttle services to populated areas. The Tribe is currently seeking funding to develop an air quality program and complete the treatment as a state (TAS) application in accordance with 40 CFR 49.7, which will include the following:

- A statement that it is an Indian Tribe recognized by the Secretary of the Interior;
- A descriptive statement demonstrating that the Tribe is currently carrying out substantial governmental duties and powers over the Rancheria;
- A descriptive statement of the Tribe's authority to regulate air quality;
- A map or legal description of the area over which the Tribe asserts authority;
- A statement that describes the basis for the Tribe's assertion of authority (including the nature or subject matter of the asserted regulatory authority); and
- A narrative statement describing the capability of the Tribe to administer effectively any Clean Air Act program for which the tribe is seeking approval.

Monitoring

The Tribe is developing a plan to establish an air quality monitoring station on the Rancheria that would be operated and funded by the Tribe. The monitoring station is expected to monitor ozone, ozone precursors (ROG and NO_x), PM₁₀, and particulate matter 2.5 microns in size. Determination of the placement of a monitoring station on the Rancheria would be in accordance with requirements set forth in Appendix E of 40 CFR 58, which requires the following:

- Placement of the monitoring device for ozone and PM between 2 and 15 meters above ground level, a minimum of one meter from the nearest structure and away from dirty and dusty areas.

- The monitoring station should be placed away from minor sources of ozone precursors and PM.
- The monitoring station should not be placed near buildings, trees, or cliffs.
- The monitoring station is required to be sited more than 115 meters from Millerton or Auberry Roads or 10 meter from any Rancheria roadway.
- The monitoring pathway must not exceed one kilometer.

The monitoring instruments must conform to requirements provided in Section 9 of 40 CFR 58.12, Appendix E.

The establishment of an ozone and PM monitoring station and completion of the TAS process by the Tribe would provide the EPA, CARB, and SJVAPCD with ozone and PM data that is representative of the conditions on the Rancheria, which would fill a significant gap in the SJVAB monitoring system and allow the Tribe to develop a specific regulatory system for improving air quality on the Rancheria and throughout the SJVAB.

5.0 FINDINGS

As noted in **Section 2.0**, EPA guidance issued on December 4, 2008 specifies five factors that should be considered by governments when making their designation recommendations to the EPA. These include air quality data, emissions and emissions-related data, meteorology, geography/topography, and jurisdictional boundaries. A detailed discussion of each of these factors with respect to the appropriate ozone NAAQS designation for the Rancheria is provided below.

AIR QUALITY DATA (EPA FACTOR 1)

Certified ozone monitoring data is available for the Cities of Fresno, Clovis, and Madera. The monitoring data shows that the immediate vicinity surrounding the monitoring stations exceeds the NAAQS for ozone. There is no certified or preliminary monitoring data for the Rancheria due to the lack of monitoring station(s) in the vicinity of the Rancheria (see **Figure 5**). As described in more detail under Factors 2, 3 and 4 below, the certified monitoring data available for the densely populated areas of Fresno, Clovis and Madera is not likely representative of the air quality on the Tribe's Rancheria and is not sufficient to designate the Rancheria as nonattainment.

EMISSIONS AND EMISSIONS-RELATED DATA (EPA FACTOR 2)

The Rancheria has a number of minor stationary emission sources of ozone precursors (home and commercial stoves, backup generators, etc.); while the region surrounding the Clovis, Fresno, and Madera monitoring stations has major stationary emission sources of ozone precursors, such as power generation and food processing plants. Mobile and stationary emissions of ozone precursors near the monitoring stations are much greater than those on and in the vicinity of the Rancheria as shown in **Section 3.0, Regional, Area, and Rancheria Emissions Sources**. Areas of dense population or commercial development, such as the Clovis, Fresno, and Madera metropolitan areas, are an indicator of area source and mobile source of ozone precursor emissions, which contribute to ozone formation. The monitoring

data from the Clovis, Fresno, and Madera monitoring stations indicate the high formation of ozone. The sparse population and lack of commercial development on and surrounding the Rancheria may indicate a lack of ozone formation. However, due to a lack of monitoring data it is unknown to what extent ozone is formed in the vicinity of the Rancheria.

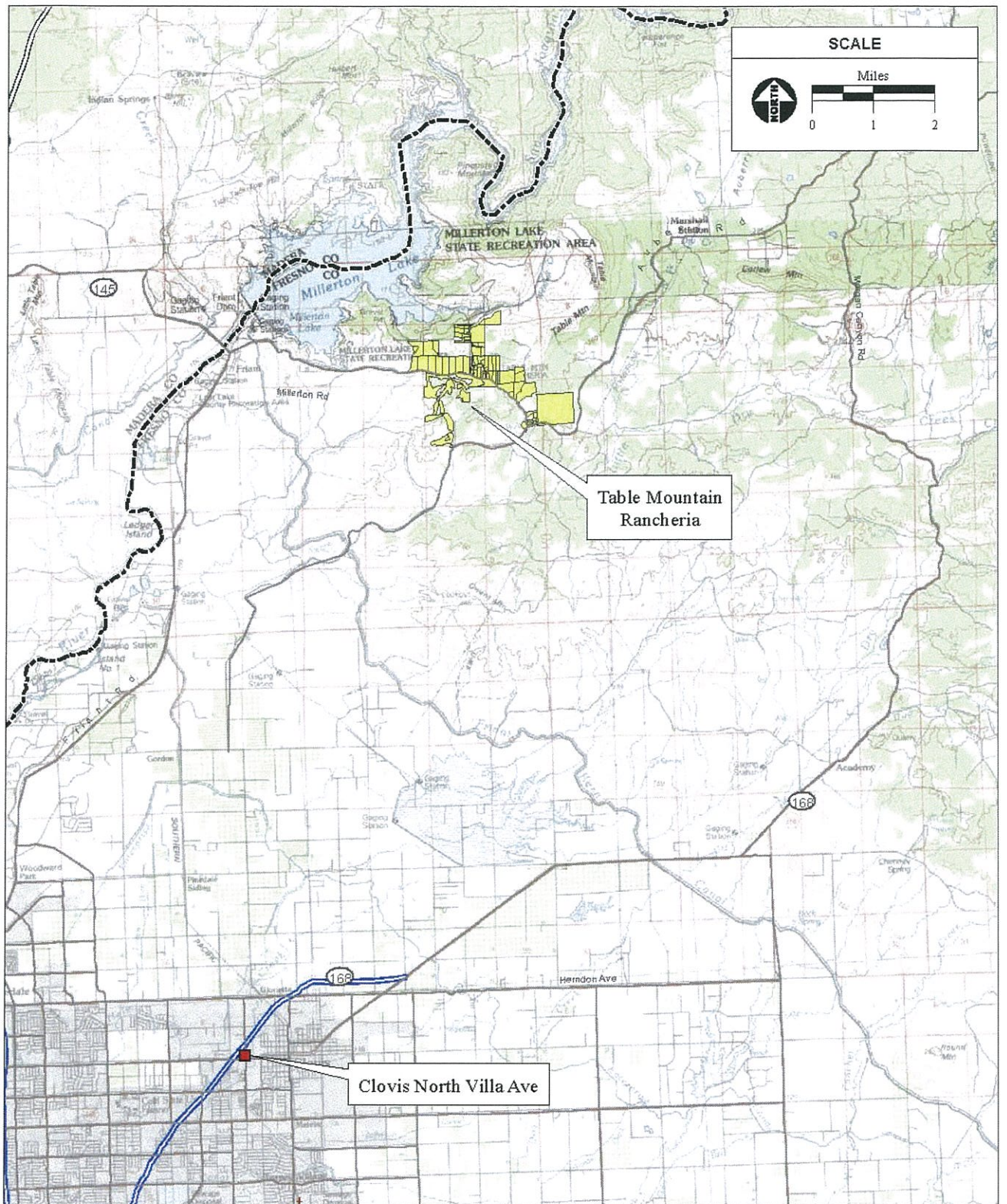
METEOROLOGY (EPA FACTOR 3)

In the regions of the SJV where ozone precursor emission sources are minor and a transport system exists, it is assumed that elevated ozone formation is due to the transport system and the meteorological conditions. Wind flow in the SJVAB most frequently comes from the west-northwest, originating in the San Francisco Bay Area and the Sacramento Valley. These winds create an ozone transport system, which imports ozone precursors into the SJVAB from neighboring air basins. As shown in **Figure 4**, winds carrying ozone and ozone precursors exit the SJVAB in the south or are recirculated north up along the SJV floor. Winds originating from the west during the summer months have a tendency to drive ozone precursors up into the Sierra Nevada foothills during the day time, while down winds return ozone formed in the mountains to the valley floor during the nighttime. EPA has noted that the SJV may influence ozone concentrations in the Southern Mountain counties, which include Fresno County where the Rancheria is located, and the western portions of the Southern Mountain counties (Madera, Fresno, and Tulare) are likely subject to the meteorology of the SJV. However portions of these counties, including the Rancheria, are in the foothills of the Sierra Nevada mountain range, rather than in the flats of the SJV, and on the whole more rural and largely mountainous. Due to the transport system in the SJVAB (exiting south winds in the southern portion of the SJV, the recirculating north winds in the eastern portion of the SJV) and lack of monitoring stations in the foothills, the concentration of ozone in the foothills adjacent to the SJV and consequently in the Rancheria cannot be accurately estimated in the absence of monitoring data.

GEOGRAPHY/TOPOGRAPHY (EPA FACTOR 4)

As shown in **Figure 6**, the topography in the vicinity of the Rancheria is starkly different than the topography in the vicinity of the nearest monitoring stations located more than 12 miles from the Rancheria boundaries in the cities of Clovis, Fresno, and Madera. The topography surrounding the Rancheria is a maze of foothill ranges and valleys which range in elevation from 600 feet amsl to 1,100 feet amsl; in contrast, the nearest monitoring stations are located at approximately 300 feet amsl on the vast SJV floor. The varying elevations of the foothill ranges and valleys between the Rancheria and the nearest monitoring station tend to restrict air flow and ventilation, creating meteorological barriers, which may disperse and dilute ozone precursor concentrations.

A similar topological situation occurs 40 miles to the south of Fresno between the densely populated City of Visalia, which sits on the SJV floor, and the adjacent foothills. As shown in **Table 3**, the ozone concentration substantially decreases in the foothills near SNP than on the SJV floor near the City of Visalia. This decrease in ozone concentration at the SNP monitoring station location is likely due to the natural transport barriers provided by the foothills and the lack of ozone emission sources in the vicinity of the SNP monitoring station.



SOURCE: ESRI Data, 2007; San Joaquin Valley APCD, 2009; AES 2012

Table Mountain Ozone Technical Study / 212500 ■

Figure 6
Topographic Map

The difference in elevation and geographic/topographic barriers between the Rancheria and the SJV floor, where ozone monitoring stations are located, coupled with the lack of ozone monitoring data in the foothill region, does not provide a clear indication of ozone concentrations at the Rancheria.

JURISDICTIONAL BOUNDARIES (EPA FACTOR 5)

For each potential nonattainment area, the EPA considers existing jurisdictional boundaries to provide a clearly defined legal boundary and to help identify the areas appropriate for carrying out the air quality planning and enforcement functions for nonattainment areas. The SJVAB is under the jurisdiction of the SJVAPCD, CARB, and the EPA; in contrast air quality on the Rancheria is under the jurisdiction of the EPA. Also, it should be noted that the Rancheria is not within the jurisdictional boundary of Fresno County and is not subject to State of California jurisdiction. The Tribe is a sovereign nation, and land use within the Rancheria is under the jurisdiction of the Tribal Council. Further, as discussed in **Section 4.0**, the Tribe intends to prepare an application to be treated as a state with regards to air quality. The Tribe is also planning to develop an air quality monitoring station on the Rancheria and has taken a step towards this goal. Although the Tribe has non-contiguous land within the SJV nonattainment area, as shown above it is unclear if these adjacent lands exceed the NAAQS for ozone.

CONCLUSION

Based on the discussion of the factors above, this technical memorandum concludes that the Table Mountain Rancheria should be designated as “Unclassified” for the 2008 ozone NAAQS. As stated in December 9, 2011, letter from the EPA to California Governor Brown:

“Consistent with designations for previous ozone standards, the EPA intends to designate an area as unclassifiable/attainment if there are certified, quality-assured air quality monitoring data showing the area is meeting the ozone standards or there are no monitoring data for the area, and the EPA has not made a determination that the area is contributing to a violation in a nearby area”.

The EPA has not determined that the Rancheria contributes to the violation of the NAAQS ozone standard in a nearby area. As shown by the discussion above, the five factors which the EPA uses to determine if monitoring data is applicable are not consistent with a designation of nonattainment but rather a designation of unclassified.

Since the EPA has not made a determination that the Rancheria contributes to the violation of the NAAQS ozone standard of near-by areas and there is no applicable ozone monitoring data that may be interpreted to be representative of air quality on the Rancheria, a designation of unclassified for the Rancheria is justifiable and warranted. The Tribe is aware of the lack in ozone and PM monitoring data within the SJVAB for the foothill region surrounding its jurisdictional boundaries. Air quality on the Rancheria is of great concern to the Tribe and the Tribe will continue with its efforts to reduce harmful ozone precursors and PM emissions on the Rancheria.

6.0 REFERENCES

Analytical Environmental Service, 2011. Land uses within Table Mountain Rancheria, Determined in cooperation with the Tribal Public Works Department and on-site surveys, 2011.

California Air Resource Board (CARB), 2011. Nation and California Ambient Air Quality Standards, Available at: <http://www.arb.ca.gov/research/aaqs/aaqs.htm/>. Accessed February 24, 2012.

California Air Resource Board (CARB), 2012a. Air Quality Data Statistics, Available at: <http://www.arb.ca.gov/adam/>. Accessed on February 3, 2012.

California Air Resource Board (CARB), 2012b. Attainment status, Available at: <http://www.arb.ca.gov/desig/adm/adm.htm>. Accessed on February 6, 2012.

EPA, 2011. Letter from the EPA to the Honorable Edmund G. Brown , Jr. Governor of California, regarding the designation of nonattainment under the 2008 revised NAAQS.

Federal Registry, 2010. National Ambient Air Quality Standard, Ozone, 40 CFR Parts 50 and 58. Vol. 75, No. 11, January 19, 2010.

Fresno Council of Governments (FCG), 2011. 2011 Regional Transportation Plan. Available at: <http://www.fresnocog.org/rtp>. Viewed on February 2, 2012.

San Joaquin Valley Air Pollution Control District (SJVAPCD), 2002. Guide for Assessing and Mitigating Air Quality Impacts. Available at: <http://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI%20Jan%202002%20Rev.pdf> . Viewed on January 31, 2012.

Western Regional Climate Center, 2012. Average wind direction. Available at: <http://www.wrcc.dri.edu/htmlfiles/westwinddir.html>. Viewed on February 3, 2012.

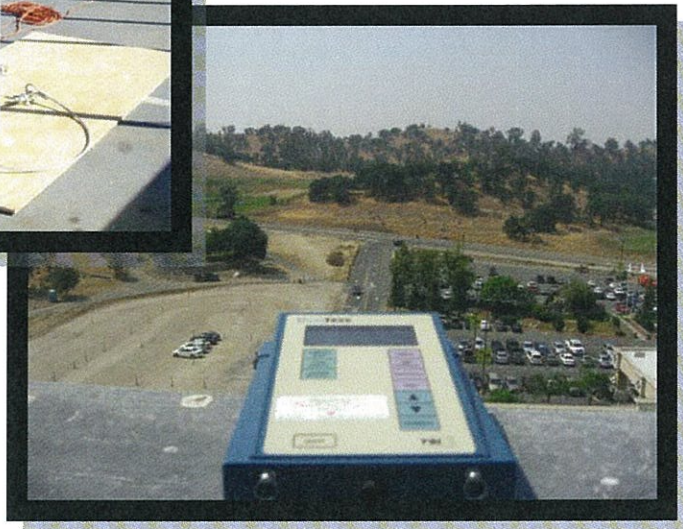
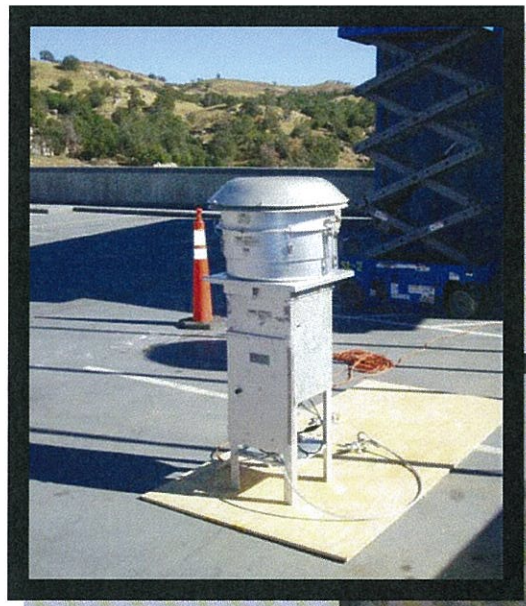
Attachment 1

Preliminary Air Quality Assessment



PRELIMINARY AIR QUALITY ASSESSMENT

AUGUST 2009



PRELIMINARY AIR QUALITY ASSESSMENT

AUGUST, 2009

Prepared for
Table Mountain Rancheria
23736 Sky Harbour Road
Friant, CA 93626



Prepared by
Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811



TABLE OF CONTENTS

TABLE MOUNTAIN RANCHERIA PRELIMINARY AIR QUALITY ASSESSMENT

1.0	INTRODUCTION	1
2.0	METHODOLOGY	12
3.0	EXISTING CONDITIONS.....	21
	June, 2008 Monitoring Event	21
	November, 2008 Monitoring Event.....	21
	February, 2009 Monitoring Event	26
4.0	MONITORING RESULTS	30
	2-Minute Monitoring Results	31
	Particle Identification	34
5.0	SUMMARY AND RECOMMENDATIONS	35

LIST OF FIGURES

Figure 1. Regional Location	2
Figure 2. San Joaquin Air Basin Pollution Transport System	3
Figure 3. Monitoring Site Photos 1 and 2	4
Figure 4. Monitoring Site Photos 3 and 4.....	13
Figure 5. Monitoring Site Photos 5 and 6.....	14
Figure 6. Monitoring Site Photos 7 and 8.....	15
Figure 7. Monitoring Site Photos 9 and 10.....	17
Figure 8. Monitoring Site Photos 11 and 12.....	18
Figure 9. Monitoring Site Photos 13 and 14.....	20
Figure 10. Monitoring Site Photos 15 and 16.....	22
Figure 11. Monitoring Site Photos 17 and 18.....	23
Figure 12. Monitoring Site Photos 19 and 20.....	24
Figure 13. Monitoring Site Photos 21 and 22.....	25
Figure 14. Monitoring Site Photos 23 and 24.....	27
Figure 15. Monitoring Site Photos 25 and 26.....	28

Figure 16. Monitoring Site Photos 27 and 28.....29

LIST OF TABLES

Table 1. National Ambient Air Quality Standards 7
 Table 2. Federal Attainment Status for the SJVAB..... 8
 Table 3. Federal and California Air Monitoring Data 8
 Table 4. 24-Hour PM10 Monitoring Event Results.....30
 Table 5. June, 2008 Monitoring Event, 2-Minute Monitoring Results.....31
 Table 6. November, 2008 Monitoring Event, 2-Minute Monitoring Results33
 Table 7. February, 2009 Monitoring Event, 2-Minute Monitoring Results.....33

APPENDICES

- Appendix A. June, 2008 Monitoring Event Results
- Appendix B. November, 2008 Monitoring Event Results
- Appendix C. February, 2009 Monitoring Event Results

SECTION 1.0

INTRODUCTION

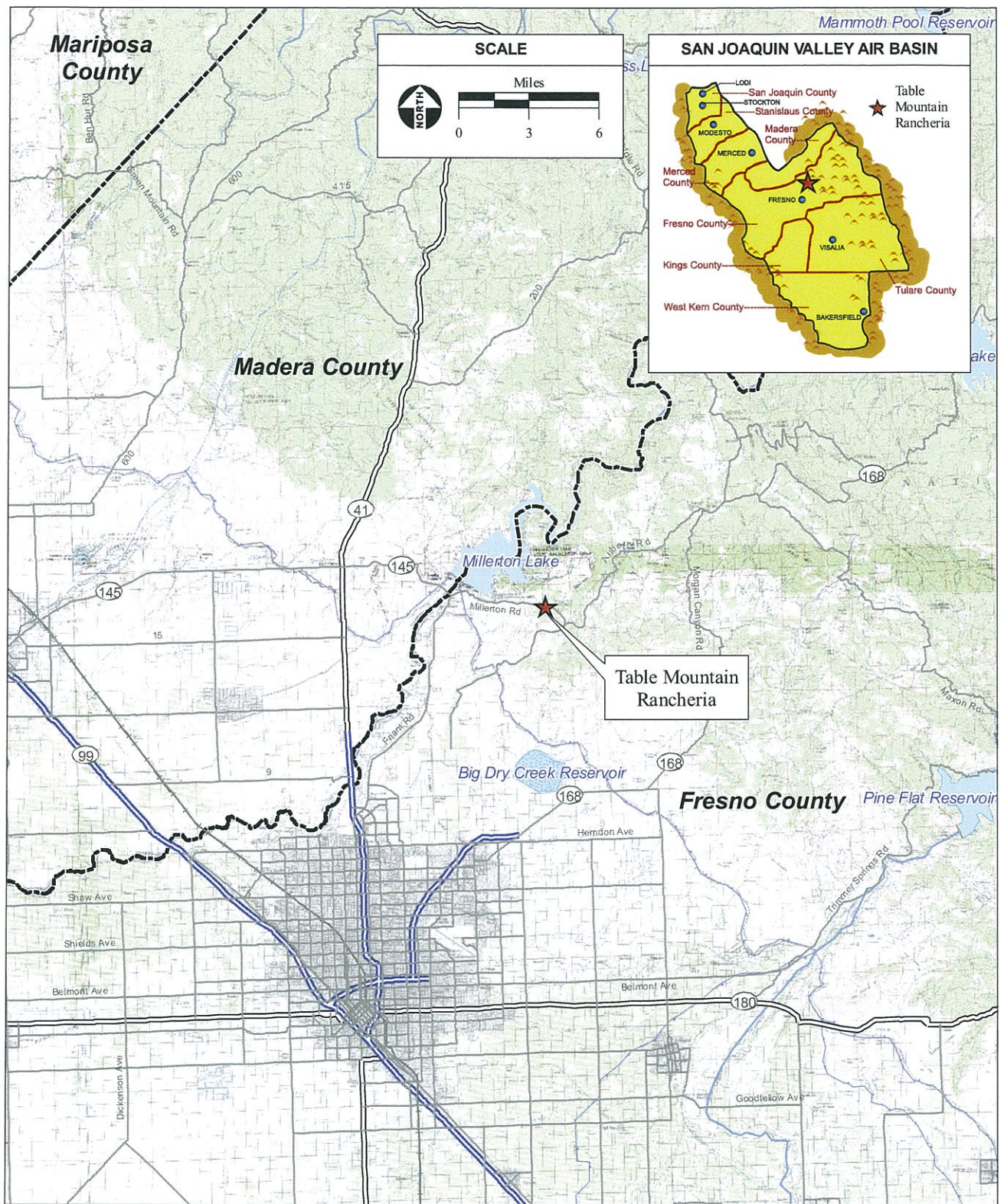
Table Mountain TMR (TMR) has requested that Analytical Environmental Services (AES) assist the Tribe in developing an air quality program for the TMR. The Tribe has expressed interest in the potential for “Treatment as a State” (TAS) by the United States Environmental Protection Agency (EPA) under the Federal Clean Air Act (CAA). Phase I of the air quality program entails determining the appropriate monitoring site to obtain ambient air quality data representative of the TMR and surrounding air basin. Should the Tribe wish to apply for funding to implement their air quality program, this Phase I assessment also serves to establish an appropriate monitoring site for inclusion in a Quality Assurance Project Plan (QAPP).

Regional climate plays a large role in ambient air pollution concentrations. The TMR is located within the San Joaquin Valley Air Basin (SJVAB) (**Figure 1**), under the jurisdiction of the EPA and San Joaquin Valley Air Pollution Control District (SJVAPCD). Winds within the SJVAB can cause air pollutants to be trapped in the foothill canyons where the TMR is located (**Figure 2**). During times of low pressure east of the San Joaquin Valley, winds flow east into the mountain canyon transporting valley contaminants east towards the TMR. These winds, in conjunction with the surrounding topography, provides for the entrapment of pollutants from the San Joaquin Valley in the foothill canyons surrounding the TMR (**Photos 1 and 2 of Figure 3**).

In 1963, the Federal Clean Air Act (CAA) was enacted for the purposes of protecting and enhancing the quality of the nation’s air resources to benefit public health, welfare, and productivity. Basic components of the CAA and its amendments include national ambient air quality standards (NAAQS) for major air pollutants and state implementation plans (SIPs) for states that do not meet NAAQS. The U.S. Environmental Protection Agency (USEPA) is the federal agency responsible for identifying Criteria Air Pollutants (CAPs), establishing NAAQS, and approving and overseeing state and tribal air programs as they relate to the CAA.

CRITERIA AIR POLLUTANTS (CAPS)

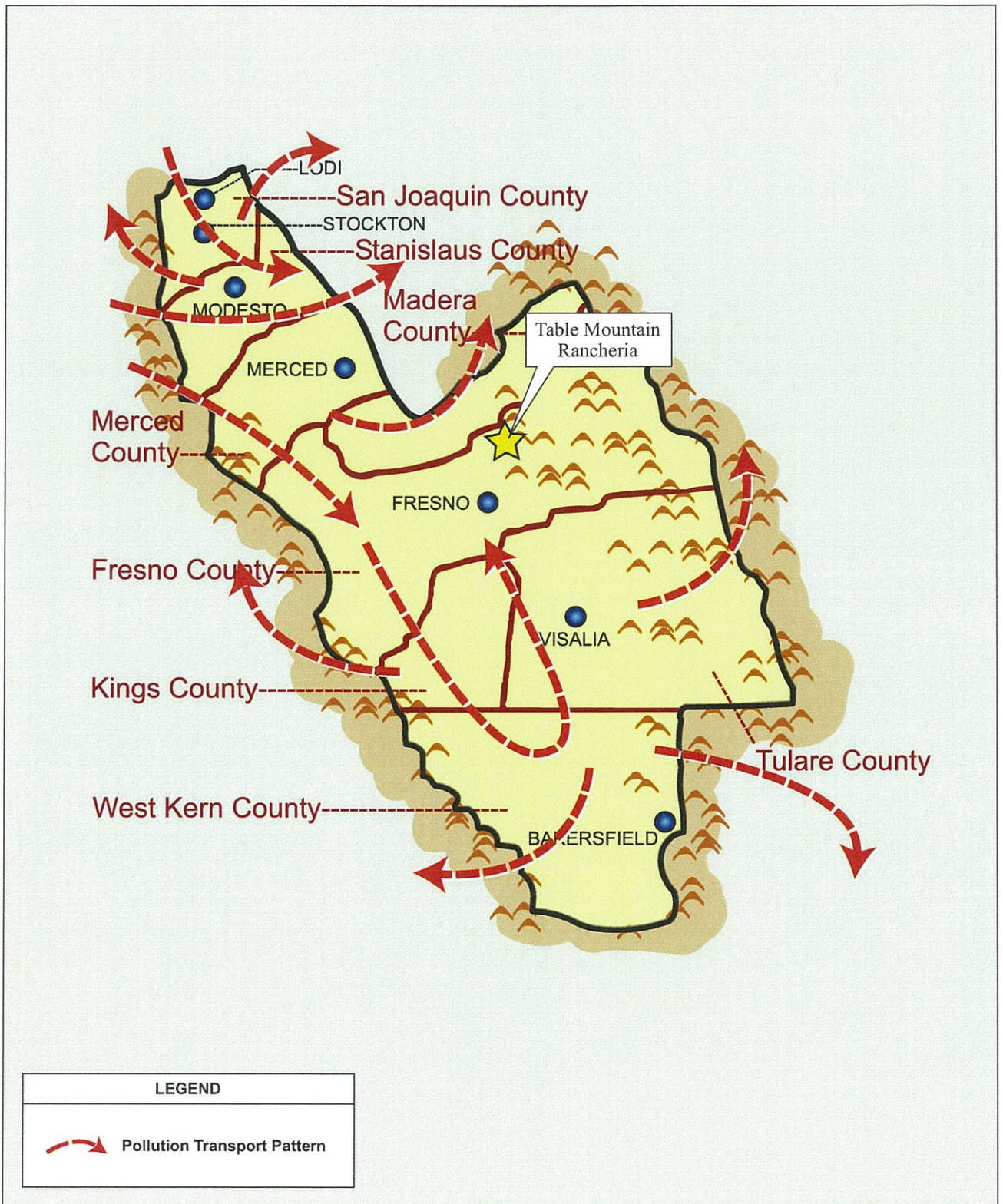
CAPs are air pollutants commonly emitted from a myriad of sources around the country that have been identified as being detrimental to human health, the environment, and property, and are used as general indicators of regional air quality. The EPA has designated six CAPs: ozone (O₃), carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂),



SOURCE: ESRI Data, 2007; San Joaquin Valley APCD, 2009; AES 2009

Table Mountain Air Quality / 208515 ■

Figure 1
Regional Location



SOURCE: San Joaquin Valley APCD, 2009; AES 2009

Table Mountain Air Quality / 208515 ■

Figure 2
San Joaquin Air Basin Pollution Transport System



Photo 1: Valley Corridor, view to the west from the parking garage.



Photo 2: Foothills surrounding the casino, view from Medical Center.

and lead (Pb).

Ozone

Ozone (O₃) is not directly emitted in concentrations of concern. Photochemical reactions (reactions initiated by sunlight) generate ground-level ozone at concentrations that may impact sensitive individuals. Photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_x) resulting from the incomplete combustion of fossil fuels are the largest source of ground-level ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. As a photochemical pollutant, ozone is formed only during daylight hours under appropriate conditions, but is destroyed throughout the day and night. Ozone is considered a regional pollutant, as the reactions forming it take place over time and are often most noticeable downwind from the sources of the emissions.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas formed when carbon in fuel is not fully combusted. In cities, 85- to 95-percent of all CO emissions may come from motor vehicle exhaust. CO is considered a local pollutant because it dissipates quickly. High CO concentrations occur in areas of limited geographic size sometimes referred to as hot spots. Higher levels of CO generally occur in areas with heavy traffic congestion. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

Particulate Matter (PM₁₀ and PM_{2.5})

Particle pollution is a mixture of microscopic solids and liquid droplets suspended in the air as a result of direct emissions from a variety of anthropogenic and natural sources. Commonly referred to as particulate matter, this form of pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, soil or dust particles, and allergens (such as fragments of pollen or mold spores). The size of particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers (µm) in diameter, known as PM₁₀, pose the greatest problems, because they have the potential to deeply penetrate people's lungs. The term PM₁₀ corresponds to any particle less than 10 microns in size. Even smaller particles less than 2.5 µm, known as PM_{2.5}, have the potential to enter the bloodstream. Exposure to such particles can affect both lungs and heart. Larger particles are of less concern, as they are trapped by the body's natural defenses (such as mucus and bifurcating airways) although they can irritate eyes, nose, and throat.

Nitrogen Dioxide

Nitrogen dioxide (NO₂) is a brownish, highly reactive gas present in all urban environments. NO₂ is directly emitted from combustion devices such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily Nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO₂. The combined emissions of NO and NO₂ are referred to as nitrogen oxides (NO_x), and are reported as equivalent NO₂. Because NO₂ is formed and depleted by reactions associated with photochemical smog (ozone), the NO₂ concentration in a particular geographical area may not be representative of the local NO_x emission sources.

Sulfur Oxides and Lead

The standards for sulfur oxides (SO_x) and lead (Pb) are either being met or are unclassified throughout the country. Many of the sources for these CAPs have either been eliminated or that industry standard source pollution control techniques have dramatically reduced emissions. National pollutant trends for SO_x and Pb show that emission levels are on a steady decline.

NATIONAL AMBIENT AIR QUALITY STANDARDS

The established maximum concentrations for the six CAPs are known as NAAQS (**Table 1**). Concentrations above these time-averaged limits are anticipated to cause adverse health effects to sensitive receptors. The CAA established primary and secondary NAAQS. Primary standards set limits to protect public health, while secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. For some of the CAPs, more than one averaging time standard has been identified in order to address the typical exposures found in the environment. The EPA has established violation criteria for each CAP. For example, in order to constitute a violation, the NAAQS for O₃ must be exceeded on more than three days in three consecutive years. On the other hand, if the CO NAAQS is exceeded on more than one day in any given year, a violation has occurred. Refer to **Table 1** for the violation criteria for the various averaging times for each CAP.

The EPA classifies areas throughout the United States based on their compliance status with NAAQS. Areas that meet current NAAQS are subsequently labeled as “attainment” areas. Areas where insufficient data is available to determine attainment status are classified as “unclassified” and are assumed to be in attainment for that pollutant. Areas that do not meet NAAQS are labeled either “nonattainment” or “maintenance” for the CAP for which the area is non-compliant. The EPA further classifies nonattainment areas according to the ability of the region to meet NAAQS for the particular CAP. There are five classes of nonattainment areas: maintenance (recently became compliant with the NAAQS), marginal (relatively easy to obtain levels below the NAAQS), serious, severe, and extreme (will be difficult to reach levels below NAAQS). The CAA uses the classification system to design clean-up requirements appropriate for the severity of the pollution and set realistic deadlines for reaching clean-up goals.

TABLE 1
NATIONAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Symbol	Average Time	Standard (ppm)	Standard (ug/m ³)	Violation Criteria
Ozone	O ₃	8 hours	0.08	N/A	If exceeded on more than 3 days in 3 years
Carbon monoxide	CO	8 hours	9	N/A	If exceeded on more than 1 day per year
		1 hour	35	N/A	If exceeded on more than 1 day per year
Nitrogen dioxide	NO _X	Annual average 1 hour	0.053	100	If exceeded
Sulfur dioxide	SO _X	Annual average	0.03	80	If exceeded
		24 hours	0.14	365	If exceeded on more than 1 day per year
Inhalable particulate matter	PM ₁₀	Annual geometric mean	N/A	N/A	N/A
		Annual arithmetic mean	N/A	50	If exceeded
		24 hours	N/A	150	If exceeded on more than 1 day per year
Fine particulate matter	PM _{2.5}	Annual arithmetic mean	N/A	15	If exceeded
		24 hours	N/A	35	If exceeded on more than 1 day per year
Lead particles	Pb	Calendar quarter	N/A	1.5	If exceeded on more than 1 day per year
		30 days	N/A	60	N/A

SOURCE: EPA, 2006

NOTES: All standards are based on measurements at 25°C and 1 atmosphere pressure.

National standards shown are the primary (health effects) standards.

N/A = not applicable; ppm = parts per million; ug/m³ = micrograms per cubic meter.

Attainment and nonattainment areas are identified through monitoring. Unclassifiable areas are those for which air monitoring has not been conducted but are assumed to be in attainment for the NAAQS. States that contain areas of non-attainment are required to develop a State Implementation Plan (SIP), which outlines policies and procedures designed to bring the state into compliance with the NAAQS. **Table 2** shows the federal attainment status applicable to the SJVAB.

Under the CAA, each state establishes a statewide air pollution control program. In California the statewide air pollution control program is implemented by the California Air Resource Board (CARB). Under the CCA, CARB can designate regional air quality management district's (AQMDs), which implement portions of the statewide air pollution control program. CARB is responsible for submittal of air quality attainment plans, which is developed by the air quality

management district's, to the EPA. In the SJVAB the AQMD is the San Joaquin Valley Air Pollution Control District (SJVAPCD).

TABLE 2
FEDERAL ATTAINMENT STATUS FOR THE SJVAB

Pollutants	Designation
Ozone 8-hour	Nonattainment/Serious
PM ₁₀	Attainment ¹
PM _{2.5}	Nonattainment
Carbon Monoxide	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified
Sulfur Dioxide	Attainment/Unclassified
Lead	No Designation/Classification

¹ On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM₁₀ National Ambient Air Quality Standard (NAAQS) and approved the PM₁₀ Maintenance Plan.

Source: San Joaquin Air Pollution Control District, 2009.

Ambient air quality data is collected by CARB and the SJVAPCD through a network of air monitoring stations located throughout the SJVAB. This data is used by the EPA to determine the attainment status of an air basin or portion(s) of an air basin. **Table 3** provides a three-year summary listing the highest annual concentrations of air pollutant, which are designated nonattainment observed at the Clovis-N Villa Avenue monitoring station. This station was selected because of its relative proximity to the TMR.

TABLE 3
FEDERAL AND CALIFORNIA AIR MONITORING DATA

Pollutant	Standard	2006	2007	2008
Ozone California 1-hour:				
Highest	0.09 ppm	0.127	0.121	0.156
Days Exceeded		37	14	24
Ozone Federal 8-hour:				
Highest	0.07 ppm	0.096	0.101	0.127
Days Exceeded		51	30	32
Ozone California 8-hour:				
Highest	0.07 ppm	0.097	0.102	0.128
Days Exceeded		66	58	43
PM₁₀ 24-hour California:				
Highest	50 ug/m ³	106	111	79
Days Exceeded		12	8	13
PM_{2.5} Federal 24-hour:				
Highest	35 ug/m ³	65.8	64.7	49.7

Days Exceeded		9	15	5
PM_{2.5} California,24-hour:				
Highest	35 ug/m ³	65.8	91.0	95.3
Days Exceeded		*	*	*

* Data not available.

Source: California Air Resource Board, 2008.

Recently the SJVAPCD was granted re-designation by EPA to attainment for PM₁₀. The SJVAB air quality is changing and on-site air quality monitoring at the TMR would allow the Tribe to be involved in the extent of environmental limitations placed on the surrounding areas. These environmental limitations impact air quality on and in the region of the TMR.

TREATMENT IN THE SAME MANNER AS A STATE

Under 40 CFR Part 70 and 71 a federally-recognized tribe has the right to establish Tribal air quality standards, issue an authority to construct (ATC) and permits to operate (PTO) emission sources, and conduct business in accordance with the rights guaranteed to states under the CAA, providing the Tribe can demonstrate the ability to govern air quality in accordance with provisions at least as stringent as the CAA. These rights are commonly referred to as Treatment as a State (TAS). To qualify for TAS designation, the Tribe would need to provide the EPA with a working air quality program as required under 40 CFR 70.4 and provide the necessary documentation that the air quality program can be administered and is enforceable as required under 40 CFR 71.10.

The 1990 CAA Amendments authorized EPA to “treat tribes in the same manner as states” for purposes of developing, administering, and enforcing air quality regulations within reservation boundaries, irrespective of land ownership (42 USC § 7601(d)(2)(B)). In doing so, Congress recognized the inherent sovereignty of tribes with respect to their land and members. Congress also delegated to the tribes regulatory authority over nonmembers operating on land within reservation boundaries.

Pursuant to the CAA, in March 1998, EPA promulgated its tribal authority rule, specifying requirements for tribal eligibility to administer air programs (40 CFR 49). To be eligible, a tribe must apply to the EPA regional administrator and demonstrate that it is “reasonably” capable of administering its program in a manner consistent with the terms and purposes of the CAA. Tribes may develop a full tribal implementation plan (TIP) and seek authority to carry out all the functions that states perform under the act, but they are not required to do so. EPA’s regulations allow tribes to assume primacy over a subset of regulatory functions and to expand their authority gradually. EPA also has the flexibility to alter deadlines for plan submittal and other regulatory requirements.

The following is a list of initial requirements provided under 40 CFR 49.6 for a tribe to be TAS:

- a) The applicant is an Indian tribe recognized by the Secretary of the Interior;
- b) The Indian tribe has a governing body carrying out substantial governmental duties and functions;
- c) The functions to be exercised by the Indian tribe pertain to the management and protection of air resources within the exterior boundaries of the reservation or other areas within the tribe's jurisdiction
- d) The Indian tribe is reasonably expected to be capable, in the EPA Regional Administrator's judgment, of carrying out the functions to be exercised in a manner consistent with the terms and purposes of the Clean Air Act and all applicable regulations. .

Completing steps a) and b) under 40 CFR 49.6 would consist of providing the EPA with a statement that the tribe is a federally recognized tribe and a statement that the tribe has a governing body that carries out substantial tribal governmental duties. Completion of steps c) and d) would consist of the tribe determining which elements of the CCA the tribe would be responsible for implementing. This could be a task that is not very involved, such as priority to review of Title V permits issued within 50 miles of the Tribe's reservation or it could be as encompassing a creating an air quality implementation plan for TMR to meet the NAAQS. Step c) provides the Tribe with the freedom to decide what the Tribe wants to control with respect to its surrounding air quality. Step d) requires a statement of how the Tribe is reasonable capable to carry out the task(s) that are described under step c).

Advantages to the Tribe

Under Section 105 of the CAA, if the Tribe applies for and is granted TAS than the Tribe would be guaranteed future funding for their any air program outline under step c) and d) of the application process.

A designation of TAS could have the following beneficial effects for the Tribe:

- It would requires major sources of air pollutants (sources which produce 100 ton per year of any single criteria pollutant) within 50 miles of the Reservation to notify the Tribe, in the same manner states are notified, when these sources of air pollution are proposed or modified. This gives the Tribe the ability to comment formally as a sovereign entity.
- Regional air permit holders within 50 miles of the Reservation will have their air permit applications reviewed by tribal officials. The Tribe's concerns will carry the same weight with regulators as those of a state.

- The Tribe has the potential to create a Tribal Implementation Plan (TIP) that would include emissions limits, registration permitting program that would cover outdoor burning.
- The Tribe would have the potential to permit emission sources on reservation land.
- The Tribe could regulate air quality on lands within the boundaries of reservation land that is owned in fee by non-tribal members.
- The Tribe may re-designate reservation lands to protect reservation air quality against trans-boundary air pollution from upwind sources through construction permits for specified new sources and source modifications

The above are just a few of the beneficial effects that the Tribe would have if TAS under 40 CFR 71.

Disadvantage to the Tribe

The disadvantages to the Tribe if the EPA granted TAS would include, but not limited, to increased staff to perform such duties as permit enforcement, air monitoring, office work, and general oversight of the program. Although portions of the cost of developing an air quality program would be off-set by Section 105 grants; the Tribe would be required to financially commit to funding the program. Costs attributed to the implementing and sustaining an air quality program include staff salaries, training, and equipment purchase and maintenance.

Full TAS implementation would require the Tribe to develop a Tribal implementation plan to achieve attainment status on the TMR for NAAQS. The CAA requires states to develop implementation plans for areas that do not meet these standards. If the Tribe decides to achieve the highest level of TAS, the Tribe would be required to develop an implementation plan to meet these standards. This plan would include emission reduction goals that the Tribe would be required to meet. This has the potential to limit construction and operation of future developments, or at least dramatically increase the cost of construction and operation of future developments. However, this comes with full TAS, which is neither required nor foreseeable for the Tribe and it should be noted that the Tribe can choose which sections of the CAA for TAS designation.

SECTION 2.0

MONITORING METHODOLOGY

MONITORING SITE

AES visited the TMR on May 7th, 2008, to view potential monitoring sites and determine which site would have greatest potential for obtaining air quality monitoring data, which would be representative of regional and local air quality. Ideally the site would be located in the path of pollutant transport (refer to **Figure 2**), have 360 degree line of sight, minimal interference from direct emission sources, access to electricity, and be beneficial to the goals of the Tribe. Two sites were determined to satisfy the criteria, the 8th floor of the casino parking garage and the medical building located on the upper TMR, these sites are discussed below:

Casino Parking Garage

The casino parking garage and the foothills surrounding the lower TMR are shown in **Photo 3 of Figure 4**. As mentioned above, the 8th floor of the casino parking garage has several potential monitoring sites. The following is a list of potential monitoring sites on the 8th floor of the casino parking garage that were considered:

- Elevator shaft
- Northwest area
- Southeast corner
- Southeast corner (radio room)

Photo 4 of Figure 4 shows the elevator shaft tower on the 8th floor of the parking garage. This location has electrical access; however, limited physical access and high winds could potential damage the equipment. **Photo 5 of Figure 5** shows the northwest area of the top floor of the parking garage, this potential monitoring site has limited electrical access and no visible video access. The northwest area may be influenced by the kitchen and parking garage exhaust systems (**Photo 6 of Figure 5**). The southwest corner of the parking garage was surveyed as a potential monitoring site; however, this site would be influenced by multiply emission sources, such as backup generators (**Photo 7 of Figure 6**) and air conditioning units directly below the parking garage ledge (**Photo 8 of Figure 6**) and has limited electrical access and no visible video access. The above sites would either have limited physical access, limited electrical access, or emission

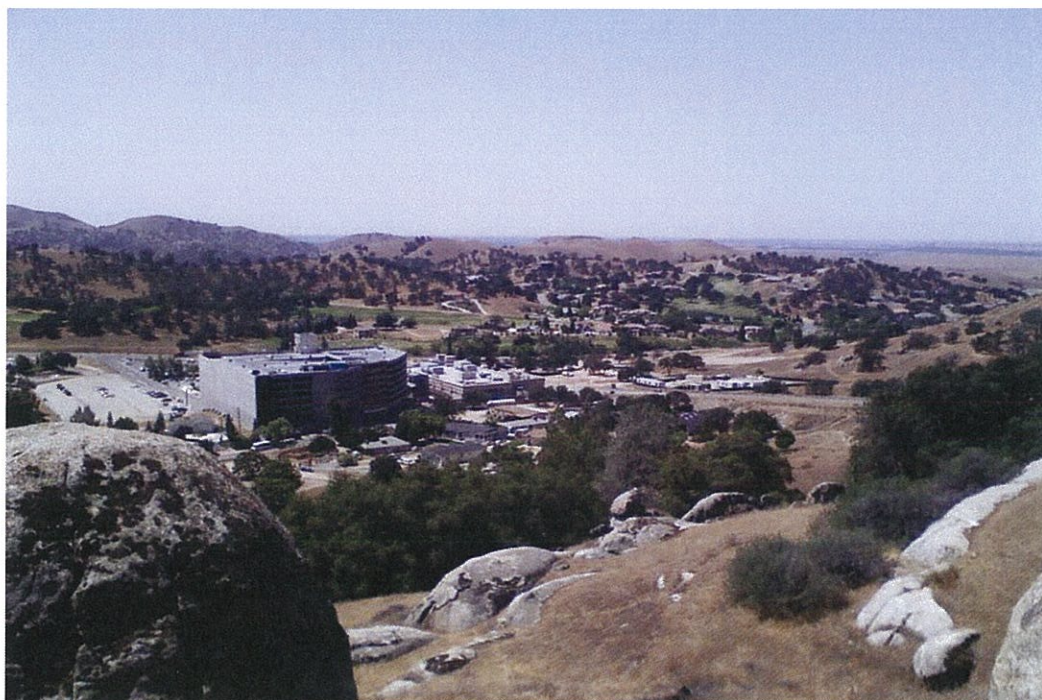


PHOTO 3: Foothills, View to the east from the parking garage.



PHOTO 4: Elevator shaft tower on south side of casino parking garage, view to the east from the communications building



PHOTO 5: Top floor of the casino parking garage, garage and kitchen exhaust, view to the north from the communications building



PHOTO 6: Kitchen and casino parking garage exhaust systems on the north of the top floor.

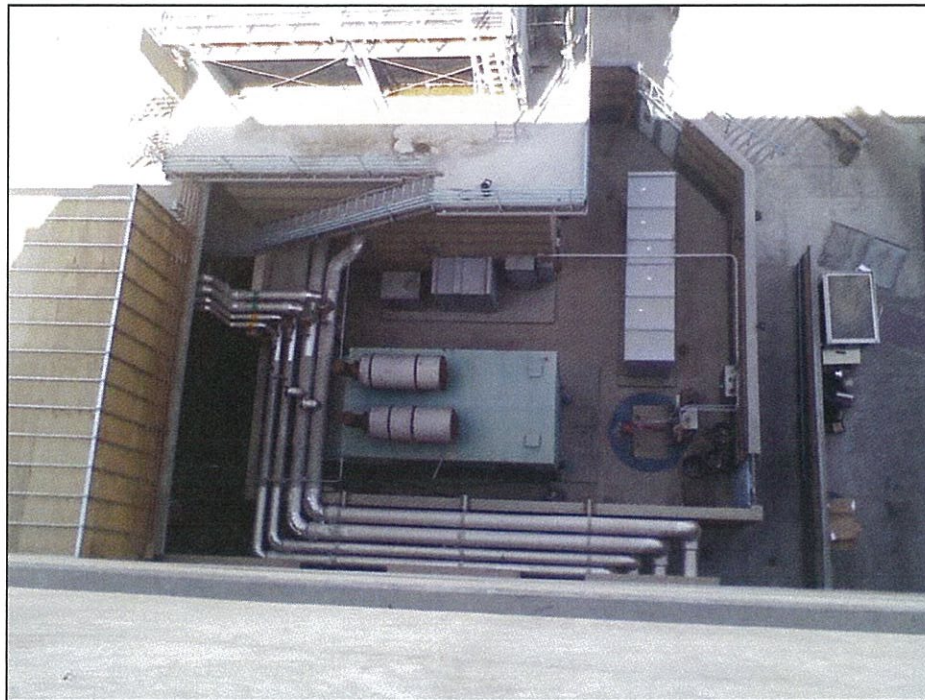


PHOTO 7: Backup generator on the west side of the casino parking garage.



PHOTO 8: Air conditioning unit on the southwest side of the parking garage.

sources that would directly influence air monitoring; therefore, these sites were determined not to be suitable.

The southeast corner of the top floor of parking garage has a communications room (**Photo 9 of Figure 7**). There are several communication arrays and a video monitoring camera on the roof. Electrical power can be accessed from the communication room. The roof top is shielded from direct wind by the elevator shaft (refer to **Photo 4 of Figure 4**) and is positioned with a direct line of sight to the San Joaquin Valley (refer to **Photo 1 of Figure 1**). Emission sources surrounding the communications room are the currently paved parking lot (the parking lot was paved shortly after this photo was taken) at ground level adjacent to the southeast corner of the parking garage (**Photo 10 of Figure 7**) and vehicles parking on the top floor of the parking garage. However, the height of the parking garage allows for substantial mixing of pollutants that would originate from the ground level adjacent paved parking lot and the 8th floor of the garage is used only on weekends and during special events. If this location is chosen it should be noted that it may be necessary to block off adjacent parking spaces surrounding the communication room. This would allow for dispersion of vehicle emissions so as not to influence monitoring.

Upper TMR – Medical Building

The southeast roof of the medical building which is situated on the upper portion of the TMR was evaluated as a potential monitoring site (**Photo 11 of Figure 8**). The medical building has electrical access; however, no video system was located. There are no emission sources surrounding the medical building that would directly influence monitoring.

The medical building is approximately 300 feet higher in elevation than the casino and would not be influenced by the lower TMR (casino) (**Photo 12 of Figure 8**). The topography surrounding the upper TMR is open to Millerton Lake and the San Joaquin Valley. The medical building site would give a representative account of the ambient air quality in an area not influenced by the casino emissions, roadways emissions, or pollutant transport into the foothill canyons.

Other Potential Monitoring Sites

Other potential monitoring sites are the eastern portion of the TMR and the residential houses located near Auberry Road and Millerton Road. The eastern TMR is isolated from pollutants that are transported from the valley, does not have adequate structures to accommodate air monitoring equipment, and does not have electrical access. The residential structures have electrical access; however, the distance from the lower and upper TMR and the mobile emissions along Auberry Road would not adequately represent the TMR's air quality.

Recommended Site

Based on the results of the site reconnaissance it was recommended that preliminary air quality



PHOTO 9: Communication building on the southeast corner of the casino parking garage.



PHOTO 12: Unpaved parking lot at the east end of the parking garage.



PHOTO 11: South face of the medical building on the upper Rancheria.

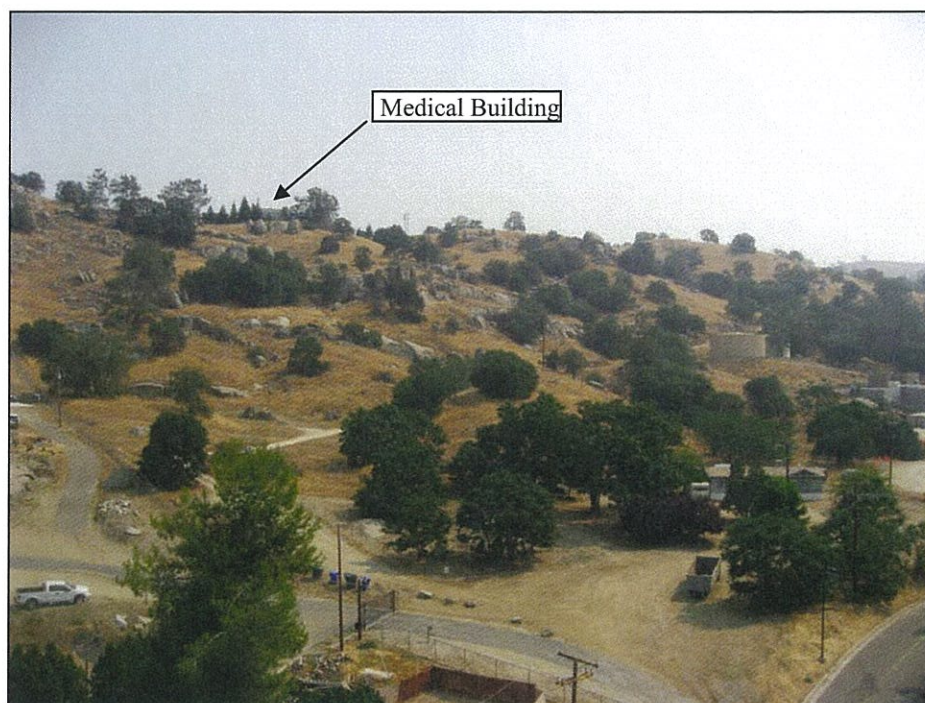


PHOTO 12: Upper Rancheria, view to the north from the parking garage.

monitoring be conducted at the southeast corner on the top floor of the casino parking garage, near the communications room. This is the preferred site based on:

- The location of the parking garage located on the lower TMR in relation to the air basin and potential contaminant pathways from the San Joaquin Valley to the west;
- The location of the parking garage within the center of major Tribal operations ensures the data will be representative of TMR/Basin air quality and defensible for use as baseline conditions;
- The location of the communications building on the 8th floor of the parking garage, which minimizes the potential for the monitoring station to be influenced from direct sources; and
- The access to electricity and security video cameras.

AIR QUALITY MONITORING

The assessment of the monitoring site entailed performing both continuous and direct read sampling for PM₁₀. Because combustion (vehicle emissions, generator operation, and venting of the restaurant facilities) and land disturbance are the major sources of air quality emissions near the parking structure, PM₁₀ results would be representative of other CAPS generated on the TMR. Continuous, 24-hour monitoring for PM₁₀ was conducted to determine ambient air monitoring conditions on the 8th floor of the parking garage and suitability of using the site to determine baseline air quality conditions for the TMR. A hand-held laser particulate counter was also used to collect direct PM₁₀ readings during the continuous monitoring to determine if emission sources near the parking garage have the potential to impact results. The air quality 24-hour PM₁₀ monitoring events were conducted in accordance with protocols outlined in 40 CFR Part 50 Appendix J, *Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere*. PM₁₀ is the criteria pollutant preferred by the EPA to be sampled when conducting an initial monitoring site assessment.

Monitoring Equipment

A Tisch PM₁₀ monitor model TE-6001 with a flow rate of 40 cubic feet per minute (cfm) was used to monitor 24-hour PM₁₀ concentrations on the TMR (**Photo 13 of Figure 9**). The Tisch PM₁₀ monitor and the selected flow rate of 40 cfm are consistent with monitoring protocols outlined in 40 CFR Part 50 Appendix J. Two-minute PM₁₀ monitoring events were conducted using a TSI, Dust Trak™ model 8520 aerosol particulate monitor (**Photo 14 of Figure 9**). Both instruments were calibrated before and after measurements were collected.



PHOTO 13: Tish, model TE-6001 PM₁₀ hi-volume monitor.



PHOTO 14: TSI DustTrak™ 8520 Aerosol Particulate Monitor.

SECTION 3.0

EXISTING CONDITIONS

JUNE, 2008 MONITORING EVENTS

The first set of monitoring events were performed on June 23 and 25, 2008. On the first day of monitoring the wind speed was approximately 10-15 miles per hour, with the temperature in the high 80's, moderate levels of smoke was present, which resulted in moderate visibility. During the June, 2008 monitoring event, California experienced a high rate of large-scale forest fires. The smoke from these fires was highly visible within the San Joaquin Valley and TMR. On the second day of monitoring winds increased to 15 to 20 miles per hour, with temperatures in the low 80's and low visibility due to smoke.

Photo 15 of Figure 10 shows the smoke that was present in the lower San Joaquin Valley on June 24, 2008; visibility was approximately 5 miles as viewed from the monitoring site. **Photo 16 of Figure 10** shows smoke present in the San Joaquin Valley and the hazy surrounding the casino on June 27, 2008, visibility is approximately 2 miles as viewed from the monitoring site. The smoke was transported up the mountain canyon and was trapped by the mountains surrounding the casino. This is an excellent illustration of how pollutants from industry and farming activities in the San Joaquin Valley are transported up mountain canyons and collect in mountain bowls, such as the one that Table Mountain casino is situated in (see **Photo 3 of Figure 4**). **Photos 17 and 18 of Figures 11** show the view looking east from the monitoring site on June 27, 2008, note how much smoke from the valley has accumulated due to transport from the San Joaquin Valley floor. **Photo 19 of Figure 12** shows a southern view from the monitoring site, which further illustrates how pollutants are trapped in the mountain bowl.

NOVEMBER, 2008 MONITORING EVENTS

The second monitoring events were performed on November 17 and 20, 2008. On the first day of the monitoring the wind speed was approximately 0-3 miles per hour, with the temperature in the high 70's. It was a sunny clear day; visibility was approximately 10 miles, with slight valley haze. The meteorological condition on the second day of monitoring was similar to the first day.

Photos 21 and 22 of Figure 13 show slight haze present in the lower San Joaquin Valley, while the area surrounding the monitoring site was clear on November 17, 2008, note visibility is

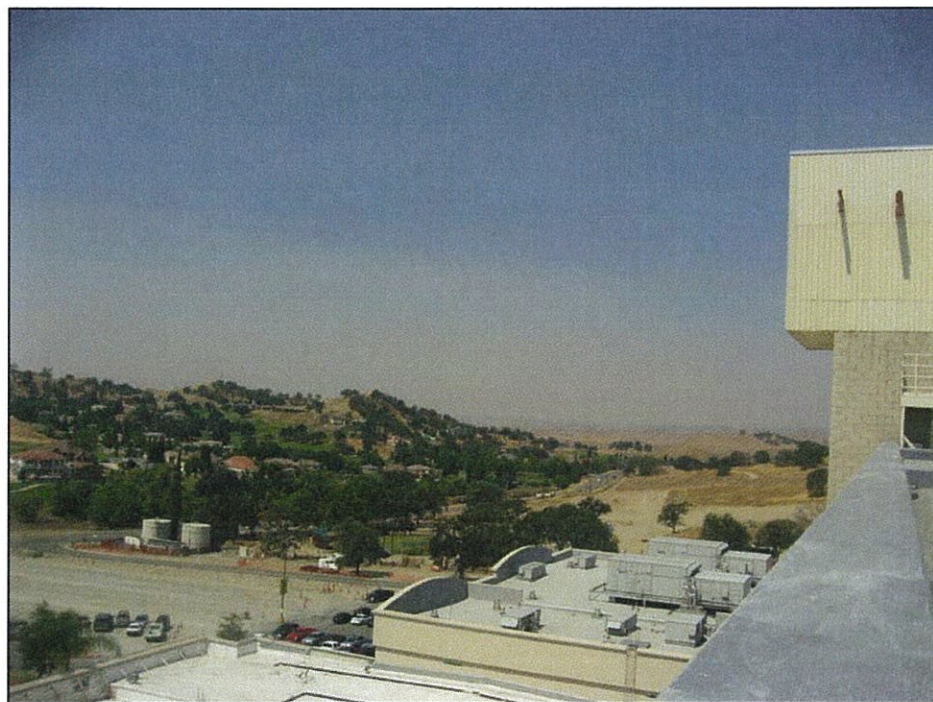


Figure 15: Visibility from Monitoring Site, June 24, 2008.

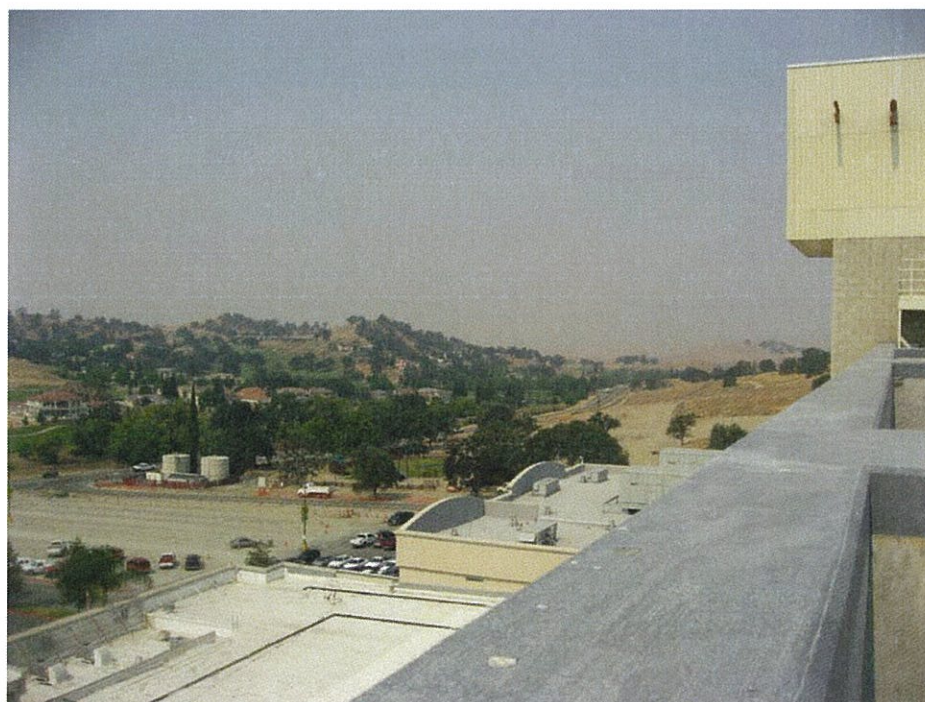


Figure 16: Visibility from Monitoring Site, June 27, 2008



Figure 17: Eastern View from Monitoring Site, June 24, 2008.

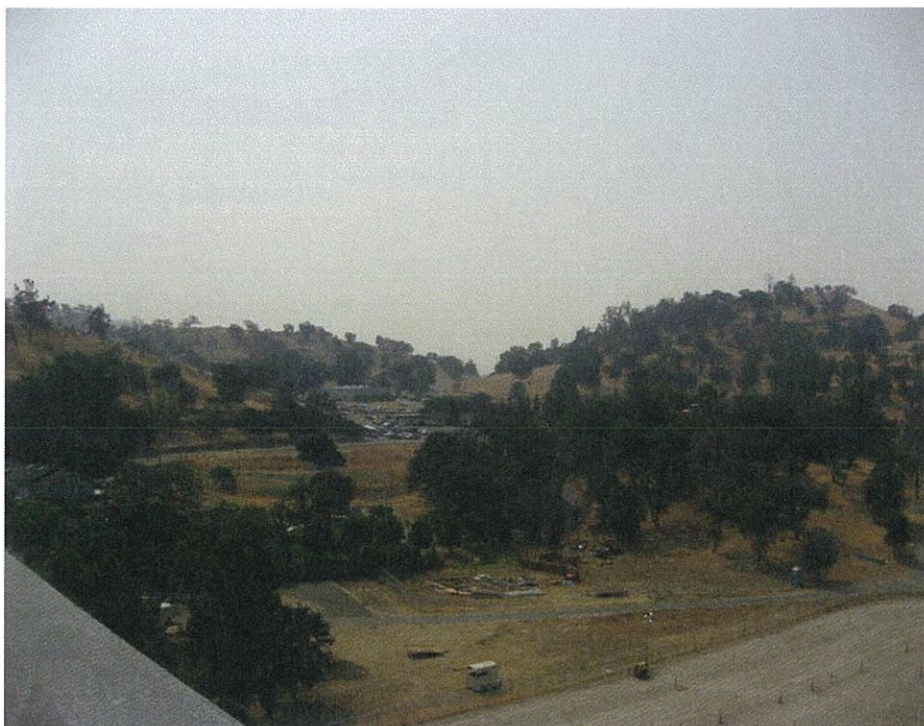


Figure 18: Eastern View from Monitoring Site, June 27, 2008.



Figure 19: Southern View from Monitoring Site, June 27, 2008.

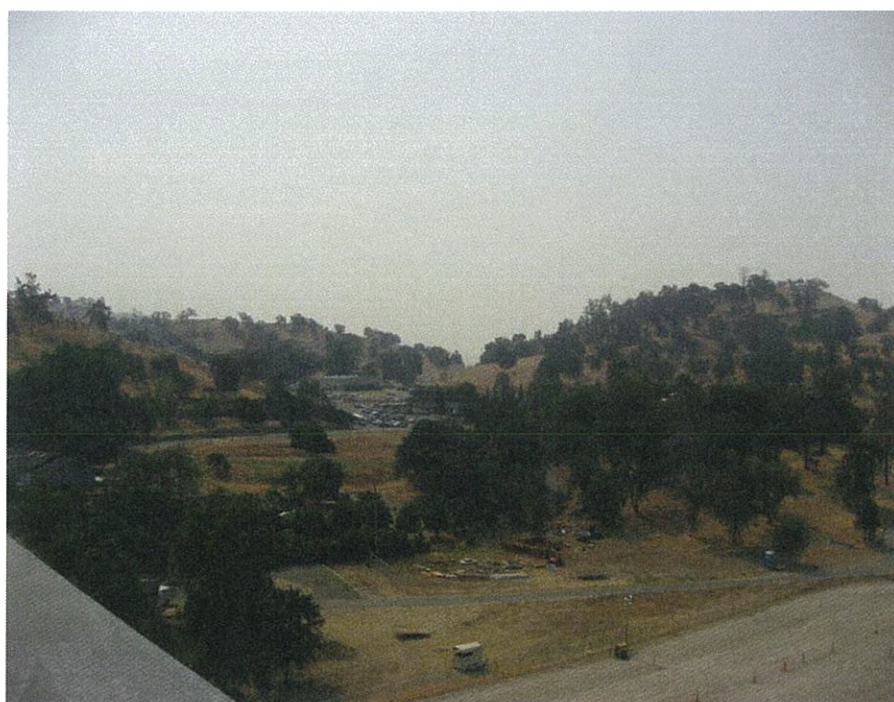


Figure 20: Eastern View from Monitoring Site, June 27, 2008.



Figure 21: Southern View from Monitoring Site, November 17, 2008.



Figure 22: Eastern View from Monitoring Site, November 17, 2008.

approximately 7 miles. **Photos 23 and 24 of Figure 14** show the north and northeastern view from the monitoring site were clear on November 17, 2008. **Photo 25 of Figure 15** shows the eastern view from the monitoring site on November 17, 2008; the photo shows some haze in the mountain pass. **Photo 26 of Figure 15** shows the southwestern view of the San Joaquin Valley floor on November 20, 2008. Haze in the valley increased since the first monitoring day; however visibility was approximately 7 miles and it was clear in the vicinity of the monitoring site. **Photo 27 of Figure 16** shows the backup generators that Table Mountain Casino tests monthly. On the second day of monitoring the backup generators were operated for approximately 0.5 hours each. The generators are located on the west side of the parking garage at ground level. **Photo 28 of Figures 16** shows the view looking west from the intersection of Routes 41 and 145. The intersection is located in the San Joaquin Valley and provides a view of the haze that so often drapes the San Joaquin Valley and is transported up into the mountain canyons.

FEBRUARY, 2009 MONITORING EVENT

Precipitation occurred in the SJVAB for several days prior to the third monitoring event on February 12, 2009. On the day that monitoring started, the sky was mostly clear with some high clouds and there was no detectable wind. Heavy precipitation occurred on the second day of monitoring with 5 to 10 mph winds and temperature in the high 50's. No Dusttrak readings were performed on the second day due to inclement weather.



Figure 23: Northeastern view from Monitoring Site, November 17, 2008.

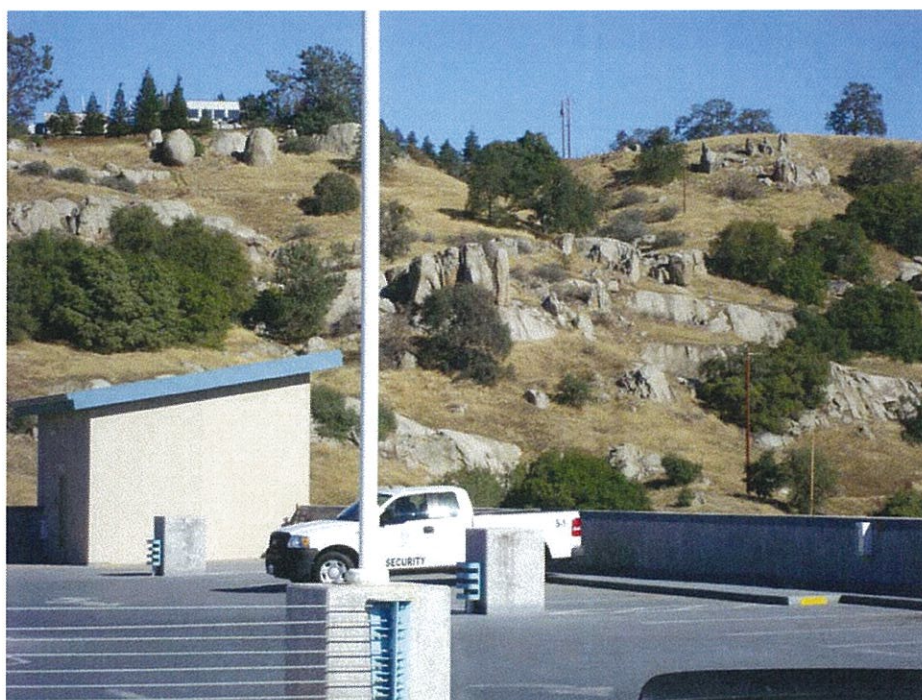


Figure 24: Northeastern View from Monitoring Site, November 17, 2008.



Figure 25: Eastern view from Monitoring Site, November 17, 2008.



Figure 26: Southwestern view from Monitoring Site, November 20, 2008.



Figure 27: View of backup generators, November 20, 2008.



Figure 28: Western view of SJV floor at the intersection of Routes 41 and 145, November 21, 2008.

SECTION 4.0

MONITORING RESULTS

Table 4 shows the results of the June, November, and February 24-hour monitoring events. The June 24-hour monitoring results are not consistent with the 2-minute monitoring results, due to excessive smoke particulate in the air at the time of the monitoring event. If the monitoring filter gets clogged with large particles it slows the flow of air through the filter, resulting in less PM₁₀ particles trapped in the filter; thus, the results are diminished, as confirmed by the 2-minute monitoring events.

TABLE 4
24-HOUR PM₁₀ MONITORING EVENT RESULTS

Location	Start	End	Flow (CFM)	PM ₁₀ (µg/m ³)
	Date-Time	Date-Time		
TMR Casino Garage	6/23/2008-11:40 AM	6/24/2008-11:40 AM	40	47.0
TMR Casino Garage	6/26/2008-10:20 AM	6/27/2008-10:20 AM	40	68.0
TMR Casino Garage	11/17/2008-10:55 AM	11/18/2008-10:55 AM	40	7.2
TMR Casino Garage	11/20/2008-11:11 AM	11/21/2008-11:11 AM	40	44.0
TMR Casino Garage	2/12/2009-9:40 AM	2/13/2009-9:40 AM	40	*

* No data available due to laboratory error.
Source: AES, 2008.

The SJVAPCD and EPA provide special exception when determining the ambient air quality during an event such as a fire, which may raise the ambient air quality above federal and California standards. During these events the SJVAPCD and the EPA do not use the monitoring data to determine if a violation occurred. As shown in **Table 4**, the results of the 24-hour monitoring event did not yield PM₁₀ in an amount that would exceed the federal standard of 150 µg/m³. The 6/26/2008 monitoring event yielded PM₁₀ levels that did exceed the state standard of 50 µg/m³. The 2/12/2008 monitoring event did not yield any results due to laboratory error; however, the composition of the particulate matter from the 2/12/2008 monitoring event is discussed below. PM₁₀ monitoring was performed using a Tish PM₁₀ Model 6000 monitor (refer to **Photo 13** of **Figure 9**). The particulate matter trapped by the filters was analyzed for content by Forensic Analytical Laboratories, Hayward, California. The results are provided in **Attachment A**.

TWO-MINUTE MONITORING EVENTS

The results of the 2-minute monitoring events are more indicative of the ambient air quality at the time of monitoring. The 2-minute monitoring events were performed during the daytime when activities around the monitored sites were greatest. Activities such as vehicles entering and leaving the casino property, construction, cooking, air conditioning use, and landscape maintenance, contribute to the ambient PM₁₀ concentration. The above activities generally do not occur at night and this coupled with the colder temperatures at night, which causes water vapor to condensate decreases PM₁₀ in the air. Therefore, the 24-hour average of PM₁₀ is significantly lower than the daytime 2-minute monitoring events due to averaging time.

On the first day of monitoring, of the June monitoring event, the results showed a range of 170 $\mu\text{g}/\text{m}^3$ to 200 $\mu\text{g}/\text{m}^3$ at the casino and 260 $\mu\text{g}/\text{m}^3$ to 280 $\mu\text{g}/\text{m}^3$ in the San Joaquin Valley (Table 5). On the second day of monitoring the results showed a range of 260 to 290 at the casino, no monitoring was performed in the San Joaquin Valley. The results of the third day monitoring showed a decrease in PM₁₀ at the casino and in the San Joaquin Valley. This would be consistent with the transport of pollutants from the San Joaquin Valley floor up the foothill canyons.

Table 5. First Monitoring Event, 2-Minute Monitoring Results

Date	Monitoring Locations	PM ₁₀ ($\mu\text{g}/\text{m}^3$)
6/24/2008	south parapit ledge adjacent to radio room	188
6/24/2008	south parapit, southwest corner of garage	184
6/24/2008	northwest parapit wall, adjacent to cooling tower	216
6/24/2008	north parapit wall, west of kitchen vents	188
6/24/2008	north parapit, adjacent to kitchen vent	189
6/24/2008	adjacent to kitchen vent	221
6/24/2008	east parapit wall adjacent to construction	175
6/24/2008	east parapit wall adjacent to radio room	187
6/24/2008	center of parking level, southeast light post	182
6/24/2008	south east garage vent, north of radio room	158
6/24/2008	7th floor covered parking bottom of ramp	188
6/24/2008	7th floor, southeast side	200
6/24/2008	Millerton and Friant Road	286
6/24/2008	Highway 99, Exit 161	268
6/26/2008	south parapit ledge adjacent to radio room	254
6/26/2008	south parapit, southwest corner of garage	252
6/26/2008	northwest parapit wall, adjacent to cooling tower	244
6/26/2008	north parapit wall, west of kitchen vents	237
6/26/2008	north parapit, adjacent to kitchen vent	245

Date	Monitoring Locations	PM ₁₀ (µg/m ³)
6/26/2008	Adjacent to kitchen vent	290
6/26/2008	east parapit wall adjacent to construction	260
6/26/2008	east parapit wall adjacent to radio room	249
6/26/2008	center of parking level, southeast light post	241
6/26/2008	south east garage vent, north of radio room	246
6/26/2008	7th floor covered parking bottom of ramp	240
6/26/2008	7th floor, southeast side	243
6/27/2008	south parapit ledge adjacent to radio room	213
6/27/2008	south parapit, southwest corner of garage	223
6/27/2008	northwest parapit wall, adjacent to cooling tower	207
6/27/2008	adjacent to kitchen vent	209
6/27/2008	east parapit wall adjacent to construction	216
6/27/2008	east parapit wall adjacent to radio room	202
6/27/2008	center of parking level, southeast light post	200
6/27/2008	south east garage vent, north of radio room	201
6/27/2008	7th floor covered parking bottom of ramp	211
6/27/2008	7th floor, southeast side	214
6/27/2008	Millerton and Friant Road	225
6/27/2008	Highway 99, Exit 161	387

Monitoring data sheet are provided in Attachment A.
Source: AES, 2008.

The first day of the November monitoring event, showed a decrease in PM₁₀ from the June monitoring event (Table 6). The November monitoring event took place in early winter when the ambient temperature was still warm (approximately 70 degrees Fahrenheit); therefore, wood stoves were not yet in use. Wood stove use is a significant contributor to the ambient PM₁₀ concentration during the winter. The fires which created smoke during the June monitoring event were not present. The clear skies surrounding the casino are an indication of these physical conditions (refer to Photos 21 of Figure 13). Although the monitor reading were not as high as the readings from the first monitoring event, the readings are still considered high, all in excess of the California standard and some in excess of the federal standard. This can be attributed to the lack of rain in the region. When a region is arid for any significant length of time winds can cause small dust particles to become and stay airborne.

Table 6. November Monitoring Event, 2-Minute Monitoring Results

Date	Monitoring Locations	PM ₁₀ (µg/m ³)
11/21/2008	Intersection of Millerton Road and Friant Road, near Friant Dam	140
11/21/2008	Ground-level parking south of casino	161
11/21/2008	Garage level 8, south adjacent to communication room	152
11/21/2008	Garage level 8, southern ledge, southwest corner	159
11/21/2008	Garage level 8, western ledge, southern corner	156
11/21/2008	Garage level 8, western ledge, northern corner	153
11/21/2008	Garage level 8, adjacent to kitchen vent	155
11/21/2008	Garage level 8, eastern ledge adjacent to stairwell terrace	135
11/21/2008	Garage level 8, eastern ledge adjacent to communication room	134
11/21/2008	Garage level 8, center of ramp leading from level 7	150
11/21/2008	Garage level 7, bottom of ramp leading to garage level 8	110
11/21/2008	level 7, adjacent to ramp leading to garage level 8	107
11/21/2008	Intersection of Millerton Road and Friant Road, near Friant Dam	186
11/21/2008	Highway 99, Exit 161 in Madera	125

Monitoring data sheet are provided in **Attachment A**.
Source: AES, 2009.

The February 2-minute monitoring event took place on February 12, 2009. The short-term monitoring only occurred on one day due to heavy rain on February 13, 2009 (**Table 7**). Rain had occurred in the region for 3 days prior to the 2-minute monitoring event. This accounts for the low readings that were obtained.

Table 7. Third Monitoring Event, 2-Minute Monitoring Results

Date	Monitoring Locations	PM ₁₀ (µg/m ³)
2/12/2009	Southeast corner of level 8 parking garage	0.002
2/12/2009	Southwest corner of level 8 parking garage	0.003
2/12/2009	Westside of level 8 parking garage above backup generators	0.003
2/12/2009	West corner of level 8 parking garage near exhaust vents	0.003
2/12/2009	Northside of level 8 parking garage near kitchen exhaust	0.005
2/12/2009	Northeast corner of level parking garage	0.007
2/12/2009	Southeast corner of level 8, parking garage	0.034
2/12/2009	Center of level 8 parking garage	0.004
2/12/2009	Center west side level 7 parking garage	0.003
2/12/2009	Center south level 7 parking garage	0.004

Date	Monitoring Locations	PM ₁₀ (µg/m ³)
2/12/2009	Ground level parking lot Table Mountain Resort	0.006
2/12/2009	Millerton Road and Winchell Cove Road	0.014
2/12/2009	Millerton Road at Millerton Lake entrance	0.006
2/12/2009	Friant Dam and Millerton Road	0.032
2/12/2009	Road 145 and Road 206	0.007
2/12/2009	Road 145 and Route 41	0.01
2/12/2009	Millerton Road and Auberry Road	0.006
2/12/2009	Auberry Road and Route 168 parking lot	0.013

Monitoring data sheet are provided in Attachment A.
Source: AES, 2009.

PARTICULATE IDENTIFICATION

Particulate matter identification was performed by Forensic Analytical Laboratories. Results of the particulate matter identification are provided in **Appendices A, B and C**. The most prevalent constituent of the PM₁₀ collected during the three monitoring events is non-fibrous sub-micron opaques. Opaques are non-transparent debris, generally mineral in nature. Iron Oxide, Quartz, and metal chips were present in amounts between one and ten percent. Fungal spores, insect parts, feldspars, and other organic debris were present in trace amounts.

SECTION 5.0

CONCLUSIONS AND RECOMMENDATIONS

The first 24-hour PM_{10} monitoring results were hindered by fires that were occurring throughout the region. However, this monitoring event gave a clear visual (refer to **Photos 1 and 2 of Figure 1**) and numeric glimpse at the air pollution transport system in the region of the casino (refer to **Table 4**). The second and third 24-hour monitoring events were conducted at different time of the year; therefore, these events provided vary different results as the first monitoring event. The second event showed how PM_{10} concentration is high during the dry season. The third monitoring event showed how the rainy season reduces PM_{10} in the air. The three monitoring events results were consistent with expected results for the time of year and weather conditions. The result of the three 2-minute monitoring events coupled with the 24-hour results confirmed that the top floor of the parking garage at the Table Mountain Casino provides a prime location for addition air pollution monitoring events. Due to the overwhelming evidence that pollutants are transported from the San Joaquin Valley up the mountain canyons it is important that the Tribe provide the regulatory framework under 40 CFR Part 71, which would provide them with the opportunity to influence air quality decisions in regions adjacent to the TMR.

The success of the PM_{10} monitoring events indicates that the site chosen for air quality monitoring would produce an accurate description of the air quality at TMR. Currently the SJVAB is in attainment for PM_{10} ; however, the SJVAB is in nonattainment for ozone. The next step in setting up a real-time monitoring station at TMR would be to conduct ozone monitoring at the selected monitoring site and begin developing a Tribal air quality program and apply for funding under Section 105 of the CAA. The Tribe can choose to start its application process for TAS under 40 CFR 71 as soon as the initial air quality program is developed. It should be noted that the SJVAB was designated nonattainment for $PM_{2.5}$ starting in January, 2009. The Tribe may want to perform preliminary monitoring of $PM_{2.5}$ as well as ozone to provide a complete monitoring profile of the TMR.

APPENDICES

APPENDIX A

June, 2008 Monitoring Event



**PARTICLE IDENTIFICATION ANALYSIS
by Polarized Light Microscopy (PLM)**

Erin Quinn
Analytical Environmental Services
1801 7th St, Suite 100
Sacramento CA 95811

Page: 1/1
Client Number: CH1000-3342
Report Number: T015356
SP Number: 08138
Date Received: 7/1/08

PO#:
Site: Table Mountain, Casino Garage
Job #: 207539

Date Reported: 8/7/08
Analyst: LW,MF

PARTICLE IDENTIFICATION ANALYSIS RESULTS			
Client Sample No.	208515003-62408 (Filter 1)		208515003-62708 (Filter 2)
Lab Sample No.	20059328		20059329
Description:	PM10 filter, 8"x10" (mineral wool not reported)		PM10 filter, 8"x10" (mineral wool not reported)
Fibrous	Major		
	Minor		
	Trace	Fungal hyphae	Fungal hyphae
Non-Fibrous	Major	Opagues (sub-micron)	Opagues (sub-micron)
	Minor	Epithelial cells Iron oxide Metal chips Quartz	Epithelial cells Iron oxide Metal chips Quartz
	Trace	Fungal spores: aspergillus/penicillium, cladosporium, epicoccum, rust/smut, misc Insect parts Feldspars Limestone Organic debris Starch	Fungal spores: aspergillus/penicillium, cladosporium, epicoccum, rust/smut, misc Insect parts Feldspars Limestone Organic debris Starch Rubber

Quantitation: Major: >10%, minor: 1-10%, trace: <1%.

Lawrence E Wayne
Senior Microscopist

Mark S Floyd
Analytical Microscopy Supervisor

Client Name & Address: <u>Analytical Environmental Services</u> <u>1801 7th Street, Suite 100</u> <u>Sacramento, CA 95811</u>		P.O. #:	Date: <u>6/30/2008</u>
Contact: <u>Erin Quinn</u>		Turn Around Time: <input type="checkbox"/> hr / <input type="checkbox"/> 12hr / <input type="checkbox"/> 24hr / <input type="checkbox"/> 48hr / <input checked="" type="checkbox"/> Ext. Call	Due Date: _____ Due Time: _____
Phone #: <u>(916) 447-3479</u>	<input type="checkbox"/> PLM: <input type="checkbox"/> Standard / <input type="checkbox"/> Point Count 400 <input type="checkbox"/> PCM: NIOSH 7400 <input type="checkbox"/> Point Count 1000		<input type="checkbox"/> TEM Air: <input type="checkbox"/> AHERA / <input type="checkbox"/> Yamate2 / <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> TEM Bulk: <input type="checkbox"/> Quantitative / <input type="checkbox"/> Qualitative / <input type="checkbox"/> Chatfield <input type="checkbox"/> TEM Water: <input type="checkbox"/> Potable / <input type="checkbox"/> Non-Potable / <input type="checkbox"/> Wt % <input type="checkbox"/> TEM Microvac
Fax #: <u>(916) 447-1665</u>	<input checked="" type="checkbox"/> Special Project: <u>Gravimetric</u>		
Site: <u>Table Mountain</u>	<input checked="" type="checkbox"/> Metals Analysis: Method _____ Matrix: <u>Particle Identification</u>		
Job: <u>207539</u>	Analytes: _____		

Comments / Email Reports To: equinn@analyticalcorp.com

Sample ID	Date/Time	Sample Location/Description	FOR AIR SAMPLES ONLY				Sample Area or Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
Filter #1	6/23 11:40 AM	Table Mountain Resia Gauge	<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C	11:40 AM	90 CFM	24hr	8x10 Filter
Filter #2	6/25 10:20	" "	<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C	10:20 AM	40 CFM	24hr	8x10 Filter
Filter #3	-	Blank	<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				

Sampled by: _____ Date: _____ Time: _____

Shipped via: Fed Ex Airborne UPS US Mail Courler Drop Off Other: _____

Relinquished by:	Relinquished by:	Relinquished by:
Date / Time:	Date / Time:	Date / Time:
Received by: <u>BP</u>	Received by:	Received by:
Date / Time: <u>10:30 AM</u>	Date / Time:	Date / Time:
Condition Acceptable? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No



Forensic Analytical Laboratories

3777 Depot Road, Suite 409, Hayward, California 94545 Phone: 510-887-8828, Fax: 510-887-4218

GRAVIMETRIC ANALYSIS OF AIR FILTERS

Method: NIOSH 500/600 (modified)

Erin Quinn
Analytical Environmental Services
1801 7th St, Suite 100
Sacramento CA 95811

Page: 1/1
Client Number: CH1000-3342
Report Number: T015356
SP Number: 08138
Date Received: 7/1/08

Site: Table Mountain Casino Garage
Fax#: 207539

Date Reported: 8/7/08
Analyst: LW,MF

GRAVIMETRY ANALYSIS RESULTS			
Client Sample No.	208515003-62408	208515003-62708	Field Blank
Lab Sample No.	20059328	20059329	20059330
Description:	PM10 filter 8" x 10"	PM10 filter 8" x 10"	PM10 filter 8" x 10"
SAMPLING			
Sampling time, min	1440	1440	0
Flow rate, LPM	1132.67	1132.67	0
Sample volume, m ³	1631	1631	0
GRAVIMETRY			
Initial weight, gm	4.09452	4.09315	4.10305
Final weight, gm	4.17093	4.20424	4.10123
Difference, mg	76.41	111.09	-1.82
RESULTS			
Analyte	Dust	Dust	Dust
Result*, mg/m ³	0.047	0.068	n/a
Reporting Limit*, mg/m ³	6.1E-05	6.1E-05	n/a

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory limit. Results are not blank- or background corrected unless otherwise noted.

Mark Floyd, Analytical Microscopy Supervisor

Analytical results and reports are generated by Forensic Analytical at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by Forensic Analytical to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full with approval from Forensic Analytical. The client is solely responsible for the use and interpretation of test results and reports requested from Forensic Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any U.S. government agency. Forensic Analytical is unable to assess the degree of hazard resulting from materials analyzed. Forensic Analytical reserves the right to dispose of all samples after a period of 30 days, according to all state and federal guidelines, unless otherwise specified.



**PM₁₀ Monitoring Log
Dust Trak**

Project Name	Table Mountain Preliminary Air Quality Assessment
Project Number	208515-003
Date of Site Visit	24, 26, 27-June-08

Sample Time	Average Reading (Ave $\mu\text{g}/\text{m}^3$)	Description of Location
2 min	188	south parapit ledge adjacent to radio room
2 min	184	south parapit, southwest corner of garage
2 min	216	northwest parapit wall, adjacent to cooling tower
2 min	188	north parapit wall, west of kitchen vents
2 min	189	north parapit, adjacent to kitchen vent
2 min	221	adjacent to kitchen vent
2 min	175	east parapit wall adjacent to construction
2 min	187	east parapit wall adjacent to radio room
2 min	182	center of parking level, southeast light post
2 min	158	south east garage vent, north of radio room
2 min	188	7th floor covered parking bottom of ramp
2 min	200	7th floor, southeast side
2 min	286	Millerton and Friant Road
2 min	268	Highway 99, Exit 161
2 min	254	south parapit ledge adjacent to radio room
2 min	252	south parapit, southwest corner of garage
2 min	244	northwest parapit wall, adjacent to cooling tower
2 min	237	north parapit wall, west of kitchen vents
2 min	245	north parapit, adjacent to kitchen vent
2 min	290	Adjacent to kitchen vent
2 min	260	east parapit wall adjacent to construction
2 min	249	east parapit wall adjacent to radio room
2 min	241	center of parking level, southeast light post
2 min	246	south east garage vent, north of radio room
2 min	240	7th floor covered parking bottom of ramp
2 min	243	7th floor, southeast side
2 min	213	south parapit ledge adjacent to radio room
2 min	223	south parapit, southwest corner of garage
2 min	207	northwest parapit wall, adjacent to cooling tower
2 min	209	adjacent to kitchen vent
2 min	216	east parapit wall adjacent to construction

APPENDIX B

November, 2008 Monitoring Event



Forensic Analytical Laboratories

3777 Depot Road, Suite 409, Hayward, California 94545 Phone: 510-887-8828, Fax: 510-887-4218

GRAVIMETRIC ANALYSIS OF AIR FILTERS

Method: NIOSH 500/600 (modified)

Erin Quinn
Analytical Environmental Services
1801 7th St, Suite 100
Sacramento CA 95811

Page: 1/1
Client Number: CH1000-3342
Report Number: T016139
SP Number: 08265
Date Received: 11/25/08

Site: Table Mountain Casino
Fax#: 208515-003

Date Reported: 12/5/08
Analyst: MF

GRAVIMETRY ANALYSIS RESULTS			
Client Sample No.	A	B	C
Lab Sample No.	20062902	20062903	20062904
Description:	PM10 filter 8" x 10"	PM10 filter 8" x 10"	Field Blank PM10 filter 8" x 10"
SAMPLING			
Sampling time, min	1440	1440	0
Flow rate, LPM	1132.67	1132.67	0
Sample volume, m ³	1631	1631	0
GRAVIMETRY			
Initial weight, gm	4.12261	4.13975	4.10144
Final weight, gm	4.13430	4.21148	4.10045
Difference, mg	11.69	71.73	-0.99
RESULTS			
Analyte	Dust	Dust	Dust
Result*, mg/m ³	0.0072	0.044	n/a
Reporting Limit*, mg/m ³	6.1E-05	6.1E-05	n/a

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory limit. Results are not blank- or background corrected unless otherwise noted.

Mark Floyd, Analytical Microscopy Supervisor

Analytical results and reports are generated by Forensic Analytical at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by Forensic Analytical to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full with approval from Forensic Analytical. The client is solely responsible for the use and interpretation of test results and reports requested from Forensic Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any U.S. government agency. Forensic Analytical is unable to assess the degree of hazard resulting from materials analyzed. Forensic Analytical reserves the right to dispose of all samples after a period of 30 days, according to all state and federal guidelines, unless otherwise specified.



**PARTICLE IDENTIFICATION ANALYSIS
by Polarized Light Microscopy (PLM)**

Erin Quinn
Analytical Environmental Services
1801 7th St, Suite 100
Sacramento CA 95811

Page: 1/1
Client Number: CH1000-3342
Report Number: T016139
SP Number: 08265
Date Received: 11/25/08

PO#:
Site: Table Mountain Casino
Job #: 208515-003

Date Reported: 12/5/08
Analyst: LW

PARTICLE IDENTIFICATION ANALYSIS RESULTS			
Client Sample No.		A	B
Lab Sample No.		20062902	20062903
Description:		PM10 filter, 8"x10" (mineral wool not reported)	PM10 filter, 8"x10" (mineral wool not reported)
Fibrous	Major		
	Minor		
	Trace	Cellulose Fungal hyphae	Cellulose Fungal hyphae
Non-Fibrous	Major	Fungal spores: aspergillus/penicillium, basidiospores, cladosporium, epicoccum, rust/smut, misc. Opaques	Fungal spores: aspergillus/penicillium, basidiospores, cladosporium, alternaria, ascospores, epicoccum, dreschlera/bipolaris, ganoderma, rust/smut, misc. Opaques
	Minor	Iron oxide Organic debris	Iron oxide Quartz
	Trace	Epithelial cells Diatoms Limestone Metal chips Quartz Starch Plant ash	Diatoms Feldspars Limestone Metal chips Mica Organic debris Plant ash

Quantitation: Major: >10%, minor: 1-10%, trace: <1%.

Lawrence E Wayne
Senior Microscopist

Mark S Floyd
Analytical Microscopy Supervisor



Forensic Analytical

Analysis Request Form

Client Name & Address:

Analytical Environmental Services
1801 7th Street Suite 100
Sacramento, CA 95811

P.O. #

Order: 012508

Turn Around Time: [] hr / [] 12hr / [] 24hr / [] 48hr /
[] Ext: Call

Due Date: Due Time:

[] PLM: [] Standard / [] Point Count 400 [] PCM: NIOSH 7400
[] Point Count 1000

Contact:

Erin Quinn

[] TEM Air: [] AHERA / [] Yamate2 / [] NIOSH 7402

[] TEM Bulk: [] Quantitative / [] Qualitative / [] Chatfield

Phone #:

916-447-3479

[] TEM Water: [] Potable / [] Non-Potable / [] Wt %

[] TEM Microvac

Fax #:

916-447-1665

[] Special Project:

Gravimetric

Site:

Table Mountain Casino

[] Metals Analysis: Method

Matrix: Particulate Identification

Job:

208515-003
Table Mountain Air Quality rev

Analytes:

Comments / Email Reports To:

equinn@analyticalcorp.com

Table with columns: Sample ID, Date/Time, Sample Location/Description, Type, Time On/Off, Avg. LPM, Total Time, Sample Area or Air Volume. Contains data for samples A and B.

Sampled by: Erin Quinn

Date: Nov 17 & 18, 2008 Time: 10:00 am

Shipped via: [x] Fed Ex [] Airborne [] UPS [] US Mail [] Courier [] Drop Off [] Other:

Relinquished by:

Relinquished by:

Relinquished by:

Date / Time:

Date / Time:

Date / Time:

Received by:

Signature and date 11/25/08 1030

Received by:

Received by:

Date / Time:

Date / Time:

Date / Time:

Condition Acceptable? [x] Yes [] No

Condition Acceptable? [] Yes [] No

Condition Acceptable? [] Yes [] No

APPENDIX C

February, 2009 Monitoring Event



Forensic Analytical Laboratories

3777 Depot Road, Suite 409, Hayward, California 94545 Phone: 510-887-8828, Fax: 510-887-4218

**PARTICLE IDENTIFICATION ANALYSIS
by Polarized Light Microscopy (PLM)**

Erin Quinn
Analytical Environmental Services
1801 7th St, Suite 100
Sacramento CA 95811

Page: 1/1
Client Number: CH1000-3342
Report Number: T016472
SP Number: 09018
Date Received: 2/18/09

PO#:
Site: Table Mountain Casino
Job #

Date Reported: 2/25/09
Analyst: LW

PARTICLE IDENTIFICATION ANALYSIS RESULTS			
Client Sample No. Lab Sample No. Description:	Filter A 20064339 PM10 filter, 8"x10" (mineral wool not reported)	Filter B 20064340 PM10 filter, 8"x10" (mineral wool not reported)	
Fibrous	Major	Field blank; not analyzed	
	Minor		
	Trace		Cellulose Fungal hyphae
Non-Fibrous	Major		
	Minor		Organic debris
	Trace		Fungal spores: cladosporium, epicoccum, aspergillus/penicillium, misc. Pollen: pinaceae Epithelial cells Limestone Metal chips Mica Paint chips Quartz Starch

Quantitation: Major: >10%, minor: 1-10%, trace: <1%.

Lawrence E Wayne
Senior Microscopist

Mark S Floyd
Analytical Microscopy Supervisor



Forensic Analytical Laboratories

3777 Depot Road, Suite 409, Hayward, California 94545 Phone: 510-887-8828, Fax: 510-887-4218

GRAVIMETRIC ANALYSIS OF AIR FILTERS

Method: NIOSH 500/600 (modified)

Erin Quinn
Analytical Environmental Services
1801 7th St, Suite 100
Sacramento CA 95811

Page: 1/1
Client Number: CH1000-3342
Report Number: T016472
SP Number: 09018
Date Received: 2/18/09

PO#:
Site: Table Mountain Casino
Job #

Date Reported: 2/25/09
Analyst: MF

GRAVIMETRY ANALYSIS RESULTS		
Client Sample No.	A**	B
Lab Sample No.	20064339	Field Blank 20064340
Description:	PM10 filter 8" x 10"	PM10 filter 8" x 10"
SAMPLING		
Sampling time, min	1440	0
Flow rate, LPM	1132.67	0
Sample volume, m ³	1631	0
GRAVIMETRY		
Initial weight, gm	4.12970	4.09783
Final weight, gm**	4.08642	4.09791
Difference, mg	-43.28	0.08
RESULTS		
Analyte	Dust	Dust
Result*, mg/m ³	-0.0265	n/a
Reporting Limit*, mg/m ³	6.1E-05	n/a

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory limit. Results are not blank- or background corrected unless otherwise noted.

**Filter A received in sealed envelope; filter torn upon opening with some loss of matrix material.

Mark Floyd, Analytical Microscopy Supervisor

Analytical results and reports are generated by Forensic Analytical at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by Forensic Analytical to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full with approval from Forensic Analytical. The client is solely responsible for the use and interpretation of test results and reports requested from Forensic Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any U.S. government agency. Forensic Analytical is unable to assess the degree of hazard resulting from materials analyzed. Forensic Analytical reserves the right to dispose of all samples after a period of 30 days, according to all state and federal guidelines, unless otherwise specified.

Client Name & Address: <u>Analytica Environmental Services</u> <u>1801 7th Street, Suite 100</u> <u>Sacramento, California 95811</u>		P.O. #:	Date: <u>2/13/2009</u>
Contact: <u>Erin Quinn</u>		Turn Around Time: <input type="checkbox"/> hr / <input type="checkbox"/> 12hr / <input type="checkbox"/> 24hr / <input type="checkbox"/> 48hr / <input checked="" type="checkbox"/> Ext: <u>Call</u>	Due Date: _____ Due Time: _____
Phone #: <u>(916) 447-3479</u>	<input type="checkbox"/> PLM: <input type="checkbox"/> Standard / <input type="checkbox"/> Point Count 400 <input type="checkbox"/> PCM: NIOSH 7400 <input type="checkbox"/> Point Count 1000		<input type="checkbox"/> TEM Air: <input type="checkbox"/> AHERA / <input type="checkbox"/> Yamate2 / <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> TEM Bulk: <input type="checkbox"/> Quantitative / <input type="checkbox"/> Qualitative / <input type="checkbox"/> Chatfield <input type="checkbox"/> TEM Water: <input type="checkbox"/> Potable / <input type="checkbox"/> Non-Potable / <input type="checkbox"/> Wt % <input type="checkbox"/> TEM Microvas
Fax #: <u>(916) 447-1665</u>	<input checked="" type="checkbox"/> Special Project: <u>Gravimetric</u>		
Site: <u>Table Mountain Casino</u>	<input checked="" type="checkbox"/> Metals Analysis: Method _____		
Job: <u>Table Mountain Air Quality</u>	Matrix: <u>Particle Identification</u>		
Comments / Email Reports To: _____			

Sample ID	Date/Time	Sample Location/Description	FOR AIR SAMPLES ONLY				Sample Area or Air Volume
			Type	Time On/Off	Avg. LPM	Total Time	
Filter A	<u>2/12/09</u> <u>2/13/09</u>	<u>Level 8 TMR Parking Garage</u>	<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C	<u>9:40 am</u> <u>9:40 am</u>	<u>32.62</u> <u>40 LPM</u>	<u>24 hr</u>	<u>8x10"</u> <u>Filter</u>
Filter B	/	<u>Blank</u>	<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C	/	<u>43</u>	/	<u>8x10"</u> <u>FILTER</u>
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
			<input type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				

Sampled by: Erin Quinn Date: 2/12/2009 Time: 9:40 am

Shipped via: Fed Ex Airborne UPS US Mail Courier Drop Off Other: _____

Relinquished by:	Relinquished by:	Relinquished by:
Date / Time:	Date / Time:	Date / Time:
Received by: <u>[Signature]</u>	Received by:	Received by:
Date / Time: <u>2/18/09</u> <u>10:00</u>	Date / Time:	Date / Time:
Condition Acceptable? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No	Condition Acceptable? <input type="checkbox"/> Yes <input type="checkbox"/> No

