NOTICE TO BIDDERS
ADDENDUM #1
RFQ/P 200-22 Environmental Consulting Services

Palomar Community College District

The following changes, additions, deletions, clarifications or corrections shall become part of the Bid & Contract Documents for the above listed project. This Addendum #1 forms a part of the contract document and modifies the original bidding documents. Acknowledge receipt of Addendum #1 in the space provided on the bid form. Failure to do so may subject bidder to disqualification.

ADDITIONAL DOCUMENTS – Separate attachments

- Environmental Consulting Services - Notice of Preparation/Initial Study and Responses
- Environmental Consulting Services - Air Quality Technical Report

END OF ADDENDUM #1

Date Issued: January 6, 2023

Ann M. Jensen

Ann Jensen, Director Business Services
Palomar Community College District

APPENDIX A

Notice of Preparation/ Initial Study and Responses

PALOMAR COLLEGE
Learning for Success

1140 West Mission Road, San Marcos, California 92069-1487 • (760) 744-1150 • www.palomar.edu

Sherrill L.Amador, Ed.D.
Superintendent/President

NOTICE OF PREPARATION
PUBLIC SCOPING MEETING NOTICE

PALOMAR COMMUNITY COLLEGE - SAN MARCOS CAMPUS, FACILITIES MASTER PLAN
PROGRAM ENVIRONMENTAL IMPACT REPORT (PEIR)

DATE: July 7, 2008

TO: Responsible, Trustee, and Other Jurisdictional Agencies and Other Interested Organizations/Individuals

LEAD AGENCY: Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, CA 92069-1487

In accordance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines (CCR Title 14, §§15082(a), 15103, and 15375), this Notice of Preparation (NOP) is hereby sent to inform you that the Palomar Community College District (PCCD) is preparing a draft PEIR to assess the environmental effects associated with implementation of the San Marcos Campus Facilities Master Plan ("Master Plan"). A Program EIR is being prepared pursuant to CEQA Guidelines §15168 because the Master Plan involves a long-term development program at the San Marcos campus in which the geographically-related individual activities will generally have similar environmental effects that can be mitigated in similar ways.

As Lead Agency under CEQA, we need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with implementation of the Master Plan. Your agency may need to use the PEIR prepared by the PCCD when considering your permit or other approvals. The PCCD requests that any potential responsible or trustee agency respond to this NOP in a manner consistent with State CEQA Guidelines Section 15082 (b). If you are responding as an interested organization or individual citizen, we need to know your views as to the environmental information you would like us to address in the draft PEIR.

Attachment 1 provides a description of the Master Plan and its objectives. A location map of the San Marcos campus is provided in Attachment 2. Attachment 3 is a map of the Master Plan projects. The Initial Study is included in Attachment 4, which describes the potential environmental effects associated with implementation of the Master Plan.

Public Scoping Meeting: A public scoping meeting will be held to provide more information on the Master Plan, and to give the public an opportunity to offer comments and suggestions on the scope of the draft PEIR. The public scoping meeting will provide the PCCD with an opportunity to learn about potential concerns, mitigation measures and alternatives that may warrant in-depth analysis in the environmental review process. The date, time, and address of this meeting are provided below:

Date: July 17, 2008
Time: 6:00 PM
Place: Palomar Community College - San Marcos Campus
Governing Board Room
Student Services Center
1140 West Mission Road
San Marcos, CA 92069-1487

Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but **not later than 30 days after receipt of this NOP**. Please send your written responses, including the name of a contact person and phone number, to:

Kelley Hudson-MacIsaac
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, CA 92069-1487
Phone: (760) 744-1150 x2772
Fax: (760) 761-3506
Email: kmacisaac@palomar.edu

Any written or oral comments received at the public scoping meeting will be considered in preparing the draft PEIR, along with any written comments received during the 30-day NOP public comment period. All parties that have submitted their names and mailing addresses will be notified of subsequent actions as part of the environmental review process. If you wish to be placed on the mailing list or have any questions about the Master Plan, please contact Ms. Kelley Hudson-MacIsaac at the phone number above.

Signature:

Name: Ken Jay
Title: Director of Business Services
Date: July 7, 2008

Attachments: Description of Master Plan
Project Location Map
Map of Master Plan Projects
Initial Study

ATTACHMENT 1

Description of the Master Plan

The San Marcos campus is located at 1140 West Mission Road in the City of San Marcos, near the west edge of the PCCD boundary in northern San Diego County. Regional access is provided to the San Marcos campus via Interstate 15 (I-15) and State Route 78 (SR-78) freeways.

The Master Plan encompasses growth and development of the existing San Marcos campus from the present through 2022. ***The overall purpose of the Master Plan is to increase the on-campus capacity to accommodate the anticipated growth in student enrollment up to a maximum of 25,000 students through the year 2022.*** This will be accomplished via the following means: infrastructure improvements; demolition of older, single-story buildings; construction of new multi-story buildings; replacement of inadequate temporary space with permanent facilities; modernization of the majority of existing buildings to remain; consolidation of instructional space to minimize land development and create more open space; and facilities planning that is sensitive to environmentally sensitive areas and topography.

The Master Plan map shown in Attachment 3 illustrates the San Marcos campus fully developed to accommodate an enrollment of 25,000 students. New buildings are shown in approximate locations; precise footprints of future buildings would be determined with the actual design of the building. The plan also illustrates additional parking, landscaping and improved circulation for the campus. A total of 30 Master Plan projects will be evaluated in the draft PEIR. These projects are scheduled in a logical sequence that would be the least disruptive to campus operations. The phasing sequence, which also takes into account anticipated incremental funding, is broken out into near-term (year 2009 to year 2013) and long-term (year 2014 to year 2022) projects. The following near-term projects have been identified as the first group to be constructed during the years 2009-2013:

- Projects 1-A/9-A: Parking Improvement Projects (3)
- Project 3: Multi-media Lab/Planetarium
- Project 5*: Library/Learning Resource Center
- Project 5-A: Humanities/Foreign Language Building
- Project 6: "LL" Building Remodel
- Project 9: Child Development Center
- Project 10*: Industrial Technology Center
- Projects 12/12-A*: Theatre Addition/Renovation
- Project 14: Maintenance and Operations Facilities
- Project 19: Relocate Baseball/Softball Fields
- Project 20-A: Lot 12 Storm Drain Upgrades
- Project 20-B: Phase 1 of the Arboretum Landscape Improvements

* These projects are being evaluated concurrently in a separate environmental document because construction is scheduled to begin prior to the expected certification date of the Master Plan PEIR; design plans are in preparation for these projects; and a CEQA State Clearinghouse Number must be obtained for these projects by fall of 2008 to meet State funding requirements.

Master Plan Objectives

1. **Replace Small, Single-Story Buildings with Multi-Story Buildings:** The Master Plan allows for demolition of older, single-story buildings, opening up the area for a "Core" of multi-story instructional buildings and a central green area. The result would be a concentration of flexible, "smart" instructional space defined by an open lawn area and surrounded by parking.

2. **Shift the Center of Campus North:** The Master Plan would result in shifting the center of campus 175 feet north from its existing location. The new campus center would be located between the future Library and the future Student Services Center. Students would be able to move from building to building through the Campus Core as they travel between classes. The shift would also capture more parking within a 5-minute walking radius of the new Campus Core, allowing students to reach their classes from the parking lots in a shorter period of time than under existing conditions.

3. **Construct a Two-Way Loop Road:** The Master Plan includes an improved two-way campus loop road system with upgraded entrances. Students would be able to maneuver throughout the campus without having to exit the campus. The two-way traffic flow would improve emergency and safety access within the campus. In addition, the improved road system is designed to decrease campus-related traffic flow on adjacent neighborhood streets.

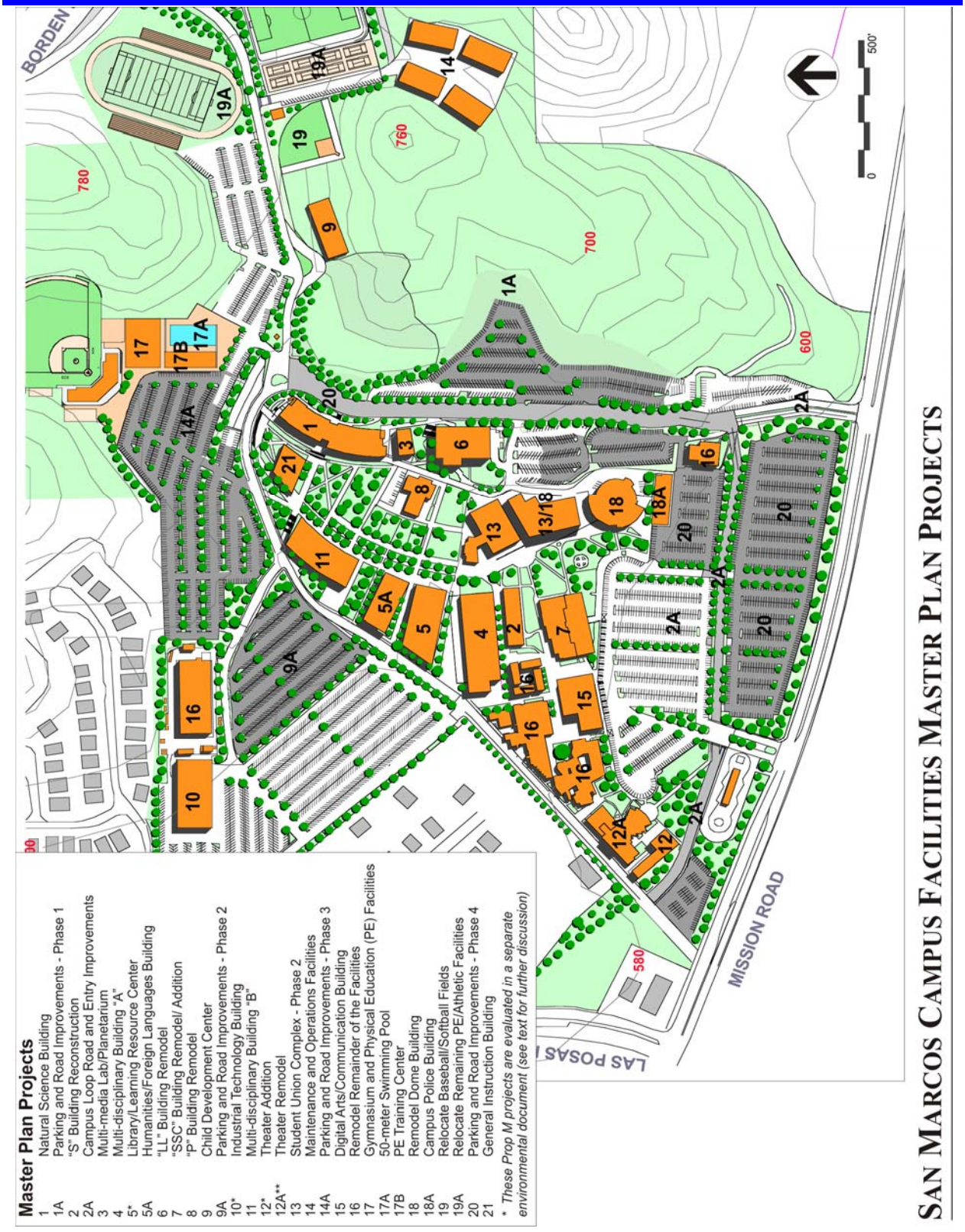
4. **Provide Additional Parking:** The Master Plan identifies the location of acutely needed additional parking. Parking would encircle the Campus Core as well as provide convenient access to the physical education facilities and the theatre.

5. **Relocate the Physical Education Facilities and Fields:** The baseball and softball fields would be relocated to the northeast portion of campus. The Master Plan provides for the consolidation of Physical Education facilities, fields, tennis courts and a swimming pool at this location, which would have direct access via Borden Road and sufficient parking for classes and athletic events.

ATTACHMENT 2

LOCATION MAP OF PALOMAR COLLEGE SAN MARCOS CAMPUS

ATTACHMENT 3



ATTACHMENT 4

PALOMAR COMMUNITY COLLEGE - SAN MARCOS CAMPUS, FACILITIES MASTER PLAN INITIAL STUDY

ENVIRONMENTAL CHECKLIST FORM

1. Project Title: **Palomar Community College - San Marcos Campus, Facilities Master Plan**

2. Lead Agency Name/Address: **Palomar Community College District**
   1140 West Mission Road
   San Marcos, CA 92069-1487

3. Contact Person/Phone Number: **Kelley Hudson-MacIsaac**
   Manager, Facilities Planning
   Environmental Health & Safety
   (760) 744-1150 x2772

4. Project Location: **Please refer to Attachment 2.**

5. Sponsor's Name/Address: **Same as #2 above.**

6. General Plan Designation: **"Palomar College"**

7. Description of Project: **Please refer to Attachment 1.**

8. Surrounding Land Uses/Setting:

Direction	General Plan Designation	Land Use
North	**Open Space; Residential (4-6 du/ac); Residential (.125-1 du/ac)**	**Open space, residential**
East	**Open Space; Residential (.125-1 du/ac); Office Professional; Junior High School**	**Open space, residential, medical office, San Marcos Junior High School**
South	**Business; Industrial**	**NCTD Sprinter Station, light industrial, commercial buildings Mission Sports Park**
West	**Residential (2-4 du/ac); Commercial**	**Gas station/mini-mart, church, residential**

9. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement): **Discretionary review and/or authorization may be required by the California Chancellor of Community Colleges; the State Division of Architecture; possibly the U.S. Army Corps of Engineers, California Department of Fish & Game (CDFG), and Regional Water Quality Control Board (RWQCB) to obtain permits for discharge of fill material into a disturbed emergent wetland area located south of Parking Lot 9 and west of the soccer field, for construction of Projects 9 (child development center relocation), 19 (relocation of baseball/softball fields), and 19-A (relocation of soccer field); and possibly the U.S. Fish & Wildlife Service and CDFG to obtain a Section 10(A) Permit for "take" authorization for impacts to California gnatcatcher habitat and associated Habitat Conservation Plan.**

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below (☒) would be potentially affected by implementation of the Master Plan, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒	Aesthetics	☒	Hazards & Hazardous Materials	☒	Public Services
☐	Agricultural Resources	☒	Hydrology/Water Quality	☒	Recreation
☒	Air Quality	☒	Land Use/Planning	☒	Transportation/Traffic
☒	Biological Resources	☐	Mineral Resources	☒	Utilities/Service Systems
☒	Cultural Resources	☒	Noise	☒	Mandatory Findings of Significance
☒	Geology/Soils	☒	Population/Housing		

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ☐

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☒

I find that the proposed project MAY have a "potential significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed in an earlier EIR or NEGATIVE DEDCLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐

Kelley Hudson Mac Isaac — July 7, 2008

Signature — Date

Kelley Hudson-MacIsaac

Printed Name

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, "Earlier Analysis," may be cross-referenced).

5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c) (3) (d). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

1. AESTHETICS. Would the project:

a) Have a substantial adverse effect on a scenic vista? ☒ ☐ ☐ ☐

The San Marcos campus is located within the College Area Community Plan of the City of San Marcos General Plan. The visual character of the College Area Community is dominated by steep mountains within, and in the periphery of, the planning area. Much of the eastern portion of the planning area has been included in the Owen Peak Resource Conservation Area (RCA). Owen Peak is a visual landmark which can be seen for miles in several directions. Owen Peak RCA contributes to scenic corridors. Goal 1 of the San Marcos General Plan Conservation Element calls for preservation of prominent landforms, such as the Merriam Mountains, San Marcos Mountains, Cerro de las Posas, Mt. Whitney, Double Peak, Franks Peak, and Owen Peak, by conservation and management policies.

The east-west trending Merriam Mountains are situated to the south of San Marcos campus and the Owen Peak RCA to the northeast. Primary Ridgelines are identified in these areas on Figure D-3 of the Conservation Element, while a north-south trending Secondary Ridgeline is identified in the hills that comprise the northern portions of San Marcos campus. Unobstructed views of the Primary Ridgelines associated with Merriam Mountains and Owen Peak RCA can be seen from several view corridors on campus and from residential neighborhoods adjacent to the campus. The development of taller structures on campus as identified in the Master Plan could interfere or obstruct these views. Therefore, the PEIR will analyze whether implementation of the Master Plan would have a substantial adverse effect on a scenic vista.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway? ☐ ☐ ☐ ☒

According to the Department of Transportation website, there are no designated or eligible scenic corridors or highways in the vicinity of the San Marcos campus. Although a substantial amount of grading is expected to occur with several projects in the northeast portion of campus, this landform alteration would not be visible from a designated State scenic highway. As such, no notable scenic resources, such as trees, rock outcroppings or historic buildings, would be affected along a designated State scenic highway. Therefore, no further evaluation is necessary.

c) Substantially degrade the existing visual character or quality of the site and its surroundings? ☐ ☒ ☐ ☐

Implementation of the Master Plan would result in the replacement of older, primarily single-story buildings and temporary classrooms with energy-efficient, multi-story instructional buildings incorporating a cohesive architectural design and a new campus "Core" with a central "green" area. The result would be a concentration of flexible, "smart" instructional space defined by an open lawn area and surrounded by parking. With the incorporation of consistent architectural elements (design features), which are not present among the existing buildings on campus, and more interior "green" space compared to existing conditions, implementation of the Master Plan would not substantially degrade the existing visual character or quality of the San Marcos campus and its surroundings. Therefore, the PEIR will describe the specific design features to be incorporated as mitigation for these potentially significant impacts.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ☒ ☐ ☐ ☐

Although there will be more glass surface area on the new multi-story buildings on campus, compared to the primarily brick and stucco surfaces on the existing buildings, various building materials would be used to avoid large expanses of glass. In addition, glass surfaces would be minimized on south-facing building exposures and tinted glass with appropriate UV ratings would be used to increase energy efficiency. With the incorporation of these architectural elements (design features), the new buildings on campus are not expected to create a new source of glare that would adversely affect daytime views in the area. Therefore, the PEIR will describe the specific design features to be incorporated as mitigation for these potentially significant impacts.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Ball fields and athletic facilities would be relocated to the north and northeast portions of the campus. Night lighting associated with evening sports activities in these locations may impact astronomical observations conducted at the on-campus Planetarium, which would be relocated to the Campus Core. Therefore, the PEIR will analyze whether the relocated ball fields and athletic facilities would create a new source of substantial light that would adversely affect nighttime views in the area.

2. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project?

a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use?	☐	☐	☐	☒

According to the San Diego County Important Farmland 2004 Map, prepared by the California Department of Conservation (CDC), the San Marcos campus is categorized as "Urban Land". As such, implementation of the Master Plan would not convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance, as designated by the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Therefore, no further evaluation is necessary.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

The San Marcos campus is not designated on the City of San Marcos General Plan or zoned for agricultural uses. In addition, there are no Williamson Act lands in the vicinity of the campus as mapped by the CDC Division of Land Resource Protection, Williamson Act Program "San Diego County Williamson Act Lands 2006: Land Enrolled in Williamson Act and Farmland Security Zone Contracts as of 01-01-2006". As such, implementation of the Master Plan would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Therefore, no further evaluation is necessary.

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

As stated in the response to Question 2a, implementation of the Master Plan would not result in the conversion of farmland to non-agricultural use. Therefore, no further evaluation is necessary.

3. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐

The San Marcos campus is located in the San Diego Air Basin (SDAB), which is designated as federal and State non-attainment status for several criteria air pollutants. To ensure standards are achieved, the San Diego Air Pollution Control District (APCD) adopted in 1991 "The San Diego Air Basin Triennial Regional Air Quality Strategy Revision," which was most recently updated in 2004. This planning document identifies emission control measures to provide expeditious progress toward attaining the State ozone standard. Additional on-campus development could result in increases in short-term and long-term criteria air pollutant emissions from mobile and/or stationary sources, as well as potential increases in toxic air contaminants from storage or use of laboratory chemicals. Therefore, the

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

PEIR will analyze whether implementation of the Master Plan would conflict with or obstruct implementation of the regulations promulgated by the California Air Resources Board (CARB) or the APCD.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation. ☒ ☐ ☐ ☐

Refer to response to Question 3a. The PEIR will analyze whether implementation of the Master Plan would violate any air quality standard or contribute substantially to an existing or projected air quality violation.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ☒ ☐ ☐ ☐

Additional development on campus, combined with known and reasonably foreseeable growth in the region, could result in a cumulatively considerable net increase of emissions for those criteria air pollutants for which the SDAB is non-attainment. Therefore, the PEIR will analyze whether cumulatively considerable air quality impacts would occur as a result of implementation of the Master Plan.

d) Expose sensitive receptors to substantial pollutant concentrations? ☒ ☐ ☐ ☐

Students, faculty and staff on campus and existing single-family residential areas adjacent to portions of the campus are considered sensitive receptors. Construction grading from on-campus development associated with implementation of the Master Plan could expose sensitive receptors to substantial dust or fugitive air emissions, although various methods are typically employed to reduce these emissions, including site watering. The number of new vehicle trips to be generated by implementation of the Master Plan could increase traffic congestion and potentially lead to increased intersection delays in the vicinity of San Marcos campus, even with circulation improvements that would be required as mitigation measures for significant traffic impacts. The resulting increased vehicle engine idling could expose sensitive receptors near these congested intersections to substantial Carbon Monoxide (CO) concentrations, or CO “hot spots”. Additional emissions of criteria air pollutants and toxic air contaminants (TAC) due to campus operations would occur from new stationary sources, increased energy usage, and expanded research and teaching laboratories associated with implementation of the Master Plan. Potential incremental cancer risks, non-cancer chronic hazards, and non-cancer acute hazards could result from TAC emissions on campus. Therefore, the PEIR will analyze whether implementation of the Master Plan would expose sensitive receptors to substantial pollutant concentrations.

e) Create objectionable odors affecting a substantial number of people? ☐ ☐ ☒ ☐

Construction and operational activities from on-campus development associated with implementation of the Master plan could generate objectionable odors due to diesel exhaust from construction equipment, road improvements requiring the use of asphalt, and storage or use of laboratory chemicals at new or expanded facilities. Odors generated by these activities are normally localized. As such, implementation of the Master Plan is not expected to create objectionable odors affecting a substantial number of people, and this potential impact would be less than significant. Therefore, the PEIR will document this conclusion.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Result in greenhouse gas emissions that would hinder or delay the State's ability to meet the reduction targets contained in AB 32?	☐	☒	☐	☐

Implementation of the Master Plan would result in an increase in greenhouse gas emissions from the following sources associated with additional development and population growth on campus: construction activities, vehicle trips, stationary sources, TACs, and electricity, natural gas, and other fossil fuel consumption. The PEIR will identify current building sustainability and energy conservation practices and guidelines for new development (design features and energy-efficiency policies) to reduce greenhouse gas emissions. With the incorporation of such design features and energy-efficiency policies, implementation of the Master Plan is not expected to result in greenhouse gas emissions that would hinder or delay the State's ability to meet the reduction targets contained in AB 32. Therefore, the PEIR will describe the specific design features and energy-efficiency policies to be incorporated as mitigation for this potentially significant impact.

4. BIOLOGICAL RESOURCES. Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	☒	☐	☐	☐

Large, natural open space areas in the north and east portions of San Marcos campus consist of undisturbed coastal sage scrub and chaparral vegetation communities, which are considered sensitive habitats. The federally threatened California gnatcatcher has been previously documented in these areas. Projects 1-A (Expansion of Parking Lots 3B and 5), 9 (Child Development Center), 14 (Maintenance and Operations Facilities), 19 (Baseball/Softball Fields Relocation), and 19-A (Soccer Field Relocation) of the Master Plan would result in disturbance to these sensitive habitats. Therefore, the PEIR will analyze whether implementation of the Master Plan could have a substantial adverse effect on the California gnatcatcher and other special status species that use the sensitive habitats on campus.

b) Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U. S. Wildlife Service?	☒	☐	☐	☐

A disturbed emergent wetland is located in the northeast portion of campus (i.e., south of Parking Lot 9 and west of the soccer field), in an area where Projects 9 and 19 of the Master Plan would be constructed. In addition, as stated in response to Question 4a, the Master Plan calls for new development within sensitive coastal sage scrub and chaparral habitats in the north and east portions of campus (i.e., Projects 1-A, 9, 14 19, and 19-A). Therefore, the PEIR will analyze whether implementation of the Master Plan could have a substantial adverse effect on these sensitive riparian and upland vegetation communities on campus.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐

As stated in response to Question 4b, a disturbed emergent wetland is located in the northeast portion of campus and could be impacted by construction of Projects 9 and 19. This area may constitute “Waters of the United States” as defined by Section 404 of the Clean Water Act, and may also be protected by the California Fish and Game Code. Therefore, the PEIR will analyze whether implementation of the Master Plan could have a substantial adverse effect on federally protected wetlands on campus.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐

The large natural open space areas in the north and east portions of San Marcos campus, as mentioned in response to Question 4a, are contiguous with natural open space areas to the east of the campus boundary and to the northeast of Borden Road. The on-campus natural open space areas may provide habitat for a number of animal species, and serve as a network for wildlife corridors that extend off campus. Therefore, the PEIR will analyze whether implementation of the Master Plan could interfere substantially with the movement of any resident or migratory wildlife species or with established native resident or migratory wildlife corridors.

There is an Arboretum on campus, but it is not used as a native wildlife nursery, and there are no other such nurseries adjacent to the campus. Therefore, implementation of the Master Plan would not impede the use of native wildlife nursery sites, and no further evaluation is necessary.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐

The PCCD implements a long standing procedure that involves replacement of any trees removed, or if a common species, replacement with a species that increases the diversity of trees on campus. Therefore, the PEIR will analyze whether implementation of the Master Plan would conflict with this PCCD tree preservation procedure.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State habitat conservation plan?	☒	☐	☐	☐

The San Marcos campus is not within an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP); however, portions of the Northern Focused Planning Area of the Draft NCCP for the City of San Marcos (May 2001) abut the north and east campus boundaries. Therefore, the PEIR will analyze whether implementation of the Master Plan could conflict with the provisions of the City of San Marcos Draft NCCP. The PEIR will also evaluate the potential for PCCD to work with the regulatory agencies to adopt a HCP for the natural open space areas on campus. The purpose of the San Marcos Campus HCP would be to establish a mitigation banking agreement to address programmatic impacts to coastal sage scrub and California gnatcatcher habitat resulting from implementation of the Master Plan.

5. CULTURAL RESOURCES. Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☒	☐	☐	☐

It is unknown whether any of the on-campus buildings are considered historic or if there are any historic sites located on campus. Therefore, the PEIR will analyze whether implementation of the Master Plan could cause a substantial adverse change in the significance of a historic resource.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☒	☐	☐	☐

The Master Plan acknowledges the presence of archaeological resources on campus that are used for instruction and research by the archaeology/anthropology programs. Therefore, the PEIR will analyze whether implementation of the Master Plan could cause a substantial adverse change in the significance of an archaeological resource.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

The near-surface geologic formations underlying the campus include:

- **Qya:** mostly poorly consolidated, poorly sorted, permeable, alluvial flood plain deposits (Holocene and late Pleistocene).
- **Mzu**: wide variety of low- to high-metamorphic grade metavolcanic and metasedimentary rocks (Mesozoic).
- **Kt:** mostly massive, coarse-grained tonalite ("granitic" rock) (mid-Cretaceous).

Although the metavolcanic/metasedimentary formation is geologically too young to contain fossils, and the tonalite formation does not contain fossils because these granitic rocks were formed when molten lava cooled deep within the earth, the alluvial flood plain deposits are generally fossil-bearing. With the incorporation of standard construction-related mitigation measures involving the use of paleontological monitors during grading/excavation activities, any potential impacts to paleontological resources due to implementation of the Master Plan would be less than significant. Therefore, the PEIR will incorporate mitigation for this potentially significant impact.

There are no unique geologic features on campus; therefore, implementation of the Master Plan would not directly or indirectly destroy a unique geologic feature.

d) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

Prior cultural resource assessments indicate that prehistoric occupation may have occurred in the area where the San Marcos campus is now located. It is unknown whether or not human remains are located on campus. Therefore, the PEIR will analyze whether future ground disturbance activities associated with implementation of the Master Plan could disturb any human remains, including those interred outside of formal cemeteries.

6. GEOLOGY AND SOILS. Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:

(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

According to the Alquist-Priolo (AP) Earthquake Fault Zoning Map issued by the State Geologist pursuant to California Division of Mines and Geology Special Publication 42, there are no known earthquake faults delineated on campus. The closest known fault to the campus is the Rose Canyon fault, approximately 12 miles to the southwest. Since there are no active or potentially active faults mapped in the area, the campus is not in a designated AP Fault Zone, and implementation of the Master Plan would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death, involving fault rupture. Therefore, no further evaluation is necessary.

(ii) Strong seismic ground shaking?	☐	☒	☐	☐

The San Marcos campus is located in the seismically active southern California region, and is likely to be subjected to moderate to strong seismic shaking. Seismic shaking on campus could be generated by events on any number of known active and potentially active faults in the region. The faults most likely to affect San Marcos are the Elsinore, Coronado Banks, and Rose Canyon faults. The campus could be subject to moderate to severe ground shaking in the event of an earthquake. Pursuant to the Uniform Building Code (UBC) and California Building Code (CBC), design

and construction of new buildings would be engineered to withstand the expected ground acceleration that may occur on campus. With the incorporation of such design features to be identified in a geotechnical report that will be prepared as part of the PEIR, implementation of the Master Plan is not expected to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death, involving strong seismic ground shaking. Therefore, the PEIR will describe the specific design features to be incorporated as mitigation for this potentially significant impact.

(iii) Seismic-related ground failure, including liquefaction? ☐ ☒ ☐ ☐

Liquefaction is a phenomenon in which soil loses its shear strength for short periods of time during an earthquake. Ground shaking of sufficient duration results in the loss of grain-to-grain contact, due to a rapid increase in pore water pressure, causing the soil to behave as a fluid for short periods of time. The effects of liquefaction may include excessive total and/or differential settlement for structures founded in the liquefiable soils. To be susceptible to liquefaction, a soil is typically cohesionless and loose to medium density (generally sand and silt), below the groundwater table, and subjected to a sufficient magnitude and duration of ground shaking. The potential damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, and heaving and cracking of structure slabs. Based on the relatively dense nature of the underlying formational materials, there is a low potential for liquefaction and seismically induced settlement in the north portion of the campus. However, there is a greater potential for liquefaction in the south and northeast portions of campus due to the presence of alluvial and fill soils, and the potential shallow groundwater conditions. If subsequent geotechnical studies confirm these soils are prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All on-campus structures shall comply with applicable methods of the UBC and CBC. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the ground characteristics. With the incorporation of such design features and remedial measures to be identified in a geotechnical report that will be prepared as part of the PEIR, implementation of the Master Plan is not expected to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death, involving seismic-related ground failure, including liquefaction. Therefore, the PEIR will describe the specific design features and remedial measures to be incorporated as mitigation for this potentially significant impact.

(b) Result in substantial soil erosion or the loss of topsoil? ☐ ☒ ☐ ☐

A Storm Water Management Plan (SWMP) will be prepared for the Master Plan PEIR. The SWMP will identify Best Management Practices (BMPs) to mitigate downstream water quality impacts from storm water and non-storm water runoff pollutants associated with construction activities and long-term operations on campus. With the incorporation of construction-related and post-construction BMPs (design features), such as erosion control measures, landscaping/revegetation and stockpiling/reapplication of topsoil, implementation of the Master Plan would not result in substantial soil erosion or the loss of topsoil. Therefore, the PEIR will describe the specific BMPs and design features to be incorporated as mitigation for these potentially significant impacts.

(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? ☐ ☒ ☐ ☐

Refer to response to Question 6a (iii) re: potential liquefaction impacts. Historically, no unstable geologic conditions (i.e., landslides, lateral spreading, subsidence, liquefaction, and collapse) have been observed in and around the campus; therefore, the potential to encounter such conditions is considered low. There are fill soils located on campus that may be subject to subsidence and settlement. With the incorporation of standard remedial measures to be identified in a geotechnical report that will be prepared as part of the PEIR, grading and construction activities associated with implementation of the Master Plan are not expected to result in unstable geologic conditions. Therefore, the PEIR will describe the specific remedial measures to be incorporated as mitigation for this potentially significant impact.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(d) Be located on expansive soil, as defined in Table 18-a-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐

Expansive soils generally result from clay minerals that have the capacity to shrink or swell in response to changes in moisture content. Shrinking or swelling of foundation soils can lead to damage to foundations and engineered structures, including tilting and cracking. Expansive soils found on slopes can cause slope failure. In addition to the geologic formations listed in Question 5c, fill soils and units of the Eocene Santiago Formation are present on campus. Due to the clay content, the fill and Santiago Formation material are expected to have potential for expansion. The CBC specifies that foundations constructed on materials with an expansion index greater than 20 need additional design consideration to address and accommodate the potential for soil expansion. Expansive soils can be mitigated by their removal and replacement with non-expansive material or by "mixing" with fill material to lower the expansion index of the soil. With the incorporation of standard remedial measures to be identified in a geotechnical report that will be prepared as part of the PEIR, grading and construction activities associated with implementation of the Master Plan are not expected to result in expansive soil conditions otherwise creating substantial risks to life or property. Therefore, the PEIR will describe the specific remedial measures to be incorporated as mitigation for this potentially significant impact.

(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

The San Marcos campus is provided sanitary sewer service by the Vallecitos Water District (VWD); no septic tanks or alternative wastewater systems are proposed as part of the Master Plan. Therefore, no further evaluation is necessary.

7. HAZARDS AND HAZARDOUS MATERIALS. Would the project?

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☒	☐	☐

Implementation of the Master Plan would involve an increase in the transport, use, and disposal of hazardous materials (chemical, radiological, biohazardous) from construction, laboratory activities, general maintenance, and landscaping on campus. However, these activities are comprehensively managed by PCCD pursuant to federal and State regulations. Due to continued compliance with these regulations, construction and operation activities associated with implementation of the Master Plan are not expected to create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. Therefore, the PEIR will describe the specific regulations to be incorporated as mitigation for this potentially significant impact.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☐	☒	☐	☐

Please refer to response to Question 7a.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐

Please refer to response to Question 7a.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would it create a significant hazard to the public or the environment?	☒	☐	☐	☐

The San Marcos campus is associated with three unauthorized storage tank (UST) release cases that have been resolved and closed by the San Diego County Department of Environmental Health (DEH). Nevertheless, residual contamination may exist in the areas previously occupied by these closed UST release cases. In addition, portions of the campus may have historically been used for livestock grazing and/or dry farming and it is possible that pesticides were applied during the period of agricultural use. Therefore, the PEIR will analyze whether excavation and grading activities associated with implementation of the Master Plan would create a significant hazard to the public or the environment due to exposure to hazardous materials sites.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

The San Marcos campus is not located within two miles of a public airport or public use airport. The nearest airport is McClellan-Palomar Airport, which is operated by the County of San Diego and is located approximately 8 miles to the west of the campus. Therefore, no further evaluation is necessary.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

The San Marcos campus is not within the vicinity of a private airstrip. Therefore, no further evaluation is necessary.

g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐

On-campus construction activities and off-campus circulation improvements could result in temporary closures or detours for on and off-campus roads and intersections that require alternate emergency response or evacuation routes. Therefore, the PEIR will analyze whether construction activities associated with implementation of the Master Plan would impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☒	☐	☐	☐

The north and east portions of campus are natural open space areas consisting of coastal sage scrub and chaparral habitats that are susceptible to fire. The potential for fire hazards associated with these existing vegetation communities adjacent to new development (Projects 9, 14, 17, 19 and 19-A) on campus could be substantial. Fuel modification zones can reduce this potential fire threat, but may be impractical due to the substantial geographic size of the campus development/natural open space interface, varied topographic conditions, potential need to maintain existing biological habitat, and the proximity to other large-scale open space areas. Appropriate mitigation measures to reduce fire risk may include the use of fire-retardant construction materials and other built-in fire protection measures, as required by the City of San Marcos fire code, and compliance with all applicable fire code and ordinance requirements for construction, brush clearance, and fuel management plans. Therefore, the PEIR will analyze whether implementation of the Master Plan could expose people or structures to a significant risk of loss, injury or death involving wildland fires.

8. HYDROLOGY AND WATER QUALITY. Would the project:

a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐

Construction activities and new development (Projects 1-A, 9, 14, 17, 19 and 19-A) associated with implementation of the Master Plan could adversely affect receiving water quality by increasing levels of sediment from graded areas and urban contaminants from increased impervious surfaces (e.g., oil, grease, metals, pesticides/herbicides, entrained dust) in storm water runoff. In addition, new development on campus could result in increased water use and corresponding wastewater discharge volumes, which could exceed waste discharge requirements for water quality and/or quantity. As stated in response to Question 6b, a SWMP will be prepared for the Master Plan PEIR which will identify BMPs to mitigate downstream water quality impacts from storm water and non-storm water runoff pollutants associated with construction activities and long-term operations on campus. With the incorporation of construction-related and post-construction BMPs (design features), implementation of the Master Plan is not expected to violate any water quality standards or waste discharge requirements. Therefore, the PEIR will describe the specific BMPs and design features to be incorporated as mitigation for these potentially significant impacts.

b) Substantially degrade groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒

Implementation of the Master Plan would not involve removal of groundwater because potable water is supplied by VWD via existing lines for use on campus. VWD purchases imported water from the San Diego County Water Authority (SDCWA) to satisfy potable water demand. As such, implementation of the Master Plan would not substantially degrade groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table. Therefore, no further evaluation is necessary

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐

Implementation of the Master Plan would not alter the course of a stream or river. However, new development under the Master Plan (Projects 1-A, 9, 14, 17, 19 and 19-A) could substantially alter the existing drainage patterns in the north and east portions of campus (during and/or after ground-disturbing activities). As stated in response to Question 6b, a SWMP will be prepared for the Master Plan PEIR which will identify BMPs to mitigate downstream water quality impacts from storm water and non-storm water runoff pollutants associated with construction activities and long-term operations on campus. With the incorporation of construction-related and post-construction BMPs (design features), implementation of the Master Plan is not expected to result in substantial erosion or siltation on and off campus. Therefore, the PEIR will describe the specific BMPs and design features to be incorporated as mitigation for these potentially significant impacts.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate of surface runoff in a manner which would result in flooding on- or off site?	☐	☒	☐	☐

Please refer to response to Question 8c re: alteration of watercourses and drainage patterns. To resolve complaints of flooding on private properties from residents along the west edge of Parking Lot 12, a subdrain system was installed to mitigate seepage conditions in the southwest area of Parking Lot 12. Project 9-A of the Master Plan calls for the extension of Parking Lot 12 into the area currently occupied by the existing Child Development Center. This would result in an increase in impermeable surface area because portions of the existing Child Development Center are landscaped.

A Drainage Master Plan (DMP) will be prepared for the Facilities Master Plan PEIR which will identify any drainage improvements (design features) necessary to adequately convey the projected increases in surface runoff volumes due to the increase in impermeable surface area within each on-campus drainage basin, resulting from new development under the Master Plan. For example, the DMP will evaluate whether the existing subdrain system in the southwest area of Parking Lot 12 has adequate capacity to handle the projected increase in surface runoff flows from the addition of paved parking area due to Project 9-A, or if additional storm drain or other drainage improvements are warranted in this area of the campus.

With the incorporation of recommended drainage improvements identified in the DMP, implementation of the Master Plan is not expected to substantially increase the rate of surface runoff in a manner that would result in flooding on or off campus. Therefore, the PEIR will describe the specific drainage improvements to be incorporated as mitigation for this potentially significant impact.

e) Create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐

Please refer to response to Question 8d re: preparation of the DMP which will identify recommended drainage improvements to ensure the projected increases in surface runoff volumes from new development under the Master Plan would not exceed the capacity of existing or planned storm water drainage systems. Please refer to response to Question 6b re: preparation of the SWMP which will identify BMPs to mitigate downstream water quality impacts from storm water and non-storm water runoff pollutants associated with construction activities and long-term operations on campus.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐

Please refer to responses to Questions 6b, 8a, 8c, and 8e.

g) Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

Implementation of the Master Plan would not involve the construction of any housing. Therefore, no further evaluation is necessary.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

Because the entire campus is outside of the 100-year floodplain, implementation of the Master Plan would not involve the placement of structures within a 100-year flood hazard area that would otherwise impede or redirect flood flows. Therefore, no further evaluation is necessary.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒

Please refer to response to Question 8d re: preparation of the DMP which will identify recommended drainage improvements to adequately convey the projected increases in surface runoff volumes from new development under the Master Plan, such that people or structures would not be exposed to a significant risk of loss, injury or death involving flooding. In addition, the campus and surrounding areas are not subject to flooding from the failure of a levee or dam. Therefore, no further evaluation is necessary.

j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

The campus is not subject to inundation by seiche as this phenomenon is typically associated with land-locked bodies of water, none of which occur near the campus. The campus is located in northern San Diego County approximately 10 miles inland from the Pacific Ocean. In the event of a tsunami, the campus would not be impacted. Inundation by mudflows across the developed portion of the campus is unlikely due to the urbanized location of the campus, coverage of the undeveloped areas of the campus with native vegetation, and its location outside of the 100-year floodplain. In addition, the specific combination of unstable geologic formations, steep slopes, and extensive clay soils that would otherwise contribute to mudflows is not prevalent on campus. As such, on-campus development associated with implementation of the Master Plan would not be impacted by inundation by seiche, tsunami or mudflow. Therefore, no further evaluation is necessary.

9. LAND USE AND PLANNING. Would the project:

a) Physically divide an established community?	☐	☐	☐	☒

Since the establishment of the PCCD San Marcos campus in 1950, the San Marcos community has developed around and in response to the campus. Implementation of the Master Plan would not include any development outside of the established campus boundaries that would otherwise result in an incursion into, or division of, the surrounding communities. Therefore, no further evaluation is necessary.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐

The applicable land use plan for the San Marcos campus is the Facilities Master Plan 2022. The PCCD campuses are not subject to local zoning and land use regulations. However, implementation of the Master Plan could result in impacts to adjacent communities for which the relevant jurisdiction's land use plans, policies or regulations may apply. For example, if new development under the Master Plan would result in aesthetics or noise impacts to adjacent off-campus neighborhoods, then such impacts may conflict with applicable Conservation Element policies of the San Marcos General Plan, visual quality implications of the College Area Community Plan, or noise regulations of the City of San Marcos Zoning Ordinance. Therefore, to ensure optimal cooperation between campus projects and neighboring communities, the PEIR will analyze whether implementation of the Master Plan would conflict with an applicable land use plan, policy or regulation of an adjacent jurisdiction adopted for the purpose of avoiding or mitigating an environmental effect.

c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	☐	☒	☐	☐

If new development under the Master Plan would result in indirect impacts to biological resources within the adjacent Owen Peak RCA (College Area Community Plan) or the Northern Focused Planning Area of the Draft NCCP for the City of San Marcos (May 2001), then such impacts may conflict with applicable policies from these documents. However, as discussed in response to Question 4f, the PEIR will evaluate the potential for PCCD to work with the regulatory agencies to adopt a HCP for the natural open space areas on campus. The purpose of the San Marcos Campus HCP would be to establish a mitigation banking agreement to address programmatic impacts to coastal sage scrub and California gnatcatcher habitat resulting from implementation of the Master Plan. With the incorporation of mitigation measures identified in the HCP, implementation of the Master Plan is not expected to conflict with applicable policies in the College Area Community Plan (Owen Peak RCA) or the City of San Marcos Draft NCCP for areas adjacent to the campus. Therefore, the PEIR will describe the specific HCP measures (e.g., Land Use Adjacency Guidelines) to be incorporated as mitigation for this potentially significant impact.

10. MINERAL RESOURCES. Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

The predominant geologic formation that underlies the campus consists of marine sedimentary deposits that are not known to contain mineral resources. As such, implementation of the Master Plan would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, no further evaluation is necessary.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

As stated in response to Question 9c, the applicable land use plan for the San Marcos campus is the Facilities Master Plan 2022. The Master Plan does not delineate a locally-important mineral resource recovery site on campus. Therefore, no further evaluation is necessary.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

11. NOISE. Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ☒ ☐ ☐ ☐

Project 16 would be adjacent to residences and Projects 1-A, 6, 14, 14-A, 17, 19 and 19-A would be adjacent to potential California gnatcatcher habitat, both are considered noise sensitive land uses. Grading and construction activities for these projects could generate temporary noise levels that exceed applicable noise standards. Operational noise levels at these locations may also exceed applicable noise standards. Therefore, the PEIR will analyze whether implementation of the Master Plan could expose persons or wildlife to noise levels in excess of applicable standards.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? ☒ ☐ ☐ ☐

As stated in response to Question 11a, Project 16 would be adjacent to residences. The grading and construction activities associated with this project, and the close proximity of earth moving equipment to existing residences, could cause substantial ground vibration. In addition, improvement to area streets could also cause notable ground vibration. Therefore, the PEIR will analyze whether implementation of the Master Plan could expose persons to excessive groundborne vibration or groundborne noise levels.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? ☒ ☐ ☐ ☐

Please refer to response to Question 11a.

d) A substantially temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? ☒ ☐ ☐ ☐

Please refer to response to Question 11a.

e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ☐ ☐ ☐ ☒

Please refer to response to Question 7e.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? ☐ ☐ ☐ ☒

Please refer to response to Question 7f.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

12. POPULATION AND HOUSING. Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? ☒ ☐ ☐ ☐

The Master Plan would accommodate an increase in student enrollment on campus from an existing student headcount of approximately 21,000 in 2008 to a maximum of 25,000 students at full campus build-out in 2022. Therefore, the PEIR will analyze whether implementation of the Master Plan could indirectly induce population growth within the neighboring cities of San Marcos and Vista, and whether such growth could result in demand for additional housing, and for goods and services, which could induce additional population growth.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ☒

Implementation of the Master Plan would not displace any existing housing that would otherwise necessitate the construction of replacement housing elsewhere. Therefore, no further evaluation is necessary.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ☒

Please refer to response to Question 12b.

13. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection? ☒ ☐ ☐ ☐

Fire protection services are provided to the campus by the City of San Marcos Fire Department. Additional development, higher buildings and more students would occur on campus under the Master Plan, which would increase demand for fire protection services to the campus. Therefore, the PEIR will analyze whether implementation of the Master Plan could result in unacceptable service ratios or response times to the campus which may require the provision of new or physically altered fire protection services, the construction of which could cause substantial adverse environmental impacts.

b) Police protection? ☒ ☐ ☐ ☐

Police protection services are provided to the San Marcos campus by the PCCD Police Department which is located on campus. Additional development and more students would occur on campus under the Master Plan, which would increase demand for police protection services. Therefore, the PEIR will analyze whether implementation of the Master Plan could result in unacceptable service ratios or response times on campus which may require the provision of new or physically altered police protection services, the construction of which could cause substantial adverse environmental impacts.

c) Schools? ☒ ☐ ☐ ☐

Implementation of the Master Plan would result in significant environmental impacts associated with the provision of new or physically altered school facilities on campus. The purpose of the PCCD San Marcos Campus Facilities Master Plan PEIR is to analyze these impacts and identify appropriate design features, performance standards, and mitigation measures.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Because the San Marcos campus does not provide residential housing for students, faculty and staff, implementation of the Master Plan would not result in an increase in on-campus population and school-age children requiring attendance at off-campus elementary, middle and high schools for which the provision of new or physically altered facilities may be needed, the construction of which could cause substantial adverse environmental impacts.

d) Parks? ☐ ☐ ☒ ☐

The on-campus relocation and construction of new, expanded recreational facilities (Projects 17, 19, and 19-A) and the proposed addition of "green" open space areas in the Campus Core are expected to satisfy the additional demand for on-campus recreational and park space resulting from the projected increase in student enrollment. As such, implementation of the Master Plan would not result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities in order to maintain acceptable performance objectives, and this potential impact would be less than significant. Therefore, the PEIR will document this conclusion.

e) Other public facilities? ☒ ☐ ☐ ☐

VWD provides water and sewer services to the campus. The additional on-campus development under the Master Plan is expected to increase water demand and waste water generation. Therefore, the PEIR will analyze whether implementation of the Master Plan could result in unacceptable performance objectives for these services which may require the provision of new or physically altered water and sewer facilities, the construction of which could cause substantial adverse environmental impacts.

14. RECREATION.

a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ☐ ☐ ☐ ☒

As stated in response to Question 13d, new and expanded recreational facilities (Projects 17, 19, and 19-A) would be provided on campus to satisfy the additional demand for recreational space resulting from the projected increase in student enrollment. As such, implementation of the Master Plan would not increase the use of existing neighborhood or regional parks or other recreational facilities off campus, such that substantial physical deterioration of these facilities would occur or be accelerated. Therefore, no further evaluation is necessary.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? ☒ ☐ ☐ ☐

Implementation of the Master Plan would result in significant environmental impacts associated with the relocation and construction of new recreational facilities on campus. The purpose of the PCCD San Marcos Campus Facilities Master Plan PEIR is to analyze these impacts and identify appropriate design features, performance standards, and mitigation measures.

15. TRANSPORTATION/TRAFFIC. Would the project:

a) Cause an increase in the traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? ☒ ☐ ☐ ☐

The projected increase in student enrollment through the plan horizon year of 2022 would result in additional commuters using the regional transportation system to and from the campus. It is anticipated these projected increases

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

in campus-related trips would contribute to existing and projected deficiencies in the level of service at certain roadways, intersections and/or freeway segments in the vicinity, as identified by the City of San Marcos, County of San Diego, and Caltrans. Therefore, the PEIR will analyze whether implementation of the Master Plan could cause an increase in traffic volumes which is substantial in relation to the existing and future traffic loads and capacity of the regional circulation system.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? ☒ ☐ ☐ ☐

Please refer to response to Question 15a.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? ☐ ☐ ☐ ☒

As stated in responses to Questions 7e and 7f, the campus is not located in close proximity to any airports. Development associated with the Master Plan would not change existing air traffic patterns or volumes in any measurable way that would otherwise result in substantial safety risks. Therefore, no further evaluation is necessary.

d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? ☒ ☐ ☐ ☐

The projected increase in traffic volumes resulting from implementation of the Master Plan would not substantially increase hazards along the on- or off-campus circulation system resulting from potential traffic conflicts with incompatible uses, such as farm equipment. However, the projected increase in traffic volumes resulting from implementation of the Master Plan could increase the potential hazards identified by the City of San Marcos relative to the existing congestion at the northbound approach of Mission Road/Las Posas Road intersection, and vehicles backing onto the North County Transit District (NCTD) Sprinter railway. Therefore, the PEIR will analyze whether implementation of the Master Plan could substantially increase hazards at this intersection.

e) Result in inadequate emergency access? ☐ ☐ ☒ ☐

Objective 3 of the Master Plan involves the provision of a widened two-way campus loop road system with upgraded entrances (Project 2-A) which would improve emergency and safety access within the campus. In addition, development associated with the Master Plan is subject to review by the City of San Marcos Fire Marshall to ensure that adequate fire and emergency access is designed into the projects. Projects cannot be bid for construction until the Fire Marshall signs off on the final plans. As such, implementation of the Master Plan is not expected to result in inadequate emergency access on campus, and this potential impact would be less than significant. Therefore, the PEIR will document this conclusion.

f) Result in inadequate parking capacity? ☐ ☐ ☒ ☐

Objective 4 of the Master Plan involves the provision of additional parking capacity on campus (Projects 1-A, 9-A, 14-A, 20, and 20-C) to satisfy the projected increase in parking demand resulting from the increase in student enrollment and associated commuter trips. As such, implementation of the Master Plan is not expected to result in inadequate parking capacity on campus, and this potential impact would be less than significant. Therefore, the PEIR will document this conclusion.

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Conflict with adopted policies or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

A bus Transit Center is maintained by NCTD next to the main entrance of the campus, along the north side of Mission Road, and the NCTD Sprinter Boarding Station is located across from the main entrance, along the south side of Mission Road. Bicycle facilities are provided on campus to promote the use of these NCTD transit options to access the campus, and ridesharing/carpooling incentives are offered. Although the San Marcos campus is a commuter campus, the PCCD will continue to work with NCTD and City of San Marcos to provide and expand alternative transportation programs on campus to better meet anticipated future transportation demands. As such, implementation of the Master Plan would not conflict with adopted policies or programs supporting alternative transportation. Therefore, no further evaluation is necessary.

16. UTILITIES AND SERVICE SYSTEMS. Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☒	☐	☐	☐

As stated in responses to Questions 6e and 13e, the San Marcos campus is provided sanitary sewer service by VWD. Implementation of the Master Plan would result in increased wastewater generation from additional development and population growth on campus, which would result in increased wastewater discharge volumes requiring treatment at either the Encina Water Pollution Control Facility or the Meadowlark Reclamation Facility. Therefore, the PEIR will analyze whether implementation of the Master Plan would exceed wastewater treatment requirements of the VWD and San Diego RWQCB.

b) Require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

Please refer to response to Question 13e.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐

As stated in response to Question 8d, a DMP will be prepared for the Facilities Master Plan PEIR which will identify any drainage improvements (design features) necessary to adequately convey the projected increases in surface runoff volumes due to the increase in impermeable surface area within each on-campus drainage basin, resulting from new development under the Master Plan. Implementation of the Master Plan could result in significant environmental impacts associated with the construction of new storm water drainage facilities or expansion of existing facilities on campus. The purpose of the PCCD San Marcos Campus Facilities Master Plan PEIR is to analyze these impacts and identify appropriate design features, performance standards, and mitigation measures.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐

As stated in response to Question 13e, VWD provides water service to the San Marcos campus. Implementation of the Master Plan would result in increased water demands from additional development, landscaped areas and population growth on campus. A Water Availability Analysis (WAA) will be prepared for the Facilities Master Plan PEIR which will identify the projected increases in water usage by campus activity, and the water conservation opportunities to reduce these increases (e.g., recycled water, artificial turf, weather-based irrigation control systems, tank-less toilets or units with tanks, flush urinals, manual sink faucets). Therefore, the PEIR will analyze whether implementation of the

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Master Plan would have sufficient water supplies available from VWD to serve the new development on campus, or if new or expanded entitlements are needed, then the projected impacts to water supply and the corresponding mitigation measures will be identified in the WAA.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐

Please refer to response to Question 16a.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐

Implementation of the Master Plan would result in increased solid waste generation and disposal due to construction activities and additional development and population growth on campus. Therefore, the PEIR will analyze whether the solid waste disposal needs associated with implementation of the Master Plan would exceed the permitted capacity of the landfill that would serve the campus. The PEIR will also discuss PCCD's comprehensive recycling program and the role of recycling to divert waste that would otherwise go to the landfill.

g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

As stated in response to Question 16f, PCCD will continue to implement a comprehensive recycling program at the San Marcos campus, in compliance with federal, State, and local statutes and regulations related to solid waste reduction. Edco, which provides waste disposal services to the campus, is required to comply with federal, State, and local statutes and regulations related to solid waste disposal. Therefore, no further evaluation is necessary.

h) Result in wasteful, inefficient or unnecessary consumption of energy?	☐	☒	☐	☐

Implementation of the Master Plan would result in increased demands for electricity, natural gas, and other fossil fuels associated with additional development and population growth on campus. The PEIR will identify current building sustainability and energy conservation practices and guidelines for new development (design features) to reduce energy consumption. With the incorporation of such design features, implementation of the Master Plan is not expected to result in wasteful, inefficient or unnecessary consumption of energy. Therefore, the PEIR will describe the specific energy-efficient design features to be incorporated as mitigation for this potentially significant impact.

17. MANDATORY FINDINGS OF SIGNIFICANCE.

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

As discussed in all of the responses to the questions above, implementation of the Master Plan has the potential to degrade the quality of the environment, including reduction of wildlife habitat (please refer to response to Question 4a) and impacts to important examples of the major periods of California history or prehistory (please refer to responses to Questions 5a and 5b).

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐

Implementation of the Master Plan, in conjunction with other current and reasonably foreseeable development in the vicinity or region, could result in cumulatively considerable environmental impacts. The cumulative analysis in the PEIR will include an evaluation of Master Plan implementation along with other cumulative projects in the vicinity of San Marcos campus, as identified by the cities of San Marcos and Vista, that would contribute to the degradation of the environment in each topic area. The cumulative projects will vary with the particular issue addressed because the cumulative nature of a particular topic area varies. Probable projects will include those which: (1) have an application on file at the time the NOP is released; (2) are included in an adopted capital improvement program, general plan, regional transportation plan, or similar plan; (3) are included in a summary of projections (or development areas designated) in a general plan or similar plan; (4) are anticipated as later phases of approved projects; or (5) are included in funds budgeted by public agencies.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

As discussed in responses to Questions 1a-d, 2a-d, 6a-d, 7a-d, 7g-h, 8d, 9b, 11a-d, 12a, 13a-b, 15a-b, and 15d, implementation of the Master Plan could cause substantial adverse effects on human beings, either directly or indirectly, in the following areas: aesthetics, air quality, safety hazards from geologic conditions, exposure to hazardous materials, emergency response deficiencies, wildland fires, flooding, noise, population growth, and traffic congestion.

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Affidavit of Publication

JUL 15 2008

PBS&J

ATTN: DEBBIE SURRELL

9275 SKY PARK COURT, #200

SAN DIEGO, CA 92123

STATE OF CALIFORNIA} ss.
County of San Diego}

The Undersigned, being duly sworn, deposes and says: That....She is a resident of the County of San Diego. THAT....She is and at all times herein mentioned was a citizen of the United States, over the age of twenty-one years, and that .....She is not a party to, nor interested in the above entitled matter; that ....She is..... Chief Clerk for the publisher of .....

The San Diego Union-Tribune

a newspaper of general circulation, printed and published daily in the City of San Diego, County of San Diego, and which newspaper is published for the dissemination of local news and intelligence of a general character, and which newspaper at all the times herein mentioned had and still has a bona fide subscription list of paying subscribers, and which newspaper has been established, printed and published at regular intervals in the said City of San Diego, County of San Diego, for a period exceeding one year next preceding the date of publication of the notice hereinafter referred to, and which newspaper is not devoted to nor published for the interests, entertainment or instruction of a particular class, profession, trade, calling, race, or denomination, or any number of same; that the notice of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following date, to-wit: JULY 9, 2008

Gwendolyn Watson

Chief Clerk for the Publisher

Affidavit of Publication of

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NOTICE OF PREPARATION OF A PROGRAM ENVIRONMENTAL IMPACT REPORT AND PUBLIC SCOPING MEETING NOTICE

Palomar Community College District - San Marcos Campus, Facilities Master Plan

NOTICE IS HEREBY GIVEN that the Palomar Community College District (PCCD) is preparing a draft Program Environmental Impact Report (EIR), in accordance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines (CCR Title 14, §§15082(a), 15103, and 15375), to assess the environmental effects associated with implementation of the San Marcos Campus Facilities Master Plan ("Master Plan"). A brief description of the Master Plan is provided below.

In compliance with CEQA Guidelines, the PCCD has established a 30-day public review period, beginning on July 8, 2008, to solicit comments and input on this Notice of Preparation (NOP). For agencies that may need to use the PEIR prepared by the PCCD when considering your permit or other approvals, we need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with implementation of the Master Plan. The PCCD requests that any potential responsible or trustee agency respond to this NOP in a manner consistent with CEQA Guidelines §15082 (b). If you are responding as an interested organization or individual citizen, we need to know your views as to the environmental information you would like us to address in the draft PEIR. All written comments, including the name of a contact person and phone number, should be forwarded to the PCCD contact listed below by no later than August 6, 2008.

Ms. Kelley Hudson-Macisaac
Palomar Community College District
San Marcos Campus, Facilities Planning
1140 West Mission Road
San Marcos, CA 92069-1487
Phone: (760) 744-1150 x2772
Fax: (760) 761-3506
Email: kmacisaac@palomar.edu

LOCATION: The San Marcos campus is located at 1140 West Mission Road in the City of San Marcos, near the west edge of the PCCD boundary in northern San Diego County.

DESCRIPTION OF MASTER PLAN: The Master Plan encompasses growth and development of the existing San Marcos campus from the present through 2022. The overall purpose of the Master Plan is to increase the on-campus capacity to accommodate the anticipated growth in student enrollment up to a maximum of 25,000 students through the year 2022. This will be accomplished via the following means: infrastructure improvements; demolition of older, single-story buildings; construction of new multi-story buildings; replacement of inadequate temporary space with permanent facilities; modernization of the majority of existing buildings to remain; consolidation of instructional space to minimize land development and create more open space; and facilities planning that is sensitive to environmentally sensitive areas and topography. A total of 30 Master Plan projects will be evaluated in the draft PEIR.

PUBLIC SCOPING MEETING: A public scoping meeting will be held to provide more information on the Master Plan, and to give the public an opportunity to offer comments and suggestions on the scope of the draft PEIR. The meeting will be held on July 17, 2008, 6:00 p.m. at Palomar Community College, San Marcos Campus, Governing Board Room, Student Services Center, 1140 West Mission Road, San Marcos, CA 92069-1487.

Any written or oral comments received at the public scoping meeting will be considered in preparing the draft PEIR, along with any written comments received during the 30-day NOP public comment period. All parties that have submitted their names and mailing addresses will be notified of subsequent actions as part of the environmental review process. If you wish to be placed on the mailing list or have any questions about the Master Plan, please contact Ms. Kelley Hudson-Macisaac at the phone number or email address listed above.

Details regarding the location and environmental setting of San Marcos campus, the Master Plan, and the potential environmental effects associated with implementation of the Master Plan are contained within the NOP/Initial Study which can be reviewed by appointment at the San Marcos Campus Facilities Planning office (address listed above). Please contact Ms. Kelley Hudson-Macisaac at the phone number or email address listed above to set up an appointment. The NOP/Initial Study can also be reviewed at the San Marcos Public Library located at 2 Civic Center Drive, San Marcos CA 92069.

STATE OF CALIFORNIA Arnold Schwarzenegger, *Govemor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

July 16, 2008

Kelley Hudson-MacIsaac
Palomar Community College District
1140 West Mission Road
San Marcos, CA 92069-1487

RE: SCH#2008071024 Palomar Community College-San Marco Campus, Facilities Master Plan Program; San Diego County.

Dear Ms. Hudson-MacIsaac:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Preparation (NOP) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5 minute quadrangle name, township, range and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Katy Sanchez
Program Analyst

CC: State Clearinghouse

Native American Contacts
San Diego County
July 16, 2008

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Kumeyaay Cultural Historic Committee
Ron Christman
56 Viejas Grade Road Diegueno/Kumeyaay
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Manzanita Band of Kumeyaay Nation
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This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2008071024 Palomar Community College-San Marcos Campus, Facilities Master Plan Program; San Diego County.

Native American Contacts
San Diego County
July 16, 2008

Kumeyaay Cultural Repatriation Committee
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This list is current only as of the date of this document.

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This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2008071024 Palomar Community College-San Marcos Campus, Facilities Master Plan Program; San Diego County.

N C T D

July 18, 2008

Ms. Kelley Hudson-MacIsaac
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, CA 92069

RE: NOP of a Draft EIR for the Palomar Community College San Marcos Campus Master Plan

Dear Ms. Hudson-MacIsaac:

Thank you for the opportunity to review the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the Community College San Marcos Campus Master Plan project, which proposes to increase the on-campus capacity to accommodate the anticipated growth in student enrollment up to a maximum of 25,000 students through the year 2022. The project area is the current Palomar Community College Campus, which generally occupies the area northeast of the intersection of West Mission Road and North Las Posas Road in the City of San Marcos.

The North County Transit District (NCTD) currently operates fixed route bus service to the Palomar College Transit Center seven days a week. The routes that serve this location (most of which do not operate on Sunday) are 304, 305, 321, 341, 347, 404, and 442. In addition, the SPRINTER train, also operated by NCTD, stops at the Palomar College Station directly across West Mission Road from the transit center. This bus and train service connects the project area with other regional and local transit services at Cal State San Marcos, the Escondido, Vista, and Oceanside Transit Centers.

NCTD requests that the DEIR address the following issues: transit passenger access, access for seniors and people with disabilities, pedestrian circulation, bus stop improvements and safety, encouraging alternative modes of transportation, direct impacts on transit service (caused by an increase in student enrollment and the corresponding increase in ridership), and indirect impacts on transit service (bus and SPRINTER delays caused by any traffic delays caused by the project).

Please see the following:

1. Transit passenger access, pedestrian circulation and safety, and site design:

   The DEIR should include an analysis of pedestrian circulation and safety through the plan area, as well as an implementation plan. The street network and developments within the plan area should be designed to encourage pedestrian trips to, from, and within the campus. Amenities such as landscaping, wide sidewalks, enhanced crosswalks, and pedestrian-supportive lighting should be included. Specific guidelines for creating a pedestrian-friendly environment can be found in *Planning and Designing for Pedestrians*, at www.sandag.org/urbandesign. All pedestrian paths included in this analysis should be ADA-compliant, to facilitate safe access for seniors and people with disabilities.

   Other requested pedestrian-related improvements include the following:

   a) To facilitate walkability for transit passengers walking to, from, and between the existing bus transit center, the SPRINTER station, and the campus, pedestrian connections should be emphasized between the campus, transit center, and SPRINTER station.

NORTH COUNTY TRANSIT DISTRICT
810 Mission Avenue, Oceanside, CA 92054-2825
760-967-2828

b) Designated pedestrian paths through the following locations should be designed to facilitate safe access for pedestrians:
   - Between the campus, the transit center, and adjacent roads
   - From the campus/transit center side of the street to the SPRINTER station.
   - From adjacent roads to the campus

c) Any redesigned streets, whether interior or exterior, should have ADA-accessible sidewalks and curb cuts to facilitate access for both able-bodied and wheelchair-bound pedestrians.

d) Finally, individual development sites within the project area should be designed so that at least one building entrance faces a pedestrian path, in order to facilitate pedestrian access and readability.

2. Reducing automobile trips by encouraging alternative modes:

The DEIR should include an analysis of measures and a corresponding implementation plan designed to encourage alternative modes of transportation. These measures include:

a. Providing facilities to encourage bicycle travel to, from, and within the plan area:

   - Include ample bicycle parking (lockers and U-loops) for students, faculty, staff, and visitors throughout the project area;

   - Include bike lanes on redesigned streets;

   - Provide shower facilities for students/faculty/staff who choose to ride their bikes to campus.

b. Initiate (or describe, if currently implemented) a Transportation Demand Management (TDM) program to encourage transit use by employees:

   - Offer pre-paid free or greatly reduced transit passes to student, faculty, and staff;

c. Fund transit services for a demonstration period (5 years) to encourage transit use by students, faculty, and staff:

   - Fund additional service on adjacent routes to provide more frequent and faster transit service.

3. Transit improvements and safety:

NCTD staff does not currently know current enrollment levels at Palomar College. An increase in enrollment to 25,000 students may seriously impact the ability of public transit to adequately serve the Palomar College Community. The DEIR should address the following:

- Transit mode share (existing and with project)
- Capital needs generated by increased ridership (need for additional bus bays, buses, trains, bus shelters and benches, etc)
- Delays to bus/SPRINTER service caused by project.

Please work closely with NCTD staff during the creation of the DEIR to address these issues.

NCTD will be pleased to work with the developers and the City to successfully address the needs listed above. If you have any questions regarding our comments, please feel free to contact me at (619) 699-7336 or by email at tcl@sandag.org, or Kurt Luhrsen at (760) 966-6546 or kluhrsen@nctd.org.

Sincerely,

Travis Cleveland
Regional Planner
SANDAG on behalf of NCTD

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maureen F. Gorsen, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Arnold Schwarzenegger
Governor

July 30, 2008

Mrs. Kelly Hudson-MacIsaac (Kmacisaac@palomar.edu)
Palomar Community College District
1140 West Mission Road
San Marcos, CA 92069

NOTICE OF PREPARATION FOR PALOMAR COMMUNITY COLLEGE – SAN MARCOS CAMPUS, FACILITIES MASTER PLAN PROGRAM EIR, SAN DIEGO COUNTY, SAN MARCOS, CALIFORNIA (SCH 2008071024)

Dear Mr. Savidge:

The Department of Toxic Substances Control (DTSC) has reviewed the Notice of Preparation (NOP), dated July 8, 2008, for the subject project. The due date to submit comments is August 6, 2008. Based on a review of the NOP, DTSC would like to provide the following comments:

1. The project consists of an overall masterplan including infrastructure improvements, demolition, construction, modernization and consolidation of existing structures.

2. If demolition of an old structure will occur, lead based paint and organochlorine pesticides from termiticide applications may be potential environmental concerns at the site. DTSC recommends that these environmental concerns be investigated and possibly mitigated, in accordance with DTSC's *"Interim Guidance, Evaluation of School Sites with Potential Soil Contamination as a Result of Lead From Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers, dated June 9, 2006."*

3. If the site has been used for agricultural purposes, pesticides (e.g., DDT, DDE, toxaphene) and fertilizers (usually containing heavy metals) commonly used as part of agricultural operations are likely to be present. These agricultural chemicals are persistent and bio-accumulative toxic substances. DTSC recommends that these environmental concerns be investigated and possibly mitigated, in accordance with the "Interim Guidance for Sampling Agricultural Soils (Third Revision), dated August 2008." This Guidance should be followed for sampling agricultural properties where development is anticipated.

4. There were three unauthorized storage tank release cases for the San Marcos campus, but now closed. A UST site may have a regulatory closure under a specific agency standard (e.g., for industrial land use); however, a closed UST may still present risk to students and DTSC oversight may be needed. Therefore, the area where the underground storage tank (UST) was previously located may need to be re-evaluated for school use. DTSC recommends that these environmental concerns be investigated using DTSC's *"Advisory – Active Soil Gas Investigations, dated January 2003"* and *"Vapor Intrusion Guidance Document – Final Interim,* dated December 15, 2004."

5. Since the project is school site related, Palomar Community College (PCC) is invited to participate in DTSC's School Property Evaluation and Cleanup Program. If PCC elects to proceed to conduct a Preliminary Endangerment Assessment (PEA) at the site, it should enter into a Voluntary Cleanup Agreement (VCA) with DTSC to oversee the preparation of the PEA. For additional information on the VCA Program, please visit DTSC's web site at www.dtsc.ca.gov.

If you would like to discuss this matter further, please contact me at (818) 717-6617.

Sincerely,

Ken Chiang
Senior Hazardous Substances Scientist
Brownfields and Environmental Restoration Program

cc: State Clearinghouse (State.clearinghouse@opr.ca.gov)
Office of Planning and Research

Mr. Guenther W. Moskat (Gmoskat@dtsc.ca.gov)
CEQA Tracking Center – Sacramento HQ

School Reading File – Chatsworth (cwherry@dtsc.ca.gov)

CEQA Reading File – Chatsworth

STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

July 31, 2008

Kelly Hudson-Maclsaac
Palomar Community College District
1140 West Mission Road
San Marcos, CA 92069-1487

Dear Ms. Hudson-Maclsaac:

Re: SCH# 2008071024; Palomar Community College - San Marcos Campus, Facilities Master Plan Program EIR

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings.

The Commission's Rail Crossing Engineering Section (RCES) is in receipt of the *Notice of Completion & Environmental Document Transmittal-NOP* from the State Clearinghouse. The proposed master plan to encompass growth and development of up to 25,000 more students for the college at W. Mission Road, W. Borden Road, N. Las Posas Road, and S. Santa Fe Avenue (lat= 33.148030, long=- 117.185030) may increase traffic volumes not only on streets and at intersections, but also at crossings. RCES is particularly concerned that increased congestion may affect safety at the N. Las Posas Road (DOT# 027576G) and W. Mission Road (DOT# 027574T) crossings. Any traffic study undertaken should then consider mitigation measures at these crossings.

Mitigation measures to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and continuous vandal resistant fencing or other appropriate barriers to limit the access of trespassers onto the railroad right-of-way.

The college should schedule a meeting with RCES, and North County Transit District to discuss mitigation measures and safety improvements for the crossings due to increase in vehicle traffic volume.

If you have any questions, please contact Jose Pereyra, Utilities Engineer at 213-576-7083, jfp@cpuc.ca.gov, or me at rxm@cpuc.ca.gov, 213-576-7078.

Sincerely,

Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

C: Keith Kranda, NCTD

U. S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011
(760) 431-9440
FAX (760) 431-9618

California Department of Fish and Game
South Coast Region
4949 Viewridge Avenue
San Diego, California 92123
(858) 467-4201
FAX (858) 467-4299

In Reply Refer To:
FWS/CDFG-08B0646-08TA0726

AUG 0 4 2008

Ms. Kelley Hudson-MacIsaac
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, California 92069-1487

Subject: Notice of Preparation of a Program Environmental Impact Report (PEIR) for the Palomar Community College – San Marcos Campus, Facilities Master Plan (SCH Number 2008071024)

Dear Ms. Hudson-MacIsaac:

The U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Game (Department), hereafter collectively referred to as the Wildlife Agencies, have reviewed the above-referenced Notice of Preparation (NOP), dated July 7, 2008, for the Palomar Community College – San Marcos Campus, Facilities Master Plan. The Wildlife Agencies have identified potential effects of this project on wildlife and sensitive habitats. The project details provided herein are based on the information provided in the NOP and associated documents.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; Sections 15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (CESA) and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning (NCCP) Program. The City of San Marcos (City) is currently participating in the NCCP program through the preparation of a draft MHCP Subarea Plan; however, Palomar Community College District (PCCD) is not participating in the NCCP program.

The San Marcos campus is located at 1140 West Mission Road in the City, near the western edge of the PCCD boundary in northern San Diego County. Regional access is provided via Interstate 15 (I-15) and State Route 78 (SR-78) freeways.

The Master Plan encompasses growth and development of the existing San Marcos Campus from the present through 2022. The overall purpose of the Master Plan is to increase the on-campus capacity to accommodate the anticipated growth in student enrollment up to a maximum of 25,000 students. A total of 30 Master Plan projects will be evaluated in the draft PEIR. The projects will be broken into near-term (2009 to 2013) and long-term (2014 to 2022) phases. The following near-term projects have been identified as the first group to be constructed during the years 2009 to 2013.

- Projects 1-A/9-A: Parking Improvement Projects (3)
- Project 3: Multi-media Lab/Planetarium
- Project 5*: Library/Learning Resource Center
- Project 6: "LL" Building Remodel
- Project 9: Child Development Center
- Project 10*: Industrial Technology Center
- Projects 12/12-A*: Theatre Addition/Renovation
- Project 14: Maintenance and Operations Facilities
- Project 19: Relocate Baseball/Softball Fields
- Project 20-A: Lot 12 Storm Drain Upgrades
- Project 20-B: Phase 1 of the Arboretum Landscape Improvements

*These projects are to be evaluated concurrently in a separate environmental document because construction is scheduled to begin prior to the expected certification date of the Master Plan PEIR; design plans are in preparation for these projects; and a CEQA State Clearinghouse Number must be obtained for these projects by fall of 2008 to meet State funding requirements.

We are providing comments and recommendations (Enclosure) to assist the PCCD in avoiding, minimizing, and adequately mitigating project-related impacts to biological resources, and to ensure that the project is consistent with ongoing regional habitat conservation planning efforts.

We appreciate the opportunity to comment on this NOP. The comments and recommendations provided are based on our knowledge of sensitive and declining vegetation communities in the County of San Diego and our participation in regional conservation planning efforts. We are hopeful that further consultation between our respective agencies will ensure protection for the important biological resources in the project area.

If you have questions or comments regarding this letter, please contact Janet Stuckrath of the Service (760) 431-9440 or David Lawhead of the Department at (858) 627-3997.

Sincerely,

Karen Goebel
Acting Assistant Field Supervisor
U.S. Fish and Wildlife Service

Stephen M. Juarez
Environmental Program Manager
California Department of Fish and Game

Enclosures (3):

Wildlife Agency Comments on the Notice of Preparation for the Palomar Community College – San Marcos Campus, Facilities Master Plan
Sensitivity of Top Priority Rare Natural Communities in Southern California
Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities

cc:
State Clearinghouse

Enclosure
Wildlife Agency Comments on the
Notice of Preparation for the
Palomar Community College – San Marcos Campus, Facilities Master Plan
(SCH Number 2008071024; FWS/CDFG-08B0646-08TA0726)

Specific Comments

1. Although the Palomar Community College – San Marcos campus is not a participant in the NCCP program, it is adjacent to existing conservation areas included in the Northern Focused Planning Area (FPA) depicted in Figure 4 of the draft San Marcos Subarea Plan, dated May 2001. The PEIR should provide a complete evaluation of this project in relationship to the adjacency standards in the City of San Marcos' draft Multiple Habitats Conservation Program (MHCP) Subarea Plan. Specifically, provide an analysis of the proposed project's impacts on any adjacent habitat that is proposed as open space under the draft Subarea Plan.

2. The coastal California gnatcatcher (*Polioptila californica californica*; gnatcatcher) was previously documented in coastal sage scrub on the campus. Impacts to the gnatcatcher may require consultation under either section 7 or section 10 of the Act in compliance with the Federal Endangered Species Act.

3. The Wildlife Agencies consider fuel modification zones to be fully impacted. Thus, they should be located completely within the project footprint and impacts calculated, included in the total impact acreage, and mitigated appropriately. The PEIR should include a discussion and maps of all fuel modification required by the local fire district.

4. The Wildlife Agencies are concerned about the biological effects of artificial night lighting (ANL) on the species that depend on the native vegetation and open spaces adjacent to the project sites. Species' behaviors are tied to light and darkness in daily and seasonal life cycles. The PEIR should include the results of the lighting tests to confirm that illumination in the natural areas has not significantly increased.

5. The Wildlife Agencies encourage and support programs that maintain high quality waters of the state and prevent the degradation thereof caused by pollution and contamination. In addition, we seek mutual cooperation with the Regional Water Quality Control Board (Regional Board) in solving water quality problems. The Wildlife Agencies are concerned about the potential for project-related contaminants to reach riparian areas onsite. The PEIR should include best management practices onsite that fully mitigate for project-related contaminants in surface flows prior to their discharge to the riparian areas onsite.

6. The proposed project may require a Section 1603 Streambed Alteration Agreement (SAA). The Department's issuance of a Lake or Streambed Alteration Agreement for a project that is subject to CEQA requires CEQA compliance actions by the Department as a Responsible

Agency. As a Responsible Agency under CEQA, the Department may consider the local jurisdiction's (Lead Agency's) CEQA documentation for the project. To minimize additional requirements by the Department pursuant to Section 1600 *et seq.* and/or under CEQA, the final document should identify fully the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the agreement. A Streambed Alteration Agreement notification form may be obtained by writing to the Department of Fish and Game, 4949 Viewridge Avenue, San Diego, California 92123-1662, or by calling (858) 636-3160, or by accessing the Department's web site at www.dfg.ca.gov/1600.

7. The PEIR should discuss methods the proposed project will employ to prevent or restrict general public access to on-site or adjacent natural habitat lands that are conserved for their long-term biological values. Uncontrolled access via the college property could result in increases in vandalism, risk of fire, trash dumping, and off-road vehicle trespass. All of these potential impacts would degrade or eliminate habitat values for native plant and wildlife species.

General Comments

In order for us to adequately review and comment on the proposed project from the standpoint of the protection of plants, fish and wildlife, we recommend the following information be included in the draft EIR.

1. A complete discussion of the purpose and need for, and description of, the proposed project, including all staging areas and access routes to the construction and staging areas.

2. A complete list and assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying State or federally listed rare, threatened, endangered, or proposed candidate species, California Species-of-Special Concern and/or State Protected or Fully Protected species, and any locally unique species and sensitive habitats. Specifically, the EIR should include:

   a. A thorough assessment of Rare Natural Communities onsite and within the area of impact. We recommend following the California Department of Fish and Game's Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (enclosed).

   b. A current inventory of the biological resources associated with each habitat type onsite and within the area of impact.

   c. An inventory of rare, threatened, and endangered species onsite and within the area of impact. In addition, the PEIR should require updated (i.e., not more than one year old)

protocol-level surveys for rare, threatened, and endangered species as projects covered by the PEIR are implemented.

d. Discussions regarding seasonal variations in use by sensitive species of the project site as well as the area of impact on those species, using acceptable species-specific survey procedures as determined through consultation with the Wildlife Agencies. Focused species-specific surveys, conducted in conformance with established protocols at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required.

3. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources. All facets of the project should be included in this assessment. Specifically, the PEIR should provide:

a. Specific acreage and descriptions of the types of wetlands, coastal sage scrub, and other sensitive habitats that will or may be affected by the proposed project or project alternatives. Maps and tables should be used to summarize such information.

b. Discussions regarding the regional setting, pursuant to the CEQA Guidelines, Section 15125(a), with special emphasis on resources that are rare or unique to the region that would be affected by the project. This discussion is critical to an assessment of environmental impacts.

c. Detailed discussions, including both qualitative and quantitative analyses, of the potentially affected listed and sensitive species (fish, wildlife, plants), and their habitats on the proposed project site, area of impact, and alternative sites, including information pertaining to their local status and distribution. The anticipated or real impacts of the project on these species and habitats should be fully addressed.

d. Discussions regarding indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed NCCP reserve lands. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated and provided. A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage. The latter subject should address: project-related changes on drainage patterns on and downstream of the project site; the volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site.

e. Discussions regarding possible conflicts resulting from wildlife-human interactions at the interface between the development project and natural habitats. The zoning of areas for

development projects or other uses that are nearby or adjacent to natural areas may inadvertently contribute to wildlife-human interactions.

f. An analysis of cumulative effects, as described under CEQA Guidelines, Section 15130. General and specific plans, and past, present, and anticipated future projects, should be analyzed concerning their impacts on similar plant communities and wildlife habitats.

g. If applicable, an analysis of the effect that the project may have on completion and implementation of regional and/or subregional conservation programs. We recommend that the Lead Agency ensure that the development of this and other proposed projects do not preclude long-term preserve planning options and that projects conform to other requirements of the NCCP program. Jurisdictions participating in the NCCP program should assess specific projects for consistency with the NCCP Conservation Guidelines. Additionally, the jurisdictions should quantify and qualify: 1) the amount of coastal sage scrub within their boundaries; 2) the acreage of coastal sage scrub habitat removed by individual projects; and 3) any acreage set aside for mitigation. This information should be kept in an updated ledger system.

4. Measures to fully avoid and otherwise protect Rare Natural Communities (list enclosed) from project-related impacts. The Department considers these communities as threatened habitats having both regional and local significance.

5. Mitigation measures for unavoidable adverse project-related impacts on sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance, and where avoidance is infeasible, reduction of project impacts. For unavoidable impacts, offsite mitigation through acquisition and preservation in perpetuity of the affected habitats should be addressed. We generally do not support the use of relocation, salvage, and/or transplantation as mitigation for impacts on rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.

   This discussion should include measures to perpetually protect the targeted habitat values where preservation and/or restoration are proposed. The objective should be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc. Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: (a) the location of the mitigation site; (b) the plant species to be used; (c) a schematic depicting the mitigation area; (d) time of year that planting will occur; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation onsite; (g) success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the entity(ies) that

will guarantee achieving the success criteria and provide for conservation of the mitigation site in perpetuity.

Mitigation measures to alleviate indirect project impacts on biological resources must be included, including measures to minimize changes in the hydrologic regimes onsite, and means to convey runoff without damaging biological resources, including the morphology of onsite and downstream habitats.

6. As discussed previously, descriptions and analyses of a range of alternatives to ensure that alternatives to the proposed project are fully considered and evaluated. The analyses must include alternatives that avoid or otherwise reduce impacts to sensitive biological resources. Specific alternative locations should be evaluated in areas of lower resource sensitivity where appropriate.

7. Native plants should be used to the greatest extent feasible in landscaped areas adjacent to and/or near mitigation/open space areas and/or wetland/riparian areas. The applicant should not plant, seed, or otherwise introduce invasive exotic plant species to landscaped areas adjacent and/or near native habitat areas. Exotic plant species not to be used include those species listed on the California Invasive Plant Council's (Cal-IPC) Invasive Plant Inventory. This list includes such species as: pepper trees, pampas grass, fountain grass, ice plant, myoporum, black locust, capeweed, tree of heaven, periwinkle, sweet alyssum, English ivy, French broom, Scotch broom, and Spanish broom.[1] In addition, landscaping adjacent to native habitat areas should not use plants that require intensive irrigation, fertilizers, or pesticides. Water runoff from landscaped areas should be directed away from mitigation/open space and/or wetland/riparian areas and contained and/or treated within the development footprint.

8. All construction and post-construction best management practices (BMPs) should be located within the development footprint (i.e., included in the impact analysis as loss of habitat). The PEIR should include a figure depicting the location of BMPs in relation the development footprint.

9. The PEIR should include a requirement for temporary fencing (with silt barriers) of the limits of project impacts (including construction staging areas and access routes) to prevent additional habitat impacts and prevent the spread of silt from the construction zone into adjacent habitats to be avoided. Fencing should be installed in a manner that does not impact habitats to be avoided. The applicant should submit to the Service for approval, at least 30 days prior to initiating project impacts, the final plans for initial clearing and grubbing of habitat and project construction. These final plans should include photographs that show the fenced limits of impact and all areas (including riparian/wetland or coastal sage scrub) to be

[1] A copy of the complete list can be obtained by contacting the California Invasive Plant Council at 1442-A Walnut Street, Suite #462, Berkeley, California 94709, or by accessing their web site at http://www.cal-ipc.org.

impacted or avoided. If work occurs beyond the fenced or demarcated limits of impact, all work should cease until the problem has been remedied to the satisfaction of the Agencies. Any riparian/wetland or upland habitat impacts that occur beyond the approved fenced should be mitigated at a minimum 5:1 ratio. Temporary construction fencing should be removed upon project completion.

10. Impacts from fugitive dust should be avoided and minimized through watering and other appropriate measures.

11. The clearing and grubbing of, and construction adjacent to, sensitive habitats should occur outside of the bird breeding season (generally February 15 to August 31 or sooner if a qualified biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting is complete). In southern California, red-tailed hawks are known to lay their eggs as early as the beginning of January (Unitt 2004), which indicates that they start building their nests earlier. Therefore, for raptors, the construction avoidance period should be adjusted to begin at the latest by January 1, unless it can be demonstrated that raptors do not nest on site or off site within 500 feet of construction activities.

12. If project construction (other than clearing and grubbing of sensitive habitats) is necessary adjacent to preserved on and offsite habitat during the bird breeding season (generally February 15 to August 31 or sooner if a qualified biologist demonstrates to the satisfaction of the Agencies that all nesting is complete), a qualified biologist should conduct pre-construction surveys in the adjacent habitat to determine the location of any active bird nests in the area, including raptors and ground nesting birds. The survey should begin not more than three days prior to the beginning of construction activities. The Wildlife Agencies will be notified if any nesting birds are found. During construction, no activity should occur within 300 feet of active nesting territories (500 feet for raptors or listed species), unless measures are implemented to minimize the noise and disturbance to those adjacent birds. Exceptions to this measure includes cases where surveys confirm that adjacent habitat is not occupied or where noise studies confirm that construction noise levels are below 60 dBA hourly L_{eq} along the edge of adjacent habitat. If construction activities are not completed prior to the breeding season and noise levels exceed this threshold, noise barriers should be erected to reduce noise impacts to occupied habitat to below 60 dBA hourly L_{eq} and/or the culpable activities shall be suspended.

13. A monitoring biologist approved by the Wildlife Agencies should be onsite during: a) initial clearing and grubbing of sensitive habitat; and b) project construction within 500 feet of preserved habitat to ensure compliance with all conservation measures. The biologist must be knowledgeable of gnatcatcher or other listed species biology and ecology. The applicant should submit the biologist's name, address, telephone number, and work schedule on the project to the Wildlife Agencies at least 30 days prior to initiating project impacts. The biologist will perform the following duties:

a. Perform a minimum of three focused surveys, on separate days, to determine the presence of gnatcatchers in the project impact footprint outside the gnatcatcher breeding season. Surveys will begin a maximum of seven days prior to performing vegetation clearing/grubbing and one survey will be conducted the day immediately prior to the initiation of remaining work. If any gnatcatchers are found within the project impact footprint, the biologist will direct construction personnel to begin vegetation clearing/grubbing in an area away from the gnatcatchers. In addition, the biologist will walk ahead of clearing/grubbing equipment to flush birds towards areas of CSS to be avoided. It will be the responsibility of the biologist to ensure that gnatcatchers will not be injured or killed by vegetation clearing/grubbing. The biologist will also record the number and location of gnatcatchers disturbed by vegetation clearing/grubbing. The applicant will notify the Agencies at least seven days prior to vegetation clearing/grubbing to allow the Agencies to coordinate with the biologist on bird flushing activities.

b. Perform a minimum of three focused surveys, on separate days, to determine the presence of gnatcatchers, nest building activities, egg incubation activities, or brood rearing activities in or within 500 feet of the project impact limits of any vegetation clearing/grubbing or project construction proposed within the gnatcatcher breeding season. The surveys will begin a maximum of seven days prior to vegetation clearing/grubbing or project construction and one survey will be conducted the day immediately prior to the initiation of work. Additional surveys will be done once a week during project construction in the breeding season. These additional surveys may be suspended as approved by the Wildlife Agencies. The applicant will notify the Wildlife Agencies at least seven days prior to the initiation of surveys, and within 24 hours of locating any gnatcatchers.

c. If a nest of a listed species is found in or within 500 feet of initial vegetation clearing/grubbing or project construction, the biologist will postpone work within 500 feet of the nest and contact the Agencies to discuss: 1) the best approach to avoid/minimize impacts to nesting birds (e.g., sound walls); and 2) a nest monitoring program acceptable to the Agencies. Subsequent to these discussions, work may be initiated subject to implementation of the agreed upon avoidance/minimization approach and nest monitoring program. Nest success or failure will be established by regular and frequent trips to the site, as determined by the biologist and through a schedule approved by the Agencies. The biologist will determine whether bird activity is being disrupted. If the biologist determines that bird activity is being disrupted, the applicant will stop work and coordinate with the Agencies to review the avoidance/minimization approach. Coordination between the applicant and Agencies to review the avoidance/minimization approach will occur within 48 hours. Upon agreement as to the necessary revisions to the avoidance/minimization approach, work may resume subject to the revisions and

continued nest monitoring. Nest monitoring will continue until fledglings have dispersed or the nest has been determined to be a failure, as approved by the Agencies.

d. Be onsite during all vegetation clearing/grubbing and project construction in sensitive habitat to be impacted or within 500 feet of sensitive to be avoided.

e. Oversee installation of and inspect the fencing and erosion control measures within or up-slope of restoration and/or preservation areas a minimum of once per week and daily during all rain events to ensure that any breaks in the fence or erosion control measures are repaired immediately.

f. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.

g. Train all contractors and construction personnel on the biological resources associated with this project and ensure that training is implemented by construction personnel. At a minimum, training will include: 1) the purpose for resource protection; 2) a description of listed species and their habitats; 3) environmentally responsible construction practices; 4) the protocol to resolve conflicts that may arise at any time during the construction process; and 5) the general provisions of the Act, the need to adhere to the provisions of the Act, the penalties associated with violating the Act.

h. Halt work, if necessary, and confer with the Wildlife Agencies to ensure the proper implementation of species and habitat protection measures. The biologist will report any violation to the Wildlife Agencies within 24 hours of its occurrence.

i. Submit weekly letter reports (including photographs of impact areas) to the Wildlife Agencies during clearing of sensitive habitat and/or project construction within 500 feet of avoided habitat. The weekly reports will document that authorized impacts were not exceeded, work did not occur within the 500-foot setback except as approved by the Wildlife Agencies, and general compliance with all conditions. The reports will also outline the duration of gnatcatcher monitoring, the location of construction activities, the type of construction which occurred, and equipment used. These reports will specify numbers, locations, and sex of gnatcatchers (if present), observed gnatcatcher behavior (especially in relation to construction activities), and remedial measures employed to avoid, minimize, and mitigate impacts to gnatcatchers. Raw field notes should be available upon request by the Agencies.

j. Submit a final report to the Wildlife Agencies within 60 days of project completion that includes: as-built construction drawings with an overlay of habitat that was impacted and avoided, photographs of habitat areas that were to be avoided, and other relevant

summary information documenting that authorized impacts were not exceeded and that general compliance with all conditions of PEIR were achieved.

14. The PEIR should include measures that ensure that the following conditions are implemented during project construction.

    a. Employees should strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint.

    b. To avoid attracting predators of listed species, the project site should be kept as clean of debris as possible. All food related trash items should be enclosed in sealed containers and regularly removed from the site.

    c. Pets of project personnel should not be allowed on the project site.

    d. Disposal or temporary placement of excess fill, brush or other debris should not be allowed in waters of the United States or their banks.

    e. All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities should occur in designated areas outside of waters of the United States within the fenced project impact limits. These designated areas should be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering waters of the United States, and should be shown on the construction plans. Fueling of equipment should take place within existing paved areas greater than 100 feet from waters of the United States. Contractor equipment should be checked for leaks prior to operation and repaired as necessary. "No-fueling zones" should be designated on construction plans.

15. The PEIR should include a measure requiring the installation of permanent protective fencing along any interface with developed areas and/or use other measures approved by the Wildlife Agencies to deter human and pet entrance into on or offsite habitat. Fencing should have no more than one locked gate and be designed to prevent intrusion by pets, especially cats. Signage for any biological conservation easement areas should be posted and maintained at conspicuous locations. Plans for fencing and/or other preventative measures should be submitted to the Service for approval at least 30 days prior to initiating project impacts. Fencing should be installed prior to completion of project construction.

16. Any planting stock to be brought onto the project site for landscape or habitat creation/restoration/enhancement should be first inspected by a qualified pest inspector to ensure it is free of pest species that could invade natural areas, including but not limited to, Argentine ants (*Iridomyrmex humil*), fire ants (*Solenopsis invicta*) and other insect pests. Any planting stock found to be infested with such pests should not be allowed on the project

site or within 300 feet of natural habitats unless documentation is provided to the Agencies that these pests already occur in natural areas around the project site. The stock should be quarantined, treated, or disposed of according to best management principles by qualified experts in a manner that precludes invasions into natural habitats. The applicant should ensure that all temporary irrigation will be for the shortest duration possible, and that no permanent irrigation will be used, for landscape or habitat creation/restoration/enhancement.

Literature cited

Unitt, P. 2004. San Diego County Bird Atlas.

ATTACHMENT 2

Sensitivity of Top Priority Rare Natural Communities in Southern California *

Sensitivity rankings are determined by the Department of Fish and Game, California Natural Diversity Data Base and based on either the number of known occurrences (locations) and/or amount of habitat remaining (acreage). The three rankings used for these top priority rare natural communities are as follows:

S1. - Less than 6 known locations and/or on less than 2,000 acres of habitat remaining

S2. - Occurs in 6-20 known locations and/or 2,000-10,000 acres of habitat remaining

S3. - Occurs in 21-100 known locations and/or 10,000-50,000 acres of habitat remaining

The number to the right of the decimal point after the ranking refers to the degree of threat posed to that natural community regardless of the ranking. For example:

S1.1 = Very threatened
S2.2 = Threatened
S3.3 = No current threats known

Sensitivity Rankings (February 1992)

Rank	Community Name	
S1.1	Mojave Riparian Forest	Southern Dune Scrub
	Sonoran Cottonwood Willow Riparian	Southern Coastal Bluff Scrub
	Mesquite Bosque	Maritime Succulent Scrub
	Elephant Tree Woodland	Riversidean Alluvial Fan Sage Scrub
	Crucifixion Thorn Woodland	Southern Maritime Chaparral
	Allthorn Woodland	Valley Needlegrass Grassland
	Arizonan Woodland	Great Basin Grassland
	Southern California Walnut Forest	Mojave Desert Grassland
	Mainland Cherry Forest	Pebble Plains
	Southern Bishop Pine Forest	Southern Sedge Bog
	Torrey Pine Forest	Cismontane Alkali Marsh
	Desert Mountain White Fir Forest	
S1.2	Southern Foredunes	
	Mono Pumice Flat	
	Southern Interior Basalt Fl. Vernal Pool	

Rank	Community Name	
S2.1	Venturan Coastal Sage Scrub	Coastal and Valley Freshwater Marsh
	Diegan Coastal Sage Scrub	S. Arroya Willow Riparian Forest
	Riversidean Upland Coastal Sage Scrub	Southern Willow Scrub
	Riversidean Desert Sage Scrub	Modoc-Great Basin Cottonwood Willow Rip.
	Sagebrush Steppe	Modoc-Great Basin Riparian Scrub
	Desert Sink Scrub	Mojave Desert Wash Scrub
	Mafic Southern Mixed Chaparrel	Engelmann Oak Woodland
	San Diego Mesa Hardpan Vernal P.	Open Engelmann Oak Woodland
	San Diego Mesa Claypan Vernal P.	Closed Engelmann Oak Woodland
	Alkali Meadow	Island Oak Woodland
	Southern Coastal Salt Marsh	California Walnut Woodland
	Coastal Brackish Marsh	Island Ironwood Forest
	Transmontane Alkali Marsh	Island Cherry forest
		S. Interior Cypress Forest
		Bigcone Spruce-Canyon Oak Forest
S2.2	Active Coastal Dunes	
	Active Desert Dunes	
	Stab. and Part. Stab. Desert Dunes	
	Stab. and Part. Stab. Desert Sandfield	
	Mojave Mixed Steppe	
	Transmontane Freshwater Marsh	
	Coulter Pine Forest	
	S. California Fellfield	
	White Mountains Fellfield	
S2.3	Bristlecone Pine Forest	
	Limber Pine Forest	

Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities

State of California
THE RESOURCES AGENCY
Department of Fish and Game
December 9, 1983
Revised May 8, 2000

The following recommendations are intended to help those who prepare and review environmental documents determine **when** a botanical survey is needed, **who** should be considered qualified to conduct such surveys, **how** field surveys should be conducted, and **what** information should be contained in the survey report. The Department may recommend that lead agencies not accept the results of surveys that are not conducted according to these guidelines.

1. Botanical surveys are conducted in order to determine the environmental effects of proposed projects on all rare, threatened, and endangered plants and plant communities. Rare, threatened, and endangered plants are not necessarily limited to those species which have been "listed" by state and federal agencies but should include any species that, based on all available data, can be shown to be rare, threatened, and/or endangered under the following definitions:

A species, subspecies, or variety of plant is "endangered" when the prospects of its survival and reproduction are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, or disease. A plant is "threatened" when it is likely to become endangered in the foreseeable future in the absence of protection measures. A plant is "rare" when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens.

Rare natural communities are those communities that are of highly limited distribution. These communities may or may not contain rare, threatened, or endangered species. The most current version of the California Natural Diversity Database's List of California Terrestrial Natural Communities may be used as a guide to the names and status of communities.

2. It is appropriate to conduct a botanical field survey to determine if, or to the extent that, rare, threatened, or endangered plants will be affected by a proposed project when:

a. Natural vegetation occurs on the site, it is unknown if rare, threatened, or endangered plants or habitats occur on the site, and the project has the potential for direct or indirect effects on vegetation; or
b. Rare plants have historically been identified on the project site, but adequate information for impact assessment is lacking.

3. Botanical consultants should possess the following qualifications:

a. Experience conducting floristic field surveys;
b. Knowledge of plant taxonomy and plant community ecology;
c. Familiarity with the plants of the area, including rare, threatened, and endangered species;
d. Familiarity with the appropriate state and federal statutes related to plants and plant collecting; and,
e. Experience with analyzing impacts of development on native plant species and communities.

4. Field surveys should be conducted in a manner that will locate any rare, threatened, or endangered species that may be present. Specifically, rare, threatened, or endangered plant surveys should be:

a. Conducted in the field at the proper time of year when rare, threatened, or endangered species are both evident and identifiable. Usually, this is when the plants are flowering.

When rare, threatened, or endangered plants are known to occur in the type(s) of habitat present in the project

area, nearby accessible occurrences of the plants (reference sites) should be observed to determine that the species are identifiable at the time of the survey.

b. Floristic in nature. A floristic survey requires that every plant observed be identified to the extent necessary to determine its rarity and listing status. In addition, a sufficient number of visits spaced throughout the growing season are necessary to accurately determine what plants exist on the site. In order to properly characterize the site and document the completeness of the survey, a complete list of plants observed on the site should be included in every botanical survey report.

c. Conducted in a manner that is consistent with conservation ethics. Collections (voucher specimens) of rare, threatened, or endangered species, or suspected rare, threatened, or endangered species should be made only when such actions would not jeopardize the continued existence of the population and in accordance with applicable state and federal permit requirements. A collecting permit from the Habitat Conservation Planning Branch of DFG is required for collection of state-listed plant species. Voucher specimens should be deposited at recognized public herbaria for future reference. Photography should be used to document plant identification and habitat whenever possible, but especially when the population cannot withstand collection of voucher specimens.

d. Conducted using systematic field techniques in all habitats of the site to ensure a thorough coverage of potential impact areas.

e. Well documented. When a rare, threatened, or endangered plant (or rare plant community) is located, a California Native Species (or Community) Field Survey Form or equivalent written form, accompanied by a copy of the appropriate portion of a 7.5 minute topographic map with the occurrence mapped, should be completed and submitted to the Natural Diversity Database. Locations may be best documented using global positioning systems (GPS) and presented in map and digital forms as these tools become more accessible.

5. Reports of botanical field surveys should be included in or with environmental assessments, negative declarations and mitigated negative declarations, Timber Harvesting Plans (THPs), EIR's, and EIS's, and should contain the following information:

a. Project description, including a detailed map of the project location and study area.
b. A written description of biological setting referencing the community nomenclature used and a vegetation map.
c. Detailed description of survey methodology.
d. Dates of field surveys and total person-hours spent on field surveys.
e. Results of field survey including detailed maps and specific location data for each plant population found. Investigators are encouraged to provide GPS data and maps documenting population boundaries.
f. An assessment of potential impacts. This should include a map showing the distribution of plants in relation to proposed activities.
g. Discussion of the significance of rare, threatened, or endangered plant populations in the project area considering nearby populations and total species distribution.
h. Recommended measures to avoid impacts.
i. A list of all plants observed on the project area. Plants should be identified to the taxonomic level necessary to determine whether or not they are rare, threatened or endangered.
j. Description of reference site(s) visited and phenological development of rare, threatened, or endangered plant(s).
k. Copies of all California Native Species Field Survey Forms or Natural Community Field Survey Forms.
l. Name of field investigator(s).
m. References cited, persons contacted, herbaria visited, and the location of voucher specimens.

STATE OF CALIFORNIA, RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

August 6, 2008

VIA FACSIMILE (760) 761-3506
Kelley Hudson-MacIssac
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, CA 92069-1487

Subject: San Marcos Campus Facilities Master Plan Notice of Preparation (San Diego County)

Dear Ms. Hudson-MacIssac:

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the Notice of Preparation (NOP) for the referenced project. The Division monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs.

Project Description

The San Marcos Campus Facilities Master Plan encompasses growth and development of the existing San Marcos campus from the present through 2022. The project site is located in the City of San Marcos, near the west edge of the Palomar Community College District in northern San Diego County. The NOP has determined that the project will have no impacts on agricultural resources. The project site is not under a Williamson Act contract, nor does it involve the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. As such, the Department has no comment on this project.

Thank you for the opportunity to comment on this NOP. If you have questions on our comments, or require technical assistance or information on agricultural land conservation, please contact Elliott Lum, Environmental Planner, at 801 K Street, MS 18-01, Sacramento, California 95814; or, phone (916) 324-0869.

Sincerely,

Brian Leahy
Assistant Director

cc: State Clearinghouse

1 Civic Center Drive
San Marcos, CA 92069-2918

Telephone
760.744.1050
FAX: 760.591.4135

August 6, 2008

Ms. Kelley Hudson-MacIsaac
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, CA 92069-1487

RE: Palomar College Facilities Master Plan Notice of Preparation

Dear Ms. Hudson-MacIsaac:

Thank you for giving the City of San Marcos an opportunity to comment on the Palomar College Facilities Master Plan Notice of Preparation. The City of San Marcos has the following comments on the project:

With regard to Surrounding Land Uses/Setting/Project Description, the City recommends the following:

- In addition to the existing City of San Marcos General Plan land uses listed, the surrounding land use section should include Palomar Station, a mixed use Specific Plan Area, located to the south of the project area as well as office professional to the east.
- The EIR's project description should identify square footage of buildings and number of stories and height.

With regard to Other public agencies whose approval is required, the City recommends the following:

- Any infrastructure improvements constructed within the City of San Marcos right-of-way for the purpose of serving the project shall require a City of San Marcos Encroachment Permit, Construction permit and public improvement plan approval.

With regard to Transportation/Traffic, the City recommends the following:

- The Project impacts on the vicinity roadways, intersections, SR-78 and its interchanges shall be analyzed per SANTEC/ITE guidelines using the Combined North County SANDAG Model, and improvements should be identified that fully mitigate the project impacts.

- The operation of the Las Posas Road/Mission Road intersection is greatly impacted by a large number of 'U' turns primarily from college traffic. Palomar College and City staff should continue to work together towards a near term solution to improve the intersection's operation. Placement of a new traffic signal at Comet Circle (such as possible realignment of Comet Circle

to the east) should be analyzed in the Environmental Impact Report (EIR), along with other alternatives that reduce impacts at the Las Posas Road/Mission Road Intersection.

- The project should contribute a fair share reimbursement for college traffic generation to the City for the Las Posas Road interchange and Las Posas Road corridor improvements.

- This project should contribute a fair share to a pedestrian overcrossing between the Palomar College Transit Center and the new SPRINTER station on the south side of Mission Road, to enhance student/pedestrian safety, and reduce vehicle delays/emissions on Mission Road.

- Address the potential impact of student parking to off-campus parking. Palomar College should work with the City of San Marcos to come up with measures discouraging or fully eliminating off-campus parking which could affect the vicinity streets and businesses.

- Palomar College should develop a Traffic Demand Management (TDM) Program similar to the one established by CSUSM and coordinate with the City's proposed intra-City shuttle.

With regard to Hydrology and Water Quality, the City recommends the following:

- Capacity of the downstream storm drain facilities under the existing and future conditions shall be analyzed. Palomar College should participate on a fair share basis in any near term and long-term down stream storm drain improvements within the basin(s) in which College is located and work with the City to allow placement of a detention basin(s) on College property. Furthermore, future increases in runoff shall be fully mitigated on-site.

- Due to the fact that runoff from the college campus travels to area regulated by the City's MS-4 Stormwater Permit, the project should be subject to the water quality requirements adopted by the City of San Marcos. Development or redevelopment of each area of campus shall be subject to BMP's and water quality requirements in effect at the time of said development. Under the current requirements the project would be subject to Low Impact Development and Hydromodification standards.

With regard to Public Services, the City recommends the following:

- The EIR should study the fire flow requirements and indicate impacts of new multi-story buildings to the Fire Department, both in terms of facilities, staffing and equipment as well as paramedic services. A mechanism to serve as a mitigation measure for potential impacts to fire protection services for the square footage area of new buildings on the campus is to annex into the City of San Marcos Fire Protection District Community Facilities District 2001-01.

- The Fire Department has been contacted under s separate letter by your office to address project impacts. The San Marcos Fire Protection District will forward additional project comments in response to your request which may include additional impact areas for consideration in the EIR.

Please feel free to contact Susan Vandrew Rodriguez in the Planning Division at (760) 744-1050 extension 3237 to discuss our comments.

Sincerely,

Jerry Backoff
Planning Division Director

cc: Mike Edwards, City Engineer
Sassan Haghgoo, Deputy City Engineer
Todd Newman, Fire Chief
Matthew Ernau, Division Chief/Fire Marshal
Susan Vandrew Rodriguez, Associate Planner
File

ERIC GIBSON
INTERIM DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017

August 6, 2008

Kelley Hudson-MacIsaac
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, CA 92069-1487

RE: COMMENTS ON THE NOTICE OF PREPARATION PUBLIC SCOPING NOTICE, PALOMAR COMMUNITY COLLEGE – SAN MARCOS CAMPUS, FACILITIES MASTER PLAN, PROGRAM ENVIRONMENTAL IMPACT REPORT (PEIR)

The County of San Diego has received and reviewed the Notice of Preparation Public Scoping Notice, Palomar Community College – San Marcos Campus, Facilities Master Plan, Program Environmental Impact Report (PEIR) dated July 7, 2008 and appreciates this opportunity to comment. The County Department of Planning and Land Use (DPLU) and Department of Public Works (DPW) staff has completed its review and has the following comments regarding the content of the above document:

GENERAL COMMENTS

1. The County of San Diego, Land Use and Environment Group has developed Guidelines for Determining Significance that are used as guidance for determining the significance of environmental impacts in the unincorporated portions of the County of San Diego. The Guidelines also provide mitigation options for addressing potentially significant impacts. Project impacts that could have potentially significant adverse effects to the unincorporated County or County facilities should evaluate and mitigate environmental impacts using the guidance described in the County of San Diego Guidelines for Determining

Significance, available online at: http://www.sdcounty.ca.gov/dplu/procguid.html.

2. The NOP indicates that the proposed project will add trips to existing and projected deficiencies along roadways and intersections located in neighboring vicinities including the County of San Diego. The County is concerned with potential direct and/or cumulative impacts to the following Circulation Element roadways:

   - South Santa Fe Avenue
   - Buena Creek Road
   - Deer Springs Road

3. The PEIR should identify the project's significant traffic impacts for all proposed phases (through 2022) to County roadways and intersections and provide recommended mitigation measures.

4. The PEIR should identify the volumes of project-related traffic that will distribute to the above listed County roads.

5. The proposed project at full buildout will accommodate an estimated 25,000 students. The PEIR should document any unique trip generation rates for students and the modal split potential of these trips.

6. The PEIR should clearly identify the existing and projected trip generation estimates for the college campus site.

7. The project should reference and use the County's Guidelines for Significance, updated December 2007 for assessing potential impacts within the unincorporated area.

8. The project should reference the County's TIF program which was updated in January 2008.

9. The proposed project should consider making payments to the County's Transportation Impact Fee (TIF) program (updated January 2008) to mitigate the project's cumulative project impacts. The proposed project will have cumulative impacts to roads located within the unincorporated area. In April 2005 the County adopted the TIF program. The program may provide a mechanism to mitigate cumulative impacts to County roads that was not previously available to neighboring jurisdictions. TIF funds will be used to help pay for future capacity-enhancing road improvements in order to mitigate the cumulative traffic impacts caused by new development. The City and the project applicant should provide a discussion of the feasibility of the proposed project participating in the TIF program in order to mitigate their cumulative impacts. Fair-share contributions to

an official County road /intersection improvement project or physical road improvements are other options for mitigating a project's cumulative impacts.

The County of San Diego appreciates the opportunity to participate in the environmental review process for this project. We look forward to receiving any future environmental documents related to this project, the PEIR for review, or providing additional assistance at your request. If you have any questions regarding these comments, please contact Bobbie Stephenson at (858) 694-3680.

Sincerely,

ERIC GIBSON, Interim Director
Department of Planning and Land Use

cc: Sachiko Kohatsu, Policy Advisor, Board of Supervisors, District 3, MS A500
Vince Nicoletti, CAO Staff Officer, DCAO, M.S. A-6
Francisco "Nick" Ortiz, Department of Public Works, Transportation Division, MS O334
Jennifer Campos, Land Use/Environmental Planner, Department of Planning and Land Use, MS O650
Bobbie Stephenson, Land Use/Environmental Planner, Department of Planning and Land Use, MS O650
Priscilla Jaszkowiak, Administrative Secretary, Department of Planning and Land Use, MS O650

Reference County Project IJN 08-065

CALIFORNIA INDIAN LEGAL SERVICES

Escondido Office

609 South Escondido Boulevard, Escondido, CA 92025 g Phone 760/746-8941 g Fax 760/746-1815
www.calindian.org g contactCILS@calindian.org

BISHOP
EUREKA

Michele Fahley, Staff Attorney
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mfahley@calindian.org

SACRAMENTO
ESCONDIDO

August 7, 2008

VIA FACSIMILE (760-761-3506) AND ELECTRONIC MAIL

Ms. Kelley Hudson-MacIsaac
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, CA92069

Re: Notice of Preparation, Facilities Master Plan, Program Environmental Impact Report Comments

Dear Ms. Hudson-MacIssac,

The San Luis Rey Band of Mission Indians hereby submits the following comments on the Program Environmental Impact Report for the Palomar College Facilities Master Plan Project ("Project"). The San Luis Rey Band ("Band" or "Tribe") is a San Diego County Tribe whose traditional territory includes the current cities of Vista, Oceanside, Carlsbad, San Marcos, Escondido, Fallbrook, and Bonsall, among others. The Band's primary concerns are the preservation and protection of cultural, archaeological, sacred and historical sites of significant to the Band which may be located within the Project area.

The cultural resources section of the NOP indicates that there may be significant impacts on cultural resources as a result of the Project. The Band is aware that the area in and around the college is rich in cultural resources. As such, there is a distinct interest by the Tribe in being involved during the drafting of the PEIR.

The Band requests that tribal monitors be allowed to survey the site with the consultant preparing the PEIR on behalf of the District. This will ensure that the cultural resources that will likely be impacted by the Project receive a full, accurate and culturally sensitive survey. In addition, early and frequent consultation with the Band regarding the resources in the area is another vital component to ensuring that the PEIR adequately addresses the Tribe's concerns.

Because there will likely be a significant impact on cultural resources due to the Project, the Band requests specific mitigation measures be required as part of the grading or similar permit requirements, which should be reflected in the PEIR mitigation measures. To ensure a complete and undisputed understanding by all parties regarding the protection of these priceless resources, the Band respectfully requests that the following mitigation measures be added. The

District must be required to submit written proof of these requirements before the permit may be issued.

1. The District must execute a Pre-Excavation Agreement with the San Luis Rey Band prior to any ground-disturbing activities on the Project site. The agreement will, at minimum, include the following provisions:

   A. Require appropriate treatment of human remains and cultural items.
   B. Require a good faith effort by the parties to agree on what is appropriate treatment and dignity when addressing human remains and cultural items.
   C. Require that any human remains or cultural items recovered during the grading process be returned to the Band, and not curated in a facility absent the express written consent of the Band.
   D. Require that any remains or cultural items discovered be re-interred in the same area in which they were discovered and in a place where they would not be subject to further disturbance. if possible. The agreement would require a good faith negotiation on behalf of the Tribe and the District for such reburial.
   E. Require avoidance for all significant and sacred archaeological sites which may be found during development. Avoidance is the preferred method of preservation under CEQA for such resources.
   F. Require Native American monitors from the Band to be present during all ground-disturbing activities.
   G. Provide for the compensation of tribal monitors at the expense of the District.

2. Additionally, the Band requests that Native American monitors from the San Luis Rey Band be added as a mandatory requirement, in addition to any archaeological monitor required by state law.

If the project is approved, the San Luis Rey Band believes that the mitigation measures described above will provide adequate protection for the cultural resources and human remains that may be discovered in the Project area. The Band intends to carefully monitor this Project to ensure that the requirements imposed by CEQA are rigorously applied for the duration of the Project.

The Band truly appreciates the commitment of the Palomar Community College District to continue consultation with the Tribe during the Project. We look forward to continuing this positive relationship and we thank you for your assistance in protecting our invaluable Luiseño cultural resources.

Should you have any questions, please do not hesitate to contact me at (760) 746-8941.

Sincerely,

CALIFORNIA INDIAN LEGAL SERVICES

Michele Fahley, Staff Attorney
Attorneys for the San Luis Rey Band of Mission Indians

cc: Carmen Mojado, President, Saving Sacred Sites and Secretary of Government Relations, San Luis Rey Band of Mission Indians

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
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e-mail: ds_nahc@pacbell.net

August 7, 2008

Ms. Michelle Dalope, Associate Archaeologist
ASM Affiliates
2034 Corte del Nogel
Carlsbad, CA 92011

Sent by Fax: 760-804-5755
Number of pages: 3

Re: Proposed Palomar College Master Plan located in the City of San Marcos; San Diego County, California

Dear Ms. Dalope:

The Native American Heritage Commission was able to perform a record search of its Sacred Lands File (SLF) for the affected project area. The SLF failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the Sacred Lands File does not guarantee the absence of cultural resources in any 'area of potential effect (APE).'

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the nearest tribes that may have knowledge of cultural resources in the project area. A List of Native American contacts are attached to assist you. The Commission makes no recommendation of a single individual or group over another. It is advisable to contact the person listed; if they cannot supply you with specific information about the impact on cultural resources, they may be able to refer you to another tribe or person knowledgeable of the cultural resources in or near the affected project area (APE).

Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 5097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery. Discussion of these should be included in your environmental documents, as appropriate.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Attachment: Native American Contact List

Native American Contacts
San Diego County
August 7, 2008

Pauma & Yuima
Christobal C. Devers, Chairperson
P.O. Box 369 Luiseno
Pauma Valley , CA 92061
paumareservation@aol.com
(760) 742-1289
(760) 742-3422 Fax

Pauma Valley Band of Luiseño Indians
Bennae Calac, Chair - Repatriation Committee
P.O. Box 369 Luiseno
Pauma Valley , CA 92061
bennaecalac@aol.com
(760) 617-2872
(760) 742-3422 - FAX

Rincon Band of Mission Indians
Angela Veltrano, Rincon Culture Committee
P.O. Box 68 Luiseno
Valley Center , CA 92082
council@rincontribe.org
(760) 749-1051
(760) 749-8901 Fax

San Luis Rey Band of Mission Indians
Carmen Mojado, Co-Chair
1889 Sunset Drive Luiseno
Vista , CA 92081
cjmojado@slrmissionindians.org
(760) 724-8505
(760) 724-2172 - FAX

San Luis Rey Band of Mission Indians
Henry Contreras, Most Likely Descendant
1763 Chapulin Lane Luiseno
Fallbrook , CA 92028
(760) 728-6722 - Home
(760) 908-7625 - Cell

Cupa Cultural Center (Pala Band)
Shasta Gaughen, Assistant Director
35008 Pala-Temecula Rd.PMB Box 445 Luiseno
Pala , CA 92059
cupa@palatribe.com
(760) 742-1590
(760) 742-4543 - FAX

San Luis Rey Band of Mission Indians
Russell Romo, Chairman
12064 Old Pomerado Road Luiseno
Poway , CA 92064
(858) 748-1586

La Jolla Band of Mission Indians
ATTN: Rob Roy,Environmental Director
22000 Highway 76 Luiseno
Pauma Valley , CA 92061
lajolla-sherry@aol.com and
(760) 742-3790
(760) 742-1704 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the propose Palomar College Master Plan located in the City of San Marcos; 'north county' San Diego County, California for which a Sacred Lands File search and Native American Contacts list were requested.

Native American Contacts
San Diego County
August 7, 2008

Mel Vernon
San Luis Rey Band of Mission Indians
1044 North Ivy Street Luiseno
Escondido , CA 92026
melvern@aol.com
(760) 746-8692
(760) 703-1514 - cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the propose Palomar College Master Plan located in the City of San Marcos; 'north county' San Diego County, California for which a Sacred Lands File search and Native American Contacts list were requested.

401 B Street, Suite 800
San Diego, CA 92101-4231
(619) 699-1900
Fax (619) 699-1905
www.sandag.org

August 7, 2008

File Number 7000300

Ms. Kelley Hudson-MacIsaac
Palomar Community College District
1140 West Mission Road
San Marcos, CA 92069

Dear Ms. Hudson-MacIsaac:

SUBJECT: Palomar Community College San Marcos Facilities Master Plan

Thank you for the opportunity to comment on the Notice of Preparation (NOP) for the Palomar College San Marcos Campus Facilities Master Plan, which proposes a series of improvements to accommodate the anticipated increase in student enrollment to 25,000 by 2022.

Our comments are based on policies included in the Regional Comprehensive Plan (RCP), the Regional Transportation Plan (RTP), and the Congestion Management Program (CMP). We submit them from a regional perspective emphasizing the need for land use and transportation coordination and implementation of smart growth principles.

Due to its potential size, this project could have a significant impact on the regional transportation system, specifically the SPRINTER train line, adjacent bus lines, and State Route (SR) 78. SANDAG requests that appropriate mitigation measures be incorporated, which may include a "fair share" payment or the building of improvements.

Smart Growth

A key RCP goal is to focus growth in smart growth opportunity areas. The proposed project is located within a potential Special Use Center (Palomar Community College) identified on the Smart Growth Concept Map. Special Use Centers draw employees from throughout the region, are dominated by one non-residential land use with retail support services, with a mix of low-, mid-, and high-rise buildings and 45+ employees per acre within a quarter-mile of a transit station.

An increase in student enrollment at Palomar College would continue to contribute toward the project area meeting the intensity target of the Special Use Center place type. Since this project is located within an area on the Smart Growth Concept Map, the project area may be eligible to compete for Smart Growth Incentive Funds for infrastructure through the City of San Marcos. Among other uses, these funds could be used for improving pedestrian access to the facility from nearby transit, including the SPRINTER station.

Multi-modal Transportation Analysis

The 2030 Regional Transportation Plan provides a multi-modal approach to meet the region's transportation needs. The California Environmental Quality Act (CEQA) provides regional transportation planning agencies (such as SANDAG) the means to request information to determine how best to meet those needs. As such, SANDAG requests that the traffic analysis for this project consider balancing the needs of motorists, transit riders, pedestrians, and bicyclists by including the following impact analysis:

1. Address potential impacts to SR 78 and Interstate 15 (I-15) and perform analysis required according to the Congestion Management Program (CMP) guidelines (attached). The attached documents are excerpts from the CMP; the entire CMP can be found online at:

   www.sandag.cog.ca.us/uploads/projectid/projectid_13_5804.pdf.

   You also may request a printed copy at cost.

2. Address potential impacts to existing and planned transit by identifying the transit mode share (bus, light rail/SPRINTER, and commuter rail/COASTER) as a share of total project trips, existing or planned transit stop locations within/adjacent to the proposed project, and any traffic delay on bus service resulting from the proposed project.

   This analysis is desired as a reference to help quantify potential impacts on the transit system. In the case of significant or unusual impacts on the transit system, SANDAG may wish to explore fair share mitigation.

3. In considering mitigation for regional transportation impacts, please consider alternatives to driving alone during peak periods, such as carpooling, vanpooling, bicycling, student transit passes, distance learning, telecommuting, flexible work hours, and the potential of a Transportation Demand Management (TDM) plan as a part of this project.

4. This project is an important regional destination and is adjacent to two major transit centers and the regional bike network (on both North Las Posas Road and West Mission Road). Improved bicycle access to local destinations can help to mitigate the traffic effects of projects and provide mobility options. Please consider a program to provide increased awareness of bicycling, including education, outreach, bicycle parking/lockers, and showers for those biking longer distances.

5. In addition to coordination with SANDAG, we also direct the developer to consult with the North County Transit District (NCTD), the transit service provider within the project area.

6. In addition to coordination with SANDAG, we also direct the developer to Caltrans when evaluating/coordinating planned highway improvements.

7. Additionally, when analyzing future (2030) traffic conditions, SANDAG recommends using the transportation network included in the 2030 RTP Reasonably Expected funding scenario.

Conclusion

We appreciate the opportunity to comment on this project. If you have any questions or concerns regarding my comments on this project, please contact me at (619) 699-7336 or tcl@sandag.org.

Sincerely,

TRAVIS CLEVELAND
Regional Planner

TCL/dsn

Attachment: CMP Land Use Analysis Program and Traffic Study requirements

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maureen F. Gorsen, Director
5796 Corporate Avenue
Cypress, California 90630

Arnold Schwarzenegger
Governor

September 16, 2008

Ms. Kelley Hudson-MacIsaac
Manager, Facilities Planning
Environmental Health & Safety
Palomar Community College District
San Marcos Campus
1140 West Mission Road
San Marcos, California 92069
kmacisaac@palomar.edu

NOTICE OF PREPARATION OF A PROGRAM ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE PALOMAR COMMUNITY COLLEGE- SAN MARCOS CAMPUS, FACILITIES MASTER PLAN PROJECT, SAN MARCOS

Dear Ms. Hudson-MacIsaac:

The Department of Toxic Substances Control (DTSC) has received your submitted Notice of Preparation (NOP) for a Program Environmental Impact Study and Initial Study for the above-mentioned project. The following project description is stated in your document: "The San Marcos campus is located at 1140 West Mission Road in the City of San Marcos, near the west edge of the Palomar Community College District boundary in northern San Diego County. The Master Plan encompasses growth and development of the existing San Marcos campus from the present through 2022. The overall purpose of the Master Plan is to increase the on-campus capacity to accommodate the anticipated growth in student enrollment up to a maximum of 25,000 students through the year 2022. This will be accomplished via the following means: infrastructure improvements; demolition of older, single-story buildings; construction of new multi-story buildings; replacement of inadequate temporary space with permanent facilities; modernization of the majority of existing buildings to remain; consolidation of instructional space to minimize land development and create more open space; and facilities planning that is sensitive to environmentally sensitive areas and topography." DTSC has the following comments:

1) The EIR should identify the current or historic uses at the project site that may have resulted in a release of hazardous wastes/substances, and any known or potentially contaminated sites within the proposed Project area. For all identified sites, the EIR should evaluate whether conditions at the site may pose a threat to human health or the environment. Following are the databases of some of the pertinent regulatory agencies:

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
- Envirostor: A Database primarily used by the California Department of Toxic Substances Control, accessible through DTSC's website (see below).
- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
- Leaking Underground Storage Tanks (LUST) / Spills, Leaks, Investigations and Cleanups (SLIC): A list that is maintained by Regional Water Quality Control Boards.
- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

2) The EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, DTSC would require an oversight agreement in order to review such documents. Please see comment No. 12 below for more information.

3) All environmental investigations, sampling and/or remediation for the site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. The findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document. All sampling results in which hazardous substances were found should be clearly summarized in a table.

4) Proper investigation, sampling and remedial actions overseen by the respective regulatory agencies, if necessary, should be conducted at the site prior to the new development or any construction. All closure, certification or remediation approval reports by these agencies should be included in the EIR.

5) If buildings or other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of other related hazardous chemicals, lead-based paints or products, mercury, and asbestos containing materials (ACMs). If other hazardous chemicals, lead-based paints or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

6) Project construction may require soil excavation or filling in certain areas. Sampling may be required. If soil is contaminated, it must be properly disposed and not simply placed in another location onsite. Land Disposal Restrictions (LDRs) may be applicable to such soils. Also, if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.

7) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. If it is found necessary, a study of the site and a health risk assessment overseen and approved by the appropriate government agency and a qualified health risk assessor should be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should

also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

9) If the project plans include discharging wastewater to a storm drain, you may be required to obtain an NPDES permit from the overseeing Regional Water Quality Control Board (RWQCB).

10) If during construction/demolition of the project, the soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented.

11) If the site was used for agricultural, livestock or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. Proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.

12) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

If you have any questions regarding this letter, please contact Ms. Teresa Hom, Project Manager, at thom@dtsc.ca.gov or by phone at (714) 484-5477.

Sincerely,

Greg Holmes
Unit Chief
Brownfields and Environmental Restoration Program - Cypress Office

cc: see next page

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
1001 I Street, 22nd Floor, M.S. 22-2
Sacramento, California 95814
gmoskat@dtsc.ca.gov

CEQA#2222

APPENDIX B

Air Quality Technical Report

Air Quality Technical Report

for the

Palomar College
San Marcos Campus Facilities Master Plan

Submitted To:

PBS&J
9275 Sky Park Court, Suite 200
San Diego, CA 92123

Prepared By:

Scientific Resources Associated
1328 Kaimalino Lane
San Diego, CA 92109

December 24, 2008

Table of Contents

1.0 INTRODUCTION

This report presents an assessment of potential air quality impacts associated with implementation of the Palomar Community College District (PCCD) San Marcos Campus Facilities Master Plan. This evaluation addresses the potential for air emissions during construction and after full buildout of the project, including an assessment of the potential for CO "hot spots" to form due to traffic associated with the implementation of the Master Plan.

The Palomar College San Marcos campus is located at 1140 West Mission Road in the City of San Marcos, near the west edge of the PCCD boundary in northern San Diego County. Regional access is provided to the San Marcos campus via Interstate 15 (I-15) and State Route 78 (SR-78) freeways.

Within the overall context of the PCCD Master Plan, the San Marcos Campus Facilities Master Plan encompasses growth and development of the existing San Marcos campus from the present through 2022. The overall purpose of the Facilities Master Plan is to increase the on-campus capacity to accommodate the anticipated growth in student enrollment up to a maximum of 25,000 students through the year 2022. This will be accomplished via the following means: infrastructure improvements; demolition of older, single-story buildings; construction of new multi-story buildings; replacement of inadequate temporary space with permanent facilities; modernization of the majority of existing buildings to remain; consolidation of instructional space to minimize land development and create more open space; and facilities planning that is sensitive to environmentally sensitive areas and topography.

The Facilities Master Plan projects are scheduled in a logical sequence that would be the least disruptive to campus operations. The phasing sequence, which also takes into account anticipated incremental funding, is broken out into near-term (year 2009 to year 2013) and long-term (year 2014 to year 2022) projects. The following near-term projects have been identified as the first group to be constructed during the years 2009-2013:

- Projects 1-A/9-A: Parking Improvement Projects (2)

- Project 3*: Multi-media Lab/Planetarium
- Project 5**: Library/Learning Resource Center
- Project 5A: Humanities/Foreign Language Building
- Project 6: "LL" Building Remodel
- Project 9: Child Development Center
- Project 10**: Industrial Technology Center
- Projects 12/12A**: Theatre Addition/Renovation
- Project 14: Maintenance and Operations Facilities
- Project 19: Relocation of Baseball Fields
- Project 20A: Lot 12 Storm Drain Upgrades
- Project 20B: Phase 1 of the Arboretum Landscape Improvements

* This project has been approved under a separate Mitigated Negative Declaration dated September 11, 2007.
** These projects are being evaluated concurrently in a separate environmental document because construction is scheduled to begin prior to the expected certification date of the PCCD San Marcos Campus Master Plan PEIR; design plans are in preparation for these projects; and a CEQA State Clearinghouse Number must be obtained by fall of 2008 to meet state funding requirements.

This Air Quality Technical Report includes an evaluation of existing conditions in the project vicinity, an assessment of potential impacts associated with project construction, and an evaluation of project operational impacts.

2.0 EXISTING CONDITIONS

The Palomar College San Marcos Campus is located at 1140 West Mission Road in the City of San Marcos, near the west edge of the PCCD boundary in northern San Diego County. The campus is located in the San Diego Air Basin (SDAB). The climate of the SDAB is dominated by a semi-permanent high pressure cell located over the Pacific Ocean. This cell influences the direction of prevailing winds (westerly to northwesterly) and maintains clear skies for much of the year. Figure 1 provides a graphic representation of the prevailing winds in the project

vicinity, as measured at the San Diego Air Pollution Control District's (APCD's) Escondido Monitoring Station (the closest meteorological monitoring station to the site). The high pressure cell also creates two types of temperature inversions that may act to degrade local air quality.

The climate of the Palomar College area is characterized by a repetitive pattern of frequent early morning cloudiness, hazy afternoon sunshine, clean daytime onshore breezes and little temperature change throughout the year. Limited rainfall occurs in the winter while summers are often completely dry. The onshore winds across the coastline diminish quickly when they reach the foothill communities in the eastern part of San Diego County, and the sinking air within the offshore high pressure system forms a massive temperature inversion that traps all air pollutants near the ground. The resulting horizontal and vertical stagnation, in conjunction with ample sunshine, cause a number of reactive pollutants to undergo photochemical reactions and form smog that degrades visibility and irritates tear ducts and nasal membranes. High smog levels in coastal communities occasionally occur when polluted air from the South Coast (Los Angeles) Air Basin drifts seaward and southward at night, and then blows onshore the next day. Such weather patterns contribute to occasionally high levels of pollutants in the SDAB which are attributable to transport.

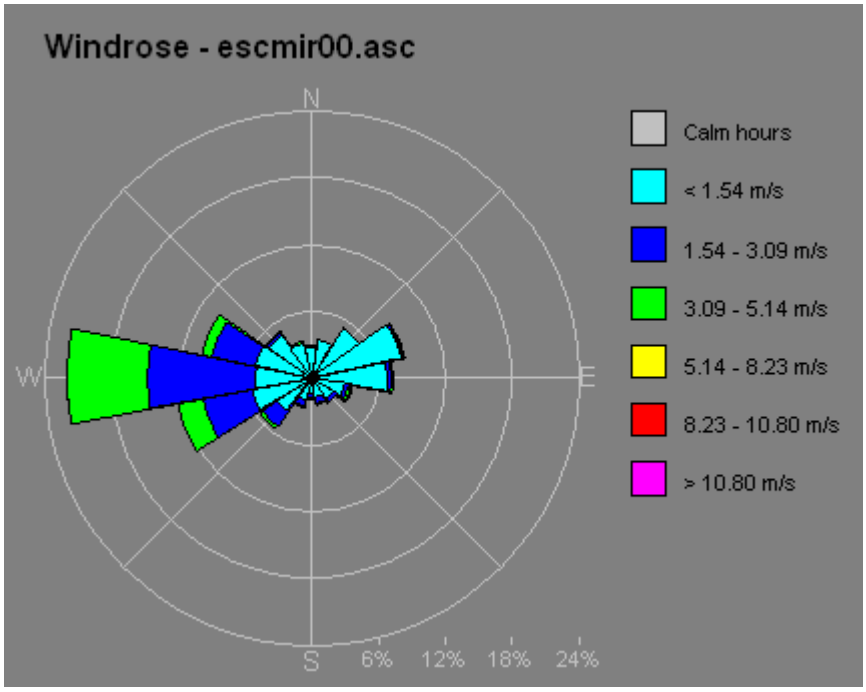

Figure 1. Wind Rose – Escondido Monitoring Station

2.1 Regulatory Setting

Air quality is defined by ambient air concentrations of specific pollutants identified by the United States Environmental Protection Agency (USEPA) to be of concern with respect to health and welfare of the general public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several pollutants (called "criteria" pollutants). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere.

In September 1997, the EPA promulgated 8-hour O_3 and 24-hour and annual $PM_{2.5}$ national standards (particulate matter less than 2.5 microns in diameter). However, due to a lawsuit in May 1999, the United States District Court rescinded these standards and the EPA's authority to

enforce them. Subsequent to an appeal of this decision by the EPA, the United States Supreme Court upheld these standards in February 2001. As a result, this action has initiated a new planning process to monitor and evaluate emission control measures for these pollutants. The EPA is moving forward to develop policies to implement these standards.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. The California Air Resources Board (ARB) has established the more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants through the California Clean Air Act of 1988, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be "nonattainment areas" for that pollutant. On April 15, 2004, the SDAB was designated a basic nonattainment area for the 8-hour NAAQS for O_3, and on December 15, 2005, the 1-hour NAAQS for O_3 was rescinded. In December 2006 the annual NAAQS for PM_{10} was also rescinded. The SDAB is in attainment for the NAAQS for all other criteria pollutants. The SDAB is currently classified as a nonattainment area under the CAAQS for O_3 and PM_{10}.

The ARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The ARB is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program, as well as the adoption of the CAAQS. The ARB also reviews operations and programs of the local air districts, and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS. The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The APCD is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County.

The APCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient

air quality standards in the SDAB. The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1991, and is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, and most recently in 2004. The RAQS outlines APCD's plans and control measures designed to attain the state air quality standards for O_3. The APCD has also developed the air basin's input to the SIP, which is required under the Federal Clean Air Act for areas that are out of attainment of air quality standards. The SIP includes the APCD's plans and control measures for attaining the O_3 NAAQS. The SIP is also updated on a triennial basis. The most recent update to the SIP is the APCD's *Eight Hour Ozone Attainment Plan for San Diego County* (APCD 2007), which presents the APCD's proposed strategies to attain and maintain the 8-hour NAAQS for O_3.

The RAQS and SIP rely on information from ARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. The ARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County as part of the development of the County's General Plan. As such, projects that propose development that is consistent with the growth anticipated by the general plans would be consistent with the RAQS and SIP. In the event that a project would propose development which is less dense than anticipated within the general plan, the project would likewise be consistent with the RAQS and SIP. If a project proposes development that is greater than that anticipated in the general plan and SANDAG's growth projections, the project might be in conflict with the RAQS and SIP, and might have a potentially significant impact on air quality.

The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin. The SIP also includes rules and regulations that have been adopted by the APCD to control emissions from stationary sources. These SIP-approved rules may be used as a guideline to determine whether a project's emissions would have the potential to conflict with the SIP and thereby hinder attainment of the NAAQS for O_3.

The following specific descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on EPA (2005a) and CARB (2001).

Ozone. O_3 is considered a photochemical oxidant, which is a chemical that is formed when VOCs and NOx, both byproducts of combustion, react in the presence of ultraviolet light. Ozone is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from exposure to ozone.

Carbon monoxide. CO is a product of combustion, and the main source of CO in the SCAB is from motor vehicle exhaust. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease, and can also affect mental alertness and vision.

Nitrogen dioxide. NO_2 is also a by-product of fuel combustion, and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen. NO_2 is a respiratory irritant and may affect those with existing respiratory illness, including asthma. NO_2 can also increase the risk of respiratory illness.

Fine particulate matter. Particulate matter, or PM_{10}, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or $PM_{2.5}$, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in this size range has been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM_{10} and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, combustion, tire and brake wear, construction operations, and windblown dust. PM_{10} and $PM_{2.5}$ can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. $PM_{2.5}$ is considered to have the potential to lodge deeper in the lungs.

Sulfur dioxide. SO_2 is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes. Generally, the highest concentrations of SO_2 are found near large industrial sources. SO_2 is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO_2 can cause respiratory illness and aggravate existing cardiovascular disease.

Lead. Lead (Pb) in the atmosphere occurs as particulate matter. Lead has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Lead has the potential to cause gastrointestinal, central nervous system, kidney, and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen.

Sulfates. Sulfates are the fully oxidized ionic form of sulfur. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to sulfur dioxide (SO_2) during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide. H_2S is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation. Breathing H_2S at levels above the standard would result in exposure to a very disagreeable odor.

In 1984, a CARB committee concluded that the ambient standard for H_2S is adequate to protect public health and to significantly reduce odor annoyance.

Vinyl Chloride. Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage. Cancer is a major concern from exposure to vinyl chloride via inhalation. Vinyl chloride exposure has been shown to increase the risk of angiosarcoma, a rare form of liver cancer, in humans.

Table 1 presents a summary of the ambient air quality standards adopted by the federal and California Clean Air Acts.

Table 1
AMBIENT AIR QUALITY STANDARDS

POLLUTANT	AVERAGE TIME	CALIFORNIA STANDARDS		NATIONAL STANDARDS		
		Concentration	Method	Primary	Secondary	Method
Ozone	1 hour	0.09 ppm (180 $\mu g/m^3$)	Ultraviolet Photometry	--	--	Ethylene Chemiluminescence
	8 hour	0.070 ppm (137 $\mu g/m^3$)		0.075 ppm (147 $\mu g/m^3$)	0.075 ppm (147 $\mu g/m^3$)	
Carbon Monoxide	8 hours	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Spectroscopy (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Spectroscopy (NDIR)
	1 hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
Nitrogen Dioxide (NO_2)	Annual Average	0.030 ppm (56 $\mu g/m^3$)	Gas Phase Chemiluminescence	0.053 ppm (100 $\mu g/m^3$)	0.053 ppm (100 $\mu g/m^3$)	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (338 $\mu g/m^3$)		--	--	
Sulfur Dioxide (SO_2)	Annual Average	--	Ultraviolet Fluorescence	0.03 ppm (80 $\mu g/m^3$)	--	Pararosaniline
	24 hours	0.04 ppm (105 $\mu g/m^3$)		0.14 ppm (365 $\mu g/m^3$)	--	
	3 hours	--		--	0.5 ppm (1300 $\mu g/m^3$)	
	1 hour	0.25 ppm (655 $\mu g/m^3$)		--	--	
Respirable Particulate Matter (PM_{10})	24 hours	50 $\mu g/m^3$	Gravimetric or Beta Attenuation	--	--	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 $\mu g/m^3$		50 $\mu g/m^3$	50 $\mu g/m^3$	
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 $\mu g/m^3$	Gravimetric or Beta Attenuation	15 $\mu g/m^3$	--	Inertial Separation and Gravimetric Analysis
	24 hours	--		35 $\mu g/m^3$	--	
Sulfates	24 hours	25 $\mu g/m^3$	Ion Chromatography	--	--	--
Lead	30-day Average	1.5 $\mu g/m^3$	Atomic Absorption	--	--	Atomic Absorption
	Calendar Quarter	--		1.5 $\mu g/m^3$	1.5 $\mu g/m^3$	
Hydrogen Sulfide	1 hour	0.03 ppm (42 $\mu g/m^3$)	Ultraviolet Fluorescence	--	--	--
Vinyl Chloride	24 hour	0.01 ppm (26 $\mu g/m^3$)	Gas Chromatography	--	--	--

ppm= parts per million
$\mu g/m^3$ = micrograms per cubic meter
mg/m^3= milligrams per cubic meter
Source: California Air Resources Board 2008

2.2 Background Air Quality

The APCD operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest ambient monitoring stations to the project site are the Escondido East Valley Parkway station, and the San Diego 12th Avenue station (which is the closest station that measures SO_2). Because both the Escondido and San Diego 12th Avenue monitoring stations are located in areas where there is substantial traffic congestion, it is likely that pollutant concentrations measured at those monitoring stations are higher than concentrations that would be observed or measured in the Project area, and would thus provide a conservative estimate of background ambient air quality. Ambient concentrations of pollutants over the last three years are presented in Table 2-2.

The federal 8-hour ozone standard of 0.08 ppm, which was formally adopted in 2001 after legal arguments with the EPA, was exceeded at the Escondido monitoring station twice in 2006 but was not exceeded in 2005 or 2007. The EPA adopted the new 8-hour ozone standard of 0.075 ppm in 2008. The federal 24-hour PM_{10} standard was not exceeded during the three-year period from 2005 through 2007 at the Escondido monitoring station. The federal 24-hour PM2.5 standard was exceeded twice in 2007, however the exceedances occurred during the southern California fire event in October. The data from the monitoring stations indicate that air quality is in attainment of all other federal standards.

Concentrations of CO at the Escondido monitoring station tend to be among the highest in the SDAB, due to the fact that the monitor is located along East Valley Parkway in a congested area in downtown Escondido. The station sees higher concentrations of CO than have historically been measured elsewhere in San Diego County and the background data are not likely to be representative of background ambient CO concentrations at the Project site, due to the site's location in a less developed area. Since 2000, CO has not been monitored at other stations in northern San Diego County.

Table 2-2
Ambient Background Concentrations
(ppm unless otherwise indicated)

Pollutant	Averaging Time	2005	2006	2007	Most Stringent Ambient Air Quality Standard	Monitoring Station
Ozone	8 hour	0.079	0.096	0.077	0.070	Escondido
	1 hour	0.095	0.108	0.094	0.09	Escondido
PM_{10}	Annual	23.9 $\mu g/m^3$	24.2 $\mu g/m^3$	26.9 $\mu g/m^3$	20 $\mu g/m^3$	Escondido
	24 hour	42 $\mu g/m^{3,2}$	51 $\mu g/m^3$	68 $\mu g/m^3$	50 $\mu g/m^3$	Escondido
$PM_{2.5}$	Annual	12.3 $\mu g/m^3$	11.5 $\mu g/m^3$	13.3 $\mu g/m^3$	12 $\mu g/m^3$	Escondido
	24 hour[2]	43.1 $\mu g/m^3$	40.6 $\mu g/m^3$	126.2 $\mu g/m^3$	35 $\mu g/m^3$	Escondido
NO_2	Annual	0.016	0.017	0.016	0.030	Escondido
	1 hour	0.076	0.071	0.072	0.18	Escondido
CO	8 hour	3.10	3.61	3.19	9.0	Escondido
	1 hour	5.9	5.7	5.2	20	Escondido
SO_2	Annual	0.003	0.004	0.003	0.03	San Diego
	24 hour	0.005	0.009	0.006	0.04	San Diego
	3 hour	0.026	0.030	0.010	0.5[1]	San Diego
	1 hour	0.036	0.034	0.018	0.25	San Diego

[1]Secondary NAAQS
[2]Maximum measured pollutant concentrations occurring during the 2007 southern California fire event
Source: www.arb.ca.gov/aqd/aqd.htm (Measurements of all pollutants at Escondido-E Valley Parkway station, except SO_2.)
www.epa.gov/air/data/monvals.html (1-hour and 3-hour SO_2 and 1-hour CO)

3.0 THRESHOLDS OF SIGNIFICANCE

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the State CEQA Guidelines which provides guidance that a project would have a significant environmental impact if it would:

1. Conflict or obstruct the implementation of the San Diego Regional Air Quality Strategy (RAQS) or applicable portions of the State Implementation Plan (SIP);
2. Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3. Result in a cumulatively considerable net increase of PM_{10} or exceed quantitative thresholds for O_3 precursors, oxides of nitrogen (NO_X) and volatile organic compounds (VOCs);
4. Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations; or
5. Create objectionable odors affecting a substantial number of people.

To determine whether a project would (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation; or (b) result in a cumulatively considerable net increase of PM_{10} or exceed quantitative thresholds for O_3 precursors, oxides of nitrogen (NO_X) and volatile organic compounds (VOCs), project emissions may be evaluated based on the quantitative emission thresholds established by the San Diego APCD. As part of its air quality permitting process, the APCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIA).

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. Since APCD does not have AQIA thresholds for emissions of VOCs, the use of the threshold for VOCs from the City of San Diego's Significance Thresholds (City of San Diego 2007) is appropriate. The screening thresholds are included in the table below.

Table 3 SCREENING-LEVEL CRITERIA FOR AIR QUALITY IMPACTS			
Pollutant	Total Emissions		
Construction Emissions			
	Lb. per Day		
Respirable Particulate Matter (PM_{10})	100		
Fine Particulate Matter ($PM_{2.5}$)	100		
Oxides of Nitrogen (NOx)	250		
Oxides of Sulfur (SOx)	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOCs)	137		
Operational Emissions			
	Lb. Per Hour	Lb. per Day	Tons per Year
Respirable Particulate Matter (PM_{10})	---	100	15
Fine Particulate Matter ($PM_{2.5}$)	---	100	15
Oxides of Nitrogen (NOx)	25	250	40
Oxides of Sulfur (SOx)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOC)	---	137	15

The thresholds listed in Table 3 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the State and Federal Ambient Air Quality Standards, including appropriate background levels. For nonattainment pollutants (ozone, with ozone precursors NOx and VOCs, and PM_{10}), if emissions exceed the thresholds shown in Table 3, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or Hazardous Air Pollutants (HAPs). In San Diego County, APCD Regulation XII establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1210, emissions of TACs that result in a cancer risk of 10 in 1 million or less and a health hazard index of one or less would not be required to notify the public of potential health risks. If a project has the potential to result in emissions of any TAC or HAP which result in a cancer risk of greater than 10 in 1 million, the project would be deemed to have a potentially significant impact.

With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (Preschool-12th Grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Any project which has the potential to directly impact a sensitive receptor located within 1 mile and results in a health risk greater than 10 in 1 million would be deemed to have a potentially significant impact.

APCD Rule 51 (Public Nuisance) also prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health or safety of any person. A project that proposes a use which would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors.

The impacts associated with construction and operation of the project were evaluated for significance based on these significance criteria.

4.0 IMPACTS

This section presents an evaluation of impacts associated with construction and operations for the Palomar College San Marcos Campus Facilities Master Plan.

4.1 Construction Activity Impacts

Construction activities, including soil disturbance dust emissions and combustion pollutants from on-site construction equipment and from off-site trucks hauling dirt, cement or building materials, will create a temporary addition of pollutants to the local airshed. These emissions are quite variable in both time and space and differ considerably among various construction projects. Such emission levels can, therefore, only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts. Because of their temporary nature, construction activity impacts have often been considered as having a less-than-significant air quality impact. However, the cumulative impact from all simultaneous construction in the basin is a major contributor to the overall pollution burden, especially for particulate matter (PM_{10}). A number of current APCD strategies thus focus on dust control and on using cleaner off-road equipment to reduce the role of construction in the poor air quality of the region.

Three types of dust emissions may be associated with construction. Large particulates are generated that settle out again rapidly in close proximity to the source. A fraction of the material is small enough to remain suspended in the air semi-indefinitely. The size cut-off for these total suspended particulates (TSP) is around 30 microns in diameter. An even lesser fraction of TSP is small enough to enter deep lung tissue. The size cut-off for particulate matter that is deeply respirable is 10 microns or less and is called PM_{10}. The ambient air quality standard is for PM_{10}. The PM_{10} fraction of TSP is assumed to be around 50 percent. Fine particulate matter, which is considered particulate matter that is 2.5 microns or less, is called $PM_{2.5}$. Depending on the type of source, $PM_{2.5}$ is a fraction of the PM_{10} emissions ranging from 21 percent to 99 percent (SCAQMD 2006).

As discussed in Section 1.0, the San Marcos Campus Facilities Master Plan involves the development or redevelopment of the Palomar College San Marcos Campus. The proposed

project will involve a number of projects proposed for near-term and long-term development of the campus. Thirty projects from the San Marcos Campus Facilities Master Plan are evaluated in this analysis. These projects are scheduled in a logical sequence that would be the least disruptive to campus operations. The phasing sequence also takes into account anticipated incremental funding. For purposes of analysis in this PEIR, the San Marcos campus phasing sequence is broken out into near-term (year 2009 to year 2013) and long-term (year 2014 to year 2022) projects. The list of projects included in the Facilities Master Plan and anticipated phasing is shown on Table 4.

Table 4
San Marcos Campus Facilities Master Plan Projects

Project Priority	Phasing Sequence	Project Description	Existing ASF	Existing GSF	Future ASF	Future GSF
1	Completed	Natural Science Building	36,036		67,481	101,403
1-A*	Near-Term	Parking and Road Improvements - Phase 1	--	--	--	--
2	Near-Term	"S" Building Reconstruction	8,225		9,691	10,597
2-A	Near-Term	Campus Loop Road and Entry Improvements	--	--	--	--
3*	Near-Term	Multi-media Lab/Planetarium	4,327		4,000	5,000
4	Near-Term	Multi-disciplinary Building "A"	31,005		72,664	87,000
5**	Near-Term	Library/Learning Resource Center	39,915		87,000	100,000
5-A*	Near-Term	Humanities/Foreign Languages Building	17,470		56,170	68,000
6*	Near-Term	"LL" Building Remodel	16,348		32,290	51,100
7	Near-Term	"SSC" Building Remodel/ Addition	18,206		29,460	45,324
8	Near-Term	"P" Building Remodel	4,861		11,952	
9*	Near-Term	Child Development Center	5,480		10,290	15,000
9-A*	Near-Term	Parking and Road Improvements - Phase 3	--	--	--	--
10**	Near-Term	Industrial Technology Center	16,344		19,445	26,000
11	Long-Term	Multi-disciplinary Building "B"	17,072		57,430	87,000
12**	Near-Term	Theater Addition	--	--	--	15,000
12-A**	Near-Term	Theater Remodel		20,180		20,180
13	Long-Term	Student Union Complex - Phase 2	17,345		37,100	47,000
14	Near-Term	Maintenance and Operations Facilities				52,000
14-A	Long-Term	Parking and Road Improvements - Phase 4	--	--	--	--
15	Long-Term	Digital Arts/Communication Building	15,4111		40,591	63,000
16	Long-Term	Remodel Remainder of the Facilities	--	118,887	--	118,887
17	Long-Term	Gymnasium and Physical Education (PE) Facilities				
17-A	Long-Term	50-meter Swimming Pool	--	--	--	
17-B	Long-Term	PE Training Center				19,920
18	Long-Term	Remodel Dome Building	--	7,500	--	7,500

Table 4 (continued)
San Marcos Campus Facilities Master Plan Projects

Project Priority	Phasing Sequence	Project Description	Existing ASF	Existing GSF	Future ASF	Future GSF
18-A	Long-Term	Campus Police Building				15,473
19 *	Near-Term	Relocate Baseball/Softball Fields	--	--	--	--
19-A*	Long-Term	Relocate Remaining PE/Athletic Facilities	--	--	--	--
20	Long-Term	Parking and Road Improvements - Phase 5	--	--	--	--
20-A*	Near-Term	Campus-wide Infrastructure Upgrades				
20-B*	Near-Term	Landscape and Hardscape Improvements				
20-C	Long-Term	Parking Structure				
20-D	Long-Term	Potential West Campus Land Acquisition				
21	Long-Term	General Instruction Building				

** Prop M Bond Issue – Series A Proposed Projects*
*** These Prop M projects are evaluated in a separate environmental document (see text for further discussion).*
**** Total number of existing parking spaces distributed among 22 parking lots on campus.*
Source: PCCD Master Plan 2022, August 2003.
ASF = Assignable Square Feet; GSF = Gross Square Feet

The San Marcos Campus Facilities Master Plan is a land use plan that guides physical development of the Palomar College San Marcos campus. A detailed construction schedule and description of each of the required construction activities has not been developed for the Master Plan. Construction associated with implementation of the Master Plan is therefore evaluated on a programmatic level. Accordingly, a worst likely case for a peak construction day was developed based on estimated project construction requirements. To develop the maximum daily construction scenario, it was assumed that construction of three large projects and two to three smaller projects could occur simultaneously. Construction activities for individual projects include site work (demolition, clearing, grubbing, and grading activities), foundation excavation, and building construction activities.

As discussed in Section 1.0, the following near-term projects have been identified as the first group to be constructed during the years 2009-2013:

- Projects 1-A/9-A: Parking Improvement Projects (2)

- Project 3*: Multi-media Lab/Planetarium
- Project 5**: Library/Learning Resource Center
- Project 5A: Humanities/Foreign Language Building
- Project 6: "LL" Building Remodel
- Project 9: Child Development Center
- Project 10**: Industrial Technology Center
- Projects 12/12A**: Theatre Addition/Renovation
- Project 14: Maintenance and Operations Facilities
- Project 19: Relocation of Baseball Fields
- Project 20A: Lot 12 Storm Drain Upgrades
- Project 20B: Phase 1 of the Arboretum Landscape Improvements

Construction-related air quality impacts associated with implementation of the Master Plan is evaluated on a programmatic level because a detailed construction schedule and description of the required construction activities has not been developed for each project. Accordingly, a likely worst-case scenario for a peak construction day was developed based on estimated project construction requirements. To develop the maximum daily construction scenario, it was assumed that construction of three large projects (approximately 100,000 square feet) and two to three smaller projects (approximately 15,000 square feet) could occur simultaneously. It was also assumed that some demolition (approximately 50,000 square feet) would be required for renovation/replacement activities on campus.

Construction activities for individual projects include site work (clearing, grubbing, and grading activities), foundation excavation, and building construction activities. As such, construction would occur in two general phases. Phase 1 would involve demolition, grading, and site preparation. Phase 2 would involve utilities installation, building construction, external/internal building work, paving and landscaping. A peak-day construction scenario was defined for each of these general construction phases.

Tables 5a and 5b summarize the assumptions used to develop peak-day construction emissions, providing estimates of heavy equipment, worker trips, truck trips, and site grading on a per-project basis.

Table 5a
Phase 1 Construction Activities – Demolition, Grading, and Site Preparation

Square Footage:	100,000		15,000	
Project Type	Large Project (per project)		Small Project (per project)	
Typical Duration at Each Site:	8 months		6 months	
Equipment Type	**Quantity**	**Hours/Day**	**Quantity**	**Hours/Day**
Off-highway Truck	2	8	1	4
Tractor	0	0	0	0
Scraper	0	0	0	0
Roller	1	8	1	8
Crane	0	0	1	4
Bulldozer	2	8	1	4
Water Truck	1	4	1	1
Tracked Loader	1	4	1	1
Wheeled Loader	1	4	1	1
Motor Grader	1	4	1	1
Miscellaneous	2	8	2	8
Vehicle Type	**Quantity**	**Vehicle Trips/ Day**	**Quantity**	**Vehicle Trips/ Day**
Haul Trucks	3	20	0	0
Construction Employee Vehicles	40	2	20	2
Emission Source				
Demolition Work	1,600 cubic yards/project		400 cubic yards/project	
Site Grading	3 acres/day		1 acre/day	

Table 5b

Phase 2 Construction Activities – Utilities Installation, Building Construction, External/Internal Building Work, Paving and Landscaping

Square Footage:	100,000		15,000	
Project Type	Large Project (per project)		Small Project (per project)	
Typical Duration at Each Site:	6 months		6 months	
Equipment Type	**Quantity**	**Hours/Day**	**Quantity**	**Hours/Day**
Off-highway Truck	0	0	0	0
Tractor	1	8	0	0
Scraper	0	0	0	0
Roller	1	4	1	4
Crane	0	0	0	0
Bulldozer	0	0	0	0
Water Truck	1	4	1	1
Tracked Loader	0	0	0	0
Wheeled Loader	0	0	0	0
Motor Grader	0	0	1	1
Miscellaneous	3	8	2	8
Vehicle Type	**Quantity**	**Vehicle Trips/ Day**	**Quantity**	**Vehicle Trips/ Day**
Haul Trucks	1	2	0	0
Construction Employee Vehicles	100	2	50	2
Emission Source	**Acres/Day**		**Acres/Day**	
Site Grading	1		0	
Asphalt Work	1		0	

The URBEMIS2007 model was used to estimate emissions associated with construction. Tables 6a and 6b present the URBEMIS2007 model results for Phase 1 and Phase 2 construction, showing the maximum daily construction scenario, assuming that a number of projects identified for that construction phase would be undergoing simultaneous construction during the building construction phase. This assumption represents a worst case as it is unlikely that each project would be undergoing maximum construction activity at the same time. It was assumed that standard dust control measures would be implemented during construction, including watering

active sites a minimum of three times daily, watering unpaved roads, and reducing vehicle speeds to 15 mph or less on unpaved surfaces.

Table 6a
Maximum Daily Construction Emissions –Phase 1
San Marcos Campus Facilities Master Plan

Construction Project/Phase	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Demolition						
Fugitive Dust	-	-	-	-	21.00	4.37
Off-Road Diesel	1.23	8.15	4.78	0.00	0.64	0.59
On-Road Diesel	1.41	22.16	7.41	0.03	0.95	0.82
Worker Trips	0.04	0.07	1.18	0.00	0.01	0.00
Total	**2.68**	**30.38**	**13.37**	**0.03**	**22.60**	**5.78**
Significance Threshold	137	250	550	250	100	100
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Grading and Site Preparation						
Fugitive Dust	-	-	-	-	20.29	4.24
Off-Road Diesel	20.58	185.08	81.48	0.00	8.26	7.60
Worker Trips	0.21	0.36	6.50	0.01	0.04	0.02
Total	**20.79**	**185.44**	**87.98**	**0.01**	**28.59**	**11.86**
Significance Threshold	137	250	550	250	100	100
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Table 6b
Maximum Daily Construction Emissions –Phase 2
San Marcos Campus Facilities Master Plan

Construction Project/Phase	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Building Construction Off-Road Diesel	4.73	44.58	16.34	0.00	2.02	1.86
Building Vendor Trips	0.08	0.96	0.80	0.00	0.04	0.04
Building Construction Worker Trips	0.26	0.44	8.09	0.01	0.06	0.03
Architectural Coating Offgassing	16.95	-	-	-	-	-
Architectural Coatings Worker Trips	0.02	0.03	0.48	0.00	0.00	0.00
Asphalt Offgassing	0.05	-	-	-	-	-
Paving Off-Road Diesel	2.64	15.97	9.18	0.00	1.39	1.27
Paving On-Road Diesel	0.01	0.17	0.06	0.00	0.01	0.01
Paving Worker Trips	0.07	0.12	2.20	0.00	0.02	0.01
Total	**24.80**	**62.27**	**37.14**	**0.01**	**3.54**	**3.22**
Significance Threshold	137	250	550	250	100	100
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

As shown in the tables, emissions of criteria pollutants would not exceed the significance thresholds during either Phase 1 or Phase 2 construction based on the assumptions regarding construction emissions, assuming that fugitive dust control measures would be implemented and

that low-VOC coatings would be used. Emissions associated with construction would be temporary and would not be anticipated to result in a significant impact on air quality.

4.2 Operational Impacts

This section addresses potential operational impacts resulting from criteria air pollutant emissions for implementation of the San Marcos Campus Facilities Master Plan. Operational impacts associated with the Master Plan would result from incremental increases in emissions of criteria air pollutants (CO, VOCs, NOx, SOx, PM_{10}, and $PM_{2.5}$) resulting from three main source categories: area sources, stationary sources, and mobile sources. The following subsections describe the source categories and emission estimation methodologies used to estimate emissions for each category.

4.2.1 Area Sources

Area sources of air pollutant emissions associated with implementation of the Master Plan include:

- Fuel combustion emissions from energy use, including space and water heating
- Fuel combustion emissions from landscape maintenance equipment
- Architectural coatings use for maintenance purposes

The URBEMIS2007 model, Version 9.2.4, was used to estimate incremental air pollutant emissions from the identified types of area sources. Land use data associated with the San Marcos Campus Facilities Master Plan were used in the model to estimate square footage based on land uses proposed under the Master Plan. The data used in the URBEMIS2007 model analysis are presented in Table 7.

Table 7
San Marcos Campus Facilities Master Plan Land Use

Land Use	Increased Development Amount (approximate square feet)
Classroom Buildings	289,000
Administrative Support Buildings/Facilities	202,000
Recreational Facilities	20,000

The modeling analysis for the area sources used model default emission factors contained within the URBEMIS model. Table 8 presents the estimated emissions for the area sources proposed for the projects analyzed for the San Marcos Campus Facilities Master Plan. URBEMIS output files are provided in Appendix A of this report.

Table 8
Summary of Estimated Operational Area Source Emissions
San Marcos Campus Facilities Master Plan Land Use

Emission Source	Maximum Daily Emissions (lbs/day)					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$[1]**
Fuel Combustion	0.36	4.24	4.15	0.00	0.01	0.01
Landscaping	0.12	0.02	1.55	0.00	0.01	0.01
Architectural Coatings (Maintenance)	2.99	-	-	-	-	-
Total	**3.47**	**4.26**	**5.70**	**0.00**	**0.02**	**0.02**
Significance Threshold (lbs/day)	***137***	***250***	***550***	***250***	***100***	***100***
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
	Annual Emissions (tons/year)					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$[1]**
Fuel Combustion	0.09	0.90	0.76	0.00	0.01	0.01
Landscaping	0.01	0.00	0.14	0.00	0.00	0.00
Architectural Coatings (Maintenance)	0.55	-	-	-	-	-
Total	**0.65**	**0.90**	**0.90**	**0.00**	**0.01**	**0.01**
Significance Threshold (tons/year)	***15***	***40***	***100***	***40***	***15***	***15***
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[1]Based on SCAQMD (2006), $PM_{2.5}$ is 99% of PM_{10} for combustion sources.

4.2.2 Stationary Sources

Stationary air pollutant emission sources at the Palomar College Campus include the following sources:

- Academic laboratory uses
- Diesel-fueled emergency engines

- Maintenance operations

Criteria air pollutants generated from these sources include CO, VOCs, NOx, SOx, PM_{10}, and $PM_{2.5}$. Emissions associated with operation of the diesel emergency generators would be negligible as the engines would only be operated for testing purposes, and therefore emissions would not be expected to increase with increases in enrollment. Emissions from maintenance activities would also be anticipated to remain the same regardless of enrollment.

Emissions associated with use of chemicals on campus would also be minor. Palomar College tracks chemical usage, hazardous materials handling, and waste disposal amounts as mandated under regulatory requirements. Minor amounts of materials such as solvents, laboratory reagents, acids, and other laboratory chemicals are used in the Earth Sciences/Life Sciences Department, Art Department, and Theater Department. The usage of these substances would not result in significant emissions of air pollutants, nor would it expose sensitive receptors to substantial pollutant concentrations.

4.2.3 Vehicular Emissions

Implementation of the San Marcos Campus Facilities Master Plan will result in increases in traffic due to increased enrollment at Palomar College. Traffic increases are projected in the Traffic Impact Analysis for the Palomar College San Marcos Campus Facilities Master Plan (Linscott, Law & Greenspan 2008). According to the Traffic Impact Analysis, implementation of the Master Plan is anticipated to result in 4,950 additional average daily trips (ADTs).

Emissions associated with vehicular traffic were estimated using the URBEMIS2007 model. Inputs to the URBEMIS2007 model include incremental vehicle trips based on the Traffic Impact Analysis, vehicle fleet percentage, winter and summer temperatures, trip characteristics, variable start information, emission factors, environmental factors, trip distances, and modeling year (2030). The ambient temperatures selected for winter and summer modeling runs were 60 ºF and 85 ºF, respectively. It was assumed that road dust silt loading would be 0.035 grams per square meter, based on ARB's value for major roadways, upon which vehicles would travel to and from the Campus. Other inputs to the model were assumed to be defaults.

Table 9 presents a summary of vehicular emissions associated with implementation of the San Marcos Campus Facilities Master Plan.

Table 9
Summary of Estimated Operational Vehicular Emissions

Emission Source	Maximum Daily Emissions (lbs/day)[1]					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Vehicular Emissions	47.91	38.90	284.46	0.36	33.80	7.23
Significance Threshold (lbs/day)	***137***	***250***	***550***	***250***	***100***	***100***
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
	Annual Emissions (tons/year)					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Vehicular Emissions	7.77	6.17	50.42	0.06	6.17	1.32
Significance Threshold (tons/year)	***15***	***40***	***100***	***40***	***15***	***15***
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[1]Maximum daily emissions reported as the maximum of summer and winter day emissions from the URBEMIS model.

4.2.4 Summary

Table 10 presents a summary of the total estimated incremental operational air emissions associated with implementation of the San Marcos Campus Facilities Master Plan, in comparison with the significance thresholds identified in Section 3.0. To provide perspective regarding the significance of operational emissions, Table 10 also compares the estimated emissions of pollutants with the ARB projections for the SDAB. Emissions for the Master Plan were compared with 2020 emission projections from the ARB's Almanac. The ARB's Almanac does not provide projections for years after 2020. As shown in Table 10, maximum daily and annual emissions associated with implementation of the Master Plan would be below the daily and annual significance thresholds for all pollutants.

As discussed in the following section (Section 5.0), air dispersion modeling was conducted to further evaluate the potential for significant impacts due to emissions of CO. In general, exceedances of the CO standard are associated with traffic congestion. Provided traffic at congested locations (i.e., intersections operating at LOS E or F) does not result in an exceedance of the CO standards, significant impacts would not result.

Emissions of ROG can contribute to elevated levels of ozone in the ambient air, because ROG

react in the atmosphere to form ozone. To develop its SIP and demonstrate that the air basin will attain and maintain the ozone standards, the SDAPCD utilizes growth projections and traffic projections developed by SANDAG and local municipalities. Projects that are consistent with the SANDAG projections and with local General Plans would be accounted for in the SDAPCD's attainment demonstration, and would not constribute to a violation of the ozone standard. Should a project's projected growth in traffic exceed traffic projections developed by SANDAG and accounted for in the SIP and the attainment demonstration, the project may contribute elevated levels of ozone and may conflict with existing air quality plans.

The San Marcos Campus Facilities Master Plan is consistent with the San Diego Association of Governments' (SANDAG's) growth projections for the county. Thus the operational emissions associated with implementation of the Master Plan would not be anticipated to adversely affect the air basin's ability to demonstrate continuing reductions and progress toward attainment of the ambient air quality standards.

As discussed in Section 2.0, the SDAPCD has prepared the *Eight-Hour Ozone Attainment Plan for San Diego County* (APCD 2007), which develops plans and programs to attain and maintain the newly adopted 8-hour NAAQS for O_3. That process included emission projections for 2008, the year in which the APCD projected attainment of the 8-hour NAAQS for O_3. The emissions associated with implementation of the Master Plan would not substantially contribute to the overall emissions in the SDAB, and given that implementation of the Master Plan is consistent with growth projections for the County, the emissions from the project will be accounted for in the attainment demonstrations contained in the updated SIP.

Table 10
Summary of Total Estimated Operational Emissions

Emission Source	Maximum Daily Emissions (lbs/day)					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	3.47	4.26	5.70	0.00	0.02	0.02
Vehicular Emissions	47.91	38.90	284.46	0.36	33.80	7.23
Total	**51.38**	**43.16**	**290.16**	**0.36**	**33.82**	**7.25**
Significance Threshold (lbs/day)	***137***	***250***	***550***	***250***	***100***	***100***
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
	Annual Emissions (tons/year)					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	0.65	0.90	0.90	0.00	0.01	0.01
Vehicular Emissions	7.77	6.17	50.42	0.06	6.17	1.32
Total	**8.42**	**7.07**	**51.32**	**0.06**	**6.18**	**1.33**
Significance Threshold (tons/year)	***15***	***40***	***100***	***40***	***15***	***15***
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Total (tons/day)	**0.0253**	**0.0215**	**0.145**	**0.00018**	**0.0169**	**0.00362**
Projected 2020 County Emissions (tons/day)	**543.77**	**171.25**	**159.37**	**31.59**	**135.77**	**47.89**

4.3 Cumulative Impacts

The potential for cumulative impacts exists during both construction and following implementation of the San Marcos Campus Facilities Master Plan. During construction, the cumulative effect of construction of simultaneous projects under Phase 1 and Phase 2 of the Master Plan were considered to address the potential for exceedances of the significance thresholds. In addition, the potential for simultaneous operational emissions and construction emissions was evaluated. Table 11 presents a summary of the potential maximum daily and annual emissions associated with cumulative construction and operations for the San Marcos Campus Facilities Master Plan.

Table 11
Summary of Total Estimated Construction and Operational Emissions

Emission Source	Maximum Daily Emissions (lbs/day)					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Phase I Construction	20.79	185.44	87.98	0.01	28.59	11.86
Phase II Construction	24.80	62.27	37.14	0.01	3.54	3.22
Operations	51.38	43.16	290.16	0.36	33.82	7.25
Total	**96.97**	**290.87**	**415.28**	**0.38**	**65.95**	**22.33**
Significance Threshold (lbs/day)	***137***	***250***	***550***	***250***	***100***	***100***
Above Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**
	Annual Emissions (tons/year)					
	ROG	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Phase I Construction	2.80	25.17	11.91	0.00	4.45	1.73
Phase II Construction	1.31	6.54	3.69	0.00	0.32	0.29
Operations	8.42	7.07	51.32	0.06	6.18	1.33
Total	**12.53**	**38.78**	**66.92**	**0.06**	**10.95**	**3.35**
Significance Threshold (tons/year)	***15***	***40***	***100***	***40***	***15***	***15***
Above Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Total (tons/day)	**0.048**	**0.145**	**0.207**	**0.00019**	**0.033**	**0.011**
Projected 2020 County Emissions (tons/day)	**543.77**	**171.25**	**159.37**	**31.59**	**135.77**	**47.89**

As shown in Table 10, emissions of all pollutants except NOx would be below the significance thresholds for both daily and annual emissions. Emissions of NOx would only be above the significance thresholds if the maximum daily construction during Phase I and Phase II occurred at the same time as additional traffic associated with the Campus Master Plan. This impact would be temporary.

Other off-campus projects could be under construction at the same time as construction is occurring at the Palomar College San Marcos campus. It is unlikely that additional major projects that would be constructed in the vicinity of the campus would contribute to localized impacts to air quality from fugitive dust emissions.

Construction emissions of ozone precursors (NOx and ROG) can be mitigated to below a level of significance. Because emissions are short-term and temporary, and because emissions are a small percentage of the emissions of ozone precursors in the SDAB, construction emissions of ozone precursors would not be anticipated to result in a cumulatively considerable impact on the ambient air quality.

To address whether the implementation of the Master Plan would have a cumulative impact on air quality, the project's consistency with SANDAG growth projections was evaluated. SANDAG's growth projections provide the basis for emissions estimates that are developed for the attainment demonstration and SIP requirements adopted by the SDAPCD. Provided a project is consistent with overall growth projections for the County, the project would fit within the emissions estimates used to demonstrate that the SDAB will attain and maintain the ozone standard. As discussed above, the San Marcos Campus Facilities Master Plan would not be anticipated to adversely affect the air basin's ability to demonstrate continuing reductions and progress toward attainment of the ambient air quality standards. Furthermore, the Master Plan's emissions represent a small percentage of the projected 2020 emissions budget for the SDAB. Implementation of the Master Plan would therefore not be anticipated to result in a cumulatively considerable impact.

5.0 LOCALIZED CO IMPACTS

5.1 Impacts

Projects involving increases in traffic and/or traffic congestion may result in localized increases in CO concentrations. To further evaluate whether the project would result in a significant impact, additional modeling to assess whether the increases in traffic attributable to implementation of the San Marcos Campus Facilities Master Plan would result in localized CO impacts.

Projects involving traffic impacts may result in the formation of locally high concentrations of CO, known as CO "hot spots." To verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO "hot spots" was conducted. The Traffic Impact Analysis evaluated whether or not there would be a decrease in the level of service at the roadways and/or intersections affected by the Project. The potential for CO "hot spots" was evaluated based on the results of the Traffic Impact Analysis. The Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol (Caltrans 1998) should be followed to determine whether a CO "hot spot" is likely to form due to Project-generated traffic. In accordance with the Protocol, CO "hot spots" are typically evaluated when (a) the level of service (LOS) of an intersection or roadway decreases to a LOS E or worse; (b) signalization and/or channelization is added to an intersection; and (c) sensitive receptors such as residences, commercial developments, schools, hospitals, etc. are located in the vicinity of the affected intersection or roadway segment.

The Traffic Impact Analysis evaluated 35 intersections in the project vicinity to assess the Existing, Near Term with and without Project, and Long Term with and without Project. Because the Long Term with Project conditions would result in the greatest impacts, the focus of the CO "hot spots" analysis was on that scenario. Based on the Traffic Impact Analysis, the following intersections were projected to experience a degradation in LOS or a significant increase in delay. These intersections were identified in the Traffic Impact Analysis as intersections for which the impact would be significant.

- Borden Road and Twin Oaks Valley Road
- Las Posas Road and Palm Road
- Las Posas Road and Mission Avenue
- Comet Circle (East) and Mission Avenue
- SB 78 Ramp/Via Veta/Grand Avenue
- Las Posas Road and San Marcos Boulevard

To evaluate the potential for CO "hot spots," the procedures in the Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol (Caltrans 1998) were used. As recommended in the Protocol, CALINE4 modeling was conducted for the intersections identified above for the scenario without Project traffic, and the Project scenarios. Modeling was conducted based on the guidance in Appendix B of the Protocol to calculate maximum predicted 1-hour CO concentrations. Predicted 1-hour CO concentrations were then scaled to evaluate maximum predicted 8-hour CO concentrations using the recommended scaling factor of 0.7 for urban locations.

Inputs to the CALINE4 model were obtained from the Traffic Impact Analysis for the San Marcos Campus Facilities Master Plan (Linscott, Law, & Greenspan 2008). As recommended in the Protocol, receptors were located at locations that were approximately 3 meters from the mixing zone, and at a height of 1.8 meters. Average approach and departure speeds were conservatively assumed to be 1 mph, and emission factors for that speed were estimated from the EMFAC2007 emissions model (ARB 2007) for 2020 for Long Term plus Project conditions.

In accordance with the Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol, it is also necessary to estimate future background CO concentrations in the project vicinity to determine the potential impact plus background and evaluate the potential for CO "hot spots" due to the project. As a conservative estimate of background CO concentrations, the existing maximum 1-hour background concentration of CO that was measured at the Escondido monitoring station for the period 2005 to 2007 of 5.9 ppm was used to represent future maximum background 1-hour CO concentrations. The existing maximum 8-hour background concentration

of CO that was measured at the Escondido monitoring station during the period from 2005 to 2007 of 3.61 ppm was also used to provide a conservative estimate of the maximum 8-hour background concentrations in the project vicinity. CO concentrations in the future may be lower as inspection and maintenance programs and more stringent emission controls are placed on vehicles.

The CALINE4 model outputs are provided in Appendix A of this report. Table 12 presents a summary of the predicted CO concentrations (impact plus background) for the intersections evaluated. As shown in Table 12, the predicted CO concentrations would be substantially below the 1-hour and 8-hour NAAQS and CAAQS for CO shown in Table 1 of this report. Therefore, no exceedances of the CO standard are predicted, and the project would not cause or contribute to a violation of this air quality standard.

Table 12
CO "Hot Spots" Evaluation
Predicted CO Concentrations, ppm

Intersection	**Long Term plus Project**	
Maximum 1-hour Concentration Plus Background, ppm CAAQS = 20 ppm; NAAQS = 35 ppm; Background 5.9 ppm		
	am	***pm***
Borden Road and Twin Oaks Valley Road	6.6	6.6
Las Posas Road and Palm Road	6.7	6.7
Las Posas Road and Mission Avenue	6.8	6.8
Comet Circle (East) and Mission Avenue	6.5	6.4
Via Veta and Grand Avenue	6.5	6.6
Las Posas Road and San Marcos Boulevard	6.6	6.6
Maximum 8-hour Concentration Plus Background, ppm CAAQS = 9.0 ppm; NAAQS = 9 ppm; Background 3.61 ppm		
Borden Road and Twin Oaks Valley Road	4.10	
Las Posas Road and Palm Road	4.17	
Las Posas Road and Mission Avenue	4.24	
Comet Circle (East) and Mission Avenue	4.03	
Via Veta and Grand Avenue	4.10	
Las Posas Road and San Marcos Boulevard	4.10	

5.2 Cumulative Impacts

The potential for localized CO "hot spots" was evaluated based on the cumulative traffic movements for the Long Term plus Project conditions as provided in the Traffic Impact Analysis. These traffic projections include not only project-specific traffic associated with the Master Plan, but also traffic associated with baseline conditions and cumulative projects. Accordingly, the evaluation of the potential for CO "hot spots" is based on a cumulative analysis and indicates that the San Marcos Campus Facilities Master Plan would not result in cumulatively significant CO "hot spots" impacts.

6.0 RECOMMENDATIONS AND CONCLUSIONS

Short-term construction activities during grading activities without implementation of fugitive dust control measures may exceed recommended PM_{10} significance thresholds, depending upon disturbance acreage and amount of equipment operating onsite. Implementation of best management practices is recommended to reduce the potential for any short-term construction activity impacts. The following measures are recommended for construction activities:

1. During grading activities, any exposed soil areas shall be watered a minimum of twice per day. On windy days or when fugitive dust can be observed leaving the project site, additional applications of water shall be applied to maintain a minimum 12 percent moisture content. Under windy conditions where velocities are forecast to exceed 25 miles per hour, all ground disturbing activities shall be halted until winds that are forecast to abate below this threshold.

2. The project shall implement dust suppression techniques to prevent fugitive dust from creating a nuisance offsite. These dust suppression techniques are summarized as follows:

    a. Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

    b. All on-site access points shall be paved as soon as feasible or watered periodically or chemically stabilized.

    c. All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

    d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.

3. All vehicles on the construction site shall travel at speeds less than 15 miles per hour.

4. All material stockpiles subject to wind erosion during construction activities, that will not be utilized within three days, shall be covered with plastic, an alternative cover deemed equivalent to plastic, or sprayed with a nontoxic chemical stabilizer.

5. Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

6. All diesel-powered vehicles and equipment shall be properly operated and maintained.

7. All diesel-powered vehicles and gasoline-powered equipment shall be turned off when not in use for more than five (5) minutes as practicable.

8. The construction contractor shall utilize electric or natural gas-powered equipment in lieu of gasoline or diesel-powered engines, where feasible.

9. As much as possible, the construction contractor shall time the construction activities so as not to interfere with peak hour traffic. In order to minimize obstruction of through traffic lanes adjacent to the site, a flagperson shall be retained to maintain safety adjacent to existing roadways, if necessary.

10. The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

11. The construction contractor shall utilize as much as possible pre-coated/natural colored building materials. Water-based or low VOC coatings with a ROG content of 100 grams per liter or less shall be used. Spray equipment with high transfer efficiency, such as the electrostatic spray gun method, or manual coatings application such as paint brush hand roller, trowel, spatula, dauber, rag, or sponge, shall be used to reduce VOC emissions, where practical.

12. During demolition activities, utilize safety measures as required by City/State for removal of toxic or hazardous materials.

13. Maintain rubble piles in damp state to minimize dust generation.

Operational emissions are below the significance thresholds for all pollutants. Palomar College has access to transit including the Sprinter and bus services within the City of San Marcos, which serves to reduce vehicle miles traveled and therefore emissions associated with traffic.

Emissions would be less than significant for both construction and operations.

7.0 REFERENCES

California Air Resources Board. 2005a. *Air Quality and Land Use Handbook: A Community Health Perspective*. April.

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APPENDIX A

URBEMIS Computer Model Outputs
CALINE4 Model Outputs

CALINE4 Model Outputs

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

               JOB: Twin Oaks Valley & Border am
               RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide


  I.  SITE VARIABLES

         U=   1.0 M/S            Z0= 100. CM           ALT=     0. (M)
       BRG= WORST CASE           VD=   .0 CM/S
      CLAS=     7 (G)            VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=   10. DEGREES       TEMP= 15.6 DEGREE (C)


  II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*-------------------------------
A. Borden EBLA  *  -150     0     0     0 *  AG    104   3.3     .0  10.0
B. Borden EBTA  *  -150    -4     0    -4 *  AG    225   3.3     .0  10.0
C. Borden EBRA  *  -150    -6     0    -6 *  AG    475   3.3     .0  10.0
D. Borden EBD   *     0    -4   150    -4 *  AG    637   3.3     .0  10.0
E. Borden WBLA  *   150     0     0     0 *  AG    288   3.3     .0  10.0
F. Borden WBTA  *   150     4     0     4 *  AG    460   3.3     .0  10.0
G. Borden WBRA  *   150     6     0     6 *  AG     90   3.3     .0  10.0
H. Borden WBD   *     0     4  -150     4 *  AG   1173   3.3     .0  10.0
I. TOV NBLA     *     0  -150     0     0 *  AG    310   3.3     .0  10.0
J. TOV NBTA     *     4  -150     4     0 *  AG    811   3.3     .0  10.0
K. TOV NBRA     *     6  -150     6     0 *  AG    292   3.3     .0  10.0
L. TOV NBD      *     4     0     4   150 *  AG   1005   3.3     .0  10.0
M. TOV SBLA     *     0   150     0     0 *  AG    120   3.3     .0  10.0
N. TOV SBTA     *    -4   150    -4     0 *  AG   1474   3.3     .0  10.0
O. TOV SBRA     *    -6   150    -6     0 *  AG    403   3.3     .0  10.0
P. TOV SBD      *    -4     0    -4  -150 *  AG   2237   3.3     .0  10.0
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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Twin Oaks Valley & Border am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-14	-14	1.8
2. Recpt 2	*	-34	-14	1.8
3. Recpt 3	*	-54	-14	1.8
4. Recpt 4	*	-14	-34	1.8
5. Recpt 5	*	-14	-54	1.8
6. Recpt 6	*	-16	14	1.8
7. Recpt 7	*	-36	14	1.8
8. Recpt 8	*	-56	14	1.8
9. Recpt 9	*	-16	34	1.8
10. Recpt 10	*	-16	54	1.8
11. Recpt 11	*	16	-14	1.8
12. Recpt 12	*	16	-34	1.8
13. Recpt 13	*	16	-54	1.8
14. Recpt 14	*	36	-14	1.8
15. Recpt 15	*	56	-14	1.8
16. Recpt 16	*	14	16	1.8
17. Recpt 17	*	34	16	1.8
18. Recpt 18	*	54	16	1.8
19. Recpt 19	*	14	36	1.8
20. Recpt 20	*	14	56	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Twin Oaks Valley & Border am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	15.	.7	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	75.	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	76.	.4	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	15.	.6	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	15.	.6	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	163.	.7	.0	.0	.0	.0	.0	.0	.0	.1
7. Recpt 7	111.	.5	.0	.0	.0	.0	.0	.0	.0	.1
8. Recpt 8	106.	.5	.0	.0	.0	.0	.0	.0	.0	.2
9. Recpt 9	165.	.6	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	167.	.6	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	285.	.6	.0	.0	.0	.0	.0	.0	.0	.1
12. Recpt 12	338.	.5	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	343.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	282.	.5	.0	.0	.0	.0	.0	.0	.0	.1
15. Recpt 15	281.	.4	.0	.0	.0	.0	.0	.0	.0	.1
16. Recpt 16	195.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17	257.	.4	.0	.0	.0	.0	.0	.0	.0	.1
18. Recpt 18	257.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	194.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	194.	.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Twin Oaks Valley & Border am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	*	.0	.0	.0	.1	.0	.2	.0	.0
2. Recpt 2	*	.0	.0	.0	.0	.0	.0	.0	.1
3. Recpt 3	*	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	*	.0	.0	.0	.1	.0	.1	.0	.2
5. Recpt 5	*	.0	.0	.0	.0	.0	.0	.0	.3
6. Recpt 6	*	.0	.0	.0	.0	.0	.0	.0	.3
7. Recpt 7	*	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	*	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	*	.0	.0	.0	.0	.0	.0	.0	.2
10. Recpt 10	*	.0	.0	.0	.0	.0	.1	.0	.1
11. Recpt 11	*	.0	.0	.0	.0	.0	.0	.0	.1
12. Recpt 12	*	.0	.0	.0	.0	.0	.1	.0	.0
13. Recpt 13	*	.0	.0	.0	.0	.0	.1	.0	.0
14. Recpt 14	*	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	*	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	*	.0	.1	.0	.0	.0	.0	.0	.2
17. Recpt 17	*	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	*	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	*	.0	.0	.0	.0	.0	.0	.0	.2
20. Recpt 20	*	.0	.0	.0	.1	.0	.0	.0	.2

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Twin Oaks Valley & Border pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Borden EBLA	*	-150	0	0	0	* AG	330	3.3	.0	10.0
B. Borden EBTA	*	-150	-4	0	-4	* AG	279	3.3	.0	10.0
C. Borden EBRA	*	-150	-6	0	-6	* AG	287	3.3	.0	10.0
D. Borden EBD	*	0	-4	150	-4	* AG	633	3.3	.0	10.0
E. Borden WBLA	*	150	0	0	0	* AG	245	3.3	.0	10.0
F. Borden WBTA	*	150	4	0	4	* AG	151	3.3	.0	10.0
G. Borden WBRA	*	150	6	0	6	* AG	170	3.3	.0	10.0
H. Borden WBD	*	0	4	-150	4	* AG	721	3.3	.0	10.0
I. TOV NBLA	*	0	-150	0	0	* AG	359	3.3	.0	10.0
J. TOV NBTA	*	4	-150	4	0	* AG	1631	3.3	.0	10.0
K. TOV NBRA	*	6	-150	6	0	* AG	214	3.3	.0	10.0
L. TOV NBD	*	4	0	4	150	* AG	2131	3.3	.0	10.0
M. TOV SBLA	*	0	150	0	0	* AG	140	3.3	.0	10.0
N. TOV SBTA	*	-4	150	-4	0	* AG	1283	3.3	.0	10.0
O. TOV SBRA	*	-6	150	-6	0	* AG	211	3.3	.0	10.0
P. TOV SBD	*	-4	0	-4	-150	* AG	1815	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Twin Oaks Valley & Border pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-14	-14	1.8
2. Recpt 2	*	-34	-14	1.8
3. Recpt 3	*	-54	-14	1.8
4. Recpt 4	*	-14	-34	1.8
5. Recpt 5	*	-14	-54	1.8
6. Recpt 6	*	-16	14	1.8
7. Recpt 7	*	-36	14	1.8
8. Recpt 8	*	-56	14	1.8
9. Recpt 9	*	-16	34	1.8
10. Recpt 10	*	-16	54	1.8
11. Recpt 11	*	16	-14	1.8
12. Recpt 12	*	16	-34	1.8
13. Recpt 13	*	16	-54	1.8
14. Recpt 14	*	36	-14	1.8
15. Recpt 15	*	56	-14	1.8
16. Recpt 16	*	14	16	1.8
17. Recpt 17	*	34	16	1.8
18. Recpt 18	*	54	16	1.8
19. Recpt 19	*	14	36	1.8
20. Recpt 20	*	14	56	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Twin Oaks Valley & Border pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	15.	.7	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	75.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	75.	.4	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	15.	.6	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	15.	.6	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	163.	.7	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7	154.	.4	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	107.	.4	.0	.0	.0	.0	.0	.0	.0	.1
9. Recpt 9	164.	.6	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	166.	.6	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	343.	.6	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	344.	.6	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	344.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	282.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	281.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	196.	.7	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17	257.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	257.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	195.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	195.	.7	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Twin Oaks Valley & Border pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	*	.0	.0	.0	.2	.0	.2	.0	.0
2. Recpt 2	*	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	*	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	*	.0	.0	.0	.2	.0	.1	.0	.1
5. Recpt 5	*	.0	.0	.0	.1	.0	.0	.0	.2
6. Recpt 6	*	.0	.2	.0	.0	.0	.0	.0	.3
7. Recpt 7	*	.0	.1	.0	.0	.0	.0	.0	.1
8. Recpt 8	*	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	*	.0	.2	.0	.0	.0	.0	.0	.2
10. Recpt 10	*	.0	.1	.0	.0	.0	.1	.0	.1
11. Recpt 11	*	.0	.0	.0	.3	.0	.1	.0	.0
12. Recpt 12	*	.0	.0	.0	.2	.0	.1	.0	.0
13. Recpt 13	*	.0	.2	.0	.0	.0	.0	.0	.0
14. Recpt 14	*	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	*	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	*	.0	.3	.0	.0	.0	.0	.0	.2
17. Recpt 17	*	.0	.0	.0	.1	.0	.0	.0	.0
18. Recpt 18	*	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	*	.0	.1	.0	.2	.0	.0	.0	.2
20. Recpt 20	*	.0	.0	.0	.3	.0	.0	.0	.1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Las Posas and Mission am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission EBLA	*	-146	28	0	0	* AG	493	3.3	.0	10.0
B. Mission EBTA	*	-146	24	0	-4	* AG	536	3.3	.0	10.0
C. Mission EBRA	*	-146	22	0	-6	* AG	350	3.3	.0	10.0
D. Mission EBD	*	0	-4	150	-4	* AG	1319	3.3	.0	10.0
E. Mission WBLA	*	150	0	0	0	* AG	556	3.3	.0	10.0
F. Mission WBTA	*	150	4	0	4	* AG	1019	3.3	.0	10.0
G. Mission WBRA	*	150	6	0	6	* AG	252	3.3	.0	10.0
H. Mission WBD	*	0	4	-146	31	* AG	1267	3.3	.0	10.0
I. LP NBLA	*	0	-150	0	0	* AG	70	3.3	.0	10.0
J. LP NBTA	*	4	-150	4	0	* AG	974	3.3	.0	10.0
K. LP NBRA	*	6	-150	6	0	* AG	408	3.3	.0	10.0
L. LP NBD1	*	4	0	-8	75	* AG	1719	3.3	.0	10.0
M. LP NBD2	*	-8	75	-28	146	* AG	1719	3.3	.0	10.0
N. LP SBLA1	*	-32	146	-12	75	* AG	375	3.3	.0	10.0
O. LP SBLA2	*	-12	75	0	0	* AG	375	3.3	.0	10.0
P. LP SBTA1	*	-35	146	-16	75	* AG	1259	3.3	.0	10.0
Q. LP SBTA2	*	-16	75	-4	0	* AG	1259	3.3	.0	10.0
R. LP SBRA1	*	-37	146	-17	75	* AG	178	3.3	.0	10.0
S. LP SBRA2	*	-17	75	-6	0	* AG	178	3.3	.0	10.0
T. LP SBD	*	-4	0	-4	-150	* AG	2165	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Las Posas and Mission am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-14	-14	1.8
2. Recpt 2	*	-34	-9	1.8
3. Recpt 3	*	-54	-4	1.8
4. Recpt 4	*	-14	-34	1.8
5. Recpt 5	*	-14	-54	1.8
6. Recpt 6	*	-14	16	1.8
7. Recpt 7	*	-34	21	1.8
8. Recpt 8	*	-54	26	1.8
9. Recpt 9	*	-18	36	1.8
10. Recpt 10	*	-22	56	1.8
11. Recpt 11	*	16	-14	1.8
12. Recpt 12	*	16	-34	1.8
13. Recpt 13	*	16	-54	1.8
14. Recpt 14	*	36	-14	1.8
15. Recpt 15	*	56	-14	1.8
16. Recpt 16	*	12	16	1.8
17. Recpt 17	*	32	16	1.8
18. Recpt 18	*	52	16	1.8
19. Recpt 19	*	8	36	1.8
20. Recpt 20	*	4	56	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Las Posas and Mission am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	75.	.8	.0	.0	.0	.2	.0	.1	.0	.0
2. Recpt 2	80.	.7	.0	.0	.0	.1	.0	.1	.0	.0
3. Recpt 3	84.	.7	.0	.0	.0	.0	.0	.1	.0	.0
4. Recpt 4	25.	.6	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	22.	.6	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	163.	.8	.0	.0	.0	.0	.0	.0	.0	.1
7. Recpt 7	113.	.6	.0	.0	.0	.1	.0	.0	.0	.0
8. Recpt 8	118.	.5	.0	.0	.0	.0	.0	.0	.0	.2
9. Recpt 9	148.	.7	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	150.	.6	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	336.	.9	.0	.0	.0	.1	.0	.0	.0	.0
12. Recpt 12	341.	.7	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	343.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	290.	.7	.0	.0	.0	.2	.0	.0	.0	.2
15. Recpt 15	287.	.7	.0	.0	.0	.2	.0	.0	.0	.1
16. Recpt 16	194.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17	225.	.6	.0	.0	.0	.1	.0	.1	.0	.0
18. Recpt 18	245.	.5	.0	.0	.0	.0	.0	.1	.0	.0
19. Recpt 19	191.	.8	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Las Posas and Mission am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. Recpt 2	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
5. Recpt 5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
6. Recpt 6	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
7. Recpt 7	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	*	.0	.0	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0
10. Recpt 10	*	.0	.0	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0
11. Recpt 11	*	.0	.0	.0	.3	.0	.0	.0	.0	.1	.0	.0	.0
12. Recpt 12	*	.0	.0	.0	.2	.0	.0	.0	.0	.1	.0	.0	.0
13. Recpt 13	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
17. Recpt 17	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
18. Recpt 18	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.2
20. Recpt 20	*	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.2

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Las Posas and Mission pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission EBLA	*	-146	28	0	0	* AG	551	3.3	.0	10.0
B. Mission EBTA	*	-146	24	0	-4	* AG	1267	3.3	.0	10.0
C. Mission EBRA	*	-146	22	0	-6	* AG	200	3.3	.0	10.0
D. Mission EBD	*	0	-4	150	-4	* AG	2101	3.3	.0	10.0
E. Mission WBLA	*	150	0	0	0	* AG	582	3.3	.0	10.0
F. Mission WBTA	*	150	4	0	4	* AG	610	3.3	.0	10.0
G. Mission WBRA	*	150	6	0	6	* AG	264	3.3	.0	10.0
H. Mission WBD	*	0	4	-146	31	* AG	1022	3.3	.0	10.0
I. LP NBLA	*	0	-150	0	0	* AG	230	3.3	.0	10.0
J. LP NBTA	*	4	-150	4	0	* AG	1376	3.3	.0	10.0
K. LP NBRA	*	6	-150	6	0	* AG	538	3.3	.0	10.0
L. LP NBD1	*	4	0	-8	75	* AG	2191	3.3	.0	10.0
M. LP NBD2	*	-8	75	-28	146	* AG	2191	3.3	.0	10.0
N. LP SBLA1	*	-32	146	-12	75	* AG	296	3.3	.0	10.0
O. LP SBLA2	*	-12	75	0	0	* AG	296	3.3	.0	10.0
P. LP SBTA1	*	-35	146	-16	75	* AG	777	3.3	.0	10.0
Q. LP SBTA2	*	-16	75	-4	0	* AG	777	3.3	.0	10.0
R. LP SBRA1	*	-37	146	-17	75	* AG	182	3.3	.0	10.0
S. LP SBRA2	*	-17	75	-6	0	* AG	182	3.3	.0	10.0
T. LP SBD	*	-4	0	-4	-150	* AG	1559	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Las Posas and Mission pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-14	-14	1.8
2. Recpt 2	*	-34	-9	1.8
3. Recpt 3	*	-54	-4	1.8
4. Recpt 4	*	-14	-34	1.8
5. Recpt 5	*	-14	-54	1.8
6. Recpt 6	*	-14	16	1.8
7. Recpt 7	*	-34	21	1.8
8. Recpt 8	*	-54	26	1.8
9. Recpt 9	*	-18	36	1.8
10. Recpt 10	*	-22	56	1.8
11. Recpt 11	*	16	-14	1.8
12. Recpt 12	*	16	-34	1.8
13. Recpt 13	*	16	-54	1.8
14. Recpt 14	*	36	-14	1.8
15. Recpt 15	*	56	-14	1.8
16. Recpt 16	*	12	16	1.8
17. Recpt 17	*	32	16	1.8
18. Recpt 18	*	52	16	1.8
19. Recpt 19	*	8	36	1.8
20. Recpt 20	*	4	56	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Las Posas and Mission pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	75.	.9	.0	.0	.0	.3	.0	.0	.0	.0
2. Recpt 2	80.	.8	.0	.1	.0	.2	.0	.0	.0	.0
3. Recpt 3	85.	.7	.0	.2	.0	.1	.0	.0	.0	.0
4. Recpt 4	30.	.6	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	23.	.6	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	163.	.8	.0	.1	.0	.0	.0	.0	.0	.1
7. Recpt 7	125.	.6	.0	.0	.0	.0	.0	.0	.0	.1
8. Recpt 8	124.	.6	.0	.1	.0	.0	.0	.0	.0	.1
9. Recpt 9	157.	.7	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	156.	.6	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	293.	.9	.0	.2	.0	.0	.0	.0	.0	.1
12. Recpt 12	341.	.8	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	343.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	289.	.8	.0	.1	.0	.2	.0	.0	.0	.1
15. Recpt 15	286.	.8	.0	.0	.0	.3	.0	.0	.0	.0
16. Recpt 16	193.	.9	.0	.0	.0	.1	.0	.0	.0	.0
17. Recpt 17	205.	.6	.0	.0	.0	.1	.0	.0	.0	.0
18. Recpt 18	240.	.6	.0	.0	.0	.2	.0	.0	.0	.0
19. Recpt 19	191.	.8	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Las Posas and Mission pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. Recpt 2	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
5. Recpt 5	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
6. Recpt 6	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
7. Recpt 7	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	*	.0	.0	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0
11. Recpt 11	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
12. Recpt 12	*	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	*	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2
17. Recpt 17	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
18. Recpt 18	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	*	.0	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.2
20. Recpt 20	*	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Las Posas and Palm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Palm WBLA1	*	102	95	32	0	* AG	0	3.3	.0	10.0
B. Palm WBLA2	*	32	0	0	0	* AG	0	3.3	.0	10.0
C. Palm WBRA1	*	106	95	32	-4	* AG	42	3.3	.0	10.0
D. Palm WBRA2	*	32	-4	0	-4	* AG	42	3.3	.0	10.0
E. Palm EBD1	*	99	95	32	4	* AG	40	3.3	.0	10.0
F. Palm EBD2	*	32	4	0	4	* AG	40	3.3	.0	10.0
G. LP NBRA1	*	-24	-142	-4	-79	* AG	40	3.3	.0	10.0
H. LP NBRA2	*	-4	-79	6	0	* AG	40	3.3	.0	10.0
I. LP NBTA1	*	-28	-142	-8	-79	* AG	1679	3.3	.0	10.0
J. LP NBTA2	*	-8	-79	4	0	* AG	1679	3.3	.0	10.0
K. LP NBD	*	4	0	-36	149	* AG	1721	3.3	.0	10.0
L. LP SBLA	*	-39	149	0	0	* AG	0	3.3	.0	10.0
M. LP SBTA	*	-43	149	0	-4	* AG	1812	3.3	.0	10.0
N. LP SBD1	*	0	-4	-12	-79	* AG	1812	3.3	.0	10.0
O. LP SBD2	*	-12	-79	-31	-142	* AG	1812	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Las Posas and Palm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	-14	0	1.8
2. Recpt 2	-17	-20	1.8
3. Recpt 3	-20	-40	1.8
4. Recpt 4	-23	-60	1.8
5. Recpt 5	-20	20	1.8
6. Recpt 6	-26	40	1.8
7. Recpt 7	-32	60	1.8
8. Recpt 8	14	-14	1.8
9. Recpt 9	12	-34	1.8
10. Recpt 10	10	-54	1.8
11. Recpt 11	10	14	1.8
12. Recpt 12	4	34	1.8
13. Recpt 13	-2	54	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	2.	.4	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	166.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	41.	.4	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	37.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7	141.	.4	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	334.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	342.	.7	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	346.	.6	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	197.	.8	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	188.	.8	.0	.0	.0	.0	.0	.0	.0	.0

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13. Recpt 13 *  184. *    .8 *   .0   .0   .0   .0   .0   .0   .0   .0
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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Las Posas and Palm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

	*	CONC/LINK (PPM)						
RECEPTOR	*	I	J	K	L	M	N	O
1. Recpt 1	*	.0	.0	.2	.0	.3	.0	.0
2. Recpt 2	*	.0	.1	.0	.0	.0	.2	.0
3. Recpt 3	*	.0	.2	.0	.0	.0	.2	.0
4. Recpt 4	*	.0	.2	.0	.0	.0	.2	.0
5. Recpt 5	*	.0	.0	.2	.0	.2	.0	.0
6. Recpt 6	*	.0	.0	.2	.0	.2	.0	.0
7. Recpt 7	*	.0	.0	.2	.0	.2	.0	.0
8. Recpt 8	*	.0	.0	.3	.0	.3	.0	.0
9. Recpt 9	*	.0	.2	.2	.0	.2	.0	.0
10. Recpt 10	*	.0	.2	.1	.0	.2	.1	.0
11. Recpt 11	*	.0	.3	.0	.0	.0	.3	.0
12. Recpt 12	*	.0	.2	.2	.0	.1	.2	.0
13. Recpt 13	*	.0	.0	.3	.0	.2	.1	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Las Posas and Palm pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Palm WBLA1	*	102	95	32	0	* AG	0	3.3	.0	10.0
B. Palm WBLA2	*	32	0	0	0	* AG	0	3.3	.0	10.0
C. Palm WBRA1	*	106	95	32	-4	* AG	43	3.3	.0	10.0
D. Palm WBRA2	*	32	-4	0	-4	* AG	43	3.3	.0	10.0
E. Palm EBD1	*	99	95	32	4	* AG	50	3.3	.0	10.0
F. Palm EBD2	*	32	4	0	4	* AG	50	3.3	.0	10.0
G. LP NBRA1	*	-24	-142	-4	-79	* AG	50	3.3	.0	10.0
H. LP NBRA2	*	-4	-79	6	0	* AG	50	3.3	.0	10.0
I. LP NBTA1	*	-28	-142	-8	-79	* AG	2141	3.3	.0	10.0
J. LP NBTA2	*	-8	-79	4	0	* AG	2141	3.3	.0	10.0
K. LP NBD	*	4	0	-36	149	* AG	2184	3.3	.0	10.0
L. LP SBLA	*	-39	149	0	0	* AG	0	3.3	.0	10.0
M. LP SBTA	*	-43	149	0	-4	* AG	1255	3.3	.0	10.0
N. LP SBD1	*	0	-4	-12	-79	* AG	1255	3.3	.0	10.0
O. LP SBD2	*	-12	-79	-31	-142	* AG	1255	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Las Posas and Palm pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	-14	0	1.8
2. Recpt 2	-17	-20	1.8
3. Recpt 3	-20	-40	1.8
4. Recpt 4	-23	-60	1.8
5. Recpt 5	-20	20	1.8
6. Recpt 6	-26	40	1.8
7. Recpt 7	-32	60	1.8
8. Recpt 8	14	-14	1.8
9. Recpt 9	12	-34	1.8
10. Recpt 10	10	-54	1.8
11. Recpt 11	10	14	1.8
12. Recpt 12	4	34	1.8
13. Recpt 13	-2	54	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	2.	.4	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	166.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	41.	.4	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	37.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7	141.	.4	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	334.	.7	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	342.	.7	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	346.	.6	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	196.	.8	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	188.	.8	.0	.0	.0	.0	.0	.0	.0	.0

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13. Recpt 13 *  183. *    .8 *   .0   .0   .0   .0   .0   .0   .0   .0
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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Las Posas and Palm pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O
1. Recpt 1	*	.0	.0	.2	.0	.2	.0	.0
2. Recpt 2	*	.0	.2	.0	.0	.0	.1	.0
3. Recpt 3	*	.0	.2	.0	.0	.0	.1	.0
4. Recpt 4	*	.0	.2	.0	.0	.0	.2	.0
5. Recpt 5	*	.0	.0	.2	.0	.2	.0	.0
6. Recpt 6	*	.0	.0	.2	.0	.2	.0	.0
7. Recpt 7	*	.0	.0	.2	.0	.2	.0	.0
8. Recpt 8	*	.0	.0	.4	.0	.2	.0	.0
9. Recpt 9	*	.0	.2	.2	.0	.2	.0	.0
10. Recpt 10	*	.0	.2	.2	.0	.1	.0	.0
11. Recpt 11	*	.0	.4	.0	.0	.0	.2	.0
12. Recpt 12	*	.0	.2	.3	.0	.0	.1	.0
13. Recpt 13	*	.0	.1	.4	.0	.1	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Comet Circle and Mission am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission EBLA	*	-150	0	0	0	* AG	297	3.3	.0	10.0
B. Mission EBTA	*	-150	-4	0	-4	* AG	916	3.3	.0	10.0
C. Mission EBD	*	0	-4	150	-4	* AG	916	3.3	.0	10.0
D. Mission WBTA	*	150	4	0	4	* AG	1772	3.3	.0	10.0
E. Mission WBRA	*	150	6	0	6	* AG	416	3.3	.0	10.0
F. Mission WBD	*	0	4	-150	4	* AG	1772	3.3	.0	10.0
G. CC SBLA	*	0	150	0	0	* AG	0	3.3	.0	10.0
H. CC SBRA	*	-4	150	-4	0	* AG	0	3.3	.0	10.0
I. CC NBD	*	4	0	4	150	* AG	713	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Comet Circle and Mission am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-60	-14	1.8
2. Recpt 2	*	-40	-14	1.8
3. Recpt 3	*	-20	-14	1.8
4. Recpt 4	*	0	-14	1.8
5. Recpt 5	*	20	-14	1.8
6. Recpt 6	*	40	-14	1.8
7. Recpt 7	*	60	-14	1.8
8. Recpt 8	*	-14	14	1.8
9. Recpt 9	*	-34	14	1.8
10. Recpt 10	*	-54	14	1.8
11. Recpt 11	*	-14	34	1.8
12. Recpt 12	*	-14	54	1.8
13. Recpt 13	*	14	16	1.8
14. Recpt 14	*	14	36	1.8
15. Recpt 15	*	14	56	1.8
16. Recpt 16	*	34	16	1.8
17. Recpt 17	*	54	16	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Comet Circle and Mission am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	75.	.5	.0	.1	.0	.1	.0	.0	.0	.0
2. Recpt 2	74.	.5	.0	.1	.0	.2	.0	.0	.0	.0
3. Recpt 3	74.	.4	.0	.0	.1	.2	.0	.0	.0	.0
4. Recpt 4	74.	.4	.0	.0	.2	.2	.0	.0	.0	.0
5. Recpt 5	70.	.4	.0	.0	.2	.2	.0	.0	.0	.0
6. Recpt 6	285.	.4	.0	.0	.0	.0	.0	.2	.0	.0
7. Recpt 7	285.	.4	.0	.0	.1	.0	.0	.1	.0	.0
8. Recpt 8	104.	.6	.0	.0	.1	.3	.0	.0	.0	.0
9. Recpt 9	102.	.5	.0	.0	.1	.2	.0	.1	.0	.0
10. Recpt 10	102.	.5	.0	.0	.0	.1	.0	.2	.0	.0
11. Recpt 11	115.	.3	.0	.0	.0	.1	.0	.0	.0	.0
12. Recpt 12	120.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	253.	.5	.0	.1	.0	.0	.0	.3	.0	.0
14. Recpt 14	244.	.3	.0	.0	.0	.0	.0	.1	.0	.0
15. Recpt 15	236.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	254.	.5	.0	.1	.0	.1	.0	.2	.0	.0
17. Recpt 17	255.	.5	.0	.0	.0	.2	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Comet Circle and Mission am
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	(PPM) I
1. Recpt 1	.0
2. Recpt 2	.0
3. Recpt 3	.0
4. Recpt 4	.0
5. Recpt 5	.0
6. Recpt 6	.0
7. Recpt 7	.0
8. Recpt 8	.0
9. Recpt 9	.0
10. Recpt 10	.0
11. Recpt 11	.0
12. Recpt 12	.0
13. Recpt 13	.0
14. Recpt 14	.0
15. Recpt 15	.0
16. Recpt 16	.0
17. Recpt 17	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Comet Circle and Mission pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Mission EBLA	*	-150	0	0	0	* AG	212	3.3	.0	10.0
B. Mission EBTA	*	-150	-4	0	-4	* AG	1928	3.3	.0	10.0
C. Mission EBD	*	0	-4	150	-4	* AG	1928	3.3	.0	10.0
D. Mission WBTA	*	150	4	0	4	* AG	1266	3.3	.0	10.0
E. Mission WBRA	*	150	6	0	6	* AG	180	3.3	.0	10.0
F. Mission WBD	*	0	4	-150	4	* AG	1266	3.3	.0	10.0
G. CC SBLA	*	0	150	0	0	* AG	0	3.3	.0	10.0
H. CC SBRA	*	-4	150	-4	0	* AG	0	3.3	.0	10.0
I. CC NBD	*	4	0	4	150	* AG	392	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Comet Circle and Mission pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-60	-14	1.8
2. Recpt 2	*	-40	-14	1.8
3. Recpt 3	*	-20	-14	1.8
4. Recpt 4	*	0	-14	1.8
5. Recpt 5	*	20	-14	1.8
6. Recpt 6	*	40	-14	1.8
7. Recpt 7	*	60	-14	1.8
8. Recpt 8	*	-14	14	1.8
9. Recpt 9	*	-34	14	1.8
10. Recpt 10	*	-54	14	1.8
11. Recpt 11	*	-14	34	1.8
12. Recpt 12	*	-14	54	1.8
13. Recpt 13	*	14	16	1.8
14. Recpt 14	*	14	36	1.8
15. Recpt 15	*	14	56	1.8
16. Recpt 16	*	34	16	1.8
17. Recpt 17	*	54	16	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Comet Circle and Mission pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	75.	.5	.0	.3	.0	.0	.0	.0	.0	.0
2. Recpt 2	74.	.5	.0	.2	.1	.1	.0	.0	.0	.0
3. Recpt 3	287.	.5	.0	.3	.0	.0	.0	.1	.0	.0
4. Recpt 4	286.	.5	.0	.3	.0	.0	.0	.1	.0	.0
5. Recpt 5	285.	.5	.0	.3	.0	.0	.0	.1	.0	.0
6. Recpt 6	285.	.5	.0	.1	.2	.0	.0	.1	.0	.0
7. Recpt 7	285.	.5	.0	.0	.3	.0	.0	.0	.0	.0
8. Recpt 8	105.	.5	.0	.0	.2	.2	.0	.0	.0	.0
9. Recpt 9	104.	.5	.0	.0	.2	.1	.0	.0	.0	.0
10. Recpt 10	104.	.5	.0	.0	.1	.0	.0	.2	.0	.0
11. Recpt 11	116.	.3	.0	.0	.1	.1	.0	.0	.0	.0
12. Recpt 12	124.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	253.	.5	.0	.2	.0	.0	.0	.2	.0	.0
14. Recpt 14	244.	.3	.0	.1	.0	.0	.0	.0	.0	.0
15. Recpt 15	236.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	254.	.5	.0	.2	.0	.0	.0	.1	.0	.0
17. Recpt 17	255.	.5	.0	.1	.0	.1	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Comet Circle and Mission pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	(PPM) I
1. Recpt 1	.0
2. Recpt 2	.0
3. Recpt 3	.0
4. Recpt 4	.0
5. Recpt 5	.0
6. Recpt 6	.0
7. Recpt 7	.0
8. Recpt 8	.0
9. Recpt 9	.0
10. Recpt 10	.0
11. Recpt 11	.0
12. Recpt 12	.0
13. Recpt 13	.0
14. Recpt 14	.0
15. Recpt 15	.0
16. Recpt 16	.0
17. Recpt 17	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Via Veta and Grand
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Grand EBLA	*	-150	0	0	0	* AG	398	3.3	.0	10.0
B. Grand EBTA	*	-150	-4	0	-4	* AG	271	3.3	.0	10.0
C. Grand EBRA	*	-150	-6	0	-6	* AG	280	3.3	.0	10.0
D. Grand EBD	*	0	-4	150	-4	* AG	451	3.3	.0	10.0
E. Grand WBLA	*	150	0	0	0	* AG	60	3.3	.0	10.0
F. Grand WBTA	*	150	4	0	4	* AG	304	3.3	.0	10.0
G. Grand WBRA	*	150	6	0	6	* AG	40	3.3	.0	10.0
H. Grand WBD	*	0	4	-150	4	* AG	1312	3.3	.0	10.0
I. VV NBLA	*	102	-106	0	0	* AG	170	3.3	.0	10.0
J. VV NBTA	*	106	-106	4	0	* AG	110	3.3	.0	10.0
K. VV NBRA	*	108	-106	6	0	* AG	30	3.3	.0	10.0
L. VV NBD	*	4	0	-44	67	* AG	548	3.3	.0	10.0
M. VV SBLA	*	-47	67	0	0	* AG	150	3.3	.0	10.0
N. VV SBTA	*	-51	67	-4	0	* AG	360	3.3	.0	10.0
O. VV SBRA	*	-53	67	-6	0	* AG	838	3.3	.0	10.0
P. VV SBD	*	-4	0	99	-106	* AG	700	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Via Veta and Grand
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-10	-16	1.8
2. Recpt 2	*	-30	-16	1.8
3. Recpt 3	*	-50	-16	1.8
4. Recpt 4	*	10	-36	1.8
5. Recpt 5	*	30	-56	1.8
6. Recpt 6	*	-25	14	1.8
7. Recpt 7	*	-45	14	1.8
8. Recpt 8	*	-65	14	1.8
9. Recpt 9	*	-40	34	1.8
10. Recpt 10	*	-55	54	1.8
11. Recpt 11	*	30	-14	1.8
12. Recpt 12	*	50	-14	1.8
13. Recpt 13	*	70	-14	1.8
14. Recpt 14	*	50	-34	1.8
15. Recpt 15	*	70	-54	1.8
16. Recpt 16	*	5	16	1.8
17. Recpt 17	*	-10	36	1.8
18. Recpt 18	*	-25	56	1.8
19. Recpt 19	*	25	16	1.8
20. Recpt 20	*	45	16	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Via Veta and Grand
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	346.	.4	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	45.	.3	.0	.0	.0	.0	.0	.0	.0	.1
3. Recpt 3	59.	.3	.0	.0	.0	.0	.0	.0	.0	.1
4. Recpt 4	335.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	331.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	125.	.6	.0	.0	.0	.0	.0	.0	.0	.2
7. Recpt 7	114.	.4	.0	.0	.0	.0	.0	.0	.0	.2
8. Recpt 8	110.	.4	.0	.0	.0	.0	.0	.0	.0	.2
9. Recpt 9	129.	.5	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	130.	.4	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	285.	.5	.0	.0	.0	.0	.0	.0	.0	.1
12. Recpt 12	282.	.4	.0	.0	.0	.0	.0	.0	.0	.1
13. Recpt 13	280.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	296.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	300.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	254.	.5	.0	.0	.0	.0	.0	.0	.0	.2
17. Recpt 17	244.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	168.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	257.	.4	.0	.0	.0	.0	.0	.0	.0	.2
20. Recpt 20	260.	.4	.0	.0	.0	.0	.0	.0	.0	.1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Via Veta and Grand
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	*	.0	.0	.0	.0	.0	.0	.1	.0
2. Recpt 2	*	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	*	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	*	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	*	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	*	.0	.0	.0	.0	.0	.0	.0	.1
7. Recpt 7	*	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	*	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	*	.0	.0	.0	.0	.0	.0	.1	.0
10. Recpt 10	*	.0	.0	.0	.0	.0	.0	.1	.0
11. Recpt 11	*	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	*	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	*	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	*	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	*	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	*	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17	*	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	*	.0	.0	.0	.1	.0	.0	.0	.0
19. Recpt 19	*	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	*	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Via Veta and Grand pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Grand EBLA	*	-150	0	0	0	* AG	695	3.3	.0	10.0
B. Grand EBTA	*	-150	-4	0	-4	* AG	842	3.3	.0	10.0
C. Grand EBRA	*	-150	-6	0	-6	* AG	340	3.3	.0	10.0
D. Grand EBD	*	0	-4	150	-4	* AG	1362	3.3	.0	10.0
E. Grand WBLA	*	150	0	0	0	* AG	70	3.3	.0	10.0
F. Grand WBTA	*	150	4	0	4	* AG	453	3.3	.0	10.0
G. Grand WBRA	*	150	6	0	6	* AG	80	3.3	.0	10.0
H. Grand WBD	*	0	4	-150	4	* AG	1300	3.3	.0	10.0
I. VV NBLA	*	102	-106	0	0	* AG	330	3.3	.0	10.0
J. VV NBTA	*	106	-106	4	0	* AG	230	3.3	.0	10.0
K. VV NBRA	*	108	-106	6	0	* AG	100	3.3	.0	10.0
L. VV NBD	*	4	0	-44	67	* AG	1005	3.3	.0	10.0
M. VV SBLA	*	-47	67	0	0	* AG	420	3.3	.0	10.0
N. VV SBTA	*	-51	67	-4	0	* AG	410	3.3	.0	10.0
O. VV SBRA	*	-53	67	-6	0	* AG	517	3.3	.0	10.0
P. VV SBD	*	-4	0	99	-106	* AG	820	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Via Veta and Grand pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-10	-16	1.8
2. Recpt 2	*	-30	-16	1.8
3. Recpt 3	*	-50	-16	1.8
4. Recpt 4	*	10	-36	1.8
5. Recpt 5	*	30	-56	1.8
6. Recpt 6	*	-25	14	1.8
7. Recpt 7	*	-45	14	1.8
8. Recpt 8	*	-65	14	1.8
9. Recpt 9	*	-40	34	1.8
10. Recpt 10	*	-55	54	1.8
11. Recpt 11	*	30	-14	1.8
12. Recpt 12	*	50	-14	1.8
13. Recpt 13	*	70	-14	1.8
14. Recpt 14	*	50	-34	1.8
15. Recpt 15	*	70	-54	1.8
16. Recpt 16	*	5	16	1.8
17. Recpt 17	*	-10	36	1.8
18. Recpt 18	*	-25	56	1.8
19. Recpt 19	*	25	16	1.8
20. Recpt 20	*	45	16	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Via Veta and Grand pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	347.	.6	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	45.	.5	.0	.1	.0	.0	.0	.0	.0	.1
3. Recpt 3	63.	.5	.0	.1	.0	.0	.0	.0	.0	.1
4. Recpt 4	337.	.5	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	332.	.4	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	125.	.7	.0	.0	.0	.0	.0	.0	.0	.2
7. Recpt 7	113.	.6	.0	.0	.0	.0	.0	.0	.0	.2
8. Recpt 8	110.	.6	.0	.0	.0	.0	.0	.0	.0	.2
9. Recpt 9	129.	.6	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	130.	.5	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	285.	.7	.0	.0	.0	.0	.0	.0	.0	.1
12. Recpt 12	282.	.6	.0	.0	.0	.1	.0	.0	.0	.1
13. Recpt 13	281.	.6	.0	.0	.0	.2	.0	.0	.0	.0
14. Recpt 14	296.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	300.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	254.	.7	.0	.0	.0	.0	.0	.0	.0	.2
17. Recpt 17	174.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	165.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	256.	.6	.0	.0	.0	.0	.0	.0	.0	.2
20. Recpt 20	259.	.5	.0	.0	.0	.0	.0	.0	.0	.1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Via Veta and Grand pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	*	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	*	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	*	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	*	.0	.0	.0	.1	.0	.0	.0	.0
5. Recpt 5	*	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	*	.0	.0	.0	.0	.0	.0	.0	.1
7. Recpt 7	*	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	*	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	*	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	*	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	*	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	*	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	*	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	*	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	*	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	*	.0	.0	.0	.1	.0	.0	.0	.0
17. Recpt 17	*	.0	.0	.0	.2	.0	.0	.0	.0
18. Recpt 18	*	.0	.0	.0	.2	.0	.0	.0	.0
19. Recpt 19	*	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	*	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Las Posas and San Marcos Blvd.
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A.	SM EBLA	*	-150	0	0	0	* AG	356	3.3	.0	10.0
B.	SM EBTA	*	-150	-4	0	-4	* AG	1270	3.3	.0	10.0
C.	SM EBRA	*	-150	-6	0	-6	* AG	50	3.3	.0	10.0
D.	SM EBD	*	0	-4	150	-4	* AG	1450	3.3	.0	10.0
E.	SM WBLA	*	150	0	0	0	* AG	90	3.3	.0	10.0
F.	SM WBTA	*	150	4	0	4	* AG	1600	3.3	.0	10.0
G.	SM WBRA	*	150	6	0	6	* AG	120	3.3	.0	10.0
H.	SM WBD	*	0	4	-150	4	* AG	2369	3.3	.0	10.0
I.	LP NBLA	*	0	-150	0	0	* AG	40	3.3	.0	10.0
J.	LP NBTA	*	4	-150	4	0	* AG	70	3.3	.0	10.0
K.	LP NBRA	*	6	-150	6	0	* AG	70	3.3	.0	10.0
L.	LP NBD	*	4	0	4	150	* AG	546	3.3	.0	10.0
M.	LP SBLA	*	0	150	0	0	* AG	110	3.3	.0	10.0
N.	LP SBTA	*	-4	150	-4	0	* AG	70	3.3	.0	10.0
O.	LP SBRA	*	-6	150	-6	0	* AG	729	3.3	.0	10.0
P.	LP SBD	*	-4	0	-4	-150	* AG	210	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Las Posas and San Marcos Blvd.
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-14	-16	1.8
2. Recpt 2	*	-14	-36	1.8
3. Recpt 3	*	-14	-56	1.8
4. Recpt 4	*	-34	-16	1.8
5. Recpt 5	*	-54	-16	1.8
6. Recpt 6	*	-16	14	1.8
7. Recpt 7	*	-36	14	1.8
8. Recpt 8	*	-56	14	1.8
9. Recpt 9	*	-16	34	1.8
10. Recpt 10	*	-16	54	1.8
11. Recpt 11	*	16	-14	1.8
12. Recpt 12	*	36	-14	1.8
13. Recpt 13	*	56	-14	1.8
14. Recpt 14	*	16	-34	1.8
15. Recpt 15	*	16	-54	1.8
16. Recpt 16	*	14	16	1.8
17. Recpt 17	*	14	36	1.8
18. Recpt 18	*	14	56	1.8
19. Recpt 19	*	34	16	1.8
20. Recpt 20	*	54	16	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Las Posas and San Marcos Blvd.
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	12.	.6	.0	.1	.0	.0	.0	.0	.0	.2
2. Recpt 2	9.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	8.	.3	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	45.	.5	.0	.1	.0	.0	.0	.0	.0	.2
5. Recpt 5	66.	.5	.0	.2	.0	.0	.0	.0	.0	.2
6. Recpt 6	106.	.6	.0	.0	.0	.2	.0	.2	.0	.0
7. Recpt 7	106.	.6	.0	.0	.0	.1	.0	.1	.0	.2
8. Recpt 8	105.	.6	.0	.0	.0	.1	.0	.0	.0	.3
9. Recpt 9	116.	.4	.0	.0	.0	.0	.0	.1	.0	.0
10. Recpt 10	156.	.3	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	286.	.6	.0	.2	.0	.0	.0	.0	.0	.2
12. Recpt 12	285.	.6	.0	.1	.0	.1	.0	.0	.0	.2
13. Recpt 13	285.	.6	.0	.0	.0	.2	.0	.0	.0	.1
14. Recpt 14	347.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	348.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	253.	.7	.0	.1	.0	.0	.0	.0	.0	.3
17. Recpt 17	244.	.4	.0	.0	.0	.0	.0	.0	.0	.2
18. Recpt 18	236.	.4	.0	.0	.0	.0	.0	.0	.0	.1
19. Recpt 19	256.	.6	.0	.1	.0	.0	.0	.0	.0	.2
20. Recpt 20	258.	.5	.0	.1	.0	.0	.0	.1	.0	.2

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Las Posas and San Marcos Blvd.
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	*	.0	.0	.0	.0	.0	.0	.1	.0
2. Recpt 2	*	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	*	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	*	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	*	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	*	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7	*	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	*	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	*	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	*	.0	.0	.0	.0	.0	.0	.1	.0
11. Recpt 11	*	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	*	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	*	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	*	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	*	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	*	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17	*	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	*	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	*	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	*	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Las Posas and San Marcos Blvd. pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	1.0 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	15.6 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A.	SM EBLA	*	-150	0	0	0	* AG	510	3.3	.0	10.0
B.	SM EBTA	*	-150	-4	0	-4	* AG	1780	3.3	.0	10.0
C.	SM EBRA	*	-150	-6	0	-6	* AG	240	3.3	.0	10.0
D.	SM EBD	*	0	-4	150	-4	* AG	1950	3.3	.0	10.0
E.	SM WBLA	*	150	0	0	0	* AG	70	3.3	.0	10.0
F.	SM WBTA	*	150	4	0	4	* AG	1160	3.3	.0	10.0
G.	SM WBRA	*	150	6	0	6	* AG	170	3.3	.0	10.0
H.	SM WBD	*	0	4	-150	4	* AG	1797	3.3	.0	10.0
I.	LP NBLA	*	0	-150	0	0	* AG	40	3.3	.0	10.0
J.	LP NBTA	*	4	-150	4	0	* AG	70	3.3	.0	10.0
K.	LP NBRA	*	6	-150	6	0	* AG	50	3.3	.0	10.0
L.	LP NBD	*	4	0	4	150	* AG	750	3.3	.0	10.0
M.	LP SBLA	*	0	150	0	0	* AG	120	3.3	.0	10.0
N.	LP SBTA	*	-4	150	-4	0	* AG	120	3.3	.0	10.0
O.	LP SBRA	*	-6	150	-6	0	* AG	597	3.3	.0	10.0
P.	LP SBD	*	-4	0	-4	-150	* AG	430	3.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Las Posas and San Marcos Blvd. pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	-14	-16	1.8
2. Recpt 2	*	-14	-36	1.8
3. Recpt 3	*	-14	-56	1.8
4. Recpt 4	*	-34	-16	1.8
5. Recpt 5	*	-54	-16	1.8
6. Recpt 6	*	-16	14	1.8
7. Recpt 7	*	-36	14	1.8
8. Recpt 8	*	-56	14	1.8
9. Recpt 9	*	-16	34	1.8
10. Recpt 10	*	-16	54	1.8
11. Recpt 11	*	16	-14	1.8
12. Recpt 12	*	36	-14	1.8
13. Recpt 13	*	56	-14	1.8
14. Recpt 14	*	16	-34	1.8
15. Recpt 15	*	16	-54	1.8
16. Recpt 16	*	14	16	1.8
17. Recpt 17	*	14	36	1.8
18. Recpt 18	*	14	56	1.8
19. Recpt 19	*	34	16	1.8
20. Recpt 20	*	54	16	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Las Posas and San Marcos Blvd. pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	14.	.6	.0	.2	.0	.0	.0	.0	.0	.1
2. Recpt 2	11.	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	9.	.4	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	57.	.6	.0	.2	.0	.0	.0	.0	.0	.1
5. Recpt 5	68.	.6	.0	.2	.0	.0	.0	.0	.0	.1
6. Recpt 6	106.	.6	.0	.0	.0	.2	.0	.2	.0	.0
7. Recpt 7	106.	.6	.0	.0	.0	.2	.0	.0	.0	.2
8. Recpt 8	106.	.6	.0	.0	.0	.1	.0	.0	.0	.2
9. Recpt 9	116.	.4	.0	.0	.0	.1	.0	.0	.0	.0
10. Recpt 10	156.	.4	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	285.	.7	.0	.3	.0	.0	.0	.0	.0	.2
12. Recpt 12	284.	.6	.0	.2	.0	.2	.0	.0	.0	.2
13. Recpt 13	283.	.6	.0	.0	.0	.2	.0	.0	.0	.1
14. Recpt 14	347.	.4	.0	.0	.0	.1	.0	.0	.0	.0
15. Recpt 15	348.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	253.	.7	.0	.2	.0	.0	.0	.0	.0	.3
17. Recpt 17	244.	.5	.0	.1	.0	.0	.0	.0	.0	.1
18. Recpt 18	209.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. Recpt 19	255.	.6	.0	.2	.0	.0	.0	.0	.0	.2
20. Recpt 20	257.	.6	.0	.1	.0	.0	.0	.1	.0	.1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Las Posas and San Marcos Blvd. pm
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P
1. Recpt 1	*	.0	.0	.0	.0	.0	.0	.1	.0
2. Recpt 2	*	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	*	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	*	.0	.0	.0	.0	.0	.0	.0	.0
5. Recpt 5	*	.0	.0	.0	.0	.0	.0	.0	.0
6. Recpt 6	*	.0	.0	.0	.0	.0	.0	.0	.0
7. Recpt 7	*	.0	.0	.0	.0	.0	.0	.0	.0
8. Recpt 8	*	.0	.0	.0	.0	.0	.0	.0	.0
9. Recpt 9	*	.0	.0	.0	.0	.0	.0	.0	.0
10. Recpt 10	*	.0	.0	.0	.0	.0	.0	.0	.0
11. Recpt 11	*	.0	.0	.0	.0	.0	.0	.0	.0
12. Recpt 12	*	.0	.0	.0	.0	.0	.0	.0	.0
13. Recpt 13	*	.0	.0	.0	.0	.0	.0	.0	.0
14. Recpt 14	*	.0	.0	.0	.0	.0	.0	.0	.0
15. Recpt 15	*	.0	.0	.0	.0	.0	.0	.0	.0
16. Recpt 16	*	.0	.0	.0	.0	.0	.0	.0	.0
17. Recpt 17	*	.0	.0	.0	.0	.0	.0	.0	.0
18. Recpt 18	*	.0	.0	.0	.1	.0	.0	.0	.0
19. Recpt 19	*	.0	.0	.0	.0	.0	.0	.0	.0
20. Recpt 20	*	.0	.0	.0	.0	.0	.0	.0	.0

8/28/2008 5:22:42 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name:

Project Name: Palomar College Area Sources

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.47	4.96	5.70	0.00	0.02	0.02	5,930.41

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.47	4.96	5.70	0.00	0.02	0.02	5,930.41

8/28/2008 5:22:42 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.36	4.94	4.15	0.00	0.01	0.01	5,927.60
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products							
Architectural Coatings	2.99						
TOTALS (lbs/day, unmitigated)	3.47	4.96	5.70	0.00	0.02	0.02	5,930.41

Area Source Changes to Defaults

8/28/2008 5:21:37 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name:

Project Name: Palomar College Area Sources

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.35	4.94	4.15	0.00	0.01	0.01	5,927.60

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.35	4.94	4.15	0.00	0.01	0.01	5,927.60

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.36	4.94	4.15	0.00	0.01	0.01	5,927.60
Hearth							
Landscaping - No Winter Emissions							
Consumer Products							
Architectural Coatings	2.99						
TOTALS (lbs/day, unmitigated)	3.35	4.94	4.15	0.00	0.01	0.01	5,927.60

Area Source Changes to Defaults

8/28/2008 5:23:15 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name:

Project Name: Palomar College Area Sources

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.63	0.90	0.90	0.00	0.00	0.00	1,082.04

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.63	0.90	0.90	0.00	0.00	0.00	1,082.04

8/28/2008 5:23:15 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.07	0.90	0.76	0.00	0.00	0.00	1,081.79
Hearth							
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products							
Architectural Coatings	0.55						
TOTALS (tons/year, unmitigated)	0.63	0.90	0.90	0.00	0.00	0.00	1,082.04

Area Source Changes to Defaults

3/31/2009 9:45:01 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Palomar College Operations.urb924

Project Name: Palomar College Operations

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	47.19	31.28	284.46	0.36	33.80	7.23	36,947.47

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	47.19	31.28	284.46	0.36	33.80	7.23	36,947.47

3/31/2009 9:45:01 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
University/college (4 yrs)	47.19	31.28	284.46	0.36	33.80	7.23	36,947.47
TOTALS (lbs/day, unmitigated)	47.19	31.28	284.46	0.36	33.80	7.23	36,947.47

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
University/college (4 yrs)		1.53	students	3,235.00	4,949.55	36,911.27
					4,949.55	36,911.27

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.5	0.2	99.6	0.2
Light Truck < 3750 lbs	10.8	0.9	95.4	3.7
Light Truck 3751-5750 lbs	21.9	0.5	99.5	0.0
Med Truck 5751-8500 lbs	9.7	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.5	48.6	51.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	90.0	10.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
University/college (4 yrs)				5.0	2.5	92.5

3/31/2009 9:45:32 AM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Palomar College Operations.urb924

Project Name: Palomar College Operations

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	33.38	38.90	259.99	0.32	33.80	7.23	32,028.85

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	33.38	38.90	259.99	0.32	33.80	7.23	32,028.85

3/31/2009 9:45:32 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
University/college (4 yrs)	33.38	38.90	259.99	0.32	33.80	7.23	32,028.85
TOTALS (lbs/day, unmitigated)	33.38	38.90	259.99	0.32	33.80	7.23	32,028.85

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
University/college (4 yrs)		1.53	students	3,235.00	4,949.55	36,911.27
					4,949.55	36,911.27

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.5	0.2	99.6	0.2
Light Truck < 3750 lbs	10.8	0.9	95.4	3.7
Light Truck 3751-5750 lbs	21.9	0.5	99.5	0.0
Med Truck 5751-8500 lbs	9.7	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.5	48.6	51.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	90.0	10.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
University/college (4 yrs)				5.0	2.5	92.5

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Urbemis\Urbemis 9.2.2\Projects\Palomar College Operations.urb924

Project Name: Palomar College Operations

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	7.77	6.17	50.42	0.06	6.17	1.32	6,443.70

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	7.77	6.17	50.42	0.06	6.17	1.32	6,443.70

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Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
University/college (4 yrs)	7.77	6.17	50.42	0.06	6.17	1.32	6,443.70
TOTALS (tons/year, unmitigated)	7.77	6.17	50.42	0.06	6.17	1.32	6,443.70

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
University/college (4 yrs)		1.53	students	3,235.00	4,949.55	36,911.27
					4,949.55	36,911.27

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.5	0.2	99.6	0.2
Light Truck < 3750 lbs	10.8	0.9	95.4	3.7
Light Truck 3751-5750 lbs	21.9	0.5	99.5	0.0
Med Truck 5751-8500 lbs	9.7	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	76.5	23.5
Lite-Heavy Truck 10,001-14,000 lbs	0.7	0.0	57.1	42.9

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.9	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.5	48.6	51.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.0	0.0	90.0	10.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
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% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
University/college (4 yrs)				5.0	2.5	92.5

Addendum 1 - RFQ-P 200-23

Final Audit Report 2023-01-24

Created:	2023-01-23
By:	Allen Young (ayoung@palomar.edu)
Status:	Signed
Transaction ID:	CBJCHBCAABAAhdq4zjjN4t6xNV_ToZNiQCcnPZ2RqBmB

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