Data Adequacy Responses
CANYON POWER PLANT

submitted to:

California Energy Commission

submitted by:

Southern California Public Power Authority

with support from:

URS Corporation

February 2008

Data Request	Page
AQ-1	AQ-1
AQ-2	AQ-2
BIO-1	BIO-1
BIO-2	BIO-2
BIO-3	BIO-3
BIO-4	BIO-4
BIO-5	BIO-5
CUL-1	CUL-1
CUL-2	CUL-2
CUL-3	CUL-3
CUL-4	CUL-4
CUL-5	CUL-5
CUL-6	CUL-6
CUL-7	CUL-7
GEO-1	GEO-1
LAND-1	LAND USE-1
LAND -2	LAND USE-2
LAND -3	LAND USE-4
PALEO-1	PALEO-1
PROJ-1	PROJ-1
PROJ-2	PROJ-2
PROJ-3	PROJ-3
PROJ-4	PROJ-4
PROJ-5	PROJ-5

SOCIO-1	SOCIO-1
SOCIO-2	SOCIO-2
SOCIO-3	SOCIO-3
SOILS-1	SOILS-1
SOILS-2	SOILS-2
TRAFFIC-1	TRAFFIC-1
TRAFFIC-2	TRAFFIC-2
TRAFFIC-3	TRAFFIC-3
TRAFFIC-4	TRAFFIC-4
TRAFFIC-5	TRAFFIC-5
TRAFFIC-6	TRAFFIC-6
TRAFFIC-7	TRAFFIC-7
TRAFFIC-8	TRAFFIC-9
VISUAL-1	VISUAL-1
VISUAL-2	VISUAL-2
VISUAL-3	VISUAL-3
VISUAL-4	VISUAL-5
WATER-1	WATER-1
WATER-2	WATER-2

Technical Area: Air Quality

Data Request AIR-1: The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.

Response: Please see attached.

City of Anaheim
PUBLIC UTILITIES DEPARTMENT
Integrated Resources Division

February 8, 2008

Mr. Michael D. Mills, P.E.
South Coast Air Quality Management District
Senior Manager
General Commercial & Energy Team
Engineering & Compliance
21865 Copley Drive
Diamond Bar CA 91765-4178

Subject: Response to SCAQMD Application

Dear Mr. Mills

The City of Anaheim has received the District's letter dated January 25, which identified information deficiencies preventing a finding of completeness for the permit application submitted in late December for the Canyon Power Plant. The purpose of this letter is to provide the information requested insofar as it is currently available and to indicate dates when the City expects information on the remaining items will become available. Our responses are provided in the same sequence as the information requirements specified in the District's letter.

1. Application No. 476650 – Initial Title V

a. Form 500 A2, Item 3 MACT Hammer Certification

A revised edition of this form is provided as an attachment to this letter, with Item '3b' checked. The CPP will not be a major source of Hazardous Air Pollutants and is thus not subject to Section 112(j) of the Clean Air Act (Subpart B of 49 CFR Part 63). The attached Table 1a combines the data presented in Tables 3-8, 3-9 and 3-10 of the Applications to show that the total annual emissions of each individual HAP is less than 10 tons per year and total annual emissions for all HAPS combined are less than 25 tons per year.

b. Form 500-A2 Signature of Responsible Official

As described in the Application, the CPP is being proposed by the Southern California Public Power Authority (SCPPA), which will owner of the project, but the City of Anaheim is the sole participating member city and will be the operating agent of the CPP. Steve Sciortino is the City's Project Manager for the Canyon Power Plant in addition to his title of Integrated Resources Manager for the City. Anaheim has an existing 46 MW LM5000 peaking facility whose operations, reporting and budgeting functions are part of Mr. Sciortino's responsibilities. The Canyon Power Project will also be part of Mr. Sciortino's operational organization. Mr. Sciortino is the person

201 S. Anaheim Boulevard, Suite 802
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www.anaheim.net

designated by SCPPA and the City to be the responsible official for purposes of permitting the CPP.

c. Project Schedule and Compliance with Rule 1309.1(c)(6)

The proposed schedule for the CPP, which essentially replicates what is reported in the project's Application for Certification to the California Energy Commission, is provided below.

- *AFC and PTC applications filed - 4th Qtr 2007*
- *EPC contractor selected - 4th Qtr 2008*
- *AFC License and PTC granted (Priority Reserve credits issued) - 1st Qtr 2009*
- *Construction complete, commissioning - 2nd Qtr 2010*
- *Project complete, commence commercial operations - 3rd Qtr 2010*

This schedule demonstrates that the CPP will be fully operational at the rated capacity well within 3 years following receipt of any Priority Reserve Credits, as required by Rule 1309.1(c)(6). The applicant will accept a permit condition requiring compliance with this provision of the Rule.

d. Wastewater oil water separator

The proposed wastewater oil/water separator is exempt from the requirements of Rule 219 (p) (16), because it will use gravity separation.

2. Application Nos. 4766511, 476656, 476659, 476661 - Gas Turbines

a. Forms 400-E-12

Revised Forms 400-E-12 are attached to this letter with entries for most requested items.

b. Additional requested information to Turbine Operating Scenarios table

i. *479.2 MMBtu/hr HHV (See Application, Appendix B, Turbine Operating Scenarios, 38 F, 100% load)*
ii. *Maximum output: 50.95 MW_{gross} & 49.7 MW_{net} (prorated from plant MW_{net})*
iii. *Net HR = 8,721 Btu/kWh LHV*
iv. *Net HR = 9663 Btu/kWh HHV*
v. *Net efficiency = 39.1% LHV*
vi. *Unabated emission rate: NOx = 25 ppmvd @ 15% O2; unabated rates for CO and VOC are not guaranteed at this time.*

c. Equipment specifications and diagrams

As described elsewhere in this letter, the applicant expects to execute equipment purchases in about July, 2008, and will subsequently request detailed specifications and diagrams to meet SCAQMD requirements.

d. Vendor emission guarantees

Vendors have indicated that they are willing to guarantee the emission rates per SCAQMD requirements, but written guarantees are not yet available until the applicant executes the equipment procurement contract with the selected vendor. Anaheim expects to complete the procurement process by July, 2008.

e. Number of startup/shutdown cycles per year per turbine

The applicant is requesting 514 startup/shutdown cycles per year among all four turbines (which averages to 128.5 cycles per year per turbine), and would accept permit conditions limiting the annual numbers of plant-wide startup/shutdown cycles to 514.

f. Turbine commissioning hours

Table 3-5 of the Application shows that commissioning hours per turbine are expected to total 104 hours, which may occur over a period of about 1 month for each unit (up to 4 months for all four units). The table also shows the expected emissions of criteria pollutants for each of six stages of the turbine commissioning process. However, in order to provide some flexibility in the event difficulties are encountered during commissioning of one or more turbines, the applicant wishes to extend the maximum allowable hours of commissioning per turbine to 156 hours, including up to 132 hours with no emissions control and up to 24 hours with water injection. This scenario corresponds to a 50% increase in the maximum allowable hours of each stage of commissioning compared with the values in the "Duration" column of Table 3-5. The applicant will accept a permit condition limiting commissioning hours to these revised numbers.

3. Application Nos. 476654, 476657, 476660, 476663 - SCR and Oxidation Catalyst

a., b Forms 400-E-5

Revised Forms 400-E-5- are attached to this letter with entries for most requested items.

c. SCR and CO Catalyst Information Attachments

Tables 3c1 and 3c2 providing the requested information on the SCR and CO catalyst is attached. These data largely duplicate the information provided in Forms 400-E-5.

d. Equipment specifications and diagrams

See figure attached to this letter which shows a typical SCR/CO catalyst control technology module for gas turbines. Any additional equipment specifications and/or diagrams required by the District will be provided following execution of procurement contracts in the July 2008 timeframe.

e. Vendor guarantees for emission rates and catalyst life

The expected catalyst life is 5 years or 10,000 operating hours for both the SCR and CO catalysts. Vendors have indicated that they are willing to guarantee the emission rates

and catalyst life per SCAQMD requirements, but written guarantees are not yet available until the applicant executes the equipment procurement contract with the selected vendor. Anaheim expects to complete the procurement process by July, 2008.

4. Application No. 47666 – Blackstart Engine

a. Manufacturer and Model Number

i. Manufacturer: Caterpillar

ii. Model: CAT C27 ATAAC Diesel Engine, 750 ekW 60 Hz 1800 rpm 480 volts

b. Form, 400-E-13a

Revised Form 400-E-13a is attached to this letter with entries for most requested items.

c. Equipment specifications and diagrams

All currently available technical information pertaining to the black start engine has been provided to the District. Following execution of a purchase agreement with the selected vendor, any additional specifications and/or diagrams required by the District will be requested and provided.

d. Operating hours for testing and maintenance

Information is only provided for 12 hours of engine testing and maintenance activities, because this engine will only be operated in a non-testing mode in the event of an emergency failure of the local electric grid, in which case this engine will be run for a short time to restart one of the CPP turbines. The number of such hours of operation will normally be zero. The applicant will accept a condition limiting the number of testing and maintenance hours per year to 12.

5. Application No. 47665 – Aqueous Ammonia Storage Tank

a. Form 400-E-18

Revised Form 400-E-18- is attached to this letter with entries for the requested items

b. MSDS for Aqueous Ammonia

The requested Material Safety Data Sheet for Aqueous Ammonia is attached to the end of this letter.

c. Information on Tank Filling

i. Receipt of aqueous ammonia: *Aqueous ammonia will be delivered in a tanker truck and pumped into the storage tank by the delivery truck using a flexible hose connection. The truck driver will monitor the unloading process to ensure safe transfer of the product to the tank. See procedure in attached pdf file.*

ii. Maximum gallons per shipment: *7,000 gallons maximum, normal 6,000 gallons*

iii. Maximum deliveries per month: *3.*

iv. Fill time: *Approximately 30 minutes*

6. Rule 1309.1 – Priority Reserve

a. NO_x Turbine Emission Limit Guarantee

Vendor emission guarantees have not yet been provided but will be available after the applicant executes the equipment procurement contract with the selected vendor, expected to be completed by July, 2008 . However, the SCR vendors have given verbal assurances and the applicant hereby commits to meeting the applicable NO_x emission rate specified in Rule 1309.1 (0.08 lb/Mw-hr at 59 degrees Fahrenheit ambient temperature, 60% ambient relative humidity and 14.7 psia ambient pressure.

b. Rule 13091(c) (5)(B) Alternative Technologies Demonstration

Section 1309.1 (c)(5)(B) requires an application seeking access to Priority Reserve emission credits to demonstrate to the satisfaction of the Executive Officer the following:

> *"That renewable/alternative energy (for the purpose of this rule, renewable/alternative energy is hydropower, wind and wave power, solar and geothermal energy, and fossil fuel-based energy [provided the emissions are no more than those from a fuel cell] in lieu of natural gas fired EGF is not a viable option for the power to be generated at that site."*

Each of the alternative technologies was evaluated with respect to the viability of construction and operation at the proposed site of the CPP.

Hydropower

Hydropower is the energy contained in moving water and can be used to generate hydroelectricity. Hydropower is normally harnessed in two different ways: the potential energy available from a dammed water body; or the kinetic energy available from moving surface water, such as a stream or river. The energy in the water is used to rotate a water turbine which in turn spins an electric generator. There is no moving surface water or potentially dammable water body at this site to support a hydroelectric installation; therefore hydroelectricity is not a viable option at this site.

Wind Power

Wind power is created by converting wind energy into electricity using wind turbines. An annual average wind speed of at least 7 m/sec (15.7 mph) is usually needed for a site to be considered even marginally attractive for wind farm development. The average wind speed at John Wayne Airport near the CPP site is just 5.0 mph.

In addition, wind farms occupy a significant amount of land area per megawatt of generating capacity. The land requirements vary considerably based on local topography, prevailing wind patterns and the dimensions of the rotors of individual turbines. Each turbine typically physically occupies an area of about 0.3 to 0.5 acres, and the spacing between turbines needs to be 3 to 10 rotor diameters in order to avoid inter-turbine wake effects that reduce the efficiency of electrical production. Typical; land use intensity in a flat area like the CPP site would be at least 5 to 10 acres per megawatt. Thus a wind farm would have to cover an area of about 1,000

to 2,000 acres to match the 200 MW output of the proposed CPP, or 100 to 200 acres for generation of 10% of the CPP capacity. Conversely, the CPP will occupy only 10 acres of land. Since the land available at the proposed SGGS site would allow for the construction of only about 1 to 2 MW of capacity at most, wind power is not a viable option at this site.

Wave Power

Wave power is created by converting the energy in ocean surface waves into electricity. The proposed SGGS site is not located on or adjacent to the Pacific Ocean; therefore wave power is not a viable option at this site.

Solar Energy

Solar energy is the energy contained in sunlight which can be harnessed and converted into solar power. Common solar plants use either photovoltaic arrays or solar thermal systems (CTS) to generate electricity. Photovoltaic systems convert sunlight directly into energy while a CTS concentrates the sun's energy into a tight beam which is used to heat a working fluid which in turn transfers its heat to a power generation system to generate electricity.

Like wind power, solar power requires a significant amount of land use per megawatt produces. Assuming the least land-intensive CTS technology currently available (about 5 acres per megawatt), a solar plant would require an area of around 1,000 acres to match the 200 MW output of the proposed CPP and 100 acres to produce 10% of this capacity. Since the land available at the proposed CPP site would allow for the construction of only about 2MW of solar project, this option is not viable at this site.

Geothermal Energy

Geothermal energy is energy stored as heat beneath the Earth's surface which can be converted into geothermal power. There are no geothermal steam or hot water reservoirs located at the proposed CPP site. Thus generation of geothermal power is precluded by site conditions.

Fossil-Fuel-Based Energy

The fossil fuels most commonly used to generate electricity are natural gas, oil, and coal. A variety of different technologies are available to convert fossil fuels into electricity (e.g., reciprocating engines, turbines, steam boilers); however, none of these technologies produce emissions less than those from a fuel cell. Of these fossil-fuel technologies, the natural-gas-fired, combustion turbine operating in simple cycle mode offers the best performance available for peaking facilities that are required to undergo numerous startups and shutdowns and to be able to execute these startups and shutdowns within a few minutes. This is the technology proposed for the CPP.

c. Rule 13091(d(14) Discussion of CPP Compliance with Power Sales Limitations

This topic was thoroughly addressed on Page 8-19 of the CPP application.

7. Offsets

No response appears to be required for this item, as the applicant agrees with the District's assessment of the project offset requirement. The applicant also

acknowledges that it must conduct due diligence efforts to secure available ERCs from the open market as required by projects wishing to access Priority Reserve credits.

8. Permit Fees

A check in the amount of $23,672.67 was submitted to SCAQMD accompanying the CPP Application. A breakdown showing the rationale used to calculate these fees is presented in the table entitled, "SCAQMD Application Fee Estimate" at the end of this letter. Based on our current understanding, the portion of the submitted fee earmarked for permitting the chiller cooling tower ($1,865.02) appears to have been an overpayment as this equipment is not actually a permit unit.

The responses to the AQMD data requests that are provided above represent the most current information currently available to the applicant, and we trust they are sufficient to allow the District to reach a finding of completeness for the CPP Application. Please notify the undersigned with any questions or requests for additional information, if needed.

Sincerely,

Stephen Sciortino
CPP Project Manager
City of Anaheim Public Utilities Department

cc: Scott Galati, Galati Blek LLC
John Lague, URS Corporation
Cindy Poire, URS Corporation

Table 1a
Hazardous Air Pollutant Emissions from the Operationa CPP

Source	Total Annual HAP Emissions (ton/yr)
Unit 1	0.169
Unit 2	0.169
Unit 3	0.169
Unit 4	0.169
Black Start Engine	0.000
Chiller Cooling Tower	0.007
Total all sources	**0.685**

Pollutant	Total Annual HAP Emissions All Sources (ton/yr)
1,3-Butadiene	4.39E-04
Acetaldehyde	4.08E-02
Acrolein	3.69E-03
Benzene	3.32E-03
Ethylbenzene	3.26E-02
Formaldehyde	3.67E-01
Propylene Oxide	2.96E-02
Toluene	1.33E-01
Xylenes	6.53E-02
Naphthalene	0.002
PAHs (other than naphthalene)	3.82E-04
Antimony	4.66E-07
Arsenic	3.73E-06
Beryllium	7.76E-08
Cadmium	7.76E-08
Chlorine	7.22E-03
Chromium	8.54E-07
Cobalt	1.71E-06
Cyanide	3.57E-05
Lead	1.24E-06
Manganese	7.14E-06
Mercury	3.88E-08
Nickel	7.76E-08
Selenium	1.24E-05
Total	**0.685**

Table 3c1Information Required on SCR Units

Data provided as typical values by an Emission Control Module Vendor

1. Catalyst manufacturer	Cormetech or Equal
2. Catalyst & Heat Recovery Steam Generator (HSRG) Drawings include catalyst dimensions (SCR)	NOx Catalyst dimensions are nominally 18 ft W x 25 ft H x 2.5 ft deep
3. Ammonia grid details	2 x 4 Matrix - Details are Proprietary
4. Ammonia injection rate	Nominally 110 lb/hr - for 19% Aqueous Ammonia
5. Ammonia emission rate	5 ppmvd corrected to 15% O2
6. Pressure drop across SCR unit including injection grid	6.0 inches w.c.
7. Controls for ammonia injection	feedforward from fuel / feedback from CEMS
8. Type of catalyst	Homogeneous
9. Catalyst volume	Proprietary
10. Space velocity (gas flow rate/catalyst volume)	200 1/sec
11. Area velocity (gas flow rate/wetted catalyst surface area)	nominally 11 ft /sec
12. Manufacturer's guarantee for efficiency & catalyst life	5 years @ 10,000 hours per year
13. NOx concentration in and out of SCR unit	25 in / 2.3 out ppmvd @ 15% O2
14. SCR unit total cost	$3,000,000.00
15. Catalyst replacement cost	$400,000.00
16. Percent decrease in prime mover output	nominally 500 kW for an LM 6000PC @ 12 inches w.c. (nominally 300 kW for NOx Catalyst delta P alone)
17. Percent increase in HRSG output	N/A
18. SO2 oxidation rate/SO3 emissions	ranges from 40% to 75% based on gas flow & temp
19. Stack temperature after HRSG	840°F max
20. HRSG and turbine modifications	N/A
21. Temperature at which ammonia injection will begin	540°F at backface of NOx Catalyst

Table 3c2 Information Required on CO Catalysts

Data provided as typical values by an Emission Control Module Vendor

1. Type of Catalyst	stainless foil substrate with alumina washcoat that is impregnated with platinum group metals
2. Catalyst Volume	75 ft3
3. Space Velocity	210,000 1/hr
4. Linear Velocity	11.7 ft/sec
5. Pressure Drop Across Catalyst	1.5 inches w.c.
6. Manufacturer's Guarantee for Efficiency and Catalyst Life	5 years @ 10,000 hours per year
7. Operating temperature Range of Catalyst	500° to 1200°F
8. Effect of Temperature on Efficiency	Efficiency decreases outside of operating range specified above
9. CO Conversion Efficiency	75% or greater - depending on operating case
10. Unsaturated Hydrocarbon Conversion Efficiency	35%
11. Saturated (Non-Methane) Hydrocarbon Conversion Efficiency	0%
12. Methane Conversion Efficiency	0%
13. CO Catalyst Total Cost	Catalyst + Frame = $315,000.00
14. Catalyst Replacement Cost	$250,000.00
15. Catalyst and Heat Recovery Steam Generator (HRSG) Drawings Including Catalyst Dimensions	NOX Catalyst dimensions are nominally 18 ft W x 25 ft H x 2.5 ft deep
16. Catalyst Manufacturer	BASF / Engelhard
17. CO and HC Concentration In and Out of Co Catalyst	CO - 53 In / 6.0 Out ppmvd @ 15% O2 VOC (NMNEHC) - 3 In / 2 Out ppmd @ 15% O2
18. Catalyst Depth	nominally 2.8 inches
19. Catalyst Cell Density (Cells Per Square Inch)	145

SCAQMD APPLICATION FEE ESTIMATE

Canyon Power Plant

PERMIT/ EQUIPMENT	PERMIT FEE	FEES (1)	SCHEDULE	NOTES
Application Nos. 4766511, 476656, 476659, 476661 - Gas Turbines CTG 1-4 (4)				
◆ Special Processing Fees (3)			D	fee schedule D for Gas Turbine, <50 MW, other fuel from TABLE IB ref. SCAQMD Rule 301 page 61, ref. SCAQMD Rule 301 page 78 for identical equipment: full fee for the 1st & 50% discount for each additional
Number of units		**4**		
Subtotal (4 units)		**$10,178.43**		
Application Nos. 476654, 476657, 476660, 476663 - Selective Catalytic Reduction (SCR) (4)				
◆ PTC - Permit Processing Fee		$2,949.92		fee schedule C for Selective Catalytic Reduction (SCR) from TABLE IA ref. SCAQMD Rule 301 page 61,
◆ Special Processing Fees (3)			C	ref. SCAQMD Rule 301 page 78 for identical equipment: full fee for the 1st & 50% discount for each additional
Number of units		**4**		
Subtotal (4 units)		**$7,374.80**		
Application No. 476666 - Blackstart Engine (1)				fee schedule B for Internal Combustion Engine , emergency, (> 500 hp), from TABLE IB
◆ PTC - Permit Processing Fee		$1,865.02	B	ref. SCAQMD Rule 301 page 61,
◆ Special Processing Fees (3)				ref. SCAQMD Rule 301 page 78
Subtotal		**$1,865.02**		
Application No. 476665 - Ammonia Storage Tank (1)				fee schedule A for Storage Tank, Other, from TABLE IB
◆ PTC - Permit Processing Fee		$1,170.20	A	ref. SCAQMD Rule 301 page 61,
◆ Special Processing Fees (3)				ref. SCAQMD Rule 301 page 78
Subtotal (1 units)		**$1,170.20**		
Cooling Tower (4-cell chiller) (1)				fee schedule B for Cooling Tower, other, from TABLE IB
◆ PTC - Permit Processing Fee		$1,865.02	B	ref. SCAQMD Rule 301 page 61,
◆ Special Processing Fees (3)				ref. SCAQMD Rule 301 page 78
Subtotal		**$1,865.02**		
Application No. 476650 - Title V Permit				ref. SCAQMD Rule 301 page 45
◆ Facility Permit Amendment		$1,219.20		initial Title V permit application, 1-20 devices
Subtotal		**$1,219.20**		
TOTAL		**$23,672.67**		

Notes:

1. All fee schedules are in FY 07-08 (application will be submitted after June 30 2007)
2. CTG Units 1-4: each turbine proposed for 1,061 hours of operation (1,001.5 hours normal operation and 128.5 startup/warmup and shutdowns events)
3. After receiving and reviewing the application, SCAQMD will estimate and send us the invoice for other fees (CEMS, special processing fee for AQA & HRA, possible public notice preparation and publication, and etc.)

South Coast Air Quality Management District

Form 500-A2
TITLE V Application Certification

Mail Application To:
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385
www.aqmd.gov

Section I - Facility Information

1. Permit to be issued to (Business name of operator to appear on permit): Canyon Power Plant
2. Valid AQMD Facility ID (Available on Permit or Invoice Issued by AQMD): _____
3. This Certification is submitted with a (Check one):
   - a. (●) Title V Application (Initial, Revision or Renewal)
   - b. ( ) Supplement/Correction to a Title V Application
   - c. ( ) MACT Part 2
4. Is Form 500-C2 included with this Certification? ( ) Yes (●) No

Section II - Responsible Official Certification Statement

I certify under penalty of law that I am the responsible official for this facility as defined in AQMD Regulation XXX and that based on information and belief formed after reasonable inquiry, the statements and information in this document and in all attached application forms and other materials are true, accurate, and complete.

Read each statement carefully and check each that applies – ***You must check 3a or 3b.***

1. For Initial, Permit Renewal, and Administrative Application Certifications:

a. ( ) The facility, including equipment that are exempt from written permit per Rule 219, is currently operating and will continue to operate in compliance with all applicable requirement(s) identified in Section II and Section III of Form 500-C1,

i. ( ) except for those requirements that do not specifically pertain to such devices or equipment and that have been identified as "Remove" on Section III of Form 500-C1.

ii. ( ) except for those devices or equipment that have been identified on the completed and attached Form 500-C2 that will not be operating in compliance with the specified applicable requirement(s).

b. (●) The facility, including equipment that are exempt from written permit per Rule 219, will meet in a timely manner, all applicable requirements with future effective dates.

2. For Permit Revision Application Certifications:

a. ( ) The equipment or devices to which this permit revision applies, will in a timely manner comply with all applicable requirements identified in Section II and Section III of Form 500-C1.

3. For MACT Hammer Certifications:

a. ( ) The facility is subject to Section 112(j) of the Clean Air Act (Subpart B of 40 CFR part 63), also known as the MACT "hammer." The following information is submitted with a Title V application to comply with the Part 1 requirements of Section 112(j). (If Part 2 has not been submitted, you must submit 500-MACT Part 2 with this form.)

b. (●) The facility is not subject to Section 112(j) of the Clean Air Act (Subpart B of 40 CFR part 63).

Stephen Sciortino — Signature of Responsible Official — Date: 2/11/08

Steve Sciortino — Type or Print Name of Responsible Official — Phone: (714) 765-5177

Integrated Resources Manager — Title of Responsible Official — Fax: (714) 765-4140

201 South Anaheim Blvd, Suite 802 — Address of Responsible Official — Anaheim — City — CA — State — 92805 — Zip Code

Acid Rain Facilities Only: Turn page over & complete Section III

© South Coast Air Quality Management District, Form 500-A2 (2006.02)

Table 1a
Hazardous Air Pollutant Emissions from the Operationa CPP

Source	Total Annual HAP Emissions (ton/yr)
Unit 1	0.169
Unit 2	0.169
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Unit 4	0.169
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Chiller Cooling Tower	0.007
Total all sources	**0.685**

Pollutant	Total Annual HAP Emissions All Sources (ton/yr)
1,3-Butadiene	4.39E-04
Acetaldehyde	4.08E-02
Acrolein	3.69E-03
Benzene	3.32E-03
Ethylbenzene	3.26E-02
Formaldehyde	3.67E-01
Propylene Oxide	2.96E-02
Toluene	1.33E-01
Xylenes	6.53E-02
Naphthalene	0.002
PAHs (other than naphthalene)	3.82E-04
Antimony	4.66E-07
Arsenic	3.73E-06
Beryllium	7.76E-08
Cadmium	7.76E-08
Chlorine	7.22E-03
Chromium	8.54E-07
Cobalt	1.71E-06
Cyanide	3.57E-05
Lead	1.24E-06
Manganese	7.14E-06
Mercury	3.88E-08
Nickel	7.76E-08
Selenium	1.24E-05
Total	**0.685**

South Coast Air Quality Management District

FORM 400-E-12
GAS TURBINE

Mail Application To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385
www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEQA, Plot Plan and Stack Form

Permit to be issued to (Business name of operator to appear on permit):
Canyon Power Plant

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site):
3071 East Miraloma Ave., Anaheim, California 92806

(●) Fixed Location ( ) Various Locations

SECTION A: EQUIPMENT INFORMATION

Turbine

Manufacturer: General Electric

Model No.: LM 6000PC Sprint

Serial No.:

Size (based on Higher Heating Value - HHV):

Manufacturer Maximum Input Rating: 480.600 MMBTU/hr 140724.[illegible] kWh

Manufacturer Maximum Output Rating: _____ MMBTU/hr 50950.00[illegible] kWh

Function (Check all that apply)

[x] Electrical Generation [ ] Driving Pump/Compressor [ ] Emergency Peaking Unit
[ ] Steam Generation [ ] Exhaust Gas Recovery [ ] Other (specify): _____

Cycle Type

(●) Simple Cycle ( ) Regenerative Cycle
( ) Combined Cycle ( ) Other (specify): _____

Combustion Type

( ) Tubular ( ) Can-Annular ( ) Annular

Fuel (Turbine)

(●) Natural Gas ( ) LPG ( ) Digester Gas*
( ) Landfill Gas* ( ) Propane ( ) Refinery Gas* ( ) Other* : _____

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

Heat Recovery Steam Generator (HRSG)

Steam Turbine Capacity _____ MW

Low Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

High Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

Superheated Steam Output Capacity: _____ lb/hr @ _____ °F

Duct Burner

Manufacturer:

Model:

Number of burners:

Rating of each burner (HHV):

Type: ( ) Low NOx (please attach manufacturer's specifications)
( ) Other: _____

Show all heat transfer surface locations with the HRSG and temperature profile

Fuel (Duct Burner)

(●) Natural Gas ( ) LPG ( ) Digester Gas*
( ) Refinery Gas* ( ) Landfill Gas* ( ) Propane ( ) Other* : _____

*(If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

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Air Pollution Control

- (●) Selective Catalytic Reduction (SCR)*
- ( ) Selective Non-catalytic Reduction (SNCR)*
- ( ) Oxidation Catalyst*
- ( ) Other (specify)* _____
- ( ) Steam/Water Injection:
  Injection Rate: _____ lbs. water/lbs. fuel, or _____ mole water/mole fuel

* Separate application is required.

Capital Cost:	Installation Cost:	Annual Operating Cost:
$3000000.00		

Oxidation Catalyst Data (If Applicable)

Manufacturer: BASF/Engelhard
Model: Stainless foil substrate

Catalyst Dimensions: Length: ____ ft. 2.800 in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.

Catalyst Cell Density: 145.000 cells/sq. in.
Pressure Drop Across Catalyst: 1.500 inches w.c.

Manufacturer's Guarantee
CO Control Efficiency: 75.00 %
Catalyst Life: 5 yrs.
VOC Control Efficiency: 35.00 %
Operating Temp. Range: 500 – 1200.00 °F

Space Velocity (gas flow rate/catalyst volume): 210000.000 /hr
Area Velocity (gas flow/wetted catalyst surface area): 11.700 ft/sec

VOC Concentration into Catalyst: ____ PPMVD @ 15 % O_2
CO Concentration into Catalyst: ____ PPMVD @ 15 % O_2

→ To be provided by GE

SECTION B: OPERATION INFORMATION

On-line Emissions Data

Pollutants	Maximum Emissions Before Control* PPM@15% O_2 dry	Maximum Emissions Before Control* lb/Hour	Maximum Emissions After Control PPM@15% O_2 dry	Maximum Emissions After Control lb/Hour
ROG			2.000	1.200
NOx		44.000	2.320	4.050
CO		25.440	6.000	6.360
PM10				3.040
SOx				0.340
NH3			5.000	3.640

* Based on temperature, fuel consumption, and MW output

Reference (attach data):
- [x] Manufacturer Emission Data
- [ ] EPA Emission Factors
- [ ] AQMD Emission Factors
- [ ] Source Test

Stack or Vent Data

Stack Height: 86 ft. 0.000 in. Stack Diameter: 11 ft. 8.000 in.
Exhaust Temperature: 840.00 °F Exhaust Pressure: ____ inches water column
Exhaust Flow Rate: 590234.[illegible] CFM Oxygen Level: 15.00 %

Operating Schedule

Normal: ____ hours/day ____ days/week ____ weeks/yr
Maximum: 12 hours/day ____ days/week ____ weeks/yr

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_____ Serial Number

Startup Data

No. of Startups per day: _____ No. of Startups per year: 129 Duration of each startup: 0.3 hours

Shutdown Data

No. of Shutdowns per day: _____ No. of Shutdowns per year: 129 Duration of each shutdown: 0.1 hours

Startup and Shutdown Emissions Data

Pollutants	Startup Emissions		Shutdown Emissions	
	PPM @15% O_2, dry	lb/Hour	PPM @15% O_2, dry	lb/Hour
ROG		0.750		0.390
NOx		20.870		21.360
CO		13.270		18.380
PM10		2.010		1.140
SOx		1.080		0.800
NH3				

Monitoring and Reporting

Continuous Emission Monitoring System (CEMS)

CEMS Make: _____

CEMS Model: _____

Will the CEMS be used to measure both on-line and startup/shutdown emissions? (●) Yes ( ) No

The following parameters will be continuously monitored:

☒ NOx ☒ CO ☒ O_2

☐ Fuel Flow Rate ☐ Ammonia Injection Rate ☐ Other (specify) _____

☐ Ammonia Stack Concentration: Ammonia CEMS Model _____

Ammonia CEMS Make _____

SECTION C: APPLICANT CERTIFICATION STATEMENT

I hereby certify that all information contained herein and information submitted with this application is true and correct.

SIGNATURE OF PREPARER:	TITLE OF PREPARER: Sen. AQ Consultant	PREPARER'S TELEPHONE NUMBER: (619) 243-2823 PREPARER'S E-MAIL ADDRESS: john_lague@urscorp/com
CONTACT PERSON FOR INFORMATION ON THIS EQUIPMENT: Steve Sciortino E-MAIL ADDRESS: SSciortino@anaheim.net	CONTACT PERSON'S TELEPHONE NUMBER: (714) 765-5177 FAX NUMBER: (714) 765-3357	DATE SIGNED: 2/11/08

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(a) Make a copy of any page containing confidential information blanked out. Label this page "public copy."
(b) Label the original page "confidential." Circle all confidential items on the page.
(c) Prepare a written justification for the confidentiality of each confidential item. Append this to the confidential copy.

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_____ Serial Number

South Coast Air Quality Management District

FORM 400-E-12
GAS TURBINE

Mail Application To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385
www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEQA, Plot Plan and Stack Form

Permit to be issued to (Business name of operator to appear on permit):
Canyon Power Plant

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site):
3071 East Miraloma Ave., Anaheim, California 92806

(●) Fixed Location ( ) Various Locations

SECTION A: EQUIPMENT INFORMATION

Turbine

Manufacturer: General Electric

Model No.: LM 6000PC Sprint

Serial No.:

Size (based on Higher Heating Value - HHV):

Manufacturer Maximum Input Rating: 480.600 MMBTU/hr 140724.76 kWh

Manufacturer Maximum Output Rating: _____ MMBTU/hr 50950.006 kWh

Function (Check all that apply)

[x] Electrical Generation [ ] Driving Pump/Compressor [ ] Emergency Peaking Unit
[ ] Steam Generation [ ] Exhaust Gas Recovery [ ] Other (specify): _____

Cycle Type

(●) Simple Cycle ( ) Regenerative Cycle
( ) Combined Cycle ( ) Other (specify): _____

Combustion Type

( ) Tubular ( ) Can-Annular ( ) Annular

Fuel (Turbine)

(●) Natural Gas ( ) LPG ( ) Digester Gas*
( ) Landfill Gas* ( ) Propane ( ) Refinery Gas* ( ) Other* : _____

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

Heat Recovery Steam Generator (HRSG)

Steam Turbine Capacity _____ MW

Low Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

High Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

Superheated Steam Output Capacity: _____ lb/hr @ _____ °F

Duct Burner

Manufacturer:

Model:

Number of burners:

Rating of each burner (HHV):

Type: ( ) Low NOx (please attach manufacturer's specifications)
( ) Other: _____

Show all heat transfer surface locations with the HRSG and temperature profile

Fuel (Duct Burner)

(●) Natural Gas ( ) LPG ( ) Digester Gas*
( ) Refinery Gas* ( ) Landfill Gas* ( ) Propane ( ) Other* : _____

*(If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

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Air Pollution Control

- (●) Selective Catalytic Reduction (SCR)*
- ( ) Selective Non-catalytic Reduction (SNCR)*
- ( ) Oxidation Catalyst*
- ( ) Other (specify)* _____
- ( ) Steam/Water Injection:
  Injection Rate: _____ lbs. water/lbs. fuel, or _____ mole water/mole fuel

* Separate application is required.

Capital Cost:	Installation Cost:	Annual Operating Cost:
$3000000.00		

Oxidation Catalyst Data (If Applicable)

Manufacturer: BASF/Engelhard
Model: Stainless foil substrate

Catalyst Dimensions: Length: ____ ft. 2.800 in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.

Catalyst Cell Density: 145.000 cells/sq. in.
Pressure Drop Across Catalyst: 1.500 inches w.c.

Manufacturer's Guarantee
CO Control Efficiency: 75.00 %
Catalyst Life: 5 yrs.
VOC Control Efficiency: 35.00 %
Operating Temp. Range: 500 – 1200.00 °F

Space Velocity (gas flow rate/catalyst volume): 210000.000 /hr
Area Velocity (gas flow/wetted catalyst surface area): 11.700 ft/sec

VOC Concentration into Catalyst: ____ PPMVD @ 15 % O_2
CO Concentration into Catalyst: ____ PPMVD @ 15 % O_2

→ To be provided by GE

SECTION B: OPERATION INFORMATION

On-line Emissions Data

Pollutants	Maximum Emissions Before Control* PPM@15% O_2 dry	lb/Hour	Maximum Emissions After Control PPM@15% O_2 dry	lb/Hour
ROG			2.000	1.200
NOx		44.000	2.320	4.050
CO		25.440	6.000	6.360
PM10				3.040
SOx				0.340
NH3			5.000	3.640

* Based on temperature, fuel consumption, and MW output

Reference (attach data):
- [x] Manufacturer Emission Data
- [ ] EPA Emission Factors
- [ ] AQMD Emission Factors
- [ ] Source Test

Stack or Vent Data

Stack Height: 86 ft. 0.000 in.
Stack Diameter: 11 ft. 8.000 in.
Exhaust Temperature: 840.00 °F
Exhaust Pressure: ____ inches water column
Exhaust Flow Rate: 590234.[illegible] CFM
OxygenLevel: 15.00 %

Operating Schedule

	hours/day	days/week	weeks/yr
Normal:			
Maximum:	12		

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_____ Serial Number

Startup Data

No. of Startups per day: _____ No. of Startups per year: 129 Duration of each startup: 0.3 hours

Shutdown Data

No. of Shutdowns per day: _____ No. of Shutdowns per year: 129 Duration of each shutdown: 0.1 hours

Startup and Shutdown Emissions Data

Pollutants	Startup Emissions		Shutdown Emissions	
	PPM @15% O_2, dry	lb/Hour	PPM @15% O_2, dry	lb/Hour
ROG		0.750		0.390
NOx		20.870		21.360
CO		13.270		18.380
PM10		2.010		1.140
SOx		1.080		0.800
NH3				

Monitoring and Reporting

Continuous Emission Monitoring System (CEMS)

CEMS Make: _____

CEMS Model: _____

Will the CEMS be used to measure both on-line and startup/shutdown emissions? (•) Yes ( ) No

The following parameters will be continuously monitored:

[x] NOx [x] CO [x] O_2

[ ] Fuel Flow Rate [ ] Ammonia Injection Rate [ ] Other (specify) _____

[ ] Ammonia Stack Concentration: Ammonia CEMS Model _____

Ammonia CEMS Make _____

SECTION C: APPLICANT CERTIFICATION STATEMENT

I hereby certify that all information contained herein and information submitted with this application is true and correct.

SIGNATURE OF PREPARER:	TITLE OF PREPARER: Sen. AQ Consultant	PREPARER'S TELEPHONE NUMBER: (619) 243-2823 PREPARER'S E-MAIL ADDRESS: john_lague@urscorp/com
CONTACT PERSON FOR INFORMATION ON THIS EQUIPMENT: Steve Sciortino E-MAIL ADDRESS: SSciortino@anaheim.net	CONTACT PERSON'S TELEPHONE NUMBER: (714) 765-5177 FAX NUMBER: (714) 765-3357	DATE SIGNED: 2/11/08

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_____ Serial Number

South Coast Air Quality Management District

FORM 400-E-12
GAS TURBINE

Mail Application To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385
www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEQA, Plot Plan and Stack Form

Permit to be issued to (Business name of operator to appear on permit):
Canyon Power Plant

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site):
3071 East Miraloma Ave., Anaheim, California 92806

(●) Fixed Location ( ) Various Locations

SECTION A: EQUIPMENT INFORMATION

Turbine

Manufacturer: General Electric

Model No.: LM 6000PC Sprint

Serial No.:

Size (based on Higher Heating Value - HHV):

Manufacturer Maximum Input Rating: 480.600 MMBTU/hr 140724.[illegible] kWh

Manufacturer Maximum Output Rating: _____ MMBTU/hr 50950.0[illegible] kWh

Function (Check all that apply)

- [x] Electrical Generation
- [ ] Driving Pump/Compressor
- [ ] Emergency Peaking Unit
- [ ] Steam Generation
- [ ] Exhaust Gas Recovery
- [ ] Other (specify): _____

Cycle Type

- (●) Simple Cycle
- ( ) Regenerative Cycle
- ( ) Combined Cycle
- ( ) Other (specify): _____

Combustion Type

- ( ) Tubular
- ( ) Can-Annular
- ( ) Annular

Fuel (Turbine)

- (●) Natural Gas
- ( ) LPG
- ( ) Digester Gas*
- ( ) Landfill Gas*
- ( ) Propane
- ( ) Refinery Gas*
- ( ) Other* : _____

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

Heat Recovery Steam Generator (HRSG)

Steam Turbine Capacity _____ MW

Low Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

High Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

Superheated Steam Output Capacity: _____ lb/hr @ _____ °F

Duct Burner

Manufacturer:

Model:

Number of burners:

Rating of each burner (HHV):

Type:
- ( ) Low NOx (please attach manufacturer's specifications)
- ( ) Other: _____

Show all heat transfer surface locations with the HRSG and temperature profile

Fuel (Duct Burner)

- (●) Natural Gas
- ( ) LPG
- ( ) Digester Gas*
- ( ) Refinery Gas*
- ( ) Landfill Gas*
- ( ) Propane
- ( ) Other* : _____

*(If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

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Air Pollution Control

- (●) Selective Catalytic Reduction (SCR)*
- ( ) Selective Non-catalytic Reduction (SNCR)*
- ( ) Oxidation Catalyst*
- ( ) Other (specify)* _____
- ( ) Steam/Water Injection:
  Injection Rate: _____ lbs. water/lbs. fuel, or _____ mole water/mole fuel

* Separate application is required.

Capital Cost:	Installation Cost:	Annual Operating Cost:
$3000000.00		

Oxidation Catalyst Data (If Applicable)

Manufacturer: BASF/Engelhard
Model: Stainless foil substrate

Catalyst Dimensions: Length: _____ ft. 2.800 in. Width: _____ ft. _____ in. Height: _____ ft. _____ in.

Catalyst Cell Density: 145.000 cells/sq. in.
Pressure Drop Across Catalyst: 1.500 inches w.c.

Manufacturer's Guarantee
CO Control Efficiency: 75.00 %
Catalyst Life: 5 yrs.
VOC Control Efficiency: 35.00 %
Operating Temp. Range: 500 – 1200.00 °F

Space Velocity (gas flow rate/catalyst volume): 210000.000 /hr
Area Velocity (gas flow/wetted catalyst surface area): 11.700 ft/sec

VOC Concentration into Catalyst: _____ PPMVD @ 15 % O_2
CO Concentration into Catalyst: _____ PPMVD @ 15 % O_2

To be provided by GE

SECTION B: OPERATION INFORMATION

On-line Emissions Data

Pollutants	Maximum Emissions Before Control*		Maximum Emissions After Control	
	PPM @15% O_2, dry	lb/Hour	PPM @15% O_2, dry	lb/Hour
ROG			2.000	1.200
NOx		44.000	2.320	4.050
CO		25.440	6.000	6.360
PM10				3.040
SOx				0.340
NH3			5.000	3.640

* Based on temperature, fuel consumption, and MW output

Reference (attach data):
- [x] Manufacturer Emission Data
- [ ] EPA Emission Factors
- [ ] AQMD Emission Factors
- [ ] Source Test

Stack or Vent Data

Stack Height: 86 ft. 0.000 in.
Stack Diameter: 11 ft. 8.000 in.
Exhaust Temperature: 840.00 °F
Exhaust Pressure: _____ inches water column
Exhaust Flow Rate: 590234.00 CFM
Oxygen Level: 15.00 %

Operating Schedule

Normal: _____ hours/day _____ days/week _____ weeks/yr
Maximum: 12 hours/day _____ days/week _____ weeks/yr

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_____ Serial Number

Startup Data

No. of Startups per day: _____ No. of Startups per year: 129 Duration of each startup: 0.3 hours

Shutdown Data

No. of Shutdowns per day: _____ No. of Shutdowns per year: 129 Duration of each shutdown: 0.1 hours

Startup and Shutdown Emissions Data

Pollutants	Startup Emissions		Shutdown Emissions	
	PPM @15% O_2, dry	lb/Hour	PPM @15% O_2, dry	lb/Hour
ROG		0.750		0.390
NOx		20.870		21.360
CO		13.270		18.380
PM10		2.010		1.140
SOx		1.080		0.800
NH3				

Monitoring and Reporting

Continuous Emission Monitoring System (CEMS)

CEMS Make: _____

CEMS Model: _____

Will the CEMS be used to measure both on-line and startup/shutdown emissions? ◉ Yes ○ No

The following parameters will be continuously monitored:

☒ NOx ☒ CO ☒ O_2

☐ Fuel Flow Rate ☐ Ammonia Injection Rate ☐ Other (specify) _____

☐ Ammonia Stack Concentration: Ammonia CEMS Model _____

Ammonia CEMS Make _____

SECTION C: APPLICANT CERTIFICATION STATEMENT

I hereby certify that all information contained herein and information submitted with this application is true and correct.

SIGNATURE OF PREPARER:	TITLE OF PREPARER: Sen. AQ Consultant	PREPARER'S TELEPHONE NUMBER: (619) 243-2823 PREPARER'S E-MAIL ADDRESS: john_lague@urscorp/com
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South Coast Air Quality Management District

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GAS TURBINE

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Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site):
3071 East Miraloma Ave., Anaheim, California 92806 ◉ Fixed Location ○ Various Locations

SECTION A: EQUIPMENT INFORMATION

Turbine

Manufacturer: General Electric

Model No.: LM 6000PC Sprint

Serial No.:

Size (based on Higher Heating Value - HHV):

Manufacturer Maximum Input Rating: 480.600 MMBTU/hr 140724.76 kWh

Manufacturer Maximum Output Rating: _____ MMBTU/hr 50950.00 kWh

Function (Check all that apply)
☒ Electrical Generation ☐ Driving Pump/Compressor ☐ Emergency Peaking Unit
☐ Steam Generation ☐ Exhaust Gas Recovery ☐ Other (specify): _____

Cycle Type
◉ Simple Cycle ○ Regenerative Cycle
○ Combined Cycle ○ Other (specify): _____

Combustion Type
○ Tubular ○ Can-Annular ○ Annular

Fuel (Turbine)
◉ Natural Gas ○ LPG ○ Digester Gas*
○ Landfill Gas* ○ Propane ○ Refinery Gas* ○ Other* : _____
* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

Heat Recovery Steam Generator (HRSG)

Steam Turbine Capacity _____ MW

Low Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

High Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

Superheated Steam Output Capacity: _____ lb/hr @ _____ °F

Duct Burner

Manufacturer:

Model:

Number of burners:

Rating of each burner (HHV):

Type:
○ Low NOx (please attach manufacturer's specifications)
○ Other: _____

Show all heat transfer surface locations with the HRSG and temperature profile

Fuel (Duct Burner)
◉ Natural Gas ○ LPG ○ Digester Gas*
○ Refinery Gas* ○ Landfill Gas* ○ Propane ○ Other* : _____
*(If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

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Air Pollution Control

- (●) Selective Catalytic Reduction (SCR)*
- ( ) Selective Non-catalytic Reduction (SNCR)*
- ( ) Oxidation Catalyst*
- ( ) Other (specify)* _____
- ( ) Steam/Water Injection:
  Injection Rate: _____ lbs. water/lbs. fuel, or _____ mole water/mole fuel

* Separate application is required.

Capital Cost:	Installation Cost:	Annual Operating Cost:
$3000000.00		

Oxidation Catalyst Data (If Applicable)

Manufacturer: BASF/Engelhard
Model: Stainless foil substrate

Catalyst Dimensions: Length: ____ ft. 2.800 in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.

Catalyst Cell Density: 145.000 cells/sq. in.
Pressure Drop Across Catalyst: 1.500 inches w.c.

Manufacturer's Guarantee
CO Control Efficiency: 75.00 %
Catalyst Life: 5 yrs.
VOC Control Efficiency: 35.00 %
Operating Temp. Range: 500 – 1200.00 °F

Space Velocity (gas flow rate/catalyst volume): 210000.000 /hr
Area Velocity (gas flow/wetted catalyst surface area): 11.700 ft/sec

VOC Concentration into Catalyst: _____ PPMVD @ 15 % O_2
CO Concentration into Catalyst: _____ PPMVD @ 15 % O_2

To be provided by GE

SECTION B: OPERATION INFORMATION

On-line Emissions Data

Pollutants	Maximum Emissions Before Control*		Maximum Emissions After Control	
	PPM@15% O_2, dry	lb/Hour	PPM@15% O_2, dry	lb/Hour
ROG			2.000	1.200
NOx		44.000	2.320	4.050
CO		25.440	6.000	6.360
PM10				3.040
SOx				0.340
NH3			5.000	3.640

* Based on temperature, fuel consumption, and MW output

Reference (attach data):
- [x] Manufacturer Emission Data
- [ ] EPA Emission Factors
- [ ] AQMD Emission Factors
- [ ] Source Test

Stack or Vent Data

Stack Height: 86 ft. 0.000 in. Stack Diameter: 11 ft. 8.000 in.
Exhaust Temperature: 840.00 °F Exhaust Pressure: _____ inches water column
Exhaust Flow Rate: 590234.00 CFM Oxygen Level: 15.00 %

Operating Schedule

Normal: _____ hours/day _____ days/week _____ weeks/yr
Maximum: 12 hours/day _____ days/week _____ weeks/yr

© South Coast Air Quality Management District, Form 400-E-12 (2006.02)

_____ Serial Number

Startup Data

No. of Startups per day: _____ No. of Startups per year: 129 Duration of each startup: 0.3 hours

Shutdown Data

No. of Shutdowns per day: _____ No. of Shutdowns per year: 129 Duration of each shutdown: 0.1 hours

Startup and Shutdown Emissions Data

Pollutants	Startup Emissions		Shutdown Emissions	
	PPM @15% O_2, dry	lb/Hour	PPM @15% O_2, dry	lb/Hour
ROG		0.750		0.390
NOx		20.870		21.360
CO		13.270		18.380
PM10		2.010		1.140
SOx		1.080		0.800
NH3				

Monitoring and Reporting

Continuous Emission Monitoring System (CEMS)

CEMS Make: _____

CEMS Model: _____

Will the CEMS be used to measure both on-line and startup/shutdown emissions? ◉ Yes ○ No

The following parameters will be continuously monitored:

☒ NOx ☒ CO ☒ O_2

☐ Fuel Flow Rate ☐ Ammonia Injection Rate ☐ Other (specify) _____

☐ Ammonia Stack Concentration: Ammonia CEMS Model _____

Ammonia CEMS Make _____

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CONTACT PERSON FOR INFORMATION ON THIS EQUIPMENT: Steve Sciortino E-MAIL ADDRESS: SSciortino@anaheim.net	CONTACT PERSON'S TELEPHONE NUMBER: (714) 765-5177 FAX NUMBER: (714) 765-3357	DATE SIGNED: 2/11/08

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_____ Serial Number

South Coast Air Quality Management District

FORM 400-E-5

SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, OXIDATION CATALYST, AND AMMONIA CATALYST

Mail Application To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385
www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEQA, Plot Plan and Stack Form

Permit to be issued to (Business name of operator to appear on permit): Canyon Power Plant

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): 3071 East Miraloma Ave., Anaheim, California 92806 ◉ Fixed Location ○ Various Locations

SECTION A: EQUIPMENT INFORMATION

SELECTIVE CATALYTIC REDUCTION (SCR)

SCR Catalyst

Manufacturer: Cormetech or Equal
Catalyst Active Material: vanadium/tungsten
Model Number: N/A
Type: Homogeneuous/extruded honeycomb
Size of Each Layer or Module: Length: 2 ft. 6.00 in. Width: 18 ft. ____ in. Height: 25 ft. ____ in.
No. of Layers or Modules: ____ Total Volume: ____ cu.ft. Total Weight: ____ lbs.

Reducing Agent

○ Urea ○ Anhydrous Ammonia ◉ Aqueous Ammonia 19.00 % Injection Rate: 88.000 lb/hr.

Reducing Agent Storage

Diameter: 7 ft. ____ in. ~~Height:~~ Lg 42 ft. ____ in. Capacity: 10000.00 gal Pressure Setting: 40.000 psia

Space Velocity

Gas Flow Rate/Catalyst Volume: 720000 hr^{-1}

Area Velocity

Gas Flow Rate/Wetted Catalyst Surface Area: 39600.00 ft/hr

Manufacturer's Guarantee

NOx: 2.300 ppm $\%O_2$: 15.00 NOx: ____ gm/bhp-hr Ammonia Slip: 5.000 ppm @ 15.00 % O_2

Catalyst Life

5 years (expected) (10,000 hr)

Cost

Capital Cost: $3000000.00 Installation Cost: ____ Catalyst Replacement Cost: $400000.00

OXIDATION CATALYST

Oxidation Catalyst

Manufacturer: BASF/Engelhard
Catalyst Active Material: Platinum
Model Number: ____
Type: Stainless foil substrate
Size of Each Layer or Module: Length: ____ ft. 2.800 in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.
No. of Layers or Modules: ____ Total Volume: 75.000 cu.ft. Total Weight: ____ lbs.

Space Velocity

Gas flow rate/Catalyst Volume: 210000 hr^{-1}

Manufacturer's Guarantee

VOC 2.000 ppm VOC ____ gm/bhp-hr CO 6.000 ppm CO ____ gm/bhp-hr
$\%O_2$ 15.00 $\%O_2$ 15.00

Catalyst Life

5 years (expected) (10,000 hr)

Cost

Capital Cost: $315000.00 Installation Cost: ____ Catalyst Replacement Cost: $250000.00

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AMMONIA CATALYST		
Ammonia Catalyst	Manufacturer:	Catalyst Active Material:
	Model Number:	Type:
	Size of Each Layer or Module: Length: ____ ft. ____ in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.	
	No. of Layers or Modules: ____ Total Volume: ____ cu.ft. Total Weight: ____ lbs.	
Space Velocity	Gas flow rate/Catalyst Volume: ____ hr^{-1}	
Manufacturer's Guarantee	NH3 ____ ppm % O_2 ____	
Catalyst Life	____ years (expected)	
Cost	Capital Cost: ____ Installation Cost: ____ Catalyst Replacement Cost: ____	

SECTION B: OPERATION INFORMATION	
Operating Temperature	Minimum Inlet Temperature: ____ °F (from cold start) Maximum Temperature: 840.00 °F
	Warm-up Time: ____ hr. 10 min. (maximum)
Operating Schedule	Normal: ____ hours/day ____ days/week ____ weeks/yr.
	Maximum: 12 hours/day ____ days/week ____ weeks/yr.

SECTION C: APPLICANT CERTIFICATION STATEMENT

I hereby certify that all information contained herein and information submitted with this application is true and correct.

SIGNATURE OF PREPARER:	TITLE OF PREPARER: Sen. AQ Consultant	PREPARER'S TELEPHONE NUMBER: (619) 243-2823 PREPARER'S E-MAIL ADDRESS: john_lague@urscorp.com
CONTACT PERSON FOR INFORMATION ON THIS EQUIPMENT: Steve Sciortino E-MAIL ADDRESS: SSciortino@anaheim.net	CONTACT PERSON'S TELEPHONE NUMBER: (714) 765-5177 FAX NUMBER: (714) 765-3357	DATE SIGNED: 2/11/08

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South Coast Air Quality Management District

FORM 400-E-5
SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, OXIDATION CATALYST, AND AMMONIA CATALYST

Mail Application To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385
www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEQA, Plot Plan and Stack Form

Permit to be issued to (Business name of operator to appear on permit): Canyon Power Plant

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): 3071 East Miraloma Ave., Anaheim, California 92806 — (●) Fixed Location ( ) Various Locations

SECTION A: EQUIPMENT INFORMATION

SELECTIVE CATALYTIC REDUCTION (SCR)

SCR Catalyst

Manufacturer: Cormetech or Equal
Catalyst Active Material: vanadium/tungsten
Model Number: N/A
Type: Homogeneuous/extruded honeycomb
Size of Each Layer or Module: Length: 2 ft. 6.00 in. Width: 18 ft. ____ in. Height: 25 ft. ____ in.
No. of Layers or Modules: ____ Total Volume: ____ cu.ft. Total Weight: ____ lbs.

Reducing Agent

( ) Urea ( ) Anhydrous Ammonia (●) Aqueous Ammonia 19.00 % Injection Rate: 88.000 lb/hr.

Reducing Agent Storage

Diameter: 7 ft. ____ in. ~~Height:~~ Lg 42 ft. ____ in. Capacity: 10000.00 gal Pressure Setting: 40.000 psia

Space Velocity

Gas Flow Rate/Catalyst Volume: 720000 hr^{-1}

Area Velocity

Gas Flow Rate/Wetted Catalyst Surface Area: 39600.00 ft/hr

Manufacturer's Guarantee

NOx: 2.300 ppm $\%O_2$: 15.00 NOx: ____ gm/bhp-hr Ammonia Slip: 5.000 ppm @ 15.00 % O_2

Catalyst Life

5 years (expected) (10,000 hr)

Cost

Capital Cost: $3000000.00 Installation Cost: ____ Catalyst Replacement Cost: $400000.00

OXIDATION CATALYST

Oxidation Catalyst

Manufacturer: BASF/Engelhard
Catalyst Active Material: Platinum
Model Number: ____
Type: Stainless foil substrate
Size of Each Layer or Module: Length: ____ ft. 2.800 in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.
No. of Layers or Modules: ____ Total Volume: 75.000 cu.ft. Total Weight: ____ lbs.

Space Velocity

Gas flow rate/Catalyst Volume: 210000 hr^{-1}

Manufacturer's Guarantee

VOC 2.000 ppm VOC ____ gm/bhp-hr CO 6.000 ppm CO ____ gm/bhp-hr
$\%O_2$ 15.00 $\%O_2$ 15.00

Catalyst Life

5 years (expected) (10,000 hr)

Cost

Capital Cost: $315000.00 Installation Cost: ____ Catalyst Replacement Cost: $250000.00

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AMMONIA CATALYST		
Ammonia Catalyst	Manufacturer:	Catalyst Active Material:
	Model Number:	Type:
	Size of Each Layer or Module: Length: ____ ft. ____ in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.	
	No. of Layers or Modules: ____ Total Volume: ____ cu.ft. Total Weight: ____ lbs.	
Space Velocity	Gas flow rate/Catalyst Volume: ____ hr^{-1}	
Manufacturer's Guarantee	NH3 ____ ppm % O_2 ____	
Catalyst Life	____ years (expected)	
Cost	Capital Cost: ____ Installation Cost: ____ Catalyst Replacement Cost: ____	

SECTION B: OPERATION INFORMATION	
Operating Temperature	Minimum Inlet Temperature: ____ °F (from cold start) Maximum Temperature: 840.00 °F
	Warm-up Time: ____ hr. 10 min. (maximum)
Operating Schedule	Normal: ____ hours/day ____ days/week ____ weeks/yr.
	Maximum: 12 hours/day ____ days/week ____ weeks/yr.

SECTION C: APPLICANT CERTIFICATION STATEMENT

I hereby certify that all information contained herein and information submitted with this application is true and correct.

SIGNATURE OF PREPARER:	TITLE OF PREPARER:	PREPARER'S TELEPHONE NUMBER: (619) 243-2823
	Sen. AQ Consultant	PREPARER'S E-MAIL ADDRESS: john_lague@urscorp.com

CONTACT PERSON FOR INFORMATION ON THIS EQUIPMENT:	CONTACT PERSON'S	DATE SIGNED:
Steve Sciortino	TELEPHONE NUMBER: (714) 765-5177	2/11/08
E-MAIL ADDRESS: SSciortino@anaheim.net	FAX NUMBER: (714) 765-3357	

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South Coast Air Quality Management District

FORM 400-E-5
SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, OXIDATION CATALYST, AND AMMONIA CATALYST

Mail Application To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385
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SECTION A: EQUIPMENT INFORMATION

SELECTIVE CATALYTIC REDUCTION (SCR)

SCR Catalyst

Manufacturer: Cormetech or Equal
Catalyst Active Material: vanadium/tungsten
Model Number: N/A
Type: Homogeneuous/extruded honeycomb
Size of Each Layer or Module: Length: 2 ft. 6.00 in. Width: 18 ft. ____ in. Height: 25 ft. ____ in.
No. of Layers or Modules: ____ Total Volume: ____ cu.ft. Total Weight: ____ lbs.

Reducing Agent

○ Urea ○ Anhydrous Ammonia ◉ Aqueous Ammonia 19.00 % Injection Rate: 88.000 lb/hr.

Reducing Agent Storage

Diameter: 7 ft. ____ in. ~~Height:~~ Lg 42 ft. ____ in. Capacity: 10000.00 gal Pressure Setting: 40.000 psia

Space Velocity

Gas Flow Rate/Catalyst Volume: 720000 hr^{-1}

Area Velocity

Gas Flow Rate/Wetted Catalyst Surface Area: 39600.00 ft/hr

Manufacturer's Guarantee

NOx: 2.300 ppm $\%O_2$: 15.00 NOx: ____ gm/bhp-hr Ammonia Slip: 5.000 ppm @ 15.00 % O_2

Catalyst Life

5 years (expected) (10,000 hr)

Cost

Capital Cost: $3000000.00 Installation Cost: ____ Catalyst Replacement Cost: $400000.00

OXIDATION CATALYST

Oxidation Catalyst

Manufacturer: BASF/Engelhard
Catalyst Active Material: Platinum
Model Number: ____
Type: Stainless foil substrate
Size of Each Layer or Module: Length: ____ ft. 2.800 in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.
No. of Layers or Modules: ____ Total Volume: 75.000 cu.ft. Total Weight: ____ lbs.

Space Velocity

Gas flow rate/Catalyst Volume: 210000 hr^{-1}

Manufacturer's Guarantee

VOC 2.000 ppm VOC ____ gm/bhp-hr CO 6.000 ppm CO ____ gm/bhp-hr
$\%O_2$ 15.00 $\%O_2$ 15.00

Catalyst Life

5 years (expected) (10,000 hr)

Cost

Capital Cost: $315000.00 Installation Cost: ____ Catalyst Replacement Cost: $250000.00

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AMMONIA CATALYST		
Ammonia Catalyst	Manufacturer:	Catalyst Active Material:
	Model Number:	Type:
	Size of Each Layer or Module: Length: ____ ft. ____ in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.	
	No. of Layers or Modules: ____ Total Volume: ____ cu.ft. Total Weight: ____ lbs.	
Space Velocity	Gas flow rate/Catalyst Volume: ____ hr^{-1}	
Manufacturer's Guarantee	NH3 ____ ppm % O_2 ____	
Catalyst Life	____ years (expected)	
Cost	Capital Cost: ____ Installation Cost: ____ Catalyst Replacement Cost: ____	

SECTION B: OPERATION INFORMATION	
Operating Temperature	Minimum Inlet Temperature: ____ °F (from cold start) Maximum Temperature: 840.00 °F
	Warm-up Time: ____ hr. 10 min. (maximum)
Operating Schedule	Normal: ____ hours/day ____ days/week ____ weeks/yr.
	Maximum: 12 hours/day ____ days/week ____ weeks/yr.

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South Coast Air Quality Management District

FORM 400-E-5

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SCR Catalyst

Manufacturer: Cormetech or Equal
Catalyst Active Material: vanadium/tungsten
Model Number: N/A
Type: Homogeneuous/extruded honeycomb
Size of Each Layer or Module: Length: 2 ft. 6.00 in. Width: 18 ft. ____ in. Height: 25 ft. ____ in.
No. of Layers or Modules: ____ Total Volume: ____ cu.ft. Total Weight: ____ lbs.

Reducing Agent

( ) Urea ( ) Anhydrous Ammonia (●) Aqueous Ammonia 19.00 % Injection Rate: 88.000 lb/hr.

Reducing Agent Storage

Diameter: 7 ft. ____ in. ~~Height:~~ Lg 42 ft. ____ in. Capacity: 10000.~~cf~~ gal Pressure Setting: 40.000 psia

Space Velocity

Gas Flow Rate/Catalyst Volume: 720000 hr^{-1}

Area Velocity

Gas Flow Rate/Wetted Catalyst Surface Area: 39600.00 ft/hr

Manufacturer's Guarantee

NOx: 2.300 ppm $\%O_2$: 15.00 NOx: ____ gm/bhp-hr Ammonia Slip: 5.000 ppm @ 15.00 % O_2

Catalyst Life

5 years (expected) (10,000 hr)

Cost

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Oxidation Catalyst

Manufacturer: BASF/Engelhard
Catalyst Active Material: Platinum
Model Number: ____
Type: Stainless foil substrate
Size of Each Layer or Module: Length: ____ ft. 2.800 in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.
No. of Layers or Modules: ____ Total Volume: 75.000 cu.ft. Total Weight: ____ lbs.

Space Velocity

Gas flow rate/Catalyst Volume: 210000 hr^{-1}

Manufacturer's Guarantee

VOC 2.000 ppm VOC ____ gm/bhp-hr CO 6.000 ppm CO ____ gm/bhp-hr
% O_2 15.00 % O_2 15.00

Catalyst Life

5 years (expected) (10,000 hr)

Cost

Capital Cost: $315000.00 Installation Cost: ____ Catalyst Replacement Cost: $250000.00

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AMMONIA CATALYST		
Ammonia Catalyst	Manufacturer:	Catalyst Active Material:
	Model Number:	Type:
	Size of Each Layer or Module: Length: ____ ft. ____ in. Width: ____ ft. ____ in. Height: ____ ft. ____ in.	
	No. of Layers or Modules: ____ Total Volume: ____ cu.ft. Total Weight: ____ lbs.	
Space Velocity	Gas flow rate/Catalyst Volume: ____ hr^{-1}	
Manufacturer's Guarantee	NH3 ____ ppm % O_2 ____	
Catalyst Life	____ years (expected)	
Cost	Capital Cost: ____ Installation Cost: ____ Catalyst Replacement Cost: ____	

SECTION B: OPERATION INFORMATION	
Operating Temperature	Minimum Inlet Temperature: ____ °F (from cold start) Maximum Temperature: 840.00 °F
	Warm-up Time: ____ hr. 10 min. (maximum)
Operating Schedule	Normal: ____ hours/day ____ days/week ____ weeks/yr.
	Maximum: 12 hours/day ____ days/week ____ weeks/yr.

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Table 3c1Information Required on SCR Units

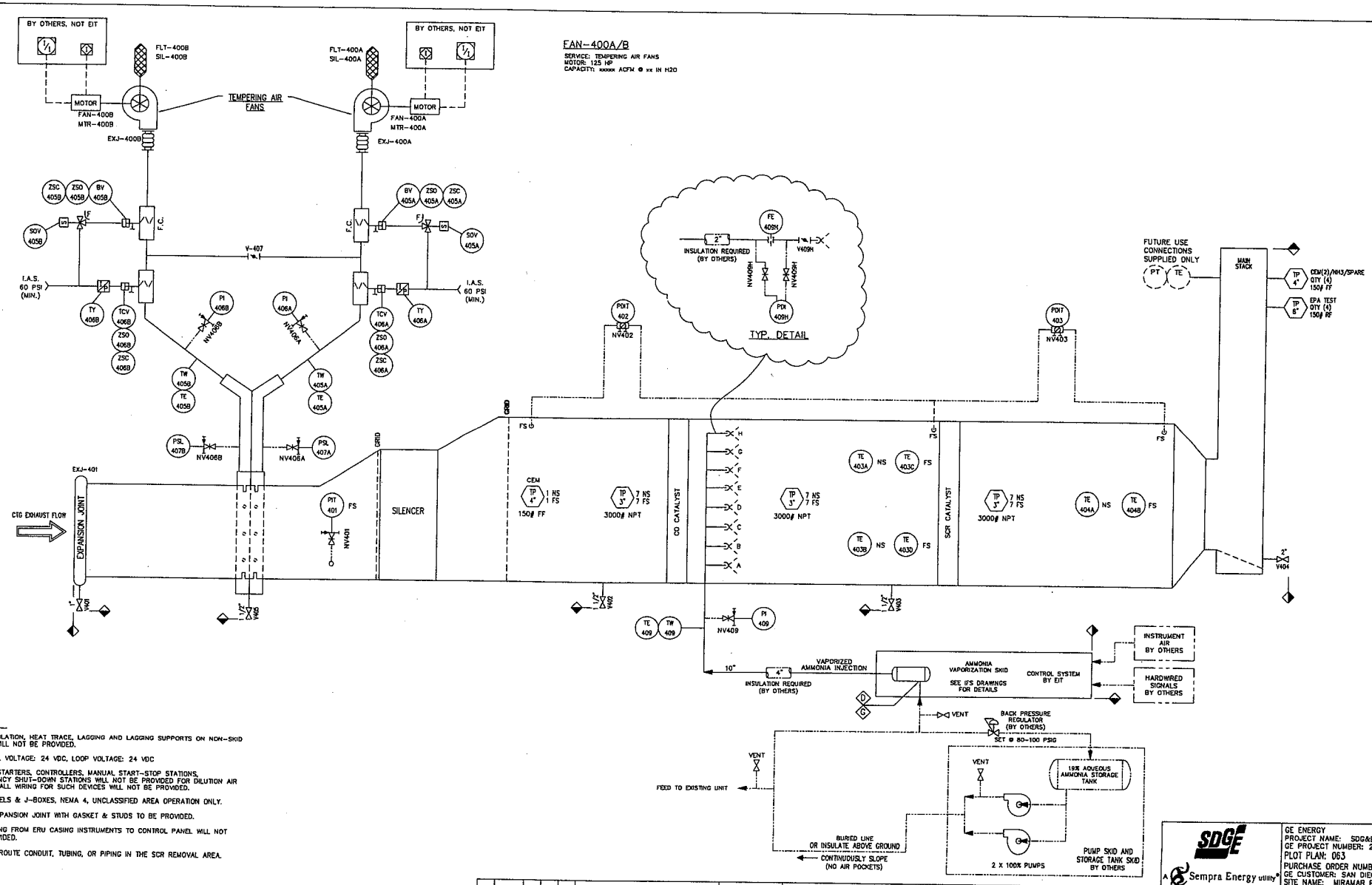
Data provided as typical values by an Emission Control Module Vendor

1. Catalyst manufacturer	Cormetech or Equal
2. Catalyst & Heat Recovery Steam Generator (HSRG) Drawings include catalyst dimensions (SCR)	NOx Catalyst dimensions are nominally 18 ft W x 25 ft H x 2.5 ft deep
3. Ammonia grid details	2 x 4 Matrix - Details are Proprietary
4. Ammonia injection rate	Nominally 110 lb/hr - for 19% Aqueous Ammonia
5. Ammonia emission rate	5 ppmvd corrected to 15% O2
6. Pressure drop across SCR unit including injection grid	6.0 inches w.c.
7. Controls for ammonia injection	feedforward from fuel / feedback from CEMS
8. Type of catalyst	Homogeneous
9. Catalyst volume	Proprietary
10. Space velocity (gas flow rate/catalyst volume)	200 1/sec
11. Area velocity (gas flow rate/wetted catalyst surface area)	nominally 11 ft /sec
12. Manufacturer's guarantee for efficiency & catalyst life	5 years @ 10,000 hours per year
13. NOx concentration in and out of SCR unit	25 in / 2.3 out ppmvd @ 15% O2
14. SCR unit total cost	$3,000,000.00
15. Catalyst replacement cost	$400,000.00
16. Percent decrease in prime mover output	nominally 500 kW for an LM 6000PC @ 12 inches w.c. (nominally 300 kW for NOx Catalyst delta P alone)
17. Percent increase in HRSG output	N/A
18. SO2 oxidation rate/SO3 emissions	ranges from 40% to 75% based on gas flow & temp
19. Stack temperature after HRSG	840°F max
20. HRSG and turbine modifications	N/A
21. Temperature at which ammonia injection will begin	540°F at backface of NOx Catalyst

Table 3c2 Information Required on CO Catalysts

Data provided as typical values by an Emission Control Module Vendor

1. Type of Catalyst	stainless foil substrate with alumina washcoat that is impregnated with platinum group metals
2. Catalyst Volume	75 ft3
3. Space Velocity	210,000 1/hr
4. Linear Velocity	11.7 ft/sec
5. Pressure Drop Across Catalyst	1.5 inches w.c.
6. Manufacturer's Guarantee for Efficiency and Catalyst Life	5 years @ 10,000 hours per year
7. Operating temperature Range of Catalyst	500° to 1200°F
8. Effect of Temperature on Efficiency	Efficiency decreases outside of operating range specified above
9. CO Conversion Efficiency	75% or greater - depending on operating case
10. Unsaturated Hydrocarbon Conversion Efficiency	35%
11. Saturated (Non-Methane) Hydrocarbon Conversion Efficiency	0%
12. Methane Conversion Efficiency	0%
13. CO Catalyst Total Cost	Catalyst + Frame = $315,000.00
14. Catalyst Replacement Cost	$250,000.00
15. Catalyst and Heat Recovery Steam Generator (HRSG) Drawings Including Catalyst Dimensions	NOX Catalyst dimensions are nominally 18 ft W x 25 ft H x 2.5 ft deep
16. Catalyst Manufacturer	BASF / Engelhard
17. CO and HC Concentration In and Out of Co Catalyst	CO - 53 In / 6.0 Out ppmvd @ 15% O2 VOC (NMNEHC) - 3 In / 2 Out ppmd @ 15% O2
18. Catalyst Depth	nominally 2.8 inches
19. Catalyst Cell Density (Cells Per Square Inch)	145



NOTES:

1. ALL INSULATION, HEAT TRACE, LAGGING AND LAGGING SUPPORTS ON NON-SKID ITEMS WILL NOT BE PROVIDED.
2. CONTROL VOLTAGE: 24 VDC, LOOP VOLTAGE: 24 VDC
3. MOTOR STARTERS, CONTROLLERS, MANUAL START-STOP STATIONS, EMERGENCY SHUT-DOWN STATIONS WILL NOT BE PROVIDED FOR DILUTION AIR FANS. ALL WIRING FOR SUCH DEVICES WILL NOT BE PROVIDED.
4. ALL PANELS & J-BOXES, NEMA 4, UNCLASSIFIED AREA OPERATION ONLY.
5. INLET EXPANSION JOINT WITH GASKET & STUDS TO BE PROVIDED.
6. ALL WIRING FROM ERU CASING INSTRUMENTS TO CONTROL PANEL WILL NOT BE PROVIDED.
7. DO NOT ROUTE CONDUIT, TUBING, OR PIPING IN THE SCR REMOVAL AREA.

NO	DATE	BY	CHK'D	APP'D	DESCRIPTION

REVISIONS

DWG NO	DESCRIPTION
0020	P&ID

REFERENCE DRAWINGS

Express Integrated Technologies

DRAWN	JPS
DATE	4.27.07
SCALE	NONE
CHK'D	BZP
APP'D	BCA

SDGE A Sempra Energy utility

GE ENERGY
PROJECT NAME: SDG&E MEF II
GE PROJECT NUMBER: 20211
PLOT PLAN: 063
PURCHASE ORDER NUMBER: 411505695
GE CUSTOMER: SAN DIEGO GAS AND ELECTRIC
SITE NAME: MIRAMAR ENERGY FACILITY II

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EMISSIONS REDUCTION UNIT – GAS SIDE P&ID

JOB NO	PC	DRAWING NO	REV
07025	2	0021	A

South Coast Air Quality Management District

FORM 400-E-13a
Emergency Internal Combustion Engine

Mail Application To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765
Tel: (909) 396-3385
www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A

Permit to be issued to (Business name of operator to appear on permit): Canyon Power Plant

Street location where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): 3071 East Miraloma Ave., Anaheim, California 92806 ◉ Fixed ○ Various

Section A: EQUIPMENT INFORMATION

Internal Combustion Engine

Manufacturer: Caterpillar

Model No.: CAT C27 ATAAC 750ekW

Serial No.: MJE00001 or equivalent

Date of Manufacture: _____ (mm/dd/yyyy)

Date of Installation: _____ (mm/dd/yyyy)

For an ICE manufactured after 7/18/94, please provide manufacturer's specification and guarantee.

Manufacturer Maximum Rating: 1141 BHP @ 1800 RPM

ICE Emergency Function: ◉ Electrical Generator ○ Fire Pump ○ Flood Control ○ Pump Driver ○ Compressor

Type: ◉ Fixed site ○ Portable

How Is This Type of Equipment Used? (Check All That Apply) ☒ Within Facility ☐ Off- Site ☐ Rental

Fuel: ◉ Diesel Oil No. 2 ○ LPG ○ Natural Gas ○ Other: _____

Cycle Type: ○ Two Cycle ◉ Four Cycle

Combustion Type: ◉ Lean Burn ○ Rich Burn

No. of Cylinders: ○ Four ○ Six ○ Eight ○ Ten ○ Twelve ○ Sixteen ◉ Other _____

Aspiration Type: ○ Turbocharged ◉ Turbocharged/Aftercooled ○ Naturally Aspirated ☐ Timing Retarded ≥ 4° (relative to standard timing)

Air Pollution Control (if applicable):
○ Selective Catalytic Reduction (SCR)* ◉ No Controls
○ Selective Non-catalytic Reduction (SNCR)* ○ Air Fuel Ratio Controller
○ Non-selective Catalytic Reduction (NSCR) ○ Other (specify) _____

* Separate application is required.

Manufacturer: _____ Model No.: _____

If already permitted, indicate Permit No. _____ Device No. _____

Section B: OPERATION INFORMATION

Fuel Consumption: Maximum Rated load: 53.500 gal./hr. OR _____ cu. ft./hr Average Load: 21.100 gal./hr. OR _____ cu. ft./hr.

Operating Schedule:
Normal: _____ hours/day _____ days/week _____ weeks/yr.
Maximum: _____ hours/day _____ days/week _____ weeks/yr.

Testing & Maintenance (Emergency ICE only): 12 hours/year

CONFIDENTIAL INFORMATION

Under the California Public Records Act, all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain items as confidential, please complete the following steps:
(a) Make a copy of any page containing confidential information blanked out. Label this page "public copy".
(b) Label the original page "confidential". Circle all confidential items on the page.
(c) Prepare a written justification for the confidentiality of each confidential item. Append this to the confidential copy.

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Serial Number: MJE00001 or equiv

Engine Data

(1) Select year of manufacture and rated horsepower.

(2) Provide actual emission figures from manufacturing specifications (if available) for the Rated Power selected. If engine fuel is LPG or Natural Gas, select Spark Ignition.

(3) The compression ignited diesel fuel internal combustion engine (ICE's) must meet the State of California or EPA's Non-Road Emission Standards as listed below (please provide manufacturer's specification and guarantee.

	Rated Power	Year	Figures	Carbon Monoxide (grams/bhp-hr)	Hydrocarbons (grams/bhp-hr)	Oxides of Nitrogen (grams/bhp-hr)	Particulate Matter (grams/bhp-hr)
Compressor Ignition							
	50 – 750 H.P.						
	○	50 - 100 H.P.	BACT	8.5	1.0	6.9	0.38
			Actual				
	○	100 - 175 H.P.	BACT	8.5	1.0	6.9	0.38
			Actual				
	○	175 - 750 H.P.	BACT	2.6	1.0	3.8	0.15
			Actual				
	751 and greater H.P						
	◉	2000 and	BACT	8.5	1.0	6.9	0.38
			Actual	2.600	0.740	4.060	0.150

		Figures	VOC	NOx	CO
Spark Ignition		For natural gas fired or LPG. The ICE must meet the requirements for BACT as listed below.			
	○	BACT	1.5 grams/bhp-hr	1.5 grams/bhp-hr	2.0 grams/bhp-hr
		Actual			

Section C: APPLICANT CERTIFICATION STATEMENT

I hereby certify that all information contained herein and information submitted with this application is true and correct.

SIGNATURE OF PREPARER:	TITLE OF PREPARER: Senior Air Quality Consultant	
CONTACT PERSON FOR INFORMATION ON THIS EQUIPMENT: Steve Sciortino, Integrated Resource Manager	CONTACT PERSON'S TELEPHONE NUMBER (714) 765-5177	DATE SIGNED: 2/11/08

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South Coast Air Quality Management District

FORM 400-E-13A

Emergency ICE Attachment A

Official Use Only

Engr. Ini.	
A/N	
Appln Date:	
Class	

Data Input

Applicant	Canyon Power Plant	ID	
Mailing Address	201 South Anaheim Blvd, Suite 802 Anaheim, CA 92805		
Equipment Location	3071 East Miraloma Ave., Anaheim, California 92806	Equipment Type	Fixed site

Equipment Description	
Manufacturer:	Caterpillar
Model No:	CAT C27 ATAAC 750ekW
Serial No.:	MJE00001 or equivalent
Manufacturer Date:	
Installation Date:	
Cylinders:	12
HP Rating:	1141.000

Aspiration Type	Turbocharged	Turbocharged/Aftercooled	Naturally Aspirated
	0	X	0
	Turbocharged/Aftercooled		

Driving (ICE Emergency Function)	Generator	Compressor	Pump
	X	0	0
	Electrical Generator		

Emission Factors, g/HP-hr	VOC	NOx	CO	PM
	0.740	4.060	2.600	0.150
	(Note: Emission factors taken from engine manufacturer specs included with application			

Retard Timing	Yes	No

Operating Schedule				
	Hrs/Day Max.		Hrs/Month Max	
	Hrs/Day Ave.	1	Wks/Yr	1
	Days/Wk.	1		
	Days/Mo	4		

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South Coast Air Quality Management District

FORM 400-E-13A

Emergency ICE Attachment A

Official Use Only

A/N:	

Given

HP	1141.000					
G to lb conversion factor	0.0002046					
Operating Schedule	Hrs/Day Max.					
	Hrs/Day Avg.	1				
	Days/Wk.	1				
	Days.Mo.	4				
	Hrs/Month Max.					
	Wks/Yr.	1				
Emission Factors	VOC	NOx	SOx	CO	PM	PM10
	0.740	4.060	0.160	2.600	0.150	0.144
Retard Timing	Yes	No				
Emission Correction Factor	VOC	NOx	SOx	CO	PM	PM10
	1.000		1.000		1.000	1.000

Computations

	Emission factor, g/HP-hr	VOC	NOx	SOx	CO	PM	PM10
		0.740		0.160		0.150	0.144
	lb/hr.	1.861		0.402		0.377	0.362
	lb/day Max.						
	lb/day Avg.						
	lb/yr.						

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT *ENGINEERING AND COMPLIANCE* APPLICATION PROCESSING AND CALCULATIONS	PAGE	1 of 3	For Official Use Only
	CHECKED BY:		
	A/N:		
	PROCESSED BY:		
	DATE:		

Applicant's Name: Canyon Power Plant ID:

Equipment Location: 3071 East Miraloma Ave., Anaheim, California 92806

Equipment Description:

EQUIPMENT:	INTERNAL COMBUSTION ENGINE
MANUFACTURER:	Caterpillar
MODEL NO.:	CAT C27 ATAAC 750ekW
FUELED WITH:	Diesel Oil No. 2
DRIVING:	Engine Generator
SERIAL NO.:	MJE00001 or equivalent
CYLINDERS:	12
ASPIRATION:	Turbocharged/Aftercooled
HP RATING:	1141.000

Permit Description:

INTERNAL COMBUSTION ENGINE, Fixed site, Caterpillar, MODEL NO. CAT C27 ATAAC 750ekW, SERIAL NO. MJE00001 or equivalent, Diesel Oil No. 2 FUELED, Four CYCLES, 12 CYLINDERS, Turbocharged/Aftercooled, RATED AT 1141 B.H.P., DRIVING AN EMERGENCY Engine Generator.

CALCULATIONS
See ATTACHMENT A

EVALUATION:

Rule 212: (Not Applicable if more than 1,000 feet from a school.)

This is a not significant project as defined by this rule. Hence, public notice is not required.

Rule 401:

Based on experience with similar equipment, this engine is expected to comply with the visible emission limits.

Rule 402:

Based on experience with similar equipment, nuisance complaints are not expected.

Rule 404:

Based on experience with similar equipment, compliance with this rule is expected.

Rule 431.2:

Diesel fuel supplied to this equipment must contain 0.05% or less sulfur by weight. Compliance is expected.

Rule 1110.2:

Exempt per Rule 1110.2 (i)(2) and (i)(10).

REGULATION XIII:

Exempt per Rule 1301 (b)(3).

REGULATION XIV:

Exempt per Rule 1401 (g)(1)(F).

CARB-EPA Emission Limits for Nonroad Compression-Ignited Engines:

For engine manufacture date on or after _____ and engine rating between 751 and greater H.P. _____, the following emission limits apply:

	NOx	ROG	CO	PM
Required	6.9	1	8.5	0.4
Actual	4.060	0.740	2.600	0.150
Compliance	Yes	Yes	Yes	Yes

CONDITIONS

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.

3. SULFUR CONTENT OF DIESEL FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 0.05% BY WEIGHT.

4. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR.

5. THIS ENGINE SHALL NOT OPERATE MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

6. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.

7. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION AND THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

8. IN ADDITION TO MAINTENANCE AND TESTING OF THIS ENGINE, THIS ENGINE SHALL ONLY BE USED FOR EITHER PROVIDING ELECTRICAL POWER TO PORTABLE OPERATIONS OR EMERGENCY POWER TO STATIONARY SOURCES. PORTABLE OPERATIONS ARE THOSE WHERE IT CAN BE DEMONSTRATED THAT BECAUSE OF THE NATURE OF THE OPERATION. IT IS NECESSARY TO PERIODICALLY MOVE THE EQUIPMENT FROM ONE LOCATION TO ANOTHER. EMERGENCIES AT STATIONARY SOURCES ARE THOSE THAT RESULT IN AN INTERRUPTION OF SERVICE OF THE PRIMARY POWER SUPPLY OR DURING STAGE II OR III ELECTRICAL EMERGENCIES DECLARED BY THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR.

9. UPON THE FIFTH DAY AFTER PLACEMENT OF THIS EQUIPMENT INTO OPERATION AT A NEW SITE, THE DISTRICT SHALL BE NOTIFIED VIA TELEPHONE AT 1-877-810-6995 OF THE EXACT NATURE OF THE PROJECT AS FOLLOWS:

   A. THE PERMIT NUMBER OF THE PORTABLE EQUIPMENT.

   B. THE NAME AND TELEPHONE NUMBER OF A CONTACT PERSON.

   C. THE LOCATION WHERE THE PORTABLE EQUIPMENT WILL BE OPERATED.

   D. THE ESTIMATED TIME THE PORTABLE EQUIPMENT WILL BE LOCATED AT THE SITE.

   E. DESCRIPTION OF THE PROJECT.

   F. IF LESS THAN 1/4 MILE, THE DISTANCE TO THE NEAREST SENSITIVE RECEPTOR. SENSITIVE RECEPTORS ARE DEFINED AS LONG-TERM HEALTH CARE FACILITIES, REHABILITATION CENTERS, CONVALESCENT CENTERS, RETIREMENT HOMES, RESIDENCES, SCHOOLS, PLAYGROUNDS, CHILD CARE CENTERS, AND ATHLETIC FACILITIES.

10. THIS ENGINE AND ITS REPLACEMENT UNIT INTENDED TO PERFORM THE SAME OR SIMILAR FUNCTION, SHALL NOT RESIDE AT ANY ONE LOCATION FOR MORE THAN 12 CONSECUTIVE MONTHS. THE PERIOD DURING WHICH THE ENGINE AND ITS REPLACEMENT IS MAINTAINED AT A STORAGE FACILITY SHALL BE EXCLUDED FROM RESIDENCY TIME DETERMINATION.

11. THIS ENGINE SHALL NOT BE REMOVED FROM ONE LOCATION FOR A PERIOD OF TIME, AND THEN IT OR ITS EQUIVALENT ENGINE RETURNED TO THE SAME LOCATION, IN ORDER TO CIRCUMVENT THE PORTABLE ENGINE RESIDENCE TIME REQUIREMENTS.

South Coast Air Quality Management District

FORM 400-E-13A

Emergency ICE Attachment A

Official Use Only

A/N	

Given

HP	1141.000					
Btu/hp-hr conversion factor	0.0022046					
Operating Schedule	Hrs/Day Max.					
	Hrs/Day Avg.	1				
	Days/Wk.	1				
	Days.Mo.	4				
	Hrs/Month Max.					
	Wks/Yr.	1				
Emission Factors	VOC	NOx	SOx	CO	PM	PM10
	0.740	4.060	0.160	2.600	0.150	0.144
Backfitting	Yes	No				
Emission Correction Factor	VOC	NOx	SOx	CO	PM	PM10
	1.000		1.000		1.000	1.000

Computations

Emission factor, g/HP-hr	VOC	NOx	SOx	CO	PM	PM10
	0.740		0.160		0.150	0.144
lb/hr.	1.861		0.402		0.377	0.362
lb/day Max.						
lb/day Avg.						
lb/yr.						

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGE	1 of 3	For Official Use Only
ENGINEERING AND COMPLIANCE	CHECKED BY:		
	A/N:		
APPLICATION PROCESSING AND CALCULATIONS	PROCESSED BY:		
	DATE:		

Applicant's Name: Canyon Power Plant ID:

Equipment Location: 3071 East Miraloma Ave., Anaheim, California 92806

Equipment Description:

EQUIPMENT:	INTERNAL COMBUSTION ENGINE
MANUFACTURER:	Caterpillar
MODEL NO.:	CAT C27 ATAAC 750ekW
FUELED WITH:	Diesel Oil No. 2
DRIVING:	Engine Generator
SERIAL NO.:	MJE00001 or equivalent
CYLINDERS:	12
ASPIRATION:	Turbocharged/Aftercooled
HP RATING:	1141.000

Permit Description:

INTERNAL COMBUSTION ENGINE, Fixed site, _____, MODEL NO. _____, SERIAL NO. _____, Diesel Oil No. 2 FUELED, Four CYCLES, _____ CYLINDERS, Turbocharged/Aftercooled, RATED AT 1141 B.H.P., DRIVING AN EMERGENCY Engine Generator.

CALCULATIONS
See ATTACHMENT A

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Actual	4.060	0.740	2.600	0.150
Compliance	Yes	Yes	Yes	Yes

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Terra Industries Inc.
Terra Centre – 600 Fourth Street
Sioux City, Iowa 51101

Material Safety Data Sheet

Aqua Ammonia (19% NH_3)

MSDS Number 2050A (Revised February 16, 2007)

8 Pages

1. CHEMICAL PRODUCT and EMERGENCY TELEPHONE CONTACT

Product Name:	Aqua Ammonia (19% NH_3)
Chemical Family:	Inorganic Nitrogen Compound
Synonyms:	Ammonium Hydroxide; Ammonia Solution, Aqueous Solution; Ammonia Monohydrate; Ammonia Water; Ammonia Liquor
Formula:	NH_4OH in H_2O
Product Use:	Fertilizers; Pharmaceuticals; Lubricants; Household Cleaners; SCR NO_x Control

EMERGENCY TELEPHONE NUMBERS

CHEMTREC (U.S.):	800-424-9300
CANUTEC (Canada):	613-996-6666

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name/CAS Number	Concentration	Exposure Limits (NH_3)
Ammonium Hydroxide / 1336-21-6	39.1%	25 ppm TWA
Water / 7732-18-5	60.9%	35 ppm STEL
		50 ppm PEL
Contains 19% ammonia as NH_3		300 ppm IDLH

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Corrosive liquid! May be fatal if swallowed. Vapor is toxic and irritating to eyes, nose, throat and skin. Liquid will burn skin and eyes. Vapor is flammable under limited conditions. Use water to control fire and disperse vapors.

NFPA Hazard Classification (for ammonia vapor)	Health Hazard (Blue)	3
	Flammability (Red)	1
	Reactivity (Yellow)	0

POTENTIAL HEALTH EFFECTS

Primary Routes of Entry: Inhalation, skin contact/absorption and eye contact.

General Acute Exposure: Aqua ammonia may cause caustic injury. The severity of injury depends upon the concentration and duration of exposure. The extent of injury ranges from mild skin irritation or cough to severe burns or laryngeal edema and life-threatening pulmonary edema.

Inhalation:
Corrosive! Ammonia vapor is toxic and a severe irritant of the respiratory tract. It may cause a running nose, coughing, chest pain, cessation of respiration and death. It may cause severe breathing difficulties, which may be delayed in onset. ADDITIONAL MEDICAL INFORMATION: Bronchospasm, laryngitis, tracheitis, wheezing, dyspnea, and laryngeal stridor may be noted. Mucosal burns to the tracheobronchial tree, Pulmonary Edema, and associated hypoxemia frequently occur following exposure to concentrated ammonia.

Skin Contact:
Corrosive! Aqua ammonia is a severe irritant of the skin. Skin exposure to high concentrations may cause pain and deep and severe burns to the skin. ADDITIONAL MEDICAL INFORMATION: Corrosive effects on the skin and other tissues may be delayed, and damage may occur without the sensation or onset of pain. Strict adherence to first aid measures following exposure is essential.

Eye Contact:
Corrosive! Vapors cause irritation. Effects as a result of direct contact with aqua ammonia may range from irritation and lacrimation to severe injury and blindness. ADDITIONAL MEDICAL INFORMATION: Eye exposure may result in conjunctivitis, lacrimation and/or corneal irritation. Total corneal epithelial loss may occur.

Ingestion:
Toxic! May cause corrosion to the esophagus and stomach with perforation and peritonitis. Symptoms may include pain in the mouth, chest, and abdomen, with coughing, vomiting and collapse. Ingestion of as little as 3-4 ml of ammonium hydroxide may be fatal.

Note to the Physician: Pneumonitis should be anticipated after severe inhalation or ingestion. If severe exposure is suspected, observe for 48-72 hours for delayed pulmonary edema.

Carcinogenicity:

NTP:	Not Listed
IARC:	Not Listed
OSHA:	Not Regulated

Medical Conditions Aggravated by Exposure: Chronic respiratory or skin disease.

4. FIRST AID MEASURES

First Aid for Eyes: Immediately flush eyes with copious amounts of tepid water for at least 15 minutes. If irritation, pain, swelling, excessive tearing, or light sensitivity persists, the patient should be seen in a health care facility and referral to an ophthalmologist considered.

First Aid for Skin: Immediately flush exposed area with copious amounts of tepid water for at least 15 minutes followed by washing area thoroughly with soap and water. The patient should be seen in a health care facility if irritation or pain persists.

First Aid for Inhalation: Move patient to fresh air. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for respiratory tract irritation, bronchitis, or pneumonitis. If trained to do so administer supplemental oxygen with assisted ventilation as required. Administer artificial respiration if patient is not breathing.

First Aid for Ingestion: Call a physician. If conscious, give the patient 4 to 8 ounces of milk or water to drink immediately. Do not induce vomiting.

5. FIRE FIGHTING MEASURES

Flash Point:	Not Applicable
Lower Flammable Limit:	15.5 % Volume in Air (for NH3)
Upper Flammable Limit:	27.0 % Volume in Air (for NH3)
Autoignition Temperature	1204° F (651° C) (for NH3)

Extinguishing Media: Stopping the flow of gas rather than extinguishing the fire is usually the best procedure to follow when escaping gas is burning.

Small Fire: ..... Dry chemical or CO_2
Large Fire: ..... Water spray, fog or foam

Special Fire Fighting Procedures: Use water to keep fire exposed containers cool. Use water fog or foam to reduce vapor concentrations if necessary. Full protective equipment including a self-contained breathing apparatus should be worn in a fire involving the material.

6. ACCIDENTAL RELEASE MEASURES

Spill or Leak Measures: Stop leak if you can do so without risk. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Evaluate the affected area to determine whether to evacuate or shelter-in-place by taping windows and doors, shutting off outside air intake (attic fans, etc.), and placing a wet towel or cloth over the face (if needed). Self-contained breathing apparatus (SCBA) and structural firefighter's protective clothing used in conjunction with water spray will provide limited protection in outdoor releases for short-term exposure. Fully encapsulating, vapor-protective clothing should be worn for spills and leaks with no fire. Use water spray to control vapors.

CAUTION:
Runoff from vapor control or dilution of spilled product may cause pollution.

Determining Spill Size: Generally, a small spill is one that involves a single, small Package (i.e. up to a 55 gallon drum), small cylinder, or a small (non-continuing) leak from a large container. **Small Spill:**

a. Flush area with flooding amounts of water.
b. First isolate 100 feet in all directions and then protect persons downwind 0.1 miles during daylight and 0.1 miles at night (recommended for ammonia vapor).

Large Spill:

a. Dike far ahead of liquid spill for later disposal.
b. Follow local emergency protocol for handling.
c. First isolate 200 feet in all directions, than protect persons downwind 0.4 miles during daylight and 1.4 miles at night (recommended for ammonia vapor).

7. HANDLING AND STORAGE

Handling: Avoid contact with either liquid or vapors. Direct contact with mercury must be avoided. Use proper PPE when working with or around aqua ammonia (See section 8).

Storage: Ambient temperature. Store in dry, well-ventilated area away from incompatible materials. Protect against physical damage. Keep out of direct sunlight and away from heat sources.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection Requirements: (for NH3)

<25 ppm:	No protection required.
25 to 35 ppm:	Protection required if the daily TWA is exceeded.
35 to 50 ppm:	Protection required if exposed for more than 15 minutes.
50 to 250 ppm:	Minimum of an air-purifying respirator equipped with ammonia canister(s) or cartridge(s).
250 to 300 ppm:	Minimum of a full-face air-purifying respirator equipped with ammonia canister(s) or cartridge(s).
>300 ppm:	A fresh air supply system must be used (i.e. SCBA)

Skin Protection Requirements: Nitrile rubber, neoprene, or PVC gloves and protective clothing should be used.

Eye Protection Requirements: Use chemical (indirectly vented) goggles when there is a potential for eye contact. A full-face shield is recommended in addition to goggles for added protection.

Other Protective Equipment: Safety shower and eyewash fountain should be provided in the aqua ammonia handling area. When transporting, provide at least 5 gallons of readily accessible, clean water and personal protective equipment.

Engineering Controls: Maintain adequate ventilation to keep ammonia concentrations below applicable standards.

NOTE: See Section 2 for regulatory exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: ..... Liquid
Color: ..... Colorless
Odor: ..... Strong pungent penetrating odor, ammonia.
pH: ..... 12.0 (neat)
Specific Gravity: ..... 0.9277 (@ 20° C)
Vapor Density: ..... 0.60 (@ 15.5° C) for NH3
Vapor Pressure: ..... 236 mm Hg (@ 15.5° C)
Molecular Weight: 35.05
Relative Density: ..... 0.9261 kg/l (@ 20° C)

10. REACTIVITY

Stability: ..... This is a stable material.
Hazardous Polymerization: ..... Will not occur.

Decomposition: Will liberate ammonia if heated. Hydrogen is released on heating ammonia above 850° F (454° C). The decomposition temperature may be lowered to 575° F (300° C) by contact with certain metals such as nickel. At 1290° F (690° C) or in the presence of electric spark ammonia decomposes into nitrogen and hydrogen gases, which may form a flammable mixture in the air.

Conditions to avoid: Excessive heat.

Materials to avoid: Contact with calcium hypochlorite, bleaches, gold, mercury, and silver may form highly explosive products. Contact with iodine, bromine or chlorine may cause violent spattering.

11. TOXICOLOGICAL INFORMATION

Toxicity

Acute Oral Toxicity
LD_{50} Rat:.....350 mg/kg bw
LD_{50} Cat:.....750 mg/kg bw
Acute Toxicity, Other Routes
LD_{LO} Rabbit:.....10 mg/kg bw
Skin Irritation / Corrosion
Rabbit:.....Corrosive at 20% but not 10%
Eye Irritation / Corrosion
Rabbit:.....Irritating
Genetic Toxicity *in vitro*
Gene Mutation *E. Coli*:.....Negative
Genetic Toxicity *in vivo*
Gene Mutation *Drosophila melanogaster*:....No evidence for mutagenicity

Ecotoxicity

Acute Toxicity to Fish
LC_{50} *Cyprinus carpio*:..... 1.34 – 1.70 mg un-ionized NH_3/L (48 hr semi-static)
Acute Toxicity to Aquatic Invertebrates
LC_{50} *Daphnia magna*: .....32 mg NH_4OH/L (48 hr static)
Chronic Toxicity to Fish
LC_{50} *Ictalurus punctatus*: .....37.5 ppm (8 days)

Source: TFI Product Testing Program April 2003

12. ECOLOGICAL INFORMATION

a. Ammonia is harmful to aquatic life in very low concentrations and may be hazardous if it enters water intakes.
b. Local health and wildlife authorities, as well as operators of water intakes in the vicinity, should be notified of water releases.
c. Waterfowl toxicity may occur at elevated concentrations.
d. Ammonia does not concentrate in the food chain.
e. The conversion of ammonia to nitrites/nitrates by bacteria in aquatic systems can reduce the concentration of dissolved oxygen (referred to as nitrogenous oxygen demand).

Effect on water treatment process: Chlorination will produce chloramines, which are more readily detected by taste and odor.

Note: See Ecotoxicity information in section 11.

13. DISPOSAL CONSIDERATIONS

Reclaim as fertilizer if possible. Otherwise, waste must be disposed of in accordance with federal, state, and local environmental control regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT and Canadian TDG Act

Shipping Name:..... Ammonia solutions, (*more than 10% but not more than 35 % ammonia*)
Hazard Class/Division: 8
Label Code: ..... 8 Corrosive Liquid
Product Identification Number (PIN): UN2672
Packing Group..... III
OSHA Label Required:..... Yes
RQ (Reportable Quantity):..... 1000 pounds (as NH_4OH)
TDG Reporting Quantity: ..... 5 kg or 5 liters

15. REGULATORY INFORMATION

Controlled Products Regulations Classification:
D-1B: Toxic (Acute Lethality); E: Corrosive

OSHA: This product is considered a hazardous material under criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200 (Toxic; Corrosive).

CAA Chemical Accident Prevention:
Ammonia solution with a concentration less than 20% is not subject to the provisions of 40 CFR Part 68.

CERCLA Hazardous Substances List:

a. RQ (Reportable Quantity): 1000 pounds (as NH_4OH)
b. Regulation: "Designation, Reportable Quantities, Notification" - 40 CFR Part 302

SARA TITLE III:
Ammonia (including ammonia solution) is subject to the reporting requirements of Section 313 "Specific Toxic Chemical Listings" 40 CFR Part 372. Terra is required by 40 CFR Part 372.45 to notify certain customers as to which of its mixture or trade name products contain those chemicals. The purpose of that notification is to ensure that facilities that may be subject to the reporting requirements of Section 313 and that use products of unknown formulation will have knowledge that they are receiving products that contain chemicals subject to those reporting requirements.

16. OTHER INFORMATION

May 5, 2003:	This MSDS was written to comply with ANSI Standard Z400.1-1993.
July 1, 2003:	Added toxicity information from the TFI Product Testing Program April 2003.
October 4, 2006:	Added NFPA hazard classification information and updated isolation / protective action distances per ERG 2004.
February 16, 2007:	Created separate MSDS for 19% Aqua Ammonia.

The information and recommendations herein are taken from data contained in independent, industry-recognized references including but not limited to NIOSH, OSHA, ANSI, NFPA, DOT ERG, the TFI Product Testing Program, Global Engineering Documents, MEDITEXT, HAZARDTEXT, SARATEXT, CHRIS, OHM/TADS, and IRIS. Terra Industries Inc. makes no guarantee, warranty or other representation concerning this substance, since conditions of its use are beyond the control of the company. Terra Industries Inc. disclaims any liability for loss or damage incurred in connection with the use of this substance.

System Entire : Ammonium Hydroxide (Aqua Ammonia) Cargo Transport Deliveries

Task Overview

Number	A-17
Location	LaMirada Service Center (LaMirada, CA)
Date Issued	January 8, 1991
Revised	11/07/2007 09:05 am
Operators	One (1) operator is required. An operator must be present at the location during the entire delivery process.
Protective Apparel	Chemical splash goggles, face shield, gauntlet type rubber gloves, safety shoes, splash apron. . For emergency purposes, a safety eyewash shower and a full face gas mask with a 30 minute canister should be close in case of spill or splash back.
Required Training	Ammonia Awareness Training, Emergency First Aid for Anhydrous Ammonia, Review MSDS 4002--Aqueous Ammonia. 24 Hour Hazwoper plus annual refresher
Reviewed/Certified By	**Jim Smith** *Operations Manager - West* **Airgas Specialty Products** *LaMirada Service Center (LaMirada CA)* (714) 521-9811
Date Reviewed	11/7/2007 10:05:05 AM

Task Instructions

For exposure to ammonia:

EYE CONTACT: Flush with large amounts of water for at least 15 minutes then immediately seek medical aid.

SKIN CONTACT: Immediately flush with large quantities of water for at least 15 minutes while removing clothing. If clothing has frozen to skin, thaw with water before removal. Seek immediate medical aid.

INHALATION: Remove from exposure. If breathing has stopped or is difficult, administer artificial respiration or oxygen as needed. Seek immediate medical aid.

INGESTION: Do not induce vomiting. Have victim drink large quantities of water if conscious. Immediately seek medical aid. Never give anything by mouth to an unconscious person .

Procedures: Pre-transfer.

1. Position truck so cargo tank is substantially level and in such a location that delivery hoses can be connected without straining them by stretching or excessive bending.

   NOTE: To read the liquid level gauge, if there is one, on the cargo tank accurately and unload completely, the cargo tank must be in a substantially horizontal position.

   Shut engine off.

   HAZARD: Avoid any strain which could weaken ammonia hose and cause rupture.

2. Set hand brake and place chock blocks at front and back of drive or trailer wheels on one side.

   NOTE: The driver is at no time permitted to sit in the cab of the truck.

   HAZARD: Prevent movement of vehicle during ammonia transfer.

12. Close liquid and vapor valves on storage tank. Slowly open drain valves on liquid and vapor lines to relieve any pressure. Drains should be directed onto a 5 gallon bucket or other suitable container. Slowly disconnect liquid and vapor hose connections between cargo tank and storage tank. Return hoses to rack or storage area.

Air Pressure Unloading

13. Remove the liquid delivery hose from its rack or storage area. Remove protective line caps and attach one end of the empty hose to the cargo tank liquid outlet connection and the other end to the receiving storage tank fill connection. (Be sure to install the bleeder connection in the liquid line) Remove the customer's air pressure hose from its rack or storage area. Remove protective line caps and attach one end of the air hose to the air supply connection and the other end to the connection accessing the top of the cargo tank. (Use Velcro straps to secure cam-lock levers on both ends of liquid and vapor hoses.)

    NOTE: All connections must be securely tightened. *Avoid sharp bends in hose.*

14. Slightly open the liquid delivery line valve on the receiving storage tank. Open fully if no leaks are evident. Open the liquid delivery line valve on the cargo tank. Slightly open air supply line valve. Open fully if no leaks are evident. Open the cargo tank connection valve accessing the top of the cargo tank.

15. Check the cargo tank and receiving storage tank level indicators frequently during unloading to avoid overfilling.

    NOTE: The operator must remain in constant attendance.

    HAZARD: Exceeding the maximum volume fill density of 95% creates a release hazard. The pressure relief valve is likely to open. *Exceeding the max. Cargo tank pressure of 30 psig will cause relief valve venting*

16. When the cargo tank is empty, close the liquid connection valve on the customer's storage tank. Then close the air supply line connection valves and disconnect the air hose.

If a connection to introduce air into the liquid fill line upstream of the storage tank liquid valve is available, attach the air line and open its valve to blowback any possible residual liquid in the fill hose into the cargo tank. Continue the blowback process for two minutes. Close cargo tank liquid valve and then the air supply valve. Carefully vent the hose prior to disconnecting.

Technical Area: Air Quality

Data Request AIR-2: The emission rates of criteria pollutants and greenhouse gases (CO_2, CH_4, N_2O, and SF_6) from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all on-site secondary sources.

Response: For the proposed 20-breaker, 69 kV GIS (gas insulated switchgear) layout at the CPP, the calculated quantity of SF6 is estimated by one manufacturer, Areva, at 1,400 kg or 3,080 lbs. This chemical will be contained only in the circuit breakers, i.e., not in the transformers. The variations among designs from other manufacturers could change this number slightly, but among designs for three phases in one enclosure, the gas quantity is not likely to vary by more than 10 percent. A reasonable assumption is that the leakage would be less than 0.5 percent per year of the total SF6 in the system, since this is the design specification used by the Institute of Electrical and Electronics Engineers (IEEE). Based on these assumptions, total SF6 emissions to the atmosphere would not be expected to exceed: 0.005 x 1,400 kg x 1.1 (variability factor) = 7.7 kg/yr = 0.0077 metric tons per year. In order to express this potential emission rate in terms of CO2 equivalents (CO2e), this value is multiplied by the global warming potential for SF6, which is 23,900. Thus the maximum contribution of SF6 emissions to the facility-wide emissions of CO2e would be about 184 tons per year.

Technical Area: Biological Resources

Data Request BIO-1: An aerial photo or wetlands delineation maps at a scale of (1:24.000) showing any potential jurisdictional and non-jurisdictional wetlands delineated out to 250 feet from the edge of disturbance if wetlands occur within 250 feet of the project site and/or related facilities that would be included with the U.S. Army Corps of Engineers (USACE) Section 404 Permit application. For projects proposed to be located within the coastal zone, also provide aerial photographs or maps as described above that identify wetlands as defined by the Coastal Act.

Response: Please see attached.

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J U R I S D I C T I O N A L
D E T E R M I N A T I O N R E P O R T

CANYON POWER PLANT
ORANGE COUNTY, CALIFORNIA

Prepared for

Southern California Public Power Authority

February 22, 2008

URS

2020 East First Street, Suite 400
Santa Ana, California 92705
Project No. 29870162

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LIST OF ABBREVIATED TERMS

CDFG	California Department of Fish and Game
CFG	California Fish and Game
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CWA	Clean Water Act
Study Area	The "Study Area" encompasses the natural gas pipeline's intersection below Carbon Creek; including 250-feet upstream and downstream
EPA	U.S. Environmental Protections Agency
FEMA	Federal Emergency Management Agency
JD	Jurisdictional Determination
JD Report	Jurisdictional Determination Report
NRCS	Natural Resources Conservation Service
kV	
NWP	Nationwide Permit
OHWM	Ordinary High Water Mark
Project	Canyon Power Plant Project includes a 5-acre power plant and laydown area, in addition to a water line, 69 kV communication line, and a natural gas pipeline.
Project Area	Area of permanent and temporary impacts
Rapanos Decision	John A. Rapanos v. United States; and June Carabell v. United States Army Corps of Engineers
RHA	Rivers and Harbor Act of 1899
RPW	Relatively Permanent Water
RWQCB	Regional Water Quality Control Board
TNW	Traditional Navigable Water
URS	URS Corporation
USACE	U.S. Army Corps of Engineers
WoUS	Waters of the United States
WGS	

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1.0 INTRODUCTION AND SUMMARY

This report summarizes URS Corporation's findings of: (1) U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), (2) Regional Water Quality Control Board (RWQCB) legal authority in accordance with Section 401 of the CWA, and (3) California Department of Fish and Game (CDFG) jurisdiction pursuant to Section 1600 (*et seq.*) of the California Fish and Game (CFG) Code for the proposed Canyon Power Plant Project (hereafter referred to as the Project). This report presents our best effort at estimating jurisdictional boundaries using the most up-to-date regulations, policies, and guidance from the USACE and CDFG. Nonetheless, only the USACE and CDFG can make a final determination of jurisdiction and the limits of jurisdictional boundaries. Suggested guidance for complying with state and federal laws concerning special aquatic resource areas[1] are presented below (Section 3.0) preceding the results of CWA and CDFG jurisdiction (Section 5.0).

The proposed Project is located in Orange County, in the City of Anaheim, California (Appendix A). The Project site is a 10-acre parcel to be utilized for the power plant and laydown area, in addition to three linear facilities: a water line; 69 kV communication line; and a natural gas line. Collectively, these components are herein referred to as the "Project." This analysis focuses primarily on the jack and bore installation of the natural gas pipeline under Carbon Creek; along Kraemer Street. For the purposes of this document, the "Study Area" encompasses the natural gas pipeline's intersection below Carbon Creek; including 250-feet upstream and downstream (Appendix B).

On September 9, and December 6, 2007 and on February 15, 2008 URS Corporation (URS) examined the Project study area to determine the limits of CWA jurisdiction pursuant to Section 404 and 401 and CDFG's legal authority in accordance with Section 1600 (*et seq.*) of the CFG Code. One named drainage, Carbon Creek, is located within the study area. Carbon Creek is an earthen, rock riprap, and gravel-lined surface water runoff conveyance feature flowing from east to west through the study area. Carbon Creek is a relatively permanent water (RPW) because it is assumed to have flowing water ≥ to 3 months out of the frost free growing season, includes an ordinary high water mark (OHWM), and is tributary to a traditional navigable water (TNW). As a result, it is likely subject to CWA jurisdiction. Additionally, Carbon Creek contains a defined bed and bank and has acquired the physical attributes of naturally occurring waterways. To that end, Carbon Creek has potential to support aquatic wildlife and vegetation; and is therefore subject to CFG Code Section 1600 (*et seq.*) compliance.

Nonetheless, because the proposed jack and bore drilling will pass under Carbon Creek, no temporary or permanent impacts to CWA or CDFG features are anticipated as a result of Project implementation. However, because the Project entails drilling under Carbon Creek, unexpected and temporary impacts have the potential, albeit unlikely, to occur within Carbon Creek as a result of drill fluid frac-out and other drilling activities.

[1] For the purposes of this document, special aquatic resource areas are defined as: resources that are subject to USACE jurisdiction pursuant to Section 404 of the CWA, RWQCB legal authority in accordance with Section 401 of the CWA, and CDFG jurisdiction pursuant to Section 1600 (et seq.) of the CFG Code.

1.1 USACE JURISDICTION PURSUANT TO SECTION 404 OF THE CWA

Carbon Creek is a relatively permanent water (RPW) because it is assumed to have flowing water ≥ to 3 months out of the frost free growing season. As such, Carbon Creek directs flows westward from the study area for approximately thirteen (13) miles from the intersection of Kraemer Street until it empties into Coyote Creek. Coyote Creek then directs water flow for roughly two (2) miles where it enters the San Gabriel River. The San Gabriel River then directs flows for approximately four (4) miles before reaching the Pacific Ocean. Accordingly, the Pacific Ocean is the first downstream Traditionally Navigable Water (TNW) from the study area (Appendix A). The collective distance from the study area to the Pacific Ocean is approximately XX river miles, all of which is contained within the Seal Beach Watershed. Carbon Creek contains an OHWM, is a RPW, and is contiguous with a TNW. Therefore, Carbon Creek is considered a Waters of the U.S.[2] (WoUS). See Section 5.1 for more details regarding this conclusion. Total CWA Section 404 jurisdiction located within the study area consists of XX acres, none of which includes wetlands; all of which is expected to be avoided by the Project.

1.2 RWQCB JURISDICTION PURSUANT TO SECTION 401 OF THE CWA

RWQCB jurisdiction pursuant to Section 401 of the CWA mirrors that of USACE jurisdiction. Because the Project is considered jurisdictional pursuant to CWA Section 404, Carbon Creek is also considered jurisdictional to CWA Section 401. Total RWQCB jurisdiction located within the study area consists of XX acres; all of which is expected to be avoided by the Project.

1.3 CDFG JURISDICTION PURSUANT TO SECTION 1600 (*ET SEQ.*) OF THE CFG CODE

Carbon Creek contains a defined bed and bank and has acquired the physical attributes of naturally occurring waterways. To that end, Carbon Creek has potential to support aquatic wildlife and vegetation; and is therefore subject to CFG Code Section 1600 (*et seq.*) compliance. See Section 5.3 for more details. Total CDFG jurisdiction located within the study area consists of XX acres; all of which is expected to be avoided by the Project.

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[2] The term WoUS is defined as follows: All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; All interstate waters including interstate wetlands; All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate commerce; The territorial seas; Wetlands adjacent to waters (other than waters that are themselves wetlands).

1.4 Recommended Permits

Because the Project may, albeit unlikely, adversely impact Carbon Creek as a result of drilling activities; CWA Section 404, 401 and Section 1600 (*et seq.*) of the CFG permitting is recommended.

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2.0 DESCRIPTION OF PROJECT AND LAND USE

2.1 PROJECT DESCRIPTION

The Project is located in Orange County, in the City of Anaheim, California (Appendix A). The Project includes a power plant and laydown area within a 10 acre parcel, in addition to three linear facilities: a water line, a 69 kV communication line, and a natural gas line. The Project is supplied with fuel through a new 12" steel natural gas line which will be installed along the intersection of East Orangethorpe Avenue and Kraemer Blvd. The natural gas line will cross under Carbon Creek approximately 200 feet south of east Orangethorpe Avenue. At this location, a jack and bore construction procedure will be utilized to install a steel casing and the gas line below and across the existing creek bed. The remaining length of the new natural gas supply line will be installed utilizing an open cut trench construction procedure.

2.2 PROJECT LOCATION AND SURROUNDING LAND USE

The Project is located within Orange County, California within the United States Geological Survey (USGS) 7.5-minute Orange Topographic Map Section 30, Range 9 West, Township 3 South (Appendix A). The study area is limited to XX acres at the intersection with Kraemer Boulevard and Carbon Creek. The study area sits at an approximate elevation of 251 feet above mean sea level. The WGS 84 coordinates for the study area are 33.86467 W and -117.86126 N.

In the vicinity of the study area (roughly a radius of 1 mile), the Project is surrounded primarily by industrial, high density commercial and residential housing developments and public infrastructure. No native undisturbed habitats occur in the Project vicinity. Typical development includes commercial warehouses, businesses, and apartment complexes associated infrastructure (e.g., roadways, flood control facilities, utilities, and other structures).

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3.0 REGULATORY OVERVIEW

3.1 REVIEW OF USACE JURISDICTION PURSUANT TO SECTION 404 OF THE CWA

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into WoUS.

3.1.1 Waters of the United States (WoUS)

The USACE has authority to permit the discharge of dredged or fill material in WoUS under Section 404 of the CWA, and permit work and the placement of structures in navigable WoUS under Sections 9 and 10 of the Rivers and Harbors Act of 1899 (RHA).

Ordinary High Water Mark

In the absence of wetlands (discussed below), the limits of USACE jurisdiction in non-tidal waters, including intermittent streams, extend to the OHWM (Lichvar et. al., 2006).

USACE-Defined Wetlands

Wetlands are defined in 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." The methodology set forth in the USACE 1987 Wetland Manual generally requires that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit minimal hydric characteristics. While the manual provides great detail in methods and allows for varying special conditions, a wetland should normally meet each of the following three criteria:

(1) More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands (Reed 1988);

(2) Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions). Such soils, known as “hydric soils,” have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season; and

(3) Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least 5 percent of the growing season during a normal rainfall year (Note: for most of low-lying southern California, 5 percent of the growing season is equivalent to 18 days).

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3.1.2 USACE Terminology

The following definitions are from the Rapanos Guidance Memorandum (USACE, 2007c p. 68-69):

> "Adjacent," as defined in USACE and EPA regulations, means "bordering, contiguous, or neighboring." Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands.'

A "tributary," as defined in the Rapanos guidance document, means a natural, man-altered, or man-made water body that carries flow directly or indirectly into traditional navigable waters. For purposes of determining "significant nexus" with a traditional navigable water, a "tributary" is the entire reach of the stream that is of the same order (i.e., from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream).

Wetlands that are not separated from the tributary by an upland feature, such as a berm or dike is "abutting."

In the context of CWA jurisdiction post-Rapanos, a water body is "relatively permanent" if its flow is year round or its flow is continuous at least "seasonally," (e.g., typically 3 months). Wetlands adjacent to a "relatively permanent" tributary are also jurisdictional if those wetlands directly abut such a tributary.

A water body is considered to have a "significant nexus" with a traditional navigable water if its flow characteristics and functions in combination with the ecologic and hydrologic functions performed by all wetlands adjacent to such a tributary, affect the chemical, physical, and biological integrity of a downstream traditional navigable water.

3.2 REVIEW OF RWQCB JURISDICTION PURSUANT TO SECTION 401 OF THE CWA

In accordance with Section 401 of the CWA, a typical applicant for a Section 404 permit to discharge dredged or fill material into WoUS must obtain certification from the RWQCB stating that the proposed fill would not violate water quality standards and criteria specified in the local Basin Plan. Consequently, RWQCB jurisdiction pursuant to Section 401 of the CWA mirrors that of USACE jurisdiction. As such, a request for certification is submitted to the RWQCB at the same time that an application is filed with the USACE. The RWQCB has 60 days to review the application and act on it. Applicants are required to submit an application fee (see *http://www.swrcb.ca.gov/cwa401/docs/dredgefillfeecalculator.xls*). Certifications for some NWPs have been pre-certified; yet, the majority of NWPs still require a certification (SWRCB, 2007).

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3.3 REVIEW OF CDFG JURISDICTION PURSUANT TO SECTION 1600 ET SEQ. OF THE CFG CODE

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the CFG Code, the CDFG regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife (see also *http://www.dfg.ca.gov/1600/*).

The California Code of Regulations (CCR), CDFG defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFG's definition of "lake" includes "natural lakes or man-made reservoirs." CDFG jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. CDFG Legal Advisor has prepared the following opinion (ESD-CDFG 1994):

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...
- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses should be treated by [CDFG] as natural waterways...
- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

Thus, CDFG jurisdictional limits often overlap with that of the USACE. Exceptions are CDFG's addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of adjacent riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status. The CDFG does not regulate isolated wetlands that do not contain a bed, bank, and channel.

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4.0 METHODS

This Section is organized into three parts: literature review (Section 4.1), regulatory-driven procedures and field data collection techniques (pursuant to CWA, and CDFG professional standards and publications; Section 4.2), and analysis parameters (CWA and CDFG protocols for assessing potential jurisdiction; Section 4.3).

4.1 LITERATURE REVIEW

Prior to conducting fieldwork, the following literature review supported the evaluation and analysis of all potential special aquatic resource areas within the study area. Resource databases, local resource management plans, aerial photos, topographic maps, and other readily available relevant commercial data were reviewed to determine watershed characteristics and the locations/types of special aquatic resource areas that may be present within study area (California IWMC, 2007; CARA, 1997; FEMA, 2007; USACE, 2003; Lichvar et al., 2003; Lichvar and Gustina, 2004; Hickman, 1993; UCANR, 2007; USDA-NRCS, 2006; USDA-NRCS, 2007; USDA-NRCS, 2007; USFWS, 2007; USGS, 2007; NWS, 2008; Strahler, 1957 and 1964; Reed, 1988 and 1996; SWRCB, 1998; CRWQCB, 1995; and AerialPhoto USA, 2006). In addition, the following equipment was assembled for field surveys: Binoculars, GPS, digital camera, shovel, and a Munsell Soil Color Chart (Munsell Color, 2000).

4.2 CWA SPECIFIC PROCEDURES AND DATA COLLECTION TECHNIQUES

On September 9, and December 6, 2007 and on February 15, 2008 URS examined the study area in order to determine the presence/absence and boundaries of potential special aquatic resource areas. Data related to USACE-defined WoUS, including wetlands, were recorded onto wetland data sheets (Appendix D). The vegetation, soils, and hydrology of suspected wetland habitats within the study area were evaluated using the methodology for routine determinations set forth in the USACE Wetland Delineation Manual and the Arid West Regional Supplement (EL, 1987; Reed 1988, 1996; and USACE 2001a, 2001b; 2006; USACE in prep.). Other applicable resources included: Lichvar and Wakely (2004); Lichvar et al. (2006); Tiner (1999); Fritz et al. (2006); and Brostoff et al. (2001). Hydrophytic vegetation (Reed 1988) was assessed per both the '87 Manual and Arid West Supplement (EL 1987, USACE 2006). In summary, potential special aquatic resource areas were evaluated using the methodology set forth in the USACE and Environmental Protection Agency's (EPA) guidance document publication on CWA Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States (USACE, 2007 a, b and USACE and EPA, 2007 and Environmental Law Institute, 2007).

Hydric soil assessments were predominately based upon the guidance provided in the Arid West Supplement Wetland Delineation publication (WTI, 2007), the Pocket Guide to Hydric Soil Field Indicators (WTI, 2006), the Field Indicators of Hydric Soils (USDA-NRCS, 2006), and field comparisons of hue, value, and chroma color as well as the presence/absence of any soil

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mottles[3] (Munsell Color, 2000). Supplemental soil information for the study area was also evaluated for the presence of hydric soils (Schoeneberger et al., 2002; USDA-NRCS, 2006; and USDA-NRCS, 2007).

Soils were evaluated by digging soil pits to a depth where the rock channel bottom was encountered (approximately 8"). Specific soil pit depths at each sample location are provided in Appendix D. A Munsell Color Book (Munsell Color, 2000) was used to determine the hue, value, and chroma of the soil and any mottles that were present. A moistened portion of soil was placed in the openings behind the color page of a Munsell Color Book to match the soil color to the nearest appropriate color chip to determine soil color. Soil data were recorded on wetland data sheets, which were numbered consecutively in the field and correspondingly numbered on the aerial photograph to mark soil pit locations. GPS data points were also taken at the location of the soil pit.

Plants were identified using Calflora (2008) and Hickman (1993). During the field determination, plants were also evaluated according to their probability to occur in wetlands versus non-wetlands, pursuant to the following categories shown in Table 1 below (EL, 1987; Reed 1988, 1996):

Table 1: Summary of Wetland Indicator Status

Category[4]	Probability
Obligate Wetland (OBL)	Almost always occur in wetlands (>99% probability).
Facultative Wetland (FACW)	Usually occur in wetlands (estimated probability 67 to 99%).
Facultative (FAC)	Equally likely to occur in wetlands/non-wetlands (estimated probability 34 to 66%).
Facultative Upland (FACU)	Usually occur in non-wetlands (estimated probability 67-99%).
Obligate Wetland (UPL)	Almost always occur in non-wetlands (estimated probability >99%).
No Indicator (NI)	Wetland indicator status not assigned. Species is assumed to be upland.

Hydrology was evaluated in areas suspected of being seasonally inundated and/or saturated to the surface during the growing season[5] provided the soil and vegetation parameters were met as defined in the Wetlands Delineation Manual (EL, 1987). Recent precipitation data was also used to evaluate the frequency and amount of rainfall events within the study area and on

[3] Mottles were considered spots or blotches of different colors or shades of color interspersed within the dominant color in a soil layer, usually resulting from the presence of periodic reducing soil conditions.

[4] A positive sign (+) or negative (-) sign is used with the facultative category to more specifically define the probability of wetland occurrence toward the higher or lower end of the category.

[5] For the purposes of this analysis, the growing season is defined as the period of the year when soil temperature at 20 inches below the surface is roughly 5 degrees Celsius [°C]

surrounding lands (NWS, 2008; USGS, 2007; CARA, 1997). Site-specific hydrologic observations of depth and width were noted by URS during 3 visits to the study area; September 9 and December 6, 2007 and on February 15, 2008. The hydrologic regime for the drainage was characterized based on the data gathered on both primary and secondary hydrologic indicators (e.g., inundation; soil saturated in upper 12 inches; water marks; drift lines; sediment deposits and drainage patterns; oxidized root channels in upper 12 inches; water stained leaves; and local hydric soil data), where applicable.

"Special Aquatic Resource Areas" were classified as perennial (i.e., continuous water flow for 3 months or longer), ephemeral (i.e., water flows only during and immediately following rain events), intermittent (i.e., water flows for longer than ephemeral drainages and less than perennial drainages due to water at or near the ground surface), and RPW or non-RPW (i.e., seasonal, flowing less than or equal to 3 months). Linear length and width values were determined with a measuring tape in the field and a hand held Geographic Positioning System (GPS) to determine acreages. An USACE-Approved Jurisdictional Determination (JD) Form was also completed and is included in Appendix F. Site photographs are included in Appendix E.

4.3 CDFG-Specific Procedures and Data Collection Techniques

Suspected CDFG jurisdictional areas were field checked for the presence of definable streambeds (bed, bank, and channel) and any associated riparian habitat. Streambeds and suspected riparian habitats were evaluated using the Fish and Game Code (Section 1600 *et seq.*) and guidance described in *A Field Guide to Lake and Streambed Alteration Agreements Sections 1600-1607* (ESD-CDFG 1994). Accordingly, areas suspected of having surface or subsurface flow supporting riparian vegetation, natural lakes, man-made reservoirs, or altered and artificial waterways were qualitatively assessed in the field based upon the value of those areas to fish and wildlife.

Representative widths of any feature were determined in the field with a tape measure and marked on an aerial map. Average feature widths were then utilized to calculate total acreages. Any riparian plant or wildlife species present were also noted. If adjacent floodplain and/or terrace areas were not vegetated by hydrophytic vegetation nor had no value to plants and wildlife, then these features were mapped but not included as part of CDFG jurisdiction.

4.4 Analysis Parameters

The JD map depicts current conditions, existing aquatic features, and proposed impact areas within the study area. A 250 feet upstream and downstream buffer beyond the potential impact areas are detailed areas as well.

- Total USACE jurisdiction (pursuant to Section 404 of the CWA) and RWQCB jurisdiction (pursuant to Section 401 of the CWA) was determined for wetlands and other waters for any potential specials aquatic resource areas. The lengths, widths, and the total acreage of any potential specials aquatic resource areas within the study area were determined.

- Total CDFG jurisdiction was determined for unvegetated channels and riparian vegetation for any potential specials aquatic resource areas within the study area. The lengths, widths, as well as a total acreages of any potential specials aquatic resource areas within the study area were determined.

Methods set forth by the USACE (EL, 1987; USACE, 2001a,b; and USACE [In Prep]) generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual provides great detail in methods and allows for varying special conditions, a wetland should normally meet each of the following three criteria:

- More than 50 percent of the dominant plant species must be typical of wetlands[6] (e.g., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands (Reed 1988);
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation[7] (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least 5 percent of the growing season during a normal rainfall year (for most of southern California, 5 percent of the growing season is equivalent to 18 days).

Furthermore, the methods set forth in the USACE and Environmental Protection Agency's (EPA) June, 2007-issued guidance document (USACE, 2007c) asserts that for the purpose of a Significant Nexus Analysis, the Stream Order Area must be assessed with regards to its biological, physical, and chemical characteristics and its potential to affect the nearest downstream TNW. The USACE Approved JD Form includes a sequential process for classifying potential features into one of the following categories:

- TNWs and wetlands adjacent to TNWs.
- RPWs that flow directly or indirectly into TNWs.
- Non-RPWs that flow directly or indirectly into TNWs.
- Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
- Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.
- Impoundments of jurisdictional waters.

[6] Plants that are known as "hydrophytic vegetation"
[7] Such soils are known as "hydric soils," because they have characteristics that indicate that they were developed in conditions where soil oxygen is limited by the presence of water saturated soil for long periods during the growing season.

- Isolated waters (interstate or intra-state), including isolated wetlands, where the use, degradation or destruction of such waters could affect interstate commerce (the guidance does not reverse or allow for jurisdiction to be asserted over waters, including wetlands, deemed non-jurisdictional by *SWANCC*).
- Non-jurisdictional waters and wetlands.

More specifically, when required, the process of conducting a Significant Nexus Analysis of a non-RPW or wetland directly abutting such a water body includes the following determinations:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Physical (or hydrologic) drainage factors include (but are not limited to) the volume, duration, and frequency of water flow, including consideration of certain physical characteristics of the tributary; proximity to the TNW; size of the watershed; and average annual rainfall. Chemical drainage factors include (but are not limited to) the ability for tributaries to carry pollutants and flood waters to TNWs; the ability of a tributary to provide aquatic habitat that supports a TNW; the ability of wetlands to trap and filter pollutants or store flood waters; and maintenance of water quality. Biological elements, or ecological drainage factors include wetland/riparian buffers; vegetation types and percent plant cover; habitat for aquatic species listed as federally threatened or endangered; and aquatic/wildlife diversity. In summary, if a tributary that flows through the Project Area crosses state lines or is a RPW (e.g., has flowing water for at least 3 months during the year) and is contiguous with a TNW, then it is subject to CWA Sections 404 and 401.

For those tributaries that do not fall into either of the aforementioned categories, then a Significant Nexus Analysis is required. If a tributary that requires a Significant Nexus Analysis has more than a speculative or negligible effect on the chemical, physical and/or biological integrity of a TNW (USACE, 2007c), then the drainage is subject to CWA Sections 404 and 401.

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5.0 RESULTS

This section presents the results of the field determination of USACE jurisdiction pursuant to Section 404 of the CWA, RWQCB legal authority in accordance with Section 401 of the CWA (SRWQCB, 2004), and CDFG jurisdiction pursuant to Section 1600 (*et seq.*) of the CFG Code. Accordingly, one potential jurisdictional feature, Carbon Creek, was present within the study area. Carbon Creek is a trapezoidal surface water drainage feature that directs surface flows through the study area from east to west. Carbon Creek contains an earthen/gravel channel and bottom upstream of the study area before passing through a concrete box culvert under Kraemer Boulevard where it then becomes a rock riprap-lined channel as it exits the culvert downstream of Kraemer Boulevard. The average width of the OHWM both upstream and downstream of Kraemer Boulevard is roughly 9 feet.

5.1 WATERSHED ANALYSIS

The study area is located within the south western portion of the RWQCB's Santa Ana Region within the Seal Beach Watershed (Appendix A). The Santa Ana Region is 1,791,588 acres, which contains the 57,600-acre Seal Beach Watershed (IWMC, 2007). Section III, B. of the USACE Approved JD Form for Drainage 1 (Appendix F) includes additional details related to this watershed analysis.

5.2 SURFACE HYDROLOGY

The regional climate in the study area consists of hot and dry summer months with relatively cool, wetter winters. Summer temperature highs range from 29-33°C (85-92°F) and winter lows range from 12-16°C (55-62°F). Evenings tend to be cool, even at the peak of summer, and rain falls almost exclusively between November and April. Extended storms typically occur in January and February. The annual average precipitation in Anaheim is 11.23 inches, with February being the wettest month of the year averaging 2.86 inches of rainfall (NWS 2007).

5.3 DETERMINATION OF USACE JURISDICTION SUBJECT TO SECTION 404 OF THE CWA

Carbon Creek supports an OHWM that includes hydrologic characteristics such as destruction of terrestrial vegetation, sediment deposits, scouring, water marks, and shelving (Appendix E). Carbon Creek directs flows for approximately thirteen (13) miles westward from the intersection of Kraemer Street until it empties into Coyote Creek. Coyote Creek then directs water flow for roughly two (2) miles where it enters the San Gabriel River. The San Gabriel River then directs flows for approximately four (4) miles before reaching the Pacific Ocean. Consequently, the Pacific Ocean is the first downstream Traditionally Navigable Water (TNW) from the study area. The collective distance from the study area to the Pacific Ocean is approximately XX river miles.

Carbon Creek contained flowing water both upstream and downstream of the study area on all three field days associated with this jurisdictional determination (September 9 and December 6, 2007 and on February 15, 2008). The downstream portions of the study area and beyond appear to receive perennial flow from underground channels that enter Carbon Creek beneath

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Kramer Boulevard. The presence of flowing water on three occasions spanning 5 months, one of which was during the dry season, suggests that this feature sustains perennial flows. USACE requires continuous flow for 3 months or longer to be considered a RPW. As a result, Carbon Creek is considered a "perennial" water source and a RPW by the USACE. Section III D. 2. of the USACE Approved JD Form for Carbon Creek (Appendix F) provides additional details. This feature is considered to be subject to USACE jurisdiction by virtue of its status as a RPW that is tributary to a TNW (i.e., Pacific Ocean). Total USACE jurisdiction located within the study area consists of XX acres.

No vegetation was present within the downstream portion of the study area, likely the result of storm flows that scoured all existing vegetation from the channel. It was noted on previous visits to the downstream portion of the study area that sparse annual, and ruderal upland vegetation was present prior to recent storm flows. Vegetation in the upstream portion of the study area was not dominated by hydrophytic species and consisted mainly of dead, upland annuals lining both sides of the channel bottom. Dominate species included *Salsola trigus* (UPL), *Avena fatua* (NI), and *Brassica nigra* (NI). *Rumex crispus* (FACW-) was sporadically present in small percentages of overall vegetation cover.

The Soil Survey (USDA-NRCS 2007) indicated that the study area is composed of one, non-hydric and well drained soil type found at 0 – 2% slopes; Metz Loamy Sand. Field surveys confirmed this soil type, which was composed of a matrix of 10R 3/3 with no mottles. A 2" layer of sandy, gleyed soil was also present within the downstream portion of the study area (Gley2 2.5/5PB with no mottles). This observation is consistent with the presence of perennial hydrology in the downstream portion of the study area, which has likely resulted in the creation of a layer of sedimentary organic material (presumably deposited from the previous storm events). As a result, field data suggests that this soil has become anaerobic after being covered by 4 inches of sedimentary sandy loam. However, because both the downstream and upstream portions of the study area lack hydrophytic vegetation, no USACE-defined wetlands were present.

The Federal Emergency Management Agency (FEMA) flood plain is depicted within Appendix C, and identifies the aerial extent of FEMA's 100 year flood plain within the study area. The FEMA 100 year flood plain rises to an elevation of 251 feet above mean sea level (msl) and overlaps the study area. However, since the time when the 100 year flood plain was determined by FEMA in the early 1980's, the adjacent uplands have been filled to support urban development. Consequently, the 100 year flood plain is currently restricted to the banks of Carbon Creek.

Because Project design entails jack and bore drilling under Carbon Creek at the intersection of Kraemer Boulevard, no areas subject to USACE jurisdiction within Carbon Creek will be deliberately impacted by the Project. Therefore, no permanent impacts to Carbon Creek are anticipated as a result of Project implementation. Although no permanent impacts to Carbon Creek are anticipated, temporary impacts could occur in the unlikely event of a frac-out during drilling activities.

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5.4 DETERMINATION OF RWQCB JURISDICTION PURSUANT TO SECTION 401 OF THE CWA

The RWQCB's jurisdiction pursuant to section 401 of the CWA mirrors USACE jurisdiction. In accordance with Section 401, an applicant for a Section 404 permit to discharge dredged or fill material into WoUS must also obtain certification from the RWQCB. Because Carbon Creek is subject to CWA Section 404, Carbon Creek is also subject to Section 401 of the CWA. Total RWQCB jurisdiction located within the study area consists of XX acres. Although no permanent impacts to Carbon Creek are anticipated, temporary impacts could occur in the unlikely event of a frac-out during drilling activities.

5.5 DETERMINATION OF CDFG JURISDICTION PURSUANT TO SECTION 1600 (*ET SEQ.*) OF THE CFGC

Carbon Creek contains a defined bed and bank and has acquired the physical attributes of naturally occurring waterways. To that end, Carbon Creek has potential to support aquatic wildlife and vegetation; and is therefore subject to CFG Code Section 1600 (*et seq.*) compliance. CDFG Legal staff prepared the following opinion (ESD-CDFG, 1994) which addresses natural and artificial features: (a) Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects, and riparian vegetation will be treated like natural waterways; (b) *Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFG] as natural waterways*; and (c) Artificial waterways without the attributes of natural waterways should not be subject to Fish and Game Code provisions. CFG Code Section 1600 (*et seq.*) jurisdiction within Carbon Creek is limited to an average width of 9 feet within its defined bed and bank.

Because the Project entails jack and bore drilling under Carbon Creek, no temporary or permanent impacts to Carbon Creek are anticipated to occur as a result of Project implementation. Although no permanent impacts to Carbon Creek are anticipated, temporary impacts could occur in the unlikely event of a frac-out during drilling activities.

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6.0 RECOMMENDATIONS

The following compliance implementation guidance is provided as a means of avoiding and minimizing adverse impacts to special aquatic resource areas that occur or have the potential to occur within the study area.

1. Prior to undertaking ground-disturbing activities within the study area within or immediately adjacent to any CWA Section 401 and 404 and CFGC 1600 (*et seq.*) jurisdictional features, consult with the appropriate responsible resource agency (i.e., USACE, RWQCB and CDFG) to verify delineation results and secure all obligatory discretionary permits / authorizations.

2. Develop a frac-out plan and implement standard Best Management Practices to minimize the potential for a frac-out and to avoid or minimize potential temporary impacts to Carbon Creek resulting from drilling activities.

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7.0 LITERATURE CITED

Aerial Photo USA. 2006. AirPhotoUSA's Digital Aerial Photography, MapHandler and PhotoMapper Software, January 2006.

Brostoff, W., Lichvar, R., and S. Sprecher. 2001. Delineating Playas in the Arid Southwest A Literature Review. Technical Report ERDC TR-01-4. US Army Corps of Engineers, Engineer Research and Development Center. 32p. <URL: http://www.crrel.usace.army.mil/techpub/CRREL_Reports/reports/ERDC-TR01-4.pdf

Calflora: Information on California plants for education, research and conservation (Calflora). 2008. The Calflora Database [web application; non-profit organization]. Berkeley, CA. <URL: http://www.calflora.org/ >

California Interagency Watershed Mapping Committee (IWMC). 2007. USGS 100K Quad Sheet. CalWater The Data- CalWater Version 2.2.1. <URL: http://www.ca.nrcs.usda.gov/features/calwater/#Data >

California Regional Water Quality Control Board, Santa Ana Region (CRWQCB). 1995. Water Quality Control Plan for the Santa Ana Basin, 1995. San Diego, California. <URLs: http://www.swrcb.ca.gov/plnspols/index.html; http://www.waterboards.ca.gov/santaana/html/basin_plan.html; http://www.waterboards.ca.gov/santaana/programs/basinplan.html >

California Rivers Assessment (CARA). 1997. <URL: http://www.ice.ucdavis.edu/newcara/ >

Cowardin, L.M., V. Carter, F.C.Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the U.S. U.S. Fish and Wildlife Service, Washington, D.C.

Environmental Laboratory (EL). 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

Environmental Law Institute. 2007. The Clean Water Act Jurisdictional Handbook. Washington D.C.

Environmental Services Division, CDFG (ESD-CDFG). 1994. A Field Guide to Lake and Streambed Alteration Agreements Sections 1600-1607, California Fish and Game Code. Sacramento, California. January.

Federal Emergency Management Agency (FEMA) 100 Year Flood Plain Map 2007. <URL: http://www.gismaps.fema.gov/

DRAFT

Fritz, K.M., Johnson, B.R., and Walters, D.M. 2006. Field Operations Manual for Assessing the Hydrologic Permanence and Ecological Condition of Headwater Streams. EPA/600/ R-06/126. U.S. Environmental Protection Agency (EPA), Office of Research and Development, Washington DC. 151p. <URL: http://www.epa.gov/eerd/manual/HISSmanual_full.pdf >

Hickman, J.C. (editor) 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley, California.

Lichvar, R.W. and J.S. Wakely. (Eds.). 2004. Review of ordinary high water mark indicators for delineating arid streams in the southwestern United States. ERDC TR-04-1. U.S. Army Engineer Research and Development Center (ERDC), Cold Regions Research and Engineering Laboratory, Hanover, NH. 127p. <URL: http://www.crrel.usace.army.mil/techpub/CRREL_Reports/reports/ERDC-TR-04-1.pdf

Lichvar, R.W., Gustina, G., and M. Ericsson. 2003. Planning level delineation and geospatial characterization of aquatic resources for the San Jacinto an Santa Margarita watersheds, Riverside County, California. Technical Report ERDC/CRREL TR 03-4, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, New Hampshire. <URL:http://www.crrel.usace.army.mil/techpub/CRREL_Reports/reports/TR03-4.pdf >

Lichvar, R.W. and G. Gustina. 2004. Publication of a Map Series on the Aquatic Resources for San Jacinto and Portions of the Santa Margarita Watersheds. ERDC/CRREL Technical Note 04-4. U.S. Army Cold Regions Research and Engineering Laboratory, Engineer Research and Development Center, Hanover, New Hampshire. 6p. <URLs: http://www.crrel.usace.army.mil/techpub/CRREL_Reports/reports/TN04-4.pdf; https://rsgis.crrel.usace.army.mil/vegmap/westriverside.watershedstart_pk >

Lichvar, R.W., Finnegan, D.C., Ericsson, M.P. and W. Ochs. 2006. Distribution of Ordinary High Water Mark (OHWM) Indicators and Their Reliability in Identifying the Limits of "Waters of the United States" in Arid Southwestern Channels. ERDC/CRREL Technical Report 06-5. 21p. <URL: http://www.crrel.usace.army.mil/techpub/CRREL_Reports/reports/TR06-5.pdf >

Munsell Color. 2000. Munsell Soil Color Charts. Gretag Macbeth: New Windsor, New York.

National Weather Service (NWS). 2008. Forecast Office, San Diego, CA. (website). <URL: http://www.weather.gov/climate/index.php?wfo=sgx

Personal Communication. 2007. Conversation Regarding Stream Order with Paul Brenner of URS and Mr. Jae Chung of the USACE on August 10, 2007.

DRAFT

Reed, P.B. 1988. National List of Plant Species that Occur in Wetlands: California (Region 0). US Fish and Wildlife Service Biology Report 88(26.10). 135p.

Reed, P.B. 1996. Draft National List of Plant Species that Occur in Wetlands: California (Region 0). US Fish and Wildlife Service.
URL: http://enterprise.nwi.fws.gov/list96.htm >

Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (editors), 2002. Field book for describing and sampling soils, Version 2.0. Natural Resources Conservation Service, National Soil Survey Center,Lincoln, NE. 228p.
<URL: ftp://ftp-fc.sc.egov.usda.gov/NSSC/Field_Book/FieldBookVer2.pdf >

State Water Resources Control Board (SWRCB). 1998. CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE. 128p.
<URL: http://www.spl.usace.army.mil/regulatory/303d98.pdf >

State Water Resources Control Board (SWRCB). 2007. Certification of 2007 Nationwide Permits.
<URL: http://www.swrcb.ca.gov/cwa401/docs/generalorders/nwp2007rev.pdf >

Strahler, A.N. 1957. Quantitative analysis of watershed geomorphology. American Geophysical Union Transactions. 38: 913-920

Strahler, A.N. 1964. Quantitative geomorphology of drainage basins and channel networks. Pages 40-74 *in* V.T. Chan (ed.), Handbook of applied hydrology. McGraw-Hill, New York.

Tiner, R.W. 1999. Wetland indicators: a guide to wetland identification, delineation, classification, and mapping. Lewis Publishers/CRC Press, Boca Raton, FL, USA. 392p.

UCANR. 2007. UC Agriculture and Natural Resources, Statewide Integrated Pest Management Plan, California Weather Data. Online:
http://169.237.140.1/WEATHER/wxretrieve.html

U.S. Army Corps of Engineers (USACE). 2001a. Final Summary Report: Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest. South Pacific Division. June.
<URL: http://spl.usace.army.mil/regulatory.html >

U.S. Army Corps of Engineers (USACE). 2001b. Minimum Standards for Acceptance of Preliminary Wetlands Delineations. Sacramento District, Regulatory Branch. November 30.
<URL: http://spk.usace.army.mil/cpk-co/regulatory.html >

U.S. Army Corps of Engineers (USACE). 2003. Digital GIS files for the Riverside SAMP Technical Studies- Planning Level Delineation and Landscape Level Functional Assessment.

DRAFT

U.S. Army Corps of Engineers (USACE). 2006. Interim regional supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. J. S. Wakeley, R.W. Lichvar, and C. V. Noble (Eds.). ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center. 123p. <URL: http://www.usace.army.mil/cw/cecwo/reg/inte_aridwest_sup.pdf >

U.S. Army Corps of Engineers (USACE). (in prep.). "Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region," J. S. Wakeley, R. W. Lichvar, and C. V. Noble (Eds.). Technical Report, U.S. Army Engineer Research and Development Center, Vicksburg, MS. 120p. <URL: http://www.usace.army.mil/cw/cecwo/reg/west_mt_supp_peer_rev_4-9-2007.pdf >

U.S. Army Corps of Engineers and U.S. Environmental Protection Agency (USACE and EPA). 2007. Memorandum Re: CWA Jurisdiction Following U.S. Supreme Court discussion in *Rapanos v. United States*. 12p. <URL: http://www.usace.army.mil/cw/cecwo/reg/cwa_guide/rapanos_guide_memo.pdf >

U.S. Army Corps of Engineers (USACE). 2007a. Memorandum for the Field: Coordination on JDs under CWA Section 404 in Light of *SWANCC* and *Rapanos* Supreme Court Decisions. 7p. <URL: http://www.usace.army.mil/cw/cecwo/reg/cwa_guide/rapanos_moa_06-05-07.pdf >

U.S. Army Corps of Engineers (USACE). 2007b. U.S. Army Corps of Engineers Jurisdictional Determination (JD) Form Instructional Guidebook. 60p. + Appendices A – H (Appendix D is currently under review and will be available in the future). <URL: http://www.usace.army.mil/cw/cecwo/reg/cwa_guide/jd_guidebook_051207final.pdf

U.S. Army Corps of Engineers (USACE). 2007c. U.S. Army Corps of Engineers Questions and Answers for *Rapanos* and *Carabell* Decision. 21p. <URL: http://www.usace.army.mil/cw/cecwo/reg/cwa_guide/rapanos_qa_06-05-07.pdf

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS). 2007 (website). National Hydric Soils List by State. <URL: http://soils.usda.gov/use/hydric/lists/state.html >

U.S. Department of Agriculture, National Soil Conservation Service (USDA-NRCS). 2007. Soil Survey Geographic (SSURGO) database for Western Riverside Area, California. Surveyed 1971. <URL: http://www.SoilDataMart.nrcs.usda.gov/ >

DRAFT

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS). 2006. Field Indicators of Hydric Soils in the United States, Version 6.0. G.W. Hurt and L.M. Vasilas (eds.). USDA,NRCS, in cooperation with the National Technical Committee for Hydric Soils. 47p. <URL: ftp://ftp-fc.sc.egov.usda.gov/NSSC/Hydric_Soils/FieldIndicators_v6_0.pdf >

U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS). 2007. National Wetlands Inventory- Wetlands and Deepwater Habitats of the Conterminous United States. Vector digital data: CONUS_wet_poly. Division of Habitat and Resource Conservation, Washington, D.C. <URL: http://wetlandsfws.er.usgs.gov/NWI/download.html >

U.S. Department of the Interior, U.S. Geographic Survey (USGS). 2007. National Hydrography Dataset. <URL: http://nhd.usgs.gov/ >

Wetland Training Institute, Inc. (WTI). 2006. Pocket Guide to Hydric Soil Field Indicators. Based on: Field Indicators of Hydric Soils in the United States v. 6.0

Wetland Training Institute, Inc. (WTI). 2007. Arid West Supplement Wetland Delineation April 13, 2007. Glenwood, NM 88039.

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Appendix A

Figure 1 - Regional Watershed Map

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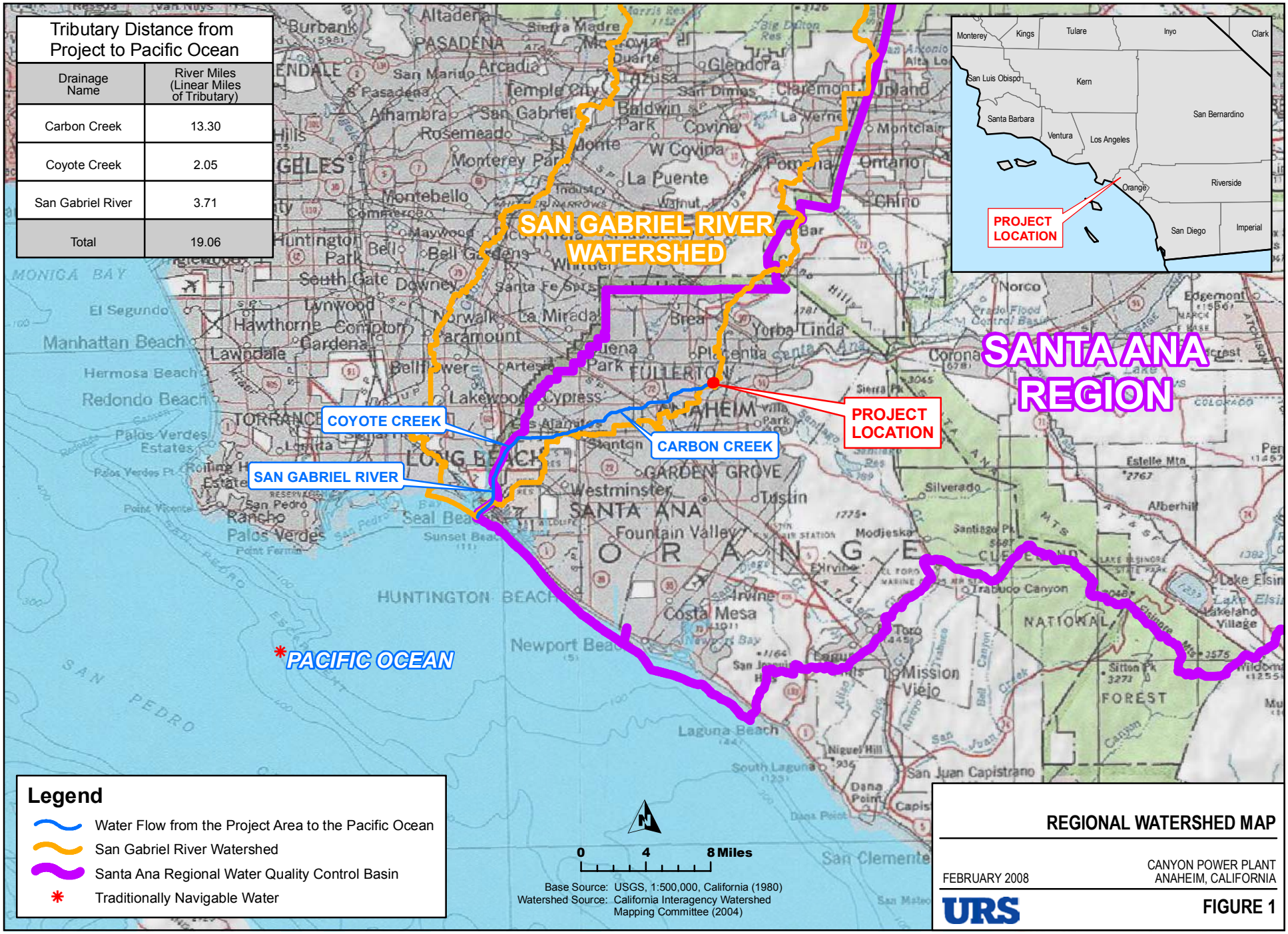

Tributary Distance from Project to Pacific Ocean

Drainage Name	River Miles (Linear Miles of Tributary)
Carbon Creek	13.30
Coyote Creek	2.05
San Gabriel River	3.71
Total	19.06

REGIONAL WATERSHED MAP

FEBRUARY 2008

CANYON POWER PLANT
ANAHEIM, CALIFORNIA

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FIGURE 1

Appendix B

Figure 2 – CWA (Sections 401 and 404) and CDFG Jurisdictional Determination Map

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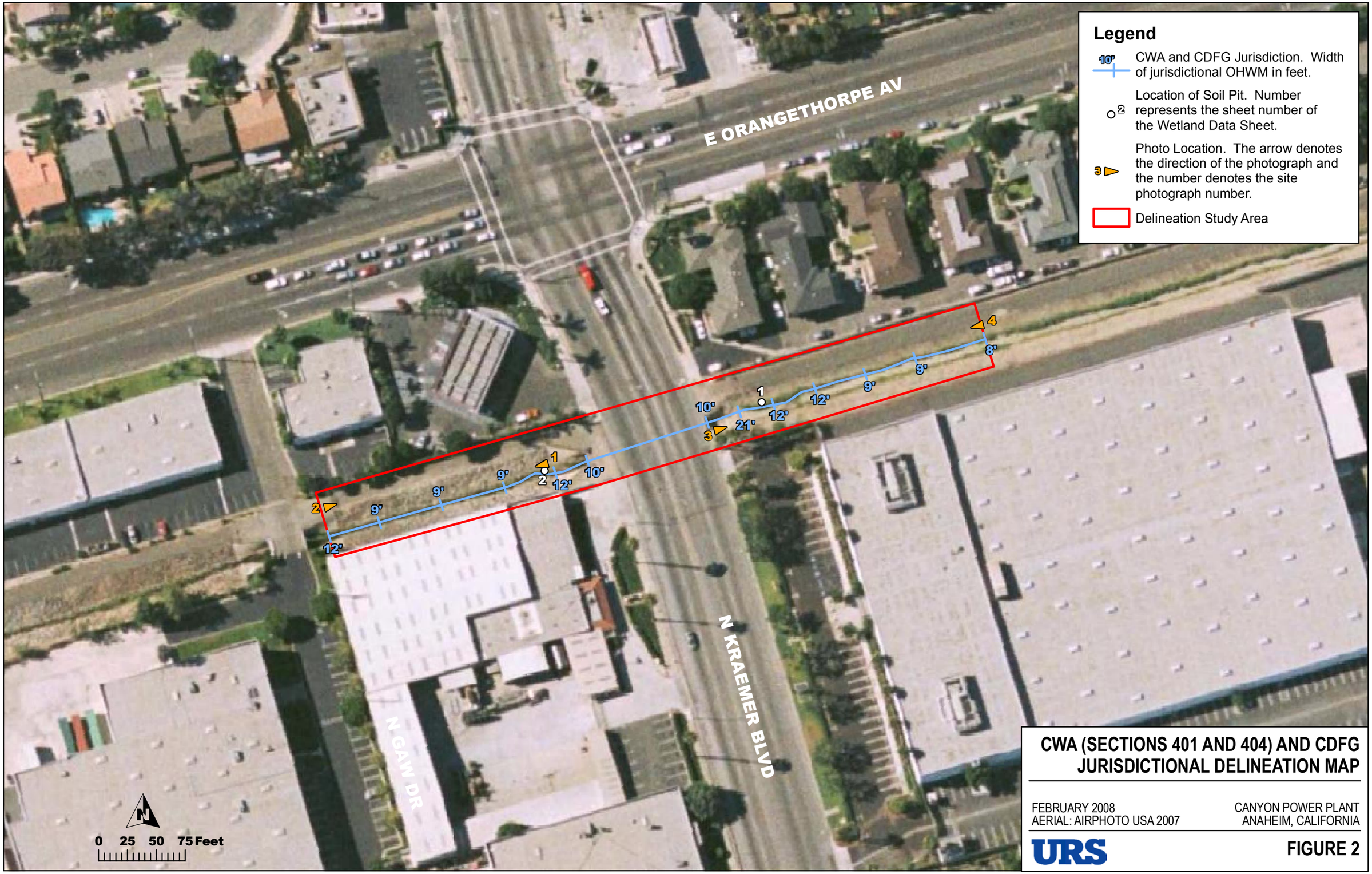


CWA (SECTIONS 401 AND 404) AND CDFG JURISDICTIONAL DELINEATION MAP

FEBRUARY 2008
AERIAL: AIRPHOTO USA 2007

CANYON POWER PLANT
ANAHEIM, CALIFORNIA

URS

FIGURE 2

Appendix C

Figure 3 – FEMA 100-Year Floodplain and Soils Map

DRAFT

FEMA 100-YEAR FLOODPLAIN AND SOILS

FEBRUARY 2008
AERIAL: AIRPHOTO USA 2007

CANYON POWER PLANT
ANAHEIM, CALIFORNIA

URS

FIGURE 3

Appendix D
Wetland Determination Data Sheets

DRAFT

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CANYON POWER PLANT City/County: ANAHEIM / ORANGE Sampling Date: 15 FEB 08

Applicant/Owner: So. Cal. Public Power Authority State: CA Sampling Point: 2-WEST (DOWNSTREA

Investigator(s): G. HOISINGTON Section, Township, Range: SECTION 30, RANGE 9 WEST, TOWNSHIP 3 SOUTH

Landform (hillslope, terrace, etc.): ARTIFICIAL CANAL Local relief (concave, convex, none): CONCAVE Slope (%): < 1%

Subregion (LRR): LRRC Lat: 115 0420277 Long: 3747467 Datum: WGS 84 UTM

Soil Map Unit Name: METZ LOAMY SAND NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. NONE		NONE	
2.			
3.			
4.			
Total Cover:	0		
Sapling/Shrub Stratum			
1. NONE		NONE	
2.			
3.			
4.			
5.			
Total Cover:	0		
Herb Stratum			
1. NONE			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	0		
Woody Vine Stratum			
1. NONE			
2.			
Total Cover:	0		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species	A	x 4 =
UPL species	N	x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: NO VEGETATION PRESENT. FLOWING H_2O HAS SCOURED ALL VEGETATION OUT OF CHANNEL SINCE LAST VISIT (6 DEC 2007). SOME ALGAE PRESENT.

SOIL

Sampling Point: 2 – DOWN STREAM

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10R 3/3	100	—	—	—	—	SAND	SANDY LOAM
4-6	GLEY2 2.5/5PB	100	—	—	—	—	SAND	SANDY GLEYED
6+	ROCK							ROCK

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- X Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: ROCK

Depth (inches): >6"

Hydric Soil Present? Yes X No ___

Remarks: SEDIMENT DEPTH TO 6", THEN ROCK BELOW

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ✓ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 6"

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: APPROXIMATELY 15 cfs flowing H_2O through channel

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CANYON POWER PLANT City/County: ANAHEIM / ORANGE Sampling Date: 15 FEB 08

Applicant/Owner: So. Cal. Public Power Authority State: CA Sampling Point: 1-EAST (UPSTREAM)

Investigator(s): G. HOISINGTON Section, Township, Range: SECTION 30, RANGE 9 WEST, TOWNSHIP 3 SOUTH

Landform (hillslope, terrace, etc.): ARTIFICIAL CANAL Local relief (concave, convex, none): CONCAVE Slope (%): <1

Subregion (LRR): LRRC Lat: 115 0420277 Long: 3747467 Datum: WGS 84 UTM

Soil Map Unit Name: METZ LOAMY SAND NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. NONE			
2.			
3.			
4.			
Total Cover: 0			
Sapling/Shrub Stratum			
1. NONE			
2.			
3.			
4.			
5.			
Total Cover: 0			
Herb Stratum			
1. Rumex crispus	1	NO	FACW-
2. Salsola tragus	2	YES	FACU
3. Avena fatua	2	YES	NI
4. Brassica nigra	2	YES	NI
5.			
6.			
7.			
8.			
Total Cover: 7			
Woody Vine Stratum			
1. NONE			
2.			
Total Cover: 0			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: .33 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species N/A	x 2 = ____
FAC species	x 3 = ____
FACU species	x 4 = ____
UPL species	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: MOST VEGETATION ARE DEAD ANNUALS FROM PAST SEASON.

SOIL

Sampling Point: 1-UPSTREAM

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-8"	10R 3/3	100	—	—	—	—	SAND	SANDY LOAM
8"+	ROCK/GRAVEL							ROCK/GRAVEL

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: ROCK/GRAVEL @ 8"+

Depth (inches): 8"

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: FLOWING H_2O (≈1' DEEP) ≈ 15 cfs

Appendix E
Site Photographs

DRAFT

Photograph 1:

View of the downstream portion of Carbon Creek, just west of Kraemer Boulevard
(see Appendix B for photo location).

Photograph 2:

View of the downstream portion of Carbon Creek, facing east toward Kraemer Boulevard
(see Appendix B for photo location).

Photograph 3:

View of the upstream portion of Carbon Creek, just east of Kraemer Boulevard facing east (see Appendix B for photo location).

Photograph 4:

View of the upstream portion of Carbon Creek, facing west toward Kraemer Boulevard (see Appendix B for photo location).

Appendix F
USACE Approved JD Forms

DRAFT

USACE Approved JD Form for Carbon Creek Canyon Power Plant Project

Applicable Sections of the USACE Approved JD Form for the Drainage Ditch:

I. C	**Background Information**
II.B.1	**CWA Section 404 Determination of Jurisdiction – Waters of the U.S.**
III.D. 2	**Determination of Jurisdictional Findings: RPWs that Flow Indirectly into a TNW**
IV.A	**Data Sources**

Preliminary Findings Subject to Review and Approval of the Regulatory Division, Los Angeles District, U.S. Army Corps of Engineers.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:CA County/parish/borough: Orange City: Anaheim
Center coordinates of site (lat/long in degree decimal format): Lat. 33.86467° **N**, Long. 117.86126° **W**.
Universal Transverse Mercator:
Name of nearest waterbody: Carbon Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Pacific Ocean
Name of watershed or Hydrologic Unit Code (HUC): Region 1 – South Coast
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: 8 February 2008
☒ Field Determination. Date(s): Feb 15, 2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
   - ☐ TNWs, including territorial seas
   - ☐ Wetlands adjacent to TNWs
   - ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
   - ☐ Non-RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
   - ☐ Impoundments of jurisdictional waters
   - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
   Non-wetland waters: 500 linear feet: 9 ft width (ft) and/or acres.
   Wetlands: 0 acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Established by OHWM.**
   Elevation of established OHWM (if known):251 feet above msl.

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   - ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: .

---

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: **Carbon Creek includes an ordinary high water mark (OHWM) and ultimately drains channelized surface water runoff to the Pacific Ocean.**.

Summarize rationale supporting determination: Carbon Creek directs flows for approximately thirteen (13) miles westward from the intersection of Kraemer Street until it empties into Coyote Creek. Coyote Creek directs water flow for roughly two (2) miles and then enters into the San Gabriel River. Subsequently, the San Gabriel River directs flows for greater than four (4) miles before reaching the Pacific Ocean. As such, the Pacific Ocean is the first downstream Traditionally Navigable Water (TNW) from Carbon Creek.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": No wetlands are present.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: .
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):
☐ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank
☐ changes in the character of soil
☐ shelving
☐ vegetation matted down, bent, or absent
☐ leaf litter disturbed or washed away
☐ sediment deposition
☐ water staining
☐ other (list):
☐ the presence of litter and debris
☐ destruction of terrestrial vegetation
☐ the presence of wrack line
☐ sediment sorting
☐ scour
☐ multiple observed or predicted flow events
☐ abrupt change in plant community

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):
☐ High Tide Line indicated by:
☐ oil or scum line along shore objects
☐ fine shell or debris deposits (foreshore)
☐ physical markings/characteristics
☐ tidal gauges
☐ other (list):
☐ Mean High Water Mark indicated by:
☐ survey to available datum;
☐ physical markings;
☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.
[6] A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7] Ibid.

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: .

Identify specific pollutants, if known: .

(iv) Biological Characteristics. Channel supports (check all that apply):

☐ Riparian corridor. Characteristics (type, average width): .
☐ Wetland fringe. Characteristics: .
☐ Habitat for:
  ☐ Federally Listed species. Explain findings: .
  ☐ Fish/spawn areas. Explain findings: .
  ☐ Other environmentally-sensitive species. Explain findings: .
  ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:
Properties:
  Wetland size: acres
  Wetland type. Explain: .
  Wetland quality. Explain: .
Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:
Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**
  Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
  ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:
☐ Directly abutting
☐ Not directly abutting
  ☐ Discrete wetland hydrologic connection. Explain: .
  ☐ Ecological connection. Explain: .
  ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW
Project wetlands are **Pick List** river miles from TNW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Flow is from: **Pick List.**
Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .
Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian buffer. Characteristics (type, average width): .
☐ Vegetation type/percent cover. Explain: .
☐ Habitat for:
  ☐ Federally Listed species. Explain findings: .
  ☐ Fish/spawn areas. Explain findings: .
  ☐ Other environmentally-sensitive species. Explain findings: .
  ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**
Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   ☐ TNWs: linear feet width (ft), Or, acres.
   ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: The site was observed on three separate occasions to have flow (9/25/07, 12/6/07, and 2/15/08), the first of which was during the dry season. Flow consisted of ponded or flowing areas on the downstream portion of the Delineation Study Area. Flow was approximatly 6 inches deep and 15 cubic feet per second on the last visit in the upstream and downstream portions of the Delineation Study Area.

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: **.**

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **.**

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .

---

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:Maps include
Figure 1 Regional Watershed Map
Figure 2 CWA (Sections 401 and 404) and CDFG Jurisdictional Delineation Map
Figure 3 FEMA 100-Year Floodplain and Soils Map
.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
USACE Wetland Data Form is attached as Appendix D
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☒ U.S. Geological Survey Hydrologic Atlas: Data used to respond to questions but no U.S. Geological Survey Hydrologic maps provided.
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name:7.5 Minute Orange Quadrangle within Township 3 South, Section 30, Range 9 West at an elevation of 251 feet above msl.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Data used to respond to questions; see reference below.
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):AirPhoto USA, 200X.
or ☒ Other (Name & Date):Site photographs (See Appendix E)

☐ Previous determination(s). File no. and date of response letter: .
☒ Applicable/supporting case law: See attached Jurisdictional Delineation Report.
☒ Applicable/supporting scientific literature:See References Below.
☐ Other information (please specify): .

References Used to Prepare the Figures Cited on this Form and/or to Obtain the Data Presented on this Form:

Aerial Photo USA. 2007. AirPhotoUSA's Digital Aerial Photography, MapHandler and PhotoMapper Software, April 2007. [Base photo map for Figure 2 (Project Location Map) and Figure 3 (CWA and CDFG JD Map), of the attached Jurisdictional Determination Report.]

California Regional Water Quality Control Board, Santa Ana Region (CRWQCB). 1995. Water Quality Control Plan for the Santa Ana Basin (8), January 1995. California.

Federal Emergency Management Agency (FEMA). 2007. Flood Maps.

B. ADDITIONAL COMMENTS TO SUPPORT JD: None.

Technical Area: Biological Resources

Data Request BIO-2: If the project or any related facilities could impact a jurisdictional or non-jurisdictional wetland, provide completed Army Corps of Engineers wetland delineation forms and/or determination of wetland status pursuant to Coastal Act requirements, name(s) and qualifications of biologist(s) completing the delineation, the results of the delineation and a table showing wetland acreage amounts to be impacted.

Response: Please see attached.

TELEPHONE CONVERSATION RECORD

URS

2020 East 1st Street, Suite 400
Santa Ana, CA
714-648-2824

COPIES TO:
Cindy Poire

DATE	February 25, 2008	TIME	1300
TO	Stephanie Hall	FROM	Lincoln Hulse
COMPANY	U.S. Army Corps of Engineers Los Angeles District		
ADDRESS	915 Wilshire Blvd., 11th Floor, Los Angeles, 90017-3401	PHONE NO.	213-452-3410
PROJECT NAME	Canyon AFC		

I left a message for Stephanie Hall of the U.S. Army Corps of Engineers (ACOE) on February 25, 2008 introducing the Canyon Power Plant project and describing the AFC process. I included in my message information regarding the draft jurisdictional delineation that has been performed and that we would be requesting verification of the delineation (upon finial JD).

Technical Area: Biological Resources

Data Request BIO-3: Submit copies of any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits from other agencies such as the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWCB) will be required for the proposed project.

Response: Please see attached.

TELEPHONE CONVERSATION RECORD

URS

2020 East 1st Street, Suite 400
Santa Ana, CA
714-648-2824

COPIES TO:
Cindy Poire

DATE	February 25, 200	TIME	1330
TO	Steve Juarez	FROM	Lincoln Hulse
COMPANY	California Department of Fish and Game South Coast Region		
ADDRESS	4949 Viewridge Avenue San Diego, CA 92123	PHONE NO.	858-467-4201
PROJECT NAME	Canyon AFC		

I left a for Steve Juarez at the South Coast Region of the Department of fish and Game on February 25, 2008 requesting a call back to introduce the Canyon Power Plant project. I also described the CEC's AFC process. I also requested information regarding section 1600 of the CDFC and upon finalizing the draft delineation we would send it to them for their records.

Also, FYI:

Based on the Warren Alquist Act, Chapter 6, Page 74, section 25500 (below, and http://www.energy.ca.gov/2007publications/CEC-140-2007-004/CEC-140-2007-004.PDF), CDFG has no jurisdiction over the project.

§ 25500. Authority; necessity of certification

In accordance with the provisions of this division, the commission shall have the exclusive power to certify all sites and related facilities in the state, whether a new site and related facility or a change or addition to an existing facility. The issuance of a certificate by the commission shall be in lieu of any permit, certificate, or similar document required by any state, local or regional agency, or federal agency to the extent permitted by federal law, for such use of the site and related facilities, and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law. After the effective date of this division, no construction of any facility or modification of any existing facility shall be commenced without first obtaining certification for any such site and related facility by the commission, as prescribed in this division.

TELEPHONE CONVERSATION RECORD

URS

2020 East 1st Street, Suite 400
Santa Ana, CA
714-648-2824

COPIES TO:
Cindy Poire

DATE	February 25, 2008	TIME	1430
TO	Adam Fisher	FROM	Lincoln Hulse
COMPANY	Santa Ana Regional Water Quality Control Board		
ADDRESS	3737 Main Street, Suite 500 Riverside, CA 92501-3348	PHONE NO.	951-782-4130
PROJECT NAME	Canyon AFC		

I spoke with Adam Fisher at the Santa Ana Regional Water Quality Control Board regarding introducing the Canyon Power Plant project. I also described the AFC process. We discussed the need for a 401 permit depending on if the ACOE decides to take 404 jurisdiction. Adam wanted more information and I agreed to send the final jurisdictional delineation (upon completion) and final engineering drawings (upon completion). He thought the need for 401 would not be necessary; however he wanted to revisit the conversation upon the ACOE's determination.

TELEPHONE CONVERSATION RECORD

URS

2020 East 1st Street, Suite 400
Santa Ana, CA
714-648-2824

COPIES TO:
Cindy Poire

DATE	February 25, 2008	TIME	1400
TO	Jonathan Snyder	FROM	Lincoln Hulse
COMPANY	United State Fish and Wildlife Service Carlsbad Field Office		
ADDRESS	6010 Hidden Valley Road, Carlsbad, CA 92011	PHONE NO.	760-431-9440 ext307
PROJECT NAME	Canyon AFC		

I left a message for Jonathan Snyder of the Department of the United States Fish and Wildlife Service (USFWS) on February 25, 2008 introducing the Canyon Power Plant project and described the AFC process. I also requested concurrence from the USFWS regarding the lack of potential for occurrence of federally threatened and endangered species with the project's study area. Upon a call back from Jonathan, I will send applicable information to assist with the concurrence letter.

Technical Area: Biological Resources

Data Request BIO-4: The name, title, phone number, address (required), and email address (if known) of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.

Response: Please see attachments to Responses BIO-2 and BIO-3.

Technical Area: Biological Resources

Data Request BIO-5: A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.

Response: Potential permits described in Section 6.6.1.3 of the AFC are currently being discussed with the agencies. A Draft Jurisdictional Determination Report has been prepared and submitted as part of this document. If permits are required for the ACOE, California Dept. of Fish and Game and RWQCB the time frame for obtaining these permits is expected to be 2-4 months.

Technical Area: Cultural Resources

Data Request CUL-1: The results of a literature search to identify cultural resources within an area not less than a 1-mile radius around the project site and not less that than one-quarter (0.25) mile on each side of the linear facilities. Identify any cultural resources listed pursuant to ordinance by a city or county, or recognized by any local historical or archaeological society or museum. Literature searches to identify the above cultural resources must be completed by, or under the direction of, individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed.

Copies of California Department of Parks and Recreation (DPR) 523 forms (Title 14 CCR §4853) shall be provided for all cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines, (36CFR60.4(g)). A copy of the USGS 7.4' quadrangle map of the literature search area delineating the areas of all past surveys and noting the California Historical Resources Information System (CHRIS) identifying numbers shall be provided. Copies also shall be provided of all technical reports whose survey coverage is wholly or partly within .25 mile of the area surveyed for the project under Section (g)(2)(C), or which report on any archaeological excavations or architectural surveys within the literature search area.

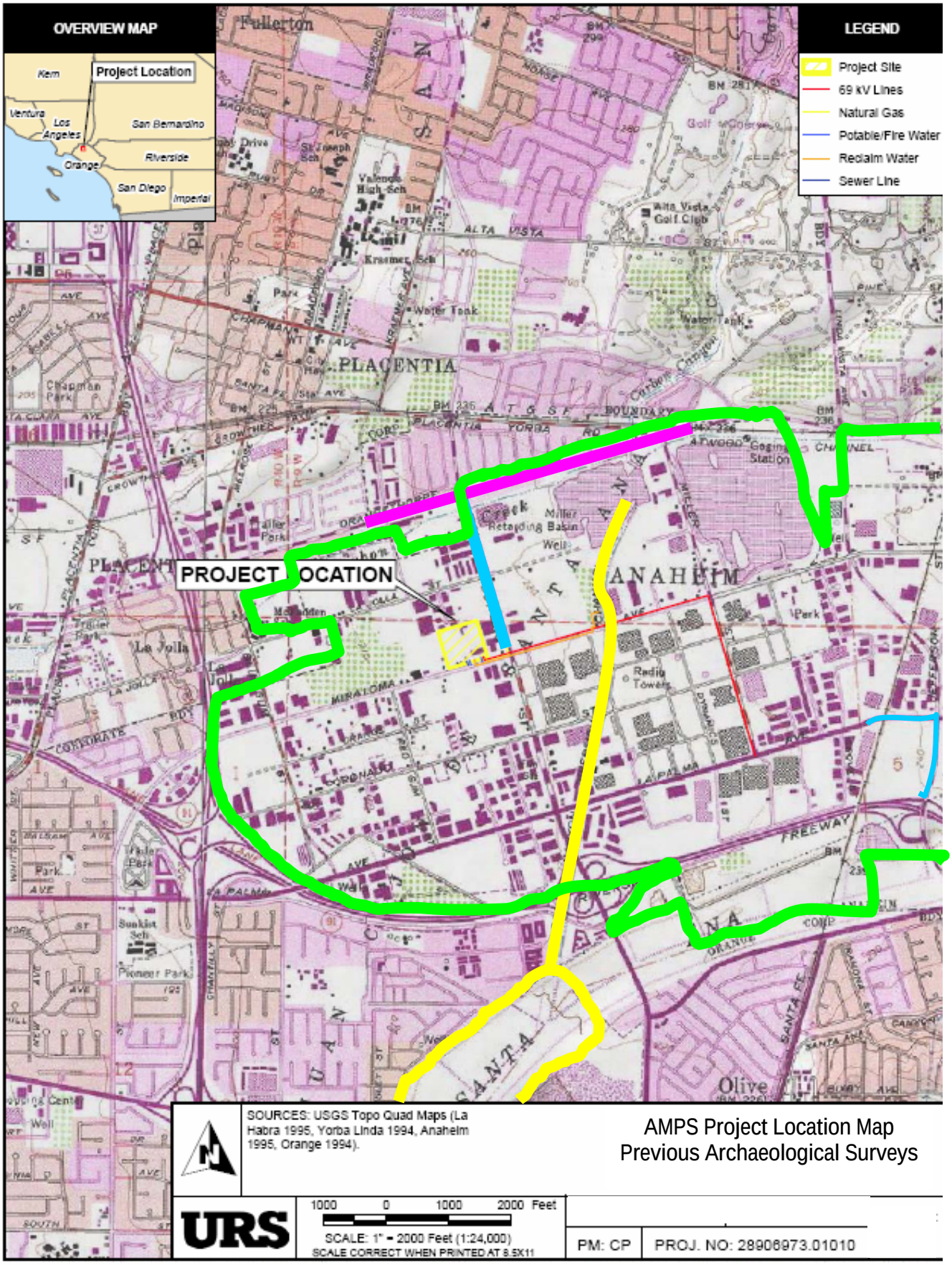
Response: This **confidential** report has been provided in hardcopy (5 sets) to the CEC. Due to the sensitive nature of archeological sites identified, it is not available to the public.

Technical Area: Cultural Resources

Data Request CUL-2: The results of new surveys or surveys less than 5 years old shall be provided if survey records of the area potentially affected by the project are more than five (5) years old. Surveys to identify new cultural resources must be completed by (or under the direction of) individuals who meet the Secretary of the Interior's Professional Standards for the technical area addressed.

New pedestrian archaeological surveys shall be conducted inclusive of the project site and project linear facility routes, extending to no less than 200' around the project site, substations and staging areas, and to no less than 50' to either side of the right-of-way of project linear facility routes. New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no less than .5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. New historic architecture field surveys in urban and suburban areas shall be conducted inclusive of the project site, extending no less than one parcel's distance from all proposed plant site boundaries. New historic architecture field reconnaissance ("windshield survey") in urban and suburban areas shall be conducted along the routes of all linear facilities to identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant, whatever their age.

Response: Please see attached.



OR-2501

OR-2591 and OR-3111

OR-2572

OR-1835

Technical Area: Cultural Resources

Data Request CUL-3: The names and qualifications of the cultural resources specialists who contributed to and were responsible for literature searches, surveys, and preparation of the technical report.

Response: Resumes for the specialists who contributed to and were responsible for the preparation of the Cultural Resources section of the AFC are included in Appendix D (located in Volume 2 of the AFC).

Technical Area: Cultural Resources

Data Request CUL-4: The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.

Response: The Orange County Coroner's Office was not contacted, as no human remains were identified. However, the NAHC and SCCIC were contacted, and information is provided in the table below.

Agency	Contact Information	Area of Expertise
Native American Heritage Commission	Dave Singleton 916 Capitol Mall Room 364 Sacramento, CA 95614 Phone: 916-653-6251 Fax: 916-657-5390 Email: ds_nahc@pacbell.net	Human remains belonging to Native Americans
Orange County Coroners Office	1071 W. Santa Ana Blvd. Santa Ana, CA 92703 Phone: 714-647-7400 Fax: 714-647-7426 Email: coroner@ocsd.org	Human remains
South Central Coastal Information Center	Stacy St. James Cal State Fullerton 800 North State College Blvd. Fullerton, CA 92834 Phone: 714-278-5395 Fax: 714-278-5542 Email: sccic@fullerton.edu	DPR form survey information

Technical Area: Cultural Resources

Data Request CUL-5: Provide a copy of your request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites and lists of Native Americans interested in the project vicinity, and copies of any correspondence received from the NAHC. Notify the Native Americans on the NAHC list about the project, including a project description and map. Provide a copy of all correspondence sent to Native American individuals and groups listed by the NAHC and copies of all responses. Provide a written summary of any oral responses.

Response: Please see attached.

Contact Report Form

Date: November 15, 2007

To: Alfred Cruz, Cultural Resources Coordinator
Juaneno Band of Mission Indians
P.O. Box 25628
Santa Ana, CA 92799
Phone: 714-998-0721
e-mail: alfredgcruz@sbcglobal.net

From: Laurie Solis, M.A.
URS Corporation
130 Robin Hill Rd, Suite 100
Santa Barbara, CA 93117
Phone: 805-964-6010 ext 560
Email: laurie_solis@urscorp.com

Date: November 15, 2007
Time: 2:00 p.m.

Subject: **AMPS Native American Coordination –**

This Contact Report Form (CRF) summarizes the phone conversation between Laurie Solis, Cultural Resource Specialist at URS Corporation and Alfred Cruz, Cultural Resource Coordinator of the Juaneno Band of Mission Indians regarding the treatment of Cultural Resources for the Anaheim Municipal Power Station (AMPS) project, for which URS is preparing an AFC document.

On November 14, 2007, Laurie Solis phoned Alfred Cruz to follow up to a letter sent my Solis on September 5, 2007. This letter requested any information that Cruz may have in regard to Native American Sacred Sites, burials, or archaeological sites within or within close proximity to the project site. Alfred Cruz returned Ms. Solis' phone call on November 15, 2007 at approximately 2:00 p.m.

Ms. Solis requested any information that Cruz may have in regard to Native American Sacred Sites, burials, or archaeological sites within or within close proximity to the project site. Ms. Solis indicated she had contacted the NAHC, but the results indicated there were no known Sacred Sites, burials within or adjacent to the project site. Mr. Cruz indicated he had knowledge of Native American habitation within or adjacent to the project area and indicated there may be a number of sites in the area.

Mr. Cruz further inquired about the project and Ms. Solis explained the proposed project and related the Cultural Resources Mitigation Measures to be included in the AFC document. Mr. Cruz indicated that she was pleased with the mitigation.

Mr. Cruz further requested, on behalf of the tribe, that in the event of newly discovered archaeological sites during project implementation that are of a prehistoric nature and affiliated with Native American inhabitants of the area he be contacted to examine the finds.

Contact Report Form

Date: November 14, 2007

To: Sonia Johnston, Tribal Vice Chairperson
Juaneno Band of Mission Indians

P.O. Box 25628
Santa Ana, CA 92799
Phone: 714-323-8312
e-mail: sonia/Johnston@sbcglobal.net

From: Laurie Solis, M.A.
URS Corporation

130 Robin Hill Rd, Suite 100
Santa Barbara, CA 93117
Phone: 805-964-6010 ext 560
Email: laurie_solis@urscorp.com

Date: November 14, 2007
Time: 1:30 p.m.

Subject: **AMPS Native American Coordination –**

This Contact Report Form (CRF) summarizes the phone conversation between Laurie Solis, Cultural Resource Specialist at URS Corporation and Sonia Johnston, Tribal Vice Chairperson of the Juaneno Band of Mission Indians regarding the treatment of Cultural Resources for the Anaheim Municipal Power Station (AMPS) project, for which URS is preparing an AFC document.

On November 14, 2007, Laurie Solis phoned Sonia Johnston to follow up to a letter sent my Solis on September 5, 2007. This letter requested any information that Johnston may have in regard to Native American Sacred Sites, burials, or archaeological sites within or within close proximity to the project site. Upon reaching Johnston, Solis was told to phone back at 1:30, which she did.

Upon phoning back, Ms. Solis requested any information that Johnston may have in regard to Native American Sacred Sites, burials, or archaeological sites within or within close proximity to the project site. Ms. Johnston inquired whether Ms. Solis had contacted the NAHC. Ms. Solis indicated she had, but the results indicated there were no known Sacred Sites, burials within or adjacent to the project site. Ms. Johnston indicated she had no knowledge of Native American Sacred Sites, burials, or archaeological sites within or adjacent to the project area.

Ms. Johnston further inquired about the project and Ms. Solis explained the proposed project and related the Cultural Resources Mitigation Measures to be included in the AFC document. Ms. Johnston indicated that she was pleased with the mitigation.

Ms. Johnston further requested, on behalf of the tribe, that in the event of newly discovered archaeological sites during project implementation that are of a prehistoric nature and affiliated with Native American inhabitants of the area, that the Juaneno tribal representative, Mr. Alfred Cruz be contacted to examine the finds. In addition, Ms. Johnston indicated that in the event tribal monitoring becomes necessary, that Alfred Cruz also be contacted.

September 5, 2007

Juaneno Band of Mission Indians
Acjachemen Nation
Attn: Mr. David Belardes, Chairperson
31742 Via Belardes
San Juan Capistrano, CA 92675
Phone: 949-493-0959
Fax: 949-493-1601

Re: Anaheim Municipal Power Station (AMPS) - Sacred Sites Records Check

I am writing to request a record search of the Sacred Lands File and a list of appropriate Native American contacts for a proposed simple cycle peaking power plant project the City of Anaheim, California. Known as "AMPS", the project falls within the following USGS 7.5 minute quadrangle:

- ORANGE

The project area consists of a nine (9) acre site located near the intersection of Miraloma Avenue and Kraemer Boulevard in the City of Anaheim. The proposed project is a simple cycle peaking power plant which would provide approximately 28% of Anaheim's generation resources and help meet load growth, local and resource adequacy capacity requirements, provide voltage support and the ability to self provide ancillary services. The project site is within: T 4 S, R 9 W, Un-sectioned area.

I am requesting the following information:
- Groups or individuals the listed by the NAHC as contacts for Orange County.
- Identification by the NAHC of any sacred lands in the area that are listed within the Sacred Lands File.

Thank you for your attention to this request. I appreciate your continued assistance.

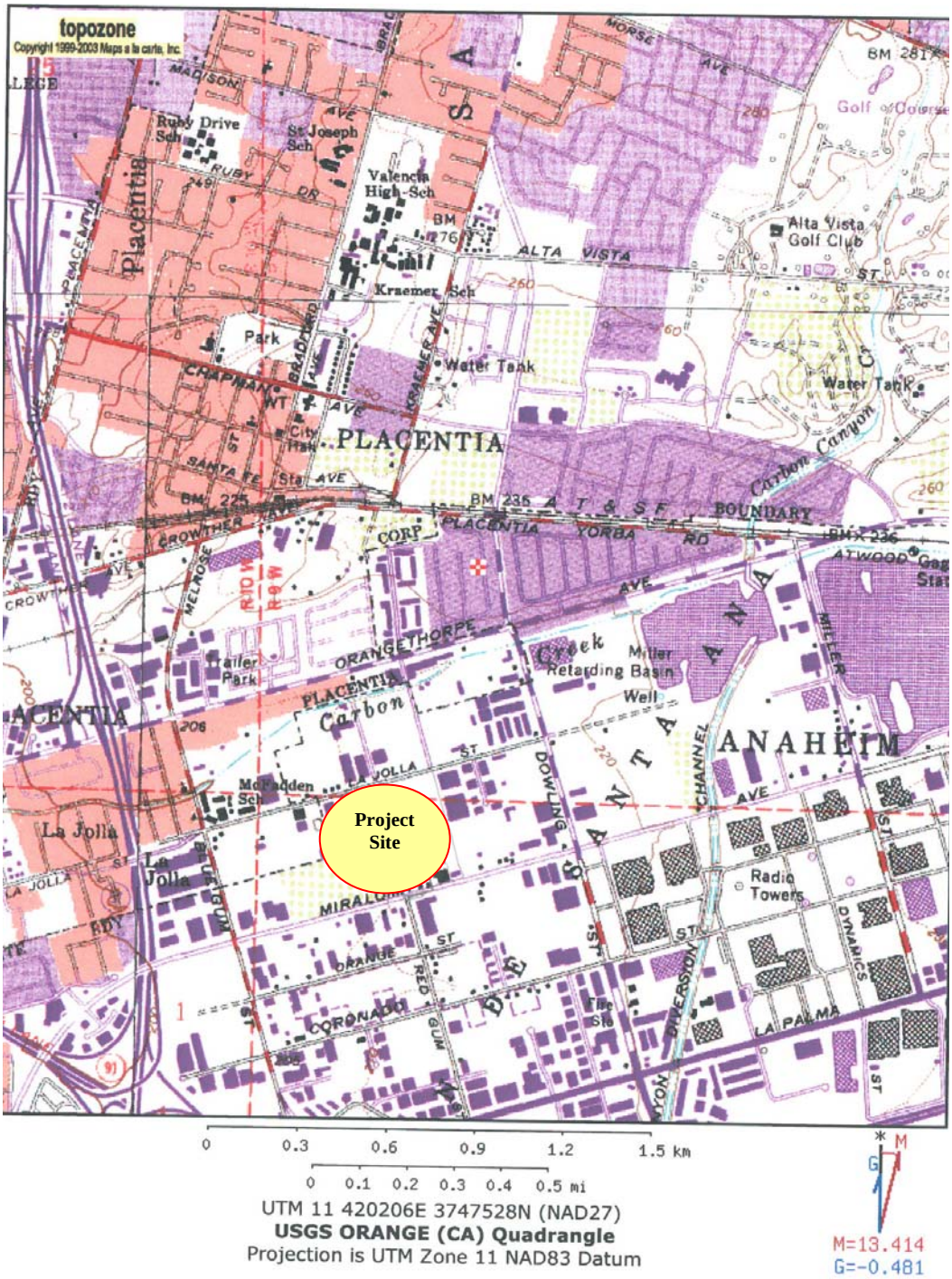
In good spirit,

Laurie Solis, M.A.
Cultural Resource Specialist

Las
Figure 1

URS

Figure 1: U.S.G.S Topographic Quadrangle, Orange. Township 4 South, Range 9 West, Un-sectioned area



September 5, 2007

Juaneno Band of Mission Indians
Attn: Alfred Cruz, Cultural Resource Coordinator
P.O. Box 25628
Santa Ana, CA 92799
Phone: 714-998-0721
slfredgcruz@sbcglobal.net

Re: Anaheim Municipal Power Station (AMPS) - Sacred Sites Records Check

I am writing to request a record search of the Sacred Lands File and a list of appropriate Native American contacts for a proposed simple cycle peaking power plant project the City of Anaheim, California. Known as "AMPS", the project falls within the following USGS 7.5 minute quadrangle:

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- Identification by the NAHC of any sacred lands in the area that are listed within the Sacred Lands File.

Thank you for your attention to this request. I appreciate your continued assistance.

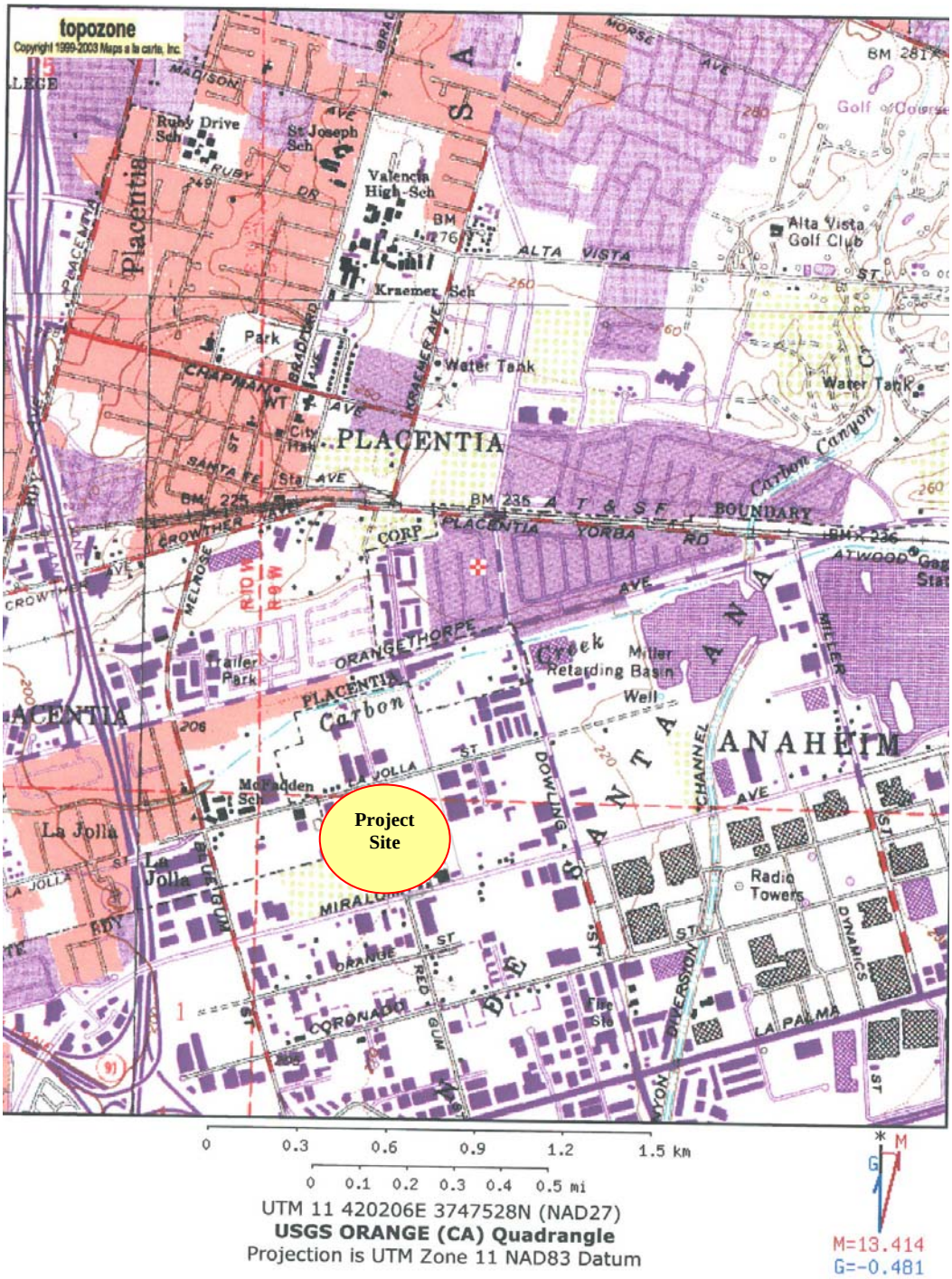
In good spirit,

Laurie Solis, M.A.
Cultural Resource Specialist

Las
Figure 1

URS

Figure 1: U.S.G.S Topographic Quadrangle, Orange. Township 4 South, Range 9 West, Un-sectioned area



URS

September 5, 2007

Juaneno Band of Mission Indians
Attn: Sonia Johnston, Tribal Vice Chairperson
P.O. Box 25628
Santa Ana, CA 92799
Phone: 714-323-8312
Sonia.johnston@sbcglobal.net

Re: Anaheim Municipal Power Station (AMPS) - Sacred Sites Records Check

I am writing to request a record search of the Sacred Lands File and a list of appropriate Native American contacts for a proposed simple cycle peaking power plant project the City of Anaheim, California. Known as "AMPS", the project falls within the following USGS 7.5 minute quadrangle:

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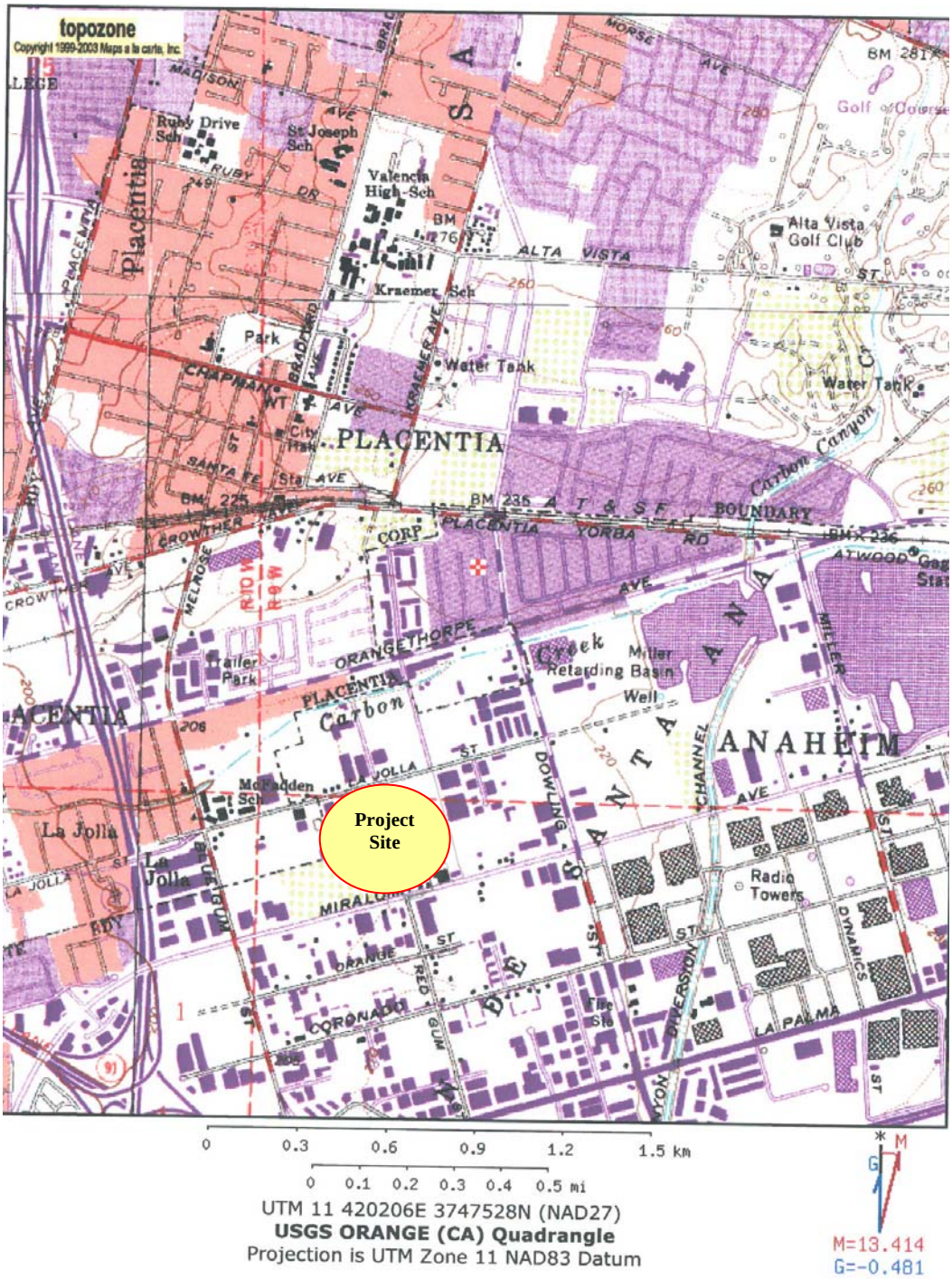

September 5, 2007

Juaneno Band of Mission Indians
Acjachemen Nation
Attn: Joyce Perry, Tribal Manager & Cultural Resources Chairperson
31742 Via Belardes
San Juan Capistrano, CA 92675
Phone: 949-493-0959
Cell: 949-293-8522
Fax: 949-493-1601

Re: Anaheim Municipal Power Station (AMPS) - Sacred Sites Records Check

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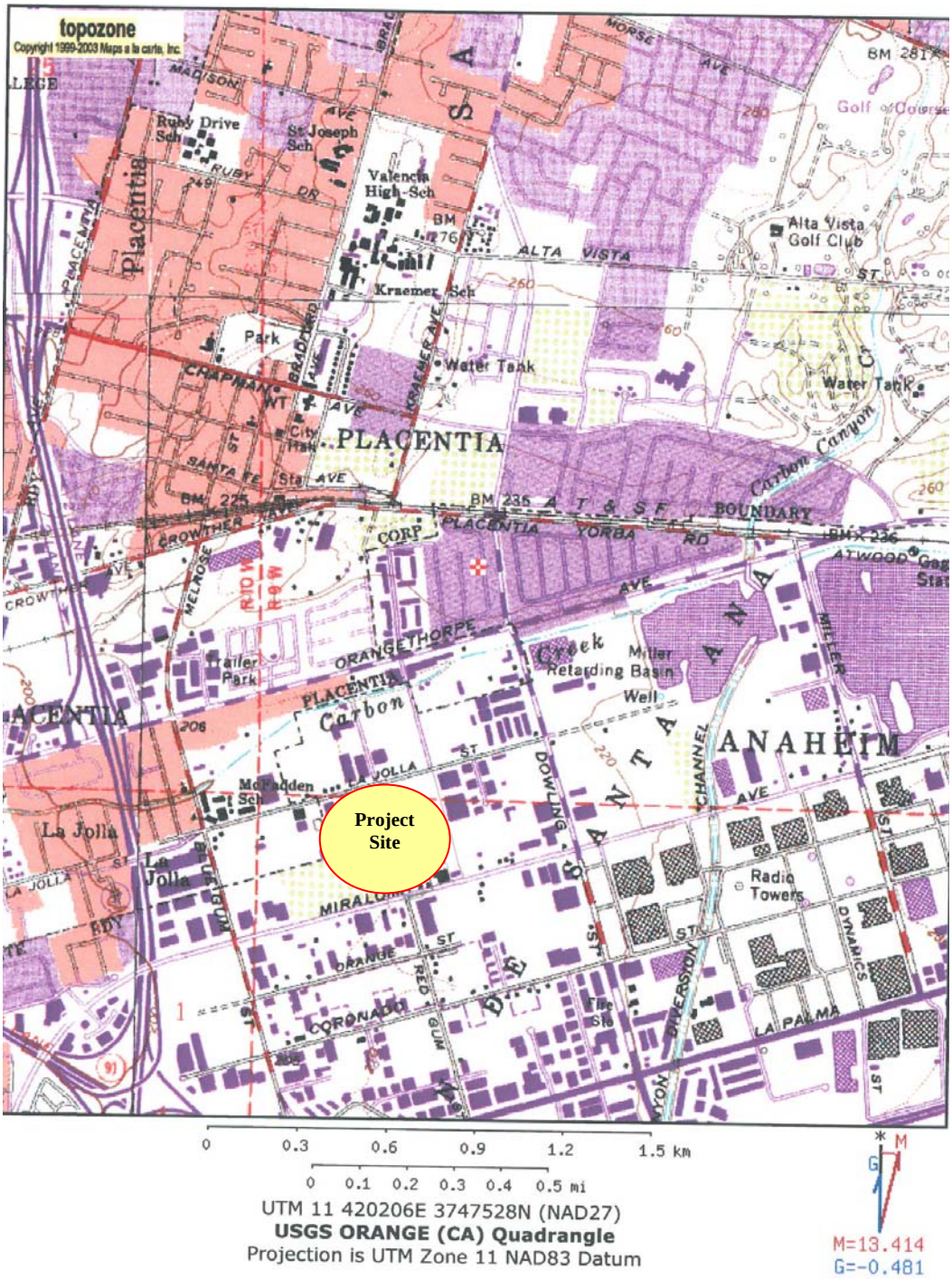

September 5, 2007

Juaneno Band of Mission Indians
Acjachemen Nation
Attn: Anthony Rivera, Chairperson
31411-A La Matanza Street
San Juan Capistrano, CA 92675
arivera@juaneno.com
Phone: 949-488-3484
Fax: 949-488-3294

Re: Anaheim Municipal Power Station (AMPS) - Sacred Sites Records Check

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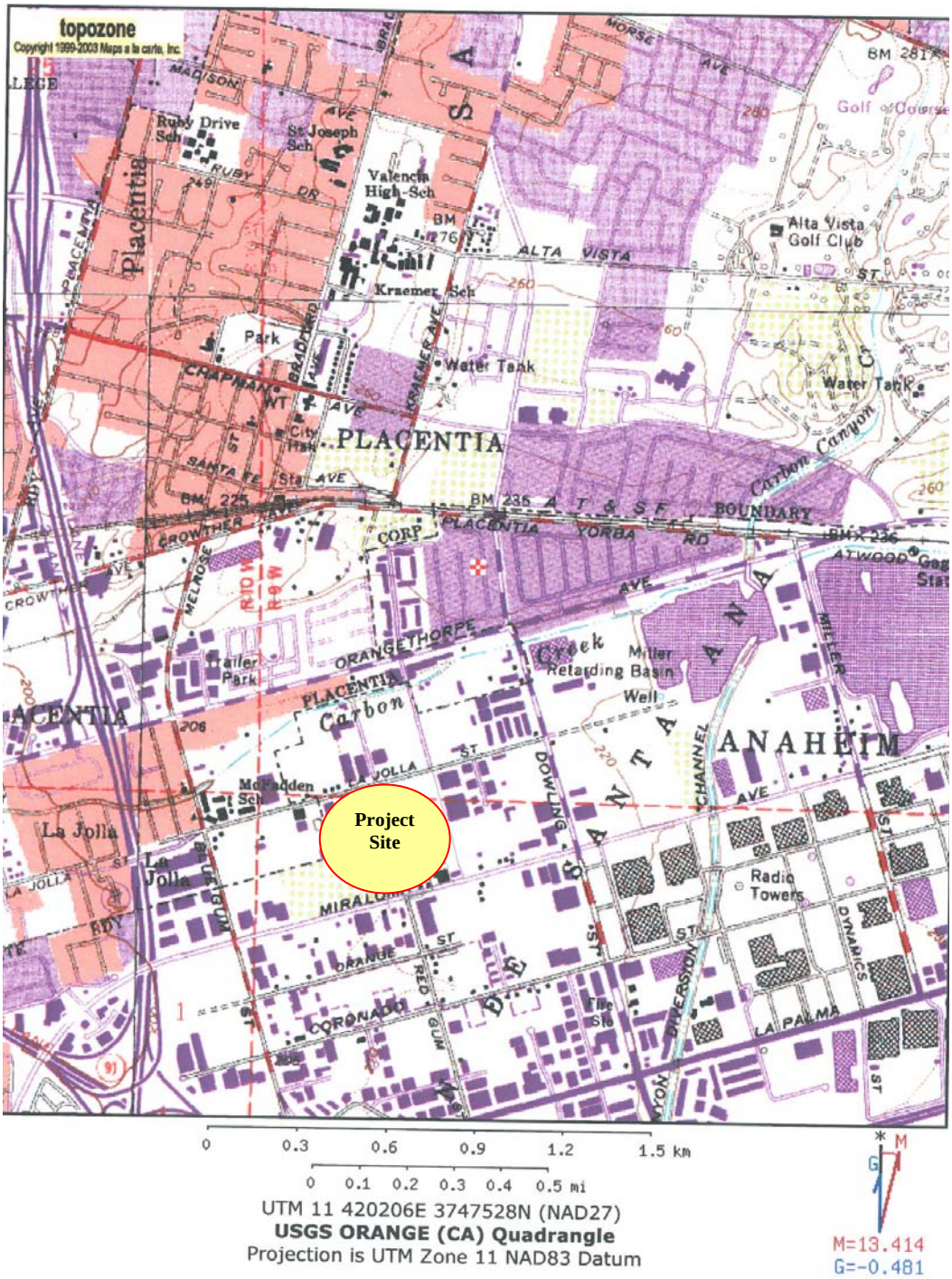

September 5, 2007

Juaneno Band of Mission Indians
Acjachemen Nation
Attn: Adolph "Bud" Sepulveda, Chairperson
P.O. Box 25828
Santa Ana, CA 92799
bsepul@yahoo.com
Phone: 714-838-3270
Cell: 714-914-1812

Re: Anaheim Municipal Power Station (AMPS) - Sacred Sites Records Check

I am writing to request a record search of the Sacred Lands File and a list of appropriate Native American contacts for a proposed simple cycle peaking power plant project the City of Anaheim, California. Known as "AMPS", the project falls within the following USGS 7.5 minute quadrangle:

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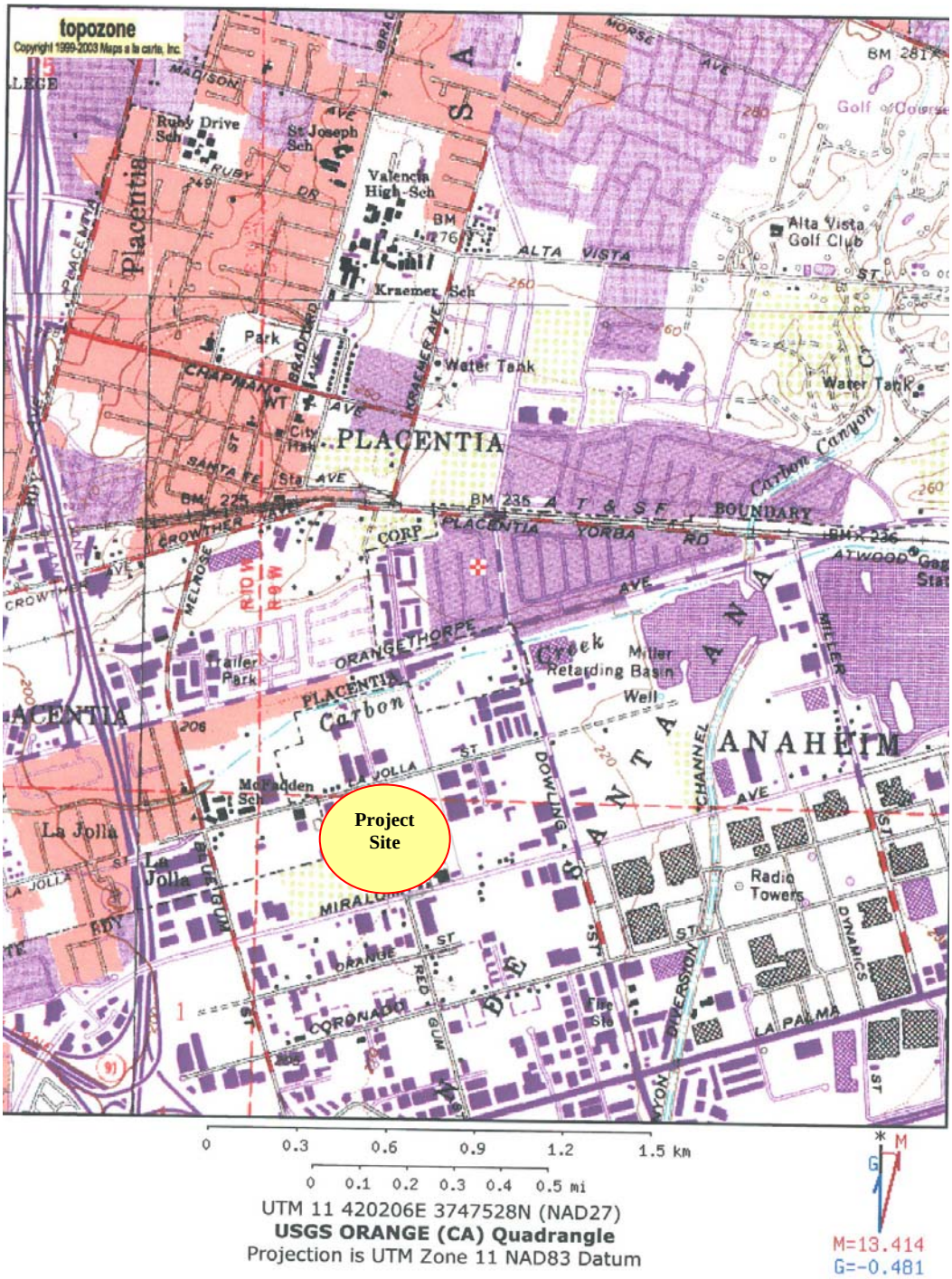

Corrected Copy

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

August 23, 2007

Laurie Solis
URS
130 Robin Hill Road, Suite 100
Santa Barbara, CA 93227

Sent by FAX: 805-964-0259
Number of pages: 2

Re: Proposed Mira Loma avenue and Kraemer Boulevard, City of Anaheim, Orange County.

Dear Ms. Solis:

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
Orange County
August 21, 2007

Juaneno Band of Mission Indians Acjachemen Nation
David Belardes, Chairperson
31742 Via Belardes Juaneno
San Juan Capistrano , CA 92675
(949) 493-0959
(949) 493-1601 Fax

Juaneno Band of Mission Indians
Adolph "Bud" Sepulveda, Chairperson
P.O. Box 25828 Juaneno
Santa Ana , CA 92799
bssepul@yahoo.net
714-838-3270
714-914-1812 - CELL
bsepul@yahoo.net

Juaneno Band of Mission Indians Acjachemen Nation
Anthony Rivera, Chairman
31411-A La Matanza Street Juaneno
San Juan Capistrano , CA 92675-2674
arivera@juaneno.com
949-488-3484
949-488-3294 Fax

Sonia Johnston, Tribal Vice Chairperson
Juaneño Band of Mission Indians
P.O. Box 25628 Juaneno
Santa Ana , CA 92799
(714) 323-8312
sonia.johnston@sbcglobal.net

Juaneno Band of Mission Indians Acjachemen Nation
Joyce Perry , Tribal Manager & Cultural Resources
31742 Via Belardes Juaneno
San Juan Capistrano , CA 92675
(949) 493-0959
(949) 293-8522 Cell
(949) 493-1601 Fax

Juaneno Band of Mission Indians
Alfred Cruz, Culural Resources Coordinator
P.O. Box 25628 Juaneno
Santa Ana , CA 92799
alfredgcruz@sbcglobal.net
714-998-0721
slfredgcruz@sbcglobal.net

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 American with regard to cultural resources for the proposed Anaheim Municipal Power Station; a 9-acres site located near intersection of Mira Loma Avenue and Kraemer Boulevard in the City of Anaheim; Orange County, California and known as "AMPS" for which a Sacred Lands File search was requested.

****
*** TX REPORT ***
****

TRANSMISSION OK

TX/RX NO	0238
RECIPIENT ADDRESS	19166575390
DESTINATION ID	
ST. TIME	08/20 11:21
TIME USE	00'52
PAGES SENT	2
RESULT	OK

URS
130 Robin Hill Road, Suite 100
Santa Barbara, CA 93117
PH: (805) 964-6010 ext 560
FAX: (805) 964-0259

FACSIMILE TRANSMITTAL

Transmitted By:

Name: Laurie Solis Date: 8/20/07
Number of Pages (including cover sheet): 2

Please Deliver To:

Name: Rob Wood
Company: California Native American Heritage Commission
Fax No.: (916) 657-5390 Office PH: (916) 653-4040
Subject: Data request for a project in Orange County, CA. Project No.: 28906973.01012

Remarks: "Anaheim Municipal Power Station, Orange County, CA"

Dear Mr. Wood,

I am writing to request a record search of the Sacred Lands File and a list of appropriate Native American contacts for a proposed simple cycle peaking power plant project the City of Anaheim, California. Known as "AMPS", the project falls within the following USGS 7.5 minute quadrangle:

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URS
130 Robin Hill Road, Suite 100
Santa Barbara, CA 93117
PH: (805) 964-6010 ext 560
FAX: (805) 964-0259

FACSIMILE TRANSMITTAL

Transmitted By:

Name: Laurie Solis Date: 8/20/07
Number of Pages (including cover sheet): 2

Please Deliver To:

Name: Rob Wood
Company: California Native American Heritage Commission
Fax No.: (916) 657-5390 Office PH: (916) 653-4040
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Thank you for your attention to this request. I appreciate your continued assistance.

Sincerely,

Laurie Solis
Archaeologist

We are transmitting from Fax. No. (805) 964-0259
If you do not receive all pages or if the transmission is not legible,
please contact the sender at your earliest convenience.

Project site

0 0.3 0.6 0.9 1.2 1.5 km

0 0.1 0.2 0.3 0.4 0.5 mi

UTM 11 420206E 3747528N (NAD27)

USGS ORANGE (CA) Quadrangle

Projection is UTM Zone 11 NAD83 Datum

M=13.414
G=-0.481

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Juaneno Band of Mission Indians
Acjachemen
Attn: Bud Sepulveda
Santa Ana Ca
P.O. Box 25828 92799

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Alfred Cruz ☑ Agent ☐ Addressee

B. Received by (Printed Name) Alfred Cruz C. Date of Delivery 10/9/07

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 0390 0000 1666 4160

PS Form 3811, August 2001 Domestic Return Receipt 102595-01-M-0381

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Juaneno Band of Mission Indians
Attn: Alfred Cruz
P.O. Box 25828
Santa Ana 92799
Ca.

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Alfred Cruz ☐ Agent ☐ Addressee

B. Received by (Printed Name) Alfred Cruz C. Date of Delivery 10/9/07

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 0390 0000 1666 4153

PS Form 3811, August 2001 Domestic Return Receipt 102595-01-M-0381

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- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Juaneno Band of Mission Indians
Acjachemen Nation
Attn: David Belardes,
31742 Via Belardes
S. Juan Capistrano Ca
92675

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X A Belardes ☑ Agent ☐ Addressee

B. Received by (Printed Name) A BELARDES C. Date of Delivery 10-9-07

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 0390 0000 1666 4191

PS Form 3811, August 2001 Domestic Return Receipt 102595-01-M-0381

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Juaneno Band of Mission Indians
Acjachemen Nation
Attn: Anthony Rivera
31411-A La Matanza St.
S. Juan Capistrano Ca
92675

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Fran Jordan ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery
10/1/07

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No
2562

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number
(Transfer from service label) 7005 0390 0000 1666 4207

PS Form 3811, August 2001 Domestic Return Receipt 102595-01-M-0381

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Juaneno Band of Mission Indians
Attn: Joyce Perry
31742 Via Buenes
S. Juan Capistrano Ca
92675

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Joyce Perry ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery
Joyce Perry 10/1/07

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number
(Transfer from service label) 7005 0390 0000 1666 4177

PS Form 3811, August 2001 Domestic Return Receipt 102595-01-M-0381

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- Attach this card to the back of the mailpiece, or on the front if space permits.

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Attn: Sonia Johnston
P.O. Box 25628
Santa Ana Ca 92799

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X Alfred Cruz ☐ Agent ☑ Addressee

B. Received by (Printed Name) C. Date of Delivery
Alfred Cruz 10/9/07

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number
(Transfer from service label) 7005 0390 0000 1666 4184

PS Form 3811, August 2001 Domestic Return Receipt 102595-01-M-0381

Technical Area: Cultural Resources

Data Request CUL-6: Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.

Response:

Agency	Contact Information	Regulation or Issue Area Enforcing
Native American Heritage Commission	Dave Singleton 916 Capitol Mall Room 364 Sacramento, CA 95614 Phone: 916-653-6251 Fax: 916-657-5390 Email: ds_nahc@pacbell.net	Human remains belonging to Native Americans
Orange County Coroners Office	1071 W. Santa Ana Blvd. Santa Ana, CA 92703 Phone: 714-647-7400 Fax: 714-647-7426 Email: coroner@ocsd.org	Human remains

Technical Area: Cultural Resources

Data Request CUL-7: The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.

Response:

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Native American Heritage Commission	Dave Singleton 916 Capitol Mall Room 364 Sacramento, CA 95614 Phone: 916-653-6251 Fax: 916-657-5390 Email: ds_nahc@pacbell.net	Human remains belonging to Native Americans
Orange County Coroners Office	1071 W. Santa Ana Blvd. Santa Ana, CA 92703 Phone: 714-647-7400 Fax: 714-647-7426 Email: coroner@ocsd.org	Human remains

Technical Area: Geology

Data Request GEO-1: The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.

Response: Calif. Division of Mines and Geology
801 K Street, Suite 2015
Sacramento, CA 95814

COA, Community Development Department, and Building Division
201 South Anaheim Blvd.
Anaheim, CA 92805
COA Fire Department

City Hall West
201 South Anaheim Blvd
Anaheim, CA 92805

URS does not have e-mail addresses.

Technical Area: Land Use

Data Request LAND-1: A discussion of the legal status of the parcel(s) on which the project is proposed. If the proposed site consists of more than one legal parcel, describe the method and timetable for merging or otherwise combining those parcels so that the proposed project, excluding linears and temporary laydown or staging area, will be located on a single legal parcel. The merger need not occur prior to a decision on the Application but must be completed prior to the start of construction.

Response: Attached please find the approved lot line adjustment map.

COUNCIL AGENDA REPORT

City of Anaheim
DEPARTMENT OF PUBLIC WORKS

DATE: **January 29, 2008**

FROM: **DEPARTMENT OF PUBLIC WORKS**

SUBJECT: **LOT LINE ADJUSTMENT NO. 648 (FOR CANYON POWER GENERATING PROJECT)**

ATTACHMENT (Y/N): **YES** **ITEM #**

RECOMMENDATION:

That the City Council, by Motion, approve Lot Line Adjustment No. 648 as it pertains to the Canyon Power Peaking Generating Project located at 3071 East Miraloma Avenue.

DISCUSSION:

The above referenced property is located at 3071 East Miraloma Avenue and is owned by the City of Anaheim. The site will be developed by the Public Utilities Department for the construction of its Canyon Power Peaking Generation Project. The site currently consists of three lots. The lot line adjustment will merge the three lots into one parcel.

The Canyon Power Project will be a new Generation Station providing 200 MW of additional peaking capability for summer loads and providing improved reliability of generating capacity for the City of Anaheim. The Application for Construction was filed with the California Energy Commission in December, 2007 and they require that the property be combined into one parcel. The facility is dedicated solely for serving Anaheim customers and is expected to be in service by the summer of 2010.

IMPACT ON BUDGET:

There is no impact on the General Fund. Sufficient funds are available in the Public Utilities Department budget Fund 525, Program 6758, for fiscal year 2007-2008.

Respectfully submitted,

Natalie A. Meeks
Director of Public Works

Attachment(s):
1. Lot Line Adjustment No. 648

H:\ADMIN\STAFF REPORTS\DEVELOPMENT SRVCS\SUBDIVISIONS\TMN-Lot Line Adjustment 648.doc

WHEN RECORDED MAIL TO:

CITY OF ANAHEIM
PUBLIC WORKS - RECORDS SECTION
P.O. BOX 3222
ANAHEIM, CA 92803

EXEMPT – GOVERNMENT AGENCY "Per Gov. Code 6103"

SPACE ABOVE THIS LINE FOR RECORDER'S USE

CITY OF ANAHEIM

LOT LINE ADJUSTMENT NO. LLA-0000648

BEING A MERGER OF THOSE PORTIONS OF LOT 8 BLOCK 5 OF GOLDEN STATE TRACT, AS SHOWN ON THE MAP RECORDED IN BOOK 4, PAGES 66 AND 67, OF MISCELLANEOUS MAPS, TOGETHER WITH PARCELS 1 AND 3 OF PMB 4/27, IN THE CITY OF ANAHEIM, COUNTY OF ORANGE, STATE OF CALIFORNIA, RECORDS OF SAID COUNTY.

RECORD OWNER'S CERTIFICATION

(I/WE) HEREBY CERTIFY THAT:

1. (I AM/WE ARE) THE RECORD OWNER(S) OF ALL PARCELS PROPOSED FOR ADJUSTMENT BY THIS APPLICATION,
2. (I/WE) HAVE KNOWLEDGE OF AND CONSENT TO THE FILING OF THIS APPLICATION, AND
3. THE INFORMATION SUBMITTED IN CONNECTION WITH THIS APPLICATION IS TRUE AND CORRECT.

EXISTING PARCEL'S AP NO(S): 344-221-003, 004 & 009
NAME: CITY OF ANAHEIM, A CALIFORNIA MANUCIPAL CORPORATION
ADDRESS: 3071 E. MIRALOMA AVENUE
ANAHEIM, CA

SIGNATURE_____

_____
MAYOR OF CITY OF ANAHEIM

ATTEST:

By:_____
Linda Nguyen, City Clerk

SURVEYOR'S STATEMENT

THIS DOCUMENT CONSISTING OF 3 OF PAGES WAS PREPARED BY ME OR UNDER MY DIRECTION

L.S. NO.: 5679
KARI J. LAUNEN

JAN. 7. 2008
DATE

PROFESSIONAL LAND SURVEYOR
KARI J. LAUNEN
No. 5679
Exp. 9/30/09
STATE OF CALIFORNIA

MY REGISTRATION LICENCE EXPIRES: 09/30/2009
COMPANY NAME: Psomas
ADDRESS: 3187 RED HILL AVE, SUITE 250
COSTA MESA, CA 92626
PHONE NO.: (714) 751-7373

CITY SURVEYOR'S APPROVAL

EXAMINED AND APPROVED BY:

_____
IAN EASTON
SURVEYOR, CITY OF ANAHEIM
LS 7016, EXP.: 6/30/08

_____
DATE

CITY OF ANAHEIM
LOT LINE ADJUSTMENT NO. LLA-0000648
(LEGAL DESCRIPTION)

PARCEL 1

A PORTION OF LOT 8 OF THE GOLDEN STATE TRACT, TOGETHER WITH PARCELS 1 AND 3 OF PMB 4/27, AS SHOWN ON THE MAP FILED IN BOOK 4, PAGES 66 AND 67 OF MISCELLANEOUS MAPS, IN THE CITY OF ANAHEIM, COUNTY OF ORANGE, STATE OF CALIFORNIA, IN THE OFFICE OF THE COUNTY RECORDED OF SAID COUNTY AS DESCRIBED AS FOLLOWS:

BEGINNING AT THE CENTERLINE INTERSECTION OF KRAEMER BOULEVARD AND MIRALOMA AVENUE PER RECORD OF SURVEY 80-1166 FILED IN BOOK 102, PAGE 21 OF RECORD OF SURVEY BOOK, IN THE OFFICE OF THE COUNTY RECORDED OF SAID COUNTY; THENCE ALONG THE CENTERLINE OF SAID MIRALOMA AVENUE SOUTH 74°02'18" WEST 330.01 FEET THENCE LEAVING SAID CENTERLINE NORTH 15°57'42" WEST 45.00 FEET ON THE NORTHERLY LINE OF MIRA LOMA AVENUE, 90 FEET WIDE, TO THE **TRUE POINT OF BEGINNING**; THENCE NORTH 15°56'41" WEST 614.80 FEET TO A POINT ON THE NORTHERLY LINE OF PARCEL 1 OF PMB 7/27; THENCE ALONG SAID NORTHERLY LINE SOUTH 74°01'56" WEST 330.00 FEET TO THE NORTHWEST CORNER OF SAID PARCEL 1 ALSO THE NORTHEAST CORNER OF LOT 8, BLOCK 5 OF SAID GOLDEN STATE TRACT; THENCE SOUTH 74°02'15" WEST 329.98 FEET ALONG THE NORTHERLY LINE OF LOT 8, BLOCK 5 OF SAID GOLDEN STATE TRACT; THENCE LEAVING SAID NORTHERLY LINE, SOUTH 15°56'13" EAST 659.76 FEET TO A POINT ON THE CENTERLINE OF MIRALOMA AVENUE, 90 FEET WIDE; THENCE ALONG SAID CENTERLINE, NORTH 74°02'18" EAST 300.07; THENCE LEAVING SAID NORTHERLY LINE, NORTH 15° 56'41" WEST 45.00 FEET; THENCE NORTH 74°02'18" EAST 330.00 TO THE **TRUE POINT OF BEGINNING**.

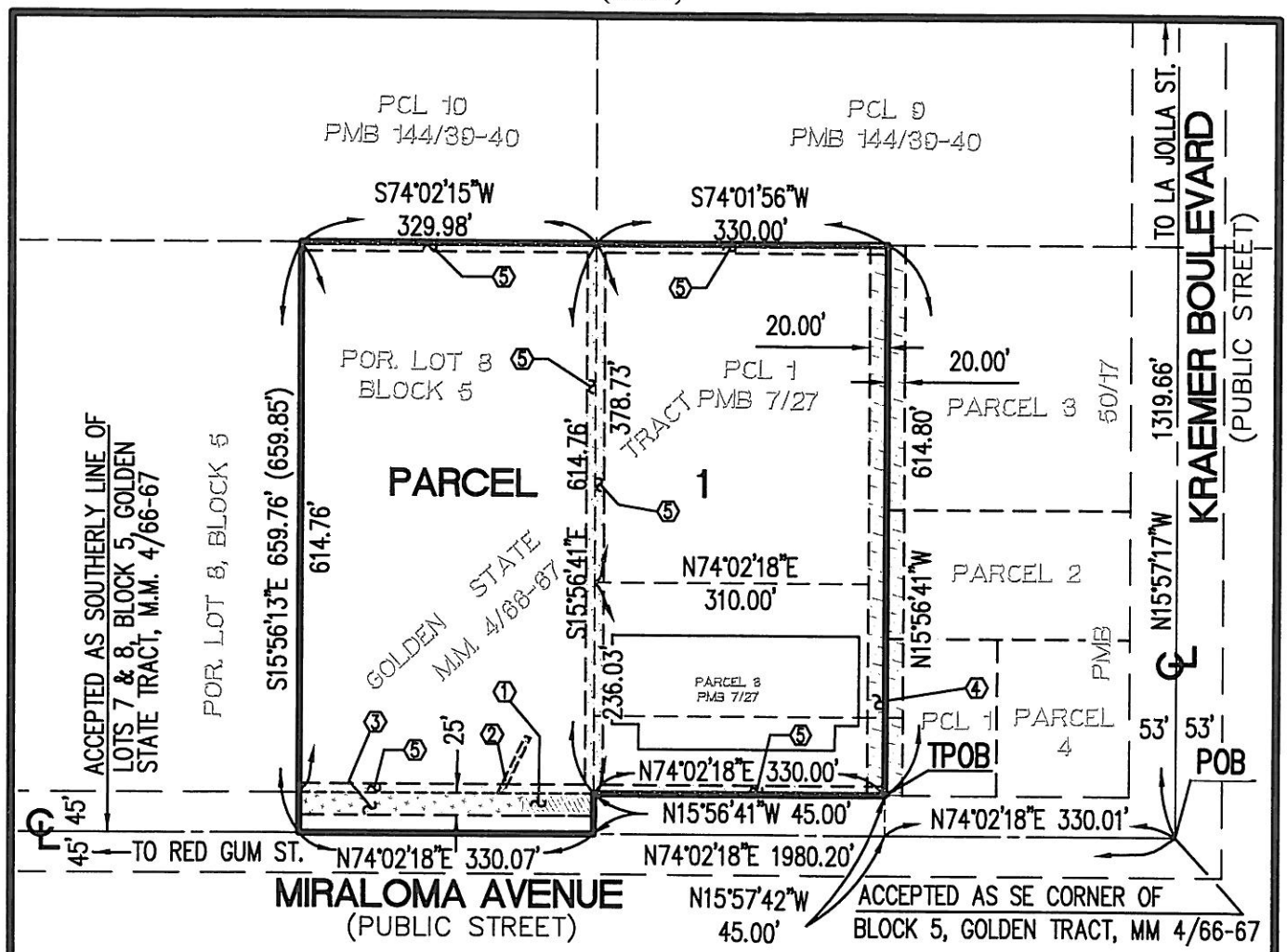
AREA: (405,758 SQUARE FEET), MORE OR LESS.
NET: 9.31 ACRES

PROFESSIONAL LAND SURVEYOR
KARI J. LAUNIEN
No. 5679
Exp. 9/30/09
STATE OF CALIFORNIA

CITY OF ANAHEIM

LOT LINE ADJUSTMENT NO. LLA-0000648

(PLAT)



BASIS OF BEARINGS

The basis of bearing hereon are based on the bearing between OCS GPS Points #391 and #470 being N74°02'18"E along the centerline of Miraloma Avenue.

EASEMENTS:

(1) 25' wide easement for road & public utility purposes in favor of City of Anaheim per document recorded on May 9, 1977 in Book 12185 Page 1277

(2) 6' wide easement in favor of Southern California Edison Co. per document recorded on June 20, 1958 in Book 4328 Page 130 (approx. location)

(3) 25' wide easement for road & public utility purposes in favor of City of Anaheim per document recorded on September 15, 1987 as Instrument No. 87-521545

(4) 20' wide easement for ingress, egress & public utility purposes per document recorded on June 21, 1966 in Book 7966 Page 722

(5) 10' wide strip of land for utility purposes in favor of Anaheim Eucalytus Water Company per document recorded March 1, 1912 in Book 209, Page 391

NOTE

This plat was prepared based on survey performed on September 4, 2007

AREA

GROSS AREA	9.66 ACRE (420,611 SF)
NET AREA	9.31 ACRE (405,758 SF)

0' 100' 200'

SCALE: 1"=200'

PROFESSIONAL LAND SURVEYOR
KARI J. LAUNER
No. 5679
Exp. 9/30/2009
STATE OF CALIFORNIA

Technical Area: Land Use

Data Request LAND-2: Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state, and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.

Response:

TABLE 6.9-6
AGENCY CONTACTS

Agency	Contact	Title	Telephone	Address
City of Anaheim, Planning Department	Marie Newland	Planner & Resource Analyst	714.765.5009	City of Anaheim City Hall East 200 S. Anaheim Blvd Anaheim, CA 92805
City of Placentia, City Planning Division	Monique Schwartz	Planner & Resource Analyst	714.993.8124	City of Placentia 401 E. Chapman Ave Placentia, CA 92870
County of Orange, Planning and Development Services	Ron Tippets	Planner & Resource Analyst	714.834.5394	Central Office 300 N. Flower P.O. Box 4048 Santa Ana, CA 92702-4048

TABLE 6.9-7
PERMITS REQUIRED

Jurisdiction [1]	Department	LORS or Land Use Plan	Type of Permit
City of Anaheim	Planning Department	City of Anaheim General Plan City of Anaheim Zoning Ordinance	CUP not required
	Planning Department	City of Anaheim Municipal Code	Building Permit
	Department of Public Works	City of Anaheim Municipal Code	Grading Permit
City of Placentia	City Planning Division	City of Placentia General Plan City of Placentia Zoning Ordinance	No Permits Required [2]
County of Orange	Planning and Development Services	County of Orange General Plan County of Orange Zoning Code	No Permits Required [2]

[1] Agencies with LORS or Land Use plans Within One Mile of Project Site and/or ¼ mile of Linear Facilities.

[2] A portion of the study area lies within the jurisdiction but no jurisdictional permitting requirements a.

Technical Area: Land Use

Data Request LAND-3: The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.

Response: Please see Table 6.9-6, above.

Technical Area: Paleontological Resources

Data Request PALEO-1: A discussion of the sensitivity of the project area described in subsection (g)(16)(A) and the presence and significance of any known paleontologic localities or other paleontologic resources within or adjacent to the project. Include a discussion of sensitivity for each geologic unit identified on the most recent geologic map at a scale of 1:24,000. Provide rationale as to why the sensitivity was assigned.

Response: Please refer to figure 6.3-1 of the AFC.

There are no available geologic maps at the 1:24,000 scale for the Anaheim and Orange quadrangles. The California Division of Mines and Geology has published maps of these quadrangles at this scale, however these are seismic hazard evaluation maps, and do not contain relevant information on the surficial geology. The Dibblee Foundation has available maps at the scale of 1:24,000 in adjacent quadrangles. These were used in conjunction with the 1:100,000 scale map by Morton and Miller (2006) to determine the local stratigraphy when creating the technical report.

A map at the scale of 1:48,000 is available for the project area, which is included in Morton et al. (1979). However, the Morton and Miller (2006; 1:100,000 scale) map was a much more recent source. This map (Morton and Miller 2006), used in conjunction with the neighboring 1:24,000 maps by Dibblee (2001a; 2001b), provided more recent and accurate data than did the older 1:48,000 scale geologic map.

In summary, the map by Morton and Miller (2006) represents the most recent and up to date geologic mapping available for the area in discussion. While this map is at 1:100,000 scale, it contains detail not provided in other older maps of 1:48,000 or 1:100,000 scale. This map is a part of the USGS Open-File Report 2006-1217, which contains an in-depth discussion of the geology and of the previous published mapping efforts in the region. When used in conjunction with the Dibblee

1:24,000 scale maps (2001a, 2001b), the surficial geology in the area can be determined with relative confidence.

Figure 6.3-1 of the AFC was amended to represent a 1:24,000 scale, for CEC reference, and it is attached herein.

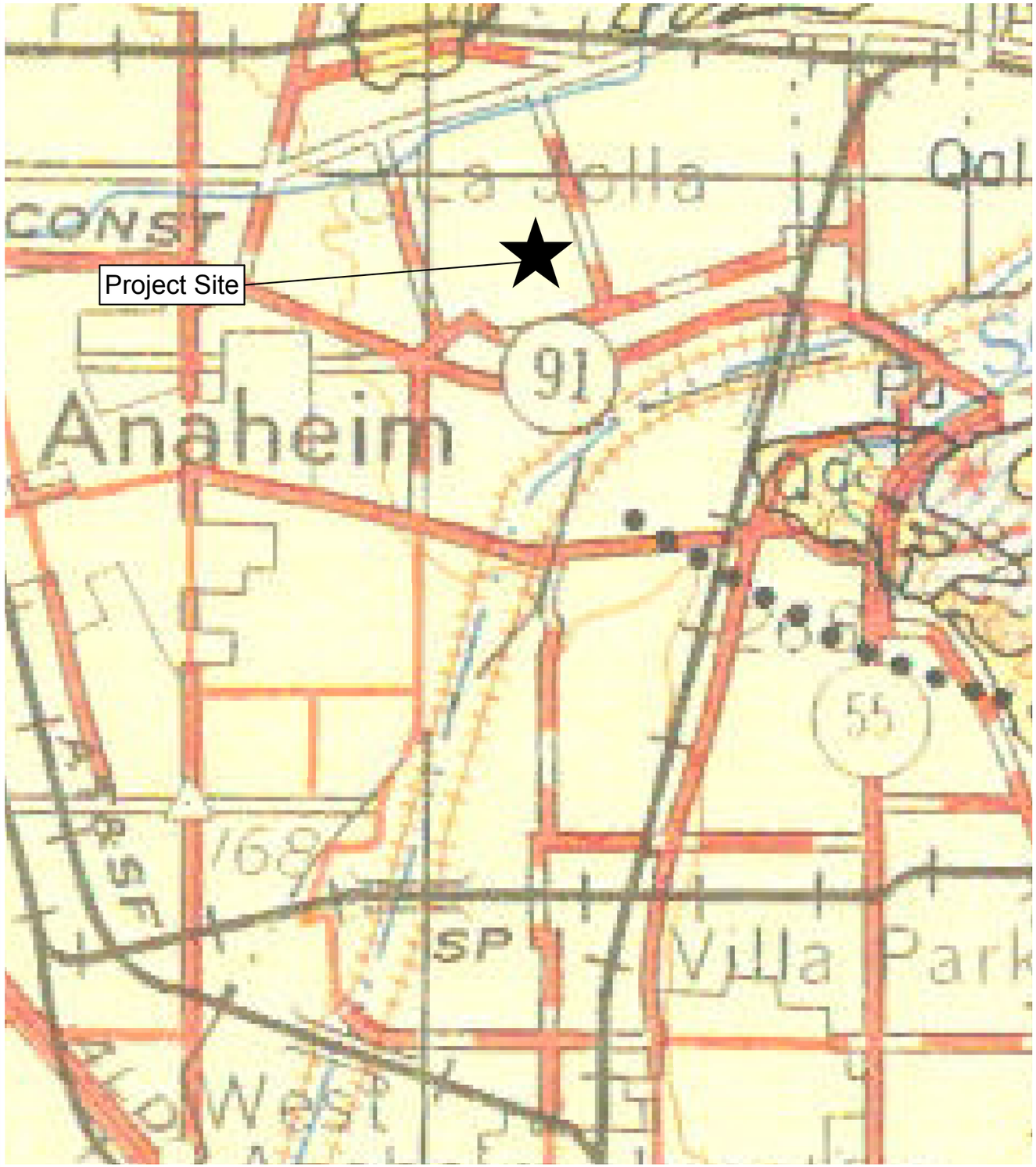
California Division of Mines and Geology, 1997, Seismic hazard evaluation of the Orange 7.5-minute quadrangle, Los Angeles County, California: California Division of Mines and Geology Open-File Report 97-19, scale 1:24,000.

Dibblee, T. W., 2001a, Geologic map of the Whittier and Prado Dam quadrangles (eastern Puente Hills), Los Angeles and Orange counties, California: Dibblee Geological Foundation Map DF-74, scale 1:24,000.

Dibblee, T. W., 2001b, Geologic map of the Yorba Linda and La Habra quadrangles (western Puente Hills), Los Angeles, Orange, San Bernardino, and Riverside counties, California: Dibblee Geological Foundation Map DF-75, scale 1:24,000.

Morton, D. M., and Miller, F. K., 2006, Geologic map of the San Bernardino and Santa Ana 30’ x 60’ quadrangles, California, version 1.0: U.S. Geological Survey Open-File Report 2006-1217, 199 p.

Morton, P. K., Miller, R. V., and Evans, J. R., 1979, Environmental geology of Orange County, California: California Division of Mines and Geology Open-File Report 79-8, 474 p.



LEGEND

SEDIMENTARY AND META-SEDIMENTARY ROCKS

- Qs — Dune sand
- Qal — Alluvium
- Qsc — Stream channel deposits (GREAT VALLEY)
- Qf — Fan deposits (GREAT VALLEY)
- Qb — Basin deposits (GREAT VALLEY)
- Qsf — Salt deposits
- Ql — Quaternary lake deposits
- Qg — Glacial deposits
- Qt — Quaternary nonmarine terrace deposits
- Qm — Pleistocene marine and marine terrace deposits
- Qc — Pleistocene nonmarine
- QP — Plio-Pleistocene nonmarine
- Pc — Undivided Pliocene nonmarine
- Puc — Upper Pliocene nonmarine
- Pu — Upper Pliocene marine
- Pmlc — Middle and/or lower Pliocene nonmarine
- Pml — Middle and/or lower Pliocene marine
- Mc — Undivided Miocene nonmarine
- Muc — Upper Miocene nonmarine
- Mu — Upper Miocene marine
- Mmc — Middle Miocene nonmarine
- Mm — Middle Miocene marine
- Ml — Lower Miocene marine
- ΦC — Oligocene nonmarine
- Φ — Oligocene marine
- Ec — Eocene nonmarine
- E — Eocene marine
- Epc — Paleocene nonmarine
- Ep — Paleocene marine

IGNEOUS AND META-IGNEOUS ROCKS

- Qrv — Recent volcanic: Q_{rv}^{r} —rhyolite; Q_{rv}^{a} —andesite; Q_{rv}^{b} —basalt; Q_{rv}^{p} —pyroclastic rocks
- Qpv — Pleistocene volcanic: Q_{pv}^{r} —rhyolite; Q_{pv}^{a} —andesite; Q_{pv}^{b} —basalt; Q_{pv}^{p} —pyroclastic rocks
- Quaternary and/or Pliocene cinder cones
- Pv — Pliocene volcanic: P_{v}^{r} —rhyolite; P_{v}^{a} —andesite; P_{v}^{b} —basalt; P_{v}^{p} —pyroclastic rocks
- Mv — Miocene volcanic: M_{v}^{r} —rhyolite; M_{v}^{a} —andesite; M_{v}^{b} —basalt; M_{v}^{p} —pyroclastic rocks
- Φv — Oligocene volcanic: Φ_{v}^{r} —rhyolite; Φ_{v}^{a} —andesite; Φ_{v}^{b} —basalt; Φ_{v}^{p} —pyroclastic rocks
- Ev — Eocene volcanic: E_{v}^{r} —rhyolite; E_{v}^{a} —andesite; E_{v}^{b} —basalt; E_{v}^{p} —pyroclastic rocks

SEDIMENTARY AND META-SEDIMENTARY ROCKS

- QTc — Cenozoic nonmarine
- Tc — Tertiary nonmarine
- Tl — Tertiary lake deposits
- Tm — Tertiary marine
- K — Undivided Cretaceous marine
- Ku — Upper Cretaceous marine
- Kl — Lower Cretaceous marine
- Jk — Knoxville Formation
- Ju — Upper Jurassic marine
- Jml — Middle and/or Lower Jurassic marine
- Ꞧ — Triassic marine
- ls — Pre-Cretaceous metamorphic rocks (ls = limestone or dolomite)
- ms — Pre-Cretaceous metasedimentary rocks
- P ls — Paleozoic marine (ls = limestone or dolomite)
- R — Permian marine
- C — Undivided Carboniferous marine
- CP — Pennsylvanian marine
- CM — Mississippian marine
- KJf — Franciscan Formation

IGNEOUS AND META-IGNEOUS ROCKS

- QTv — Cenozoic volcanic: QT_{v}^{r} —rhyolite; QT_{v}^{a} —andesite; QT_{v}^{b} —basalt; QT_{v}^{p} —pyroclastic rocks
- Ti — Tertiary intrusive (hypabyssal) rocks: T_{i}^{r} - rhyolite; T_{i}^{a} -andesite; T_{i}^{b} -basalt
- Tv — Tertiary volcanic: T_{v}^{r} —rhyolite; T_{v}^{a} —andesite; T_{v}^{b} —basalt; T_{v}^{p} —pyroclastic rocks
- KJfv — Franciscan volcanic and metavolcanic rocks
- gr — Mesozoic granitic rocks: gr^{g}-grite and adamellite; gr^{d}-granodiorite; gr^{t}-tonalite and diorite
- bi — Mesozoic basic intrusive rocks
- ub — Mesozoic ultrabasic intrusive rocks
- JTRv — Jura-Trias metavolcanic rocks
- mv — Pre-Cretaceous metavolcanic rocks
- gr/m — Pre-Cenozoic granitic and metamorphic rocks
- Pv — Paleozoic metavolcanic rocks
- Rv — Permian metavolcanic rocks
- Cv — Carboniferous metavolcanic rocks

0 — 2000 — 4000 feet

Scale (1:24,000)

SOURCES: California Division of Mines and Geology (1965)

REGIONAL GEOLOGY MAP
ANAHEIM MUNICIPAL POWER STATION

URS

CREATED BY CM	DATE: 2-28-08	FIG. NO:
PM: CP	PROJ. NO: 28906973.01021	6.3-1

Path: G:\gis\projects\1577\28906973\mxd\Regional_Geology.mxd, 11/14/07, colin_mattison

Technical Area: Project Overview

Data Request PROJ-1: Each principal subject area covered in a notice or application shall be set forth in a separate chapter or section, each of which shall identify the person or persons responsible for its preparation.

Response: Transmission Engineering:

Steve Brock	PB Power
Charles Byrom	COA
Hieu Lam	COA
Larry Davis	COA
Roger Roberge	Consultant
Gary Rose	Consultant

Alternatives:

Colin McRae	PB Power
Cindy Poiré	URS

Technical Area: Project Overview

Data Request PROJ-2: Project Schedule: Proposed dates of initiation and completion of construction, initial start-up, and full-scale operation of the proposed facilities.

Response:

Construction Initiation	March 2009
Construction Completion	January 2010
Plant Start Up	February 2010
Plant Operation	July 2010

Technical Area: Project Overview

Data Request PROJ-3: Maps at a scale of 1:24,000 (1" – 2000'), (or appropriate map scale agreed by staff) along with an identification of the dedicated leaseholds by section, township, range, county, and county assessor's parcel number, showing the proposed final locations and layout of the power plant and all related facilities.

Response: This site area does not have dedicated leaseholds since all of the property is urban and not within the coast area. Dedicated leaseholds are typically for BLM property, U.S. Forest Service property and oil and gas development and/or offshore oil and gas development. This data request is not applicable to a site in downtown Anaheim since there are no leaseholds that could be impacted remotely by this development.

Technical Area: Project Overview

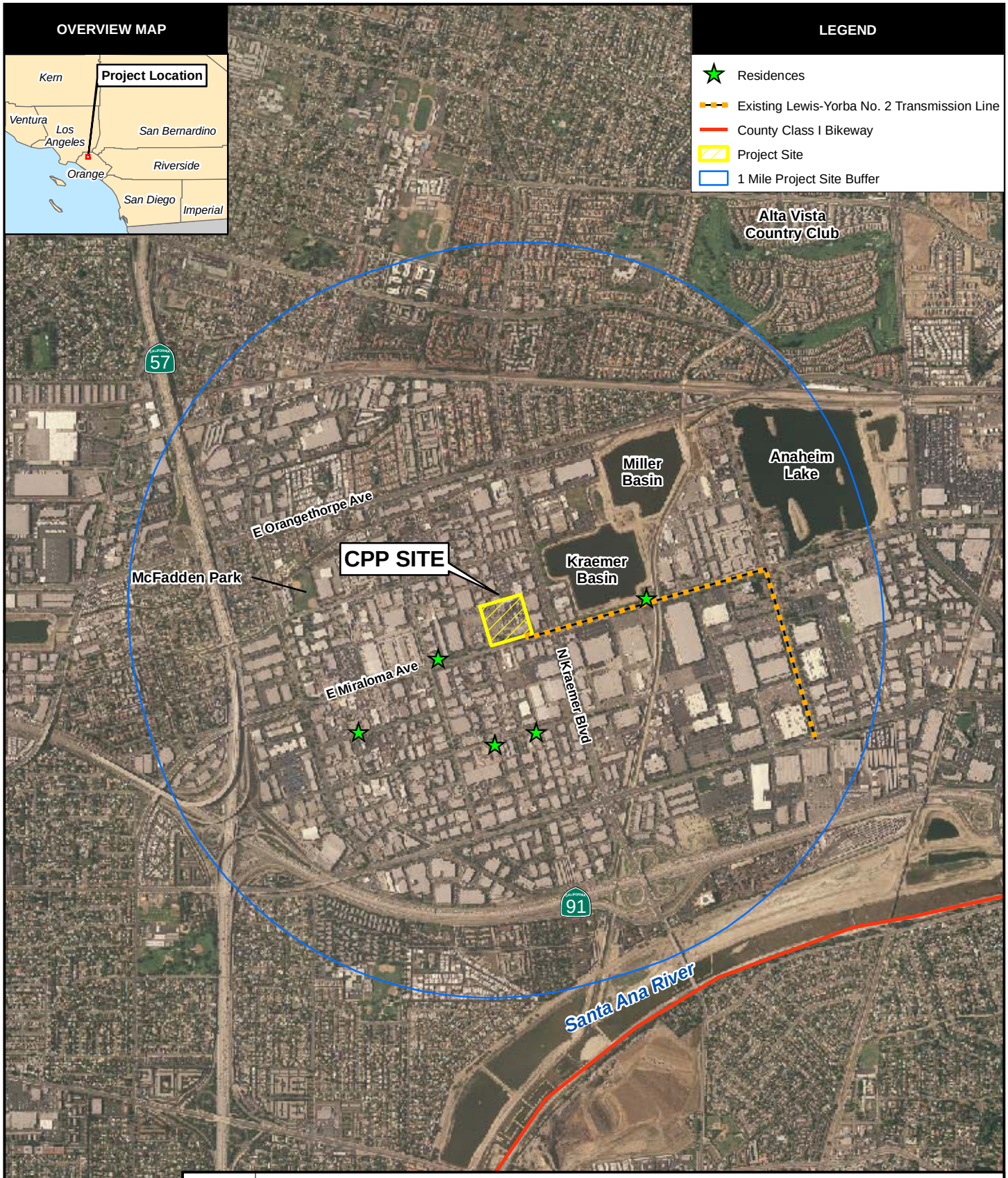
Data Request PROJ-4: Scale plan and elevation drawings depicting the relative size and location of the power plant and all related facilities to establish the accuracy of the photo simulations required in Sections (a)(1)(D) and (g)(6)(F).

Response: Figure 3-8 contains a graphic scale.

Technical Area: Project Overview

Data Request PROJ-5: Maps at a scale of 1:24,000 (or appropriate map scale agreed to by staff) of each proposed transmission line route, showing the settled areas, parks, recreational areas, scenic areas, and existing transmission lines within one mile of the proposed route(s).

Response: See attached. Please note transmission route is to be underground.



SOURCES: USDA FSA Aerial Photography Field Office: County image mosaic for Orange, CA (2005); Orange County Bikeways Map (bikeway).

AERIAL OF IMMEDIATE PROJECT VICINITY CANYON POWER PLANT (CPP)

URS

1000 0 1000 2000 Feet

SCALE: 1" = 2000 Feet (1:24,000)

SCALE CORRECT WHEN PRINTED AT 8.5X11

CREATED BY: MS	DATE: 12-2007	FIG. NO:
PM: CP	PROJ. NO: 28906973.01003	6.13-2

Path: G:\gis\projects\1577\28906973\mxd\Visual_Aerial_24k.mxd, 02/06/08, colin_mattison

Technical Area: Socioeconomics

Data Request SOCIO-1: An estimate of the total construction payroll and separate estimates of the total operation payroll for permanent and short-term (contract) operations employees.

Response: The CPP will require a staff of nine permanent employees to operate the facility. Combined, the annual operation payroll will be approximately $723,000 (rounded from $722,762) for the facility. Operation of CPP is not expected to require short-term operation employees.

Technical Area: Socioeconomics

Data Request SOCIO-2: The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.

Response: Contact names and information for the County of Orange Assessor's Office and City of Anaheim (COA) Planning Department are provided in the following table.

Subject	Agency	Contact/Title	Address	Telephone
Fiscal Resources	County of Orange Assessor's Office	Annabelle Andal, Assessor	Orange County Assessor 12 Civic Center Plaza, Room 142 P.O. Box 149 Santa Ana, CA 92702-0149	(714) 834.2727
Planning Services	COA Planning Services	Marie Newland, Planner and Resource Analyst	City of Anaheim Planning Services Division 200 S. Anaheim Boulevard Suite 162 Anaheim, CA 92805	(714) 765.5009

Technical Area: Soils

Data Request SOILS-1: The quantification of accelerated soil loss due to wind and water erosion.

Response: The CCP and associated linears are proposed for an urban developed site. The Universal Soil Loss Equation is typically used to quantify water-induced erosion in agricultural areas. However, because no agricultural land will be impacted during construction, soil loss estimates are not meaningful and thus have not been calculated for the plant site or off-site pipeline corridors. URS has not been required to prepare this calculation for other urban power plant sites.

Technical Area: Soils

Data Request SOILS-2: The effect of power plant emissions on surrounding soil-vegetation systems.

Response: Section 6.6.2.1 of the AFC describes the effect of power plant emissions on the local environment. However, the surrounding area is urban and limited in regards to soil vegetation systems.

Technical Area: Traffic and Transportation

Data Request TRAFFIC-1: A regional transportation setting, on topographic maps (scale of 1:250,000), identifying the project location and major transportation facilities. Include a reference to the transportation element of any applicable local or regional plan.

Response: Southern California Association of Governments Regional Transportation Plan

SCAG is the designated Metropolitan Planning Organization (MPO) for the six-county SCAG Region comprising the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The Association of Governments is mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. The adopted 2004 Regional Transportation Plan (RTP), also known as Destination 2030, is a multi-modal plan representing SCAG's vision for a better transportation system, integrated with the best possible growth pattern for the region. The 2004 RTP presents an assessment of the overall growth and economic trends in the SCAG region for the plan horizon 2030 and provides strategic direction for investments during this time period.

Orange County Transportation Authority (OCTA) 2006 Long Range Transportation Plan (LRTP)

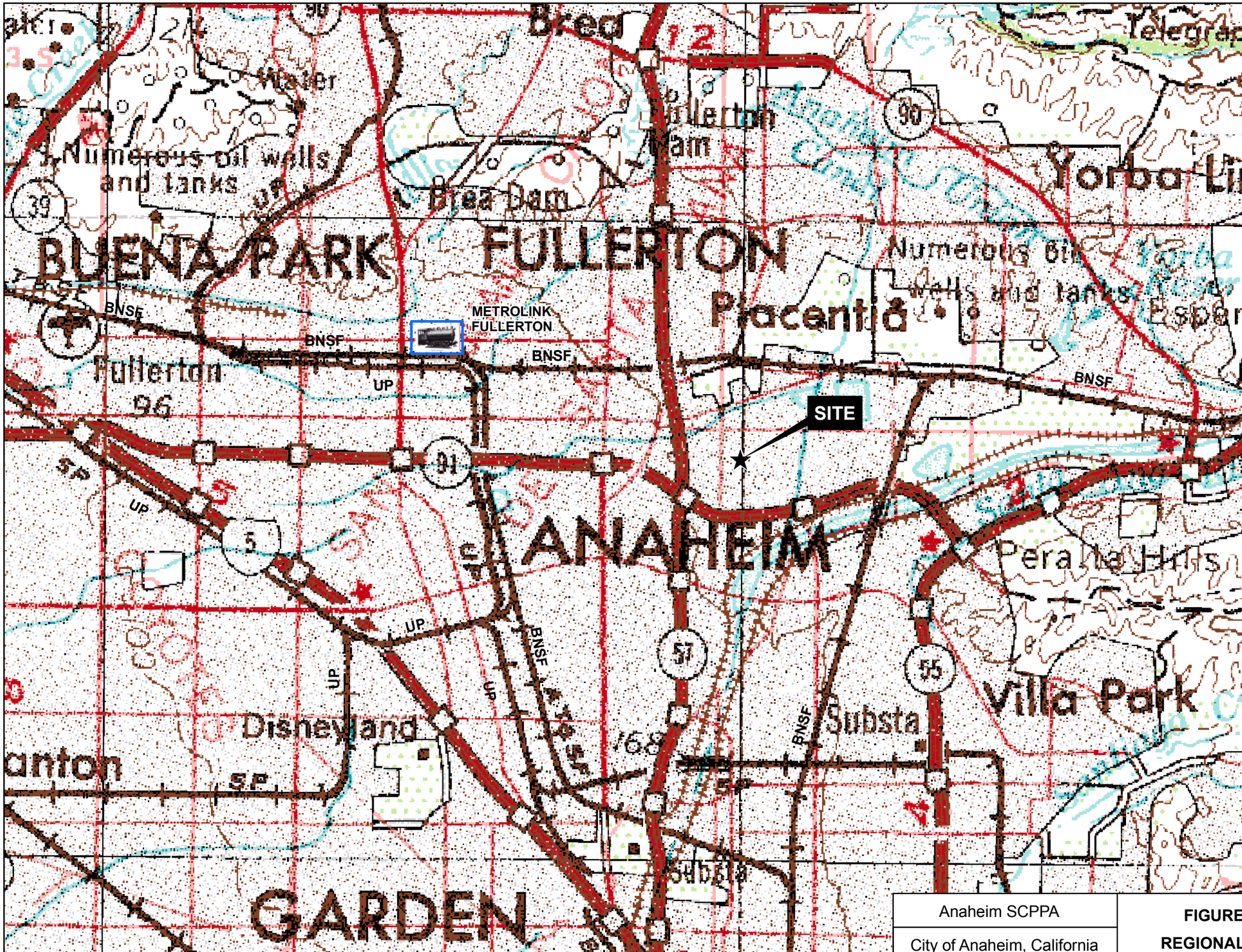
OCTA acts as the County Transportation Commission (CTC) for Orange County and plans, funds and operates transportation projects and services for the County. OCTA develops the LRTP which provides Orange County's plans, actions and direction for maintaining and improving Orange County's transportation network through Year 2030.

City of Anaheim General Plan Circulation Element

The City's Circulation Element contains the objectives, policies and principles, plan proposals and/or standards for

planning the city's infrastructure that support the circulation system, movement of goods and other alternative modes of transportation. The circulation element must correlate and support the land use element and that land use decisions and proposals shall take into consideration the capability of the circulation system.

Figure 6.11-1, attached, was updated in response to CEC Staff comments.



LEGEND

UP	Union Pacific Railroad
BNSF	Burlington Northern Santa Fe
5	Interstate 5
57	State Route 57
55	State Route 55
91	State Route 91
	Fullerton Multimodal Transportation Center

Note: Local roadways not visible due to scale
This map is based on a USGS 1:250,000 scale map

N

0 5,000 10,000 Feet

Anaheim SCPPA	**FIGURE 6.11-1**	September 2007
City of Anaheim, California	**REGIONAL VICINITY**	28906973

I:\Anaheim_SCPPA\mxd\Anaheim_Fig_6.11-1_tabloid.mxd

Technical Area: Traffic and Transportation

Data Request TRAFFIC-2: An identification, on topographic maps at a scale of 1:24,000, and a description of existing and planned roads, rail lines (including light rail), bike trails, airports, bus routes serving the project vicinity, pipelines, and canals in the project area affected by or serving the proposed facility. For each road identified, include the following information, where applicable:

Response:

Orangethorpe Avenue

Orangethorpe Avenue is classified as a primary arterial in the City of Anaheim, General Plan Circulation Element. It is an east-west roadway to the north of the proposed project site. The roadway is divided with a wide painted median and has a cross-section ranging six lanes just east of SR-57 to four lanes to the west of Kraemer Avenue. Orangethorpe Avenue is a designated truck from the Harbor Boulevard and Van Buren Street to the east.

Note: SR-57 Freeway and Kraemer Avenue had been described in Section 6.11.

Site access discussion (New added text in italics)

To access the proposed project site and construction laydown area, the recommended route for construction traffic will be via SR 91, then north on Kraemer Boulevard, west on East Miraloma Avenue, then north towards the project site.

Other alternative route to and from the access site would be via:

- *SR-57 access via eastbound Orangethorpe Avenue to southbound Kramer Avenue towards the proposed project site and construction laydown area. The supplemental traffic analysis conducted in response to the Data Adequacy Request concluded that Orangethorpe Avenue and Kramer Avenue could reasonably accommodate up to*

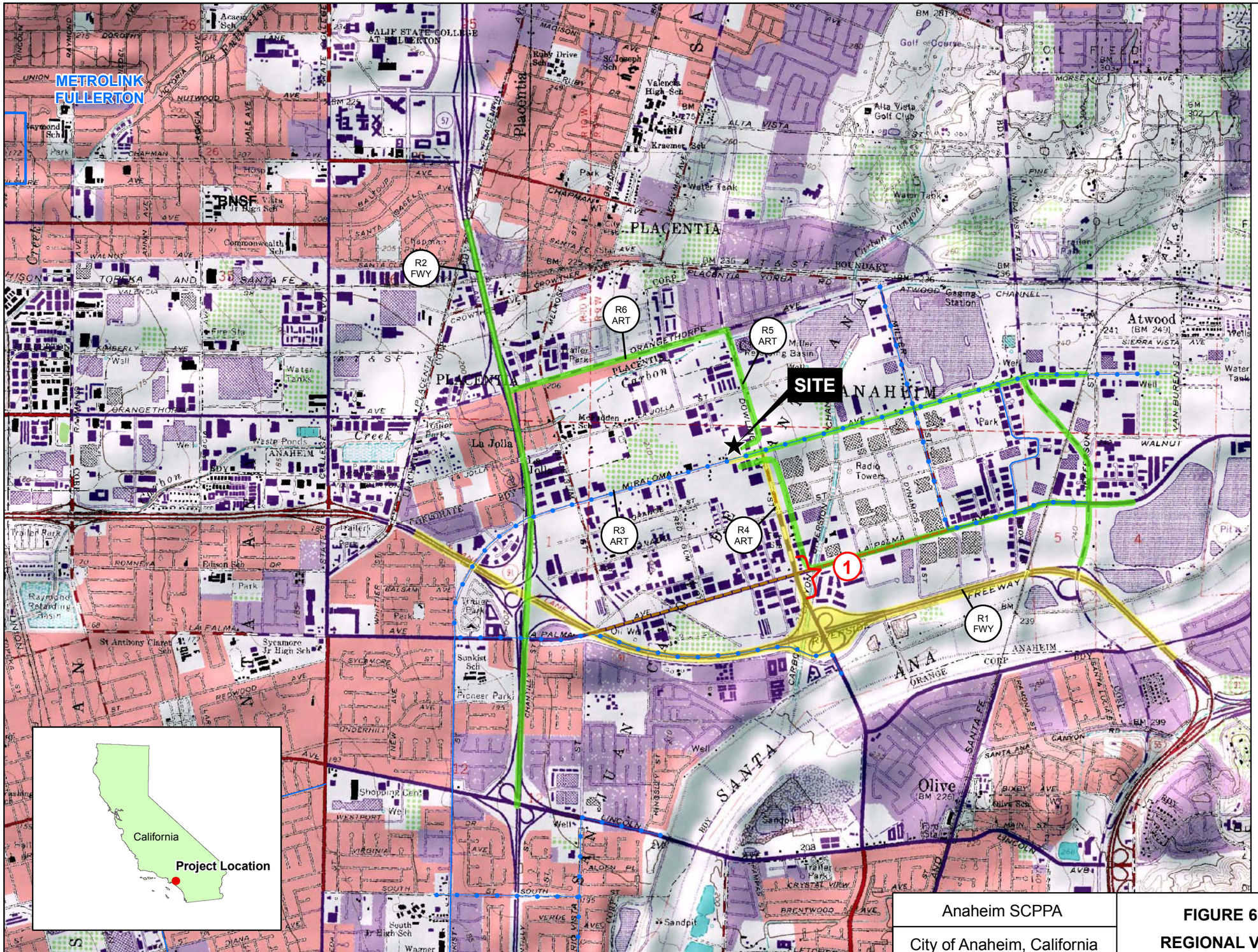
thirty percent (30 percent) of construction traffic via this route without deterioration of roadway LOS.

- *SR-91 alternative access via northbound Tustin Avenue to westbound La Palma Avenue towards the proposed project site and construction laydown area and vice-versa. This route is further down east of the project site and would only be occasionally used by workers or when there is the total closure or breakdown of the two previously mentioned route.*

To access the proposed remote construction worker parking located southeast of the project site, the recommended route for incoming workers will be via SR 91, then north on Kraemer Boulevard, west on East Miraloma Avenue, then right towards the proposed construction parking lots at 3150 and 3190 East Miraloma Avenue.

Since the project site is located in a City of Anaheim (COA) designated industrial zone, construction related heavy haul truck traffic is generally allowed as they will primarily use Kraemer Boulevard, which is a designated truck route from the northern city limits to the SR-91 Freeway Interchange. To operate or move a vehicle or combination of vehicles or special mobile equipment or a size or weight of vehicle or load exceeding the maximums specified in the California Vehicle Code (C.V.C.), a Transportation Permit shall be obtained from the City of Anaheim.

Figure 6.11-2, attached, was updated in response to CEC Staff comments.



LEGEND

1 — Roadway widening of Kraemer Boulevard to ultimate width of three through lanes in each direction

Project construction/routes and study locations approved by City of Anaheim traffic engineers

Alternative Routes

Proposed Off Road Trail Bikeway

Existing Class II Bikeway

Proposed Top Priority Class II Bikeway

R1 FWY — SR-91 is an east-west freeway facility located south of the project site. Existing Average Daily Traffic (ADT) is 233,000 vehicles per day. Existing LOS = C, Project Construction LOS = C, Project Operations LOS = C.

R2 FWY — SR-57 is a north-south freeway facility located west of the project site. Existing Average Daily Traffic (ADT) on the segment north of Orangethorpe Avenue is 265,000 vehicles per day. Existing LOS = C, Project Construction LOS = C, Project Operations LOS = C.

R3 ART — Miraloma Avenue is an east-west Secondary Arterial located directly south of the project site. Existing Average Daily Traffic (ADT) west of Kraemer Avenue is 14,300 vehicles per day. Existing LOS = A, Project Construction LOS = A, Project Operations LOS = A.

R4 ART — Kraemer Avenue is a north-south Primary Arterial located to the east of the project site. Existing Average Daily Traffic (ADT) between SR-91 and Miraloma Avenue is 30,700 vehicles per day. Existing LOS = A, Project Construction LOS = A, Project Operations LOS = A.

R5 ART — Kraemer Avenue is a north-south Primary Arterial located to the east of the project site. Existing Average Daily Traffic (ADT) between Orangethorpe Avenue and Miraloma Avenue is 25,050 vehicles per day. Existing LOS = A, Project Construction LOS = A, Project Operations LOS = A.

R6 ART — Orangethorpe Avenue is an east-west Major Arterial located to the north of the project site. Existing Average Daily Traffic (ADT) between SR-57 and Kraemer Avenue is 25,530 vehicles per day. Existing LOS = B, Project Construction LOS = B, Project Operations LOS = B.

N

0 2,000 4,000 Feet

Scale 1:24,000

Anaheim SCPPA	**FIGURE 6.11-2**	September 2007
City of Anaheim, California	**REGIONAL VICINITY**	28906973

I:\Anaheim_SCPPA\mxd\Anaheim_Fig_6.11-2_tabloid.mxd

Technical Area: Traffic and Transportation

Data Request TRAFFIC-3: An identification, on topographic maps at a scale of 1:24,000, and a description of existing and planned roads, rail lines (including light rail), bike trails, airports, bus routes serving the project vicinity, pipelines, and canals in the project area affected by or serving the proposed facility. For each road identified, include the following information, where applicable:

- Current daily average and peak flow traffic counts.

Response: According to City of Anaheim staff, long stretches of uninterrupted roadways have a design capacity of 2,200 vehicles per lane per hour. Segments with poor levels of service (LOS E or F) will be analyzed using 1,600 vehicles per lane per hour capacity. For this study, no study roadways were impacted, or at poor LOS E or F conditions.

Technical Area: Traffic and Transportation

Data Request TRAFFIC-4: Current daily average and peak flow traffic counts:

Response: Figure 6.11-2 was updated in response to CEC Staff comments and is presented as an attachment to Data Request TRAFFIC-2. Detailed traffic volumes by traffic analysis scenarios are shown in Tables 6.11-3, 6.11-7, 16.11-11, and 16.11-12 respectively. These tables are presented below, in response to Data Requests TRAFFIC-6 and TRAFFIC-7.

Tables 6.11-7, 16.11-8, 16.11-11, and 16.11-12 were subsequently expanded to include two new study roadway segments in response to CEC staff Data Adequacy comments.

These tables are presented below, in response to Data Requests TRAFFIC-6 and TRAFFIC-7.

Technical Area: Traffic and Transportation

Data Request TRAFFIC-5: Current and projected levels of service before project development, during construction, and during project operation.

Response: Tables 6.11-7, 16.11-8, 16.11-11, and 16.11-12 were subsequently expanded to include two new study roadway segments in response to CEC staff Data Adequacy comments. These tables are presented below, in response to Data Requests TRAFFIC-6 and TRAFFIC-7.

Technical Area: Traffic and Transportation

Data Request TRAFFIC-6: Estimated percentage of current traffic flows for passenger vehicles and trucks.

Response: Table 6.11-3, below, was updated to show truck traffic percentage as provided by City of Anaheim staff for the two additional study roadway segments.

TABLE 6.11-3
FREEWAY/ROADWAY SEGMENT LEVEL OF SERVICE – EXISTING CONDITIONS

Roadway	Segment	Number and Type of Lanes	Existing ADT	Percent Trucks	LOS
N. Kraemer Ave.	South of E. Miraloma Ave.	4-Lane Divided	25,050	5%	B
Orangethorpe Ave.	West of N. Kraemer Ave.	4-Lane Divided	25,530	5%	B

Technical Area: Traffic and Transportation

Data Request TRAFFIC-7: An assessment of the construction and operation impacts of the proposed project on the transportation facilities identified in subsection (g)(5)(C). Also include anticipated project-specific traffic, estimated changes to daily average and peak traffic counts, levels of service, and traffic/truck mix, and the impact of construction of any facilities identified in subsection (g)(5)(C).

Response: In response to CEC Staff Data Adequacy comments, the following roadway segments were included in the project construction and operations analysis:

TABLE 6.11-7
FREEWAY/ROADWAY SEGMENT LEVEL OF SERVICE –
YEAR 2009 NO PROJECT CONDITIONS

Roadway	Segment	Number and Type of Lanes	2009 No Project ADT	Percent Trucks	LOS
N. Kraemer Ave.	South of E. Miraloma Ave.	4-Lane Divided	25,290	5%	B
Orangethorpe Ave.	West of N. Kraemer Ave.	4-Lane Divided	25,780	5%	B

TABLE 6.11-8
FREEWAY/ROADWAY SEGMENT LEVEL OF SERVICE –
YEAR 2009 PROJECT CONSTRUCTION CONDITIONS

Roadway	Segment	Number and Type of Lanes	2009 + Project ADT	Project Added ADT	LOS
N. Kraemer Ave.	South of E. Miraloma Ave.	4-Lane Divided	25,457	167	B
Orangethorpe Ave.	West of N. Kraemer Ave.	4-Lane Divided	25,947	167	B

TABLE 6.11-11
FREEWAY/ROADWAY SEGMENT LEVEL OF SERVICE – YEAR 2010 NO PROJECT CONDITIONS

Roadway	Segment	Number and Type of Lanes	2010 No Project ADT	Percent Trucks	LOS
N. Kraemer Ave.	South of E. Miraloma Ave.	4-Lane Divided	25,560	5%	B
Orangethorpe Ave.	West of N. Kraemer Ave.	4-Lane Divided	26,060	5%	B

TABLE 6.11-12
FREEWAY/ROADWAY SEGMENT LEVEL OF SERVICE – YEAR 2010 PROJECT OPERATIONS CONDITIONS

Roadway	Segment	Number and Type of Lanes	2010 + Project ADT	Project Added ADT	LOS
N. Kraemer Ave.	South of E. Miraloma Ave.	4-Lane Divided	25,567	7	B
Orangethorpe Ave.	West of N. Kraemer Ave.	4-Lane Divided	26,067	7	B

Technical Area: Traffic and Transportation

Data Request TRAFFIC-8: The name, title, phone number, address (required), and email address (if known) of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.

Response: Mr. Glenn Campbell will be the agency contact for Orange County Congestion Management Program (CMP) matters. Tables 6.11-16, Agency Contacts, will be updated.

Glenn Campbell
Principal Transportation Analyst
Orange County Transportation Authority
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584
Tel. 714-560-5712
Fax. 714-560-5794
e-mail: gcampbell@octa.net

Technical Area: Visual Resources

Data Request VIS-1: Provide the cooling tower and heat recovery steam generator (HRSG) exhaust design parameters that affect visible plume formation. For the cooling tower, data shall include heat rejection rate, exhaust temperature, exhaust mass flow rate, liquid to gas mass flow ratio, and, if the tower is plume-abated, moisture content (percent by weight) or plume-abated fogging curve(s). The parameters shall account for a range of ambient conditions (temperature and relative humidity) and proposed operating scenarios, such as duct firing and shutting down individual cells. For the heat recovery steam generator exhausts, data shall include moisture content (percent by weight), exhaust mass flow rate, and exhaust temperature. The parameters must correspond to full-load operating conditions at specified ambient conditions, and shall account for proposed operating scenarios, such as power augmentation (i.e., evaporative coolers, inlet foggers, or steam injection) and duct firing, or proposed HRSG visible plume abatement, such as the use of an economizer bypass. For simple-cycle projects, provide analogous data for the exhaust stack(s).

Response: The CPP is proposed as a peaking plant with no HRSG and no cooling tower. There are no visible plumes expected for this power facility. The unit is the same as described in the Niland Power Plant application to the CEC. Please refer to section 6.13.2.2.5 of the CPP AFC, however no visible plumes are expected from the proposed CPP. Unlike the LMS 100 peaking technology, the LM 6000 peaking technology does not incorporate a traditional cooling tower. The evaporative chiller is used for power augmentation but due to its size, its limited amount of water use, and the time and frequency in which it is used, significant plumes are not anticipated. SCPPA has not yet finalized its design nor selected its vendors. As information about the evaporative chiller becomes available it will be provided to the CEC under separate cover.

Technical Area: Visual Resources

Data Request VIS-2: Provide:

i) Full-page color photographic reproductions of the existing site.

ii) Full-page color simulations of the proposed project at life-size scale when the picture is held 10 inches from the viewer's eyes, including any project-related electrical transmission lines, in the existing setting from each key observation point. If any landscaping is proposed to comply with zoning requirements or to mitigate visual impacts, include the landscaping in simulation(s) representing sensitive area views, depicting the landscaping five years after installation; and estimate the expected time until maturity is reached.

Response: Please see attached.

KOP 1: Existing front yard view from the nearest residence with unobstructed view of CPP site, looking west toward CPP site (approximately 0.3-mile east of CPP on Miraloma Avenue).

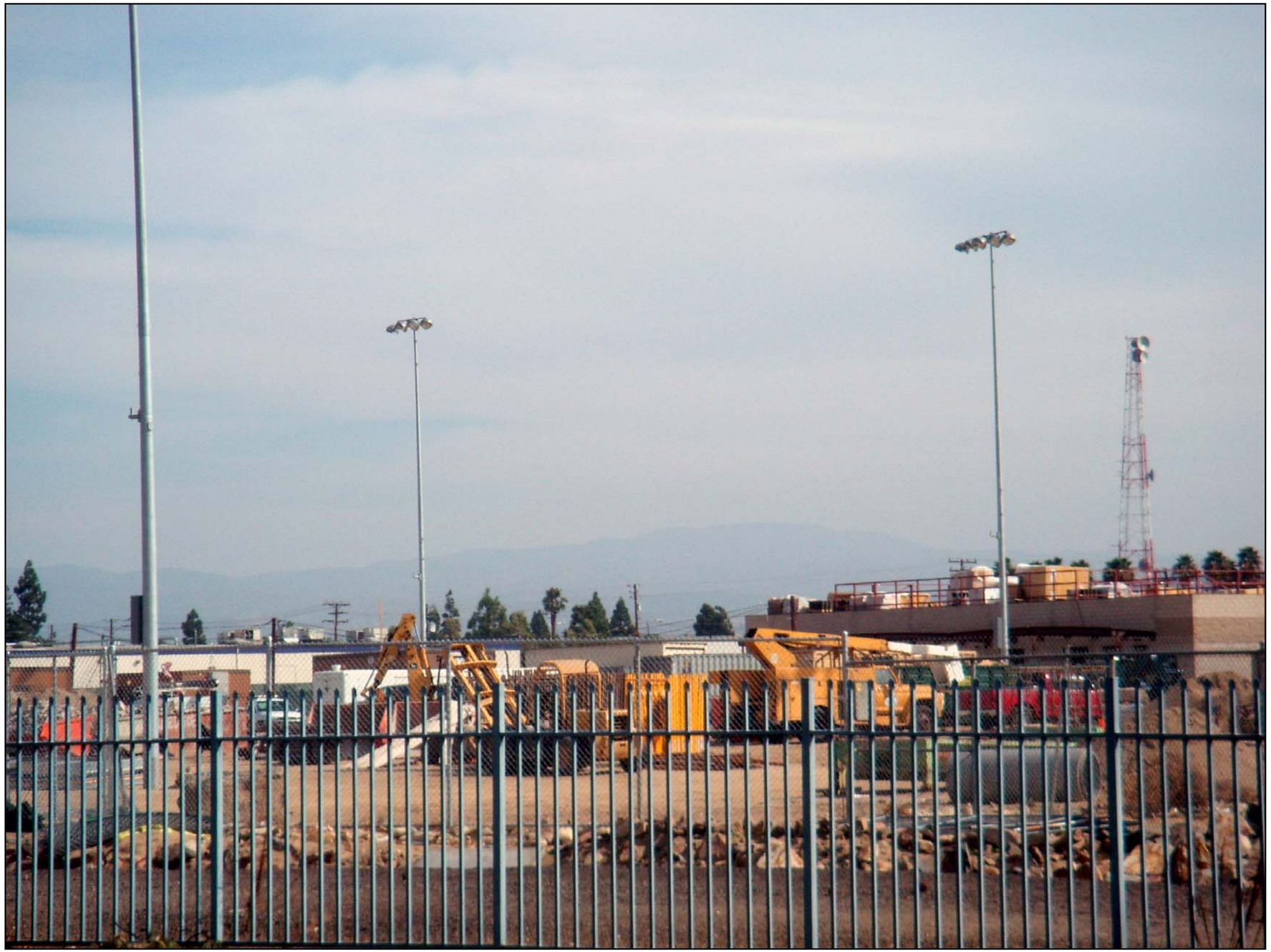
FIG NO: 6.13-10 EXISTING VIEW OF CPP FROM KOP #1, CANYON POWER PLANT

URS

KOP 1: Simulated front yard view from the nearest residence with unobstructed view of CPP site, looking west toward CPP site (approximately 0.3-mile east of CPP on Miraloma Avenue). This photo location is meant to represent "worst-case" views from residential viewers surrounding the CPP Project

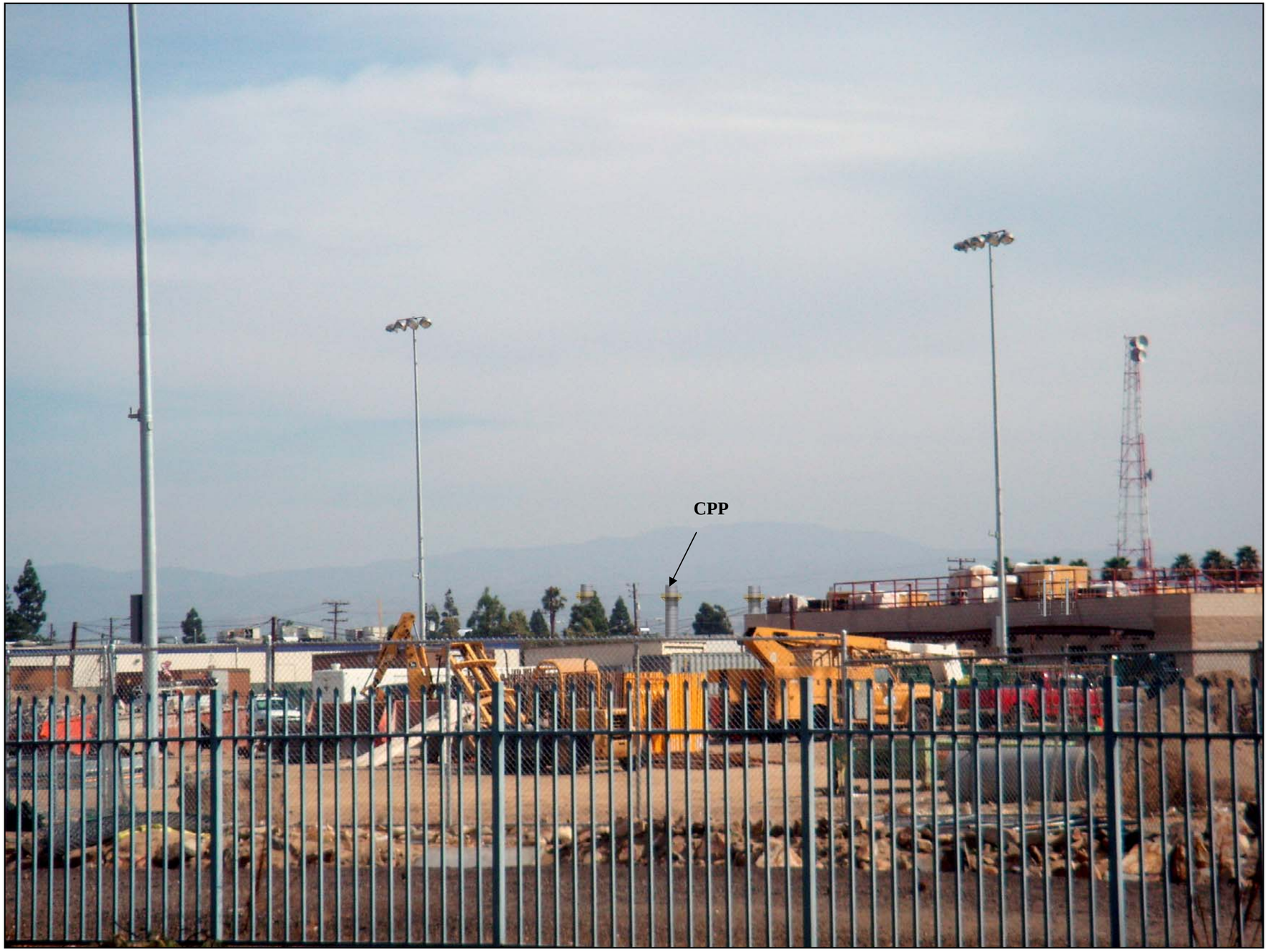
FIG NO: 6.13-11 SIMULATED VIEW OF CPP FROM KOP #1CANYON POWER PLANT (CPP)

URS



KOP 2: Existing view from the closest recreational area (McFadden Park/Melrose School) located at 974 Melrose St. in Placentia, looking east toward CPP site (approximately 0.45-mile northwest of CPP). This photo location is meant to represent "worst-case" views for recreational users within the Project area.

URS	**FIG NO: 6.13-12 EXISTING VIEW OF CPP FROM KOP#2** **CANYON POWER PLANT (CPP)**



KOP 2: Simulated view from the closest recreational area (McFadden Park/Melrose School) located at 974 S. Melrose St. in Placentia, looking east toward CPP site (approximately 0.45-mile northwest of CPP).

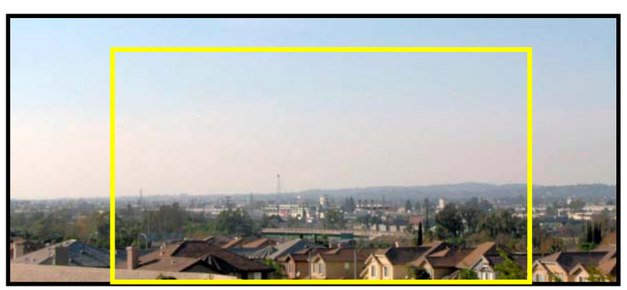
URS	**FIG. NO: 6.13-13 SIMULATED VIEW OF CPP FROM KOP #2** **CANYON POWER PLANT (CPP)**

KOP 3: Existing traveler view from the closest location along CA State Route 91/Riverside Freeway (County of Orange designated scenic highway), looking northwest towards the CPP site (approximately 2.5-mile to the southeast of CPP).

Note: this photograph has been cropped to show a wide angle view with the above photograph's area shown in yellow.

URS

FIG NO: 6.13-14 EXISTING VIEW OF CPP FROM KOP #3
CANYON POWER PLANT (CPP)



KOP 3: Simulated traveler view from the closest location along CA State Route 91/Riverside Freeway (County of Orange designated scenic highway), looking northwest towards the CPP site (approximately 2.5-mile to the southeast of CPP). This photo location is meant to represent “worst-case” traveler views from SR-91.

Note: This photograph has been cropped to show a wide angle view with the above photograph’s area shown in yellow.

URS

FIG. NO: 6.13-15 SIMULATED VIEW OF CPP FROM KOP #3
CANYON POWER PLANT (CPP)

Technical Area: Visual Resources

Data Request VIS-3: If any landscaping is proposed to reduce the visual impacts of the project, provide a conceptual landscaping plan at a 1:40 scale (1" = 40'). Include information on the type of plant species proposed, their size, quantity, and spacing at planting, expected heights at 5 years and maturity, and expected growth rates.

Response: The landscape plan for the CPP was based on the requirements from the City of Anaheim. The COA chose all plant species and spacing for the landscape plan.

The landscape plan included in the AFC is an 11" x 17" reduction of the 1:30 scale plan. Five copies of the full size plan are included. The planting depicted on the landscape plan is as follows:

Scientific Name	Common Name	Spacing
Quercus agrifolia	Coast Live Oak	30 ft OC
Macfadyena unquis-cati	Cat's Claw	5 ft OC
Rhamnus Californica	Coffeeberry	
'Mound San Bruno'	'Mound San Bruno'	5 ft OC

Common Name	Container Size	Estimated Quantity
Coast Live Oak	24' box	18
Cat's Claw	5 gal	261
Coffeeberry	1 gal	182

Species	5 year expected size	Maturity expected size	Comments
Quercus agrifolia/Coast Live Oak	If 24 in box is planted - 2 ft height, 1 ft diameter	30 ft tall, by 30 ft diameter	Dependent on root system at planting time, water, maintenance, urban conditions. Don't expect much growth within first 5 years with big box trees. Coast Live Oaks in Urban settings, set in sidewalk areas, don't expand to the large tree expected in native setting.
Cats Claw	If 1 gal size planted, 3-4 ft height, equal spread	Can reach up to 20 ft in height, 10 ft diameter	Again, depends on water, urban conditions, and shade from Oak trees.
Rhamnus californica 'Mound San Bruno'	If 1 gal size planted, 2-3 ft height, 3 ft diameter	3 ft height, 6 ft diameter	

Technical Area: Visual Resources

Data Request VIS-4: Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed.

Response: Please see Table 6.13-7 on the following pages.

TABLE 6.13-7
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
Federal					
Section 6.13.5.1	6.13-29, 6.13-30	Visual Resource Manual	To manage public lands in a manner which will protect the quality of the scenic (visual) values of these lands	CA State lands lie five miles NW and may have distant views to the project site. Due to distance and haze changes to these views will be indiscernible. Therefore, the CPP Plan is compliant with this requirement.	BLM
State					
Section 6.13	6.13-30	Application for Certificate Requirements	Rules of Practice and Procedure and Power Plant Site Certification Regulations, Appendix B.	See Data Adequacy Worksheet. The CPP is compliant with this requirement.	CEC
Section 6.13.1.3.3 Section 6.13.5.2	6.13-29, 6.13-30 6.13-29, 6.13-30	State Scenic Highway Requirements	Requirements are applicable to state designated scenic highways. There are none in the project area.	There are no Designated or Eligible State Scenic Highways in the VSOI. The section of SR 91 designated as a County scenic highway starts at the SR 55/Newport Freeway Interchange and extends eastward. Therefore, compliance with state scenic highway LORS is inapplicable.	Caltrans
Local					
Section 6.13.1.3.3 Section 6.13.1.4 Table 6.13-2 Section 6.13.5.3	6.13-10, 6.13-30 6.13-12, 6.13-30 6.13-17, 6.13-30 6.13-29, 6.13-30	County of Orange General Plan/ Transportation Element: Component Three Scenic	Preserve and Enhance unique or special aesthetic and visual resources through sensitive highway design and the regulation of development within the scenic corridor. 1.2 Offer of Dedication: Where necessary to preserve unique	There are no Designated or Eligible State Scenic Highways in the VSOI. The section of SR 91 designated	County of Orange Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
		Highways Plan – Goal 1	or special visual features, impose conditions on development within a scenic highway corridor to require dedication of scenic easements consistent with the adopted corridor plan.	as a County scenic highway starts at the SR 55/Newport Freeway Interchange and extends eastward. Due to the highway's elevated position, travelers along the western terminus of the County-designated scenic highway SR-91 have distant views of the project vicinity for roughly two miles. However, Sensitive Viewing Area and KOP 3 showed that viewing durations are short. The ESIL from this KOP can be characterized as low. Therefore, the CPP is compliant with County Scenic Highway LORS.	
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3	6.13-20, 6.13-30 6.13-23, 6.13-30 6.13-29, 6.13-30	County of Orange General Plan/Resources Element: Natural Resources Component – Goal 3	Manage and utilize wisely the County's landform resources. 3.1- To minimize to the extent feasible the disruption of significant natural landforms in Orange County. To protect the unique variety of significant landforms in Orange County through environmental review procedures and community and corridor planning activities.	No significant natural landforms, scenic views, panoramas or vistas are located within the project area or within the VSOI. Therefore, the CPP Project is compliant with this requirement.	County of Orange Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3	6.13-20, 6.13-30 6.13-23, 6.13-30 6.13-29, 6.13-30	County of Orange General Plan/Resources Element: Open Space –	Retain the character and natural beauty of the environment through the preservation, conservation, and maintenance of open space. To designate open space areas that preserve, conserve, maintain, and enhance the	There are no significant natural resources or physical features of unincorporated Orange County within the VSOI. Therefore, the	County of Orange Planning

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
		Goal 1	significant natural resources and physical features of unincorporated Orange County. To guide and regulate development of the unincorporated areas of the County to ensure that the character and natural beauty of Orange County is retained.	CPP Project is compliant with this requirement.	Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3	6.13-20, 6.13-30 6.13-23, 6.13-30 6.13-29, 6.13-30	County of Orange General Plan/Growth Management Element – Policy 7	There shall be buffer zones established through Feature Plans, Specific Plans, and/or Scenic Corridor Plans which provide for the physical separation of major communities by means of open space areas/ corridors. Said open space area/corridors will be based upon natural features such as creeks or prominent topographic or aesthetic features.	There are no scenic buffer zones located within the VSOI. Therefore, the CPP Project is compliant with this requirement.	County of Orange Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 Section 6.9.1.4	6.13-20, 6.13-30 6.13-23, 6.13-30 6.13-29, 6.13-30 6.9-5, 6.9-15 6.9-5, 6.9-15	COA General Plan/Land Use Element – Goal 3.1	Pursue land uses along major corridors that enhance the City's image and stimulate appropriate development at strategic locations. Ensure quality development along corridors through adherence to established development standards and Community Design Element goals, policies and guidelines.	The project is in conformance with land-use zoning within the Northeast Area Specific Plan and the associated development guidelines. The project will be visually compatible with existing uses within the VSOI.	COA Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 Section 6.9.1.4	6.13-20, 6.13-30 6.13-23, 6.13-30 6.13-29, 6.13-30 6.9-5, 6.9-15 6.9-5, 6.9-15	COA General Plan/Land Use Element – Goal 4.1	Promote development that integrates with and minimizes impacts to surrounding land uses. Promote compatible development through adherence to Community Design Element policies and guidelines. Ensure that developers consider and address project impacts upon surrounding neighborhoods during the design and development process.	The project will be visually compatible with the Community Design Element policies and guidelines for existing uses within the VSOI. Therefore, the CPP Project is compliant with this requirement.	COA Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2	6.13-20, 6.13-30 6.13-23, 6.13-30	COA General Plan/Land Use Element – Goal 8.1	*Hill and Canyon Area*: Preserve natural, scenic, and recreational resources; continue to ensure residential	There are no officially designated COA scenic vistas or	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
Section 6.13.5.3 Section 6.9.1.3 Section 6.9.1.4	6.13-29, 6.13-30 6.9-5, 6.9-15 6.9-5, 6.9-15		neighborhoods are safe, well-maintained, places to live; and continue to provide necessary community services and facilities. Encourage the preservation of scenic vistas and views through Green Element Policies and Zoning Code development standards.	views within the VSOI. Therefore, the CPP Project is compliant with this requirement.	
Section 6.9.4.3.1 Section 6.9.1.3 Section 6.9.1.4	6.9-15 – 6.9-16, 6.9-17 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Land Use Element – Goal 12.1	*North Central Industrial Area*: Encourage the on-going transition of the North Central Industrial Area into a high-quality light industrial area that is sensitive to adjacent residential neighborhoods. Pursue various neighborhood improvements (e.g., continued undergrounding of utility lines, continuous sidewalks and links to nearby retail centers and transit stops, additional landscaping along arterial streets, enhanced entryways into neighborhoods, etc.) to improve the livability of existing residential areas. Continue beautification efforts along the Riverside (SR-91) Freeway to reflect the vision for this area as a high quality light industrial area.	The CPP is visually compatible with the development standards and requirements for high-quality light industrial development within the North Central Industrial Area. Therefore, the CPP Project is compliant with this requirement.	COA Planning Department
Section 6.9.4.3.1 Section 6.9.1.3 Section 6.9.1.4	6.9-15 – 6.9-16, 6.9-17 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Public Services and Facilities Element – Goal 10.1	Improve the City's appearance by mitigating the visual impacts of utility equipment and facilities. Continue to implement the Underground Conversion Program in public rights-of-way and increase the number of underground utility districts, as appropriate. Use a combination of architectural enhancements, equipment undergrounding, screen walls, and landscaping to reduce or eliminate visibility of utility equipment and facilities, whenever feasible.	The offsite linears will be undergrounded. A landscape plan has been prepared for the CPP. The facility will be screened by a 20-foot ornamental fence. A height variance for the wall height has been granted and is included in Appendix G. Therefore, the CPP Project is compliant with this requirement.	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 Section 6.9.1.4	6.13-20, 6.13-30 6.13-23, 6.13-30 6.13-29, 6.13-30 6.9-5, 6.9-15 6.9-5, 6.9-15	COA General Plan/Public Services and Facilities Element – Goal 14.1	Provide attractive public spaces that enhance the City's image, safety and economic vitality. Maintain and enhance the City's public rights-of-way. Enhance neighborhood appearance and safety through the enforcement of the Anaheim Municipal Code and other regulations.	The siting of the CPP will serve to minimize the visual impact to neighborhoods by restricting the project to an area that has been specifically zoned for Industrial use under the Northeast Area Specific Plan. Therefore, the CPP Project is compliant with this requirement.	COA Planning Department
Section 6.13.2.2.2 Section 6.13.2.2.6 Section 6.13.5.3 Section 6.11	6.13-23, 6.13-30 6.13-26, 6.13-32 6.13-29, 6.13-32 6.11-23, 6.11-25	COA General Plan/Circulation Element – Goal 1.1	Provide a comprehensive multidimensional transportation system that facilitates current and long-term circulation of people and goods in and through the city. Consider aesthetics, including the provision of appropriate landscaping, in the development of arterial highways.	The CPP Project will have no association or impact on local transportation systems. Therefore, this requirement is not applicable.	COA Planning Department
Section 6.13.2.2.2 Section 6.13.2.2.6 Section 6.13.5.3 Section 6.11	6.13-23, 6.13-30 6.13-26, 6.13-32 6.13-29, 6.13-32 6.11-23, 6.11-25	COA General Plan/Circulation Element – Goal 2.2	Provide a safe circulation system. Provide adequate sight distances for safe vehicular movement on roadways at intersections and driveways.	Construction and operation of the CPP will maintain adequate sight distances for safe vehicular movement on East Miraloma Ave. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.13.2.2.2 Section 6.13.2.2.6 Section 6.13.5.3 Section 6.11 Section 6.9.1.3 Section 6.9.1.4	6.13-23, 6.13-30 6.13-26, 6.13-32 6.13-29, 6.13-32 6.11-23, 6.11-25 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Circulation Element – Goal 4.1	Preserve and enhance uniquely scenic or special visual resource areas along highways and designated State scenic routes for the enjoyment of all travelers. Continue to work with Caltrans in its implementation of the State Scenic Highway Program. Ensure the preservation and enhancement of scenic routes through special highway design and building regulation. Landscape arterial	There are no uniquely scenic or special visual resource areas along highways within the VSOI. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
			highways in keeping with the intent of the Scenic Corridor Overlay Zone and the Santa Ana River Greenbelt Plan, and maintain the residential character of the neighborhood by avoiding interference and intrusion into adjacent communities. Take such actions as may be necessary to protect the scenic appearance of the band of land generally adjacent to the scenic highway right-of-way, including but not limited to: careful design and maintained appearance of structures and equipment.		
Section 6.9.4.3 Section 6.11.2.2.8 Section 6.11.1.1.5	6.9-15 – 6.9-16, 6.9-18 6.11-17, 6.11-25 6.11-7, 6.11-25	COA General Plan/Circulation Element – Goal 8.1	Protect and encourage pedestrian travel. Ensure that streets and intersections are designed to provide visibility and safety for pedestrians.	The CPP will incorporate a sidewalk along East Miraloma Avenue in addition to the screening wall and landscaping. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.9.4.3 Section 6.11.1.1.5 Section 6.11.4	6.9-15 – 6.9-16, 6.9-18 6.11-7, 6.11-25 6.11-22	COA General Plan/Circulation Element – Goal 12.1	Ensure adequate parking is made available to City residents, visitors, and businesses. Encourage the use of well-designed, aesthetically-enhanced parking structures as an alternative to large, expansive surface parking lots.	During operation, onsite parking will be provided and will be screened from street view by the surrounding 20-foot wall. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3	6.13-20, 6.13-32 – 6.13-35 6.13-23, 6.13-32 – 6.13-35 6.13-29, 6.13-32 – 6.13-35	COA General Plan/Green Element – Goal 2.1	Preserve views of ridgelines, natural open space and other scenic vistas wherever possible. Encourage development that preserves natural contours and views of existing backdrop ridgelines or prominent views. Encourage future development and public improvements that maximize	The CPP will not interfere with distant views of ridgelines, open space or other scenic vistas. Therefore, the CPP Project will be compliant with this	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
			private and public views of golf course fairways.	requirement.	
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3	6.13-20, 6.13-32 – 6.13-35 6.13-23, 6.13-32 – 6.13-35 6.13-29, 6.13-32 – 6.13-35	COA General Plan/Green Element – Goal 14.3	Ensure that future development near regional open space resources will be sensitively integrated into surrounding sensitive habitat areas. Require new development to mitigate light and glare impacts on surrounding sensitive habitat and open space areas, where appropriate.	There are no regional open space resources to be impacted by light and glare within the VSOI. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.9.4.3 Section 6.9.1.3 Section 6.9.1.4	6.9-15 – 6.9-16, 6.9-18 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16 also 6.13-32 – 6.13-34	COA General Plan/Community Design Element – Goal 1.1	Create an aesthetically pleasing and unified community appearance within the context of distinct districts and neighborhoods. Identify and preserve/enhance view corridors for major landmarks, community facilities, and natural open space in the planning and design of all public and private projects. Screen public and private facilities and above-ground infrastructure support structures and equipment, such as electrical substations, and water wells and recharge facilities, with appropriately scaled landscaping or other methods of screening. Minimize visual impacts of public and private facilities and support structures through sensitive site design and construction. This includes, but is not limited to: appropriate placement of facilities; undergrounding, where possible; and aesthetic design (e.g., cell tower stealthing).	The CPP is compatible with the development standards for industrial zoning as stated in the Northeast Area Specific Plan. The CPP will incorporate measures to reduce visual impacts such as undergrounding project linears and constructing a fence and landscaping around the perimeter. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 Section 6.9.1.4	6.13-20, 6.13-32 – 6.13-35 6.13-23, 6.13-32 – 6.13-35 6.13-29, 6.13-32 – 6.13-35 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Community Design Element – Goal 2.1	Attractively landscape and maintain Anaheim's major arterial corridors and prepare/ implement distinctive streetscape improvement plans. Continue to underground overhead utility lines along the City's arterial corridors.	The CPP facility will be landscaped along East Miraloma Avenue according to the landscaping requirements in the COA municipal code. Therefore, the CPP Project will be	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
				compliant with this requirement.	
Section 6.9.4.3	6.9-15 – 6.9-16, 6.9-18	COA General Plan/Community Design Element – Goal 3.1	Single-family neighborhoods are attractive, safe and comfortable. Continue to maintain and improve the visual image and quality of single-family neighborhoods.	The CPP is not located within a residential neighborhood. Limited residential neighborhoods are located within the VSOI, however, visual impacts have been reduced to less than significant by project design features and project siting. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 Section 6.9.1.4	6.13-20, 6.13-35 6.13-23, 6.13-35 6.13-29, 6.13-35 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Community Design Element – Goal 4.1	Multiple-family housing is attractively designed and scaled to complement the neighborhood and provides visual interest through varied architectural detailing. Where possible, underground or screen utilities and utility equipment or locate and size them to be as inconspicuous as possible.	CPP and associated ancillary facilities are not located within a multiple-family housing residential development. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 Section 6.9.1.4	6.13-20, 6.13-35 6.13-23, 6.13-35 6.13-29, 6.13-35 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Community Design Element – Goal 5.1	Mid-block residential developments convey a neighborhood atmosphere, high level of design quality, and strong street-facing orientation. Where possible, underground or screen utilities and utility equipment or locate and size them to be as inconspicuous as possible.	CPP and associated ancillary facilities are not located within a mid-block residential development.	COA Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3	6.13-20, 6.13-35 6.13-23, 6.13-35 6.13-29, 6.13-35 6.9-5, 6.9-15 – 6.9-16	COA General Plan/Community Design Element – Goal 6.1	Focus activity centers at the intersections of selected major corridors to provide a convenient and attractive concentration of retail and office uses. Where possible, underground or screen utilities and utility equipment or	CPP and associated ancillary facilities are not located within a retail activity center. Therefore, the CPP Project will be	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
Section 6.9.1.4	6.9-7, 6.9-15 – 6.9-16		locate and size them to be as inconspicuous as possible.	compliant with this requirement.	
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 section 6.9.1.4	6.13-20, 6.13-35 6.13-23, 6.13-35 6.13-29, 6.13-35 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Community Design Element – Goal 7.1	Neighborhood retail centers are thoughtfully designed to create attractive places that provide convenient access and ample pedestrian amenities to residents of surrounding neighborhoods. Where possible, underground or screen utilities and utility equipment or locate and size them to be as inconspicuous as possible.	CPP and associated ancillary facilities are not located within a neighborhood retail center. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 section 6.9.1.4	6.13-20, 6.13-35 6.13-23, 6.13-35 6.13-29, 6.13-35 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Community Design Element – Goal 8.1	Anaheim's mixed-use areas are attractively designed, pedestrian-friendly, easily accessible, and contain a proper blend of commercial retail, office and residential uses. Where possible, underground or screen utilities and utility equipment or locate and size them to be as inconspicuous as possible.	CPP and associated ancillary facilities are not located within mixed use development. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.9.4.3 Section 6.9.1.3 Section 6.9.1.4	6.9-15 – 6.9-16, 6.9-18 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Community Design Element – Goal 9.1	Anaheim's industrial areas and the buildings within them are strategically planned, visually distinctive and attractive, abundantly landscaped and appropriately signed. Strengthen the identity of key industrial areas through entry monumentation, signage, attractive, abundantly landscaped treatments, and a complementary range of building colors and types. Encourage individual design identity and clearly visible main entrances for industrial buildings. Avoid use of long, blank walls by breaking them up with several vertical and horizontal façade articulation achieved through stamping, colors, materials, modulation and landscaping. Thoroughly screen and enclose all outside storage areas through the use of perimeter walls and landscape treatments. Use abundant landscaping to minimize views of surface parking, storage and service	The CPP project will be attractively landscaped and surrounded by an ornamental brick fence which will provide aesthetic benefits and visual relief. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
			areas. Where possible, encourage adjacent buildings to share open, landscaped and/or hardscaped areas for visual relief, access, and outdoor employee gathering places. Where practical, underground or screen utilities and utility equipment or locate and size them to be as inconspicuous as possible. Reduce the noise, traffic, and visual impacts of service, delivery, parking and loading areas by locating them as far as practical from adjacent sensitive uses (e.g., residential and commercial areas), from the street, sidewalk, or building entrances.		
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3	6.13-20, 6.13-32, 6.13-36 6.13-23, 6.13-32, 6.13-36 6.13-29, 6.13-32, 6.13-36	COA General Plan/Community Design Element – Goal 10.1	Anaheim sign guidelines address distinctive, appropriately-scaled and/or coordinated signs throughout commercial, industrial, and mixed-use areas. *Policies for arterial corridors*: Discourage and/or prohibit the use of pole signs, roof signs (except in Downtown Mixed Use Overlay Zone), temporary lettering of window signs, blinking or flashing signs and temporary signs. Encourage high quality signage, including wall signs, raised letter signs, projecting, double-faced signs, and customized logos. Along major arterial corridors, use signs that are large enough to be seen from the thoroughfare. This necessitates signs of a scale larger than that of pedestrian-scaled signs. *Policies for Pedestrian-oriented Streets and Neighborhood Centers:* Along pedestrian-oriented streets and in neighborhood centers, use signs that are simple, direct and distinctive, and designed at a scale easily read by the people walking. Along a continuous facade of storefronts, locate wall signs at approximately the same height to	The CPP will incorporate the use of appropriate signage without the use of pole or roof signs. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
			provide a unifying, horizontal design element. Encourage pedestrian-oriented signs such as awnings, wall signs, raised letter signs, and projecting blade signs.		
Section 6.13.2.2.1 Section 6.13.2.2.2 Section 6.13.5.3 Section 6.9.1.3 Section 6.9.1.4	6.13-20, 6.13-37 6.13-23, 6.13-37 6.13-29, 6.13-37 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16	COA General Plan/Community Design Element – Goal 11.1	Architecture in Anaheim has diversity and creativity of design and is consistent with the immediate surroundings. Encourage architectural designs that are visually stimulating and varied, yet tasteful, containing rich contrasts and distinctive architectural elements. Add visual richness to residential streets by discouraging the same building elevations on adjacent lots and avoiding repetitious elements and colors.	The CPP is compatible with existing industrial land use and development guidelines as provided in the Northeast Area Specific Plan. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.9.4.3	6.9-15 – 6.9-16, 6.9-18	(COA) Northeast Area Specific Plan/Specific Plan Implementation/ Utilities	Encourage and provide for the installation of electrical lines and cables and underground facilities in a manner which enhances the aesthetic appearance of the community.	The CPP has incorporated undergrounding of project linears. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.13.2.2.2 Section 6.13.5.3 Table 6.13-2 Section 6.11 Section 6.12	6.13-23, 6.13-37 6.13-29, 6.13-37 6.13-17 6.11-1 6.12-1	City of Placentia General Plan/Land Use Element – Policy 3.3	Minimize the impact of traffic congestion and unacceptable levels of noise, odor, dust, and glare from new projects on all residential developments and other sensitive receptors, such as hospitals, schools, and rest homes. Mitigate the traffic congestion to the COA's acceptable standard of LOS D and mitigate unacceptable levels of noise, odors, dust, and glare which affect residential areas and sensitive receptors.	Sensitive Viewing Area and KOP 2 was taken from the closest park/recreation area in McFadden Park, located in the only residential area in the City of Placentia visible to the CPP Project. Visual Impact Severity is low. Noise, dust or glare from the project will not impact existing uses in the City of Placentia. Therefore, the CPP project is compliant with this requirement.	City of Placentia Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
Section 6.13.2.2.2 Section 6.13.5.3 Table 6.13-2	6.13-23, 6.13-37 6.13-29, 6.13-37 6.13-17	City of Placentia General Plan/Land Use Element – Policy LU-1.5	Protect the natural landscape, topography, drainage ways, recharge basins, and plant and animal life to the greatest extent possible when vacant land is developed. Retain the most significant natural features, including hillsides, coastal sage scrub habitat in the Coyote Hills, and views on the remaining undeveloped land in the city.	No landscape within the City of Placentia will be developed as part of the CPP Project. Therefore, this requirement does not apply.	City of Placentia Planning Department
Section 6.13.2.2.2 Section 6.13.5.3 Table 6.13-2	6.13-23, 6.13-37 6.13-29, 6.13-37 6.13-17	City of Placentia General Plan/Land Use Element – Policy LU-3.2	Encourage commercial and industrial developments that are aesthetically pleasing and functionally efficient. Enhance the city's physical appearance. Establishment of review standards which favor coordinated architectural and landscape design and compatibility with surrounding developments. Mandatory architectural review in redevelopment areas of new commercial and industrial developments and major additions to existing businesses.	Sensitive Viewing Area and KOP 2 is located taken from the closest park/recreation area in McFadden Park, located in the only residential area in the City of Placentia visible to the CPP Project. Visual Impact Severity is low. The project will not impact existing visual resources in the City of Placentia. Therefore, the CPP project is compliant with this requirement.	City of Placentia Planning Department
Section 6.13.5.3	6.13-29, 6.13-38	City of Placentia General Plan/Circulation Element – Policy C-1.4	Plan and manage public rights-of-way and median islands to provide attractive streetscapes. Provide attractive streetscapes in a cost-effective, low-maintenance manner. Continuously maintain and replace street trees as needed to achieve their aesthetic purpose and avoid damage to streets and sidewalks.	No trees within the City of Placentia will be impacted as part of the CPP Project. Therefore, this requirement does not apply.	City of Placentia Planning Department
Section 6.13.5.3	6.13-29, 6.13-38	City of Placentia General Plan/Resource Management Element – Policy RM-1.1	Manage the development of those parcels of land which have unique beauty, value, setting or biological significance and where the natural terrain should not be significantly altered. Preserve the public's use of scenic	No scenic lands within the City of Placentia will be developed as part of the CPP Project. Therefore, this requirement does	City of Placentia Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
			areas and vista points which lie within the city.	not apply.	
Section 6.13.1.1 Section 6.13.1.4.1 Section 6.13.5.3	6.13-3, 6.13-29, 6.13-38 6.13-12, 6.13-29, 6.13-38 6.13-29, 6.13-38	City of Placentia General Plan/Resource Management Element – Policy RM-3.1	Identify, manage and regulate the roadside of scenic corridors. Preserve scenic vistas viewed from the roadside, where possible. Preserve the natural environment along roadways which have substantial scenic value, where possible. Prevent development along scenic corridors from compromising the views of the valleys or hillsides, when possible. Ensure that structures on public or private properties which are visible from the road are compatible with the corridor. Utilization of implementation tools such as zoning, specific plans and subdivision ordinances to control development which may directly or indirectly affect vistas or scenic focal points.	Scenic corridors within the City of Placentia will not have direct views of the CPP Project. Therefore, the CPP Project is compliant with this requirement.	City of Placentia Planning Department
Section 6.13.1.1 Section 6.13.1.4.1 Section 6.13.5.3	6.13-3, 6.13-29, 6.13-38 6.13-12, 6.13-29, 6.13-38 6.13-29, 6.13-38	City of Placentia General Plan/Resource Management Element – Policy RM-3.2	Coordinate with adjoining jurisdictions regarding scenic corridors. Encourage preservation and enhancement of natural scenic resources beyond but leading into the city limits. Ensure a coordinated approach to scenic corridors of regional importance. Provide improvements along principal scenic corridors at the city boundary which clearly distinguish these as major entries into the city. Work with adjacent communities on a regional scenic routes program.	Scenic corridors within the City of Placentia will not have direct views of the CPP Project. Therefore, the CPP Project is compliant with this requirement.	City of Placentia Planning Department
Section 6.13.5.3 Section 6.13.2.2.1	6.13-29, 6.13-39 6.13-20, 6.13-32, 6.13-39	City of Placentia General Plan/Community Health and Safety Element – Policy CHS-3.1	Provide safe and efficient airport operations. Promotion of aviation safety in operations at the airport. Regulate heights of potential obstructions on all sides of the airport in compliance Federal Aviation Resolution, Part 77 including any structure higher than 200 feet above ground level.	CPP does not contain a structure with a height higher than 200 feet above ground level. The VSOI associated with CPP does not influence the boundaries identified with Federal Aviation	City of Placentia Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
				Resolution, Part 77. Therefore, this requirement does not apply.	
Section 6.9.1.3 Section 6.9.1.4 Section 6.9.4.3.8	6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16 6.9-15 – 6.9-16, 6.9-18 also 6.13-39	COA Zoning Ordinance Section 18.120.050	Defines property development standards within the Northeast Area Specific Plan Industrial Zone (Development Area 1).	The CPP is in compliance with the property development standards for the Northeast Area Specific Plan Industrial zone. Therefore, the CPP Project will be compliant with this requirement.	COA Planning Department
Section 6.9.4.3 Section 6.9.1.3 Section 6.9.1.4 Section 6.9.4.3.8	6.9-15 – 6.9-16, 6.9-18 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16 6.9-15 – 6.9-16, 6.9-18 also 6.13-39	COA Zoning Ordinance Section 18.120.050	Provides general site development requirements regulations for the Northeast Area Specific Plan Industrial Zone (Development Area 1).	The CPP is in compliance with the general site development requirements regulations for the Northeast Area Specific Plan Industrial Zone (Development Area 1). The CPP Project is compliant with this requirement.	COA Planning Department
Section 6.9.4.3.1 Section 6.9.1.3 Section 6.9.1.4 Section 6.9.4.3.8	6.9-15, 6.9-17 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16 6.9-15 – 6.9-16, 6.9-18 also 6.13-39	COA Zoning Ordinance Section 18.120.050	Provides regulations for density in the Northeast Area Specific Plan Industrial Zone (Development Area 1).	The CPP is in compliance with the regulations for density in the Northeast Area Specific Plan Industrial Zone (Development Area 1). The CPP Project is compliant with this requirement.	COA Planning Department
Section 6.9.4.3.1 Section 6.9.1.3 Section 6.9.1.4 Section 6.9.4.3.8	6.9-15, 6.9-17 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16 6.9-15 – 6.9-16, 6.9-18 also 6.13-39	COA Zoning Ordinance Section 18.10.050	Provides regulations for building height in the Industrial zone.	The CPP is in compliance with the regulations for building height in the Industrial zone. The CPP Project is compliant with this requirement.	COA Planning Department

TABLE 6.13-7 (CONTINUED)
APPLICABLE LORS

Conformance (Section)	Page Numbers	LORS	Requirements	Conformance to Requirements	Administering Agency
Section 6.9.4.3.1 Section 6.9.1.3 Section 6.9.1.4 Section 6.9.4.3.8	6.9-15, 6.9-17 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16 6.9-15 – 6.9-16, 6.9-18 also 6.13-39	COA Zoning Ordinance Section 18.46	Provides regulations for fences, hedges, and walls.	The CPP will be built in conformance with a variance for fence height to be incorporated into the CUP issued by the COA. The CPP Project is compliant with this requirement.	COA Planning Department
Section 6.9.4.3.1 Section 6.9.1.3 Section 6.9.1.4 Section 6.9.4.3.8	6.9-15, 6.9-17 6.9-5, 6.9-15 – 6.9-16 6.9-7, 6.9-15 – 6.9-16 6.9-15 – 6.9-16, 6.9-18 also 6.13-39	COA Zoning Ordinance 17.24	Requires undergrounding of utilities for new development.	The CPP has incorporated undergrounding of all offsite linear facilities. The CPP Project is compliant with this requirement.	COA Planning Department

Technical Area: Water Resources

Data Request WATER-1: Average and maximum daily and annual water demand and waste water discharge for both the construction and operation phases of the project.

Response: The average daily water demand during construction is 5,000 gallons, and a maximum would be approximately 12,000 gallons during hydrotesting. Water for construction purposes will be provided by the COA.

Technical Area: Water Resources

Data Request WATER-2: A copy of applicable regional and local requirements regulating the drainage systems, and a discussion of how the project's drainage design complies with these requirements.

Response: Please see attached.

WATER QUALITY MANAGEMENT PLAN CHECKLIST

The purpose of this checklist is to provide a format for uniform, comprehensive, and well documented reviews of the Water Quality Management Plans (WQMPs) submitted by project applicants. The completed checklist will be transmitted to the project applicant with the project WQMP. A copy of the completed checklist will be retained with the project case file.

City Project number: _____

Project name: _____

Project address: _____

Name of plan checker: _____

First Review WQMP received on: _____

Review completed on: _____

Second Review WQMP received on: _____

Review completed on: _____

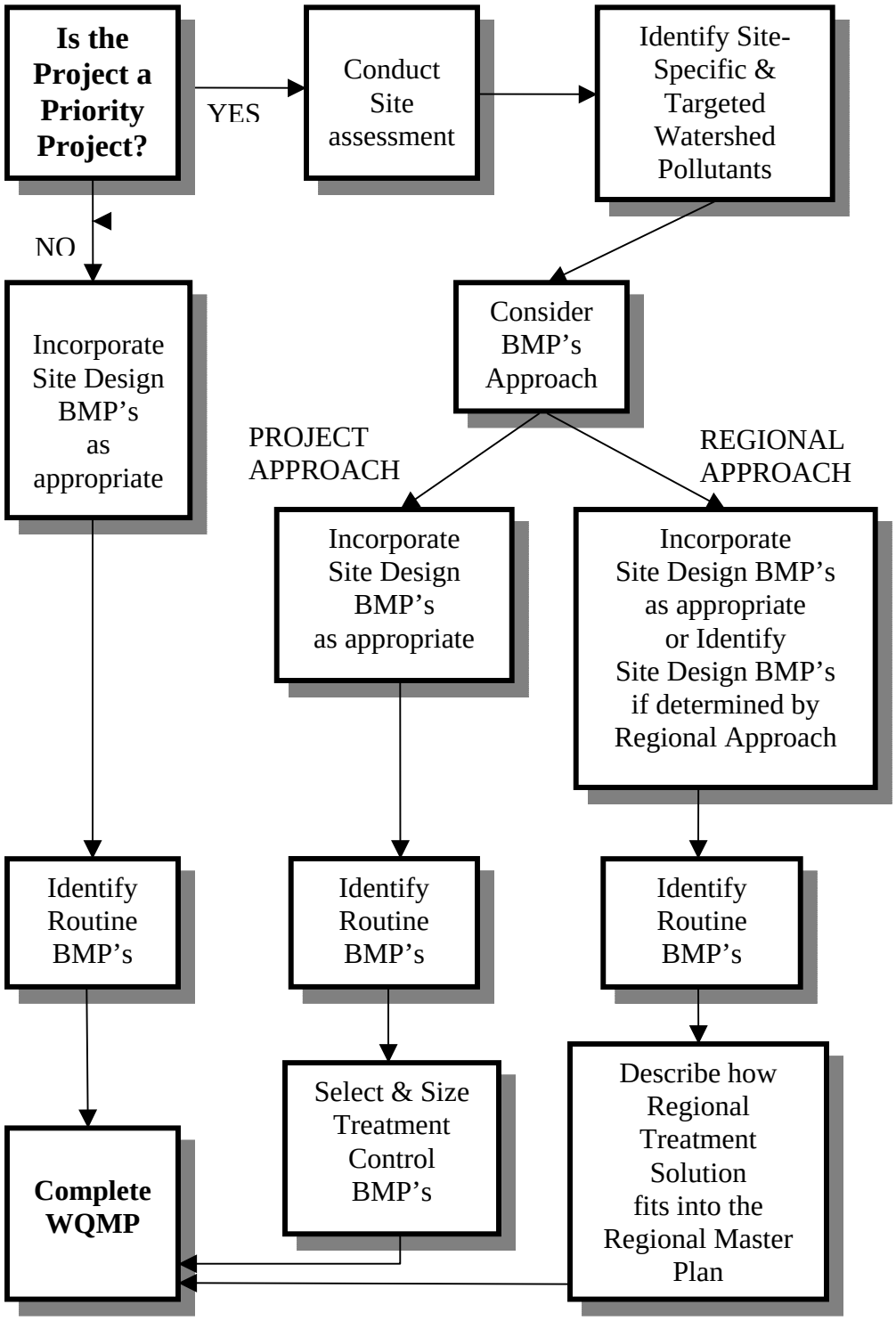
Third Review WQMP received on: _____

Review completed on: _____

Approved date: _____

Signature of plan checker: _____

FIGURE 7.II-1
DEVELOPMENT PLANNING & WQMP PREPARATION STEPS



	WQMP REQUIREMENT	Requirement Satisfied?		
		Yes	No	N/A
	Title Page			
1	Name of project			
2	Case Number and/or Tract or Parcel Map Number			
3	Lot number(s) if site is a portion of a Tract			
4	Site address (or addresses)			
5	Owner/Developer name			
6	Owner/Developer address & telephone number			
7	Consulting/Engineering firm that prepared WQMP			
8	Consulting/Engineering firm address & phone number			
9	Date WQMP was prepared/revised			
	Owner's Certification			
10	A signed certification statement, in which the project owner acknowledges and accepts the provisions of the WQMP, follows the title page.			
	Table of Contents			
11	A Table of Contents, including a list of all figures and attachments is included.			
	Section 1.0, Permit Numbers and Conditions of Approval			
12	Lists the Discretionary Permit(s).			
13	The lot & tract/parcel map number describing the subject property.			
14	Lists, verbatim, the Water Quality Conditions, including condition requiring preparation of WQMP, if applicable.			
15	Final Resolution of Approval, Conditional Use Permit, etc. is included as an Attachment to the WQMP.			
	Priority Project?			
16	Identify the project is a Priority Project?			
	CONDUCT SITE ASSESSMENT			
	Section 2.0, Project Description			
	For All Projects:			
17	Identifies planning area or community name.			
18	Does the project description completely and accurately describe:			
	where facilities will be located,			
	what activities will be conducted and where on the site,			
	what kinds of materials and products will be used,			
	how and where materials will be received and stored,			
	and what kinds of wastes will be generated?			
19	Describes all paved areas, including the type of parking areas.			
20	Describes all landscaped areas.			

	WQMP REQUIREMENT	Requirement Satisfied?		
		Yes	No	N/A
21	Describes ownership of all portions of project and site.			
	Will any infrastructure transfer to public agencies (City, County, Caltrans, etc.)?			
	Will a homeowners or property owners association will be formed?			
	Will the association will be involved in long term maintenance?			
22	Identifies the potential stormwater or urban runoff pollutants reasonably expected to be associated with the project.			
	For Commercial and Industrial Projects:			
23	Provides Standard Industrial Classification (SIC) Code which best describes the facilities operations?			
24	Describes the type of use (or uses) for each building or tenant space			
25	Does project include food preparation, cooking, and eating areas (specify location and type of area)			
26	Describes delivery areas and loading docks (specify location and design and if below grade and types of materials expected to be stored)			
27	Describes outdoor materials storage areas (describe and depict location(s), specify type(s) of materials expected to be stored)			
28	Describes activities that will be routinely conducted outdoors			
29	Describes any activities associated with equipment or vehicle maintenance and repair, including washing or cleaning.			
29a	Indicates number of service bays or number of fueling islands/fuel pumps, if applicable.			
	Residential Projects			
30	Range of lot and home sizes;			
31	Describes all community facilities such as, laundry, car wash, swimming pools, jacuzzi, parks, open spaces, tot lots, etc.			
	Section 3.0, Site Description			
32	Describes project area and surrounding planning areas in sufficient detail to allow project location to be plotted on a base map.			
33	Provides site address and site size to nearest tenth acre.			
34	Identifies the zoning or land use designation.			
35	Identify soil types			
35a	Quantity and percentage of pervious and impervious surface for pre-project and project conditions.			
36	Describes pre-project site drainage and how it ties into drainage of surrounding or adjacent areas and			
36a	describes how planned project drainage and how it will tie into drainage of surrounding or adjacent areas.			

	WQMP REQUIREMENT	Requirement Satisfied?		
		Yes	No	N/A
36b	Identify the Drainage District Number per City of Anaheim Master Plan of Drainage. Copy of map must be included.			
37	Identifies the watershed in which the project is located and the downstream receiving waters			
37a	Known water quality impairments as included in the 303(d) List Applicable Total Maximum Daily Loads (TMDLs) hydrologic conditions of concern, if any.			
38	Is this statement included: There are no Environmentally Sensitive Areas (ESAs) within the City of Anaheim?			
38a	Identifies known Areas of Special Biological Significance (ASBSs) within the vicinity and their proximity to the project.			
	Section 4.0, Best Management Practices			
39	Includes narrative describing how site design concepts were considered and incorporated into project plans.			
40	Lists and describes all Routine Source Control BMPs (Non-structural and Structural).			
41	Describes the implementation frequency and identifies the entity or party responsible for implementation of each Non-Structural BMP.			
42	If applicable Routine Source Control BMPs were not included, was a reasonable explanation provided?			
43	Lists and describes appropriate Treatment Control BMPs , Identifies the design basis (SQDF or SQDV) for the Treatment Control BMPs.			
43a	Clearly demonstrates that all pollutants that are anticipated in the project and are Priority Pollutants of Concern are treated to medium or high effectiveness of removal.			
44	For Routine Non-Structural BMPs N1 (Education for Property Owners, Tenants, and Occupants) and N12 (Employee Training), does the WQMP describe the concepts that will be addressed by the education and training?			
44a	Is a list of educational materials that will be used provided?			
44b	Are copies of the educational materials included in an Attachment to the WQMP?			
	Section 5.0, Inspection and Maintenance Responsibility for BMPs			
45	Identifies the entity (or entities) responsible for the long-term inspection and maintenance of all structural source control BMPs and all Treatment Control BMPs, including name, title, company, address, and phone number.			
46	Describes the minimum frequency for inspection and maintenance to ensure the effectiveness of each structural source control BMP and each Treatment Control BMP.			
47	If ownership of the Treatment Control BMPs will be transferred to a public agency, does the WQMP include an Attachment indicating the public agency's intent to accept the Treatment Control BMPs as designed?			

	WQMP REQUIREMENT	Requirement Satisfied?		
		Yes	No	N/A
48	Is an appropriate mechanism for the long-term operation and maintenance, including funding, in place?			
	Notice of Transfer of Responsibility			
49	Is a Notice of Transfer of Responsibility included? Are case number, current owner's information provided?			
	Section 6.0, Location Map and Plot Plan			
50	Has an 11" by 17" plot plan been included?			
51	Do all figures, maps, plot plans, etc. have a legend, including a North arrow and scale?			
52	Are all facilities labeled for the intended function?			
53	Are all areas of outdoor activity labeled?			
54	Are all structural BMPs indicated?			
55	Is drainage flow information, including general surface flow lines, concrete or other surface ditches or channels, as well as storm drain facilities such as catch basins and underground storm drain pipes depicted?			
56	Depicts where and how on-site drainage ties into the off-site drainage system.			

WQMP REVIEW SUMMARY

The following is a summary of major concerns relative to this WQMP submittal:

WATER QUALITY MANAGEMENT PLAN TEMPLATE
(WQMP)

CITY OF ANAHEIM
PUBLIC WORKS / ENGINEERING DEPARTMENT

FEBRUARY 1, 2004

WATER QUALITY MANAGEMENT PLAN (WQMP)

For:

Start Here...Triple Click here to insert Project Name-then TAB to next field

INSERT GRADING PERMIT NO., BUILDING PERMIT NO., TRACT NUMBER, CUP, SUP AND/OR APN (SPECIFY LOT NUMBERS IF SITE IS A PORTION OF A TRACT)-THEN TAB TO NEXT FIELD.

Prepared for:
Insert Owner/Developer Name-then TAB.
Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.
Insert City, State, ZIP-then TAB.
Insert Telephone-then TAB.

Prepared by:
Insert Consulting/Engineering Firm Name-then TAB.
Insert Address-then TAB.
Insert City, State, ZIP-then TAB.
Insert Telephone-then TAB

Insert Date Prepared/Revised

OWNER'S CERTIFICATION

WATER QUALITY MANAGEMENT PLAN
FOR PERMIT/PLANNING APPLICATION NUMBER _____
& TRACT/PARCEL MAP NUMBER _____

This Water Quality Management Plan (WQMP) has been prepared for Owner/Developer Name by Consulting/Engineering Firm Name. The WQMP is intended to comply with the requirements of the City of Anaheim, Public Works Department, Development Services Division, Tract/Parcel Map No. Tract/Parcel Map number, Condition Number(s) Condition Numbers, and/or Site Development Permit/Application Number Enter number, Condition Number(s) Condition Numbers requiring the preparation of a Water Quality Management Plan. The undersigned is aware that Best Management Practices (BMPs) are enforceable pursuant to the City's Anaheim Municipal Code, Chapter 10.09.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region Stormwater Runoff Management Program. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Signed:

Name:

Title:

Company:

Address:

Telephone #:

Date:

Contents

Section I Discretionary Permit(s) and Water Quality Conditions 1
Section II Project Description 1
Section III Site Description 1
Section IV Best Management Practices (BMPs) 1
Section V Inspection/Maintenance Responsibility for BMPs 1
Section VI Location Map, Plot Plan & BMP Details 1
Section VII Educational Materials Included 1
Attachments
Attachment A ..... Educational Materials
List each handout separately

Section I Discretionary Permit(s) and Water Quality Conditions

CLICK AND TYPE DISCRETIONARY PERMIT(S) AND WATER QUALITY CONDITIONS HERE

Section II Project Description

CLICK AND TYPE PROJECT DESCRIPTION HERE

Section III Site Description

CLICK AND TYPE SITE DESCRIPTION HERE

Section IV Best Management Practices (BMPs)

Source Control BMPs

The following tables show source control BMPs (routine non-structural and routine structural) included in this project and those that were not included.

Routine Non-Structural BMPs

Identifier	Name	Check One		If not applicable, state brief reason
		Included	Not Applicable	
N1	Education for Property Owners, Tenants and Occupants			
N2	Activity Restrictions			
N3	Common Area Landscape Management			
N4	BMP Maintenance			
N5	Title 22 CCR Compliance (How development will comply)			
N6	Local Industrial Permit Compliance			
N7	Spill Contingency Plan			
N8	Underground Storage Tank Compliance			
N9	Hazardous Materials Disclosure Compliance			
N10	Uniform Fire Code Implementation			
N11	Common Area Litter Control			
N12	Employee Training			
N13	Housekeeping of Loading Docks			
N14	Common Area Catch Basin Inspection			
N15	Street Sweeping Private Streets and Parking Lots			
N16	Commercial Vehicle Washing			

INSERT ADDITIONAL NARRATIVE TEXT HERE TO DESCRIBE HOW EACH ROUTINE NON-STRUCTURAL AND ROUTINE STRUCTURAL BMP WILL BE IMPLEMENTED IN THE PROJECT OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

Routine Structural BMPs

Name	Check One		If not applicable, state brief reason
	Included	Not Applicable	

Provide storm drain system stenciling and signage			
Design and construct outdoor material storage areas to reduce pollution introduction			
Design and construct trash and waste storage areas to reduce pollution introduction			
Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control			
Protect slopes and channels and provide energy dissipation			
Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)			
a. Dock areas			
b. Maintenance bays			
c. Vehicle wash areas			
d. Outdoor processing areas			
e. Equipment wash areas			
f. Fueling areas			
g. Hillside landscaping			
h. Wash water control for food preparation areas			
i. Community car wash racks			

Site Design BMPs

The following table shows site design BMPs that are included in this project. A description of each BMPs follows:

Site Design BMPs

Technique	Included?		Brief Description of Method
	Yes	No	
Minimize Impervious Area/Maximize Permeability (C-Factor Reduction)			
Minimize Directly Connected Impervious Areas (DCIAs) (C-Factor Reduction)			
Create Reduced or "Zero Discharge" Areas (Runoff Volume Reduction)			
Conserve Natural Areas (C-Factor Reduction)			

***Please note that inclusion of Site Deisgn BMPs and Treatment BMPs is a new requirement. Prior to implementing the new requirements the SWRCB and the County of Orange Board of Supervisors must approve the Drainage Area Management Plan (DAMP) and Local Implementation Plan (LIP) of which this template is a part of. The documents are still under review, however, Planning and Development Services Department encourages applicants to utilize Site Design BMPs and Treatment BMPs whenever applicable to their projects. Mandatory inclusion of these BMPs will begin upon approval by the Orange County Board of Supervisors.

INSERT ADDITIONAL NARRATIVE TEXT HERE TO DESCRIBE HOW EACH SITE DESIGN BMP WILL BE IMPLEMENTED ON THE PROJECT OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

Treatment BMPs

The following table shows treatment BMPs that are included in this project. A description of each BMP follows:

Treatment BMPs

Name	Included?		If not applicable, state brief reason
	Yes	No	
Vegetated (Grass) Strips			
Vegetated (Grass) Swales			
Proprietary Control Measures			
Dry Detention Basin			
Wet Detention Basin			
Constructed Wetland			
Detention Basin/Sand Filter			

Porous Pavement Detention			
Porous Landscape Detention			
Infiltration Basin			
Infiltration Trench			
Media Filter			
Proprietary Control Measures			

INSERT ADDITIONAL NARRATIVE TEXT HERE TO DESCRIBE HOW TREATMENT BMPs WILL BE IMPLEMENTED IN THE PROJECT OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

Section V Inspection/Maintenance Responsibility for BMPs

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

Section VI Location Map, Plot Plan & BMP Details

Section VII Educational Materials Included

The following is a list of educational materials included in this WQMP.

- LIST
-
-
-
-
-
-

PUBLIC WORKS DEPARTMENT
DEVELOPMENT SERVICES DIVISION
SUBDIVISION SERVICES SECTION

City Hall East – 200 S. Anaheim Boulevard. 2nd Floor
Anaheim, California 92805
www.anaheim.net/publicworks

WATER QUALITY MANAGEMENT PLAN PROCEDURES

I. GENERAL

WATER QUALITY MANAGEMENT PLANS REQUIRED

NPDES Water Quality Management Plans are required for private new development and significant redevelopment projects and equivalent City of Anaheim capital projects that qualify as a priority project or a non priority project. The following definitions are taken from the Orange County 2003 Drainage Area Management Plan (DAMP):

New Development – means land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

Significant Redevelopment – means development that would add 5,000 or more square feet of impervious surface on an already developed site. Significant redevelopment includes, but is not limited to:

- Expansion of a building footprint;
- Addition of a building and/or structure;
- Addition of an impervious surface that is not part of a routine maintenance activity such as construction of a new parking lot.

Priority Project

- Residential development of 10 units or more
- Commercial and industrial development greater than 100,000 square feet including parking areas.
- Restaurant where the land area of development is 5,000 square feet or more including parking areas.
- Hillside development on 10,000 square feet or more, which is located on areas with known erosive soil conditions or where the natural slope is 25 percent or more.
- Parking lot area of 5,000 square feet or more, or with 15 or more parking spaces, and potentially

exposed to urban runoff.

- All Significant redevelopment projects, where significant redevelopment is defined as the addition of 5,000 or more square feet of impervious surface on an already developed site.

There are no Environmentally Sensitive Areas within the City of Anaheim or within 200 feet of the City limit lines.

Non-Priority Project – means a new development or equivalent City of Anaheim capital project that does not qualify as a priority project and

- Requires discretionary action (i.e. *public hearing before the City Council, Planning Commission, Zoning Administrator or City Engineer)* that will include a precise plan of development, except those projects exempted by the Water Quality Ordinance (i.e. *Chapter 10.09 of the Anaheim Municipal Code exempts exempt*) Or ;
- Requires a non-residential plumbing permit (*a municipal, commercial or residential plumbing permit, excluding potable water or sewage – typically for gasoline piping systems*).

PRELIMINARY/CONCEPTUAL WATER QUALITY MANAGEMENT PLAN – INITIAL SUBMITTAL

A Preliminary Water Quality Management Plan is required for new development and significant redevelopment projects that require approval by the Zoning Administrator, Planning Commission or City Council. Applicants are encouraged to submit the Preliminary WQMP concurrently with the PREFILE submittal. The Preliminary WQMP must be approved prior to filing for the public hearing.

For private developments that do not require discretionary approval, developers are encouraged to submit a Preliminary WQMP

The submittal for the Preliminary WQMP shall consist of the following:

1. Three (3) copies of Preliminary Water Quality Management Plans. The plan must include Site Design Best Management Practices (BMPs) and Treatment Control BMPs. The Source Control BMPs and BMP Maintenance can be excluded from the Preliminary WQMP and can be added when the Project WQMP is submitted.
2. Three (3) copies of the following items
    a. A conceptual grading plan
    b. A preliminary drainage report, including hydrology calculations, map, and calculations for sizing treatment control Best Management Practices (BMPs
    c. A preliminary geotechnical report
3. A plan review deposit in the amount approved by City Council Resolution and listed in the current fee schedule.

PROJECT WATER QUALITY MANAGEMENT PLAN – INITIAL SUBMITTAL

The initial submittal of the Project WQMP shall consist of the following:

1. Three (3) copies of Water Quality Management Plans prepared according to
2. Three (3) copies of the grading plan package including
    a. The Grading Plan
    b. The Drainage Report, including hydrology calculations, map, and hydraulic calculations for storm drain plans and sizing treatment control Best Management Practices (BMPs). The drainage study shall conform to the requirements listed in the City's Drainage Design Manual.
    c. The Geotechnical Report
3. A plan review deposit in the amount approved by City Council Resolution and listed in the current fee schedule.

Incomplete plans will not be reviewed or processed, the civil engineer will be notified and the WQMP package will be returned. The project WQMP must be approved prior to approval of the grading plan, subdivision map or issuance of building permit whichever occurs first.

III. WATER QUALITY MANAGEMENT PLANS FORMAT

The Water Quality Management Plan shall be prepared in conformance to the requirements of Section 7 "New Development/Significant Redevelopment" of the Orange County 2003 Drainage Area Management Plan. The City of Anaheim is in the Santa Ana Region. The DAMP is available on the County's Stormwater Program website www.ocwatershed.com Link to the Stormwater section and click on the Documents section on the left side of the page.

The following items are specific to the City of Anaheim:

Watershed and Pollutants of Concern. The City of Anaheim contains portions of four watersheds within its boundaries. The watersheds are:

- Coyote Creek (Watershed A)
- Carbon Creek (Watershed B)
- Westminster (Watershed C)
- Santa Ana River (Watershed E)

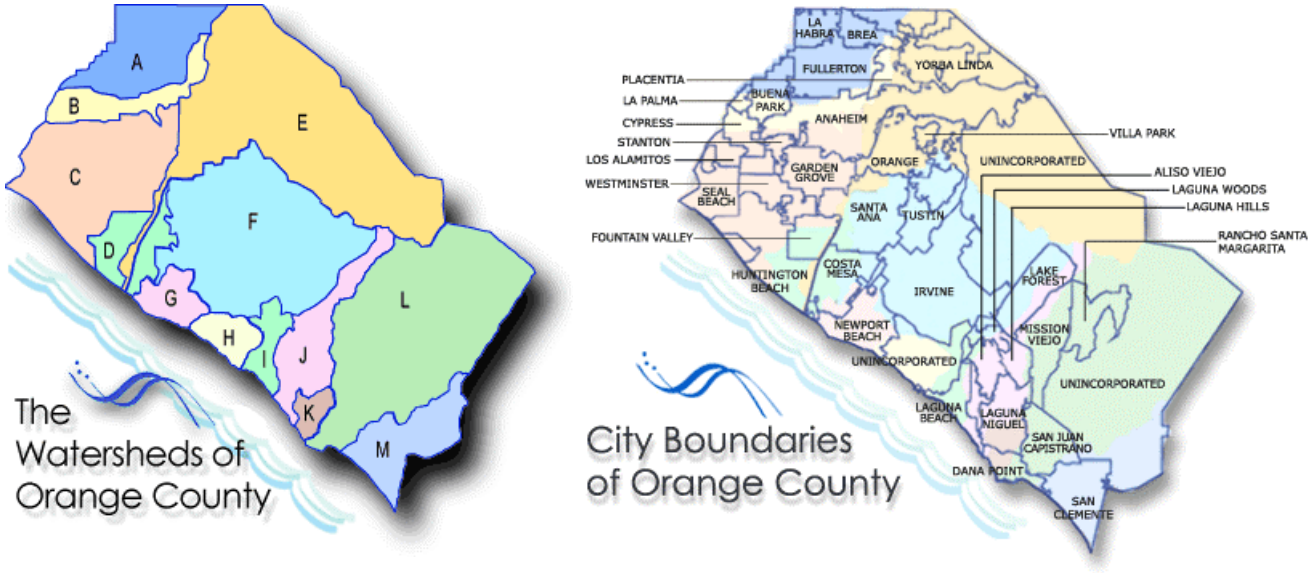
The watershed descriptions and known pollutants of concern are listed in Exhibit A for incorporation into the WQMP. The civil engineer/designer shall add any additional information that becomes available during project research. The Watershed Map is available on the Development Services website or can be picked up at the Subdivision Services counter.

The maps in **Figures 1** and **2** illustrate watershed delineation and portions of watersheds (A, B, C, and E) that fall within the City of Anaheim's boundaries. These watersheds are based on hydrologic areas delineated by the Regional Water Quality Control Board (RWQCB) in the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan).
The Storm Drain Key Map displays the major storm drains and waterways in the City of Anaheim as well as

the four major watersheds to which the City drains. The Storm Drain Key Map is available on the Development Services website or can be picked up at the Subdivision Services.

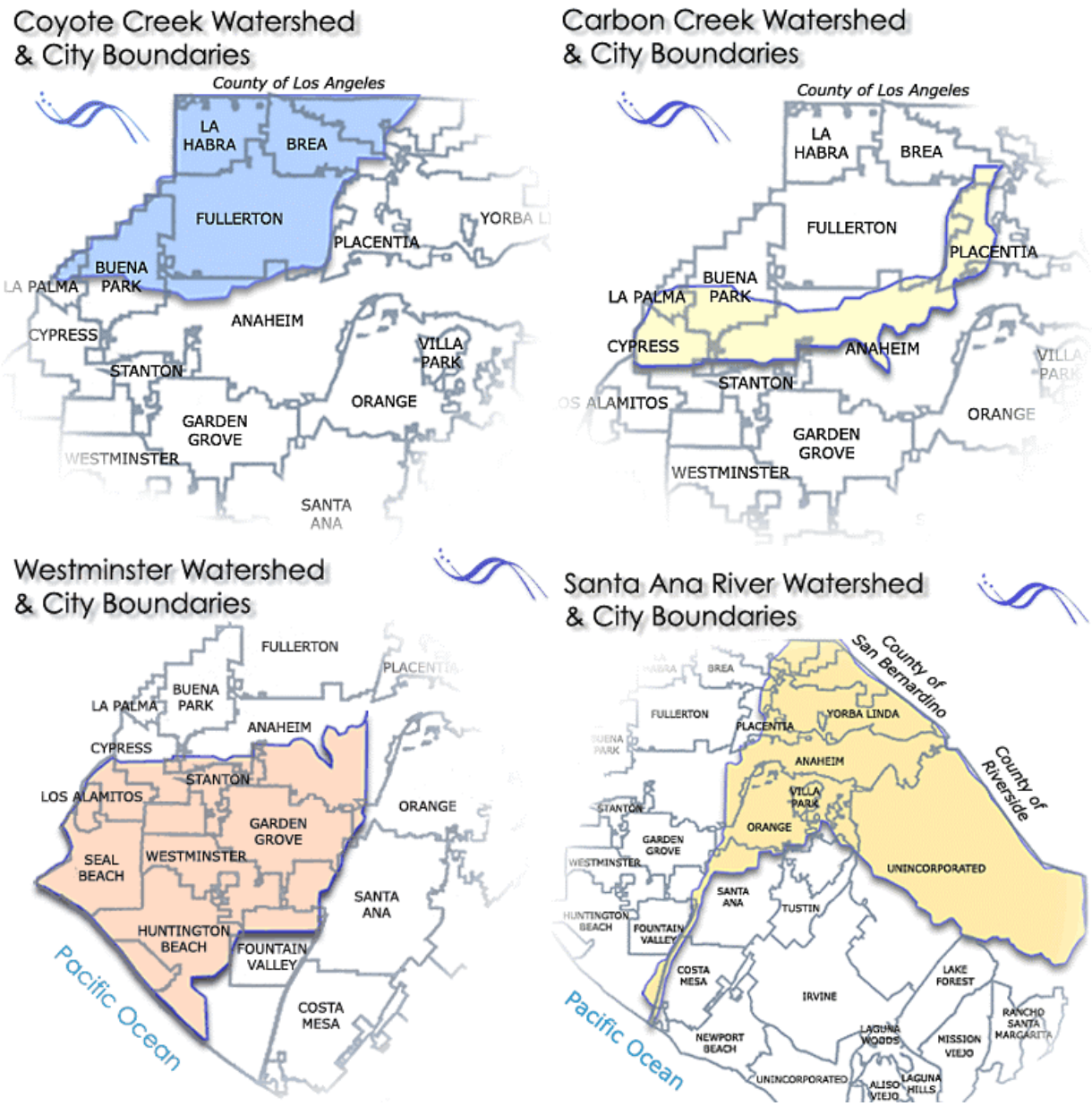
With regard to drainage from outside of Anaheim, the greatest volume of flow by far is attributed to dry weather flow in the Santa Ana River (primarily fed by wastewater treatment plants upstream in Riverside County) and intermittent large flows in the River from storm events. Additionally, a small portion of the flow in Carbon Creek comes to Anaheim from the Cities of Fullerton, Placentia and Yorba Linda. Anaheim is only tributary to the Coyote Creek and Westminster watersheds, draining to them, rather than receiving flow from outside its boundaries, as is the case with the other two watersheds.

Figure 1 Watersheds and City Boundaries of Orange County



Source: http://www.ocwatersheds.com

Figure 2 Watersheds Portions That Fall Within City of Anaheim Boundaries



Source: http://www.ocwatersheds.com

<u>Site Characteristics</u> The City of Anaheim is divided into 45 Drainage Districts. Identify which drainage district the site is within. Include a copy of the district map and a project Plot Plan showing drainage flow arrows and how the drainage ties to drainage of surrounding properties.

SITE DESIGN BEST MANAGEMENT PRACTICES

No exceptions are noted at this time.

SOURCE CONTROL BEST MANAGEMENT PRACTICES

Routine Non-Structural Source Control BMPs

The City of Anaheim Fire Department has oversight for BMPS **N5** (Title 22 CCR Compliance), **N7** (Spill Contingency Plan), **N8** (Underground Storage Tank Compliance), **N9** Hazardous Materials Disclosure Compliance and **N10** (Uniform Fire Code Implementation) pertain.

Routine Structural Source Control BMPs

- Design Trash Storage Areas to Reduce Pollutant Introduction
  See City of Anaheim Public Works Standard Detail. The project civil engineer may design a project specific area as conditions warrant.

- Use Efficient Irrigation Systems and Landscape Design
  See Anaheim Municipal Code Chapter 10.19 Landscape Water Efficiency

TREATMENT CONTROL BEST MANAGEMENT PRACTICES

No exceptions to the Orange County DAMP have been identified at this time.

ONGOING STORMWATER BMP MAINTENANCE

No exceptions have been identified at this time

V. PLAN CHECKING

A. FIRST PLAN CHECK

Plans will be scheduled for plan checking in the order they are received. The first plan check will be thorough and every attempt will be made to mark all plan deficiencies (except in those cases where the plan is incomplete or unclear). The designer will be notified as soon as the plan check is complete and ready for pick-up. The first plan check will take approximately 3-4 weeks.

When the plan checking backlog exceeds an estimated 3 weeks, the plan may be sent to a consulting engineer that has contracted with the City. All checking done by a consulting engineer will be returned to the City for review before being forwarded to the designer. The designer will be notified as soon as the plan check is complete and ready for pick-up.

All plan checks will be returned with a letter or checklist listing items to be submitted with the next plan check. Items marked "required for further processing" must be submitted with the next plan check.

C. SUBSEQUENT SUBMITTALS

Corrected plans will not be accepted for rechecking when items "required for further processing" are missing. It shall be the responsibility of the designer and/or developer to submit all items together with the corrected plans and previous check print.

Subsequent plan checks will be completed in approximately three weeks. The previous check print will be used as a guide for rechecks, the entire plan will be rechecked only in instances where the first check was incomplete or unclear. The designer will be notified as soon as the plan check is complete and ready for pick up.

In an effort to expedite the project, the plan checker assigned to the project will contact the developer and request a meeting with the designer and the developer if the plans are not ready for approval after the third plan check.

VI. WQMP APPROVAL

The plan checker will request two (2) copies of the Water Quality Management Plan with signature of the owner/developer in the plan check letter when the corrections requested are minor and will be sufficient to complete the plans.

After a final check has been made to verify that all corrections have been incorporated into the WQMP, the WQMP will be stamped approved. One stamped copy will be returned to the owner/developer. The second copy will be retained in the City Records Section.

VII. REVISIONS

All changes to an approved WQMP must be submitted and approved by the City as a revision.

Submit the following items to process a revision:

1) Two (2) copies of the revised WQMP, clearly identifying the items that are proposed to be revised.
2) A checking deposit in an amount determined by the City based on the estimated time for review.

EXHIBITS

EXHIBIT A.....WATERSHED DESCRIPTIONS

EXHIBIT B..... PROJECT REVIEW CHECKLIST FOR WQMP REQUIREMENTS

EXHIBIT C.....OWNER CERTIFICATION

EXHIBIT D.....NOTICE OF TRANSFER OF RESPONSIBILITY

Exhibit A

WATERSHED DESCRIPTIONS

Coyote Creek, Watershed A – This watershed covers 41.3 square miles in the northwest corner of Orange County. Coyote Creek, its main tributary, flows from Riverside County to the San Gabriel River. Coyote Creek Watershed is highly urbanized with residential, commercial, and industrial development. There are currently no impaired water bodies within this watershed, however, Coyote Creek ultimately empties into Reach 1 of the San Gabriel River, which is impaired for abnormal fish histology, algae, and high coliform count on Region 4's 2002 303(d) list.

Carbon Creek, Watershed B – This watershed covers 21.4 square miles in west Orange County. Carbon Creek, its main tributary, begins in the foothills and empties into the San Gabriel River. Like Coyote Creek Watershed, the watershed area is highly urbanized with residential, commercial, and industrial development. There are currently no impaired water bodies within this watershed, however, Carbon Creek ultimately empties into Reach 1 of the San Gabriel River, under Los Angeles County jurisdiction, which is impaired for abnormal fish histology, algae, and high coliform count on Region 4's 2002 303(d) list.

Westminster, Watershed C – This watershed covers 74.1 square miles in the southwestern corner of Orange County. Surface water from the southwestern portion of Anaheim drains through the storm drain system to the Anaheim Barber City Channel, which connects to the Bolsa Chica Channel, and drains to Huntington Harbour with its ocean outlet through Anaheim Bay. The Westminster watershed is mostly urbanized and lies on a level coastal plain. Land use is primarily comprised of residential and commercial development, but also includes military, light industrial, schools, parks, and transportation facilities. Tidal influence extends about two miles inland in the lower portion of Bolsa Chica Channel. Impaired water bodies within this watershed include Seal Beach, impaired for enterococci, Huntington Harbour, impaired for pathogens, metals (copper, nickel), pesticides (dieldrin), and priority organics (PCBs), Anaheim Bay, impaired for metals (copper, nickel), pesticides (dieldrin), and priority organics (PCBs), and Bolsa Chica wetlands, impaired for metals (copper, nickel).

Santa Ana River, Watershed E – This watershed covers 153.2 square miles in Orange County, including most of the eastern portion of Anaheim. Santa Ana River begins 75 miles away in the San Bernardino Mountains, crossing through eastern Anaheim before emptying into the Pacific Ocean. Impaired water bodies within this watershed include Reach 4 of Santiago Creek, impaired for salinity, TDS, and chlorides, and Silverado Creek, impaired for pathogens, salinity, TDS, and chlorides. Both Santiago Creek Reach 4 and Silverado Creek are upstream of the City of Anaheim.

Exhibit B
Project Review Checklist for WQMP Requirements

Project Name:_____

Project Address:_____

Reviewer:_____ Date ____/_____/_____

Project Requires a WQMP? NO YES

A Project WQMP is required if either of the following boxes apply:

☐ *New Development* - means land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

☐ *Significant Redevelopment* - means development that would create or add at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to:

- the expansion of a building footprint; addition to or replacement of a structure;
- replacement of an impervious surface that is not part of a routine maintenance activity;
- and land disturbing activities related with structural or impervious surfaces.

Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and replacement of damaged pavement.

Priority Project? NO YES

If a Project WQMP is required, then it is a Priority Project if any of the following boxes apply:

Table 7-1. Priority Projects

☐ Residential development of 10 units or more
☐ Commercial and industrial development greater than 100,000 square feet including parking areas
☐ Automotive repair shop (SIC codes 5013, 5014, 5541, 7532-7534, and 7536-7539)
☐ Restaurant where the land area of development is 5,000 square feet or more including parking areas (SIC code 5812)
☐ Hillside development on 10,000 square feet or more, which is located on areas with known erosive soil conditions or where natural slope in 25 percent or more within the jurisdiction of the Santa Ana RWQCB
☐ Parking lot area of 5,000 square feet or more, or with 15 or more parking spaces, and potentially exposed to urban runoff
☐ All significant redevelopment projects, where significant redevelopment is defined as the addition of 5,000 or more square feet of impervious surface on an already developed site

Exhibit C

Signed Statement (with/date) certifying that the provisions of the WQMP have been accepted by the applicant and that the applicant will strive to have the plan carried out by all future successors in accordance with the City of Anaheim's "Notice of Transfer of Responsibility" procedures (see pages 8 & 9)

OWNER'S CERTIFICATION
WATER QUALITY MANAGEMENT PLAN FOR PERMIT/PLANNING APPLICATION NUMBER _____ & TRACT/PARCEL MAP NUMBER (if applicable)_____

This Water Quality Management Plan has been prepared for (Owner/Developer Name) by (consulting/engineering firm name). It is intended to comply with the requirements of the City of Anaheim, Planning and Public Works Departments, Tract Map No. _____, Condition Number(s) _____, and/or Site Development Permit _____ Condition Number(s) requiring the preparation of a Water Quality Management Plan (WQMP). The undersigned is aware that Best Management Practices (BMPs) are enforceable pursuant to the City's Anaheim Municipal Code, Chapter 10.09. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated cities of Orange County within the Santa Ana Region Stormwater Runoff Management Program. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. An appropriate number of approved-signed copies of this document shall be available on the subject site in perpetuity.

By: _____.

Name: _____.

Title: _____.

Company: _____.

Address: _____.

Phone #: _____.

Date: _____.

Exhibit D

Water Quality Management Plan
Notice of Transfer of Responsibility

Tracking No. Assigned by the City of Anaheim: _____

Submission of this Notice of Transfer of Responsibility constitutes notice to the City of Anaheim that responsibility for the Water Quality Management Plan ("WQMP") for the subject property identified below, and implementation of that plan, is being transferred from the Previous Owner (and his/her agent) of the site (or a portion thereof) to the New Owner, as further described below.

I. Previous Owner/Previous Responsible Party Information

Company/Individual Name		Contact Person	
Street Address		Title	
City	State	ZIP	Phone

II. Information about Site Transferred

Name of Project (if applicable)	
Title of WQMP Applicable to site:	
Street Address of Site (if applicable)	
Planning Area (PA) and/or Tract Number(s) for Site	Lot Numbers (if Site is a portion of a tract)
Date WQMP Prepared (and revised if applicable)	

III. New Owner/New Responsible Party Information

Company/Individual Name		Contact Person	
Street Address		Title	
City	State	ZIP	Phone

IV. Ownership Transfer Information

General Description of Site Transferred to New Owner	General Description of Portion of Project/Parcel Subject to WQMP Retained by Owner (if any)
Lot/Tract Numbers of SiteTransferred to New Owner	
Remaining Lot/Tract Numbers Subject to WQMP Still Held by Owner (if any)	
Date of Ownership Transfer	

Note: When the Previous Owner is transferring a Site that is a portion of a larger project/parcel addressed by the WQMP, as opposed to the entire project/parcel addressed by the WQMP, the General Description of the Site transferred and the remainder of the project/parcel not transferred shall be set forth as maps attached to this notice. These maps shall show those

portions of a project/parcel addressed by the WQMP that are transferred to the New Owner (the Transferred Site), those portions retained by the Previous Owner, and those portions previously transferred by Previous Owner. Those portions retained by Previous Owner shall be labeled "Previous Owner," and those portions previously transferred by Previous Owner shall be labeled as "Previously Transferred."

V. Purpose of Notice of Transfer

The purposes of this Notice of Transfer of Responsibility are: 1) to track transfer of responsibility for implementation and amendment of the WQMP when property to which the WQMP is transferred from the Previous Owner to the New Owner, and 2) to facilitate notification to a transferee of property subject to a WQMP that such New Owner is now the Responsible Party of record for the WQMP for those portions of the site that it owns.

VI. Certifications

A. Previous Owner

I certify under penalty of law that I am no longer the owner of the Transferred Site as described in Section II above. I have provided the New Owner with a copy of the WQMP applicable to the Transferred Site that the New Owner is acquiring from the Previous Owner.

Printed Name of Previous Owner Representative	Title
Signature of Previous Owner Representative	Date

B. New Owner

I certify under penalty of law that I am the owner of the Transferred Site, as described in Section II above, that I have been provided a copy of the WQMP, and that I have informed myself and understand the New Owner's responsibilities related to the WQMP, its implementation, and Best Management Practices associated with it. I understand that by signing this notice, the New Owner is accepting all ongoing responsibilities for implementation and amendment of the WQMP for the Transferred Site, which the New Owner has acquired from the Previous Owner.

Printed Name of New Owner Representative	Title
Signature	Date