

DATE JUN 01 2010
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State of California Energy Resources Conservation and Development Commission

In the Matter of:	Docket No. 08-AFC-2
Application for Certification)	STAFF'S SUPPLEMENTAL
for the Beacon Solar Energy Project)	BRIEF AND TESTIMONY
)	ASSESSING IMPACTS AT THE
)	WASTEWATER FACILITIES

Following the evidentiary hearing, CURE raised several questions about the Rosamond and California City recycled water options. To address CURE's questions, staff recommended in its reply brief that the hearing record be reopened to admit clarifying information on the two wastewater expansions. The following is staff's supplemental evidence and testimony.

I. STAFF'S SUPPLEMENTAL TESTIMONY CLARIFIES THAT CALIFORNIA CITY AND ROSAMOND WILL BE THE LEAD AGENCIES FOR ENVIRONMENTAL REVIEW OF EACH CITY'S WASTEWATER TREATMENT PLANT EXPANSIONS.

Attached are the declarations from Dennis LaMoreaux and Michael Bevins stating that each city will be performing California Environmental Quality Act, (CEQA) review of the wastewater treatment plant upgrades. (Declaration of Dennis LaMoreaux attached as **Exhibit 507**. Declaration of Michael Bevins attached as **Exhibit 508**.)

II. THE SUPPLEMENTAL TESTIMONY CLARIFIES WHAT CHANGES WILL BE OCCURING AT EACH WASTEWATER TREATEMENT FACILITY.

A. ROSAMOND FACILITY

The Rosamond Community Services District has been planning for the conversion of secondary treated waste water into tertiary treated waste since the late 1990s. The first phase of this process started in 1999 which resulted in the conversion of 500,000 gallons a day of secondary treated waste water into tertiary treated. (Declaration of

Dennis LaMoreaux, paragraph 2.) Phase I was designed with the current Phase II upgrades in mind. (LaMoreaux declaration, paragraph 3.)

Attached as **Exhibit B** to the LaMoreaux declaration are two maps, one showing the location of the proposed phase II upgrades at the facility and the other, a drawing of the proposed upgrades. As can be seen, the upgrades occur mainly within an existing pond, a highly degraded and controlled environment. Pond expansion is proposed to extend onto an existing fenced 20-acre section of degraded land within the existing wastewater treatment facility. (LaMoreaux declaration, paragraph 4)

The upgrades and retrofits consist of converting the existing pond secondary treatment to multiple specialized ponds for tertiary treatment, including Advanced Facultative Ponds, High Rate Ponds, Algae Settling Ponds and Maturation Ponds. In addition, some existing equipment installed during phase I will be retrofitted. (LaMoreaux declaration, paragraph 5)

As part of the phase II expansion, a 20-acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. As can be seen from the map, the phase II expansion takes place on fenced property already part of the wastewater treatment facility and is adjacent to facility equipment and other wastewater ponds. (LaMoreaux declaration, paragraph 5)

The seasonal storage pond utilized by the BEACON project will be placed completely within one of the existing ponds that will be abandoned after the additional tertiary treatment facility is built. (LaMoreaux declaration, paragraph 10)

B. CALIFORNIA CITY FACILITY

CALIFORNIA City plans to expand the wastewater treatment facility's recycled water production capacity from 1.5 million gallons per day (mgd) to 3.0 mgd (the "WWTF expansion"). The WWTF expansion and the addition of sewer mains and connections to

residences and businesses currently on a septic system has been in the planning stages for eight years. (Bevins declaration paragraph 4)

The WWTF expansion and addition of sewer mains and connections would involve: the installation of new sewer mains and connections to be located within City streets on City-owned land or within City-owned easements as shown in the City's proposal to provide recycled water to the Project. The proposal involves installation of a recycled water pipeline from the WWTF to the Project, upgrade of the head works, aerator, clarifier, and tertiary filter, and replacement of the chlorination equipment with UV disinfection at the WWTF. (Bevins declaration paragraph 4)

III. BOTH ROSAMOND AND CALIFORNIA ANTICIPATE THE WASTEWATER TREATMENT PLANT UPGRADES WILL REQUIRE A NEGATIVE DECLARATION OR MITIGATED NEGATIVE DECLARATION.

Rosamond anticipate phase II of its plan will require only a negative declaration or mitigated negative declaration because the majority of the upgrades will occur within an existing waste water pond and many upgrades are retrofits on existing equipment. (LaMoreaux declaration, paragraph 4)

The findings and conclusions of the phase I negative declaration are highly relevant to the phase II project, given the location of phase II and overlapping use of phase I components. Therefore, a review of the Phase I negative declaration provides a good estimate of what the phase II environmental document will likely resemble. (LaMoreaux declaration, paragraph 7)

A past expansion to the California City WWTF was addressed in a mitigated negative declaration. Given that the proposed WWTF expansion is not anticipated to cause any significant environmental impacts and the new sewer mains and connections will occur in existing streets within the city, California City is expecting to prepare another mitigated negative declaration for the proposed WWTF expansion. (Bevins declaration paragraph 21)

IV. SUPPLEMENTAL TESTIMONY CLARIFIES WHY STAFF DID NOT EVALUATE A POTENTIAL PIPELINE TRANSVERSING EDWARDS AIR FORCE BASE.

As part of Rosamond's proposal to provide recycled water to the BEACON project, two pipeline routes were noted. One of these routes transverses lands owned by Edwards Air Force Base. This route would only become part of the longer pipeline to the BEACON project if the Air Force Base were to build the line to service its own proposed solar power plant facility or other base use. Because it is unknown whether Edwards will build the line, especially in time for connection with the Beacon project, it is reasonable to anticipate the likely route would be the alternative alignment west of the base. (LaMoreaux declaration, paragraph 9)

V. AS STATED IN STAFF'S REPLY BRIEF, THE UPGRADES AT BOTH WASTEWATER TREATMENT PLANTS ARE EXPECTED TO OCCUR REGARDLESS OF THE BEACON PROJECT. BUT TO SUPPLEMENT THE RECORD, STAFF PROVIDES THE FOLLOWING ENVIRONMENTAL ASSESSMENT OF THE WASTEWATER FACILITY UPGRADES.

To provide the Committee with additional information that addresses CURE's questions, staff proposes entering the attached testimony into the record through declaration. For those technical areas in which parties desire to cross examine witnesses, staff will make those witnesses available at the evidentiary hearing.

- For Air Quality, see the supplemental testimony and declaration of Matthew Layton attached as Exhibit 509.
- For Biological Resources, see the supplemental testimony and declaration of Susan Sanders attached as Exhibit 510.
- 3. For Cultural Resources, see the supplemental testimony and declaration of Kathleen Forrest and Beverly Bastian attached as **Exhibit 511**
- 4. For Land Use, see the supplemental testimony and declaration of Shaelyn Strattan attached as **Exhibit 512**.

- 5. For Noise, see the supplemental testimony and declaration of Erin Bright attached as **Exhibit 513**.
- 6. For Paleontology and Geology, see the declaration of Dal Hunter attached as **Exhibit 514.**
- 7. For Soil & Water, see the supplemental testimony and declaration of Casey Weaver attached as **Exhibit 515**.
- 8. For Traffic and Transportation, see the supplemental testimony and declaration of David Flores attached as **Exhibit 516**.
- 9. For Visual Resources, see the supplemental testimony and declaration of Mark Hamblin attached as **Exhibit 517**.
- 10. For Waste Management, see the supplemental testimony and declaration of Casey Weaver attached as **Exhibit 518**.
- 11. Attached as **Exhibit 519** is a fact sheet describing the current physical characteristics of the Rosamond Treatment facility and expected impacts from phase II construction.
- 12. Attached as **Exhibit 520** is an aerial view of the California City Wastewater Treatment Plant.
- VI. AFTER REVIEWING ADDITIONAL INFORMATION FROM KERN COUNTY REGARDING FIRE PROTECTION AND EMERGENCY SERVICES, STAFF BELIEVES MITIGATION IS WARRANTED.

Attached as **Exhibit 521** is staff's supplemental testimony and proposed Condition of Certification requiring the applicant to pay Kern County \$400,000.00 a year as mitigation for impacts to fire protection and emergency services. Staff has determined that the revised mitigation being requested by Kern County is generally consistent with

and falls within the range of that requested for other power plants in other counties. (Supplemental testimony and declarations of Geoff Lesh and Rick Tyler, Exhibit 520)

Staff is now aware that the level of fire protection that was initially determined to be adequate will not be sustainable due to proposed Kern County budgetary shortfalls that will impact its fire services. Staff is now aware of other large power plants proposed for Kern County (e.g., Ridgecrest, Hydrogen Energy CA) that will make similar demands on local fire and emergency services, thereby resulting in increasing demands on county fire and emergency services. Historical solar thermal power plant emergency response requests have averaged between 2-3 incidents per five years.

Staff understands that Kern County and the Applicant are in the process of negotiating an impact fee. While it is preferable for the parties to resolve this issue, if agreement can not be reached by the time of the Presiding Member's Proposed Decision, staff would recommend implementation of its Condition of Certification.

VII. THE SUPPLEMENTAL TESTIMONY CREATES AN EVIDENTIARY RECORD THAT EXCEEDS THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

An Environmental Impact Report, (EIR) must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project. (*Laurel Heights Improvement Association v Regents of University of California* (1988) 47 Cal.3d 376, 404-405) Staff believes the record accomplishes this in each of the over twenty technical areas covered in the FSA. Regardless of how the upgrades at the two wastewater facilities are characterized, the BEACON record is extensive, complete and goes beyond the requirements of CEQA and Energy Commission regulations. In addition to the 1100-page Final Staff Assessment, staff has now provided an environmental assessment of the upgrades to be implemented at the two wastewater treatment facilities even though both projects will be subject to separate environmental assessments by the respective lead agencies.

An evaluation of environmental effects of a proposed project need not be exhaustive, and the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. The courts have looked not for perfection but for adequacy, completeness and a good faith effort at full disclosure. (Cal. Code Regs., tit. 14, §15151) The FSA and supplemental testimony present a level of information well above mere adequacy and ensures an ample record for the Commission's decision.

Date: June 1, 2010	Respectfully submitted,
	JARED J. BABULA Senior Staff Counsel

EXHIBIT 507

State of California Energy Resources Conservation and Development Commission

, – – – – – – – – – – – – – – – – – – –	In the Matter of:	Docket No. 08-AFC-2
ior the Beacon Solar Energy Project) Lawioreaux	Application for Certification for the Beacon Solar Energy Project) DECLARATION OF DENNIS LaMOREAUX

I, Dennis LaMoreaux, declare as follows:

- 1. I am employed in the engineering department at the Rosamond Community Services District as the Assistant General manager/District Engineer where I have been for over one year I am also currently General Manager of the Palmdale Water District. As part of my job with Rosamond I have been involved with the operations and engineering of the Rosamond wastewater treatment plant including the currently propose project to increase the quantity of tertiary treated recycled water the plant produces.
- 2. During the course of my work in the engineering department I have knowledge of the prior 1999 phase I facility upgrades to convert 500,000 gallons a day of secondary treated waste water to tertiary treated wastewater. I am currently involved in the phase II upgrade project which would increase the facility's tertiary wastewater treatment capacity to 2.5 million gallons a day.
- 3. Attached as Exhibit A to this Declaration are excerpts from the environmental review required by the California Environmental Quality Act for the phase I 1999 wastewater treatment facility expansion. As the exhibit shows, the Rosamond Community Services District was the lead agency and a negative declaration was submitted because the expansion occurred on disturbed Rosamond treatment plant property inducing no significant environmental impacts. The phase I expansion was designed to allow for anticipated future expansions, or conversions, such as the current proposed phase II. The negative declaration specifically stated, "Space has been provided in the proposed layout to allow for the phased expansion of the facility to an ultimate plant capacity of 2.34 MGD."
- 4. The current phase II conversion of two million gallons a day of existing secondary treatment to tertiary treatment will be located adjacent to the phase I development. It is anticipated phase II will require only a negative declaration or mitigated negative declaration because the majority of the upgrades will occur within an existing waste water pond and many upgrades are retrofits on existing equipment. As with phase I, the Rosamond Community Services District will be the lead agency for the phase II analysis. Attached as Exhibit B are two maps, one showing the location of the proposed phase II upgrades at the facility and the other, a drawing of the proposed upgrades. As can be seen the upgrades occur

- mainly within an existing pond, a highly degraded and controlled environment. Pond expansion is proposed to extend onto an existing fenced 20 acre section of degraded land within the existing wastewater treatment facility.
- 5. The upgrades and retrofits consist of converting the existing pond secondary treatment to multiple specialized ponds for tertiary treatment including Advanced Facultative Ponds, High Rate Ponds, Algae Settling Ponds and Maturation Ponds. In addition some existing equipment installed during phase I will be retrofitted.
- 6. As part of the phase II expansion, a 20 acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. The phase II environmental review will evaluate the impacts of pond expansion through an initial study. If significant impacts are found additional analysis will occur and appropriate mitigation will be implemented. Based on many years of wastewater treatment operations including the construction and operation of 16 ponds, it is unlikely the phase II expansion will present significant environmental impacts and it is especially unlikely given the developed nature of the facility and small size of expansion, that any significant impacts could not be mitigated. As can be seen from the map the phase II expansion takes place on fenced property already part of the wastewater treatment facility and is adjacent to facility equipment and other wastewater ponds.
- 7. The findings and conclusions of the phase I negative declaration are highly relevant to the phase II project given the location of phase II and overlapping use of phase I components. Therefore, a review of the Phase I negative declaration provides a good estimate of what the phase II environmental document will likely resemble. Any land development usually concerns biological resources. In the event that habitat supporting species of special concern is found or actual populations of animals, such as desert tortoise, are identified, enough flexibility exists to reconfigure the pond to avoid the biological resource.
- 8. It is important to note that phase II is not an expansion of the plant's capacity to process incoming waste water, only to further process existing secondary treated waste water to tertiary treated. Therefore, phase II cannot reasonably be expected to induce additional population growth.
- 9. As part of our proposal to provide recycled water to the BEACON project, two pipeline routes were noted. One of these routes transverse lands owned by Edwards Air force Base. This route would only become part of the longer pipeline to the BEACON project if the Air Force base were to build the line to service its own proposed solar power plant facility. Unless Edwards already has the line built, it is anticipated that the recycled water line servicing BEACON would follow the alternative alignment west of the base.

10. The seasonal storage pond utilized by the BEACON project will be placed completely within one of the existing ponds that will be abandoned after the additional tertiary treatment is built. Therefore no additional environmental impacts would occur.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

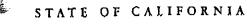
Dated: 4 27 10

Signed: Lus Ka Muuvo
DENNIS La MOREAUX

At: PALMDALE___, California

Exhibit A

BK-R14-PAGE 3,02





Gray Davis

Governor's Office of Planning and Research State Clearinghouse

STREET ADDRESS: 1400 TENTH STREET ROOM 222 SACRAMENTO, CALIFORNIA 95814

MAILING ADDRESS: P.O. BOX 3044 SACRAMENTO, DA 95812 3044 51

916-445-0613 FAX 916-323-3018 www.opr.ca.gov/clearingbouse.html

Loretta Lynch

November 12, 1999

Sherry DeLano
Rosamond Community Services District
2700 - 20th Street West
Rosamond, CA 93560

Subject: Rosamond Community Services District, Wastewater Treatment Plant Expansion

SCH#: 99101037

Dear Sherry DeLano:

The State Clearinghouse submitted the above named environmental document to selected state agencies for review. The review period closed on November 10, 1999, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the eight-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts

Senior Planner, State Clearinghouse

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Document Details Report

SCH# 99101037

Project Title Rosamond Community Services District, Wastewater Treatment Plant Expansion

Lead Agency Rosamond Community Services District

Type neg Negative Declaration

Description The proposed project would entail the expansion of the Rosamond Community Services District

Wastewater Treatment Plant. Improvements would include adding treatment capacity and effluent disposal facilities. The initial expansion will provide an additional 0.5 million gallons per day of

capacity; however, the facilities will be expandable.

Lead Agency Contact

Name Sherry DeLano

Agency Rosamond Community Services District

Phone 661-256-3411

email

Address 2700 - 20th Street West

City Rosamond

State CA

Fax

Zip 93560

Project Location

County Kern

City Rosamond

Region

Cross Streets Patterson Road & Sierra Hwy.

Parcel No. 471-190- (09, 27, 28, 32, 33)

Township 9N Range

Section 27, 34

Base SBBM

Proximity to:

Highways 14

Airports

Rallways SPRR

Waterways

Schools:

Land Use The property is part of the existing Rosamond Community Services District Wastewater Treatment

Plant. The surrounding property consists of vacant land.

Project Issues

Traffic/Circulation; Noise

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 4; Department of Parks and Recreation:

Caltrans, District 6; Department of Health Services; Integrated Waste Management Board; State Water Resources Control Board, Clean Water Program; Regional Water Quality Control Bd., Region 6

(Victorville); Native American Heritage Commission; State Lands Commission

Date Received

10/12/1999

Start of Review 10/12/1999

End of Review 11/10/1999

Note: Blanks in data fields result from insufficient Information provided by lead agency.

ROSAMOND COMMUNITY SERVICES DISTRICT AMENDED MINUTES Regular Meeting December 22, 1999 – 7:00 pm

Item 6(a) of Old Business:

/ a. Acceptance of Environmental Impact Report on Wastewater Treatment Plant.

A motion was made by Director Landsgaard, seconded by Director Speed and unanimously carried to approve the Acceptance of Environmental Impact Report on Wastewater Treatment Plant.

In order to meet the requirements of the State Water Resources Control Board the wording accepting our Notice of Determinations for the Wastewater Treatment Plant should have read:

The Board has determined that the Wastewater Treatment Plant Expansion Project (State Clearinghouse Number 99101037) will not have a significant effect on the environment. The Notice of Determination should be filed with the County Clerk and the Governor's Office of Planning and Research.

Respectfully submitted:

Sharon L. Welker, Setretary/Treasurer

Greg Wood, President

CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF KERN)

I, Sharon L. Welker, Secretary of the Board of Directors of the Rosamond Community Services District, do hereby certify that the foregoing Amended Minutes were duly approved by the Board of Directors of said District at a scheduled regular meeting of said Board held on the 22nd day of March, 2000, and that I certify that this is a true and correct copy.

Secretary, Rosamond Community Services District and the Board of Directors thereof

Travon L. Werker



6612562557



NO	OTICE OF DETERMINA	IION -	
TO: Office of Planning & R 1400 Tenth Street, R		: (Public Agency) Rosamond Communi District	ty Services
County Clerk County of Kern			
SUBJECT: Filing of Notice of De the Public Resource	etermination in complia s Code.	nce with Section 2110	8 or 21152 of
Rosamond Community Service	s District Wastewat	er Treamtnet Plant	Expansion
Project Title			
99101037	Sherry L. DeLano	(661) 256-3	
State Clearinghouse Number (If Submitted to Clearinghouse)	Contact Person	Area Code/Number/I	Extension
Rosamond Area, Kern County			····
Project Location Expansion of the RCSD's WW aeration reactor basin, se	TP, Including grit :	removal, flow splichemical feed and	tting, extended sludge drving beds.
Project Description			
This is to advise that the Rosamon	d Community Services (Lead Agency or Resp.		
has approved the above described j	project on 12-22-99	and has made the fo	ollowing
determinations regarding the above	(Date) e described project:		-
1. The project will, X will	not have a significant e	effect on the environme	ent.
provisions of CEQA.	pact Report was prepa	_	
X A Negative Declaration CEQA.	was prepared for this	project pursuant to th	e provisions of
 Mitigation measures w project. 	ere, X were not made	e a condition of the	approval of the
4. A Statement of Overriding C	Considerations was,	X was not adopted for	or this project.
This is to certify that the Negative project approval is available to the	e Declaration with com General Public at:	iments and responses	and record of
Rosamond Community Services	s District, 2700 200	th Street West, Ros	samond, CA 93560
Date Received for Filing and Postin			
Morry Ne Jano		General Manager	
Signature (Public Agency)	• • • • • • • • • • • • • • • • • • • •	Title	
	N	otica of Environmental Dosted by County Clerk on	1-20-500
	ľ	osied by coming discritical	Philippent 10

and for 30 days mersefter, Pulsuant to Section 21152(C), Public Resources Godo

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CALIFORNIA DEPARTMENT OF FISH AND GAME CERTIFICATE OF FEE EXEMPTION

De Minimis Impact Finding

Project Title/Location (include county): Rosamond Community Services District Wastewater Treatment Plant Expansion

County of Kern

The project is located east of Sierra Highway and south of Patterson Road.

Project Description:

The expansion of the Rosamond Community Services District's Wastewater Treatment Plant, including grit removal, flow splitting, extended aeration reactor basin, secondary clarifier, chemical feed and sludge drying beds.

Findings of Exemption (attach as necessary):

- 1. An initial study has been prepared by the Rosamond Community Services District to evaluate the potential adverse environmental impacts.
- 2. The Rosamond Community Services District Board of Directors finds that there is no evidence that the proposed project will have any adverse impacts on wildlife resources.

Certification:

I hereby certify that the public agency has made the above finding and that the project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

Title: General Manager

Lead Agency Rosamond Community Services District

Date December 28, 1999

Environmental Checklist Form

1. Project title: Wastewater Treatment Plant Expansion

2. Lead agency name and address: Rosamond Community Services District

2700 20th Street West Rosamond, CA 93560

3. Contact person and phone number: Mrs. Sherry DeLano, Manager, (661) 256-3411

4. Project location: Kern County, California, Sections 27 and 34, T9N, R12W, SBBM.

5. Project sponsor's name and address: Rosamond Community Services District

2700 20th Street West Rosamond, CA 93560

6. General plan designation: N/A

- 7. Description of project: The proposed project would entail the expansion of the Rosamond Community Services District (RCSD) Wastewater Treatment Plant. The treatment facilities would include grit removal, flow splitting, tie-in to the existing system, an extended aeration reactor basin, one secondary clarifier, return and waste activated sludge pumping station, chemical feed facility, filters, ultraviolet disinfection, sludge drying beds, and a control building. Effluent disposal facilities would include new effluent storage facilities and a reclaimed water pump station to feed the existing reclaimed water pipelines. The expanded wastewater treatment facilities will have an initial 12-year flow treatment capacity of 0.5 million gallons per day (MGD) but will be expandable to meet the 20-year flow of 1.0 MGD. Space has been provided in the proposed layout to allow for the phased expansion of the facility to an ultimate plant capacity of 2.34 MGD. At the present time, the facilities have a capacity of 1.3 MGD. Facilities to be constructed will be located on RCSD owned property.
- 8. Surrounding land uses and settings: The property surrounding the project site consists of an existing District wastewater treatment plant and vacant land.
- 9. Other public agencies whose comments are requested:

	Agency	Permit/Approval
1.	STATE CLEARINGHOUSE	Environmental Review
2.	Kern County Planning Department	Environmental Review
3.	Kern County Engineering & Survey Services	Environmental Review
4.	Kern County Health Department	Environmental Review
5.	Kern Council of Governments	Environmental Review
6.	Edwards Air Force Base	Environmental Review

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

		ly affected by this project, involving at ndicated by the checklist on the following
 ☐ Aesthetics ☐ Biological Resources ☐ Hazards & Hazardous Materials ☐ Mineral Resources ☐ Public Services ☐ Utilities/Service Systems 	Agriculture Resources Cultural Resources Hydrology/Water Quality Noise Recreation Mandatory Findings of Sig	☐ Air Quality ☐ Geology/Soils ☐ Land Use/Planning ☐ Population/Housing ☐ Transportation/Traffic
DETERMINATION: (To be compl	eted by the Lead Agency)	
On basis of this initial evaluation:		
I find that the proposed project NEGATIVE DECLARATION		ificant effect on the environment, and a
will not be a significant effect in	n this case because revisio	nificant effect on the environment, there ns in the project have been made by or ATIVE DECLARATION will be prepared.
☐ I find that the proposed project ENVIRONMENTAL IMPACT		ffect on the environment, and an
significant unless mitigated" im adequately analyzed in an earlie addressed by mitigation measur	pact on the environment, or document pursuant to ap res based on the earlier and	significant impact" or "potentially but at least one effect 1) has been oplicable legal standards, and 2) has been alysis as described on attached sheets. An it must analyze only the effects that
all potentially significant effects DECLARATION pursuant to a	s (a) have been analyzed a pplicable standards, and (t /E DECLARATION, incl	dequately in an earlier EIR or NEGATIVE by have been avoided or mitigated pursuant adding revisions or mitigation measures that required.
Signature Ben P. Inc.	Date	9-28-99
Printed name Bon P. Hox	2N For K	osamond Community Sorvices Datrat

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
ENVIRONMENTAL IMPACTS:				
I. Aesthetics. Would the project:				
a) Have a substantial adverse effect on a scenic vista?				\boxtimes
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				⊠
Clarification for Responses:			٠	
a,b,c,d. The project will not result in a negative visual / aesthe	etic impact.	•		
II. Agricultural Resources: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				⊠
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				
Clarification for Responses:				
a,b,c. The project will not convert any land designated or zo	oned for agr	icultural usa	ge.	
III. Air Quality. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				\boxtimes
BKR0413000 Title14_AppendixG.doc				Page 3 of 12

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
which the ambient	It in a cumulatively considerable net increase of any criteria pollutant for the project region is non-attainment under an applicable federal or state tair quality standard (including releasing emissions that exceed attive thresholds for ozone precursors)?				
d) Expo	se sensitive receptors to substantial pollutant concentrations?				\boxtimes
e) Creat	e objectionable odors affecting a substantial number of people?		· 🗖		\boxtimes
Clarif	ication for Responses:				
a,b,c.	The proposed project will not violate any applicable ai	r quality p	lans or stand	lards.	
d.	Increased pollutant concentrations will not occur as a r	esult of the	e proposed p	oroject.	
e.	The properties surrounding the proposed project site as improved facilities will not expose substantial number.	re sparsely s of people	populated. to objection	Therefore, nable odor	, the s.
IV. Bi	iological Resources. Would the project:				
modifica status sp	a substantial adverse effect, either directly or through habitat ations, on any species identified as a candidate, sensitive, or special species in local or regional plans, policies, or regulations, or by the aia Department of Fish and Game or U.S. fish and Wildlife Service?				
natural o	a substantial adverse effect on any riparian habitat or other sensitive community identified in local or regional plans, policies, regulations or california Department of fish and Game or U.S. Fish and Wildlife				
by Secti vernal p	a substantial adverse effect on federally protected wetlands as defined on 404 of the Clean Water Act (including but not limited to, marsh, ool, coastal, etc.) through direct removal, filling, hydrological tion, or other means?				
fish or v	Fere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife s, or impede the use of native wildlife nursery sites?				\boxtimes
e) Confl such as	lict with any local policies or ordinances protecting biological resources, a tree preservation policy or ordinance?				\boxtimes
Commu	ict with the provisions of an adopted Habitat Conservation Plan, Natural nity conservation Plan, or other approved local, regional, or state habitat ation plan?				\boxtimes

Clarification for Responses:

a,b,c,d,e,f. The majority of the proposed project will be located on RCSD owned property that is currently part of the existing wastewater treatment plant facilities. The property is presently used for plant operations and material storage and therefore the proposed improvements should not adversely affect the above listed items.

		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact		
v.	Cultural Resources. Would the project:						
	Cause a substantial adverse change in the significance of a historical resource defined in §15064.5?						
	Cause a substantial adverse change in the significance of an archaeological ource pursuant to §15064.5?						
	Directly or indirectly destroy a unique paleontological resource or site or ique geologic feature?				\boxtimes		
	Disturb any human remains, including those interred outside of formal neteries?			. 🗆	\boxtimes		
<u>C</u> I	arification for Responses:						
a.	There are no known cultural resources within the vicinity	of the proj	ect.				
b.	b. It is always possible that articles of archaeological significance could be discovered during the construction process. If this should occur, all construction would immediately cease until a qualified archaeologist could be brought to the site to determine the significance of the discovery.						
c.	There are no known unique paleontological resources or g	eologic fea	tures within	the projec	et vicinity.		
d.	I. There are no known human remains interred within the project area. However, upon the discovery of human remains, construction would immediately cease and the proper authorities would be contacted.						
V	I. Geology and Soils. Would the project:						
a) l the	Expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving:				\boxtimes		
Alc the	Rupture of a known earthquake fault, as delineated on the most recent quist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for area or based on other substantial evidence of a known fault? Refer to vision of Mines and Geology Special Publication 42.				⊠		
ii)	Strong seismic ground shaking?				\boxtimes		
iii)	Seismic-related ground failure, including liquefaction?				\boxtimes		
iv)	Landslides?				\boxtimes		
b)	Result in substantial soil erosion or the loss of topsoil?				\boxtimes		
uns	Be located on a geologic unit or soil that is unstable, or that would become stable as a result of the project, and potentially result in on- or off-site dslide, lateral spreading, subsidence, liquefaction or collapse?				⊠		
d) l Bu	Be located on expansive soil, as defined in Table 18-1-B of the Uniform ilding Code (1994), creating substantial risks to life or property?				\boxtimes		
alte	Have soils incapable of adequately supporting the use of septic tanks or emative wastewater disposal systems where sewers are not available for the posal of wastewater?						

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Clarification for Responses:

- a. The proposed project site is not located on a known fault and therefore should not expose people to the listed impacts.
- b,c,d,e. The project should not result in substantial erosion because it will not substantially alter the existing topography of the region. No unstable soil conditions are known to exist within the project vicinity.

VII. Hazards and Hazardous Materials. Would the project:

. ,		
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		\boxtimes
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		⋈
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?		×
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?		\boxtimes
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		\boxtimes
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas of where residences are intermixed with wildlands?		

Clarification for Responses:

- a. Hazardous materials will not be routinely transported, used, or disposed of at the project site.
- b. The wastewater treatment facilities are designed to contain the untreated sewage influent locally in the event of an accident.
- c. There are no existing or proposed schools within one-quarter mile of the proposed facilities.
- d. The proposed facilities are not located on a hazardous materials site.

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Significant Mitigation Significant No
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- e,f. There are no public airports within the vicinity of the project site; however, Edwards Air Force Base does lie just to the east of the site. The proposed improvements would not create a safety hazard for people working at the Air Force Base.
- g. Local emergency plans will not be affected by the proposed project.
- h. Wildland fires should not occur as a result of the proposed improvements.

VIII. Hydrology and Water Quality. Would the project:			
a) Violate any water quality standards or waste discharge requirements?			\boxtimes
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	. 🗆		×
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			\boxtimes
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			Ø
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			\boxtimes
f) Otherwise substantially degrade water quality?		□ ·	\boxtimes
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			\boxtimes
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			\boxtimes
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			
j) Inundation by seiche, tsunami, or mudflow?			\boxtimes

Clarification for Responses:

- a. The facility would be designed to meet or exceed all water quality and waste discharge standards.
- b. The proposed project will not interfere with the availability or quantity of the local groundwater.
- c,d,e. No local streams or rivers will be altered by the proposed improvements. Drainage should continue to flow in an easterly direction to Edwards Air Force Base lakebed.

	•	Potentially Significant Impact	Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
f.	The proposed facility improvements would not affect region.	the quality	of the grou	ndwater wi	thin the
g,h,i,j.	The proposed improvements are not located within the map) and therefore will not expose people or structure	_	_	•	ed FIRM
IX. La	and Use and Planning. Would the project:				
a) Physic	eally divide an established community?				\boxtimes
with juri specific _l	ict with any applicable land use plan, policy, or regulation of an agency sdiction over the project (including, but not limited to the general plan, plan, local coastal program, or zoning ordinance) adopted for the of avoiding or mitigating an environmental effect?				
	ct with any applicable habitat conservation plan or natural community tion plan?				
Clarifi	cation for Responses:				
a.	The proposed improvements are to be constructed on t community of Rosamond.	he southea	sterly bound	dary of the	
b,c.	A majority of the proposed project will be constructed treatment property. Any improvements to the property land use in the area.			_	
X. Mii	neral Resources. Would the project:				
	in the loss of availability of a known mineral resource that would be of the region and the residents of the state?				\boxtimes
	in the loss of availability of a locally-important mineral resource site delineated on a local general plan, specific plan or other land use				⊠
<u>Clarifi</u>	cation for Responses:				
a,b.	No impacts to mineral resources of local, regional, or s	statewide i	mportance a	re anticipa	ted.
XI. No	ise. Would the project result in:				
establish	ure of persons to or generation of noise levels in excess of standards ed in the local general plan or noise ordinance, or applicable standards agencies?			\boxtimes	
	ure of persons to or generation of excessive groundborne vibration or orne noise levels?			\boxtimes	
c) A subs vicinity a	stantial permanent increase in ambient noise levels in the project above levels existing without the project?			\boxtimes	

Potentially

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		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
	stantial temporary or periodic increase in ambient noise levels in the icinity above levels existing without the project?			\boxtimes	
not been would th	project located within an airport land use plan or, where such a plan has adopted, within two miles of a public airport or public use airport, e project expose people residing or working in the project area to e noise levels?				
f) For a people re	project within the vicinity of a private airstrip, would the project expose esiding or working in the project area to excessive noise levels?				
<u>Clarifi</u>	cation for Responses:				
a,b,d.	The potential for increased noise levels and vibrations construction period. However, the increase will only be construction is complete.				he
c.	Ambient noise levels will increase within the project a improvements. However, the lack of housing within the impacts to a minimum. Furthermore, noise emittance design of the facilities.	he vicinity	of the proje	ct will kee	
e,f.	The proposed facilities will not be located near a publi to the east of the proposed project site; however, the na- should not have any significant effect upon the resider	oise from	the construct	tion of the	
XII. P	opulation and Housing. Would the project:				
by propo	e substantial population growth in an area, either directly (for example, osing new homes and businesses) ore indirectly (for example, through n of roads or other infrastructure)?				
	ace substantial numbers of existing housing, necessitating the tion of replacement housing elsewhere?				\boxtimes
, -	ace substantial numbers of people, necessitating the construction of nent housing elsewhere?				
Clarifi	cation for Responses:				
a,b,c.	The project is not expected to induce population grow will not displace housing or people within the project to provide the required treatment capacity that the groin the future.	area. The	expansion is	s proposed	in order

	Potentially Significant Impact	Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. Public Services				
a) Would the project result in substantial adverse physical impacts asswith the provision of new or physically altered governmental facilities new or physically altered governmental facilities, the construction of vacould cause significant environmental impacts, in order to maintain ac service ratios, response time or other performance objectives for any opublic services:	, need for vhich ceptable			
Fire protection?				\boxtimes
Police protection?				\boxtimes
Schools?				\boxtimes
Parks?				\boxtimes
Other public facilities?				\boxtimes
Clarification for Responses:				
a. The proposed project should in no way interfere very parks, or other public facilities.	with fire protection	police prote	ection, sch	ools,
XIV. Recreation				
a) Would the project increase the use of existing neighborhood and reg parks or other recreational facilities such that substantial physical deter of the facility would occur or be accelerated?	gional Tioration			\boxtimes
b) Does the project include recreational facilities or require the construence expansion of recreational facilities which might have an adverse physicon on the environment?				☒
Clarification for Responses:	•			
a,b. The proposed project will not affect existing of	or proposed recreat	ional facilitie	es.	
XV. Transportation/Traffic. Would the project:			r	
a) Cause an increase in traffic which is substantial in relation to the exitraffic load and capacity of the street system (i.e., result in a substantial in either the number of vehicle trips, the volume to capacity ratio on recongestion at intersections)?	l increase			
b) Exceed, either individually or cumulatively, a level of service standaestablished by the county congestion management agency for designation highways?	ard ded roads			☒
c) Result in a change in air traffic patterns, including either an increase levels or a change in location that results in substantial safety risks?	in traffic			\boxtimes
d) Substantially increase hazards due to a design feature (e.g., sharp cu dangerous intersections) or incompatible uses (e.g., farm equipment)?	rves or			\boxtimes
e) Result in inadequate emergency access?				\boxtimes

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		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact	
f) Resi	ult in inadequate parking capacity?				\boxtimes	
	offlict with adopted policies, plans, or programs, supporting alternative ortation (e.g., bus turnouts, bicycle racks)?					
Clari	fication for Responses:				-	
ti o d	a. The possibility exists to disrupt local traffic patterns both during and after the construction phase of the project. However, the majority of the traffic interruptions will be temporary and should only occur in the immediate vicinity of the ongoing work. It is also possible that after construction, the daily operation of the expanded treatment facilities will cause an increase in the local traffic flows.					
b,c,d	e,f,g. The other traffic conditions listed above should no	t be affecte	ed by the pro	posed con	struction.	
XVI	. Utilities and Service Systems. Would the project?					
	eed wastewater treatment requirements of the applicable Regional Water y Control Board?				\boxtimes	
faciliti	uire or result in the construction of new water or wastewater treatment es or expansion of existing facilities, the construction of which could significant environmental effects?					
expans	uire or result in the construction of new storm water drainage facilities or sion of existing facilities, the construction of which could cause cant environmental effects?					
	re sufficient water supplies available to serve the project from existing ments and resources, or are new or expanded entitlements needed?				\boxtimes	
or may	ult in a determination by the wastewater treatment provider that services y serve the project that it has adequate capacity to serve the project's ted demand in addition to the provider's existing commitments?					
	served by a landfill with sufficient permitted capacity to accommodate the t's solid waste disposal needs?				\boxtimes	
g) Cor waste	nply with federal, state, and local statutes and regulations related to solid?					
Clari	ification for Responses:		٠			
a,b,e	. Not Applicable.					
c,d.	The proposed project will not require new water suppl	ly or storm	water drains	age faciliti	es.	
f,g.	The project will not require landfill service nor will it regulations.	interfere w	rith solid wa	ste statute:	s and	

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. Mandatory Finding of Significance.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? {"Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			. 🗖	
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				\boxtimes

Clarification for Responses:

a,b,c. The proposed project will not degrade, either individually or cumulatively, the quality of the surrounding environment.

NOTES TO USER

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local dramage sources of small size, or all planimetric features outside Special Flood Hazard Areas.

Areas of special flood hazard (100-year flood) include Zones A, A1-30, AE, AH, AO, A99, V, V1-30 AND VE. Certain areas not in the Special Flood Hazard Areas (rones A and V) may be protected by flood control structures.

Coastal base flood elevations apply only fandward of the shoreline shown on

For adjoining map panels, see separately printed Index to Map Panels.

NITIAL IDENTIFICATION JUNE 20, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE: SEPTEMBER 29, 1986

FLOOD INSURANCE RATE MAP REVISIONS SEPTEMBER 29, 1989 Map revised SEPTEMBER 6, 1995 to incorporate previously issued letter of map revision.

To determine it Hood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.



APPROXIMATE SCALL IN LTEL

KEY IUMAE

500-Year Flood Boundary 100-Year Flood Boundary

100-Year Flood Boundary

500-Year Flood Boundary Zone Designations

Base Flood Elevation Line

With Elevation In Feet**

Where Uniform Within Zone** Base Flood Elevation in Feet

EL 987

Elevation Reference Mark

RM7_X

Zone D Boundary River Mile **Referenced to the National Geodetic Vertical Dalum of 1929

EXPLANATION OF ZONE DESIGNATIONS

ZONE

EXPLANATION

- Areas of 100-year flood; base flood elevations and lood hazard factors not determined. ⋖
- Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of Inundation are shown, but no flood hazard factors are determined. 8
- Areas of 100-year shallow Hooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined. Ŧ
- Areas of 100-year flood; base flood elevations and lood hazard factors determined. A1-A30

- Areas of 100-year flood to be protected by flood elevations and flood hazard factors not determined. protection system under construction; base A99
- year flood; or certain areas subject to 100-year flood-ing with average depths less than one (1) foot or where Areas between Ilmits of the 100-year flood and 500the contributing drainage area is less than one square mile; or areas protected by levees from the base flood (Medfum shading)
- Areas of minimal flooding. (No shading)
- Areas of undetermined, but possible, flood hazards. Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined. حف ن
- Areas of 190-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors V1-V30

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

(UNINCORPORATED ARE) KERN COUNTY CALIFORNIA

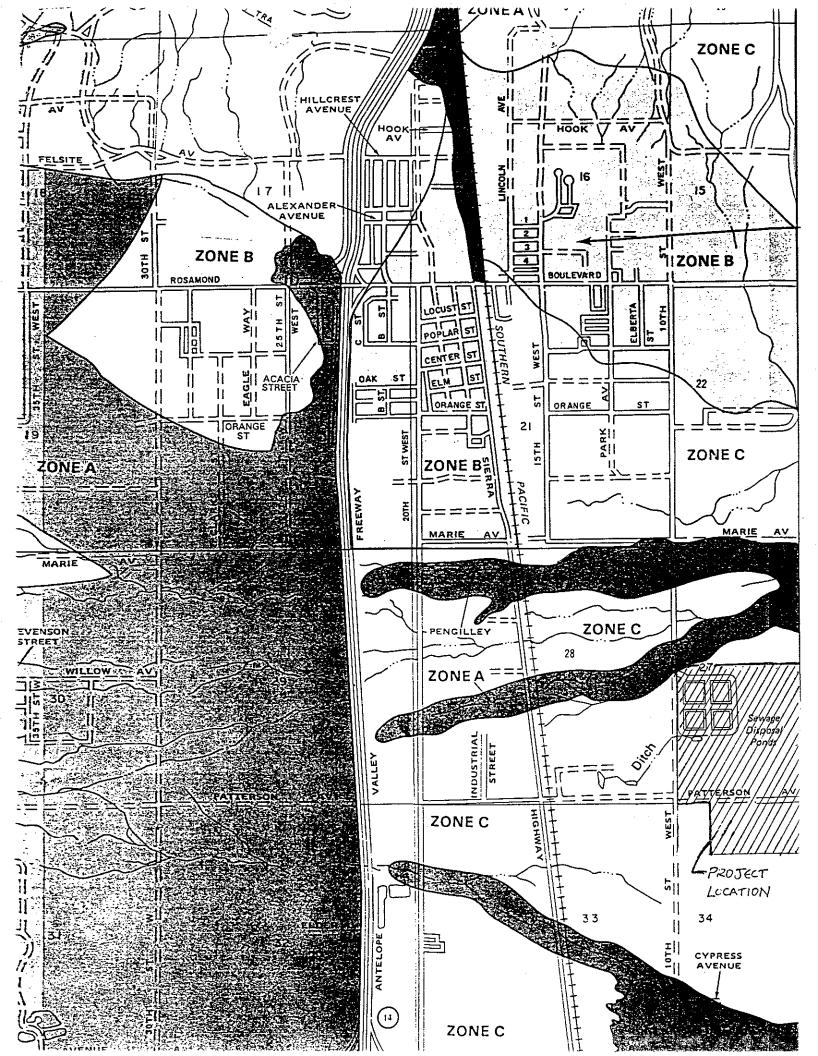
ISEE MAP INDEX FOR PANELS NOT PRINTED! PANEL 2025 OF 2075

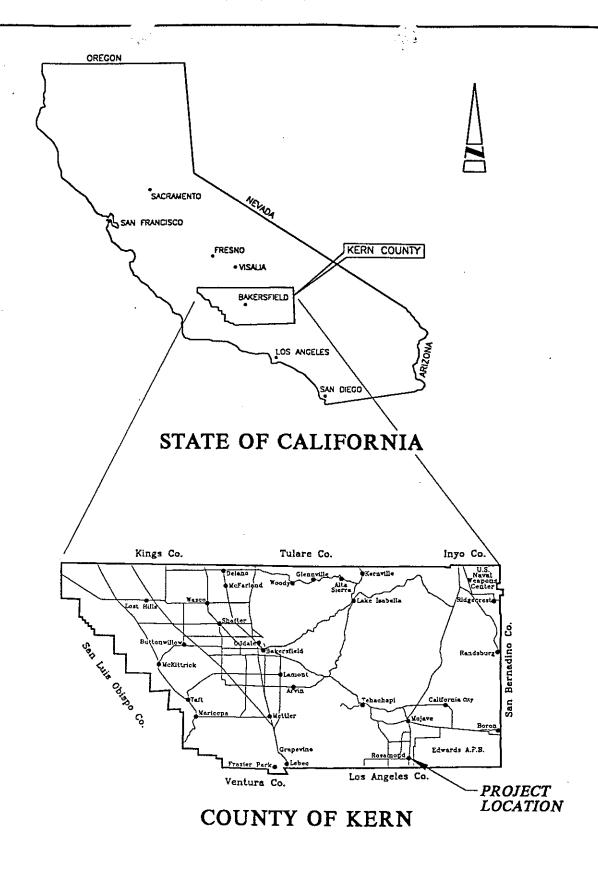


360075 2025 D

MAP REVISED:

Federal Emergency Management Agency



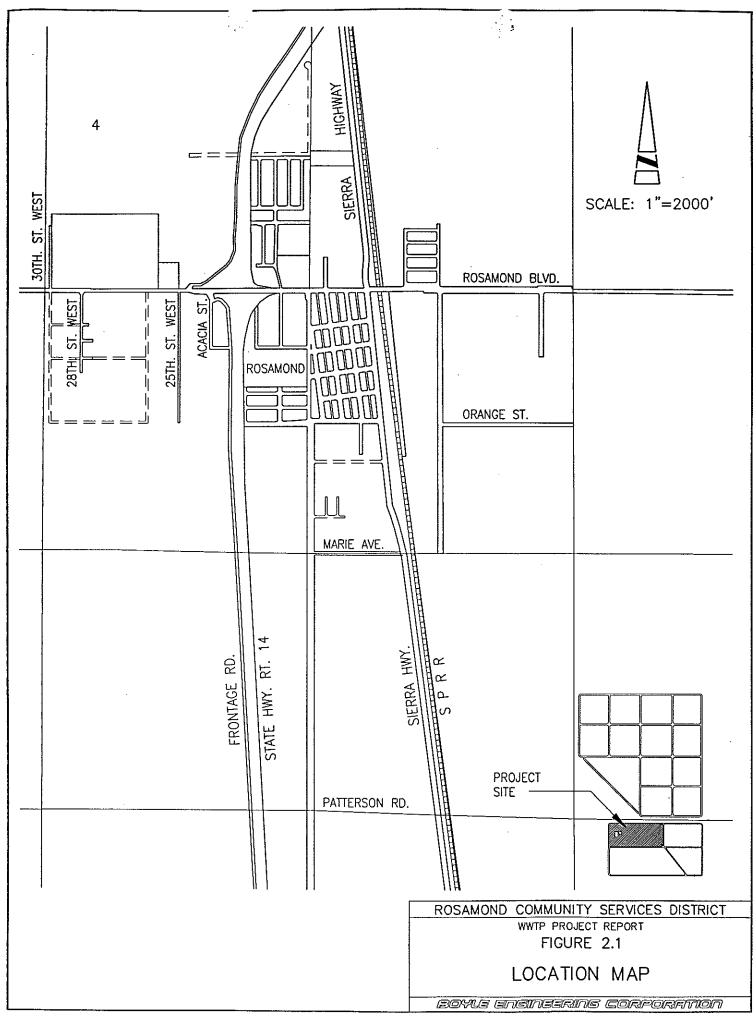


ROSAMOND COMMUNITY SERVICES DISTRICT

WWTP PROJECT REPORT FIGURE 1.1

VICINITY MAP

BOYLE ENGINEERING CORPOREMON



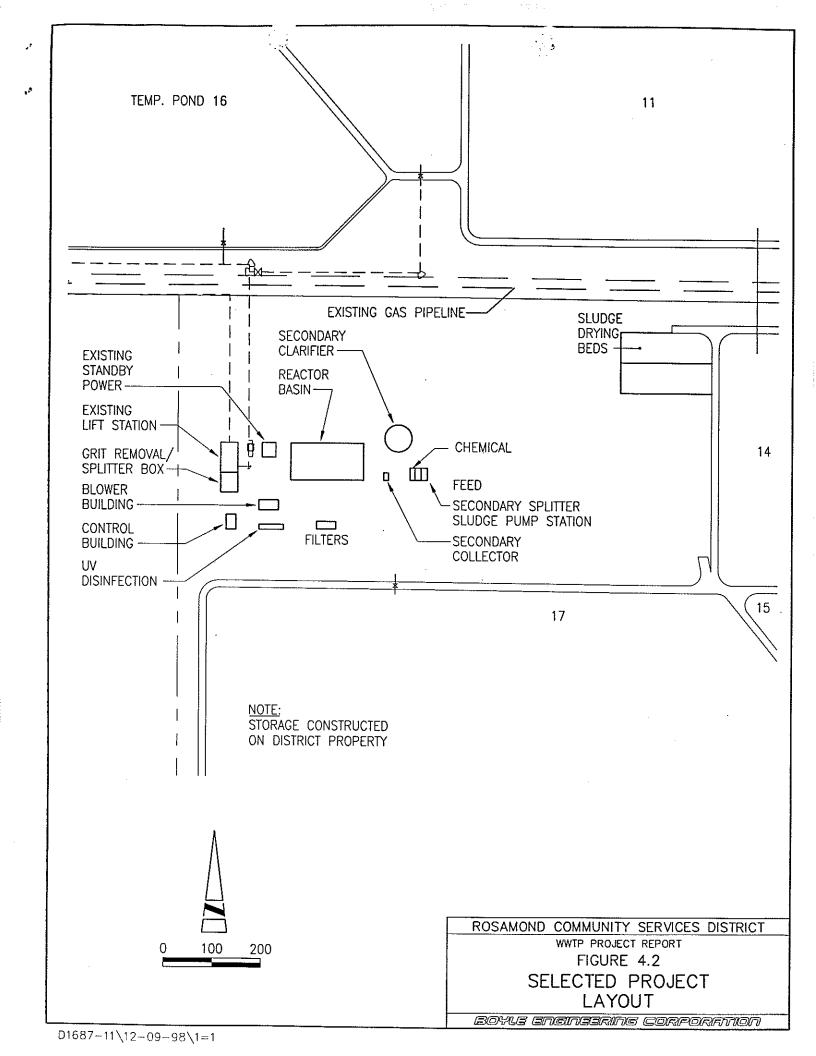


Exhibit B



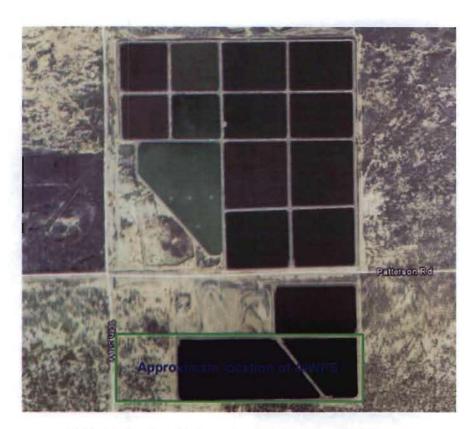


Figure 2: Location within the existing Rosamond CSD WWTF where the 2-MGD AIWPS® Facility is proposed.

ROSAMOND CSD AIWPS® WWYTF PRELIMINARY DESIGN

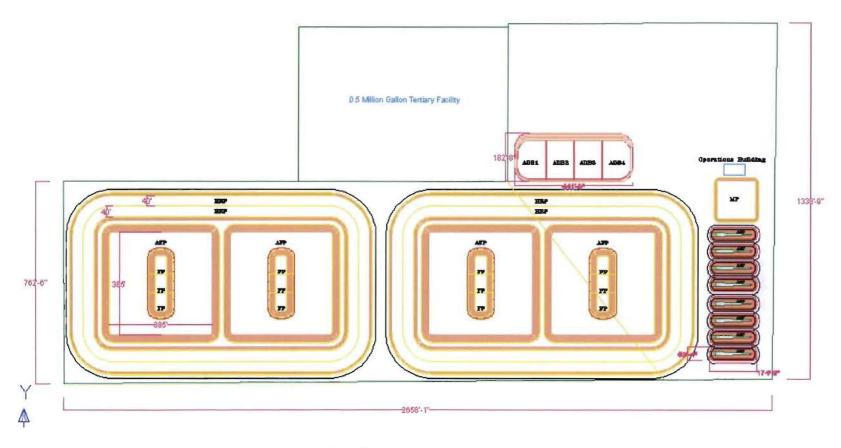


Figure 3. Preliminary AIWPS Facility Design Plan View.

Proprietary and Confidential Information

EXHIBIT 508

STATE OF CALIFORNIA

Energy Resources Conservation and Development Commission

In the Matter of:

Docket No. 08-AFC-2

Beacon Solar Energy Project

Declaration of
Michael Bevins

I, Michael Bevins, declare as follows:

- 1. I am presently employed by the City of California City (City) as the Director of Public Works. I have been in this position for two and a half (2 1/2) years.
- 2. As a result of my responsibilities as the Director of Public Works, I have personal knowledge of the planning and development of wastewater and recycled water infrastructure within the City.
- 3. The proposal by the City to provide recycled water to the Beacon Solar Energy Project's ("Project") was prepared at my direction. In addition, I am familiar with the improvements necessary to generate and convey a supply of recycled water from the City wastewater treatment facility (WWTF) to the Project site.
- 4. The City has proposed to expand the WWTF's recycled water production capacity from 1.5 million gallons per day (mgd) to 3.0 mgd (the "WWTF expansion"). The WWTF expansion and the addition of sewer mains and connections to residences and businesses currently on septic has been in the planning stages for eight (8) years. In general terms the WWTF expansion, addition of sewer mains and connections would involve: the installation of new sewer mains and connections to be located within City streets on City owned land or within City owned easements as shown in the City's proposal to provide recycled water to the Project, the installation of a recycled water pipeline from the WWTF to the Project, and the upgrade of the head works, aerator, clarifier, tertiary filter and replacing the chlorination equipment with UV disinfection at the WWTF.
- 5. The WWTF expansion is contemplated in the City's Sewer Master Plan, dated 30 September 2002. This plan was incorporated into the City's existing General Plan for

- 1993-2012 (pg 17) and carried forward into the City's 2008-2028 General Plan update (pg 5-10), though the specific reference to the expansion to 3.0 mgd was not included.
- 6. The City was incorporated in 1965 as a preplanned community. At that time, the City encompassed an area of over 160 square miles. Today, the City is the third largest city in California by land area, although it has a relatively low population of 10,685 residents (as of 2007).
- 7. The lack of a citywide sewer system creates wastewater treatment and disposal problems. As a result, in 1989, the City and the Lahontan Regional Water Quality Control Board entered into a Memorandum of Understanding (MOU) which limits development to two dwelling units per acre on lots without a connection to the City's sewer system.
- 8. Because of the development density restrictions contained in the MOU, the lack of access to the City's sewer system has prevented much of the City from being developed to its planned density, and has prevented approximately a third of the previously-platted building lots from being developed. All cities in the State of California are mandated to provide for planned growth. California City as a 'planned community' has already provided for its growth needs for the balance of this century.
- 9. The lack of citywide sewer infrastructure will prevent the City from obtaining the housing density needed to comply with the City's plans for reducing greenhouse gas emissions. Recent air quality constraints, AB 32 and SB375, as defined by the Blue Print Program, and related climate change policies, of our metropolitan planning agency, Kern Council of Governments (KernCOG) are forcing us to mandate infill densities that cannot be achieved under the Lahontan MOU without the conversion from septic tanks to a community based WWTP system. The only way that we can reduce vehicle miles traveled to 1990 levels is to increase our residential density and add the corresponding urban commercial opportunities.
- 10. The proposed WWTF expansion includes a sewer main expansion, which would bring an additional approximately 2,500 septic tanks onto the City's sewer system. This added infrastructure would allow existing lots to connect to the sewer system. This would bring these lots into compliance with the MOU, and would allow these lots to be developed as planned rather than limited to a density of two dwelling units per acre.
- 11. Allowing the existing lots in the City to come into compliance with the MOU would confer significant benefits upon the City and California as a whole by consolidating development, reducing vehicle miles traveled, and thereby reducing greenhouse gas and other air emissions associated with transportation.
- 12. As discussed above, the City is already required to expand its WWTF. The WWTF expansion will therefore occur regardless of whether the Project is built.
- 13. The City is already moving forward with the WWTF expansion project, and it has issued a request for proposals for the proposed expansion to the WWTF on 3 March 2010, published in the Mojave Desert News; Bakersfield Californian and Antelope Valley Press. On April 21, 2010, the City of California City awarded the contract and issued the

- notice to proceed on a Upgrade Feasibility Plan For The California City Tertiary Waste Water Treatment Plant (Feasibility Plan) to Aqua Gilson Engineering Team, Bountiful, UT (Gilson).
- 14. The City is proceeding with the WWTF expansion consistent with previous conversations with Lahontan Regional Water Quality Control Board memorialized in a letter dated 3 January 2008 from the City of California City to the California Regional Water Quality Control Board, South Lahontan Basin Division (Lahontan). The reply from Lahontan requested information that California City was not able to supply until the Feasibility Plan is completed by Gilson later in June, 2010.
- 15. The WWTF expansion is not in any way required as a condition of approval for the Project.
- 16. If the City is selected as the source of recycled water for the Project, the Project will pay for only its proportional share of the WWTF expansion cost.
- 17. If the Project does not use the recycled water produced from the WWTP expansion the resulting tertiary effluent will be used for a proposed expansion and upgrade of Balsitis Park or will become a point discharge disposal problem for California City.
- 18. The WWTF expansion will occur at a distance over ten miles away from the Project. The WWTF expansion will be implemented by the City, and Project will not be responsible in any way for constructing or operating the WWTF expansion.
- 19. The WWTF was initially designed to be expanded to accommodate flow from residences and business within the City that are currently on septic and to handle future growth within the City. The current WWTF site is 47.36 acres. The WWTF expansion will occur in previously disturbed areas, within the existing WWTF site boundaries.
- 20. The City will undertake its own environmental analysis of the WWTP expansion including additional sewer mains and connections to residences and businesses pursuant to the requirements of the California Environmental Quality Act.
- 21. A past expansion to the WWTF was addressed in a mitigated negative declaration. Given that the proposed WWTF expansion is not anticipated to cause any significant environmental impacts and the new sewer mains and connections will occur in existing streets within the City, the City is expecting to prepare another mitigated negative declaration for the proposed WWTF expansion.
- 22. I am generally familiar with the environmental impacts analysis for the Project. Due to the WWTF and sewer pipe addition's low level of environmental impacts and distance from the site of the Project, I do not anticipate the WWTF expansion would create any environmental impacts which would be cumulatively considerable with those from the Project.

23. I am familiar with the facts and conclusions in this declaration and if called as a witness could testify competently thereto. I make these statements freely and under oath for the purpose of constituting sworn testimony in this proceeding.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at the City of California City, California on May 3, 2010.

Michael J. Beyins

EXHIBIT 509

DECLARATION OF MATTHEW S. LAYTON

- I, Matthew S. Layton declare as follows:
- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of Air Quality and Greenhouse Gases.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. My prior testimony in the Final Staff Assessment and the attached supplemental testimony are based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Rosamond Wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services Wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond facility, design drawings of the planned phase II upgrades, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed facility upgrades and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: $\frac{5/21/10}{}$ Signed: $\frac{M}{}$

AIR QUALITY

Supplemental Testimony of Matthew S. Layton

The testimony of Will Walters was previously submitted into the record as the Air Quality section of the Final Staff Assessment (FSA) In Will Walters' absence, my testimony supplements his prior testimony, which is incorporated by reference, as is his list of qualifications previously provided in the FSA. My qualifications to provide this supplemental testimony are provided in the FSA.

In the FSA, cumulative impacts to Air Quality were discussed on pages 4.1-33 to -35. The cumulative impacts discussion focused on the potential effects on air quality. Other projects occur within the site vicinity (Pine Tree Wind Farm and Barren Ridge Transmission Upgrade), but they have no effect on and are not affected by the proposed Beacon Solar Energy Project

Regarding analysis of the proposed waste water treatment plant expansions, I have reviewed the Declaration of Dennis LaMoreaux that was filed with staff's reply brief as well as Rosamond's negative declaration submitted as part of phase I of the waste water treatment plant upgrades and the maps describing the planned phase II upgrades. The materials I have reviewed evidence a facility consisting of a developed industrial site with a number of large waste ponds and relevant buildings and equipment visible around the site. There has been considerable alteration and degradation of the landscape as expected in an industrial facility.

In his declaration Mr. LaMoreaux stated that as part of the phase II expansion, a 20 acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. Rosmond's phase II environmental review will evaluate the impacts of pond expansion through an initial study. If significant impacts are found, additional analysis will occur and appropriate mitigation will be implemented. Mr. LaMoreaux concluded that it is unlikely the phase II expansion will present significant environmental impacts. Based on the developed and degraded nature of the facility and the small size of the proposed expansion, it is highly likely that any and all significant impacts could be mitigated. Finally, Mr. Lamoreaux noted that the phase II expansion will take place within fenced property already part of the waste water treatment facility in an area adjacent to existing facility equipment and operating waste water evaporation ponds.

Based on my review of the record, my experience performing environmental analysis, I concur with Mr. LaMoreaux' statement that the phase II upgrades planned for the waste water plant will likely result in minimal impacts to Air Quality, and even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

Because the phase II project will expand an existing evaporating pond, the primary potential for new impacts associated with the phase II project is the enlargement of the

pond as shown in the submitted maps. The evidence indicates a 20 acre section of land next to the southern pond will be incorporated into this expanded southern pond. The land is characterized as an existing fenced 20 acre section of degraded land within the existing waste water treatment facility. Based on the information I reviewed, potential environmental impacts from the proposed expansion would be minimal. Possible impacts that could occur include increased soil erosion by wind, dust generation, and equipment emissions.

Impact one: Facility expansion and pipeline installation will involve soil excavation and grading. Bare soil exposed to strong wind is susceptible to generation of airborne dust.

Impact two: Facility expansion and pipeline installation will involve equipment and vehicle operation, emitting air pollutant emissions.

Given the nature of the waste water project and potential range of impacts, mitigation is readily available. Feasible mitigation, which I anticipate Rosamond would implement if necessary include watering surface soils in areas or active excavation/construction, and development of appropriate Best Management Practices (BMPs) to minimize erosion hazards in disturbed soil areas and equipment emissions. BMPs are readily available and any licensed contractor hired to perform the upgrade work would have access to such standard information. Rosamond as a municipality operating a wastewater facility would also be experienced with BMPs.

These mitigation measures should be effective because they are proven methods, easily employed and the materials/water are readily available. Rosamond has indicated it expects to utilize facility generated tertiary treated recycled water for dust management.

I have also reviewed the Declaration of Michael Bevins regarding the plan in California City to remove approximately 2,500 homes off of septic systems and connect these homes to the central waste water treatment plant. Mr. Bevins notes the project will include the installation of new sewer mains and connections to be located within City streets on City owned land or within City owned easements and the upgrade of the head works, aerator, clarifier, tertiary filter and replacing the chlorination equipment with UV disinfection at the waste water treatment facility. Mr. Bevins states the current wastewater treatment facility site is 47.36 acres and that the waste water treatment facility expansion will occur in previously disturbed areas within the existing facility site boundaries. I have reviewed an aerial photograph of the California City waste water treatment facility and other relevant information. Mr. Bevins indicates that California City anticipates the need for only a mitigated negative declaration because project impacts will be limited.

Based on my review of the record relating to the California City recycled water option and my experience performing environmental analysis I concur with Mr. Bevins

statement that the upgrades and collection system planned for the California City option will likely result in minimal impacts to Air Quality and even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

As with Rosamond, California City will be limiting the proposed work and construction to highly disturbed land including existing roads within the city and disturbed areas of the waste water facility.

Based on the information I reviewed regarding the California City recycled water upgrades, potential environmental impacts from the proposed expansion would be minimal. Possible impacts that could occur include increased soil erosion by wind, dust generation, and equipment emissions.

In addition, the California City waste water treatment plant expansion include installation of an approximately 12 mile long recycled waste water pipeline to supply water to the Beacon site, installation of a subsurface waste water collection system, and abandonment of existing septic tanks. The recycled waste water pipe will be buried in a trench excavated either in the disturbed shoulder of existing roadways or beneath the existing paved road surface. The subsurface waste water collection system will connect individual residences by sealing off the inlets to the existing septic tanks and routing the waste from the residences through buried pipes to a subsurface sewer main buried in the existing street. The septic tanks will be abandoned in place by sealing off the waste inlet and filling the tank with sand or other granular material as approved by the City engineer. Possible impacts to soil and water resources that could occur from these activities include increased soil erosion by wind, dust generation, and equipment emissions.

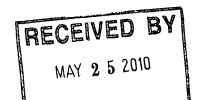
Impact one: Facility expansion and pipeline installation will involve soil excavation and grading. Bare soil exposed to strong wind is susceptible to generation of airborne dust.

Impact two: Facility expansion and pipeline installation will involve equipment and vehicle operation, emitting air pollutant emissions.

Given the nature of the wastewater project and potential range of impacts, mitigation is readily available. Feasible mitigation, which I anticipate California City would implement if necessary, includes watering surface soils in areas or active excavation/construction, and development of appropriate BMPs to minimize erosion hazards in disturbed soil areas, and equipment emissions. BMPs are readily available and any licensed contractor hired to perform the upgrade work would have access to such standard information. California City as a municipality operating a wastewater facility would also be experienced with BMPs. Because California City is phasing in the sewer connections over five years impacts are minimized by performing construction in limited areas.

These mitigation measures should be effective because they are proven methods, easily employed and the materials/water are readily available.

EXHIBIT 510



DECLARATION OF

Susan D. Sanders

CHIEF COUNSEL OFFICE

I. Susan Sanders, declare as follows:

- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of biological resources.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. My prior testimony in the Final Staff Assessment and the attached supplemental testimony are based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Rosamond Wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services Wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond facility, design drawings of the planned phase II upgrades, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed facility upgrades and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: May 20, 2010 Signed: Suran D. Sand

At: Nevada City, California

BIOLOGICAL RESOURCES

Supplemental Testimony of Susan D. Sanders

I have been the principle biologist analyzing impacts to biological resources from construction and operation of the Beacon Solar Energy Project (Beacon Project). My testimony was previously submitted into the record as the Biological Resources section of the Final Staff Assessment (FSA) and as live testimony provided at the evidentiary hearing on March 22, 2010. This testimony supplements my prior testimony which is incorporated by reference as is my list of qualifications provided in the FSA. I discuss below my assessment of the potential biological impacts associated with implementing either of two options for securing a source of cooling water for the Beacon project: the Rosamond Water Treatment Plant and the California City Wastewater Treatment Plant

<u>Potential Biological Impacts of Rosamond Water Treatment Plant Option</u>

I have reviewed the Declaration of Dennis LaMoreaux filed with staff's reply brief, the Rosamond Community Services District Wastewater Treatment Plant Expansion Negative Declaration Negative Declaration (SCH# 99101037) for phase I of the waste water treatment plant upgrades and the maps describing the planned phase II upgrades. I have also reviewed the "Additional Facts: RCSD WWTP Conversion to Additional Tertiary Treatment Capacity" prepared by Mr. LaMoreaux, dated May 19, 2010. As part of my pipeline analysis described in the Biological Resource section of the Final Staff Assessment I visited the Rosamond Waste Water Treatment Plan on June 30, 2009, and conducted a windshield survey of the facility property by driving on the banks separating the various waste water ponds. The facility is a developed industrial site with a number of large wastewater ponds and relevant buildings and equipment visible around the site. Those area not occupied by ponds or structures are disturbed with little native vegetation or habitat to support desert tortoise or Mohave ground squirrels, although their potential occurrence at the site cannot be ruled out.

In his declaration Mr. LaMoreaux stated that as part of the phase II expansion, a 20-acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. Rosamond's phase II environmental review will evaluate the impacts of pond expansion through an initial study. Mr. LaMoreaux concluded that the phase II expansion would be unlikely to result in significant environmental impacts because of the developed nature of the facility and the small size of expansion. Mr. LaMoreaux also noted that the phase II expansion would take place on fenced property already part of the wastewater treatment facility and is adjacent to facility equipment and other wastewater ponds.

Based on my June 30, 2090 reconnaissance observations of the site, my review of aerial photos of the wastewater treatment plant, and my experience in assessing impacts to biological resources, I agree with Mr. LaMoreaux's conclusions, and consider it unlikely that construction of the phase II expansion would result in significant impacts

to biological resources. I also agree that an Initial Study would be necessary to evaluate potential impacts to sensitive biological resources; while the site is fragmented and highly disturbed, it is in the immediate vicinity of Mojave creosote scrub habitat that could support Mojave ground squirrel, desert tortoise, burrowing owls and other special-status species plant and wildlife species. However, even if these or other sensitive biological resources were detected during surveys conducted for the Initial Study, avoidance, minimization and compensation measures could be implemented that would reduce potential impacts to biological resources to less than significant levels as required under the California Environmental Quality Act.

Potential Biological Impacts of California City Recycled Water Pipeline Option

I have reviewed the Declaration of Michael Bevins regarding the plan in California City to remove multiple homes off of septic systems and connect these homes to the central waste water treatment plant. I reviewed the plan, profile and engineer's estimate of the cost of installing a potable waterline from Beacon to California City (attachment to memo to Solorio dated August 13, 2009, tn 52865). Mr. Bevins notes the project will include the installation of new sewer mains and connections to be located within City streets on City owned land or within City owned easements and the upgrade of the head works, aerator, clarifier, tertiary filter and replacing the chlorination equipment with UV disinfection at the wastewater treatment facility. Mr. Bevins states the current wastewater treatment facility site is 47.36 acres and that the wastewater treatment facility expansion will occur in previously disturbed areas, within the existing facility site boundaries. I have reviewed an aerial photo of the California City wastewater treatment facility and concur that most of the facility is highly disturbed.

Based on my review of the record relating to the California City recycled water proposal, including an aerial photo of the California City wastewater plant showing a highly degraded industrial site and my experience in assessing impacts to biological resources. I consider it unlikely that construction at the wastewater facility and the phased installation of sewer lines would result in significant impacts to biological resources. While it is possible some special status species could be found in proximity to planned work, avoidance, minimization and compensation measures could be implemented that would reduce potential impacts to biological resources to less than significant levels as required under the California Environmental Quality Act. The fact that conversion from septic system to main sewer collection system will occur in developed existing neighborhoods provides a strong basis for concluding the planned construction would not produce impacts to biological resources, let alone significant adverse impacts. This is so because the environment at issue consists of existing groupings of homes, in an existing development with existing roads where sewer lines will be installed. Even if a significant impact is identified by California City, ample mitigation is readily available as noted above.

To deliver the water from the California City wastewater facility to the Beacon project site, a pipeline would need to be buried along a three-mile stretch of Mendiburu Road to

Neuralia Road, a distance of approximately three miles, and from there about 9 miles of pipe would be buried along Neuralia Road to the Beacon site. To evaluate the potential impacts to biological resources of construction along Mendiburu Road I reviewed the Beacon Solar Energy Project Biological Resource Assessment Mendiburu Road Water Pipeline, California City, Kern County, California, prepared by AECOM Technology Corp, dated May 2010. The AECOM report found that because all construction and maintenance would occur within the existing disturbed road and/or road shoulder, no impacts to existing vegetation communities or associated biological resources would occur. Construction of the California City recycled water pipeline along Mendiburu would be limited to highly disturbed land including existing roads within the city and disturbed areas of the wastewater facility. While direct and indirect impacts to sensitive biological resources are possible during construction, significant impacts are unlikely with implementation of Conditions of Certification BIO-1 through BIO-8. These conditions require qualified biologists, with authority to implement mitigation measures necessary to prevent impacts to biological resources, to be present during all construction activities. In addition, these conditions require implementation of a worker training program, a mitigation and monitoring plan and best management practices.

With respect to the construction impacts of the 17.6 miles of pipe proposed along Neuralia Road, I already assessed the impacts of this construction when it was part of the originally proposed Beacon Project, and described these impacts in the Biological Resources section of the Preliminary Staff Assessment (PSA). During my testimony at the evidentiary hearing there seemed to be some confusion regarding my analysis of the 17.6-mile section of the recycled water line, which is in the same location as the originally proposed 17.6-mile gas line. My FSA testimony referenced the analysis in the PSA, and for clarity I am reiterating my analysis of the 17.6-mile line here.

Construction of the portion of the original 17.6-mile gas line relevant to the recycled water pipeline would occur within the disturbed and barren shoulder of Neuralia Road, and therefore no native plant communities would be directly impacted. Nevertheless, construction in the road shoulder could impact special-status species such as burrowing owl, Mohave ground squirrel, and desert tortoise. Potential direct and indirect construction impacts to vegetation and wildlife could be reduced to less-than-significant levels with avoidance and minimization measures described in staff's proposed Conditions of Certification BIO-1 through BIO-8. Staff's proposed Conditions of Certification BIO-1 through BIO-5 requires qualified biologists, with authority to implement mitigation measures necessary to prevent impacts to biological resources, be on site during all construction activities. Staff's proposed Condition of Certification BIO-6 requires the development and implementation of a Worker Environmental Awareness Program to train all workers to avoid impacts to sensitive species and their habitats. Staff's proposed Condition of Certification BIO-7 requires the project owner to prepare and implement a Biological Resources Mitigation Implementation and Monitoring Plan that incorporates the mitigation and compliance measures required by local, state, and federal LORS regarding biological resources. Staff's proposed

Condition of Certification **BIO-8** describes Best Management Practices requirements and other impact avoidance and minimization measures.

Conclusions

Based on the information described above I have concluded that potential impacts to biological resources from either the Rosamond Water Treatment Plant Option or the California City Treatment Recycled Water Option could be mitigated to less than significant levels with implementation of appropriate mitigation measures.

EXHIBIT 511

DECLARATION OF Kathleen Forrest

I, Kathleen Forrest, declare as follows:

- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of Cultural Resources.
- 2. A copy of my professional qualifications and experience is attached and is incorporated by reference herein.
- 3. The attached supplemental testimony are based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Rosamond Wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services Wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond facility, design drawings of the planned phase II upgrades, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed facility upgrades and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 5/27 10 Signed: Julilly JMD

At: Sacramento, California

Kathleen A. Forrest

PROFESSIONAL EXPERIENCE

Planner II, Siting, Transmission and Environmental Protection Division, California Energy Commission, Sacramento, CA, December 2009-Present

Cultural resource specialist performing technical analyses assessing cultural resources implications of energy resource utilization and electric power generation.

Environmental Review

- Review and analyze applications for adequacy, including identification of cultural resources, project-related impacts, and mitigations
- Negotiate with applicants, consultants and other staff to develop solutions that achieve project objectives
- Prepare and present complex and comprehensive reports and recommendations orally and in writing, including analysis of complex data and working knowledge of the legal requirements protecting cultural resources
- Formulate mitigation techniques to prevent significant impacts to cultural resources
- Testify as subject expert at Energy Commission project certification hearings
- Participate in site visits, public workshops and hearings

Associate Planner, Preservation Office, City of Sacramento, Development Services Department Sacramento, CA, July 2006-July 2009

Cultural resource specialist in City's Preservation Office responsible for a wide range of complex cultural resources programs, policies and project reviews.

Development Project Application Review & Management

- Interpret the Secretary of the Interior's Standards and negotiate with developers, property owners, design professionals, contractors and other city staff to reach design solutions that achieved development project objectives
- Analyzed 36 development proposals for consistency with the Secretary of the Interior's Standards
- Managed Certified Local Government Program grant-funded survey project, including RFQ and consultant selection process, contract negotiations, schedule, review of consultant work, and reporting requirements to State Office of Historic Preservation
- Led multi-disciplinary Matrix review teams to facilitate a timely, seamless and predictable development review for the applicant through planning and building permit processes
- Worked with City Council members and staff on politically sensitive issues

Environmental Review

- Reviewed and provided comments on adequacy of Cultural Resources sections of CEQA and NEPA documents, including identification of cultural resources, project-related impacts, and mitigations
- Prepared 430 recommendations to the Preservation Director and Planning staff regarding potential cultural resources eligibility for ministerial and discretionary projects

Historic Resource Nomination & Management

- Presentations to the City Council, Preservation Commission, Preservation Director, community
 groups and staff regarding Landmark and Historic District nominations and preservation
 programs, including preparation of staff reports, informational handouts and visual presentations
- Managed Preservation Commission's Historic Resources Survey Committee
- Updated and maintained the Sacramento Register of Historic and Cultural Resources

Kathleen A. Forrest

Historic Compliance Coordinator, Presidio Trust, San Francisco, CA, January 2004-July 2006

Monitored and assisted in discharging the agency's responsibilities for historic structures within the Presidio of San Francisco

NEPA and Section 106 Review

- Communicated with Presidio Trust personnel regarding NEPA and Section 106 compliance responsibilities and internal procedures to ensure that the required review & consultation occurred
- Collected, analyzed and interpreted information for all Section 106 documentation (determinations
 of no effect and no adverse effect by the Federal Preservation Officer) for weekly NHPA/NEPA
 compliance meeting, including preparation of annual report
- Carried out mitigation monitoring of commercial and residential real estate development projects
- Led organization-wide training and compliance on NHPA the Secretary of the Interior's Standards for the Treatment of Historic Properties
- Represented the Presidio Trust at public and partner agency meetings
- Managed preservation compliance files and database
- Assisted FPO in formal consultation for undertakings outside the Programmatic Agreement

Project Management

- Facilitated a successful relationship with trades crews and technical personnel to affect positive historic preservation projects. Began in non-communicative situation and built trust and open communication with those Operations and Maintenance employees that are essential to preservation projects
- Managed building preservation studies and residential rehabilitation projects
- Visited project sites to advise project managers and trades people during project planning and implementation regarding compliance requirements and mitigations

Special Project: Volunteer Coordinator, California Preservation Foundation Conference Steering Committee, 2004.

- Recruited 80 volunteers to staff the 29th annual California Preservation Foundation Conference (2004) at the Presidio of San Francisco from local and state-wide historical associations, local neighborhood associations, regional parks, and interested individuals. Joined Steering Committee halfway through the planning process with no volunteers in place; recruited most volunteers in history of conference to that date
- Coordinated and trained volunteers based on availability, interest and need

Architectural Conservator, Carey & Co., San Francisco, CA. April 2002-December 2003 Staff architectural conservator conducting laboratory analysis and historic research and documentation.

- Performed conditions assessments of historic structures, including identification of characterdefining features, finishes analysis of historic paint samples, and treatment recommendations
- Supervised on-site product testing for effectiveness and consistency with the Secretary of the Interior's Standards
- Conducted historical assessments of prospective development project areas to identify potential historic resources
- Prepared historic structures reports, including historic research, surveys, identification of significant features and characteristics, and treatment recommendations

Bandelier National Monument, Los Alamos, NM. June 2000 and June-September 2001 Architectural conservation intern and seasonal employee. Conducted historical research and documentation of cliff dwellings.

Kathleen A. Forrest

Mesa Verde National Park, Mesa Verde, CO. July 2000

Architectural conservation intern. Carried out documentation and on-site treatment at Cliff Palace site.

RELEVANT EDUCATION AND TRAINING

Graduate Program in Historic Preservation, University of Pennsylvania, Philadelphia, PA **Master of Science,** May 2001

Emphasis on conservation of architectural materials, conditions assessment methodology and technological applications in documentation, architectural history and archival and site documentation.

University of Massachusetts, Amherst, MA

Bachelor of Arts, cum laude, May 1999. Major, History. Minor, Anthropology.

Junior semester abroad, University College London, London, England

Environmental Impact Analysis: CEQA and NEPA, Spring 2007, CSU Sacramento Review of legislative and judicial requirements for environmental impact analysis.

NEPA Workshop. March 28, 2004. UC Santa Cruz Extension One-day workshop in NEPA policy.

DECLARATION OF

Beverly E. Bastian

- I, Beverly E. Bastian, declare as follows:
- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of Cultural Resources.
- 2. A copy of my professional qualifications and experience is attached and is incorporated by reference herein.
- 3. The attached supplemental testimony is based on my independent analysis of the Beacon Cultural Resources Conditions of Certification, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed the Beacon Cultural Resources Conditions of Certification.
- 5. The applicant for the BEACON SOLAR ENERGY PROJECT expressed concern that one of the Cultural Resources Conditions of Certification could adversely affect the project's ability to start construction before the end of 2010 and thereby endanger the project's qualifying for American Recovery And Reinvestment Act funding. The purpose of this testimony is to provide assurance that the language of the condition can accommodate their desire to start construction before the end of 2010.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 6/1/10 Signed: Burny & Bastran

At: <u>Sucraments</u>, California

CULTURAL RESOURCES

Supplemental Testimony of Kathleen Forrest and Beverly E. Bastian

Evaluation of Possible Impacts to Cultural Resources from Upgrades to Two Wastewater Treatment Plants Identified as Sources of Reclaimed Water for Cooling at the Beacon Solar Energy Project

The testimony of Beverly E. Bastian, Michael D. McGuirt, and Amanda Blosser was previously submitted into the record as the Cultural Resources section of the Final Staff Assessment (FSA) I, Kathleen Forrest, provide this testimony as a supplement to the aforementioned individuals' prior testimony which is incorporated by reference, as are their qualifications previously provided in the FSA. My qualifications to provide this supplemental testimony are provided with this supplement.

In regard to the analysis of the proposed Rosamond waste water treatment plant expansions, I have reviewed the Declaration of Dennis LaMoreaux, filed with staff's reply brief, as well as Rosamond's negative declaration, submitted as part of phase I of the waste water treatment plant upgrades, and the maps describing the planned phase II upgrades The materials I have reviewed evidence a facility consisting of a developed industrial site with a number of large waste ponds and relevant buildings and equipment visible around the site. The landscape, as expected in an industrial facility, has been considerably altered.

In his declaration Mr. LaMoreaux stated that as part of the phase II expansion, a 20-acre section of facility property will be converted into a wastewater pond, as anticipated in the phase I negative declaration. Rosamond's phase II environmental review will evaluate the impacts of pond expansion through an initial study. If significant impacts are found additional analysis will occur, and appropriate mitigation will be implemented. Mr. LaMoreaux concluded that it is unlikely the phase II expansion will present significant environmental impacts, and it is especially unlikely given the developed nature of the facility and small size of the expansion, that any significant impacts could not be mitigated. Finally Mr. Lamoreaux noted that the phase II expansion takes place on fenced property already part of the wastewater treatment facility and is adjacent to facility equipment and other wastewater ponds.

Based on my review of the record and my experience performing environmental analysis, I concur with Mr. LaMoreaux's statement that the phase II upgrades planned for the wastewater plant will likely result in minimal impacts to cultural resources, given that no cultural resources were found during construction of the facility. Even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts to less than significant, as required under the California Environmental Quality Act.

Because the phase II project will be occurring in an existing evaporating pond, the primary potential for new impacts associated with the phase II project is the expansion of the pond, as shown in the submitted maps. The evidence indicates a 20-acre section of land next to the southern pond will be incorporated into this southern pond. The land is described as an existing fenced 20-acre section of degraded land within the existing wastewater treatment facility. Based on the information I reviewed, potential environmental impacts from the proposed expansion would be minimal. Possible impacts that could occur include discovery of unknown archaeological resources, including human remains.

Impact one: The facility expansion will involve excavation to depths of 35 feet. The discovery of unknown archaeological resources, including human remains, is possible during the excavation and grading of the site.

Given the nature of the wastewater project and potential range of impacts, mitigation is readily available. Feasible mitigation, which I anticipate Rosamond would implement if necessary, includes archaeological survey, construction monitoring, avoidance of discovered archaeological sites, and data recovery if avoidance is not possible.

These mitigation measures should be effective because they are proven methods, easily employed, and widely accepted in cultural resources management practice.

I have also reviewed the Declaration of Michael Bevins regarding the plan in California City to remove multiple homes from septic systems and connect these homes to the central waste water treatment plant. Mr. Bevins notes the project will include the installation of new sewer mains and connections to be located within City streets, on City-owned land, or within City-owned easements, the upgrade of the head works, aerator, clarifier, and tertiary filter, and replacement of the chlorination equipment with UV disinfection at the wastewater treatment facility. Mr. Bevins states the current wastewater treatment facility site is 47.36 acres and that the wastewater treatment facility expansion will occur in previously disturbed areas, within the existing facility site boundaries. I have reviewed an aerial photo of the California City wastewater treatment facility and other relevant information. Mr. Bevins indicates that California City anticipates the need for only a mitigated negative declaration because project impacts will be limited.

Based on my review of the record relating to the California City recycled water option and my experience performing environmental analysis I concur with Mr. Bevins' statement that the upgrades and collection system planned for the California City will likely result in minimal impacts to cultural resources, and, even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts to less than significant, as required under the California Environmental Quality Act.

As with Rosamond, California City will be limiting the proposed work and construction on highly disturbed land including existing roads within the city and disturbed areas of the wastewater facility.

Based on the information I reviewed regarding the California City recycled water upgrades, potential environmental impacts from the proposed expansion would be minimal.

Impact one: The facility expansion will involve excavation and grading of the site. Discovery of unknown archaeological resources, including human remains, is possible during any excavation and grading of the site.

Impact two: The installation of new sewer mains and connections involves excavation within the city streets. Discovery of unknown archaeological resources, including human remains, is possible during the installation of the sewer lines.

Given the nature of the wastewater project and potential range of impacts, mitigation is readily available. Feasible mitigation which I anticipate California City would implement if necessary includes archaeological survey, construction monitoring, avoidance of discovered archaeological sites, and data recovery if avoidance is not possible.

These mitigation measures should be effective because they are proven methods, easily employed, and widely accepted measures in cultural resources management practice.

The expansion of the Rosamond and California City waste water treatment facilities are, per the testimony provided, both independently planned activities that will be analyzed individually through the CEQA process. As a result the expansions would not be considered direct impacts of the Beacon project, but could be considered cumulative impacts to which the Beacon project could contribute. However, because neither project would have an unmitigable impact to cultural resources staff does not consider them to increase the impacts of the Beacon project.

Response to Applicant's Request to Add a General Condition of Certification to Facilitate Obtaining ARRA Funding

I, Beverly E. Bastian, provide this testimony supplementing my prior testimony in the FSA. My qualifications were previously provided in that document.

The applicant for the Beacon Solar Energy Project (BSEP) expressed concern that Condition of Certification CUL-4, by requiring the submittal of a Historic Resources Management Plan (presumably covering the entire project site) 270 days prior to the start of ground disturbance anywhere on the project site, could compromise the project's ability to start construction before the end of 2010 and thereby endanger the project's qualifying for American Recovery And Reinvestment Act (ARRA) funding.

At the end of the first paragraph of CUL-4 of the BSEP, this sentence appears, "No ground disturbance shall occur prior to CPM approval of the HRMP, unless such activities are specifically approved by the CPM." The last clause of this sentence was included to allow the CPM flexibility to accommodate unexpected circumstances that might arise and affect an approved project's schedule. Should the BSRP be approved, this flexibility would allow the CPM to accept for review and approval the Historic Resources Management Plan later than the first verification clause of CUL-4 specifies. For this reason, I recommend that no additional General Condition is needed, from the perspective of compliance with cultural resources conditions.

EXHIBIT 512

DECLARATION OF SHAELYN STRATTAN

- I, Marsha L. (Shaelyn) Strattan, declare as follows:
- 1. I am presently employed by the California Energy Commission in the Siting, Transmission and Environmental Protection Division as a **Planner II**.
- 2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
- 3. I prepared the supplemental staff testimony on **Land Use**, related to Growth-Inducing Impacts, for the **Beacon Solar Energy Project**, based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
- 4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: <u>5 /26 /10</u>

Signed: Maska 9

At:

Sacramento, California

Marsha L. (Shaelyn) Strattan

California Energy Commission Planner II
Siting, Transmission, and Environmental Protection Division

EXPERIENCE SUMMARY

Ten years experience in land use planning, recreation, environmental review and analysis, and project management with the California Energy Commission, California State Parks, and Calaveras County Planning Department. Twenty-five years of writing, editing, and research experience, focused on recreation, agriculture, and the environment, with the California Air Resources Board, California Department of Toxic Substances Control, California Department of Fish and Game, and as owner of *The Wordworker*, a writing, editing, and research company, specializing in environmental research, education, and public relations. Seven years experience as an Air Traffic Control Specialist with the Federal Aviation Administration and U.S. Air Force.

PROFESSIONAL EXPERIENCE

California Energy Commission

Planner II 2 yrs/6 mos¹

<u>Environmental Technical Specialist</u> - Identify, describe, and analyze complex environmental issues related to the construction and operation of electrical energy production facilities, transmission corridors, alternative energy technologies and energy conservation, and Commission programs and policies. Prepare components of Staff Analyses to comply with requirements of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), with emphasis on the identification and mitigation of environmental impacts to land use, traffic and transportation, visual resources, and environmental justice. Prepare and present Commission reports and expert technical testimony.

<u>Project Manager</u> - Plan, organize, and direct the work of an interdisciplinary environmental and engineering staff team engaged in the evaluation of complex/controversial energy facility siting applications and major commission programs.

California Energy Commission (CEC): Analyst for Eastshore Energy Power Plant (06-AFC-06; Land Use and Traffic & Transportation/Aviation); Victorville II Hybrid Power Project (07-AFC-01; Land Use); Humboldt Bay Generating Station (06-AFC-07); Traffic & Transportation); Ridgecrest Solar Power Project (09-AFC-9; Land Use/Recreation/ Wilderness); Rice Solar Energy Project (09-AFC-10; Land Use/Recreation/Wilderness); and Russell City Energy Center Amendment (01-AFC-7C; Land Use and Traffic & Transportation/ Aviation). Project Manager for Beacon Solar Energy Project (08-AFC-02); San Gabriel Generating Station (07-AFC-02); and Kings River Conservation District Community Power Project (07-AFC-07)

Calaveras County Planning Department Planner III (Senior Planner)

2 yrs/9 mos²

Planning and evaluation of complex land use projects; environment review (CEQA/NEPA); project and contract manager for consultants (EIR, natural and cultural resource studies, and peer reviews); preparation/review of resource ordinances; preparation/coordination of conservation and utility easements; CEQA coordinator; liaison with Calaveras Council of Governments and county counsel on land use issues.

¹ Nov 2006 – Nov 2008 and Dec 2009 – present.

² Feb 2005 – Nov 2006 and Nov 2008 – Nov 2009

Supervising Lead: Coordinate environmental review for DPR's Major Capital Outlay, Minor Capital Outlay, and Accessibility programs with Service Center and district staff. Consult with project managers, designers, and environmental specialists to refine project scope and identify potentially significant adverse environmental impacts for park projects in Northern and Central California. Prepare environmental documents (CEQA/NEPA) for DPR projects. Project and contract manager for consultants preparing environmental analysis. Prepare or work with consultants to prepare the environmental impact analysis for General Plans (GPs) and Resource Management Plans for State Park units. Prepare application(s) for project-specific state and federal environmental permits. Prepare grant proposal, application, and supporting documents for project-related federal funding (High Sierra Museum and Visitor Center at Donner Memorial State Park). Review environmental documents prepared by non-departmental entities to determine the potential impact on ongoing or proposed projects or programs. Prepare comments identifying potential impacts to the department's interests and/or effectiveness of proposed mitigation. Review and comment on pending legislation, as it relates to environmental issues, CEQA/NEPA, and Departmental policy/procedures.

Statewide Environmental Coordinator (January 2002 - June 2003): Develop and coordinate a standardized CEQA review process and establish criteria for evaluating project impacts and environmental compliance documents. Provide training for District and Service Center personnel involved in the preparation and processing of environmental documents. Develop training support materials. Conduct CEQA seminars at California Trails and Greenways Conference (September 2002 & 03) and Resource Ecologists' In-Service Training Seminar (2002). Act as Service Center liaison with the Environmental Stewardship Section of the Natural Resources Division regarding the effectiveness and improvement of the environmental review process.

California Air Resources Board (Research Division) Research Writer

Nov 1998-Nov 2000

Research, write, and/or edit technical documents, presentations, and related materials, with special emphasis on scientific and environmental writing for a general readership. These documents include Requests for Proposals; responses to public inquiries; consumer guidelines and fact sheets; articles for magazines and technical journals; brochures; webpage information (both internal and external); legislative bill analyses; briefing documents; proposals; and Board presentations and agenda items. Evaluate suitability of documents for publication.

The Wordworker Owner & Primary Researcher/Editor/Author

May 1987-Nov 1999

Work included narratives (including voice-overs), scripting, copy editing, transcription, and technical writing; proposals (grants, bids, and new business); legal briefs (environmental and family law); training and teacher's manuals; desktop publishing (brochures, newsletters, flyers, etc.); and adaptation of scientific information for general readership. Research, draft, review/edit, and comment on CEQA/NEPA environmental documents; coordinate preparation of materials among project scientists, lead and responsible agencies, and applicants. Promotional consultant and press liaison for several non-profit fundraisers, seminars, and symposiums.

Federal Aviation Administration Air Traffic Control Specialist

1975-1981

Control air traffic at Salem Tower (Salem, OR) and the Oakland Air Traffic Control Center in Fremont, CA. Coordinate aviation-related search and rescue operations. Provide pilot weather briefings, flight

plan assistance, and in-flight information at Bellingham International Airport, Darinelly Field (Montgomery, AL) and Purdue University Airport (W. Lafayette, IN).

Tennessee Valley Authority Engineering Aide

1974-75 (18 mos)

Set, monitor, and analyze dosimeters at Browns Ferry and Sequoia Nuclear Power Plants. Collect and analyze vegetation, silage, milk, water, and air samples from surrounding areas to establish background radiation levels and provide on-going radiation monitoring.

EDUCATION

- Colleges & Universities
 - American River College (Sacramento, CA)
 - Calhoun Community College (Huntsville, AL)
 - University of Alabama (Tuscaloosa, AL)
 - Whatcom Community College (Bellingham, WA)
 - California State University Sacramento
- Certificate: Land Use and Environmental Planning (University of California Davis)
- Certificate: Technical Writing (American River College)
- Certificate: Meteorology/Weather Observer (National Weather Service; 1975); Licensed 1975-1982

MILITARY SERVICE

- U.S. Air Force Aircraft Control & Warning Operator (honorable discharge August 1969)
- California Air National Guard Air Traffic Controller (honorable discharge 1984)

LAND USE

Supplemental Testimony of Shaelyn Strattan

This constitutes my sole testimony to date regarding Land Use issues related to the Beacon Solar Energy Project.

I have reviewed the following documents, filed with staff's reply brief, regarding the proposed expansion of the Rosamond Community Services District (RCSD) Wastewater Treatment Plant Facilities, as it relates to the Beacon Solar Energy Project:

- 1) Declaration of Dennis LaMoreaux
- Initial Study and Negative Declaration for the Rosamond Community Services
 District (RCSD) Wastewater Treatment Plant Expansion and associated maps,
 exhibits, and appendices.
- 3) Revised Rosamond CSD Letter of Intent, dated 8/14/09; Rosamond Community Services District/J. Stewart (tn 53088).
- 4) Energy Commission Staff Reply Brief.

Information contained in the cited documents confirms that the Rosamond Community Services District (RCSD) has proposed to provide tertiary-treated water to the Beacon Solar Energy Project (BSEP or Beacon project). It also indicates that the existing RCSD WWTP secondary treatment facilities would need to be upgraded to meet the required tertiary-treated level of purity. The proposed expansion would be consistent with RCSD development plans established over the last 10 years. The RCSD Letter of Intent indicates that the existing wastewater treatment plant (WWTP) would provide 1,456 acre-feet of tertiary-treated water to the Beacon project annually. The RCSD WWTP currently averages an inflow rate of 1.3 million gallons per day (MGD). That converts to an output of tertiary-treated water of approximately 1,456 acre-feet per year, equal to the amount requested by the Beacon project. (RCSD 2009d)

The Initial Study and Negative Declaration for the proposed WWTP expansion was originally filed with the State Clearinghouse in October 1999 and certified by the RCSD Board on December 22, 1999. In that document, it was noted that "[S]pace has been provided in the proposed layout to allow for the phased expansion of the facility to an ultimate plant capacity of 2.34 MGD." That portion of the proposed expansion to be funded as part of the Beacon project would increase plant capacity to 2.0 MGD, slightly less than the anticipated ultimate plant capacity envisioned in the 1999 environmental document. There was no discussion in the 1999 Negative Declaration or proposed project description restricting the distribution of the treated effluent or preventing some or all of the tertiary water production from sale or use by a single recipient.

As noted in the Energy Commission Staff Reply Brief, the Phase II expansion, as it relates to the Beacon project, is only an upgrade of the existing secondary treatment facility to tertiary levels. Beacon's projected costs cover only that portion of the transmission main and booster stations, seasonal storage, and tertiary wastewater treatment plant expansion necessary to provide a constant flow rate of tertiary-treated water to the Beacon facility. RCSD would be the lead agency for the proposed WWTP Expansion environmental document. This document would probably be a Negative Declaration or Mitigated Negative Declaration, incorporating both the Phase I Negative Declaration and the Energy Commission Final Staff Assessment into the resulting document by reference.

The upgrade of the existing WWTP's ability to further treat effluent to a greater level of clarity would not substantially contribute to population growth, distribution, or concentration, or increased demand for public services in the Rosamond area. It also would not remove or expedite removal of existing obstacles to population growth or expand existing service areas beyond projections that do not include the proposed project or upgrade to the existing WWTP. Use of the land at the proposed project site would change, but is not inconsistent with the County code or plans for development in the project area.

Based on my review of the record relating to the Rosamond recycled water option and my experience performing environmental analysis, I concur with Mr. LaMoreaux's conclusions that the proposed upgrade of the RCSD WWTP secondary treatment facilities is not an expansion of the WWTP's capacity to process incoming wastewater and would not induce additional population growth. An increase in the level of treatment for the effluent produced by the existing WWTP would not increase the overall capacity of the plant to treat sewage inflow or the number of homes or businesses that can be served by the existing system. Additionally, even effluent treated to the tertiary level is not considered potable and may not be used for drinking water. Therefore, increased availability of tertiary-treated water would not provide a source of public water to serve additional customers. There would be no growth-inducing impact from the proposed upgrade to the RCSD WWTP secondary treatment facilities.

I have also reviewed the following documents, filed with the Energy Commission Staff's reply brief, regarding the proposed expansion of the City of California City Wastewater Treatment Plant Facilities, as it relates to the Beacon Solar Energy Project:

- 1) Testimony of Michael Bevins, Director of Public Works, City of California City (May 3, 2010)
- 2) 1989 memorandum of understanding (MOU) between California City and the Lahontan Regional Water Quality Control Board
- 3) City of California City Draft General Plan Update (2009-2028); January 2009.

- 4) 2000 Census Data for the City of California City.
- 5) California City Information and Relocation website and MLS listings for California City, CA 93505 (http://www.califcity.com/about-calcity.html); last accessed May 26, 2010.

As noted by Mr. Bevins, California City is a planned community, with a projected population by 2020 in excess of 20,000, an increase of approximately 3.5%. There are currently 23,000 undeveloped residential lots in California City, designed to provide for the projected population growth through 2100. To provide for this expected growth, California City has been evaluating its infrastructure needs, including the expansion of the City's sewer system and WWTP, for the past eight years. Restrictions associated with the 1989 MOU with the Lahontan Regional Water Quality Control Board limits the City's ability to permit construction of residences at a density of more than two structures per acre in certain areas where sewage treatment is dependent on septic systems rather than public sewer. According to Mr. Bevins, the City's Sewer Master Plan (September 30, 2002) anticipated the proposed expansion. He also noted that replacement of the existing network of septic systems is necessary if the City is to comply with the Kern Council of Governments Blueprint Program, the requirements of AB 32, SB 375, and related climate change policies. Development of an Upgrade Feasibility Plan for the California City Tertiary Waste Water Treatment Plant is currently underway as the first step in expanding the WWTP and will need to be implemented regardless of the outcome of the proposed Beacon project.

CURE is correct in assuming that an increase in the capacity of the California City WWTP to accept and treat additional sewage would increase the permitted density of development within certain zoning districts in California City. It would also expedite removal of an existing obstacle to construction on existing subdivided plats. However, increased density does not necessarily equate to a substantial increase in population, as existing renters may become new homeowners or existing homeowners may upgrade. Plant expansion would allow up to 2,500 existing homes to connect to the public sewer system, which would provide sufficient recycled water to supply the Beacon project. However, the planned capacity would also allow a limited number of new homes to be connected to the system to accommodate future growth, and provide a surplus of recycled water for City use. The City anticipates the WWTP expansion would allow up to a 10% increase in housing starts in some areas, compared to the 3.5% annual growth potential on individual septic systems, totally unrelated to approval and construction of the Beacon project.

While a contract to supply the proposed project with recycled water and payment of the plant's proportional share of the WWTF expansion cost would facilitate construction of the expansion, it would not cause it. Expansion of the existing WWTP is not the result of or dependent on approval and construction of the Beacon project. It also is not dependent on use of tertiary-treated water generated by the existing plant or proposed plant expansion by the Beacon project. The proposed use of the tertiary-treated water

produced by the WWTP, as the byproduct of sewage treatment, also would not provide the City with a new or additional source of potable water and, therefore, would not contribute to any expansion of the City's public water supply system or allow it to serve additional customers.

As required under the California Environmental Quality Act (CEQA), staff has also evaluated the potential for growth resulting from the project. Once in operation, the Beacon project would employ approximately 66 people. Assuming these employees and their families all relocate from outside the California City area, this would equate to less than 200 new residents, a little over 1 percent of the current population of about 15,000. This would have a negligible effect on public services and there are sufficient homes and undeveloped lots available to accommodate these potential residents. According to the Real Estate Multiple Listing Service (MLS) for California City (zip 93505), there were 76 single family residences on the market in California City in May 2010. There were also 79 residences for rent and, as noted above, 23,000 undeveloped lots. Accommodation of this population increase is not dependent on an upgrade of the RCSD WWTP secondary treatment facilities or expansion of the California City WWTP and connection system. Construction of the proposed project would also result in an influx of over 400 temporary workers throughout the construction process. However, there are sufficient lodging and service establishments available to accommodate these temporary residents without the need for new or expanded public service facilities. (See **Socioeconomics** section of the Energy Commission FSA for additional information.)

The City of California City would be the lead agency for the future California City Tertiary Waste Water Treatment Plant expansion. Mr. Bevins has indicated that the planned upgrades will probably require a Mitigated Negative Declaration, similar to those prepared for previous upgrades. The growth-inducing impacts of additional service connections and increased density would be addressed in that document. As with the proposed RCSD WWTP expansion, it is likely that the City would incorporate the Energy Commission Final Staff Assessment for the Beacon Solar Energy Project and Mitigated Negative Declarations for previous upgrades by reference into the resulting document.

Based on my review of the record relating to the California City recycled water option and my experience performing environmental analysis, I concur with Mr. Bevins' conclusions that, while the upgrades and expansion of the existing sewage treatment system could encourage development on existing lots, the proposed expansion is not the result of or dependent on the approval the Beacon project, or purchase of the recycled water resulting from any expanded capacity by BSEP. The proposed Beacon Solar Energy Project would not directly or indirectly induce substantial population growth in California City or surrounding vicinity.

EXHIBIT 513

DECLARATION OF

Erin bright

- I, Erin Bright, declare as follows:
- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of **Noise and Vibration**.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. My prior testimony in the Final Staff Assessment and the attached supplemental testimony are based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Rosamond Wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services Wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond facility, design drawings of the planned phase II upgrades, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed facility upgrades and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Signed:

Dated: May 27, 2010

At: Sacramento, California

NOISE AND VIBRATION

Supplemental Testimony of Erin Bright

My testimony was previously submitted into the record as the Noise and Vibration section of the Final Staff Assessment (FSA). This testimony supplements my prior testimony which is incorporated by reference, as is my list of qualifications previously provided in the FSA.

I have reviewed the Declaration of Dennis LaMoreaux that was filed with staff's reply brief as well as Rosamond's negative declaration submitted as part of phase I of the waste water treatment plant upgrades and the maps describing the planned phase II upgrades. The materials I have reviewed evidence a facility consisting of a developed industrial site with a number of large waste ponds and relevant buildings and equipment visible around the site. There has been considerable alteration of the landscape as expected in an industrial facility.

In his declaration Mr. LaMoreaux stated that as part of the phase II expansion, a 20 acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. Rosmond's phase II environmental review will evaluate the impacts of pond expansion through an initial study. If significant impacts are found additional analysis will occur and appropriate mitigation will be implemented. Mr. LaMoreaux concluded that it is unlikely the phase II expansion will present significant environmental impacts. Based on the developed nature of the facility and the small size of the proposed expansion, it is likely that any significant impacts could be mitigated. Finally Mr. Lamoreaux noted that the phase II expansion would take place within fenced property that is already part of the wastewater treatment facility and is adjacent to facility equipment and other wastewater ponds.

Based on my review of the record and my experience performing environmental analysis I concur with Mr. LaMoreaux statement that the phase II upgrades planned for the wastewater plant will likely result in minimal impacts to Noise and Vibration, and even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

Because the phase II project will be occurring in an existing evaporating pond, the primary potential for new impacts associated with the phase II project is the expansion of the pond as shown in the submitted maps. The evidence indicates a 20 acre section of land next to the southern pond will be incorporated into this southern pond. The land is described as an existing fenced 20 acre section of degraded land within the existing wastewater treatment facility. Based on the information I reviewed, potential environmental impacts from the proposed expansion would be minimal. Possible impacts that could occur include temporary construction noise.

In addition, the waste water treatment plant expansion will include installation of an approximately 40 mile long recycled waste water pipeline to supply water to the Beacon

site. The pipe will be buried in a trench excavated in the disturbed shoulder of existing roadways. Possible impacts that could occur include temporary construction noise.

Impact one: Facility expansion and pipeline installation will involve noisy construction equipment and vehicle operation.

Construction noise impacts for the water treatment plant expansion and the associated pipeline would likely be noticeable to nearby residential receptors, however this noise would be temporary and no particular area would be expected to be impacted for more than a few days. Feasible mitigation, which I anticipate Rosamond would implement, if necessary, could include equipment mufflers, portable soundwalls, berms, employment of quieter equipment and/or limiting construction to during the daytime hours.. These mitigation measures should be effective because they are easily employed proven methods and any licensed contractor hired to perform the upgrade work would have knowledge of these measures. Rosamond as a municipality operating a wastewater facility would also be experienced with noise reduction measures.

I have also reviewed the Declaration of Michael Bevins regarding the plan in California City to remove multiple homes off of septic systems and connect these homes to the central waste water treatment plant. Mr. Bevins notes the project will include the installation of new sewer mains and connections to be located within City streets on City owned land or within City owned easements and the upgrade of the head works, aerator, clarifier, tertiary filter and replacing the chlorination equipment with UV disinfection at the wastewater treatment facility. Mr. Bevins states the current wastewater treatment facility site is 47.36 acres and that the wastewater treatment facility expansion will occur in previously disturbed areas, within the existing facility site boundaries. I have reviewed an aerial photograph of the California City wastewater treatment facility and other relevant information. Mr. Bevins indicates that California City anticipates the need for only a mitigated negative declaration because project impacts will be limited.

Based on my review of the record relating to the California City recycled water option and my experience performing environmental analysis I concur with Mr. Bevins statement that the upgrades and collection system planned for the California City option will likely result in minimal impacts to Noise and Vibration and even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

As with Rosamond, California City will be limiting the proposed work and construction on highly disturbed land including existing roads within the city and disturbed areas of the wastewater facility.

Based on the information I reviewed regarding the California City recycled water upgrades potential environmental impacts from the proposed expansion would be minimal. Possible impacts that could occur include temporary construction noise.

In addition, the California City waste water treatment plant expansion include installation of an approximately 12 mile long recycled waste water pipeline to supply water to the Beacon site, installation of a subsurface waste water collection system, and abandonment of existing septic tanks. The recycled waste water pipe will be buried in a trench excavated either in the disturbed shoulder of existing roadways or beneath the existing paved road surface. The subsurface waste water collection system will connect individual residences by sealing off the inlets to the existing septic tanks and routing the waste from the residences through buried pipes to a subsurface sewer main buried in the existing street. The septic tanks will be abandoned in place by sealing off the waste inlet and filling the tank with sand or other granular material as approved by the City engineer. Possible impacts to Noise and Vibration include temporary construction noise.

Impact one: Facility expansion and pipeline installation will involve noisy equipment and vehicle operation.

Construction noise impacts for the water treatment plant expansion and the associated pipeline would likely be noticeable to nearby residential receptors, however this noise would be temporary and no particular area would be expected to be impacted for more than a few days. As with Rosamond, feasible mitigation which I anticipate California City would implement if necessary include equipment mufflers, portable sound walls, berms, employment of quieter equipment and/or limiting construction to during the daytime hours. These mitigation measures should be effective because they are easily employed proven methods. California City as a municipality operating a wastewater facility would also be experienced with noise reduction measures.

EXHIBIT 514

DECLARATION OF Dal Hunter, Ph.D., C.E.G.

- I, Dal Hunter, Ph.D., C.E.G., declare as follows:
- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of geology and paleontology.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. My prior testimony in the Final Staff Assessment is based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. I have reviewed relevant documents regarding the Rosamond Wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services Wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond facility, design drawings of the planned phase II upgrades, the Rosamond Fact Sheet, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. I have reviewed the proposed upgrades for purposes of determining whether Rosamond or California City could expect either wastewater project to have significant adverse impacts with respect to geologic hazards and/or geologic and paleontologic resources.
- 6. The information indicates that both projects are of the type typically undertaken by municipalities, upgrades to wastewater treatment facilities and in the case of California City, installation of sewer lines. There is nothing in the record to indicate either project is unusual, in a sensitive environmental area or likely to present significant environmental impacts in the areas of geology and paleontology. Impacts, if any, can be expected to be of a temporary nature as the project proceeds and not to a level of significance. This is especially so given that both municipalities performed prior upgrades of these wastewater treatment facilities utilizing a negative declaration or mitigated negative declaration and found no impacts to the areas of geology and paleontology. In addition, the upgrade activity will be occurring at existing industrial sites and on existing road and road shoulders which have been subject to prior ground penetrating activity.

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- 7. On the basis of my evaluation I find it reasonable given the information in the record to conclude that the Rosamond and California City proposed projects could not have a significant effect on the environment in the areas of geology or paleontology.
- 8. I am personally familiar with the facts and conclusions related in this declaration and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

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ated: <u>5 · 2 8 · / O</u> Signe

At: Reno, Nevada

No. 1411

CERTIFIED

SINGINEERING

GEOLOGIST

OF CALIFORNIA

EXHIBIT 515

DECLARATION OF

Casey Weaver, PG

- I, Casey Weaver declare as follows:
- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of Soil and Water Resources.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. My prior testimony in the Final Staff Assessment and the attached supplemental testimony are based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Rosamond Wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services Wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond facility, design drawings of the planned phase II upgrades, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed facility upgrades and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: MM 25, 20/0 Signed:

At: <u>Spermanno</u>, California

WASTE MANAGEMENT

Supplemental Testimony by Casey Weaver

The testimony of Ellie Townsend-Hough was previously submitted into the record as the Waste Management section of the Final Staff Assessment (FSA) and as live testimony provided at the evidentiary hearing on March 22, 2010. In Ms. Townsend's absence, my testimony supplements her prior testimony, which is incorporated by reference, as is her list of qualifications previously provided in the FSA. My qualifications to provide this supplemental testimony are provided in the Soil and Water section of the FSA.

Regarding analysis of the proposed waste water treatment plant expansions, I have reviewed the Declaration of Dennis LaMoreaux that was filed with staff's reply brief as well as Rosamond's negative declaration submitted as part of phase I of the waste water treatment plant upgrades and the maps describing the planned phase II upgrades. As part of my pipeline analysis described in the Soil and Water Resources section of the Final Staff Assessment, I visited the Rosamond Waste Water Treatment Plant observing the facility property including driving on the banks separating the various waste water ponds. The materials I have reviewed evidence a facility consisting of a developed industrial site with a number of large waste ponds and relevant buildings and equipment visible around the site. There has been considerable alteration and degradation of the landscape as expected in an industrial facility.

In his declaration Mr. LaMoreaux stated that as part of the phase II expansion, a 20 acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. Rosamond's phase II environmental review will evaluate the impacts of pond expansion through an initial study. If significant impacts are found, additional analysis will occur and appropriate mitigation will be implemented. Mr. LaMoreaux concluded that it is unlikely the phase II expansion will present significant environmental impacts. Based on the developed and degraded nature of the facility and the small size of the proposed expansion, it is highly likely that any significant impacts could be mitigated. Finally, Mr. Lamoreaux noted that the phase II expansion will take place within fenced property already part of the waste water treatment facility in an area adjacent to existing facility equipment and operating waste water evaporation ponds.

Based on my review of the record, my visit to the Rosamond Wastewater Treatment plant and my experience performing environmental analysis, I concur with Mr. LaMoreaux' statement that the phase II upgrades planned for the waste water plant will likely result in minimal impacts to Management of Waste, and even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

Because the phase II project will expand an existing evaporation pond, the primary potential for new impacts associated with the phase II project is the enlargement of the pond as shown in the submitted maps. The evidence indicates a 20 acre section of land next to the southern pond will be incorporated into this expanded southern pond. The land is characterized as an existing fenced 20 acre section of degraded land within the existing waste water treatment facility. Based on the information I reviewed and my visit to the facility, potential environmental impacts from the proposed expansion would be minimal. Possible impacts that could occur include disturbance of biosolids in the existing evaporation pond and creation of construction debris.

In addition, the waste water treatment plant expansion will include installation of an approximately 40 mile long recycled waste water pipeline to supply water to the Beacon site. The pipe will be buried in a trench excavated in the disturbed shoulder of existing roadways. Possible impacts that could occur include generation of construction debris and creation of excavation spoils that may require hauling and disposal

Impact one: Facility expansion will involve modification to an existing evaporation pond. Modification to the existing pond may expose biosolids that have settled onto the bottom and sidewalls of the evaporation pond.

Impact two: Facility expansion will involve construction. Construction waste will be generated.

Impact three: Pipeline installation will involve soil excavation and grading. Portions of the pipeline alignment may cross areas currently paved with asphalt. Excavation spoils and waste asphalt may be generated.

Given the nature of the waste water project and potential range of impacts, mitigation is readily available. Feasible mitigation, which I anticipate Rosamond would implement if necessary include dewatering the existing evaporation pond, removal of biosolids from excavation pond and transportation of biosolids to an appropriate disposal facility. Construction wastes will be collected, managed and properly disposed. Rosamond has indicated that concrete rubble will be crushed and recycled for use in finish grading and that excavated soils will be reused, both appropriate uses of waste materials. Excavation spoils are expected to be free of contaminates and will therefore be rearranged in the vicinity of the excavation, or loaded into trucks and hauled to an appropriate fill site.

These mitigation measures should be effective because they are typically used in the project region, are proven methods, are easily accomplished with conventional equipment, and, in the case of the biosolids, comply with the existing regulations for the facility from which they were generated.

I have also reviewed the Declaration of Michael Bevins regarding the plan in California City to remove multiple homes off of septic systems and connect these homes to the central waste water treatment plant. Mr. Bevins notes the project will include the

installation of new sewer mains and connections to be located within City streets on City owned land or within City owned easements and the upgrade of the head works, aerator, clarifier, tertiary filter and replacing the chlorination equipment with UV disinfection at the waste water treatment facility. Mr. Bevins states the current wastewater treatment facility site is 47.36 acres and that the waste water treatment facility expansion will occur in previously disturbed areas within the existing facility site boundaries. I have reviewed an aerial photograph of the California City waste water treatment facility and other relevant information. Mr. Bevins indicates that California City anticipates the need for only a mitigated negative declaration because project impacts will be limited.

Based on my review of the record relating to the California City recycled water option and my experience performing environmental analysis I concur with Mr. Bevins statement that the upgrades and collection system planned for the California City option will likely result in minimal impacts to Management of Waste and even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

As with Rosamond, California City will be limiting the proposed work and construction on highly disturbed land including existing roads within the city and disturbed areas of the waste water facility.

Based on the information I reviewed regarding the California City recycled water upgrades, potential environmental impacts from the proposed expansion would be minimal. Possible impacts that could occur include generation of waste asphalt, construction debris and excavation spoils.

In addition, the California City waste water treatment plant expansion include installation of an approximately 12 mile long recycled waste water pipeline to supply water to the Beacon site, installation of a subsurface waste water collection system, and abandonment of existing septic tanks. The recycled waste water pipe will be buried in a trench excavated either in the disturbed shoulder of existing roadways or beneath the existing paved road surface. The subsurface waste water collection system will connect individual residences by sealing off the inlets to the existing septic tanks and routing the waste from the residences through buried pipes to a subsurface sewer main buried in the existing street. The septic tanks will be abandoned in place by sealing off the waste inlet and filling the tank with sand or other granular material as approved by the City engineer. Possible impacts to Waste Management that could occur from these activities include generation of waste asphalt, construction debris and excavation spoils.

Impact one: Facility expansion will involve construction. Construction waste will be generated.

Impact two: Pipeline installation will involve soil excavation and grading. Portions of the pipeline alignment may cross areas currently paved with asphalt. Excavation spoils and waste asphalt may be generated.

Given the nature of the waste water project and potential range of impacts, mitigation is readily available. Construction wastes will be collected, managed and properly disposed of. Concrete rubble will be crushed and recycled for use in finish grading. Excavation spoils are expected to be free of contaminates and will therefore be rearranged in the vicinity of the excavation, or loaded into trucks and hauled to an appropriate fill site.

These mitigation measures should be effective because they are typically used in the project region, are proven methods, and are easily accomplished with conventional equipment.

EXHIBIT 516

DECLARATION OF David Flores

I, David Flores, declare as follows:

- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of Traffic and Transportation.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. My prior testimony in the Final Staff Assessment and the attached supplemental testimony are based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Rosamond Wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services Wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond facility, design drawings of the planned phase II upgrades, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed facility upgrades and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: May 25, 2010 Signed:

At: Sacramento, California

TRAFFIC AND TRANSPORTATION

Supplemental Testimony of David Flores

My testimony was previously submitted into the record as the Traffic and Transportation section of the Final Staff Assessment (FSA) This testimony supplements my prior testimony which is incorporated by reference, as is my list of qualifications previously provided in the FSA.

I have reviewed the Declaration of Dennis LaMoreaux filed with staff's reply brief as well as Rosamond's negative declaration submitted as part of phase I of the waste water treatment plant upgrades and the maps describing the planned phase II upgrades. I have also reviewed the Rosamond fact sheet describing the expected activities at the wastewater treatment facility relating construction work. The materials I have reviewed evidence a facility consisting of a developed industrial site with a number of large waste ponds and relevant buildings and equipment visible around the site. There has been considerable alteration of the landscape as expected in an industrial facility.

In his declaration Mr. LaMoreaux stated that as part of the phase II expansion, a 20 acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. Rosmond's phase II environmental review will evaluate the impacts of pond expansion through an initial study. If significant impacts are found additional analysis will occur and appropriate mitigation will be implemented.

The information I have reviewed indicates the main traffic impacts are expected to be the initial mobilization with sporadic delivery of concrete and equipment during the estimated eighteen month construction period and daily commuting by the construction workforce. The Rosamond site is readily accessible from State Route 14, Avenue A, Sierra Highway, and Patterson Road. All have relatively low existing traffic volumes. The traffic generated by this project is not expected to significantly impact or lower traffic service levels. The nearest school is approximately three miles from the construction site. There is not a hospital within ten miles of the site.

Based on the low existing traffic volume, the multiple routs to access the site, expected sporadic delivery of materials during construction, and my experience performing environmental analysis I concur with Mr. LaMoreaux statement that the phase II upgrades planned for the Wastewater plant will likely result in minimal impacts to traffic and transportation. In the event construction causes some significant impacts, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

Possible impacts that could occur include the use of additional material truck deliveries that will increase the volume of traffic in the local area to such a degree that traffic impacts become significant . Heavy construction equipment can also damage roads which can cause significant impacts.

Feasible mitigation, which I anticipate Rosamond would implement if necessary include mitigation similar to condition of certification Trans-2 that requires that roadways that are damaged by project construction due to oversize or overweight construction vehicles shall be repaired to its original condition. Also traffic flow impacts can be reduced through scheduling of deliveries, flexible route planning or temporary traffic control measures such as flag men or signage.

These mitigation measure would effectively address both traffic and roadway safety during and after project construction is completed at the wastewater treatment plant.

I have also reviewed the Declaration of Michael Bevins regarding the plan in California City to remove multiple homes off of septic systems and connect these homes to the central wastewater treatment plant. Mr. Bevins notes the project will include the installation of new sewer mains and connections to be located within City streets on City owned land or within City owned easements and the upgrade of the head works, aerator, clarifier, tertiary filter and replacing the chlorination equipment with UV disinfection at the wastewater treatment facility. Mr. Bevins states the current wastewater treatment facility site is 47.36 acres and that the wastewater treatment facility expansion will occur in previously disturbed areas, within the existing facility site boundaries. I have reviewed an aerial photo of the California City wastewater treatment facility and other relevant information. Mr. Bevins indicates that California City anticipates the need for only a mitigated negative declaration because project impacts will be limited.

Based on my review of the record relating to the California City recycled water option and my experience performing environmental analysis I concur with Mr. Bevins statement that the upgrades and collection system planned for the California City will likely result in minimal impacts to traffic and transportation and even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

As with Rosamond, California City will be limiting the proposed work and construction on highly disturbed land including existing roads within the city and disturbed areas of the wastewater facility.

Based on the information I reviewed regarding the waste water upgrades potential environmental impacts from the proposed expansion would be minimal. Heavy equipment would be used throughout the construction period, including trenching and earthmoving equipment, cranes, cement mixers, and drilling equipment. Traffic congestion may occur at times either from increased use of roads from construction related activity or road closures during sewer line installation.

Where installation of waste water pipelines would occur in the road right-of-ways, alternating partial road closure would be required. The closures together with the implementation of other mitigation measures such as signage or flagman and conditions similar to TRANS-2 or TRANS-3, would provide appropriate mitigation. In addition the records indicates that California City will be phasing in sewer line installation in a five year plan. This phased in approach will help avoid potential traffic impacts.

These common mitigation measures noted should be effective in maintaining the roadways' level of service in both California City and Rosamond

EXHIBIT 517

DECLARATION OF Mark R. Hamblin

I, Mark R. Hamblin, declare as follows:

- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of Visual Resources.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. My prior testimony in the Final Staff Assessment and the attached supplemental testimony are based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Rosamond wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond wastewater treatment facility, design drawings of the planned phase II upgrades, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed facility upgrades and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: Mc, 27, 20\$ igned: Mark ?-)-land.

At: Secrement D, California

VISUAL RESOURCES

Supplemental Testimony of Mark R. Hamblin

My testimony was previously submitted into the record as the Visual Resource section of the Final Staff Assessment (FSA) and as live testimony provided at the evidentiary hearing on March 22, 2010. This testimony supplements my prior testimony which is incorporated by reference, as is my list of qualifications previously provided in the FSA.

Regarding analysis of the proposed wastewater treatment facility expansions, I have reviewed the Declaration of Dennis LaMoreaux that was filed with staff's reply brief as well as Rosamond Community Services District's negative declaration submitted as part of phase I of the waste water treatment facility upgrades and the maps describing the planned phase II upgrades. The materials I have reviewed evidence considerable visual alteration and degradation of the landscape; a developed site with a number of large wastewater ponds, and relevant buildings and equipment.

In his declaration Mr. LaMoreaux stated that as part of the phase II expansion, a 20 acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. Rosmond's phase II environmental review will evaluate the impacts of pond expansion through an initial study. If significant impacts are found additional analysis will occur and appropriate mitigation will be implemented. Mr. LaMoreaux concluded that it is unlikely the phase II expansion will present significant environmental impacts; based on the developed and degraded nature of the site and the small size of proposed expansion. Mr. LaMoreaux noted that the phase II expansion will take place within fenced property already part of the wastewater treatment facility in an area adjacent to existing facility equipment and operating wastewater evaporation ponds.

The evidence indicates a 20 acre section of land next to the southern pond will be incorporated into this expanded southern pond. The land is characterized as an existing fenced 20 acre section of degraded land within the existing wastewater treatment facility. The phase II project will expand an existing evaporating pond, the primary potential for new visual related impacts associated with the phase II project is the enlargement of the pond.

Based on my review of the record, there is nothing in the record to indicate the proposed expansion would present a substantial adverse visual effect, damage, or degrading for the purposes of "Aesthetics" under the California Environmental Quality Act.

Given the nature of the wastewater project and potential range of impacts, mitigation is readily available. Feasible mitigation, which I anticipate Rosamond would implement if necessary include surface restoration. This mitigation measure would be effective in restoring affected surface area to the original condition or better condition, including the

replacement of any vegetation, during the construction period where project development does not preclude it.

I have reviewed the Declaration of Michael Bevins, an aerial photograph of the California City wastewater treatment facility, and other relevant information regarding the plan in California City to remove approximately 2,500 homes off of septic systems and connect these homes to the central wastewater treatment plant. Mr. Bevins notes the project will include the installation of new sewer mains and connections to be located within City streets on City owned land or within City owned easements, and the upgrade of the head works, aerator, clarifier, tertiary filter and replacing the chlorination equipment with UV disinfection at the wastewater treatment facility.

Mr. Bevins states the current wastewater treatment facility site is 47.36 acres and that the wastewater treatment facility expansion will occur in previously disturbed areas, within the existing facility site boundaries. Mr. Bevins indicates that California City anticipates the need for only a mitigated negative declaration because project impacts will be limited.

The subsurface wastewater collection system will connect individual residences by sealing off the inlets to the existing septic tanks and routing the waste from the residences through buried pipes to a subsurface sewer main buried in the existing street. The septic tanks will be abandoned in place by sealing off the waste inlet and filling the tank with sand or other granular material as approved by the City engineer. California City will be limiting the proposed work and construction to highly disturbed land including existing roads within the city and disturbed areas of the wastewater facility.

Based on my review of the record relating to the California City recycled water option, I concur with Mr. Bevins the upgrades and collection system planned for the California City will likely result in minimal impacts to the Visual Resources technical area. There is nothing in the record to indicate the proposed recycled water option would present a substantial adverse visual effect, damage, or degrading for the purposes of "Aesthetics" under the California Environmental Quality Act.

EXHIBIT 518

DECLARATION OF

Casey Weaver, PG

- I, Casey Weaver declare as follows:
- 1. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing supplemental environmental analysis in the technical area of Waste Management.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. Prior testimony by Ms. Ellie Townsend-Hough on Waste Management is in the Final Staff Assessment. The attached supplemental testimony is based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Rosamond Wastewater treatment facility and the California City wastewater treatment facility including but not limited to, the Declaration of Dennis LaMoreaux, the Rosamond Community Services Wastewater treatment plant expansion phase I negative declaration, aerial maps of the Rosamond facility, design drawings of the planned phase II upgrades, the Declaration of Michael Bevins and aerial views of the California City wastewater treatment plant.
- 5. The Cities of Rosamond and California City have declared that each will be the lead agencies for purposes of the California Environmental Quality Act and will therefore be performing the environmental analysis for the planned wastewater treatment facility upgrades. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed facility upgrades and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 5/28/10 Signed: (Asa)
At: Snepamonro, California

SOIL AND WATER RESOURCES

Supplemental Testimony of Casey Weaver

My testimony was previously submitted into the record as the Soil and Water Resources section of the Final Staff Assessment (FSA) and as live testimony provided at the evidentiary hearing on March 22, 2010. This testimony supplements my prior testimony which is incorporated by reference, as is my list of qualifications previously provided in the FSA.

In the FSA, cumulative impacts to soil and water resources were discussed on pages 4.9 - 55-57. The cumulative impacts discussion focused on the potential effects to groundwater users by the proposed project in the affected groundwater basin. Other projects occur within the site vicinity (Pine Tree Wind Farm and Barren Ridge Transmission Upgrade), but they were determined to not present a cumulative impact to the basin because of limited expected water use.

Regarding analysis of the proposed waste water treatment plant expansions, I have reviewed the Declaration of Dennis LaMoreaux that was filed with staff's reply brief as well as Rosamond's negative declaration submitted as part of phase I of the waste water treatment plant upgrades and the maps describing the planned phase II upgrades. As part of my pipeline analysis described in the Soil and Water Resources section of the Final Staff Assessment, I visited the Rosamond Waste Water Treatment Plant observing the facility property including driving on the banks separating the various waste water ponds. The site visit and the materials I have reviewed confirm the facility is a developed industrial site with a number of large waste ponds, relevant buildings and equipment visible within the site. There has been considerable alteration and degradation of the landscape as expected in an industrial facility.

In his declaration Mr. LaMoreaux stated that as part of the phase II expansion, a 20 acre section of facility property will be converted into a wastewater pond as anticipated in the phase I negative declaration. Rosmond's phase II environmental review will evaluate the impacts of pond expansion through an initial study. If significant impacts are found, additional analysis will occur and appropriate mitigation will be implemented. Mr. LaMoreaux concluded that it is unlikely the phase II expansion will present significant environmental impacts. Mr. Lamoreaux noted that the phase II expansion will take place within fenced property already part of the waste water treatment facility in an area adjacent to existing facility equipment and operating waste water evaporation ponds.

Based on my review of the record, my visit to the Rosamond Wastewater Treatment plant and my experience performing environmental analysis, I concur with Mr. LaMoreaux' statement that the phase II upgrades planned for the waste water plant will likely result in minimal impacts to Soil and Water Resources and even if some

significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

Because the phase II project will expand an existing evaporating pond, the primary potential for new impacts associated with the phase II project is the enlargement of the pond as shown in the submitted maps. The evidence indicates a 20 acre section of land next to the southern pond will be incorporated into this expanded southern pond. The land is characterized as an existing fenced 20 acre section of degraded land within the existing waste water treatment facility. Based on the information I reviewed and my visit to the facility, potential environmental impacts from the proposed expansion would be minimal and associated with soil resources only. I conclude the Rosamond upgrades would not have a significant effect on water resources because there is no evidence the Rosamond project will consume significant amounts of potable water or result in the contamination of surface or ground water. Possible impacts to soil resources that could occur include increased soil erosion by wind and water and dust generation.

Impact one: Facility expansion will involve soil excavation and grading. Bare soil exposed to strong wind or concentrated storm water runoff is susceptible to erosion.

Impact two: Facility expansion will involve soil excavation and grading. Bare soil exposed to strong wind is susceptible to generation of airborne dust.

Impact three: Pipeline installation will involve soil excavation and grading. Bare soil exposed to strong wind or concentrated storm water runoff is susceptible to erosion.

Given the nature of the waste water project and potential range of impacts, mitigation is readily available. Feasible mitigation, which I anticipate Rosamond would implement if necessary include, watering surface soils in areas or active excavation/construction, and development of appropriate Best Management Practices, (BMPs) to minimize erosion hazards in disturbed soil areas. BMPs are readily available and any licensed contractor hired to perform the upgrade work would have access to such standard information. Rosamond municipality operating a wastewater facility would also be experienced with implementation of BMPs.

These mitigation measures should be effective because they are proven methods, easily employed and the materials/water are readily available. Rosamond has indicated it expects to utilize facility generated Title 22 compliant recycled waste water for dust management.

I have also reviewed the Declaration of Michael Bevins regarding the plan in California City to remove multiple homes off of septic systems and connect these homes to the central waste water treatment plant. Mr. Bevins notes the project will include the installation of new sewer mains and connections to be located within City streets on City owned land or within City owned easements and the upgrade of the head works,

aerator, clarifier, tertiary filter and replacing the chlorination equipment with UV disinfection at the waste water treatment facility. Mr. Bevins states the current wastewater treatment facility site is 47.36 acres and that the waste water treatment facility expansion will occur in previously disturbed areas, within the existing facility site boundaries. I have reviewed an aerial photograph of the California City waste water treatment facility and other relevant information. Mr. Bevins indicates that California City anticipates the need for only a mitigated negative declaration because project impacts will be limited.

Based on my review of the record relating to the California City recycled water option and my experience performing environmental analysis I concur with Mr. Bevins statement that the upgrades and collection system planned for the California City option will likely result in minimal impacts to Soil and Water resources and even if some significant impacts exist, mitigation is almost certainly available to reduce these impacts as required under the California Environmental Quality Act.

As with Rosamond, California City will be limiting the proposed work and construction on highly disturbed land including existing roads within the city and disturbed areas of the waste water facility.

Based on the information I reviewed regarding the California City recycled water upgrades, potential environmental impacts from the proposed expansion would be minimal and associated with soil resources only. I conclude the California City upgrades would not have a significant effect on water resources because there is no evidence the California City project will consume significant amounts of potable water or result in the contamination of surface or ground water. Abandonment of individual onsite septic systems will reduce potential ground water contamination and would be a benefit to water resources. Possible impacts that could occur include increased soil erosion by wind and water and dust generation.

In addition to waste water treatment plant expansion, the project will include installation of an approximately 12 mile long recycled waste water pipeline to supply water to the Beacon site, installation of a subsurface waste water collection system, and abandonment of existing septic tanks. The recycled waste water pipe will be buried in a trench excavated either in the disturbed shoulder of existing roadways or beneath the existing paved road surface. The subsurface waste water collection system will connect individual residences by sealing off the inlets to the existing septic tanks and routing the waste from the residences through buried pipes to a subsurface sewer main buried in the existing street. The septic tanks will be abandoned in place by sealing off the waste inlet and filling the tank with sand or other granular material as approved by the City engineer. Possible impacts to soil resources that could occur from these activities include increased soil erosion by wind and water and dust generation.

Impact one: Facility expansion will involve soil excavation and grading. Bare soil exposed to strong wind or concentrated storm water runoff is susceptible to erosion.

Impact two: Facility expansion will involve soil excavation and grading. Bare soil exposed to strong wind is susceptible to generation of airborne dust.

Impact three: Pipeline installation and construction of the waste water collection system will involve soil excavation, septic tank filling and site grading. Bare soil exposed to strong wind or concentrated storm water runoff is susceptible to erosion.

Given the nature of the waste water project and potential range of impacts, mitigation is readily available. Feasible mitigation which I anticipate California City would implement, if necessary, includes watering surface soils in areas or active excavation/construction, and development of appropriate BMPs to minimize erosion hazards in disturbed soil areas. Because California City will be phasing in sewer line connections over five years, the smaller areas of construction activity will help minimize the extent of potential impacts from erosion.

These mitigation measures should be effective because they are proven methods, easily employed and the materials/water are readily available. As in the case of Rosamond, BMPs are readily available and licensed contractors hired to perform the upgrade work would have access to such standard information. California City as a municipality operating a wastewater facility would also be experienced with BMPs.

EXHIBIT 519

RCSD WWTP Conversion to Additional Tertiary Treatment Capacity Additional Facts

Prepared by: Dennis D. LaMoreaux, PE May 20, 2010

Existing WWTP Conditions

1) Number of Existing Ponds: 16

2) Acres of Existing Ponds: Approximately 165 acres

3) Typical Existing Pond Depth: 6 to 8 feet (including freeboard)

4) Total Site Acreage: Approximately 280 acres

Proposed Tertiary Treatment Conversion

1) Acreage of Proposed Ponds: Approximately 70 acres including a 20 acre extension.

- **2) Depth of Deepest Ponds:** Finished depth approximately twenty-five (25) feet. Construction depth approximately thirty-five (35) feet. This is the maximum depth at the center of the ponds.
- **Construction Method and Time Estimate:** The new ponds will be constructed with normal earthmoving equipment including scrapers, excavators, and grading equipment. Rough grading operations are expected to take one to two months with overall construction operations taking approximately eighteen months.
- 4) Use of Excess Soil: A balancing of excavated soils will be attempted. Any excess soils are expected to be stockpiled and used at a later date to re-grade the existing ponds that will be abandoned. Existing stockpiles of waste concrete will also be crushed and recycled for use in the finish grading.
- Construction Staging Area(s): There are disturbed areas adjacent to the proposed construction site that are expected to be used for construction yards and staging areas. The largest area is west of the existing tertiary treatment plant and north of the 20 acre extension to an existing pond.
- 6) Current Condition of 20 acres not within Existing Ponds: Please see the attached photographs of the 20 acre site's existing condition. It is fenced as part of the existing WWTP site and is largely disturbed by existing activities. There are no known reports of desert tortoise sightings in the 20 acre area or elsewhere within the existing WWTP site.

- 7) Known Cultural Resources: No cultural resources were discovered during construction of the existing facilities and ponds. Construction operations are expected to be largely completed with scrapers. Appropriate measures will be taken in the event a cultural resource is detected during pond construction.
- 8) Air Quality Impacts Construction Dust Suppression: The main construction activity will be the rough grading operation that may generate dust. Dust control will be required in the contract documents. Water for dust suppression is expected to be provided by the existing 0.5 MGD tertiary treatment plant.
- 9) Traffic Impacts Offsite Deliveries: The main traffic impacts are expected to be the initial mobilization with sporadic delivery of concrete and equipment during the estimated eighteen month construction period and daily commuting by the construction workforce. The site is readily accessible from State Route 14, Avenue A, Sierra Highway, and Patterson Road. All have relatively low existing traffic volumes. The traffic generated by this project is not expected to significantly impact or lower traffic service levels. The nearest school is approximately three miles from the construction site. There is not a hospital within ten miles of the site.

By comparison, a larger, 13 MGD, tertiary treatment plant is currently under construction at the intersection of Avenue D and Sierra Highway (approximately four miles south of the RCSD site) by the Sanitation Districts of Los Angeles County, District 14. Construction began well over a year ago and is expected to continue until mid 2011. There have been no noticeable impacts to local traffic conditions from this project.

RCSD WWTP - 20 ACRE POND EXPANSION FOR TERTIARY CONVERSION EXISTING CONDITION



Southeast Corner Looking North - 5/17/10



Southeast Corner Looking West - 5/17/10



Southwest Corner Looking East - 5/17/10



Southwest Corner Looking North $\,$ - 5/17/10



Northwest Corner Looking South - 5/17/10



Northwest Corner Looking East - 5/17/10



Northeast Corner Looking West - 5/17/10



Northeast Corner Looking South - 5/17/10

EXHIBIT 520

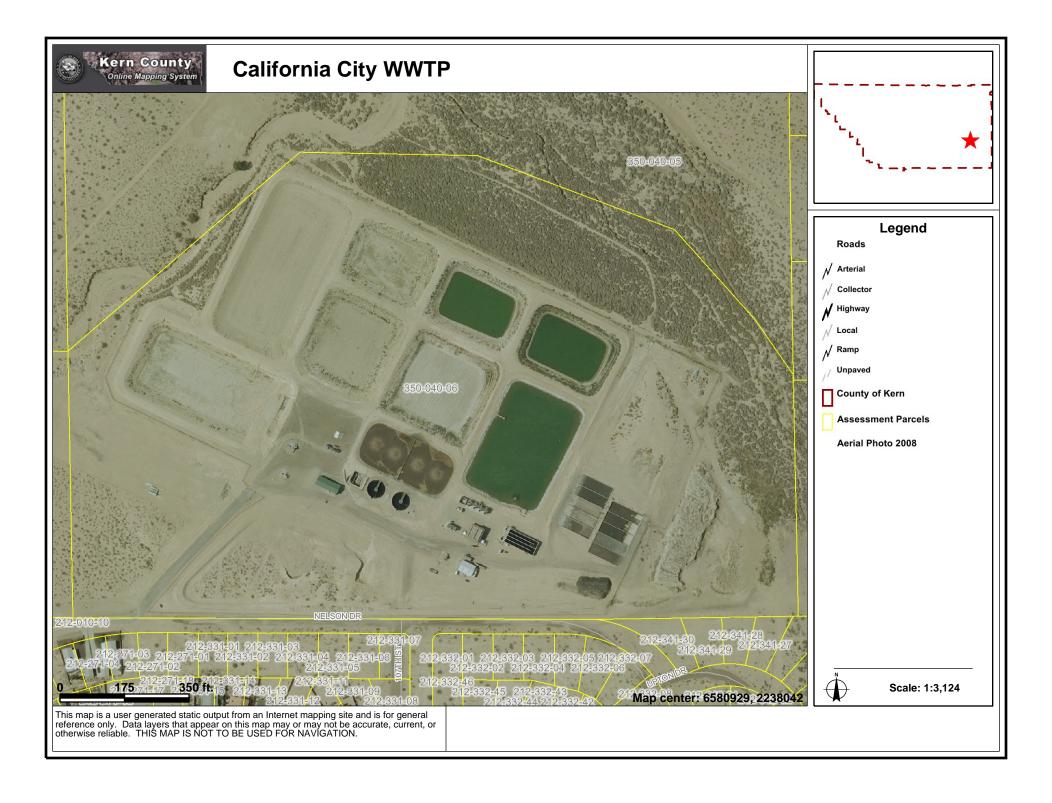


EXHIBIT 521

DECLARATION OF

Geoff Lesh, P.E.

I, Geoff Lesh, declare as follows: ...

- 1. I am presently employed by the California Energy Commission in the **Engineering** Office of the Siting, Transmission, and Environmental Protection Division as a Mechanical Engineer. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of Worker Safety and Fire Protection.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. My prior testimony in the Final Staff Assessment and the attached supplemental testimony are based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Kern County Fire Department including but not limited to, the Declaration of Nick Dunn, Director of Kern County Emergency Services dated May 28, 2010 and the declaration and letter from Lorelei Oviatt, Director of Kern County Planning Department dated May 28, 2010.
- 5. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed Beacon Solar Energy Project and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

DECLARATION OF

Rick Tyler

- I, Rick Tyler, declare as follows:
- 1. I am presently employed by the California Energy Commission in the **Engineering Office** of the Siting, Transmission, and Environmental Protection Division as a Sr. Mechanical Engineer. I am presently assigned to the BEACON SOLAR ENERGY PROJECT performing an environmental analysis in the technical area of Worker Safety and Fire Protection.
- 2. A copy of my professional qualifications and experience was previously submitted into the record with the Final Staff Assessment and is incorporated by reference herein.
- 3. I Supervised the Final Staff Assessment and the attached supplemental testimony based on my independent analysis of the relevant reliable documents and materials, and my professional experience and knowledge. I also conducted investigations of the fire at SEGS 8 that occurred in January of 1990.
- 4. In developing the attached supplemental testimony I have reviewed relevant documents regarding the Kern County Fire Department including but not limited to, the Declaration of Nick Dunn, Director of Kern County Emergency Services dated May 28, 2010 and the letter from Lorelei Oviatt, Director of Kern County Planning Department dated May 28, 2010.
- 5. The purpose of this testimony is to provide an assessment of expected impacts, if any, from the proposed Beacon Solar Energy Project and to determine whether mitigation options exist to address potential significant impacts.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Datad.

California

WORKER SAFETY AND FIRE PROTECTION

Supplemental Testimony of Geoff Lesh and Rick Tyler

Beacon Solar Power Plant

Staff has read the declaration and letter dated May 27, 2010, from Kern County Planning and Community Development Director Lorelei Oviatt (Attached as Exhibit A). Staff has read the declaration of Kern County Fire Chief and Director of Emergency Services Nick Dunn (Attached as Exhibit B), and agrees with his conclusion that there will be impacts on the Kern County Fire Department's ability to provide an adequate level of service to the project and surrounding community.

Staff is aware that large fires requiring multiple fire station response can happen at solar thermal power plants using flammable hydrocarbon heat transfer fluid (HTF), an example being the fire at SEGS VIII Solar Plant at Harper Lake, San Bernardino County on Jan 10, 1990, which required a combined response from multiple stations of San Bernardino County, Kern County, California Department of Forestry, and Edwards Air Force Base (Attached as Exhibit D). This fire was confined to the power block of the plant, and did not spread into the solar array field.

Beacon also has a very large amount of flammable material, approximately 2.4 million gallons of HTF (approximately three times the amount used at SEGS VIII). Although safety and controls designs have improved to reduce the probability of such an event in the future, its potential still exists.

Staff is now aware that the level of fire protection that was initially determined to be adequate will not be sustainable due to proposed Kern County budgetary shortfalls that will impact its fire services. Staff is now aware of other large power plants proposed for Kern County (e.g., Ridgecrest, Hydrogen Energy CA) that will make similar demands on local fire and emergency services, thereby resulting in increasing demands on county fire and emergency services. Historical solar thermal power plant emergency response requests have averaged between 2-3 incidents per five years.

Staff has determined that the revised mitigation being requested by Kern County is generally consistent with and falls within the range of that requested for other power plants in other counties.

Staff has determined that there will be a significant impact on Kern County Fire Department (KCFD) resulting from construction and operations of Beacon Solar Energy Plant. Due to proposed budget reductions of the Kern County Fire Department, the construction and operation of the proposed Beacon Solar Energy Project, in addition to construction and operation of multiple other power plants and industrial facilities having similar fire protection demands in the local service area, Staff has now determined that the proposed facility will result in direct impacts and contribute to cumulative impacts on the level of fire protection available in the community.

Staff understands that Kern County and the Applicant are in the process of negotiating an impact fee. While it is preferable for the parties to resolve this issue, if agreement can not be reached by the time of the Presiding Member's Proposed Decision, staff would recommend implementation of its Condition of Certification.

Staff therefore proposes the following Condition of Certification to mitigate the impacts to Kern County Fire Department.

Proposed Condition of Certification

WORKER SAFETY-8 The project owner shall fund its share of the ongoing capital and operational costs by making an annual payment of \$400,000 to Kern County for the support of the fire department's needs for capital, operations and maintenance commencing with the date of start of site mobilization and continuing annually thereafter on the anniversary until the final date of power plant decommissioning.

<u>Verification:</u> At least sixty (30) days prior to the start of site mobilization, the project owner shall provide to the CPM, documentation that the first annual payment of \$400,000 has been paid to the KCFD, and shall also provide a statement in the Annual Compliance Report that subsequent annual payments have been made.

EXHIBITS

- Exhibit A Declaration OF Kern County Fire Chief and Director of Emergency Services Nick Dunn, dated May 28, 2010
- Exhibit B Declaration and letter from Kern County Planning and Community Development Director Lorelei Oviatt, dated May 28, 2010
- Exhibit C Kern County Capital Improvement Plan, dated May 13, 2008
- Exhibit D Email from Doreen Weston, Kern County Fire Department, with attached Station #17 Log Book page for January 10, 2010

EXHIBIT A

DECLARATION OF KERN COUNTY PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR, LORELEI H.OVIATT, AICP

- I, Kern County Planning and Community Development Director Lorelei H.Oviatt, AICP, declare as follows:
- 1. I am currently the Kern County Planning and Community Development Director.
- 2. As the Director of Planning and Community Development I manage and administer subject to Board of Supervisors legislative determination of policy, the technical and administrative phases of all county planning and development services, including land use planning, zoning and federal funding for affordable housing.
- 3. I have written the attached letter based on my understanding of Kern County's Capital Improvement Plan; my independent analysis of the relevant reliable documents and materials, my professional experience and knowledge and can testify to the validity of the facts.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: May 28, 2010

Signed: ______Lorelei H.Oviatt. AICP

Director Planning and Community Development

At: Bakersfield, California

PLANNING DEPARTMENT

Lorelei H. Oviatt, AICP Director

2700 "M" STREET, SUITE 100 BAKERSFIELD, CA 93301-2323 Phone: (661) 862-8600 FAX: (661) 862-8601 TTY Relay 1-800-735-2929

E-Mail: planning@co.kern.ca.us

Web Address: www.co.kern.ca.us/planning



RESOURCE MANAGEMENT AGENCY

Ted James, AICP, , RMA DIRECTOR Community & Economic Development Department Engineering & Survey Services Department **Planning Department** Roads Department

May 27, 2010

California Energy Commission Attn: Eric Solario 1516 9th Street MS-15 Sacramento. California 95814

File; Beacon Solar Project

RE: **Evidentiary Hearing Comments Kern County Planning Department**

Final Staff Assessment for the Proposed Beacon Solar Energy Project (08-AFC-2)

Request for Additional Mitigation for Impacts on Public Services

Dear Mr. Solario,

Since the March 22, 2010 Evidentiary Hearing, the Kern County Board of Supervisors has directed staff to review the appropriate level of mitigation requested for the Beacon Solar Project. The adopted Capital Improvement Plan (CIP) establishes standards maintaining the current adopted level of service as growth occurs. The plan includes specific lists of facilities and equipment upgrades needed to maintain that level of service. In reviewing other thermal solar projects it appears the incident response is 2 to 3 incidents every five years. That would result in 12 to 18 incidents requiring fire, sheriff and emergency service response over the 30 year life of the project. As provided in the attached declaration from Nick Dunn the Fire Chief and Director of Emergency Services, the cumulative impact of multiple incidents in that particular area, given the type of industries sited there, requires mitigation to ensure the ability of the departments to respond. As such, in consultation with the County Administrative Office, the following is the requested mitigation to reduce the impacts on public services to less than significant:

- 1. 25% of the monetary factors calculated in the Public Facilities Fee study for fire, sheriff and countywide protection which is \$144.98 per 1000 square feet of the facility including panels. Based on the current project description of 1226 acres the amount is estimated to be \$400,000 per year for the life of the project.
- 2. The amount is be paid each year based on actual amount constructed payable to the Kern County Auditor - Controller by April 30 of each calendar year.
- 3. The amount will not be adjusted per year for inflation as originally requested.
- 4. The Board of Supervisors has directed that his funding be placed in an identified account so that it is clearly used in the future for the fire, sheriff and countywide public protection capital improvements.

Kern County Planning appreciates consideration of these comments in the final decision on this important renewable energy projects.

Sincerely.

Lorelei H.Oviatt, AICP

Director

cc: John Nilon, CAO Adel Klein, CAO

Chief Nick Dunn, Kern County Fire Department

Beacon Solar



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Director Planning and Community Development

At: Bakersfield, California

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Sincerely.

Lorelei H.Oviatt, AICP

Director

cc: John Nilon, CAO Adel Klein, CAO

Chief Nick Dunn, Kern County Fire Department

Beacon Solar



DECLARATION OF

Kern County Fire Chief and Director of Emergency Services Nick Dunn

- I, _Kern County Fire Chief and Director of Emergency Services Nick Dunn, declare as follows:
- 1. I am currently the Kern County Fire Chief and Director of Emergency Services and was appointed in 2009.
- 2. As the Fire Chief and Director of Emergency Services I manage and administer the operations and functions of the Fire Department including fire prevention, suppression, investigation and education; emergency medical response and technical rescue, I serve as the director of the Office of Emergency Services; Operational Area Emergency Operations Center; City/County Emergency Communications Center and the regional fire training facility.
- 3. The analysis of impacts from the construction and operation of the Beacon Solar Solar Thermal Project to Fire Services including the staffing response to hazardous materials incidents was based on conversations with my staff; Assistant Fire Marshall, Jim Eckroth and Fire Marshall David Goodell in 2008 and 2009.
- 4. Since those conversations a more complete understanding of the operations of the plant, including the existence of significant quantities of hazardous materials for the plant operation have been provided. The desert area of Kern County encompasses over 3000 square miles and fire response is based on a regional network of facilities. The regional response area for the Beacon Solar Thermal Plant includes the same response area as the proposed Ridgecrest Solar Thermal Plant. The responding stations include, Ridgecrest, Inyokern, Randsburg, Boron and Mojave. These facilities were constructed from 1957 to 2004. Hazardous materials response would be sent from Bakersfield. The same regional area within Highway 14, 58 and State Route 395 includes a significant number of industries with hazard potential for accidents or incidents requiring a multiple station response. These industries include the Mojave Air and Space Port between State Highway 58 and 14 with over 40 companies engaged in flight development including rocket testing that involves jet fuel and other combustibles, over 60 trains a day through the Mojave corridor carrying chemicals and hazardous materials and the activities of Naval Air Weapons Station, China Lake and Edwards Air Force Base which both conduct flight testing and testing of new propulsions and rockets. The Fire Department provides mutual aid response for the military installations which are both adjacent to the communities of Ridgecrest and Rosamond including HazMat response. The regional location for this proposed plant is within an already highly concentrated area of other potentially hazardous industrials chosen due to the low population levels and open space with highly traveled regional highways. In addition this area is a focus of Off Highway Vehicle activity on both private and Bureau of Land Management Lands and on holiday weekends crowds exceed 25,000 people. The

ability of the Fire Department to respond to multiple incidents is also hampered by the distances between stations and lack of any other regional access to areas except from State Highways. Cumulative impacts of siting in this area, another industrial use that will require specialized fire and emergency services response with the inevitable rise in population over the next 30 years will require upgrades to equipment and facilities as detailed in the master plan for the desert in the Adopted Kern County Capital Improvement Plan.

- 5. The purpose of this testimony is to provide an assessment of expected impacts, from the proposed facility and to request that mitigation be applied to the project to offset those impacts. The County Administrative Office and Board of Supervisors has indicated that drastic reductions in funding for public safety will have to be implemented in the current budget discussions as well as in the next 5 years due to the economic downturn. Such reductions in funding could result in loss of replacement and maintance for older equipment, no expansion and possible reductions in staffing at all levels and potential closure of smaller fire facilities in future budget years. Necessary funding for the incremental impacts of this project on the future capital improvements identified in the CIP need to be received or construction of this project will have significant impacts on regional response times and ability to respond to multiple events.
- 6. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
- 7. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

At: Bakersfield, California



FOR EXHIBIT C SEE:

http://www.energy.ca.gov/sitingcases/beacon/documents/other/2010-01-19_Kern_County_Comment_Impact_Fee_TN-48738.pdf



From:

Doreen Weston <dweston@co.kern.ca.us>

To:

So

<glesh@energy.state.ca.us>

cc.

"Joanne Zazueta" <JZazueta@co.kern.ca.us>, "Nick Dunn"

<NDunn@co.kern.ca...

Date:

5/28/2010 12:53 PM

Subject:

Report Request

Attachments: 90-00953.pdf

All fire records for 1990 have bee destroyed except log book entries. Here is a copy of the log book for Station 17 on January 10, 1990.

Station 17 was the only station that responded to assist San Bernardino County

on this fire.

Let me know if there is anything else I can do to assist you.

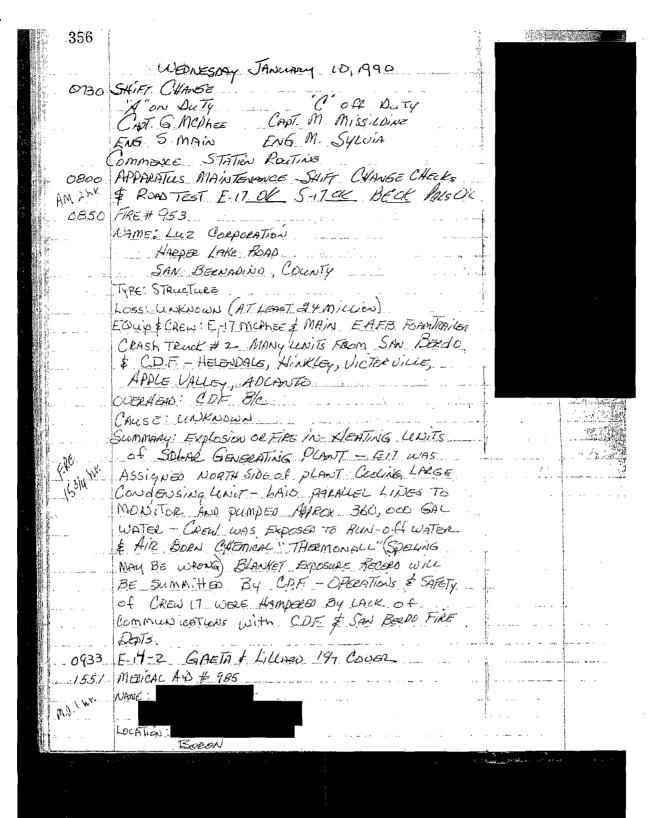
Thank you

Doreen Weston, Office Services Specialist Kern County Fire Investigations 3555 Landco Drive Suite B Bakersfield, CA 93308 (661) 391-3480 Fax (661) 326-8392 dweston@co.kern.ca.us

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To contact our e-mail administrator directly, send to kcfdadmin@co.kern.ca.us





WORKER SAFETY AND FIRE PROTECTION

Supplemental Testimony of Geoff Lesh and Rick Tyler

Beacon Solar Power Plant

Staff has read the declaration and letter dated May 27, 2010, from Kern County Planning and Community Development Director Lorelei Oviatt (Attached as Exhibit A). Staff has read the declaration of Kern County Fire Chief and Director of Emergency Services Nick Dunn (Attached as Exhibit B), and agrees with his conclusion that there will be impacts on the Kern County Fire Department's ability to provide an adequate level of service to the project and surrounding community.

Staff is aware that large fires requiring multiple fire station response can happen at solar thermal power plants using flammable hydrocarbon heat transfer fluid (HTF), an example being the fire at SEGS VIII Solar Plant at Harper Lake, San Bernardino County on Jan 10, 1990, which required a combined response from multiple stations of San Bernardino County, Kern County, California Department of Forestry, and Edwards Air Force Base (Attached as Exhibit D). This fire was confined to the power block of the plant, and did not spread into the solar array field.

Beacon also has a very large amount of flammable material, approximately 2.4 million gallons of HTF (approximately three times the amount used at SEGS VIII). Although safety and controls designs have improved to reduce the probability of such an event in the future, its potential still exists.

Staff is now aware that the level of fire protection that was initially determined to be adequate will not be sustainable due to proposed Kern County budgetary shortfalls that will impact its fire services. Staff is now aware of other large power plants proposed for Kern County (e.g., Ridgecrest, Hydrogen Energy CA) that will make similar demands on local fire and emergency services, thereby resulting in increasing demands on county fire and emergency services. Historical solar thermal power plant emergency response requests have averaged between 2-3 incidents per five years.

Staff has determined that the revised mitigation being requested by Kern County is generally consistent with and falls within the range of that requested for other power plants in other counties.

Staff has determined that there will be a significant impact on Kern County Fire Department (KCFD) resulting from construction and operations of Beacon Solar Energy Plant. Due to proposed budget reductions of the Kern County Fire Department, the construction and operation of the proposed Beacon Solar Energy Project, in addition to construction and operation of multiple other power plants and industrial facilities having similar fire protection demands in the local service area, Staff has now determined that the proposed facility will result in direct impacts and contribute to cumulative impacts on the level of fire protection available in the community.

Staff understands that Kern County and the Applicant are in the process of negotiating an impact fee. While it is preferable for the parties to resolve this issue, if agreement can not be reached by the time of the Presiding Member's Proposed Decision, staff would recommend implementation of its Condition of Certification.

Staff therefore proposes the following Condition of Certification to mitigate the impacts to Kern County Fire Department.

Proposed Condition of Certification

WORKER SAFETY-8 The project owner shall fund its share of the ongoing capital and operational costs by making an annual payment of \$400,000 to Kern County for the support of the fire department's needs for capital, operations and maintenance commencing with the date of start of site mobilization and continuing annually thereafter on the anniversary until the final date of power plant decommissioning.

<u>Verification:</u> At least sixty (30) days prior to the start of site mobilization, the project owner shall provide to the CPM, documentation that the first annual payment of \$400,000 has been paid to the KCFD, and shall also provide a statement in the Annual Compliance Report that subsequent annual payments have been made.

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