CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION R5-2012-0098

APPROVING AN INITIAL STUDY
AND
ADOPTING A MITIGATED NEGATIVE DECLARATION
FOR
SUNNYGEM, LLC, SANDRIDGE PARTNERS, LP,
AND MCCARTHY FAMILY FARMS, INC.
SPICER CITY JUICE PROCESSING PLANT
KERN COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board) finds:

1. The Central Valley Water Board proposes to adopt Waste Discharge Requirements (hereafter WDRs) for the discharge of fruit juice processing wastewater to unlined ponds for storage before application to approximately 2,200 acres of crops (Reuse Areas) by SunnyGem, LLC, and Sandridge Partners, LP (hereafter Discharger), from their Spicer City Juice Processing Plant in Kern County. McCarthy Family Farms, Inc., owns a portion of the Reuse Areas and submitted a Report of Water Reclamation for wastewater application to these areas.

2. The Central Valley Water Board is the lead agency for this project under the California Environmental Quality Act (CEQA) and has conducted an Initial Study and prepared a Mitigated Negative Declaration in accordance with Title 14 of the California Code of Regulations, entitled *Guidelines for the Implementation of the California Environmental Quality Act.*

3. The Plant was regulated under the *Conditional Waiver of Waste Discharge Requirements for Small Food Processors and Wineries* (Conditional Waiver), Order No. R5-2009-0097. In August 2011, SunnyGem, LLC, and Sandridge Partners, LP, submitted a Report of Waste Discharge (RWD) to expand operations to produce juice concentrate for pomegranates and other fruits. The expanded discharge will exceed the discharge limit of 100,000 gallons per year specified in the Conditional Waiver and, therefore, individual waste discharge requirements are necessary. The fruit juicing operation with proposed waste discharge to land requires issuance of Waste Discharge Requirements (WDRs) by the Central Valley Water Board and compliance with the CEQA.

4. Copies of the Initial Study and Mitigated Negative Declaration were transmitted to or made available to all agencies and persons known to be interested in these matters.

5. The Central Valley Water Board received comments regarding the Initial Study from the Department of Fish and Game. These comments have been considered and addressed by minor modifications to the project description in the Initial Study.

6. The Central Valley Water Board considered all testimony and evidence at a hearing held on 4 October 2012 in Rancho Cordova, California and good cause was found to approve the Initial Study and adopt a Mitigated Negative Declaration.

7. Central Valley Water Board staff drafted tentative Waste Discharge Requirements that incorporate the various mitigation measures described in the Initial Study as part of the project. The proposed WDRs will contain discharge prohibitions, effluent and groundwater limitations, and will be developed to protect the beneficial uses of receiving water and prevent conditions of nuisance.

8. Along with the WDRs, the Board will issue a Monitoring and Reporting Program that will ensure that the project will not create significant effects to the environment and that all of the mitigation measures incorporated into the WDRs will be implemented. This Monitoring and Reporting Program will therefore satisfy the requirements of Public Resources Code section 21081.6(a)(1).

THEREFORE BE IT RESOLVED, pursuant to Section 21080, et seq. of the California Public Resources Code, the Central Valley Water Board, after considering the entire record, including written and oral testimony at the hearing:

1. Approves the Initial Study and adopts the Mitigated Negative Declaration for the adoption of Waste Discharge Requirements (WDRs) for the SunnyGem, LLC, Sandridge Partners, LP, and McCarthy Family Farms, Inc., discharge of fruit juice processing wastewater from the Spicer City Juice Processing Plant.

2. Finds the record before the Central Valley Water Board contains no substantial evidence that a fair argument has been made that the project may have a significant effect on the environment.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region on 4 October 2012.

Original signed by

PAMELA C. CREEDON, Executive Officer

Resolution Attachments:
Initial Study and Mitigated Negative Declaration

SUNNYGEM, LLC
SANDRIDGE PARTNERS, LP
MCCARTHY FAMILY FARMS, INC.
SPICER CITY JUICE PROCESSING PLANT EXPANSION PROJECT

CEQA INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

15 August 2012
(original signed 6 July 2012)

Prepared and Edited by:

CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD
CENTRAL VALLEY REGION
1685 E Street
Fresno, California 93706
(559) 445-5116

This document has been edited to clarify the fact that the project is not allowing new construction, which addresses a comment from the California Department of Fish and Game. No other modifications were made to this document, and no new potentially significant impacts have been identified.

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MITIGATED NEGATIVE DECLARATION

Project Title. Spicer City Juice Processing Plant Expansion Project

Project Location. The Spicer City Juice Processing Plant (Plant) is at 23145 Lerdo Highway between Buttonwillow and Lost Hills in Kern County. The Plant and wastewater discharge areas are adjacent to Main Drain.

Summary Description of Project. The Plant seasonally produces fruit juice concentrate from pomegranates. The proposed expansion would allow the Plant to process juice from other fruits and operate most of the year, increasing wastewater flows from under 0.1 million gallons per year to as much as 6.7 million gallons per year. The associated wastewater discharge would be to unlined ponds prior to 2,200 acres of cropped application area (Reuse Area).

Mitigation Measures. The project as proposed would potentially have adverse environmental impacts (see Initial Study Checklist Item VIII a)). The Waste Discharge Requirements would implement the following measures to mitigate the potential impacts:

1. A limit on the monthly average wastewater flow to no more than 38,500 gallons per day and the maximum daily flow to no more than 500,000 gallons per day.

2. The concentration of dissolved oxygen in the wastewater ponds must not fall below 1.0 mg/L. Pond freeboard of at least 2 feet must be maintained, plus sufficient additional freeboard in October to store wastewater in addition to wet season rainfall.

3. Wastewater application to the Reuse Area must be consistent with agronomic rates and discharge to any portion of the Reuse Area where soil is saturated will be prohibited.

4. Solids produced at the Plant must be properly managed and disposed of.

5. Within 180 days of adoption of the Waste Discharge Requirements, the project proponent must have prepared and begun implementation of a salinity source control plan.

Findings. It is hereby determined that, based on information contained in the attached Initial Study, the project would not have a significant adverse effect on the environment. The mitigation measures above are necessary to avoid or reduce to a less-than-significant level the project's potential significant effects on the environment. These mitigation measures are hereby incorporated and fully made part of this Draft Mitigated Negative Declaration. The project proponent has hereby agreed to incorporate as part of the project and implement each of the identified mitigation measures, which would be adopted as part of the proposed tentative Waste Discharge Requirements.

PROJECT SUMMARY

1. Project title:
   Spicer City Juice Processing Plant Expansion Project

2. Lead agency name and address:
   Regional Water Quality Control Board, Central Valley Region
   1685 E Street
   Fresno, California 93706
   (559) 445-5116
   FAX: (559) 445-5910

3. Contact person and phone number:
   Mr. Steve Popenoe, (559) 444-2418

4. Project location:
   The Spicer City Juice Processing Plant (Plant) is at 23145 Lerdo Highway between Buttonwillow and Lost Hills in Kern County. The 45-acre Plant property is the quarter-mile-wide area bounded by Main Drain Road (adjacent to Main Drain) to the north and east and Lerdo Highway to the south. The discharge areas (Reuse Areas) span 10 parcels for a total of about 2,200 acres in Sections 3, 4, 5, 8, 9, 15, 16, and 21 T.28S. R.22E., M.D.B.&M.

5. Project sponsor's name and address:

SunnyGem, LLC	Sandridge Partners, LP	McCarthy Family Farms, Inc.
500 North F Street	920 West Fremont Avenue	P.O. Box 80727
Wasco, CA 93280	Sunnyvale, CA 94087	Bakersfield, CA 93308

6. General plan designation:
   Intensive Agriculture

7. Zoning:
   Exclusive Agriculture (A), minimum 20 acres

8. Description of project:
   The Plant seasonally produces fruit juice concentrate from pomegranates. Process wastewater at the Plant consists of evaporator condensate, plant cleaning wash water, non-contact cooling water, and boiler blowdown. Discharge from the Plant has been regulated by a conditional general waiver for small food processing facilities, but the proposed expansion makes it too large to be covered. The proposed expansion would allow the Plant to process juice from other fruits and operate most of the year, increasing wastewater flows from under 0.1 million gallons per year to as much as 6.7 million gallons per year. The associated wastewater discharge would be to unlined ponds prior to reuse for irrigation of about 2,200 acres of crops.

9. Surrounding land uses and setting:
   Surrounding land is used for farming. Crops include pomegranate, alfalfa, and cotton. The properties are adjacent to agricultural irrigation and drainage canals, including West Side Canal, East Side Canal, and Main Drain.

10. Other public agencies whose approval is required:
    None required. The Central Valley Regional Water Quality Control Board will act as the lead agency as it is preparing Waste Discharge Requirements to regulate the discharge of wastewater to land.

PROJECT DESCRIPTION

SunnyGem, LLC (SunnyGem) and Sandridge Partners, LP (Sandridge) jointly own and operate the Spicer City Juice Processing Plant (Plant) at 23145 Lerdo Highway between Buttonwillow and Lost Hills in Kern County. The Plant produces fruit juice and discharges process wastewater to land. McCarthy Family Farms, Inc., (McCarthy Farms) owns some of the land proposed for wastewater application.

The 45-acre Plant property (APN 086-080-03) is the quarter-mile-wide area bounded by Main Drain Road (adjacent to Main Drain) to the north and east and Lerdo Highway to the south. The discharge areas (Reuse Areas) span 10 parcels (see Figure 1 for parcel numbers) for a total of about 2,200 acres in Sections 3, 4, 5, 8, 9, 15, 16, and 21 T.28S. R.22E., M.D.B.&M. The Reuse Area is bounded by Delfino Road to the north and just past Vlansik Road to the south. North of Cord Road, the Reuse Area is bounded by Main Drain to the west and the East Side Canal to the east. South of Cord Road, the Reuse Area is bounded by the West Side Canal to the west and Main Drain Road to the east.

BACKGROUND

Since December 2009, the Plant is currently regulated under the *Conditional Waiver of Waste Discharge Requirements for Small Food Processors and Wineries* (Conditional Waiver), Order No. R5-2009-0097. In August 2011, the project proponent submitted a Report of Waste Discharge (RWD) to expand operations to produce juice concentrate from other fruits, in addition to pomegranate juice. The expanded discharge exceeds the discharge limit of 100,000 gallons per year specified in the Conditional Waiver.

The proposed expansion of the discharge of wastewater to land requires Waste Discharge Requirements (WDRs) pursuant to California Water Code Section 13263. The Central Valley Regional Water Quality Control Board (Central Valley Water Board) action to adopt WDRs regulating this proposed discharge requires a California Environmental Quality Act (CEQA) determination. The Central Valley Water Board will act as the lead agency in certification of the final environmental document prior to its adoption of WDRs.

Pursuant to the CEQA requirement for the lead agency to informally consult with responsible agencies (Pub. Res. Code, § 15063, sudb. (g).), staff contacted the Department of Fish and Game and the Kern County Environmental Health Services Department prior to preparation of this Initial Study. Neither agency anticipates significant adverse environmental impacts to result from the project and did not recommend preparation of an Environmental Impact Report.

PROJECT DETAILS

Process wastewater at the Plant consists of evaporator condensate, plant cleaning wash water, non-contact cooling water, and boiler blowdown. According to the RWD, excellent quality evaporator condensate would make up 85 percent of the process wastewater. Though all modifications to the Plant area are complete, including construction of new evaporator facilities

and unlined ponds, the Plant as described is not yet in operation. The RWD presents analytical data for the evaporator condensate and plant cleaning operations at a similar facility and estimates the quality of the combined waste stream. The discharge is generally expected to be better quality than the water supply for the Plant and better than receiving water quality, which nearby groundwater wells and tile drainage samples show is very poor quality.

According to the RWD, the average daily flow would be about 38,500 gallons per day (gpd) and the maximum annual flow at full capacity would be about 6.7 million gallons (based on future projections for year-round operation). The RWD proposes a maximum daily discharge of 500,000 gallons to the Reuse Area based on a 3.5 week accumulation of wastewater to accommodate reduced winter irrigation requirements.

Wastewater generated at the Plant would be collected and run through parabolic filter screens to remove solids and then discharged to two unlined settling/storage ponds. According to the RWD, the ponds have a combined storage capacity of approximately 3.8 million gallons with two feet of freeboard. Solids including skins, pulp, and other organic waste would be collected and transported off-site for use as cattle feed.

The wastewater in the ponds would be blended with irrigation water and used to irrigate crops on approximately 2,200 acres of farmland. Sandridge Partners, LP owns about 1,140 acres of the Reuse Area and McCarthy Farms owns about 710 acres. The current discharge is to 280 acres of almonds.

The blended water would be applied to the fields via drip, sprinkler, or flood irrigation depending on the type of crops being grown. Crops grown in the Reuse Area include field crops such as grains and alfalfa as well as pistachio and pomegranate trees. The project proponents plan to replace the majority of the field crops with pistachio and pomegranate trees. According to the water balance provided in the RWD, the process wastewater would supply less than 10 percent of crop water requirements.

PURPOSE

Section 15063 of the CEQA Guidelines provides for preparation of Initial Studies. The purpose of an Initial Study is to:

1. Provide the lead agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration.

2. Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling a project to qualify for a Negative Declaration.

3. Assist in the preparation of an EIR, if one is required.

4. Facilitate environmental assessment early in the design of a project.

5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.

6. Eliminate unnecessary EIRs.

7. Determine whether a previously prepared EIR could be used with the project.

SOURCES

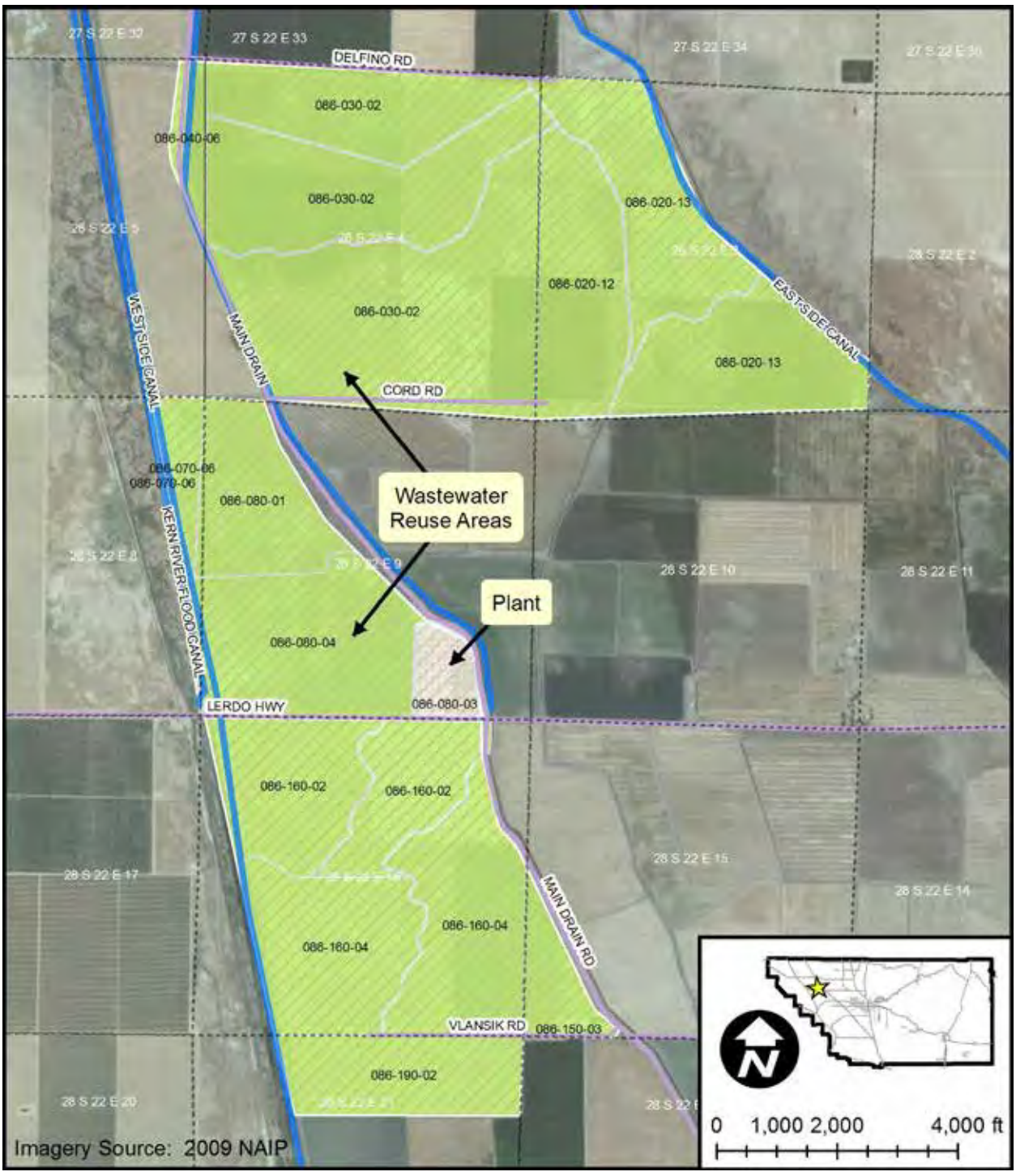
The primary source of information for this Initial Study is the Report of Waste Discharge and monitoring data collected from operation of the existing Plant and similar facilities. The monitoring reports and Report of Waste Discharge are part of public record and are available for review at the Central Valley Water Board's offices (address below).

California Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, California 93706

Other sources of information include informal consultation with other agencies and published data. Staff contacted the California Department of Fish and Game (Annee Ferranti, personal communication, 18 May 2012), Kern County Environmental Health Services Department (Amy Rutledge, personal communication, 10 May 2012) and the Kern County Roads Department (Pat Ebel, personal communication, 25 May 2012).

The Initial Study also refers to information from public earthquake hazard maps (United States. Geological Survey. *2008 United States National Seismic Hazard Maps*. January 2010. Web. 16 May 2012.), soil maps (United States. Dept. of Agriculture. Natural Resources Conservation Service. *Web Soil Survey: Kern County, Northwestern Part*. Web. 30 May 2012.), and a database of historic places (United States. National Park Service. *National Register of Historic Places*. Web. 16 May 2012.).

Figure 1. Project Location



INITIAL STUDY CHECKLIST FORM

The following discussion provides an evaluation of the environmental factors listed in the environmental checklist form (Appendix A of the CEQA Guidelines), which may be potentially affected by the project. A brief explanation is provided for each factor in the order presented in the environmental checklist form.

I. AESTHETICS. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
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 which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

I. a - d) The land use associated with the project is visually consistent with previous use of the site and surrounding land uses. The project would not affect a scenic vista, damage scenic resources, degrade existing visual character or quality, or create a new source of light or glare.

II. AGRICULTURE RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

II. a - c) The site would not be converted to a non-agricultural use. The proposed Reuse Areas are currently developed agricultural land and would be operated as such.

Crop management is a critical factor in operating and maintaining a wastewater reuse system. Healthy and productive crops are required to remove nutrients as part of the treatment of applied wastewater. Much of the crop management is accomplished in the same way for water reuse sites as conventional agricultural operations. Discharging wastewater to the farmland provides a portion of the crop needs for water and nutrients. Supplemental water and fertilizers would be added as required to maintain a healthy crop.

III. AIR QUALITY.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

III. a - e) As part of the permitting process for a boiler at the Plant, the San Joaquin Valley Air Pollution Control District (Air District) indicated that it has discretionary approval power over the project via its Permits Rule (Rule 2010) and New Source Review Rule (Rule 2201). However, Air District engineering staff found that compliance with District rules and permit conditions would reduce Stationary Source emissions from the project to levels below the District's significance thresholds for criteria pollutants. The Air District has determined that no additional CEQA findings are required.

III. d - e) The project should not expose sensitive receptors to substantial pollutant concentrations or create objectionable odors that affect a substantial number of people. There are no known sensitive receptors within the vicinity of the proposed property. New WDRs, to be issued by the Central Valley Water Board, would require that any objectionable odors originating at the land application site not be perceivable beyond the limits of the property.

Potential sources of nuisance odors include anaerobic conditions in the ponds or the distribution pipeline, stagnant puddles or pools of wastewater allowed to

stand on the land application field (especially during hot weather), or saturation of the soil with wastewater due to hydraulic overloading and/or insufficient drying times between applications. Once mixed with supplemental irrigation water, the wastewater to be discharged to land would be low in biochemical oxygen demand, which reduces the risk of the water in the ponds or in the Reuse Area becoming anaerobic and emitting odors. The WDRs would require onsite management measures to minimize the potential for generation of nuisance odors.

IV. BIOLOGICAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

IV. a – f) Staff contacted the California Department of Fish and Game for informal consultation ((Pub. Res. Code, § 15063, sudb. (g).). Fish and Game staff did not foresee any significant issues with the project. According to the project

proponent, the majority of existing field crops in Reuse Areas will eventually be replaced with pistachio and pomegranate trees, which Fish and Game staff indicated may have potential limited effects on the foraging area of Swainson's Hawk, a protected species.

In general, the project would not impact any sensitive or special status biological species, riparian habitats, sensitive natural communities, federally protected wetlands, or interfere with the movement of native or migratory wildlife species. In addition, the project would not conflict with any local policies or ordinances protecting biological resources or adopted conservation plans. No significant wildlife impacts are expected. The project property is currently already used for the purpose proposed in the project, with the difference of irrigation water being supplemented by dilute juice processing wastewater.

V. CULTURAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

V. a-d) The project would not impact cultural resources. There are no resources within the project area, which are included in the National Register Historical Places to be presumed to be historically or culturally significant. Additionally, the project is not within an area of geological or historical resource.

The project property is currently already used for the purposes proposed in the project with the difference of wastewater discharge to land as irrigation water. The soils have been disturbed due to previous agricultural production. The additional activities associated with the proposed project would not have additional impacts affecting cultural resources.

VI. GEOLOGY AND SOILS.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial	☐	☐	☐	☒

adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

VI. a) The project site is approximately 18 miles from the nearest Alquist-Priolo Special Studies Zone designated by the California Department of Conservation, Division of Mines and Geology. Therefore, it is not susceptible to rupture of a known earthquake fault. Because the project site is not located near an active fault, there is a low potential for the project site to experience significant seismic activity. According to the 2008 United States Geological Survey (USGS) National Seismic Hazard Map (Revised 2010) there is a 10 percent probability in 50 years that horizontal peak ground accelerations (PGA) will exceed about 0.25g (25 percent of the acceleration due to gravity) in the vicinity of the project. The project site overlies shallow groundwater, but soils are primarily clay. The potential for liquefaction is low and not expected to increase as a result of the project.

It is unlikely that a failure of the wastewater ponds due to seismic ground shaking would result in a discharge of wastewater because the ponds are constructed entirely below grade.

VI. b - c) The project is located on flat land and is not susceptible to landslide hazards. Therefore, implementation of the proposed project would not expose persons or structures to landslide-related risks. Agricultural activities would introduce organic material and would not result in soil erosion or loss of topsoil.

VI. d) The USGS soil survey identifies soils at the Plant and Reuse Areas as either Lokern clay or Buttonwillow clay, which are likely expansive soils as defined in the Uniform Building Code. However, the magnitude of soil expansion is anticipated to have less than significant impact.

VI. e) The proposed project has an operating septic system with leach field. Kern County is overseeing the septic system to ensure it complies with County ordinance, which implements the Water Quality Control Plan for the Tulare Lake Basin.

VII. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with	☐	☐	☐	☒

an adopted emergency response plan or emergency evacuation plan?

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? ☐ ☐ ☐ ☒

VII. a - h) Fruit juice processing requires regular equipment cleaning. Cleaning chemicals in use at the Plant include relatively small volumes of hydrogen peroxide, potassium hydroxide, sodium hydroxide, and hypochlorous acid. Hazards associated with these chemicals are minimal in the volumes and concentrations used at the Plant. The project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The project does not create hazardous wastes, nor does it have any other characteristics that could create hazards to the public or the environment.

VIII. HYDROLOGY AND WATER QUALITY.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒

f)	Otherwise substantially degrade water quality?	☐	☐	☐	X
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?	☐	☐	☐	X
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	X
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?	☐	☐	☐	X
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	X

VIII. a) The discharge is not expected to cause groundwater degradation, since naturally-occurring groundwater quality is poor, and:

- For organics, with an estimated 5-day biochemical oxygen demand (BOD) of 900 mg/L for the combined waste stream, the cycle average BOD loading rate at 0.5 mgd would be about 2 lb/acre/day. The RWD proposes to implement Best Management Practices (BMPs) including; sufficient resting periods between applications (approximately three weeks), ceasing discharge if the soils become saturated, and discing or raking between applications in order to minimize the potential for reducing conditions to develop. With the low BOD loading rate and the implementation of the BMPs described, the discharge should not cause groundwater degradation due to organic overloading.

- For nitrogen, historical groundwater data does not show nitrate issues in groundwater beneath the site (Kern County Water Agency maps, 1975/1979). A sample collected from an on-site tile drain in 2010 had a nitrate (as nitrogen) concentration of 9.7 mg/L. The Maximum Contaminant Level is 10 mg/L. The limited data for the effluent indicates that the average total nitrogen concentration of the combined discharge would be about 12 mg/L. Given the potential for nitrogen losses within the storage/settling ponds and an expected annual nitrogen loading to the Reuse Area of less than 1 lb/acre/year, the nitrogen concentration of the discharge is not expected to cause degradation of groundwater for nitrates.

- For salinity, historical groundwater data presented in the RWD shows that the EC of unconfined groundwater in the vicinity of the site ranged from 1,000 to 3,000 umhos/cm (Kern County Water Agency Maps, 1975/1979). Analytical results for recent samples of the shallow groundwater zone in the vicinity of the site show groundwater EC ranging from 2,700 to 10,000 umhos/cm (Kern County Water Agency, 2010). With an estimated EC of about 450 umhos/cm, the combined discharge of high quality condensate water and process wastewater would be of better quality than the

underlying groundwater and should not cause degradation of groundwater for salinity.

Since the discharge is expected to be of better quality than underlying groundwater, the tentative Waste Discharge Requirements would not require groundwater monitoring. The above findings depend on conservative estimates of wastewater quality based on sampling results from comparable facilities, since no site specific wastewater data is available. If sampling results indicate that the discharge poses a threat to water quality, the Executive Officer may require groundwater monitoring in the future.

Mitigation measures to be incorporated into the project to further limit potential water quality impacts include: effluent flow limits, pond operation and maintenance requirements, Reuse Area specifications, solids handling requirements, groundwater quality limits, and a provision requiring preparation and implementation of a salinity source control plan.

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VIII. b) An onsite well supplies water to the Plant. However, nearly all the water needs for processing would be met by excellent quality condensate water evaporated from the fruit juice. Based on the reported makeup of the various wastewater streams, the Plant would use less than 1 acre-foot of groundwater per year.

Based on the crop demand projected in the RWD, farmers would need to apply more than 4,000 acre-ft of water to meet crop demands. The project does not appear to include a significant increase in groundwater pumping beyond current practices. The project would not interfere with groundwater recharge.

VIII. c - e) Some amount of regrading would occur and furrows may be constructed to facilitate irrigation. The quantity of water applied would be based on agronomic demand. No offsite discharge of surface runoff would occur. There would also not be any increase in erosion or siltation onsite or offsite. The existing drainage control structures would be sufficient to contain and control drainage.

Based on precipitation records for nearby Buttonwillow, the 100-year-return-period wet year rainfall is less than 14 inches, and average rainfall is 5.6 inches. SunnyGem would maintain sufficient freeboard in the wastewater ponds to store proposed wastewater flows from the processing Plant in addition to rainfall.

VIII. f - g) The project would not degrade water quality beyond what is described above. The project does not involve placement of housing.

VIII. h) The project would not place within a 100-year flood hazard area structures which would impede or redirect flood flows. Figure 2 below is a map depicting the Federal Emergency Management Agency (FEMA) flood hazard areas in the vicinity of the project area. A portion (about 40 acres) of the Reuse Area lies within a 100-year flood hazard area. To avoid discharge of contaminated runoff from the Reuse Area, the Waste Discharge Requirements would prohibit the project proponent from discharging to any portion of the Reuse Area where soil is saturated.

The impact of the project from placement of structures in a 100-year flood hazard area that would impede or redirect flood flows is expected to be insignificant.

VIII. i - j) The project does not involve structures built within a 100-year flood hazard area. The project is not in an area subject to inundation by seiche, tsunami, or mudflow.

Figure 2. FEMA Flood Zones

Source: County of Kern Public Online Mapping System (May 2012)

IX. LAND USE AND PLANNING.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

IX. a - c) The project would not divide an established community, conflict with land use plans, or conflict with a habitat conservation plan or natural community conservation plan.

X. MINERAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

X. a, b) The project would not involve the loss of a mineral resource.

XI. NOISE.

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

XI. a – d) There would be no substantial permanent noise issues associated with operation of the proposed project. Noise associated with additional truck trips and farming equipment used to harvest crops would produce a temporary increase in ambient noise levels. Impacts associated with agricultural operations are less-than-significant due to the lack of sensitive receptors in the vicinity of the project site.

XI. e, f) The project is not within an airport land use plan or in the vicinity of a private airstrip.

XII. POPULATION AND HOUSING.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by processing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

XII. a - c) The project would not induce population growth, displace existing housing, or displace substantial numbers of people.

XIII. PUBLIC SERVICES.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

XIII. a) The project would not result in the need for new or physically altered governmental facilities.

XIV. RECREATION.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the Plant would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

XIV. a, b) The project would not affect the use of existing recreational facilities, does not include recreational facilities, nor does it require the construction or expansion of recreational facilities.

XV. TRANSPORTATION/TRAFFIC.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or	☐	☐	☒	☐

congestion at intersections)?

b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e)	Result in inadequate emergency access?	☐	☐	☐	☒
f)	Result in inadequate parking capacity?	☐	☐	☐	☒
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

XV. b) The project may add up to 18 heavy duty diesel truck round trips on the busiest day. The Kern County Roads Department requires a site-specific traffic analysis for any project that will add more than 25 additional truck trips per day. The increase in traffic does not appear to represent a significant adverse impact. Kern County staff did not express concern over the issue during informal consultation.

XV. b - g) The project would not generate new or changed air traffic patterns. The project would also not result in inadequate emergency access or parking capacity, or conflict with adopted policies, plans, or programs supporting alternative transportation.

The proposed area would be used for agricultural purposes, requiring the use of farm equipment for planting and harvesting various annual crops.

XVI. UTILITIES AND SERVICE SYSTEMS.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☒	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water	☐	☐	☐	☒

drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

XVI. a) The Central Valley Water Board would issue WDRs to regulate the discharge of wastewater on the project site. A monitoring program would be adopted with the revised WDRs requiring the performance of the Reuse Area to be monitored and to assure that compliance limits would be met. If necessary, corrective action measures can be implemented by the project proponent. With the mitigation measures included to address potential impacts from the Water Quality section, no significant impacts are anticipated.

XVI. b) The project would not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities.

XVI. c,d) The project would have no impact on storm drainage or water supply facilities.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	**X**

XVII. a) The project has very limited potential to adversely affect groundwater quality. With the mitigation measures included to address potential impacts from the Water Quality section, no significant impacts are anticipated.

XVII. b, c) The project does not significantly contribute to cumulative impacts, nor would substantial adverse effects occur on human beings.

MITIGATION MEASURES

The Waste Discharge Requirements would implement the following mitigation measures (addresses *Checklist Item VIII a)*):

1) A limit on the monthly average wastewater flow to no more than 38,500 gallons per day and the maximum daily flow to no more than 500,000 gallons per day.

2) The concentration of dissolved oxygen in the wastewater ponds must not fall below 1.0 mg/L. Pond freeboard of at least 2 feet must be maintained, plus sufficient additional freeboard in October to store wastewater in addition to wet season rainfall.

3) Wastewater application to the Reuse Area must be consistent with agronomic rates and discharge to any portion of the Reuse Area where soil is saturated will be prohibited.

4) Solids produced at the Plant must be properly managed and disposed of.

5) Within 180 days of adoption of the Waste Discharge Requirements, the project proponent must have prepared and begun implementation of a salinity source control plan.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project:

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

DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

/s/ *(Original signed 6 July* 2012)
Signature Date

Lonnie Wass, Supervising Water Resource Control Engineer
Printed name