

**HATHAWAY, LLC**

**CEQA INITIAL STUDY  
FOR  
CONDITIONAL WAIVER OF  
WASTE DISCHARGE REQUIREMENTS FOR  
REUSE OF OIL FIELD PRODUCTION WASTEWATER FOR IRRIGATION**

9 September 2011

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## INTRODUCTION

The purpose of the Initial Study is to provide the necessary California Environmental Quality Act (CEQA) documentation to support Hathaway LLCs' proposal to reuse good quality oil field production wastewater when blended for irrigation. The Central Valley Regional Water Quality Control Board (Central Valley Water Board) will act as the lead agency in adoption of this Initial Study and Conditional Waiver of Waste Discharge Requirements (WDRs).

Hathaway LLC (Hathaway) purchased the Davies Realty Co. lease (Lease) in the Kern Front Oil Field (see Figure 1), and proposes to reuse the produced wastewater for irrigation purposes. Hathaway proposes piping the wastewater to the Concordia Ranch (Ranch), approximately  $\frac{3}{4}$  of a mile southwest of the Lease, where approximately 120 acres of citrus are being farmed on the Ranch. The citrus is currently irrigated by water from a groundwater well located on the Ranch. The Ranch is within the boundaries of the Poso Creek Oil Field (see Figure 1). Wastewater from the Lease will be transported to the Ranch via an above ground pipeline (2 inches in diameter). The pipeline will extend approximately three quarters of a mile from the Lease to the Ranch irrigation reservoir (see Figure 1).

John Moody, the Ranch owner, indicates that during the months of February through November, approximately 3.5 acre-feet of water per day are applied to irrigate approximately 120 acres of citrus. Currently, an irrigation reservoir (150 feet x 190 feet x 10 feet deep) on the Ranch holds groundwater which is subsequently pumped to the irrigation system. Hathaway and Moody propose to blend the wastewater (7%) and groundwater (93%) in the reservoir. Initially the daily blend would be 0.13 acre-feet of wastewater with 3.37 acre-feet of groundwater. Hathaway may eventually increase the daily volume of wastewater to 0.26 acre-feet which would then be blended with 3.24 acre-feet of groundwater. Use of the reclaimed wastewater may reduce the amount of groundwater currently used for irrigation on the Ranch by as much as approximately 70 acre-feet-per-year. During months when the irrigation demand is less, or not needed, Hathaway will utilize a Class II injection well permitted by the California Division of Oil, Gas and Geothermal Resources on the Lease for wastewater disposal. Hathaway is currently using the Lease injection well to dispose of wastewater.

### Groundwater

The Kern River Formation is the principal groundwater aquifer in both the Kern Front and Poso Creek Oil Fields. Groundwater is believed to be largely unconfined, but there are areas where partial and/or local confinement occurs. Generally, the groundwater is a sodium bicarbonate type, and from a mineral quality consideration, the groundwater is desirable for domestic and most industrial uses. Wastewater from the Lease and groundwater from the Ranch irrigation well are both produced from the Kern River Formation.

Wastewater generated from the Lease is similar in character but of slightly lower quality than the water produced from the Ranch groundwater well. Oil wells on the Lease

produce from depths of approximately 1,600 feet within the Kern River Formation. The Ranch groundwater well is approximately 1,300 feet deep and screened in the Kern River Formation. Water quality information for Lease wastewater, Ranch well water, and the blend that is proposed for irrigation is shown in Table 1 below. Historical groundwater information (Index Oil Company Domestic Well 28S/27E-4M, Sampled 7/31/1956 and analyzed by the United States Geological Survey) for a domestic well near the Ranch is also included and indicates similar water quality.

**Table 1**  
**Wastewater, Groundwater & Blended Water with**  
**Municipal and Agricultural Water Quality Objectives**  
 (Concentrations in milligrams per liter, except where noted)

Constituent	Lease Waste Water Quality	Ranch Well Water Quality	Blended <sup>3</sup> Irrigation Water Quality	Historical <sup>4</sup> Groundwater Quality
Boron	0.47	0.1	0.13	0.1
Chloride	72	32	35	16
EC <sup>1</sup>	525	320	335	326
Sodium	147	52	59	41
TDS	330	190	200	212
Oil & Grease	12		0.9	
BTEX <sup>2</sup>	ND <sup>5</sup>			

<sup>1</sup> Measured in micromhos per centimeter

<sup>2</sup> Micrograms per liter

<sup>3</sup> Weighted average based on maximum wastewater blend (7% wastewater – 93% well water)

<sup>4</sup> 1956 analysis of groundwater from well 28S/27E-4M

<sup>5</sup> Not detected above laboratory method detection limit

Unblended Lease wastewater contains somewhat higher concentrations of constituents than Ranch groundwater. However, Lease wastewater quality meets the Basin Plan numerical limitations for discharges to land over groundwater having existing and future probable beneficial uses. Therefore, although there may be some nominal degradation from the wastewater blended with irrigation water, it will not cause underlying groundwater to exceed Basin Plan water quality objectives nor impair future probable beneficial uses of underlying groundwater.

### Pollutants of Concern

The primary pollutants of concern are crude oil and salts. Lease wastewater contains crude oil and somewhat higher concentrations of sodium, chloride, and total dissolved solids than Ranch groundwater.

Crude oil is removed from the wastewater in above ground separation tanks and a secondary oil removal system. The secondary oil removal system consists of a box structure that contains excelsior. Wastewater flows through the excelsior box and residual oil is collected. The treated wastewater is practically free of crude oil. However, based on analytical results, the wastewater still contains an oil and grease concentration of 12 milligrams per liter after being filtered.

## Report of Waste Discharge

Hathaway submitted a Report of Waste Discharge requesting a Conditional Waiver of WDRs from the Central Valley Water Board to allow the use of wastewater to be blended with irrigation water on the Ranch.

### **Purpose**

This CEQA Initial Study addresses Hathaway's proposal to reuse oil field production wastewater with irrigation water. The project area and parcel numbers are shown on Figure 1.

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

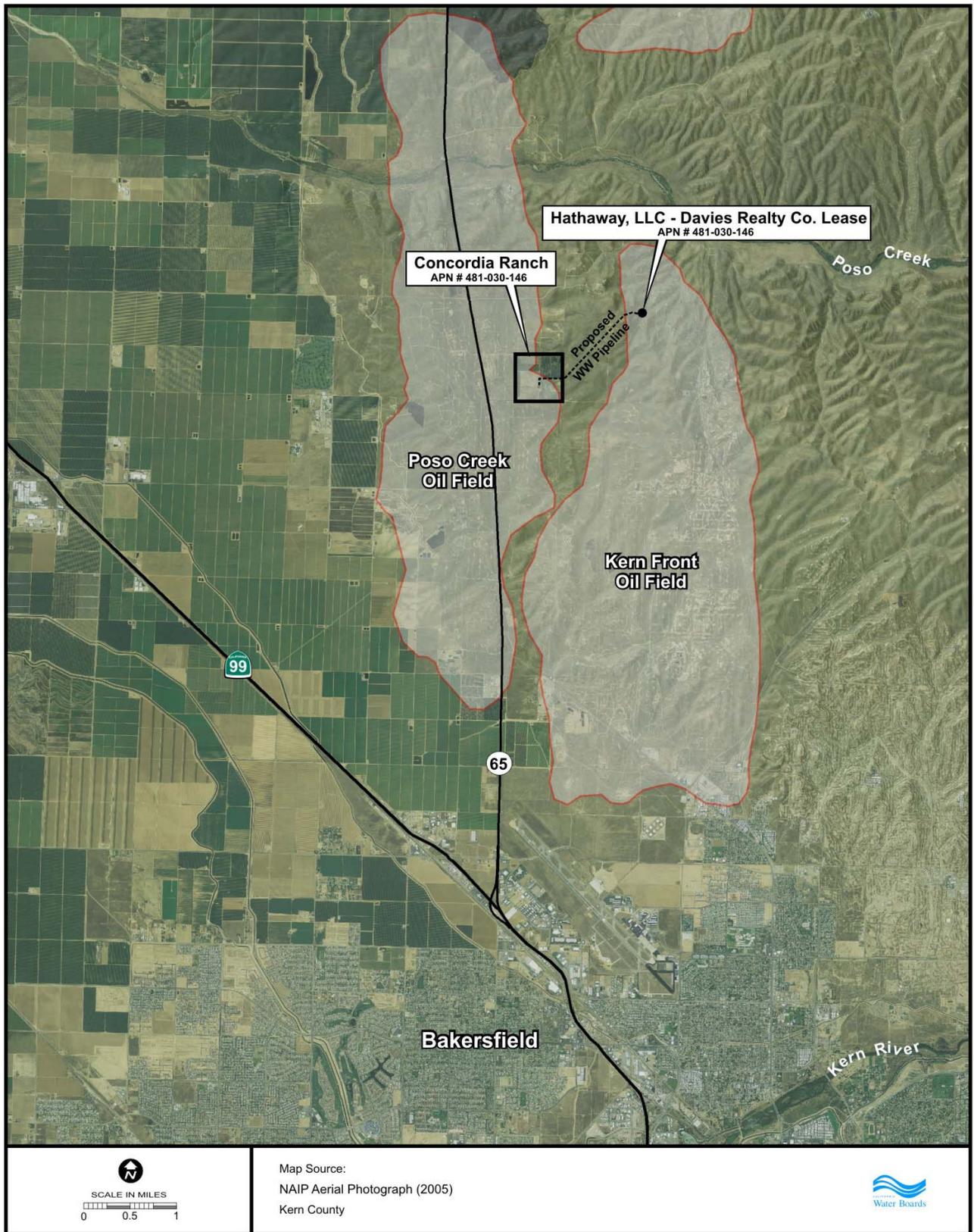
1. Provide the lead agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration.
2. Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling a project to 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 supplemental analytical data for Ranch groundwater and Lease wastewater provided by Hathaway. Additional information was obtained by Central Valley Water Board staff from Department of Water Resources Inter-Departmental Communication Reports - Geologic and Waste Disposal Investigations for Poso Creek and Kern Front Oil Fields. Geographic Information System (GIS) data for Kern County was also utilized as a source of information for this initial study. The Report of Waste Discharge and the supplemental analytical data are part of public record and are available for review at the Central Valley Water Board's Fresno office.

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

Figure 1. Project Location



## DISCUSSION OF INITIAL STUDY CHECKLIST

The following discussion provides an evaluation of the environmental factors listed in the environmental checklist form below, 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.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS.</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*I. a, b, c, d)* The proposed project would not affect a scenic vista, damage scenic resources, or create a new source of light or glare. The project will be consistent with the nature of the surrounding area.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE RESOURCES.</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*II. a - c)* The land use description for the Ranch parcel (APN # 481-030-146) is listed as "Intensive Agriculture," and the Lease parcel (APN # 481-011-021) is listed as

“Mineral and Petroleum” in the Kern County General Plan. Land use for the proposed project does not conflict with existing zoning or agricultural use. The project would not convert Farmland to a non-agricultural use. The Ranch property is currently in agricultural production and is located in an area zoned for agricultural production.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*III. a - c)* The proposed project will not increase air emissions and would not conflict with the local air quality plan, violate any air quality standard, or result in a cumulatively considerable net increase of any criteria pollutant. Hathaway’s Lease operations are currently regulated by the Air Resources Board.

*III. d - e)* The proposed project will not increase air emissions and would 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 project.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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?                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

IV. a – f) The Ranch property is currently in agricultural production and is located in an area zoned for agricultural production. No wildlife impacts are expected as the land is already in agricultural use.

- | 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?    | <input type="checkbox"/>       | <input type="checkbox"/>                            | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | <input type="checkbox"/>       | <input type="checkbox"/>                            | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?              | <input type="checkbox"/>       | <input type="checkbox"/>                            | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries?                                 | <input type="checkbox"/>       | <input type="checkbox"/>                            | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

V. a-d) The proposed project will take place on properties that are already developed. The Ranch property is currently developed agricultural land with approximately 120 acres of established citrus crops. The Lease property is currently developed

for oil production with existing oil wells and a network of pipes that route the oil and water to above ground storage tanks. Both the Ranch and Lease properties are located in an area that is used primarily for oil production and would not impact cultural resources. The only new project infrastructure proposed for construction is an above ground pipeline (2" diameter) that would transport the wastewater from the Lease to the Ranch (approximately ¾ of a mile).

<b>VI. GEOLOGY AND SOILS.</b> Would the project:	Potentially Significant Impact	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:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>VI. a - d)</i> A portion of the Ranch property is located in an Alquist-Priolo Special Studies Zone designated by the California Department of Conservation, Division of Mines and Geology. Therefore, a portion of the Ranch property is susceptible to rupture of a known earthquake fault. The portion of the Ranch property that is located within the fault zone contains only established citrus trees that are well rooted in the soil, which minimizes the potential for human injury or death as a result of seismic activity, including strong seismic ground shaking. The only new			

structure proposed for construction on the Ranch is a pipeline to transport water from the Lease to the Ranch. The proposed pipeline will not be located in an Alquist-Priolo Special Studies Zone. The project is located on relatively flat land and is not susceptible to landslide hazards. Implementation of the proposed project would not expose persons or structures to landslide-related risks.

VI. e) The proposed project is anticipated to have no such impact.

**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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII. a - h) The proposed project does not use hazardous materials, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VIII. a & f) Unblended, the wastewater contains somewhat higher concentrations of constituents than groundwater. However, wastewater quality meets the Basin Plan numerical limitations for discharges to land over groundwater having existing or future probable beneficial uses. Therefore, although there may be some nominal degradation from the wastewater blended with irrigation water, it will not cause underlying groundwater to exceed Basin Plan water quality objectives nor impair existing or future probable beneficial uses of underlying groundwater.

VIII. b ) The proposed project would not deplete groundwater supplies. In fact, the proposed project may reduce the amount of groundwater pumped from the Ranch irrigation well by as much as approximately 70 acre feet per year.

VIII. c - e) The proposed project is anticipated to have no such impact.

VIII. g - j) The proposed project is not located within a 100-year flood hazard area.

<b>IX. LAND USE AND PLANNING.</b> Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

IX. b) The proposed project is consistent with the Kern County General Plan and Zoning Ordinance.

**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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

X. a, b) The proposed 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XI. a – d) There would be no substantial permanent noise issues associated with operation of the proposed project. Existing noises associated with agricultural operations on the Ranch and petroleum production on the Lease 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*XII. a - c)* The proposed 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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*XIII. a )* The proposed project would not result in the need for new or physically altered governmental facilities. No additional demand on, or impacts to, public utilities or services are expected.

**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 facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIV. a, b) The proposed 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.** Would the Project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XV. a - c, f, g) The proposed project would not generate new vehicle trips or change air traffic patterns. The proposed project would also not result in inadequate parking capacity or conflict with adopted policies, plans, or programs supporting alternative transportation.

XV. d, e) The proposed project is located in an area used primarily for petroleum production and is surrounded by fields and dirt roads with limited emergency access. Additional infrastructure for emergency access is not planned as part of the proposed project.

**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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVI. a - e) The proposed project will not utilize public service systems for supply, treatment, or disposal of water, and will not require construction of new storm water drainage facilities or expansion of existing facilities. Wastewater produced on the Lease is mechanically treated onsite with existing equipment to remove residual oil from the wastewater. A new pipeline (2" in diameter and 3/4 of a mile long) will need to be constructed to transport wastewater from the Lease to the Ranch irrigation reservoir. Construction of the above ground pipeline is not expected to cause significant environmental effects.

XVI. f, g) Oily waste material generated as a result of wastewater treatment processes on the Lease is currently disposed at a landfill. Waste generated from the proposed project is a straw/hay filter material coated with crude oil. The waste is stockpiled into a large roll-off bin container on the Lease and disposed of at a properly permitted facility. Waste generation and disposal complies with federal, state, and local statutes and regulations related to solid waste.

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE.**

	Potentially Significant Impact		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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*XVII. a)* The proposed project does have the potential to nominally degrade groundwater quality. However, wastewater quality meets Basin Plan numerical limitations for discharges to land over groundwater having existing beneficial uses. Therefore, although there may be some nominal degradation from the wastewater blended with irrigation water, it will not cause underlying groundwater to exceed Basin Plan water quality objectives nor impair beneficial uses of underlying groundwater.

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