



**San Joaquin Valley Unified
Air Pollution Control District**

**California Resources Elk Hills, LLC
Flare Project**

Project Numbers S-1150871 and S-1150872

Kern County

**Initial Study and Final
Mitigated Negative Declaration**

February 25, 2016

**SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT
GOVERNING BOARD 2016**

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SEYED SADREDIN



INITIAL STUDY AND FINAL MITIGATED NEGATIVE DECLARATION

California Resources Elk Hills, LLC Flare Project

Project Numbers: S-1150871 and S-1150872

February 25, 2016

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A. INTRODUCTION

California Resources Elk Hills, LLC (CREH) is a Title V oil production company with facilities located in Kern County, California. The San Joaquin Valley Unified Air Pollution Control District (District) has received Authority to Construct (ATC) application packages (ATCs S-1150871 and S-1150872) from CREH proposing to authorize the use of six (6) existing emergency flares, already permitted for emergency use, for non-emergency operation to combust excess vent gas (Project) produced from the ancillary CREH gas processing plant. In addition, the five draft ATCs under project S-1150871 specifically limit the flares use through an Specific Limiting Condition (SLC) that will limit the combined volume of vent-gas they can combust to 30,938 MMBtu/day and 185,625 MMBtu/year.

The gas produced by the gas processing plant would normally flow through the gas plant. However, when the gas plant equipment is shutdown the gas is diverted to the flares to be combusted until the plant is fixed or maintenance is complete. The request for the proposed modification to the permit is to streamline CREH's compliance process with their District issued permits by incorporating the shutdown of the gas plants due to scheduled maintenance and the use of the flares for non-emergency, and as such eliminating the requirement for CREH to go through District variance process for an approval of the gas plant equipment shutdown. When the gas plant is shutdown the gas that would normally flow through the gas plant is diverted to the flares to be combusted. A variance is a request to allow a facility to operate out of compliance in order to perform maintenance on a facility.

The proposed Project is located within existing oilfield boundaries of CREH's Light Oil Western Stationary Source at the Elk Hills Oil Field and is consistent with current oil and gas operations in Kern County, California.

B. PURPOSE AND AUTHORITY

The District has discretionary approval power over the Project via District Rule 2010 (Permits Required) and District Rule 2201 (New and Modified Stationary Source Review Rule). There is no other agency with broader statutory authority over the project. As such, the District is the public agency having principal responsibility for approving the Project and serves as Lead Agency (CCR §15367).

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The ERG was prepared to comply with this requirement and is an internal document used to comply with CEQA.



The basic purposes of CEQA are to:

- a) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- b) Identify the ways that environmental damage can be avoided or significantly reduced.
- c) Prevent significant, avoidable damage to the environment by requiring changes in projects through use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- d) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Under CEQA the Lead Agency is required to:

- Conduct preliminary reviews to determine if applications are subject to CEQA [CCR §15060].
- Conduct review to determine if projects are exempt from CEQA [CCR §15061].
- Prepare Initial Studies for projects that may have adverse environmental impacts [CCR §15063].
- Determine the significance of the environmental effects caused by the project [CCR §15064].
- Prepare Negative Declarations or Mitigated Negative Declarations for projects with no significant environmental impacts [CCR §15070].
- Prepare, or contract to prepare, EIRs for projects with significant environmental impacts [CCR §15081].
- Adopt reporting or monitoring programs for the changes made to projects or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment [PRC §21081.6 & CCR §15097].
- Comply with CEQA noticing and filing requirements.

C. PROJECT BACKGROUND INFORMATION

Project Description

The District has received Authority to Construct (ATC) application packages (ATC projects S-1150871 and S-1150872) from CREH proposing to authorize the use of six (6) existing flares to combust excess vent gas for non-emergency operation (Project). Those flares are already permitted for emergency use and are located at the Elk Hills Oil Field (Section 35, Township 30S, Range 23E, APN# 158-090-17) in Kern County, California. In addition, ATC project S-1150871 specifically limits the flares use through



an SLC that will limit the combined volume of vent-gas they can combust to 30,938 MMBtu/day and 185,625 MMBtu/year.

The gas produced by the gas processing plant would normally flow through the gas plant. However, when the gas plant equipment is shutdown the gas is diverted to the flares to be combusted until the plant is fixed or maintenance is complete. The request for the proposed modification to the permit is to streamline CREH's compliance process with their District issued permits by incorporating the shutdown of the gas plants due to scheduled maintenance and the use of the flares for non-emergency, and as such eliminating the requirement for CREH to go through District variance process for an approval of the gas plant equipment shutdown. When the gas plant is shutdown the gas that would normally flow through the gas plant is diverted to the flares to be combusted. A variance is a request to allow a facility to operate out of compliance in order to perform maintenance on a facility.

CREH is a major source as defined in Section 3.23 of District Rule 2201 (New and Modified Stationary Source Review Rule). The operation of stationary source equipment for this project is subject to District permit requirements. One major requirement is that new and modified equipment that has air contaminant emissions must satisfy the requirements of New Source Review (NSR). Primary components of NSR are to require the installation of Best Available Control Technology (BACT) to minimize emission increases from such equipment, and to mitigate emission increases over certain thresholds by requiring emission offsets in the form of emission reduction credits (ERCs).

Process Description

Currently, the flares are only permitted to combust vent gas during emergency events. When the gas processing plant is shut down for maintenance, the excess vent gas received from the gas plant proceeds through the flares to be combusted. All the flares are engineered not to exceed the maximum Btu/hr flare rating, including all exhaust gas piping sizing. The main purpose for the flares is to ensure no gas is vented directly to the atmosphere but instead combusted, which is achieved with a continuously lit pilot. If for any reason the pilot is not operational, then the flare itself cannot be used.

Project Location

The Project is located in the vicinity of the communities of McKittrick and Tupman in Kern County, California, which is in the San Joaquin Valley Air Basin (see Figures 1-3. Figure 1 below identifies the specified locations in which the Project will be located. These locations are within the CREH's existing Elk Hills oilfield boundaries.



Figure 1: The San Joaquin Valley Air Basin



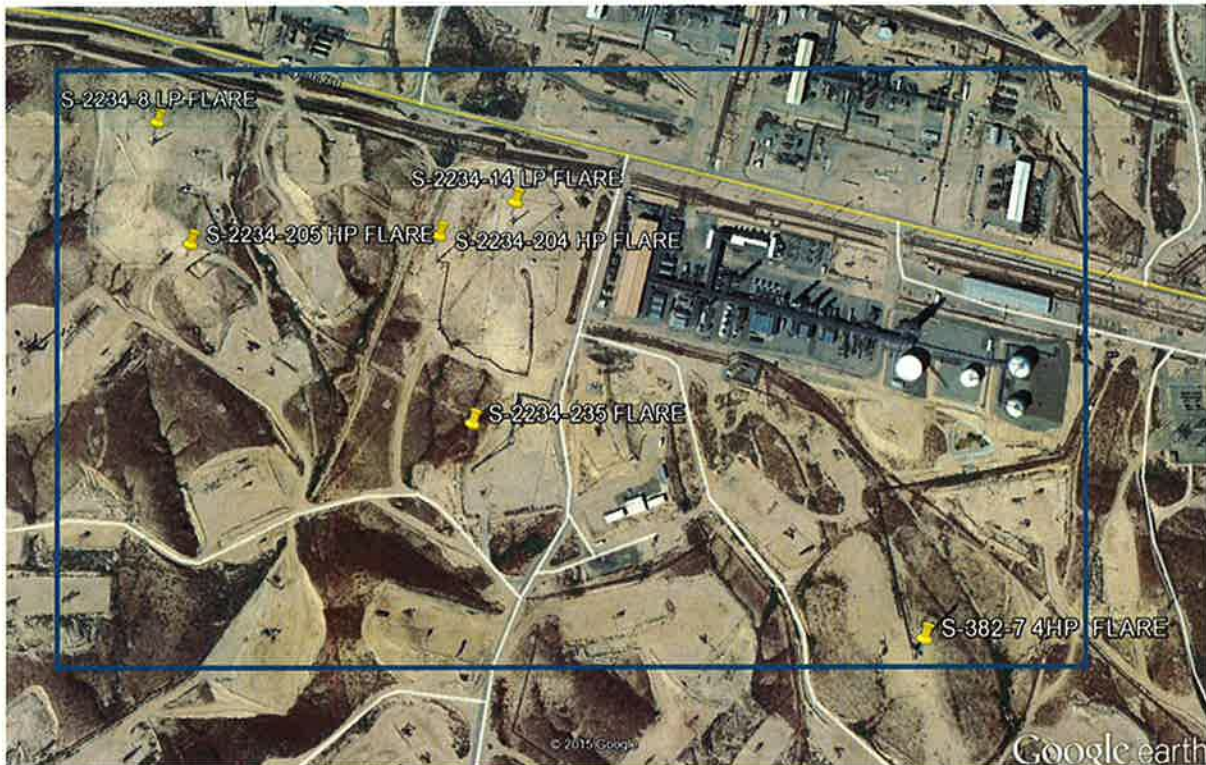


Figure 2: Elk Hills Oil Field



Source: Wikipedia. Website: http://en.wikipedia.org/wiki/Elk_Hills_Oil_Field

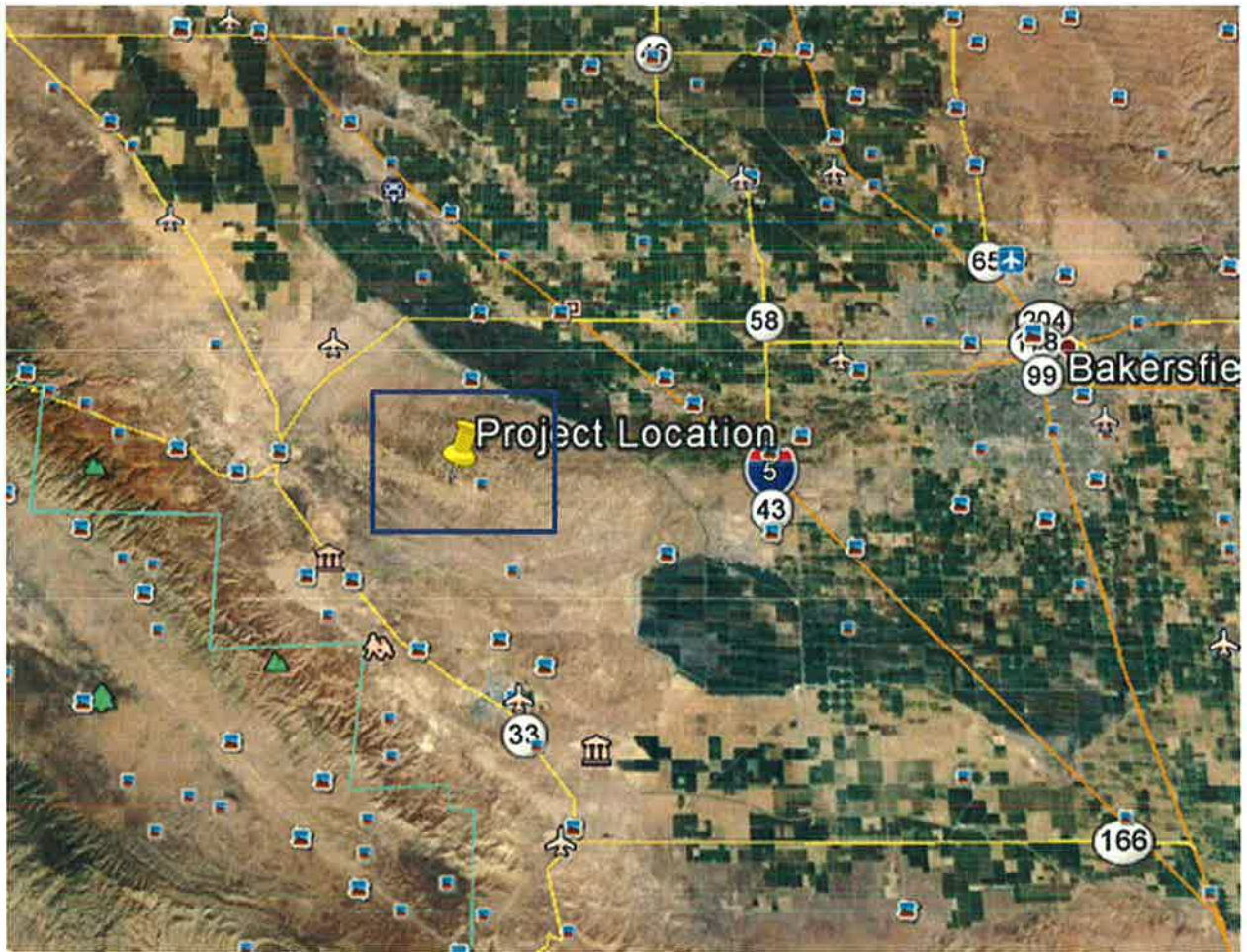
Figure 3: Project Location



Source: Google Earth & California Resources Elk Hills



Figure 4: Project Location



Source: Google Earth & California Resources Elk Hills



General Plan Designation and Zoning

The Project site is currently designated in the Kern County General Plan as Mineral and Petroleum (Code 8.4) and is currently zoned as Exclusive Agriculture (Zone A). Pursuant to Section 19.14.020(E) of the Zoning Ordinance of Kern County, oil or gas exploration and production operations, are a permitted use, by right, in Zone A.

Surrounding Land Uses and Setting

The Project is within the CREH's existing Elk Hills oilfield boundaries. The areas immediately surrounding the Project site are designated as agriculture, and mineral and petroleum.

Other Public Agencies Whose Approval Is Required

The District has identified the following agencies as having approval authority for the Project.

California Air Resources Board (ARB)

Pursuant to District Rule 2201, Section 3.18, the Project is classified as a Federal Major Modification. As such, the Project must be submitted to the ARB for a 30-day comment period.

US Environmental Protection Agency (US EPA)

The Project is classified as a Title V significant modification to be processed with a Certificate of Conformity (COC), and its ATC application shall be submitted to the US EPA for a 45-day comment period. CREH must apply to administratively amend the Title V operating permit to include the requirements of the ATCs issued with the Project.

D. DECISION TO PREPARE A MITIGATED NEGATIVE DECLARATION

Consistent with CEQA requirements the District prepared an Initial Study that evaluated potential environmental effects of the Project. The District issued a Notice of Intent to adopt a Mitigated Negative Declaration that was made available for public review and comment from January 5, 2016 to February 6, 2016. The District did not received comments during the public comment period. Thus, the District has determined with mitigation, the Project would have a less than significant impact on the environment. The District concludes that a Mitigated Negative Declaration is appropriate for the Project. Project design elements and mitigation measures that reduce the Project's impact on the environment would be enforced through mitigation and District permits.



E. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the proposed Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology / Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation / Traffic | <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

F. DETERMINATION

I certify that the Project was independently reviewed and analyzed and that this document reflects the independent judgment of the District.

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

Signature: *Arnaud Marjollet*

Date: 4/10/16

Printed Name: Arnaud Marjollet
 Title: Director of Permit Services



G. ENVIRONMENTAL IMPACT CHECKLIST

I. Aesthetics Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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. AESTHETICS

a) *Have a substantial adverse effect on a scenic vista?*

No Impact

The Project is to permit six (6) flares, already permitted for emergency use, for non-emergency operation, to combust excess vent gas and to add an SLC for ATC S-1150871. Those flares already exist and as such there is no construction associated with the Project. In addition, there are no designated scenic vistas on the Project site or adjacent properties. As such, the absence of these features on or nearby the Project site precludes the possibility of potential adverse impacts. Therefore, the Project will have no impact on scenic vista.

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

No Impact

There are no scenic resources such as trees, rock outcroppings, or historic buildings within the Project site or adjacent properties. The absence of these features on or nearby the Project site precludes the possibility of potential adverse impacts. Therefore, the Project will have no impact on scenic resources.



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

No Impact

The flares already exist on site and there will be no construction. The Project site and its surroundings are currently developed for oil and gas production activities. As such, the Project will not degrade the existing visual character or quality of the site and its surroundings. Therefore, the Project will have no impact on visual character.

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

No Impact

There are existing safety and security lightings that currently exist throughout the Project site, and the lightings are consistent with existing operation. The flares already exist on the Project site and will not create a new source of light or glare. Therefore, the Project will have no impact on light or glare.



II. Agricultural Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agricultural and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to 1) information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project and 2) the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resource Board.</p>				
<p>Would the Project:</p>				
<p>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?</p>				✓
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>				✓
<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)), timberland (as defined by Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?</p>				✓
<p>d) Result in the loss of forest land or conversion of forest land to non-forest</p>				✓



use?				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				✓

II. AGRICULTURAL RESOURCES

- 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?*

No Impact

The California Department of Conversation prepared the Farmland Mapping and Monitoring Program (FMMP) designating important farmland in California. Based on the FMMP, the Project site is not designated as Prime Farmland, Unique Farmland, or of Statewide importance. In addition, the Project is to permit six (6) existing flares, already permitted for emergency use for non-emergency operation, to combust excess vent gas and to add an SLC for ATC S-1150871. Therefore, the Project will have no impact on farmland.

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

No Impact

The Project site is zoned Exclusive Agriculture (Zone A). Pursuant to the Kern County Zoning Ordinance Section 19.14.020(E), oil or gas exploration and production operations are a permitted use in the Limited Agriculture zoning designation. The Project is consistent with current and surrounding land uses. The Project site is not designated as an active Williamson Act contract. As such, the Project will not conflict with existing zoning or a Williamson Act contract. Therefore, the Project will have no impact.



-
- c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220 (g)), timberland (as defined by Public Resource Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?*

No Impact

The flares for the project already exist and as such there is no construction associated with the Project. In addition, the Project site is located within the Elk Hills Oil Field boundary which historically has been allowed for the exploration and production of oil. No forest lands exist on the Project site and within the oil field. Therefore, the Project will have no impact on forest lands.

- d) *Result in the loss of forest lands or conversion of forest land to non-forest use?*

No Impact

As discussed above, the Project is not located on forest lands. As such, implementation of the Project will not result in the loss of forest lands or conversion of forest land to non-forest use. Therefore, the Project will have no impact on loss of forest lands.

- e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

No Impact

As discussed above, the Project is consistent with current and surrounding land uses for oil production activities and will not convert farmland or forest lands to non-farmland or non-forest use. Therefore, the Project will have no impact.



III. Air Quality Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?		✓		
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. AIR QUALITY

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

Less Than Significant Impact With Mitigation

The District is tasked with implementing programs and regulations by the Federal Clean Air Act and the California Clean Air Act and has prepared plans to attain federal and state Ambient Air Quality Standards (AAQS). The District has established thresholds of significance for criteria pollutant emissions, which are based on federal and District New Source Review (NSR) offset requirements for stationary sources. Stationary sources in the District are subject to some of the toughest regulatory requirements in the nation.

The significance of the impacts of the emissions from construction, operational non-permitted equipment and activities, and operational permitted equipment and activities are evaluated separately. The thresholds of significance are based on an annual year basis. For construction emissions, the annual emissions are evaluated on a consecutive 12-month period. A project would be determined to have a significant impact on air quality if the emissions sum for any criteria pollutant exceeds its respective threshold of significance. The District's thresholds of significance for criteria pollutant emissions are presented below in Table 1.



Table 1: District Thresholds of Significance for Criteria Pollutants

Pollutant	Construction Emissions Threshold (*tpy)	Permitted Operational Emissions Threshold (*tpy)	Non-Permitted Operational Emissions Threshold (*tpy)
NOx	10	10	10
SOx	27	27	27
PM ₁₀	15	15	15
PM _{2.5}	15	15	15
CO	100	100	100
ROG (VOC)	10	10	10
*tpy = tons per year Note: For construction emissions, the annual emissions are evaluated on a consecutive 12-month period.			

Project Details

CREH requested Authority to Construct (ATC) permits to authorize the non-emergency operation of six (6) flares and to limit their use for ATC project S-1150871 via a specific limiting condition (SLC) that will limit the combined volume of vent-gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flare to combust vent gas during non-emergency events. In addition, the SLC for ATC project S-1150871 will limit the combined amount of vent gas combusted in the six (6) flares to 30,938 MMBtu/day and 185,625 MMBtu/year.

The request for the proposed modification to the permit is to streamline CREH's compliance process with their District issued permits by incorporating the shutdown of the gas plants due to scheduled maintenance and the use of the flares for non-emergency, and as such eliminating the requirement for CREH to go through District variance process for an approval of the gas plant equipment shutdown. When the gas plant is shutdown the gas that would normally flow through the gas plant is diverted to the flares to be combusted. A variance is a request to allow a facility to operate out of compliance in order to perform maintenance on a facility.



Construction Emissions

The Project is to allow the flares to combust vent gas during non-emergency events in addition to emergency events for which they are already permitted for. The flares already exist and are within CREH's current operations in the CREH's Elk Hills oilfield boundaries in Kern County. Neither construction nor additional installment of ancillary units will be required for this Project. Therefore, the Project will not result in any construction emissions.

Operational Emissions

Operational Non-Permitted Activities – Mobile Source Emissions: The Project will be maintained and manned by existing CREH personnel and contractors. As stated above, these flares already exist and would not generate any additional mobile activities. Therefore, the Project will not result in any new mobile source emissions.

Operational Permitted Equipment – Stationary Source Emissions: The Project is to authorize and permit the non-emergency operation of six (6) flares and for ATC project S-1150871 only to limit their use via an SLC that will limit the combined volume of vent-gas they can combust. Currently, the flares are only authorized to combust vent gas during emergency events.

The District has conducted an engineering evaluation for the Project and determined that Best Available Control Technology (BACT) is triggered for NO_x, VOC, CO, PM₁₀ and SO_x. CREH is an existing Major Source and is in compliance with New Source Review requirements for existing permits. Also, offsets for emission increases through surrendering Emission Reduction Credits (ERCs) are required for the Project. The aforementioned NSR requirements (BACT and offsets) will be included as permit conditions on the ATC permits.

Table 3 below presents the Project permitted operational emissions at full operation for the six (6) flares. Since PM_{2.5} is a subset of PM₁₀, only P₁₀ emissions were assessed. Table 4 below presents the ERCs required for the Project.

As presented in Tables 3 and Table 4 below, compliance with District Rule 2201 (New Source Review Rule) will ensure Project related criteria pollutant emissions be offset through the surrendering of ERCs. The requirement for offsets will be enforced through permit conditions. Therefore, the District concludes that through a combination of project design features and permit conditions, Project related stationary source emissions will have a less than significant impact on air quality.



Table 3: Project Permitted Operational Emissions

	Annual Emissions (tons/year)				
	NO _x	SO _x	PM ₁₀	CO	ROG (VOC)
Total Project Emissions	15.34	0.61	1.70	69.80	11.85
Emission Reduction Credits (ERCs) to be Surrendered per Rule 2201	23.01	0.48	2.56*	0	17.77
Final Project Stationary Source Emissions	0	0	0	69.80	0
Significance Thresholds	10	27	15	100	10
Exceed Thresholds	No	No	No	No	No
<p>* Interpollutant offset ratios for trades between SO_x and PM₁₀ are allowed pursuant to Rule 2201, Section 4.13.3.1.2. Pursuant to draft District policy APR 1430, SO_x ERCs may be used to offset PM₁₀ at an interpollutant ratio of 1.0 : 1.0. An interpollutant ratio of 1.0 : 1.0 for SO_x to PM₁₀ will be applied.</p>					



Table 4: Project Operational Stationary Source Offset Requirements

	Offsets Required ^a				
	NO _x	SO _x	PM ₁₀	CO ‡	ROG (VOC)
Emission Reduction Credits (ERCs) Surrendered for Project (tons/year)	23.01	0.48	2.56	0	17.77
Emission Reduction Credits (ERCs) to be Surrendered for S-1150871 (lbs/quarter) ^b	6,144	241	671 ^c	0	4,468
Emission Reduction Credits (ERCs) to be Surrendered for S-1150872 (lbs/year) ^b	5,363	0	608 ^c	0	4,417
<p>^a Offset requirements were calculated at the ratios identified in District Rule 2201 (New and Modified Stationary Source Review)</p> <p>^b The lbs/quarter emissions in this table may not match exactly the lbs/quarter in MM AIR-1 and MM AIR-2.</p> <p>^c Interpollutant offset ratios for trades between SO_x and PM₁₀ are allowed pursuant to Rule 2201. Pursuant to draft District policy APR 1430, SO_x ERCs may be used to offset PM₁₀ at an interpollutant ratio of 1.0 : 1.0.</p> <p>‡ Pursuant to District Rule 2201, § 4.6.1 CO offsets were not required in attainment areas provided that federal AAQS are not violated in the areas to be affected. The District performed an ambient air quality analysis (AAQA) which demonstrates that the Project will not violate the federal AAQS for CO. Therefore, the Project CO emissions impact is less than significant, and no mitigation is required for CO.</p>					

Air Quality Plans

As presented in Table 3, Project permitted operational emissions will be mitigated to below the District's thresholds through the surrendering of ERCs. The ERCs must be surrendered to the District prior to commencement of operation of the equipment proposed under the ATCs. As such, the Project does not conflict with the implementation strategy of the District's air quality plans (2008 PM 2.5 Plan; 2007 8-Hour Ozone Plan and Request for Redesignation; 2007 PM₁₀ Maintenance Plan; 2012 PM_{2.5} Plan, 2013 Plan for the Revoked 1-hour Ozone Standard, 2015 Plan for the 1997 PM_{2.5} Standard). Therefore, the Project with mitigation measures will have a less than significant impact.



Mitigation: To ensure compliance with District New Source Review (NSR) requirements for offsetting operational emissions, CREH shall surrender ERCs sufficient to offset operational emissions as required by District NSR requirements. The following measures will be made conditions of Project approval and will be included in the Project ATCs:

AIR-1: The following measures will be made conditions of Project approval for S-1150871 and will be included in the Project ATC:

- Prior to operating equipment under this Authority to Construct, permittee shall surrender NO_x emission reduction credits for the following quantity of emissions: 1st quarter – 6,143 lb, 2nd quarter – 6,144 lb, 3rd quarter – 6,144 lb, and fourth quarter – 6,144 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
- Prior to operating equipment under this Authority to Construct, permittee shall surrender SO_x emission reduction credits for the following quantity of emissions: 1st quarter – 671 lb, 2nd quarter – 671 lb, 3rd quarter – 671 lb, and fourth quarter – 671 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter – 4467 lb, 2nd quarter - 4468lb, 3rd quarter – 4468 lb, and fourth quarter – 4468 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
- Prior to operating equipment under this Authority to Construct, permittee shall surrender SO_x emission reduction credits for the following quantity of emissions: 1st quarter – 241 lb, 2nd quarter – 241 lb, 3rd quarter – 241 lb, and fourth quarter – 242 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
- ERC Certificate Numbers S-4211-2 (NO_x), S-4390-2 (NO_x), N-1280-5 (PM₁₀ and SO_x), and S-4211-1 (VOC,)and, (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]



AIR-2: The following measures will be made conditions of Project approval for S-1150872 and will be included in the Project ATCs:

- Prior to operating equipment under this Authority to Construct, permittee shall surrender NO_x emission reduction credits for the following quantity of emissions: 1st quarter - 5362 lb, 2nd quarter – 5362 lb, 3rd quarter – 5362 lb, and fourth quarter – 5363 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
- Prior to operating equipment under this Authority to Construct, permittee shall surrender SO_x emission reduction credits for the following quantity of PM₁₀ emissions: 1st quarter –607 lb, 2nd quarter – 607 lb, 3rd quarter – 608 lb, and fourth quarter – 608 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter – 4417 lb, 2nd quarter – 4417 lb, 3rd quarter – 4417 lb, and fourth quarter – 4418 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]
- ERC Certificate Numbers S-4211-2, S-4390-2 and S-4468-2 (NO_x), and N-1280-5 and S-3823-5 (PM₁₀), and S-4211-1 (VOC) (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Less Than Significant Impact

Determination of whether project emissions would violate any ambient air quality standard is largely a function of air quality dispersion modeling. If project emissions would not exceed State and Federal ambient air quality standards at the project's property boundaries, the project would be considered to not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The District performed an AAQA for both the national and state ambient air quality standards (AAQS) to determine whether Project related criteria pollutant emissions have the potential to contribute to the possible violation of existing air quality



standards. The AAQA indicates that Project related criteria pollutant emissions will not cause or contribute to an exceedance of either national or state AAQS. Therefore, the Project is not expected to result in a violation of an air quality standard and the impact will be less than significant.

- 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)?*

Less Than Significant Impact

By its very nature, air pollution has a cumulative impact. The District's nonattainment status is a result of past and present development within the San Joaquin Valley Air Basin (SJVAB). Furthermore, attainment of ambient air quality standards can be jeopardized by increasing emissions-generating activities in the region. No single project would be sufficient in size, by itself, to result in nonattainment of the regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development within the San Joaquin Valley Air Basin.

The District's thresholds of significance for criteria pollutants are based on District Rule 2201 (New Source Review) offset requirements. Furthermore, New Source Review (NSR) is a major component of the District's attainment strategy. NSR provides mechanisms, including emission trade-offs, by which Authorities to Construct such sources may be granted, without interfering with the attainment or maintenance of ambient air quality standards. District implementation of NSR ensures that there is no net increase in emissions above specified thresholds from new and modified Stationary Sources for all nonattainment pollutants and their precursors. In fact, permitted emissions above offset thresholds equivalent to the District's thresholds of significance for criteria pollutants are mitigated to below the thresholds, and the District's attainment plans show that this level of emissions increase will not interfere with attainment or maintenance of ambient air quality standards.

The District's attainment plans demonstrate that project-specific net emissions increase below New Source Review (NSR) offset requirements will not prevent the District from achieving attainment. Consequently, emission impacts from sources permitted consistent with NSR requirements are not individually significant and are not cumulatively significant.

The Project operation will comply with all District rules and regulations including the surrendering of ERCs. Therefore, Project related emissions will have a cumulatively less than significant impact on air quality.



d) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact

Under the Clean Air Act, toxic air contaminants (TACs) are airborne pollutants that may be expected to result in an increase in mortality or serious illness or which may pose a present or potential hazard to human health. Potential health impacts from TACs include long-term health effects such as cancer, birth defects, neurological damage, or genetic damage; or short-term effects such as eye watering, respiratory irritation, throat pain and headaches. TACs may also be referred to as hazardous air pollutants (HAPs). There are currently more than seven hundred (700) substances classified by the US EPA and California Air Resources Board (CARB) as TACs. Air Quality problems occur when sources of TACs and sensitive receptors are located in proximity to one another.

TACs can be separated into carcinogens and non-carcinogens based on the nature of the physiological degradation associated with exposure to the pollutant. For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts would not occur. Cancer risk is expressed as excess cancer cases per one million exposed individuals.

Non-carcinogens differ in that there is generally assumed to be a safe level of exposure below which no negative health impact would occur. These levels are determined on a pollutant-by-pollutant basis. Acute and chronic exposure to non-carcinogens is expressed by using a Hazard Index, which is the ratio of expected exposure levels to acceptable health-acceptable exposure levels.

The District's thresholds of significance for determining whether project emissions would expose sensitive receptors to substantial pollutant concentrations are:

- Carcinogens: Probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds twenty (20) in one million.
- Non-Carcinogens: Ground Level concentrations of non-carcinogenic TACs would result in a Hazard Index greater than one (1) for the MEI.

The Health Risk Assessment (HRA) demonstrates that for each unit, the acute and chronic hazard indices are both below one (1) and the maximum individual cancer exposure risk associated with each unit is less than the 1 in a million threshold. Specific conditions will be placed into the permit to ensure that human health risks will not exceed the District allowable levels. Therefore, the District concludes that there is no substantial evidence of record to support a conclusion that the Project would expose sensitive receptors to significant health risks. Therefore, the Project will have a less than significant impact on sensitive receptors.



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

Less Than Significant Impact

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the District. Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there is no quantitative or formulaic methodologies to determine if potential odors would have a significant impact. Rather, projects must be assessed on a case-by-case basis.

The District's *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI) defines a significant odor impact as either:

- More than one (1) confirmed complaint per year averaged over a three (3) year period, or
- Three (3) unconfirmed complaints per year averaged over a three (3) year period.

A review of the District's compliance complaint database revealed that there have been no odor complaints received against CRE's operations in the Elk Hills oil field. Therefore, the District concludes that there is no substantial evidence of record to support a conclusion that the Project would create objectionable odors affecting a substantial number of people. Therefore, the Project will have a less than significant impact.



IV. Biological Resources Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 Wildlife 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, and regulations, or by the California Department of Fish and Wildlife or U.S. 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. BIOLOGICAL RESOURCES

- 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 Wildlife or U.S. Fish and Wildlife Service?*

No Impact

The Project does not involve any construction because the flares already exist. The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC that will limit the combined volume of vent-gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events. As such, the Project would not result in direct impacts to threatened or endangered species. There would be no impact.

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

No Impact

There is no riparian habitat or other sensitive natural community near the Project site. The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC that will limit the combined volume of vent-gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flare to combust vent gas during non-emergency events. This Project does not involve any construction because the flares already exist. As such, the Project would have no impact.

- 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?*

No Impact

Section 404 of the Clean Water Act defines wetlands as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of



vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

In more common language, wetlands are areas where the frequent and prolonged presence of water at or near the soil surface drives the natural system meaning the kind of soils that form, the plants that grow, and the fish and/or wildlife communities that use the habitat. Swamps, marshes, and bogs are well-recognized types of wetlands. However, many important specific wetland types have drier or more variable water systems than those familiar to the general public. Some examples of these are vernal pools (pools that form in the spring rains but are dry at other times of the year), playas (areas at the bottom of undrained desert basins that are sometimes covered with water), and prairie potholes.

There are no waters on the Project site subject to Section 404 of the Clean Water Act. As such, the District concludes that there is no substantial evidence of record to support a conclusion that the Project would have an impact on wetlands. Therefore, the Project will have no impact.

- 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?*

No Impact

There are no established native resident or migratory wildlife corridors, or native wildlife nursery sites are present on the Project site. The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. The Project does not involve any construction because the flares already exist. As such, the Project would have no impact on the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.

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

No Impact

The Kern County General Plan Land Use, Open Space, and Conservation Element outlined policies for tree conservation. The policy requires protection of oak woodlands and large oak trees. There are no trees present on the Project site or surrounding areas. Therefore, the Project will have no impact.



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- 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?*

No Impact

The Project does not involve any construction because the flares already exist. The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events.

In addition, the Project is not located within the boundaries of a Natural Community Conservation Plans (NCCP) or any other US Fish and Wildlife Service designated critical habitat. Kern County has prepared two (2) conservation plans designed to protect biological resources in the Project area. Collectively, the Draft Valley Floor Habitat Conservation Plan (DVFHCP) and the adopted Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) address impacts on biological resources throughout the majority of Kern County.

The VFHCP is a long-term comprehensive strategy that provides means of addressing compliance with the California and Federal Endangered Species Acts for Kern County's oil and gas production industry, urban development, water district development and maintenance, and public infrastructure activities. The Draft VFHCP identifies three (3) zones representing the importance of conservation in that area. Red zones represent habitat areas with high importance for conservation of the VFHCP covered species. Green zones are habitat areas of moderate importance. White zones are habitat areas of limited importance due to intensive land uses, such as cultivated agriculture. The Project site is located within the VFHCP in an oil zone and designated as White Zone.

The goal of the MBHCP is to acquire, preserve and enhance native habitats which support endangered and sensitive species, while allowing urban development to proceed as set forth in the Metropolitan Bakersfield General Plan. The MBHCP requires applicants to pay mitigation fees for grading or building permits to fund habitat land to compensate for potential impacts.

Overall, the Project is consistent with the objectives in the VFHCP and MBHCP which encourage the protection of sensitive species. Therefore, the Project will have no impact on conservation plans.



V. Cultural Resources Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '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. CULTURAL RESOURCES

- a) *Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?*

No Impact

The Project will be located within the Elk Hills oilfield boundaries which historically have been allowed for the exploration and production of oil. The Project is to authorize the non-emergency operation of six (6) flares and to limit their use for ATC project S-1150871 via an SLC that will limit the combined volume of vent-gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events. In addition, there is no construction associated with this Project. Therefore, the Project will have no impact on historical resources.

- b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?*

No Impact

As noted above, the flares already exist. The Project will be located on property that has historically been used for oil production. The Project is to authorize the non-emergency operation of six (6) flares. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events. There is no construction associated with this Project. Therefore, the Project will have no impact.



-
- c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

No Impact

The Project will be located on property that has historically been used for oil production. The flares already exist. There is no construction. This project will allow for the flares to combust vent gas during non-emergency events. Therefore, the Project will have no impact.

- d) *Disturb any human remains, including those interred outside of formal cemeteries?*

No Impact

The Project will be located on property that has historically been used for oil production. The Project is to authorize the non-emergency operation of 6 flares and to limit their use for ATC project S-1150871 via an SLC that will limit the combined volume of vent gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flare to combust vent gas during non-emergency events. There is no construction associated with this Project. As such, the District concludes that there is no substantial evidence of record to support a conclusion that the Project would have a significant impact on human remains. Therefore, the impact will be less than significant with mitigation.



VI. Geology / Soils Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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: <ul style="list-style-type: none"> 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓



VI. GEOLOGY/SOILS

- 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.*

Less Than Significant Impact

The Project will be located within the Elk Hills oilfield boundaries which historically have been allowed for the exploration and production of oil. The Project is not located within an Alquist-Priolo Earthquake Fault Zone, as published by the California Department of Conservation. The Buena Vista Fault is the nearest active earthquake fault to the Project near the Elk Hills oilfield and is located over 6 miles from the site. It is unlikely that ground rupture would occur at the project site because it is not located within an Alquist-Priolo Earthquake Fault Zone or within 500 feet of known active fault trace. Therefore, the Project will have a less than significant impact.

- ii. *Strong seismic ground shaking?*

Less Than Significant Impact

Although this Project is not located near active or potentially active faults, any impacts could potentially induce ground shaking but is unlikely to occur at the project site. According to the Safety Element of the Kern County General Plan, Kern County is susceptible to moderate-to-extreme ground shaking from a number of seismic sources. This hazard exists because elastic strains that accumulate deep within the earth become so great that the rock can no longer be contained. When this happens, movement along a fracture zone occurs, releasing enormous amounts of energy. At any given location, the amount of the resulting shaking motion caused by the sudden movement depends to a large extent on local ground condition. The Kern County Safety Element has policies and implementing measures in place to minimize concerns from ground shaking. However, compliance with California seismic design requirements would ensure that the project site would not expose persons or property to strong seismic ground shaking hazards. Therefore, the Project will have a less than significant impact.



iii. *Seismic-related ground failure, including liquefaction?*

No Impact

According to the Safety Element of the Kern County General Plan, land subsidence is a type of ground failure that can be aggravated by ground shaking. It is most often caused by the withdrawal of large volumes of fluids from underground reservoirs, but it can also occur by the addition of surface water to certain types of soil. There are four (4) types of subsidence occurring in Kern County:

- Tectonic subsidence: a long-term, very slow sinking of the valley, which is significant only over a geologic time period.
- Subsidence caused by the extraction of oil and gas: this type of subsidence is still too small to be of serious concern. The State Division of Oil, Gas, and Geothermal Resources monitors any subsidence in oil and gas fields and regulates oil and gas withdrawal and repressurizing of the fields.
- Subsidence caused by withdrawal of groundwater: in quantities much larger than replacement can occur, causing a decline of water level. This type of subsidence is of major concern and should be regulated and reduced, especially in urbanizing areas. This practice has lowered the ground level over a large area south of Bakersfield and in other areas of the County.
- Subsidence caused by hydrocompaction of moisture – deficient alluvial deposits: this is a one-time densification from collapse of the soil structure in near surface strata where the rainfall of other moisture has not penetrated during a long period of time.

As noted in the Kern County Safety Element, subsidence caused by the extraction of oil and gas is too small to be of serious concerns. As such, ground failure is not expected to occur at the project site.

Liquefaction can occur in certain types of soil that are associated with shallow water table. It has been observed in many areas of the world that ground shaking produced by earthquakes tends to cause liquefaction to the extent that buildings have fallen over on their sides due to the lack of ground support. Some buildings designed to withstand earthquake shock waves, have been deemed inhabitable due to earthquake-triggered liquefaction. The Department of Conservation has mapped liquefaction hazard areas. No liquefaction hazard areas were determined to be located within the Project sites.



The Project site is consistent with current land use and is designed in accordance with all building requirements including those pertaining to excavations, grading, and foundations. Adherence to California Buildings Standards Code (CBSC) requirements and compliance with California seismic design requirements would ensure that the Project would not expose persons or property to substantial risk of loss, injury, or death resulting from seismic activity. Therefore, the Project will have no impact.

iv. Landslides?

No Impact

The Project does not involve any construction because the flares already exist. The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events. The Project would not expose people or structures to potential adverse effects due to landslides. Therefore, the Project will have no impact.

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

No Impact

The Project will be located within existing oilfields, consistent with ongoing oil and gas production activities and the Project does not involve any construction activities. Therefore, the Project will have no impact.

c) Be located on a geological 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?

No Impact

The Project is located on Mineral and Petroleum land designated for oil production activities and will be used for such purpose. Per the Kern County General Plan Safety Element, subsidence caused by the extraction of oil and gas is deemed too small to be of serious concern and subject to monitoring and regulation by the California Department of Conservation, Division of Oil, Gas and Geothermal Resources. The Project is not located within areas that historically there has been a potential for landslides and is not located in a liquefaction area. Therefore, the Project will have no impact.



- d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risk to life or property?*

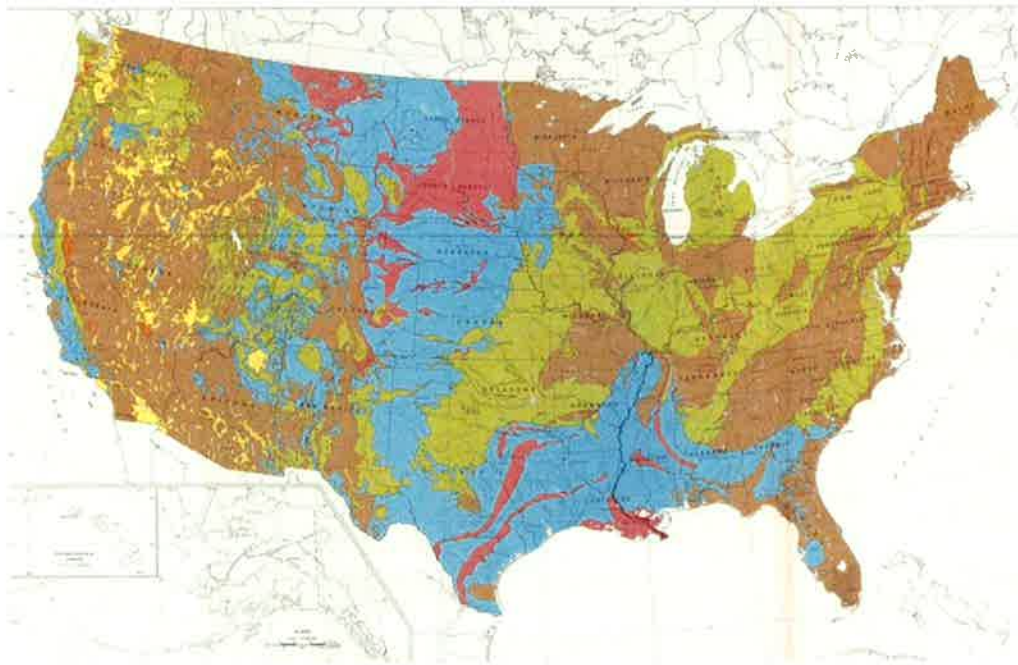
No Impact

Expansive soils are soil that swell and contract depending on the amount of water that is present. Expansive soils contain minerals such as smectite clays that are capable of absorbing water. When they absorb water they increase in volume. The more water they absorb the more their volume increases. Expansions of ten percent or more are not uncommon. This change in volume can exert enough force on a building or other structure to cause damage.

According to the United States Geological Survey, *Swelling Clays Map of the Conterminous United States* identified geologic units that contain swelling clays, and within broad limits, categorized the units according to their swelling potential (see Figures 4 and 5).



Figure 4: Swelling Clays Map of the Conterminous United States



Source: United States Geological Survey
Website: http://ngmdb.usgs.gov/Prodesc/proddesc_10014.htm



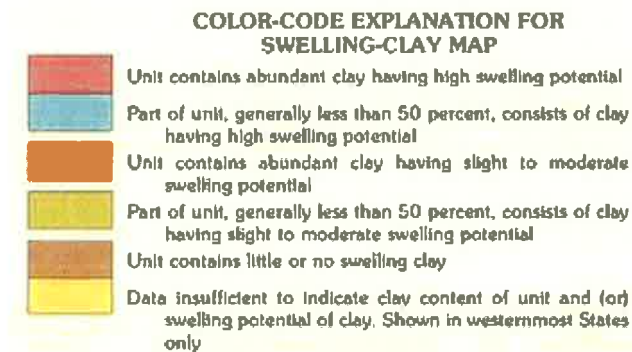
Figure 5: Swelling Clays Map of the Conterminous United States (Project Area)



Source: United States Geological Survey
Website: http://ngmdb.usgs.gov/Prodesc/proddesc_10014.htm

The color coded explanation for the swelling-clay map is shown in Figure 6 below:

Figure 6: Color-Coded Explanation for Swelling Clay Map



Source: United States Geological Survey
Website: http://ngmdb.usgs.gov/Prodesc/proddesc_10014.htm



Based on the *Swelling Clays Map of the Conterminous United States* prepared by the United States Geological Survey, the soil in Kern County contains little or no swelling potential. Therefore, there will be no impact on expansive soil.

- e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC that will limit the combined volume of vent gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flare to combust vent gas during non-emergency events and does not include or require new septic tanks or additional wastewater disposal systems. As such, the Project will not impact the soil or its capacity to support potential wastewater disposal. Therefore, the Project will have no impact.



VII. Greenhouse Gas Emissions Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

VII. GREENHOUSE GAS EMISSIONS

The Project is to authorize the non-emergency operation of six (6) flares and to limit the use of r the five flares only under ATC project S-1150871 via an SLC that will limit the combined volume of vent gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events.

GHGs are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth’s atmosphere. There are no “attainment” concentration standards established by the Federal or State government for GHGs. In fact, GHGs are not generally thought of as traditional air pollutants because GHGs, and their impacts, are global in nature, while traditional “criteria” air pollutants affect the health of people and other living things at ground level, in the general region of their release to the atmosphere. Some GHGs occur naturally and are emitted into the atmosphere through natural processes. Other GHGs are created and emitted solely through human activities. The principal GHGs that enter the atmosphere because of human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated carbons. Additional information on GHG and global climate change can be found in the District staff report titled: *Addressing Greenhouse Gas Emissions Impacts Under the California Environmental Quality Act*.

Assembly Bill 32 (AB 32)

Assembly Bill 32 (California Global Warming Solutions Act of 2006) is a key piece of California’s effort to reduce its GHG emissions. AB 32 was adopted establishing a cap on statewide greenhouse gas emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emissions levels. AB 32 requires the CARB to establish regulations designed to reduce California’s GHG emissions to 1990 levels by 2020. In executing its legislative mandate under AB 32, the CARB developed a Scoping Plan that contains the main strategies California will use to reduce GHG from Business-as-Usual (BAU) emissions projected from 2020 levels back down to 1990



levels. BAU is the projected emissions caused by growth, without any GHG reduction measures. CARB determined that a 29% reduction from BAU is necessary to achieve the 1990 GHG emissions level. On December 11, 2008, ARB adopted its AB 32 Scoping Plan, setting forth a framework for future regulatory action on how California will achieve the goal of reducing GHG emissions to 1990 levels.

Cap & Trade

The AB 32 Scoping Plan identifies a Cap and Trade program as one of the strategies California will employ to reduce the GHG emissions that cause climate change. The Cap and Trade program is implemented by the California Air Resources Board (CARB) and caps GHG emissions from the industrial, utility, and transportation fuels sectors – which account for roughly 85% of the state's GHG emissions.

The program works by establishing a hard cap on about 85% of total statewide GHG emissions. The cap starts at expected BAU emissions levels in 2012, and declines 2-3% per year through 2020. Fewer and fewer GHG emissions allowances are available each year, requiring covered sources to reduce their emissions or pay increasingly higher prices for those allowances. The cap level is set in 2020 to ensure California complies with AB 32's emission reduction target of returning to 1990 GHG emission levels.

The scope of GHG emission sources subject to Cap and Trade in the first compliance period (2013-2014), includes:

- All electricity generated and imported into California. The first deliverer of electricity into the state is the capped entity (the one that will have to purchase and surrender allowances).
- Large industrial facilities emitting more than 25,000 metric tons of GHG pollution/year. Examples include oil refineries and cement manufacturers.

The scope of GHG emission sources subject to Cap and Trade during the second compliance period (2015-2017), expands to include distributors of transportation fuels (including gasoline and diesel), natural gas, and other fuels. The regulated entity will be the fuel provider that distributes the fuel upstream (not the gas station). In total, the Cap and Trade program is expected to include roughly 350 large businesses, representing about 600 facilities. Individuals and small businesses will not be regulated. Under the program, companies do not have individual or facility-specific reduction requirements. Rather, all companies covered by the regulation are required to turn in allowances in an amount equal to their total greenhouse gas emissions during each phase of the program. The program gives companies the flexibility to either trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more will have to turn in more allowances. Companies that can cut their emissions will have to turn in fewer allowances. Furthermore, as the cap declines, total emissions are reduced.



On October 20, 2011, CARB's Board adopted the final Cap and Trade regulation and Resolution 11-32. As part of finalizing the regulation, the Board considered the related environmental analysis and, consistent with CEQA requirements, approved CARB's functionally equivalent document (FED).

CEQA Requirements

In December, 2009, the California Natural Resources Agency (NRA) amended the CEQA Guidelines to include Global Climate Change, which is now generally accepted by the scientific community to be occurring and caused by GHG emissions. The amendments address analysis and mitigation of the potential effects of GHG emissions in CEQA documents. In their *Final Statement of Reasons for Regulatory Action*, NRA recognizes that the analysis of GHG emissions in a CEQA document presents unique challenges to lead agencies. NRA amended section 15064(h)(3) of the CEQA guidelines to add compliance with plans or regulations for the reduction of GHG emissions to the list of plans and programs that may be considered in a cumulative impacts analysis. In their *Final Statement of Reasons for Regulatory Action*, NRA discusses that AB 32 requires CARB to adopt regulations that achieve the maximum technologically feasible and cost effective GHG reductions to reach the adopted state-wide emissions limit. NRA goes on to state that a lead agency may consider whether CARB's GHG reduction regulations satisfy the criteria in existing subdivision (h)(3).

District CEQA Policy

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. On December 17, 2009, the District adopted the policy "*District Policy (APR 2005) – Addressing GHG Emissions Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*" and approved the District's guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. The policy applies to all District permitting projects that have an increase in GHG emissions, regardless of the magnitude of the increase. Under this policy, the District's determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change.

As illustrated in Figure 7, the District's board-adopted policy for determining significance of project-specific GHG emissions employs a tiered approach. Of specific relevance to Cap and Trade is the provision that: "Projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the



lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement best performance standards BPS.” Projects that do not comply with such a plan or program must incorporate BPS or undergo a project-specific analysis demonstrating that GHG emissions would be reduced by at least 29%, as compared to BAU.

Determination of Significance of GHG Emissions for Projects Subject to an Approved GHG Emissions Reduction Plan

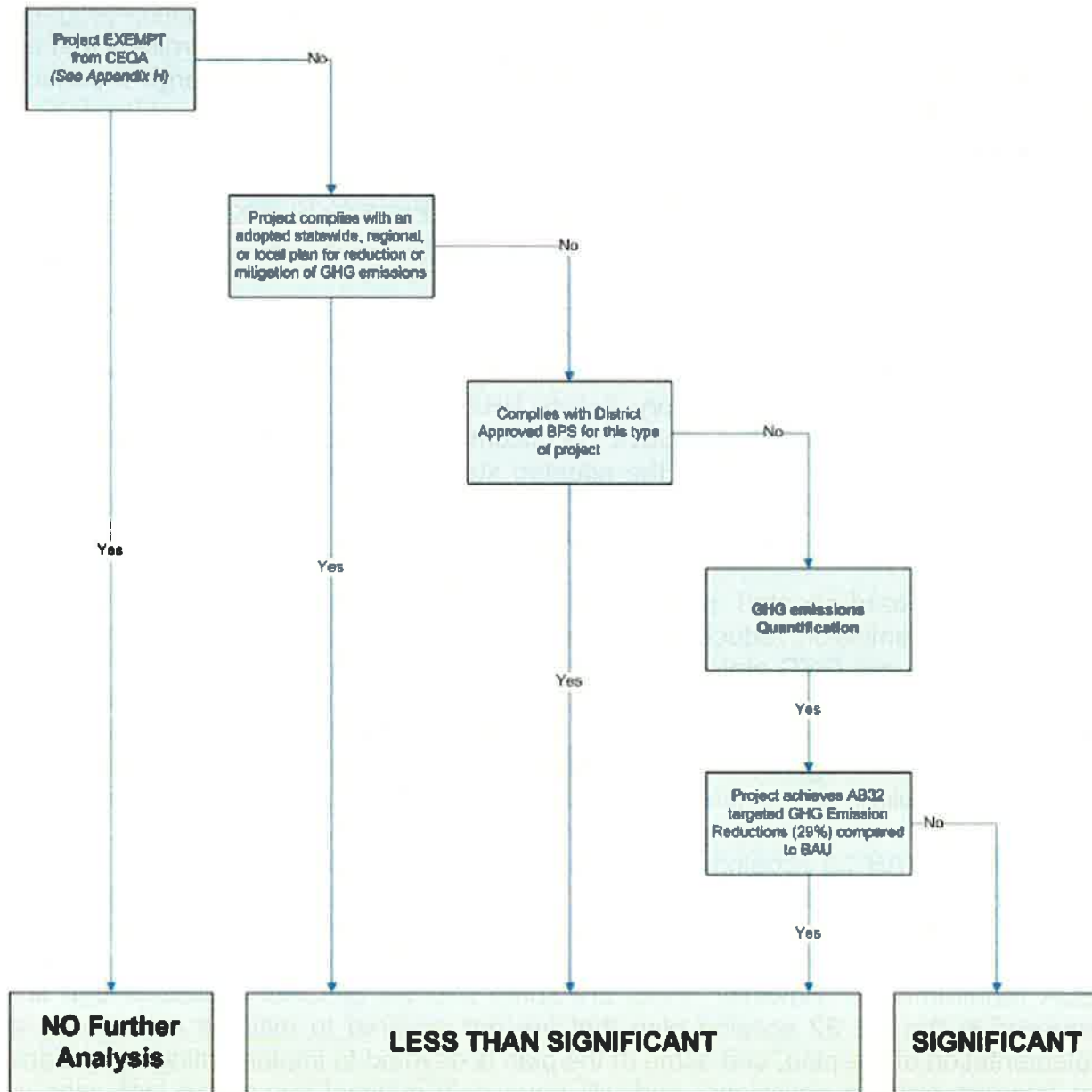
The NRA amended the CEQA Guidelines to include Global Climate Change and added compliance with plans or regulations to reduce GHG emissions to the list of plans and programs that should be considered in a cumulative impacts analysis. In their *Final Statement of Reasons for Regulatory Action*, NRA discusses that AB 32 requires the CARB to adopt regulations that achieve the maximum technologically feasible and cost effective GHG reductions to reach the adopted state-wide emissions limit. NRA goes on to state that a lead agency may consider whether CARB's GHG reduction regulations satisfy the criteria in section 15064(h)(3).

The District's board-adopted policy determines that: “Projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the Project is located would be determined to have a less than significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA compliant environmental review document adopted by the lead agency.”

AB 32, and the AB 32 scoping plan adopted by CARB, is a GHG reduction plan for CEQA purposes. It is directly and wholly responsible for meeting the GHG reduction targets of the State of California and is supported by an environmental review process that has been successfully defended in court as equivalent to, and compliant with, CEQA requirements. However, there are some sources of GHG emissions that are discussed in the AB 32 scoping plan that are not required to mitigate emissions via implementation of the plan, and some of the plan is devoted to implementing regulations that address existing emissions, and will have only minimal impact on increases in emissions. Since it is these increases that must be addressed under CEQA, the District conducts its own analysis to determine whether compliance with AB 32 and its scoping plan are adequate to conclude that a particular GHG emissions increase is less than significant.



Figure 7: Determination of Significance for Stationary Source Projects



Source: San Joaquin Valley Air Pollution Control District, *Climate Change Action Plan: Addressing GHG Emissions Impacts under CEQA*. Website: <http://www.valleyair.org>



Determination of Significance of GHG Emissions for Projects Subject to CARB's GHG Cap and Trade Regulation

One regulation proposed in the AB 32 scoping plan that does address increases in GHG emissions is the Cap and Trade regulation discussed above. Facilities subject to the Cap and Trade regulation are subject to an industry-wide cap on overall GHG emissions, and any growth in emissions must be accounted for under that cap, so that a corresponding and equivalent reduction in emissions must occur to allow any increase. Further, the cap decreases over time, resulting in an overall decrease in GHG emissions. It is therefore reasonable to conclude that facilities subject to and in compliance with CARB's Cap and Trade requirements will not, and in fact, cannot, contribute significantly towards any global GHG emissions growth. While this inherent mitigation process is not a necessary component of a finding that compliance with a plan for the reduction of greenhouse gas emissions may be considered in a cumulative impacts analysis [(CCR §15064(h)(3)], the fact that all growth in emissions at covered sources is mitigated provides a certainty that compliance with the Cap and Trade program eliminates any potential for significant impacts from those GHG emissions.

Determination of Significance of GHG Emissions for Projects Implementing BPS

BPS for stationary source projects is – for a specific class and category source of GHG emissions – the most effective, District approved, achieved-in-practice means of reducing or limiting GHG emissions from that source, which is also economically feasible per the definition of achieved-in-practice. BPS includes equipment type, equipment design, and operational and maintenance practices for the identified service, operation, or emissions unit class and category, and is developed by the District in a public process that considers and addresses input from all interested parties. Consistent with the District's adopted policy for assessing significance of project-specific GHG emission increases when serving as Lead Agency, projects implementing BPS will be determined to have a less than significant impact on global climate change.

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant Impact

Compliance with an Approved GHG Emission Reduction Plan

CREH is an oil production company that operates oil and gas production facilities within the State of California. As such, its facilities are subject to CARB's Cap and Trade regulation. As discussed above, CARB's Cap and Trade regulation is an adopted statewide plan for reducing or mitigating GHG emissions from targeted industries and is supported by an environmental review process that has been successfully defended in court as equivalent to, and compliant with, CEQA requirements.



Consistent with CCR §15064(h)(3), the District finds that compliance with CARB's Cap and Trade regulation would avoid or substantially lessen the impact of project-specific GHG emissions on global climate change. The District therefore concludes that the Project would have a less than significant individual and cumulative impact on global climate change.

Mitigation of GHG Increases under the Cap and Trade Regulation

As outlined above, facilities subject to the Cap and Trade regulation are subject to an industry-wide cap on overall GHG emissions. As such, any growth in emissions must be accounted for under that cap, such that a corresponding and equivalent reduction in emissions must occur to allow any increase. Therefore, it is reasonable to conclude that implementation of the Cap and Trade program would fully mitigate project-specific GHG emissions.

Regardless of, and independent to, the above determination that the Project is subject to a state-wide GHG emissions reduction plan, the District finds that, through compliance with the Cap and Trade regulation, Project-specific GHG emissions would be fully mitigated. Thus, the District concludes that the Project will have a less than significant individual and cumulative impact on global climate change.

- b) *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Less Than Significant Impact

As discussed above, the Project is subject to CARB's Cap and Trade regulation and is required to reduce or mitigate GHG emissions. As such, the Project will not conflict with an applicable plan, policy, or regulation for the purpose of reducing greenhouse gas emissions. Therefore, the Project will have a less than significant impact.



VIII. Hazards and Hazardous Materials Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	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?			✓	



VIII. HAZARDS & HAZARDOUS MATERIALS

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

Less Than Significant Impact

The Project is to authorize the non-emergency operation of six (6) flares and to limit their use for ATC project S-1150871 via an SLC that will limit the combined volume of vent gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flare to combust vent gas during non-emergency events. There is no routine transport, use, or disposal of hazardous materials associated with this project for its operation. The Project does not require any construction because the flares already exist.

Therefore, the risk of exposure from the transport, use, and disposal of hazardous materials is not expected. As such, the District concludes that there is no substantial evidence of record to support a conclusion that the Project would have a significant impact on human remains.

- 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?*

Less Than Significant Impact

All the flares are engineered not to exceed maximum Btu/hr flare rating, including all exhaust gas piping sizing. The main purpose for the flares is to ensure no gas is vented directly to the atmosphere but instead combusted and this is achieved with a continuously lit pilot. If for any reason the pilot is not operational then the flare itself cannot be used.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant Impact

As discussed, potentially hazardous materials are not expected to be associated with this Project. The nearest school is Elk Hills Elementary School which is located approximately 7.6 miles south of the Project site. As such, the Project will not emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school. Therefore, the Project will have a less than significant impact.



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

No Impact

The Project is not located on a site that meets the definition of Government Code Section 65962.5, which requires specific hazardous waste facilities to submit required information to the Department of Toxic Substances Control (DTSC). Therefore, Project will have no impact.

- 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?*

No Impact

The Project site is not located within 2 miles of a public airport. The nearest public airport is located in Taft, approximately 9 miles away.

- 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?*

No Impact

The Project site is not located within the vicinity of a private airport. However, CRE has two (2) functioning Helicopter Pads that are used by Kern County Fire Dept. and Hall Ambulance Services for emergency medical transport. The closest Helicopter Pad is located approximately 0.75 miles from the flares. The other Helicopter Pad is approximately 7 miles from the flares. Therefore, the Project will have no impact on 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?*

No Impact

The Project would not require any physical alterations to existing public roadways that would impair or interfere with emergency response or evacuation. As such, the Project would not interfere with emergency response. Therefore, the Project will have no impact on emergency response 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?*

Less Than Significant Impact

The Project is to authorize the non-emergency operation of six (6) flares and to limit their use for ATC project S-1150871 via an SLC that will limit the combined volume of vent gas they can combust to 30,938 MMBtu/day and 185,625 MMBtu/year. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flare to combust vent gas during non-emergency events.

The project area is located within a State Responsible Area (SRA). In most cases SRA is protected by the California Department of Forestry and Fire Prevention (CAL FIRE). However, Kern County is a Contract County with CAL FIRE and the SRA is serviced by the Kern County Fire Department for fire protection services. No wildlands are within close proximity of the Project. CRE has an Emergency Response Team with a fire truck that responds to fires as well as other emergencies. The Team and Emergency Services Building are located approximately 0.5 miles from the flare locations. The nearest Kern County Fire Dept. station is located in Taft approximately 9 miles away. As such, the Project would not expose people or structures to significant risk of loss due to a potential wildfire. Therefore, the Project will have a less than significant impact from wildfires.



IX. Hydrology / Water Quality Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?			✓	
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?				✓
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j) Inundation by seiche, tsunami, or mudflow				✓



IX. HYDROLOGY / WATER QUALITY

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

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and to limit their use for ATC project S-1150871 via an SLC that will limit the combined volume of vent gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events.

Operation of the Project will not require the use of water and will not require waste discharge requirements from the Regional Water Quality Control Board. As such, the Project is not expected to violate any water quality standards. Therefore, the Project will have no impact.

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)?*

Less Than Significant Impact

The Project is to authorize the non-emergency operation of six (6) flares and to limit their use for ATC project S-1150871 via an SLC that will limit the combined volume of vent gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. Operation of the Project will not require the use of water. Therefore, the Project will have no impact.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?*

No Impact

This Project is to allow for the flares to combust vent gas during non-emergency events. Currently, the flares are only permitted to combust vent gas during emergency events. Operation of the Project will not require the use of water. Therefore, there will be no impact on drainage pattern.



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- 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?*

No Impact

This Project is to allow for the flares to combust vent gas during non-emergency events. Currently, the flares are only permitted to combust vent gas during emergency events. The Project would not introduce a new flood hazard and would not necessitate any new flood control projects. Therefore, there will be no impact.

- 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?*

No Impact

As discussed above, the Project is to authorize the non-emergency operation of six (6) existing flares and to limit their use for ATC project S-1150871 via an SLC that will limit the combined volume of vent gas they can combust. Operation of the Project will not require the use of water. Therefore, the Project will have no impact.

- f) *Otherwise substantially degrade water quality?*

Less Than Significant Impact

As discussed above, the Project will not require the use of water. Therefore, the Project will have no impact.

- 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?*

No Impact

The Project site is not located within a 100-year flood hazard area as designated by the Federal Emergency Management Agency (FEMA). The Project does not include the construction of any housing units. This Project is to allow for the flares to combust vent gas during non-emergency events. Currently, the flares are only permitted to combust vent gas during emergency events. As such, no housing units will be exposed to potential flooding. Therefore, there Project will have no impact.



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

No Impact

As discussed above, the Project site is not located within a 100-year flood hazard area as designated by FEMA. In addition, there will be no construction because the flares already exist. Therefore, the Project will have no impact.

- 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?*

No Impact

The Project does not propose to place people or structures within any area that is subject to flooding through any cause, including as a result of failure of a levee or dam nor will there be habitable structures proposed for the Project. Therefore, the Project will have no impact.

- j) Inundation by seiche, tsunami, or mudflow?*

No Impact

The Project site is not within a county that is identified in the Tsunami Inundation Maps prepared by the California Geological Survey. Therefore, the Project will have no impact.



X. Land Use / Planning Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	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?				✓

X. LAND USE/PLANNING

a) *Physically divide an established community?*

No Impact

There is no established community that will be physically divided. The Project is to permit six (6) flares, already permitted for emergency, use for non-emergency operation, to combust excess vent gas and to add an SLC for ATC S-1150871. Those flares already exist and as such there will be no construction associated with the Project. Therefore, the District concludes that there is no substantial evidence of record to support a conclusion that the Project will physically divide an established community. The Project will have no impact.

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 mitigation an environmental effect?*

No Impact

The Project site is currently designated in the Kern County General Plan as Mineral and Petroleum (R-MP) and is currently zoned as Agriculture (Zone A). Pursuant to Section 19.14.020(E) of the Zoning Ordinance of Kern County, oil or gas exploration and production operations, are a permitted use, by right, in Zone A. As such, the Project is consistent with current and surrounding land uses and will not conflict with an applicable land use plan. Therefore, the Project will have no impact.



-
- c) *Conflict with an applicable habitat conservation plan or natural community conservation plan?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC that will limit the combined volume of vent gas they can. Currently, the flares are only permitted to combust vent gas during emergency events. The Project does not involve any construction activities as the flares already exist on site. Therefore, the Project is not expected to conflict with applicable habitat conservation plans or natural community conservation plans. As such, the Project will have no impact.



XI. Mineral Resources Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?				✓

XI. MINERAL RESOURCES

- 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?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. The Project does not involve any construction because the flares already exist. In addition, according to the California Geological Survey's Aggregate Availability Map that is created by California Department of Conservation for the purpose of showing the aggregate availability in California, the Project is not located in or within the vicinity of a site being used for aggregate production. As such, the Project has no potential to result in the loss of availability of a known mineral resource. Therefore, the Project will have no impact.

- 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?*

No Impact

The Project is to permit the flares to combust vent gas during non-emergency events. In addition, as discussed above, the Project site contains no mineral resource that is of value to the region or state. As such, the Project will not result in the loss of important mineral resource recovery site. Therefore, the Project will have no impact.



XII. Noise Would the Project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?				✓

XII. NOISE

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?*

Less Than Significant Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events.



The Kern County General Plan Noise Element identifies the following land uses as noise sensitive:

- Residential areas
- Schools
- Convalescent and acute care hospitals
- Parks and recreational areas
- Churches

The Project may result in a permanent increase in ambient noise levels. However, future noise types and volumes will be consistent with current land use and existing oil production operations. The nearest sensitive receptor to the Project is New Life Baptist Chapel and is located approximately six (6) miles from the project site. As such, the Project would not expose persons to noise level in excess of standards set forth in the Kern County General Plan. Therefore, the Project will have a less than significant impact.

- b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact

Groundborne vibrations are normally caused by trains, buses, large trucks, and construction activities such as use of heavy duty construction equipment. Meanwhile, groundborne noise results from vibration of buildings, windows, cupboards causing noise to be heard by patrons inside the buildings.

The Project does not include any construction activities as the flares currently exist on site and operation of the flares to combust vent gas during non-emergency events is consistent with current facility operations. As noted above, the flares are far from the nearest person/neighbor. As such, it is highly unlikely that any vibration or noise will be noticed off-site. Therefore, the Project will have no impact.

- c) *A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?*

Less Than Significant Impact

The Project will be located within the Elk Hills oilfield boundaries which historically have been allowed for the exploration and production of oil. The Project may result in a permanent increase in ambient noise levels. However, future noise types and volumes will be consistent with current land use and existing oil production operations. State and federal standards set by the U.S. Department of Labor



Occupational Safety and Health Administration (OSHA) regulate the amount of time workers may be exposed to sound levels above 90 dB. If the Project results in noise levels exceeding 85 dB, CREH will comply with all OSHA regulations for the protection against the effects of noise exposure (CCR §5095-5100). Therefore, the Project will have a less than significant impact.

- d) *A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?*

Less Than Significant Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. The Project does not involve any construction activities as the flares already exist on site. Since the flares already exist, there will not be any substantial temporary or periodic increase in ambient noise. Future noise types and volumes are expected to be similar to the existing conditions of the land use and are expected to remain well below the applicable Kern County noise standards. Therefore, the Project will have a less than significant impact.

- e) *For a Project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?*

No Impact

The Project site is not located within two (2) miles of a public airport. The nearest public airport is the Taft – Kern County Airport located approximately nine (9) miles from the Project site. This distance precludes the possibility of the project site being adversely exposed to aviation noise. Therefore, the Project will have no noise impact on people residing or working in the Project area.

- 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?*

No Impact

The project site is not located within the vicinity of a private airport. The nearest private airport is the Belridge Strip Airport located approximately 19 miles from the Project site. Therefore, the Project will have no noise impact on people residing or working in the Project area.



XIII. Population / Housing Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
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?				✓

XIII. POPULATION AND HOUSING

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

No Impact

The Project is to permit six (6) flares, already permitted for emergency, use for non-emergency operation, to combust excess vent gas and to add an SLC for ATC S-1150871. Those flares already exist and as such there is no construction associated with the Project. The Project does not induce the development of homes or businesses, nor does it include or require the extension of roads or infrastructure. The Project will not increase substantial population growth in the area. Therefore, the Project will have no impact.

b) Displace a substantial number of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact

There is no housing on the project site. As such, the Project will not displace a substantial number of existing housing, necessitating the construction of replacement housing elsewhere. Therefore, the Project will have no impact.



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- c) *Displace substantial number of people necessitating the construction of replacement housing elsewhere?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. The Project does not involve any construction because the flares already exist. As such, the Project will not displace a substantial number of people, necessitating the construction of replacement housing elsewhere. Therefore, the Project will have no impact.



XIV. Public Services Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
a) 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:				✓
i) Fire protection?				✓
ii) Police protection?				✓
iii) Schools?				✓
iv) Parks?				✓
v) Other public facilities?				✓

XIV. PUBLIC SERVICES

a) *Result in substantial adverse physical impacts associated with the provisions 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:*

i. *Fire protection?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. The Project does not involve any construction because the flares already exist.

No additional requirements are required from the Fire Department due to the administrative change in flare operation. All the flares were designed and constructed taking into account the maximum radius of heat radiation from the flares. Each flare has a fenced-off heat radiation boundary that is kept clear is any brush or ground cover to ensure ground fires are not caused and employee don't accidentally enter. CRE has an Emergency



Response Team with a fire truck that responds to fires as well as other emergencies. The Team and Emergency Services Building are located approximately 0.5 miles from the flare locations. The nearest Kern County Fire Dept. station is located in Taft approximately 9 miles away. No additional increase in fire protection demand is anticipated. Therefore, the Project will have no impact on fire protection.

i. Police protection?

No Impact

The nearest police station is located in Taft about 9 miles from flares. This police station is adequate to cover the Project. No new or altered police protection facility would be necessary and no additional increase in police protection demand is anticipated. Therefore, the Project will have no impact on police protection.

ii. Schools?

No Impact

The Project will be maintained and manned by existing CREH personnel and contractors. As such, the Project will not increase population in the surrounding areas necessitating the need for new schools. Therefore, the Project will have no impact on schools.

iii. Parks?

No Impact

The Project will be located within an existing oil field and is consistent with the zoning use. The Project is to authorize the non-emergency operation of six (6) existing flares and thus will not increase population in the surrounding areas necessitating the need for new parks. Therefore, the Project will have no impact on parks.

iv. Other public facilities?

No Impact

The Project will be located within an existing oil field and is consistent with the zoning use. The Project is to authorize the non-emergency operation of six (6) existing flares and thus will not increase population in the surrounding areas necessitating the need for other public facilities. Therefore, the Project will have no impact on parks.



XV. Recreation Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?				✓
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓

XV. RECREATION

- a) *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?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and for ATC project S-1150871 specifically to limit their use via an SLC that will limit the combined volume of vent gas they can combust. Currently, the flares are only permitted to combust vent gas during emergency events. The Project does not involve any construction because the flares already exist.

The project site and surrounding area does not currently contain any existing neighborhoods, regional parks, or recreational facilities. Furthermore, it does not necessitate the use of existing parks and recreational facilities due the nature of the Project. As such, no increase in the use or deterioration of existing recreational facilities would occur. Therefore, the Project will have no impact.

- b) *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

No Impact

As mentioned above, the Project is to authorize the non-emergency operation of six (6) existing flares. Furthermore, the Project is located within in the Elk Hills oil field and does not currently contain any recreational facilities due to the nature of it being



an oil field operation. Operation of the Project will not increase population of the surrounding area. As such, the Project does not include or require the construction or expansion of recreational facilities. Therefore, the Project will have no impact.



XVI. Transportation / Traffic Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation systems, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				✓
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards 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) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				✓



XVI. TRANSPORTATION / TRAFFIC

- a) *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation systems, including but not limited to intersections streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and to limit their use for ATC project S-1150871 via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events. No construction is required. As such, the Project will not impede the flow of traffic or decrease the level of service on existing roads. There are no pedestrian, bicycles, or mass transit circulation as no new public roadways will be altered during Project activities. Therefore, the Project will have no impact.

- b) *Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and to limit their use for ATC project S-1150871 via an. Currently, the flares are only permitted to combust vent gas during emergency events. The Project will be manned by existing personnel and there is no construction because the flares already exist. The Project will not conflict with the Kern County Congestion Management Program. Therefore, there will be no impact.

- 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?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and to limit their use for ATC project S-1150871 via an SLC. Currently, the flares are only permitted to combust vent gas during emergency events. The Project will be manned by existing personnel and this project does not involve any construction because the flares already exist. The Project site is not located within two (2) miles



of a private or public airport. Project operation will not result in a change in air traffic pattern and thus would not result in safety risk. Therefore, the Project will have no impact on air traffic patterns.

- d) *Substantially increase hazards due to design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

No Impact

The Project will not include the construction of new public roads or alterations to existing public roads or intersections. The flares already exist. Currently, they are only permitted to combust vent gas during emergency events. This project will allow for the flares to combust vent gas during non-emergency events. As such, the Project will not result in hazards due to sharp curves, dangerous intersections, or incompatible uses. Therefore, the Project will have no impact.

- e) *Result in an inadequate emergency access?*

No Impact

This project does not involve any construction activities. The flares already exist. Currently, they are only permitted to combust vent gas during emergency events. This project will allow for the flare to combust vent gas during non-emergency events. Therefore, the Project will have no impact on emergency access.

- f) *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?*

No Impact

There are no pedestrian or bicycle circulation as no new public roadways will be constructed for the proposed Project and no existing roadways will be altered during Project activities. The flares already exist. This project does not involve any construction activities. The Project will have restricted access; accordingly, bicyclists and pedestrians will not have access to the existing oil and gas site. Therefore, the Project will have no impact.



XVII. Utilities / Service Systems	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
Would the Project:				
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 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 that 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?				✓



XVII. UTILITIES / SERVICE SYSTEMS

Wastewater Treatment and Facilities (a, b, e)

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and to limit their use for ATC project S-1150871 via an SLC. This Project does not involve the use of water and does not require the use of a wastewater treatment. As such, the Project is not expected to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Therefore, the Project will have no impact.

- 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?*

No Impact

As noted above, the flares already exist. Currently, they are only permitted to combust vent gas during emergency events. This Project will allow for the flares to combust vent gas during non-emergency events. The Project will not use water nor generate any water or wastewater that would require treatment at a water or wastewater treatment facility. As such, the Project will not require the construction of new water or wastewater treatment facilities or expansion of existing facilities. Therefore, the Project will have no impact.

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

No Impact

The Project is to authorize the non-emergency operation of six (6) existing flares and to limit their use for ATC project S-1150871 via an SLC. This project will allow for the flares to combust vent gas during non-emergency events. This project does not involve the use of water; as such it does not require the use or result in the construction of new storm water drainage facilities or expansion to existing facilities. As such, the Project site will not be altered to have a negative effect on surface runoff or storm water drainage and new drainage facilities will not be required. Therefore, the Project will have no impact.



-
- d) *Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?*

No Impact

This project does not involve the use of water. This project will allow for the existing flares to combust vent gas during non-emergency events. Therefore, the Project will have no impact.

- e) *Result in a determination by the wastewater treatment provider that 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?*

No Impact

This project does not involve the use of water and does not involve wastewater treatment facilities. Therefore, the Project will have no impact.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?*

No Impact

This project will allow for the existing flares to combust vent gas during non-emergency events. This project does not involve any solid waste disposal. Therefore, the Project will have no impact.

- g) *Comply with federal, state, and local statutes and regulations related to solid wastes?*

No Impact

This project will allow for the existing flares to combust vent gas during non-emergency events. This project does not involve any solid waste disposal. No construction is required. Therefore, the Project will have no impact.



XVIII. Mandatory Findings of Significance	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?		✓		



XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

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

Less Than Significant Impact With Mitigation

With the incorporation of required permit conditions, the surrendering of Emission Reduction Credits (ERCs), and the incorporation of mitigation measures as outlined in the Initial Study, the Project will have a less than significant impact with mitigation on the environment and special status species.

Mitigation: See Mitigation Measures AIR-1 and AIR-2

- 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)?*

Less Than Significant Impact With Mitigation

CEQA Guidelines state that a Lead Agency shall consider whether the cumulative impact of a Project is significant and whether the effects of the project are cumulatively considerable (CCR §15065). The assessment of the significance of the cumulative effects of the Project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature and location of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The Project is not a part of any larger planned developments. Therefore, the Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., an increase in population that could lead to an increase need to housing, increase in traffic, air pollutants, etc.). The Project will have a less than significant impact with mitigation.

Mitigation: See Mitigation Measures AIR-1 and AIR 2.



-
- c) *Does the Project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less Than Significant Impact With Mitigation

The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have a substantial impact on human beings, either directly or indirectly. Project design elements and mitigation measures have been incorporated into the Project to reduce all potentially significant impacts to less than significant.

Mitigation: See Mitigation Measures AIR-1 and AIR 2



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I. APPENDICES

Appendix A. Acronyms and Abbreviations

Appendix B. Mitigation Monitoring and Reporting Program

Appendix C. Engineering Evaluation

Appendix D. Risk Management Review



Appendix A. Acronyms and Abbreviations

AAQA	Ambient Air Quality Analysis
AAQS	Ambient Air Quality Standards
AB 32	Assembly Bill 32 – California Global Warming Solutions Act of 2006
ATC	Authority to Construct
BACT	Best Available Control Technology
BAU	Business as Usual
BPS	Best Performance Standards
CARB	California Air Resources Board
CBSC	California Building Standards Code
CCR	California Code of Regulations
CH ₄	Methane
CEQA	California Environmental Quality Act
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
COC	Certificate of Conformity
dB	Decibel
District	San Joaquin Valley Unified Air Pollution Control District
DTSC	California Department of Toxic Substances Control
DVFHCP	Draft Valley Floor Habitat Conservation Plan
ERC	Emission Reduction Credit
ERG	Environmental Review Guidelines
GAMAQI	Guide for Assessing and Mitigating Air Quality Impacts
GHG	Greenhouse Gas
HAP	Hazardous Air Pollutant
HCP	Habitat Conservation Plan
HRA	Health Risk Assessment
MBHCP	Metropolitan Bakersfield Habitat Conservation Plan
MEI	Maximally Exposed Individual
MMBtu/hr	Million British Thermal Units Per Hour
N ₂ O	Nitrous Oxide
NO _x	Oxides of Nitrogen
NRA	California Natural Resources Agency
NSR	New Source Review
PM ₁₀	Particulate Matter 10 microns in diameter
PM _{2.5}	Particulate Matter 2.5 microns in diameter
RMR	Risk Management Review
ROG	Reactive Organic Gases
SO _x	Sulfur Oxides
SRA	State Responsibility Area
TAC	Toxic Air Contaminant



TPY	Tons Per Year
US EPA	US Environmental Protection Agency
USGS	US Geological Survey
VOC	Volatile Organic Compound



Appendix B. Mitigation Monitoring and Reporting Program

Impact	Significance Prior to Mitigation	Measure Number	Mitigation Measure	Enforcement Agency	Significance After Mitigation
<p>Project operational emissions may exceed the District's thresholds of significance.</p>	<p>Potentially Significant</p>	<p>AIR-1</p>	<p>For ATC Project S-1150871</p> <ul style="list-style-type: none"> • Prior to operating equipment under this Authority to Construct, permittee shall surrender NO_x emission reduction credits for the following quantity of emissions: 1st quarter – 6,143 lb, 2nd quarter – 6,144 lb, 3rd quarter – 6,144 lb, and fourth quarter – 6,144 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] • Prior to operating equipment under this Authority to Construct, permittee shall surrender SO_x emission reduction credits for the following quantity of emissions: 1st quarter – 671 lb, 2nd quarter – 671 lb, 3rd quarter – 671 lb, and fourth quarter – 671 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] • Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter – 4467 lb, 2nd quarter – 4468lb, 3rd quarter – 4468 lb, and fourth quarter – 4468 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] • Prior to operating equipment under this Authority to Construct, permittee shall surrender SO_x emission reduction credits for the following quantity of emissions: 1st quarter – 241 lb, 2nd quarter – 241 lb, 3rd quarter – 	<p>San Joaquin Valley Air Pollution Control District</p>	<p>Less than Significant</p>



Impact	Significance Prior to Mitigation	Measure Number	Mitigation Measure	Enforcement Agency	Significance After Mitigation
			<p>241 lb, and fourth quarter – 242 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]</p> <ul style="list-style-type: none"> ERC Certificate Numbers S-4211-2 (NOx), S-4390-2 (NOx), N-1280-5 (PM10 and SOX), and S-4211-1 (VOC,)and, (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] 		
		AIR-2	<p>For ATC Project S-1150872</p> <ul style="list-style-type: none"> Prior to operating equipment under this Authority to Construct, permittee shall surrender NO_x emission reduction credits for the following quantity of emissions: 1st quarter - 5362 lb, 2nd quarter – 5362 lb, 3rd quarter – 5362 lb, and fourth quarter – 5363 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Prior to operating equipment under this Authority to Construct, permittee shall surrender SO_x emission reduction credits for the following quantity of PM10 emissions: 1st quarter –607 lb, 2nd quarter – 607 lb, 3rd quarter – 608 lb, and fourth quarter – 608 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] 		



San Joaquin Valley Unified Air Pollution Control District
 Initial Study and Draft Mitigated Negative Declaration
 California Resources Production Corporation Steam Generators Project

February 25, 2016

Impact	Significance Prior to Mitigation	Measure Number	Mitigation Measure	Enforcement Agency	Significance After Mitigation
			<ul style="list-style-type: none"> • Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter – 4417 lb, 2nd quarter – 4417 lb, 3rd quarter – 4417 lb, and fourth quarter – 4418 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] • ERC Certificate Numbers S-4211-2, S-4390-2 and S-4468-2 (NOx), and N-1280-5 and S-3823-5 (PM10), and S-4211-1 (VOC) (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] 		



Appendix C. Draft Engineering Evaluations

Available Upon Request at District Office:

San Joaquin Valley Air Pollution Control District
Southern Region
34946 Flyover Court
Bakersfield, CA 93308
(661) 392-5500



Appendix D. Risk Management Review

Available Upon Request at District Office:

San Joaquin Valley Air Pollution Control District
Central Region
1990 E. Gettysburg Ave.
Fresno, CA 93726
(559) 230-6000
