



MITIGATED NEGATIVE DECLARATION (MND) ADDENDUM

This Addendum is prepared as a supplemental environmental document to the following adopted environmental document:

- *November 30, 1993 Mitigated Negative Declaration adopted for the oil and gas facility authorized by CUP No. 2491-1. (Attachment 1)*

~~In addition, the following documents are referenced for information and analysis on well stimulation techniques:~~

- ~~• *July 1, 2015 Environmental Impact Report: Analysis of Oil and Gas Well Stimulation Treatments in California; SCH No. 2013112046; Certified by the California Department of Conservation. (Attachment 2)*~~
- ~~• *August 28, 2014 report titled: Advanced Well Stimulation Technologies in California, An Independent Review of Scientific and Technical Information. This report was prepared by the California Council on Science and Technology and commissioned by the U.S. Bureau of Land Management. (Attachment 3)*~~

A. BACKGROUND INFORMATION AND PROJECT DESCRIPTION:

1. **Entitlement:** Modification of Conditional Use Permit (CUP) No. 2491-1 to authorize the continued operation and maintenance of 3 existing oil and gas wells and related production equipment within an existing oil and gas production facility, and to utilize a former storage tank site for road and facility maintenance. (Case No. PL18-0058).
2. **Applicant:** Carbon California Operating Company, LLC, and Carbon California Company, LLC, (Carbon), (Representative: Jane Farkas)
3. **Property Owner:** Carbon California Operating Company, LLC, and Carbon California Company, LLC, (Carbon), 270 Quail Court, Suite B, Santa Paula, CA 93060
4. **Location:** The project site is located near the northern terminus of Goodenough Road on the Basenberg "A" and "B" leases about 4 miles north of the City of Fillmore. (Attachment 4~~2~~)
5. **APNs:** The Assessor's Parcel Numbers (APN) of the parcels that encompass the oil and gas operations included in the proposed project are 041-0-070-080, 041-0-040-365, 041-0-040-415, 041-0-040-375.
6. **Lot Size:** 120-acre Lease "A" area (1.11-acre production pad); 15-acre Lease "B" area (1-acre graded pad).

County of Ventura
Planning Director Hearing
Case No. PL18-0058
Exhibit 4a - MND Addendum Revised
9.8.021

7. **General Plan Land Use Designation:** Open Space
8. **Zoning Designation:** OS-160 ac (Open Space, 160-acre minimum lot size)
9. **Background:** Oil exploration and production activities began in the Sespe Oil Field in the vicinity of the project site in 1887. The four existing wells on the Basenberg “A” Lease were drilled in 1968 and 1969. One of these has been abandoned. The other three are active or idle and are included in the proposed project.
10. **Project Description:**

The applicant requests that a modified conditional use permit be granted to authorize the continued operation and maintenance of an existing oil and gas facility for an additional 20-year period ending in 2038.

Oil production operations are proposed to continue on the existing 1.11-acre unvegetated graded pad located on the 120-acre Basenberg “A” Lease. There are four existing oil and gas wells located on this pad as follows:

Well Name	API Number	Use	Status
Basenberg #1	11120076	O&G Production	Active
Basenberg #2	11120120	O&G Prod./W.D.	Abandoned
Basenberg #3	11120176	Water Disposal	Idle
Basenberg #4	11120187	O&G Production	Idle

Standard well repair and maintenance activities (such as pump changes) would continue in accordance with California Geologic Energy Management Division (CalGEM) guidelines. Ancillary production equipment, such as pumping units, valves, electrical connections and pipelines, will continue to be used as part of facility operations. No flaring of gas is proposed to occur on the 1.11-acre production site or elsewhere on the subject lease. Produced fluids and gas will continue to be transported from the production facilities by existing pipelines. Oil will continue to be separated from produced wastewater at existing facilities within the Sespe Oil Field. The oil will continue to be shipped to market by pipeline. Wastewater will continue to be conveyed by pipeline from the separation facilities to existing permitted wastewater disposal wells for injection.

The three existing wells may be re-completed (i.e. perforating the existing well casing to produce fluid from a new geologic zone) or re-drilled to penetrate and produce fluid from new zones in the subsurface. Any re-drilled well would include the subsurface installation of new well casing. The existing surface casing would continue to be used.

An existing 0.5-acre graded pad on the Basenberg “A” Lease located south of the oil production pad will be revegetated and restored as it is no longer used at part of the oil and gas operation.

The 15-acre Basenberg “B” Lease will continue to be included in the permit area. A former tank battery site that encompasses approximately 1-acre on this lease will

continue to be used as a road maintenance and oil field equipment staging area. It will also be used for pipeline inspection and maintenance.

Hydraulic fracturing, acid well stimulation and other “well stimulation treatments” as defined in Public Resources Code Section 3157 are not proposed and would not be authorized by the requested permit. Additional environmental review pursuant to CEQA, a modified CUP and an additional public hearing is required for these stimulation techniques to be utilized.

Re-activation of the abandoned well (Basenberg #2) is not proposed and would not be authorized by the requested permit.

B. CEQA BASELINE:

Existing Setting:

The existing permitted facility is comprised of two sites on the Basenberg “A” and “B” leases in the Sespe Oil Field. Three existing oil and gas wells, and associated ancillary equipment such as pipelines, pumping units, valves, and electrical controls are currently operated on an existing 1.11-acre unvegetated graded pad on the Basenberg “A” Lease. A 1-acre unvegetated graded pad currently exists on the Basenberg “B” Lease that is the former site of a permitted produced fluid storage facility (i.e. a tank battery).

The proposed project primarily consists of the continued operation, maintenance, and reworking of the three existing wells and the associated production facilities located on the Basenberg “A” Lease. The reworking of the three existing wells includes the potential re-completion and re-drilling of the wells. Although most wells in the Sespe Oil Field have been subjected to hydraulic fracturing well stimulation treatments, the proposed project does not include the use of such well stimulation techniques. As with two of the three existing wells on the Basenberg “A” Lease, and most of the wells in the Sespe Oil Field, the re-completed or re-drilled well bores will be subject to “well stimulation techniques” such as hydraulic fracturing and acid well stimulation as defined in PRC 3157.

The continued operation, maintenance and reworking of the three existing oil and gas wells and associated facilities constitutes a continuation of the existing environmental setting. No new impacts would result from these components of the proposed project. Note that well stimulation by hydraulic fracturing has been a common practice in the Sespe Oil Field for more than 50 years. However, substantial public concern has been expressed regarding the potential for this technique to result in adverse environmental effects. The potential for such effects due to the re-completion or re-drilling of the three existing wells is addressed in this document.

Project changes:

A cChanges in the existing project is the proposed include the use of the 1-acre disturbed pad on the Basenberg “B” Lease as a staging area for road and facility maintenance, and as a site for the placement of portable produced fluid tanks and temporary trucking operations. The potential environmental effects of this ese-proposed project changes is are evaluated herein.

In addition to the changes in the use of the Basenberg “B” site, the environmental effects of anticipated future well re-completion and well re-drilling activities at the Basenberg “A” Lease are also evaluated in this document. Although these activities are considered part of the ongoing operation of the Sespe Oil Field, they are analyzed for environmental effect for informational purposes.

Finally, the effects of the existing facility and proposed project changes on the generation of greenhouse gases (GHG) are evaluated in this document.

C. STATEMENT OF ENVIRONMENTAL FINDINGS:

Previous Environmental Review:

On November 30, 1993, the Ventura County Planning Director granted CUP No. 2941-1 and adopted a Mitigated Negative Declaration (MND; Attachment 1) that evaluated the environmental impacts of the drilling, operation and maintenance of six new oil and gas wells in addition to the four existing oil wells (including the now-abandoned Basenberg #2 well) on the subject Basenberg Lease. The approved project also included storage of produced fluid in an onsite tank battery and truck transport of the oil to market. A maximum of 36 one-way truck trips per day (18 truckloads per day) are authorized under CUP 2941-1.

Mitigation measures identified in the MND were required to be implemented by the operator of the oil and gas facility authorized by CUP No. 2941-1. These mitigation measures addressed impacts on biological resources and visual resources. These measures involved actions to reduce the potential effects on the environment of the oil storage facility located on the Basenberg “B” Lease. One measure required that a berm be constructed around the storage tanks to prevent spillage of fluids in the event of a tank leak. The other measure required the development and implementation of a lighting plan for this site to minimize the spillover of light onto adjacent properties.

The storage tank facility on the Basenberg “B” Lease was taken out of service and abandoned in the mid-1990s. Since that time, produced fluid has been conveyed from the Basenberg “A” Lease by pipeline rather than by tanker trucks.

The current proposal involves the use of the former tank site as a staging area for the ongoing maintenance of the US Forest Service road that provides access to the Sespe Oil Field and adjacent federal public lands. It would also be used as a staging area for mobile equipment used as part of the ongoing operation of the Sespe Oil Field. No oil storage or other permanent facilities will be installed at the Lease B site. No containment berm or lighting facilities will be required or installed. Therefore, the mitigation measures identified in the adopted MND are now moot and not required. ~~The site would also be used for the placement of portable storage tanks for up to 120 days in any one year to temporarily hold produced fluid in the event of an interruption of pipeline service. During this interim operation, oil would be shipped to market by tanker truck. A maximum of 8 one-way truck trips (4 truckloads per day) is proposed. A berm consistent with the former tank facility would be constructed to protect against fluid spillage during any occasional temporary use of portable storage tanks. No permanent lighting would be installed on the Basenberg “B” Lease. Only temporary lighting required by applicable safety regulations would be utilized. Thus, the mitigation measures identified in the MND will, in effect, continue to be implemented.~~ No potentially

significant impacts were identified in the adopted MND for the oil well operations on the Basenberg "A" lease.

~~On July 1, 2015, the State Oil and Gas Supervisor (Dr. Steve Bohlen) certified the environmental impact report (EIR) titled "Analysis of Oil and Gas Well Stimulation Treatments in California" (Attachment 2). This EIR was commissioned by the California Legislature through the passage of Senate Bill 4 (SB4) in 2013. This document was prepared to "provide the public with detailed information regarding any potential environmental impacts of well stimulation in the State."~~

~~The certified EIR (Attachment 2) prepared by the State is a programmatic document that identified various significant impacts on the environment due to the cumulative effect of all well stimulation activity, and oil and gas development facilitated by such activity, in the State of California. Notably, an impact on groundwater quality was not identified in the EIR to result from hydraulic fracturing or acid well stimulation. This is consistent with the public statements of the now-former State Oil and Gas Supervisor Tim Kustic (i.e. the administrator of the California Geologic Energy Management Division or CalGEM). Mr. Kustic is quoted in the December 18, 2012 edition of the San Jose Mercury News as follows:~~

~~*"There is no evidence of harm from fracking in groundwater in California at this point in time. And it has been going on for many years."*~~

~~Mr. Kustic made a similar statement to the Ventura County Board of Supervisors in a 2013 noticed public hearing.~~

~~Note that the July 1, 2015 certification of the State EIR has been challenged and is currently under consideration by the California appellate court. No injunction against its use has been issued and no decision on its adequacy to meet the requirements of CEQA has been rendered by the appellate court.~~

~~The California Council on Science and Technology (CCST) reached a conclusion similar to the findings of the State EIR regarding potential effects on groundwater in an extensive August 28, 2014 report (Attachment 3) commissioned by the U.S. Bureau of Land Management (BLM) titled: *Advanced Well Stimulation Technologies in California, An Independent Review of Scientific and Technical Information*. This report reached the following conclusion regarding the potential effects of hydraulic fracturing:~~

~~*"There are no publicly recorded instances of subsurface release of contaminated fluids into potable groundwater in California."*~~

~~Thus, no substantial evidence that well stimulation techniques have had a significant effect on groundwater quality has been identified anywhere in the State of California. The identified effects of the well stimulation treatments are limited to changes in the ground surface and degradation of air quality.~~

~~The impacts identified in the certified EIR are largely due to the cumulative effect of oil and gas development in the State that may be facilitated or made economic by the availability and use of well stimulation techniques. Increases in air pollutant and greenhouse gas emissions, effects on biological or cultural resources due to land clearing for well pads, and risk of upset due to hazardous fluid trucking or accidents occurring at the wellsite during well~~

~~stimulation events are potentially significant when considered on a Statewide basis. However, these impacts do not reflect the far lower likelihood of potential impacts due to the application of hydraulic fracturing to a single well or a few wells in an existing oil field such as is proposed in the current project. In the current project, no new well pad is proposed and the potential future use of the subject well stimulation techniques would be limited to the existing three oil wells. Thus, there would be no new wells to contribute to air pollution and GHG generation, and no new effects on biological or cultural resources. The potential for an accident to occur during a well stimulation event at this specific facility is very low and speculative given the general rarity of such events and the decades of such activities at the Sespe Oil Field without reported incident.~~

~~The current operations and anticipated future changes in the Sespe Oil Field are described on pages 11.0-7 to 11.0-11 of the certified State EIR. Thus, in each issue area the potential contribution of this field to the identified Statewide impacts are considered. As indicated in the EIR (Page 11.0-11), it is anticipated that only 2 to 4 wells per year will be drilled in the Sespe Oil Field in the next 25 years with hydraulic fracturing treatments expected to be limited to new wells. This is in contrast to the 983 wells in the State that were subject to hydraulic fracturing treatments in a one-year period from 2012 to 2013. Thus, the activities at the Sespe Oil Field do not make a substantial contribution to the Statewide impacts identified in the EIR.~~

Environmental Review of the proposed project:

The potential impacts of the proposed project, and the environmental effects of future well re-completion and well re-drilling activities are evaluated by issue area below.

Air Quality:

Thresholds of Significance:

Criteria Pollutants:

25 pounds per day of Reactive Organic Compounds (ROC)
25 pounds per day of Nitrogen Oxides (NOx)

Greenhouse gas (GHG):

10,000 MTCO_{2e} per year

Analysis of impacts (long-term):

The proposed project primarily involves the continued operation of three existing oil wells located on the Basenberg "A" Lease. No new oil wells are proposed. Thus, no new emissions due to oil well installation would result from project implementation. Each oil well would continue to contribute approximately 2 pounds/day of ROC emissions. The total of 6 pounds per day of ROC emissions is part of the existing CEQA baseline condition and does not constitute an impact of the proposed project. In any case, these emissions are less than the [adopted](#) 25 pound/day Threshold of Significance.

Gas produced from the Basenberg Lease will continue to primarily be conveyed from the project site by pipeline to field compression facilities and then conveyed by pipeline to the Torrey Gas Plant located south of the Santa Clara Valley. From that plant, gas is sold to the Southern California Gas Company (SoCalGas) for distribution to residential and other customers of that public utility.

Approximately 95 percent of the gas produced at the Sespe Oil Field is conveyed by pipeline to SoCalGas for distribution to the customers of this public utility. The remaining approximately 5 percent is flared at four APCD-permitted facilities as follows:

Sespe Compressor Plant: Approximately 95 percent of the gas that is conveyed to this facility is transported via pipeline to the Torrey Gas Plant for sale to SoCalGas. The remaining gas is produced in the vapor recovery system and is not suitable for sale due to oxygen content. This gas is continuously flared. In the event of a pipeline shutdown, all gas received by this facility would be flared on an emergency basis in accordance with the Permit to Operate issued by the VCAPCD.

Bonebrake B Lease: Approximately 95 percent of the gas produced at this facility is conveyed by pipeline to the Torrey Plant for sale to SoCalGas. The remaining gas is produced in the vapor recovery system and is not suitable for sale due to oxygen content. This gas is continuously flared. In the event of a pipeline shutdown, all gas produced on this lease would be flared on an emergency basis in accordance with the Permit to Operate issued by the VCAPCD.

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Bonebrake A Lease: All gas produced at this facility is flared as there is no gas pipeline connection to this site. The volume of gas flared at this facility is below the amount for which an APCD permit is required. It is listed on the current Permit to Operate for informational purposes.

Cosmo Lease: All gas produced at this facility is flared as there is no pipeline connection to this site. The volume of gas flared at this facility is below the amount for which an APCD permit is required. It is listed on the current Permit to Operate for informational purposes.

The fact that a small portion of the gas attributable to the Basenberg facilities is flared does not constitute an impact of the project. It is an ongoing component of the existing permitted operations and part of the existing environmental setting.

There are no permanent or continuously-operated flares in the Sespe Oil Field. Only emergency flares are utilized under permit from the Ventura County Air Pollution Control District (VCAPCD).

Because nearly all (95 percent) of the gas produced from the project wells would continue to serve existing urban demand and not be flared, almost no new NOx emissions would be attributable to the Basenberg Lease A oil wells. result from project implementation. This would be the case even if gas production increased due to anticipated future well re-completion or well re-redrilling activities. The level of NOx emissions due to the burning of natural gas by the customers of a public utility is based on demand, not the source of the

natural gas. More gas production in the local oil and gas fields would only result in less gas being imported from outside the area by SoCalGas.

Since the project was originally reviewed and the MND adopted, the role of greenhouse gas (GHG) emissions and their potential contribution to global climate change has become an important and widely debated scientific, economic and political issue. The GHG emissions associated with oil field operations results from oil well operation, flaring of gas, and emissions of trucks that transport produced fluids. In the case of the proposed project, there is negligible ~~no~~ long-term flaring of gas and no fluid trucking. ~~or fluid trucking.~~ Thus, the ROC emissions of the three existing oil wells would be the predominant source of GHG emissions. These emissions are estimated below based on the following factors provided by the VCAPCD.

VCAPCD ROC emission factor: 2 lb/day ROC per well
ROC emissions per year: 0.365 short tons ROC/year per well
Conversion to metric tonnes: 0.9072 MT/short ton
ROC emissions per well: 0.3311 MT ROC/year per well
Ratio of Methane emissions to ROC: 3.04
Methane emissions per year per well: 1.01 MT
Ratio of CO2 emissions per unit of methane: 25

Project GHG emissions: 3 wells x 1.01 MT methane/well/year x 25 = **75.7 MTCO₂e/year**

The estimated 75.7 MTCO₂e/year of GHG emissions due to the three existing oil wells is part of the existing environmental setting and not an impact of the proposed project. In any case, the GHG emissions are far less than the 10,000 MTCO₂e/year Threshold of Significance recommended by the VCAPCD (Attachment 53). Impacts on climate change would be less than significant.

~~Note that the gas produced in the Sespe Oil Field is sold to the SoCalGas public utility for distribution to and use by urban customers. The gas burned by urban consumers does produce NOx and GHG emissions. These emissions are a function of urban demand, however, and do not increase or decrease with the fluctuations in supply obtained from oil and gas fields.~~

Each of the facility components on the Basenberg Lease operate in accordance with a Permit to Operate issued by the VCAPCD. The VCAPCD permit program involves periodic inspections of the oil wells, compressor plant, flares and other facilities by District personnel to detect and require correction of any leaks of oil and gas. This Countywide program minimizes the emissions from the existing oil fields.

In summary, air quality impacts due to ongoing operations of the three Basenberg wells on the Basenberg "A" Lease would be less than significant.

Analysis of impacts (short-term):

It is anticipated that the three wells will be subject to future re-completion or re-drilling activities during the requested permit term. These activities would be a continuation of standard oil field practice and not constitute a change from the existing setting. In any case, the short-term effects of these activities are evaluated below:

Re-completion of an existing well:

The re-completion of an existing wellbore would be a standard oil field practice involving the temporary use of a workover rig to potentially plug existing casing perforations or install new perforations in the well casing in order to produce fluids from a different subsurface geologic zone. Unless the newly tapped geologic zone is subject to hydraulic fracturing, re-completion activities would not be substantially different with other ongoing well maintenance (such as pump changes) and would not result in any discernible new impact on air quality.

~~If a new zone is subject to well stimulation by hydraulic fracturing, a series of truck mounted pumps and fluid tanks would be brought to the wellsite to pump fluid under high pressure into the wellbore. Additional short term emissions due to truck travel to the well site and the operation of diesel engines to pump fluids into the wellbore. A hydraulic fracturing treatment is anticipated to be completed in one day. According to a September 6, 2017 memorandum prepared by the VCAPCD (Attachment 6), a drilling rig using a Tier 3 diesel engine and consuming 1,000 gallons per day of diesel fuel, will generate 90 pounds of criteria pollutants (NOx + ROC) per day of operation. With the assumption that three such engines would be operated simultaneously during a hydraulic fracturing treatment and that all three existing wells would receive such treatment, it is estimated that 810 pounds of NOx/ROC would be generated by hydraulic fracturing of the project wells. Averaged over the 20-year life of the project, the average daily increase in emissions due to hydraulic fracturing would be 0.11 pounds per day. This would be far less than the 25 pound per day Threshold of Significance.~~

Re-drilling of an existing well:

The re-drilling of an existing well would involve the temporary operation of a drilling rig over an estimated three-week period. It would also involve temporary vehicle traffic to and from the well site by rig personnel. According to a September 6, 2017 memorandum prepared by the VCAPCD (Attachment 64), a drilling rig using a Tier 3 diesel engine and consuming 1,000 gallons per day of diesel fuel, will generate 90 pounds of criteria pollutants (NOx + ROC) per day of operation. In addition, the daily travel of 15 employees to and from the rig site from a 10-mile distance would generate an additional 0.06 pounds per day of NOx and 0.06 pounds per day of ROC. Thus, over a 21-day period, total emissions (NOx + ROC) is estimated to be 1,893 pounds $[(90 \times 21) + (0.06 \times 21) + (0.06 \times 21) = 1,893]$. Averaged over the 20-year life of the project, the average daily increase in emissions due to re-drilling would be 0.26 pounds per day $[1893/(365 \times 20) = 0.26]$. This would be far less than the adopted 25 pound per day Threshold of Significance.

~~As described above for well re-completion, an estimated 810 pounds of NOx/ROC would be generated by hydraulic fracturing of the three wells. Thus, a total of 2,703 pounds $(810 + 1893 = 2,703)$ of criteria pollutants would be generated by the re-drilling and subsequent hydraulic fracturing of the three existing wells. Averaged over the 20-year life of the project, the average daily increase in emissions due to re-drilling and hydraulic fracturing of the three wells would be 0.37 pounds per day. This would be far less than the 25 pound per day Threshold of Significance.~~

The proposed changes in the use of the existing 1-acre pad on the Basenberg "B" Lease involve equipment staging for ongoing road maintenance and oilfield operations. temporary

~~placement of portable tanks and trucking of produced fluid from the site in the event of an interruption of pipeline service.~~

The use of the existing pad on the Basenberg "B" Lease for road maintenance would not involve any substantial new impact on air quality. This is because the road maintenance activities by the operator of the Sespe Oil Field have been ongoing for several decades. These activities extend from the Basenberg "B" Lease on the south to sections of the roadway affected by landslides located about 1 mile to the north. The incorporation of this feature into the project description serves to formalize the historic use of the former tank site for equipment staging.

The use of the Basenberg B site as a temporary staging area for mobile oil field equipment would formalize a practice that has been ongoing for decades. The use of trucks and other equipment are part of the ongoing operations of the existing permitted oil field. No substantial impact associated with this use has been identified.

~~The occasional use of the Basenberg "B" Lease pad for the placement of portable tanks and the associated trucking of oil would involve a short-term increase in emissions. It is proposed that trucking be limited to a maximum of 120 days in any one year and 8 one-way truck trips (4 truckloads) in any one day.~~

~~With the assumption that produced oil will be trucked from the project site to the Crimson pipeline terminal in Santa Paula, a distance of about 12 miles, the truck traffic would involve a maximum of approximately 11,500 vehicle miles travelled in any one year. In a February 6, 2017 analysis (Attachment 7) prepared by the VCAPCD, tanker trucks generate emissions at a rate of 0.0017 pounds of NO_x and 0.00025 pounds of ROC per vehicle mile travelled. Thus, the maximum emissions in a single year due to temporary trucking operations would be 19.55 pounds of NO_x and 2.88 pounds of ROC. Averaged over a one-year time period, these emissions average 0.054 pounds per day of NO_x and 0.008 pounds per day of ROC. Thus, even if temporary trucking occurred every year during the 20-year life of the project, emissions due to trucking would be less than significant.~~

Analysis of impacts (Cumulative):

~~If it is assumed that temporary trucking of produced oil will occur each year for 120 days, the combined emissions (NO_x + ROC) of trucking and hydraulic fracturing averaged over the 20-year permit term is estimated to be 0.30 pounds per day (0.37 + 0.054 + 0.008 = 0.432). This level of emissions is far below the applicable 25 pounds per day Threshold of Significance.~~

Water Resources:

Threshold of Significance:

Water quality:

A project that is designed to meet all of the applicable requirements set forth in the following authorities shall not be considered to have a significant impact in this environmental area:

- California Health and Safety Code, Division 104, Part 13, Chapter 4
- California Code of Regulations, Title 22, Division 4.
- Ventura County Building Code, Article 1, Article 6
- Ventura County Ordinance Code, Division 4, Chapter 8

Note: Domestic water quality regulations for water systems with 15 or more service connections are enforced by the California Department of Public Health.

Water quantity:

A project has the potential to have a significant impact on water supply - quantity, if it either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable probable future projects would introduce physical development that would adversely affect the water supply - quantity of the hydrologic unit in which the project site is located.

Analysis of Impacts (Water quality):

There are no proposed changes in oil field equipment or surface facilities that would affect surface water quality. No new pads or roadways are proposed to be developed and no new wells would be drilled.

Future oil field activities are anticipated to involve re-completion or re-drilling of the existing three oil wells on the Basenberg "A" Lease ~~and the hydraulic fracture stimulation of those wells~~. While a valve or conduit failure of the surface equipment could conceivably occur and result in a spill of fluids on the surface, such an event is very unlikely to occur as a result of well recompletion and is considered speculative. ~~In the six-year period from 2009 to 2014, a total of 949 fluid spills were reported to the State Office of Emergency Services.~~

The water used by Carbon California for fire suppression, drilling operations and other oil field activities is obtained from the White Star #6 water supply well (API 11102841) located in the Sespe Oil Field about 2.5 miles northeast of the northern boundary of the Fillmore Groundwater Basin. This well produces fresh but non-potable water from a bedrock aquifer that has no direct hydrologic connection to the Fillmore Basin. Production of groundwater from this well does not have the potential to measurably affect the groundwater resources in the Fillmore Basin.

~~None were reported to be associated with hydraulic fracturing or acid well stimulation treatments. Furthermore, of the 7,833 spills in oil fields reported to OES from 1993-2014, none involved a confirmed spill of well stimulation flowback or wastewater. This information is published on pages 10.15-36 and 10.15-37 of the State EIR (Attachment 2). Thus, there is no substantial evidence of even an occasional failure of hydraulic fracturing equipment, and the resulting leakage of fluids, at a well site.~~

~~As indicated in the discussion on Page 6 above, no substantial evidence has been identified that well stimulation techniques have had a significant effect on groundwater quality anywhere in the State of California. The effects of the well stimulation treatments identified in the State EIR are limited to changes in the ground surface and degradation of air quality.~~

~~A permit from CalGEM is required to conduct a hydraulic fracturing well treatment. CalGEM may approve the treatment only if the geologic conditions and the engineering of the subject well is demonstrated by the operator to be adequate to prevent the leakage of injected fluids into protected groundwater resources.~~

~~The use of the existing pad on the Basenberg "B" Lease for the temporary placement of portable storage tanks would not pose a substantial risk to water quality. The site will be required to be bermed such that any leakage from the tanks will be contained and prevented from reaching surface water bodies or drainage courses.~~

In summary, no significant effects on water quality have been identified that would result from project implementation.

Analysis of Impacts (Water quantity):

~~Hydraulic fracturing treatments and the re-drilling of the three existing wells will involve the consumption of fresh water. An average of 130,000 gallons of water are required for a hydraulic fracturing well treatment according to the 2014 report by the California Council of Science and Technology (Attachment 3). Thus, if the three existing wells are subject to such a treatment, approximately 390,000 gallons of water will be consumed.~~

If each of the three wells are re-drilled, water will be consumed as part of the drilling process. It is estimated that 3500 barrels (147,000 gallons) of water will be consumed in the re-drilling of each well. In addition, about 20,000 gallons of water will be stored on the site for fire suppression purposes. Thus, an estimated 14,000 barrels (588,000 gallons) will be consumed for well re-drilling. The source of the water to be used for oil field activities is an existing water well in the Sespe Oil Field owned by the applicant. This well produces fresh water from an aquifer that is not used for any domestic potable water supply.

In summary, re-drilling of the wells ~~and hydraulic fracturing~~ will result in the consumption of an estimated ~~588,000~~^{978,000} gallons (~~1.83-0~~ acre-feet) of water. Averaged over the 20-year life of the project, the annual water demand will be ~~0.090-15~~ acre-feet per year. This negligible level of water demand does not have the potential to result in a significant effect on groundwater resources. Impacts on water quantity will be less than significant regardless of whether future well re-completion and re-drilling activities are considered part of the existing baseline setting or an impact of the proposed project.

Traffic:

Threshold of Significance

Project-Specific Impacts:

A potentially significant adverse project-specific traffic impact is assumed to occur at any intersection on the Regional Road Network if the project will exceed the thresholds established in Table 2. (For this analysis scenario, projects funded in the County's Capital Improvement Program may be used as mitigation measures. The improvements

identified in these projects may be incorporated into the capacity analysis to mitigate project specific impacts.)

Table 2: Thresholds of Significance for Changes in LOS at Intersections

Intersection LOS (Existing)	Increase in V/C or Trips greater than:
A	0.20
B	0.15
C	0.10
D	10 PHTs*
E	5 PHTs*
F	1 PHT*

*To critical movements. These are the highest combination of left and opposing through/right-turn PHTM.

Vehicle Miles Traveled (VMT)

As determined by the Governor’s Office of Planning and Research under State Bill 743, the Regional Transportation Plan/Sustainable Communities Strategy and Ventura County Public Works Roads and Transportation Division, projects that generate or attract fewer than 110 trips per day are presumed to have a less than significant impact on VMT. Under the current permit (CUP 2941-1), the Basenberg facility operation can include The project is authorized to have a maximum of 36 one-way truck trips per day (18 truckloads per day). This level of authorized traffic Therefore, the project generated (and associated VMT) is below the significant threshold of 110 trips per day and would have has no potentially significant CEQA impact. However, trucking operations ceased years ago as all produced fluids are now conveyed by pipeline. No new trucking operations are proposed or would be authorized by the requested modified CUP.

Cumulative Impacts:

A potentially significant adverse cumulative traffic impact is assumed to occur at any intersection if any one of the following results from the project:

- a. If the project will add one or more PHT to the critical movements at an intersection that is part of the regional road network and which is currently operating at an unacceptable LOS as defined in Table 1 by the year 2020.
- b. If the project will add 10 or more PHT to an intersection that is part of the regional road network, which is projected to operate at an unacceptable LOS defined in Table 1 by the year 2020.

Analysis of Impacts:

There will be no new long-term traffic associated with the proposed project. Produced fluids will continue to be conveyed from the project site by pipeline. Except in emergency situations, traffic Traffic will be comprised of ongoing field maintenance by existing field personnel. Impacts on traffic will be less than significant.

~~In the event of an interruption of pipeline service, it is proposed that produced oil be transported from the site by tanker truck for up to 120 days in any one year. A maximum of 8 one-way truck trips (4 truckloads) per day would be authorized by the requested permit.~~

~~Averaged over a year, the requested level of tanker truck traffic would be 2.6 one-way trips per day. This low level of traffic, even in the unlikely event that it occurred every year, would not have the potential to cause a significant effect on traffic safety or circulation. Note that transport of oil by tanker trucks (even on an emergency basis) has not occurred from the Basenberg leases for more than 20 years.~~

Biological Resources:

Thresholds of Significance:

Species Project Impact Thresholds:

A project will have a direct or indirect physical impact to a plant or animal species if a project, directly or indirectly:

- (a) reduces a species' population,
- (b) reduces a species' habitat,
- (c) increases habitat fragmentation, or
- (d) restricts reproductive capacity.

The determination of whether a project's impact is significant or not shall be based on both the current conservation status of the species affected and the severity or intensity of impact caused by the project. Endangered, rare and threatened species, as well as special status species, are more susceptible to project impacts than a more common species. If a project's impact is severe or intense, it may cause a population of a more common species to decline substantially or drop below self-sustaining levels, which would be considered a significant impact.

Sensitive Plant Communities Project Impact Thresholds:

The following types of impacts to sensitive plant communities are considered potentially significant:

- Construction, grading, clearing, or other activities that would temporarily or permanently remove sensitive plant communities. Temporary impacts to sensitive plant communities would be considered significant unless the sensitive plant community is restored once the temporary impact is complete.
- Indirect impacts resulting from project operation at levels that would degrade the health of a sensitive plant community. Cumulative

Waters and Wetlands Thresholds:

An analysis of potential project impacts to waters and wetlands must examine the direct and indirect impacts to the entire aquatic or wetland ecosystem potentially impacted by

the project, including impacts within the watershed that would adversely affect the aquatic or wetland ecosystem. Waters and wetlands depend on a source of water, and therefore impacts to the quality, quantity, flow rate, or timing of that water source can adversely impact a water or wetland just as much as direct development impacts to aquatic or wetland habitat. Wetlands perform numerous beneficial functions, including groundwater recharge, stream recharge, pollution filtration, flood control, and wildlife habitat. Impacts that reduce or eliminate the functions provided by a wetland would be considered significant.

Analysis of Impacts:

The proposed project does not involve any new disturbance of native habitat. The currently disturbed areas on the Basenberg "A" and "B" leases will not be expanded. There is no change in the long-term operation or configuration of the equipment and facilities on the ground surface. The use of the Basenberg "B" Lease for [staging of mobile equipment for road maintenance and oil field operations temporary trucking operations](#) will not have a discernible effect on wildlife as this site is located adjacent to the main oil field and forest access road. Thus, no substantial impacts related to the ongoing operations of the three Basenberg wells or the proposed uses of the 1-acre unvegetated pad on the Basenberg "B" Lease are anticipated.

A potentially significant impact on biological resources was identified in the adopted MND due to the potential for fluid spills at the authorized tank battery at the Basenberg "B" Lease pad. As a mitigation measure, a berm was required to be constructed to prevent the flow of any spilled liquids off of the pad. [The proposed project does not include any storage of produced fluids at the Basenberg B site. The former tank battery was removed years ago. A berm is no longer required. A similar berm will be required by the terms of the requested permit to be installed if any temporary tanks are placed on the "B" Lease. Thus, the required mitigation measure will continue to be implanted and impacts will be less than significant.](#)

Since the CUP 2941-1 was granted to authorize the Basenberg Lease oil and gas operations, public concern has been expressed regarding the potential impacts of such operations on the endangered California Condor. This issue is addressed in detail in Section D.3 below. In summary, no potentially significant impacts on the Condor have been identified.

Noise:

Thresholds of Significance:

If the noise from the proposed project is estimated to exceed any of the following standards at the nearest noise sensitive use, the noise impact is deemed to have a potentially significant noise impact and a consultant prepared acoustical analysis must be completed:

- 55 dB(A) between 6:00 a.m. and 7:00 p.m.,
- 50 dB(A) between 7:00 p.m. and 10:00 p.m., or
- 45 dB(A) between 10:00 p.m. and 6:00 a.m.

Analysis of Impacts:

The well pad on the Basenberg "A" Lease is located in a remote mountainous area that is more than 2,000 feet from any residential use or other sensitive receptor. The noise associated with the ongoing operation, maintenance and reworking of the existing three wells and associated equipment cannot be heard from any offsite location. Thus, no significant noise impact has been identified for future activities on the well pad.

Well re-drilling activities would involve the transport of a truck-mounted drilling rig to and from the well pad. It is anticipated that this would occur three times during the 20-year term of the requested permit. The noise generated on City streets (Goodenough Road and "A" Street) between the well site and State Highway 126 by two truck trips (one in and one out) occurring three times over a 20-year period does not have the potential to exceed the established Thresholds. At a speed of 25 miles per hour, a truck would be closer than 500 feet to any specific sensitive receptor for approximately 30 seconds. This brief time could not increase the one-hour average noise level (Leq-1 hour) above any applicable Threshold. Note that the noise of any project-related trucking would have no discernible effect on the ambient vehicle noise on State Highway 126. Many thousands of heavy truck trips occur each day on this highway.

~~It is also anticipated that each of the existing wells will be subject to hydraulic fracturing well stimulation treatments after being re-completed or re-drilled. Assuming that three heavy pump trucks will travel to the site, there could be six truck trips (3 in and 3 out) in a 2 or 3-day period. The 90 seconds (3 trucks x 30 seconds per truck) of noise experienced at a sensitive receptor on any one day due to the travel of hydraulic fracturing trucks does not have the potential to increase the one-hour average noise level (Leq-1 hour) above any applicable Threshold. Although numerous truck trips will be required to deliver fresh water to the well site for use in the hydraulic fracturing process, they would not travel outside of the Sespe Oil Field. This is because the water will be obtained from an onsite well. Note that the drilling rig and any trucks associated with a hydraulic fracturing treatment would not travel to or from the well site on the same day.~~

~~The potential temporary truck transport of produced oil from portable tanks on the Basenberg "A" Lease could generate new noise experienced by sensitive receptors along City of Fillmore streets. The requested permit would limit tanker truck traffic to 8 one-way trips (4 truckloads) per day. Given the time required to load a tanker truck, the 12-mile distance to the receiver site in Santa Paula, and the time to offload the oil, it would require at least one hour to complete the round trip from the site of the portable tanks on the Basenberg "A" Lease. Thus, two truck trips per hour could occur due to temporary oil transport activities. At a speed of 25 miles per hour, a truck would be closer than 500 feet to any specific sensitive receptor for approximately 30 seconds. Thus, additional truck noise could be experienced for about 60 seconds per hour. This brief time could not increase the one-hour average noise level (Leq-1 hour) above any applicable Threshold. In any case, such tanker trucking events would rarely occur in the unlikely event of a disruption of pipeline service.~~

In summary, no aspect of the proposed project has been identified that would result in a significant noise impact.

Visual Impacts:

Threshold of Significance:

1. A project has the potential to create a significant impact to scenic resources if it:
 - a. Is located within an area that has a scenic resource that is visible from a public viewing location; and,
 - b. Would physically alter the scenic resource either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects; or
 - c. Would substantially obstruct, degrade, or obscure the scenic vista, either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects.

Analysis of Impacts:

A potentially significant impact was identified in the adopted MND regarding the spillage of light from the tank battery on the Basenberg “B” Lease. The Permittee was required to prepare and implement a lighting plan for this site to minimize the spillover of light onto adjacent properties. The current proposal does not include any permanent lighting fixtures or substantial changes to the site. No substantial effect on the visual character of this site is anticipated. Visual impacts associated with the B site will be less than significant. ~~The only lighting that would be installed on this site would be limited to that necessary to satisfy applicable safety regulations for the temporary use of portable fluid storage tanks and associated trucking operations. Given the limited nature of the lighting and the anticipated infrequency of temporary trucking operations, impacts related to lighting will be less than significant.~~

The well pad on the Basenberg “A” Lease is not visible from any offsite location. Thus, no impacts on visual resources are anticipated for the continued oil field operations on this remote site.

D. CEQA GUIDELINES REQUIREMENTS

CEQA Guidelines section 15164(a) states that the lead agency shall prepare an addendum to an adopted negative declaration (ND or MND) if only minor technical changes or additions are necessary or none of the conditions described in the CEQA Guidelines section 15162 calling for the preparation of a subsequent EIR or subsequent ND have occurred. This Addendum includes a description of the changes or additions that are necessary to the adopted MND and certified EIR and, a discussion of why none of the conditions described in CEQA Guidelines section 15162 exist which require the preparation of a subsequent EIR or ND.

In summary, the proposed project is primarily comprised of the continued operation of an existing oil and gas facility. As indicated in the discussion in Section C above, the County has not identified any significant impacts that would result from the continued operation, maintenance and reworking of the three existing oil and gas wells and associated equipment on the Basenberg “A” Lease. Similarly, no significant impacts have been identified for the

use of the existing graded pad on the Basenberg "B" Lease as a road maintenance and facility staging area ~~or as a site for the temporary use of portable fluid storage tanks.~~

The conditions described in Section 15162 of the CEQA Guidelines which require the preparation of an EIR or subsequent negative declaration, are provided below, along with a discussion as to why a subsequent EIR or subsequent MND is not required for the proposed project:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects [§ 15162(a)(1)].

The requested permit modification would extend the effective period of CUP No. 2941-1 to authorize continued operation of the existing oil and gas production facility for an additional 20-year period ending in 2038. The proposed continued operation of the three existing wells does not include a physical change in the environment on the ground surface of the Basenberg "A" Lease. The three existing wells and associated equipment would continue to be utilized to produce oil and gas. The ongoing well operations would continue to include routine maintenance activities such as periodic use of a workover drill rig to change or reposition downhole pumping equipment, reconfigure wellbore perforations, perform chemical treatments to clean away precipitates that obstruct fluid flow, and other similar procedures.

Also included in the proposed project is the subsurface directional re-drilling of the three existing wells while utilizing the existing surface casing. The re-drilling of a well would involve the installation and temporary use of a drilling rig for several weeks but no permanent change in the surface facilities on the Basenberg "A" Lease. ~~Consistent with most wells drilled in the Sespe Oil Field, any re-drilled well would likely be subject to stimulation techniques such as hydraulic fracturing and acid well stimulation as defined in Public Resources Code (PRC) Section 3157. Two of the existing wells (Basenberg #1 and #4) were subject to hydraulic fracturing when they were initially drilled in 1968 and 1969.~~

The existing graded pad on the Basenberg "B" Lease would be used as an equipment staging area for road maintenance and oil field operations. ~~for the placement of portable fluid storage tanks. These tanks would be used to temporarily to hold produced fluid for up to 120 days until pipeline operations resume. Trucking of produced fluid would be limited to 8 one-way trips (4 truckloads) per day under the requested permit. The "B" Lease was the site of fluid storage tanks that were removed in the 1990s. The "B" Lease pad would not be expanded and would be bermed to ensure containment of any temporarily stored produced fluid.~~

As indicated in Section C above, no potentially significant impacts have been identified that would result from the proposed project.

Based on the above discussion, major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects are not required as a result of substantial changes in the project.

- 2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects [§ 15162(a)(2)].**

As explained below, the circumstances under which the potential impacts to the environment were evaluated have not substantially changed since the MND was adopted in 1993.

The subject oil and gas facility is located on an existing 1.11-acre graded pad in a remote area of the extensive Sespe Oil Field. This site (Basenberg Lease "A") has not substantially changed since the facility was last permitted in 1993. Except for other oil field facilities, the several square miles of mountainous open space lands that surround the site remain undeveloped.

The project site is located about 4 miles north of the City of Fillmore and cannot be seen from offsite locations.

There have been no substantial changes in the operation of other oil and gas facilities in operation in the Sespe Oil Field since 1993.

Based on the foregoing, substantial changes have not occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

- 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous negative declaration was adopted, shows any of the following:**
 - a. The project will have one or more significant effects not discussed in the previous EIR [§ 15162(a)(3)(A)].**

The impact of Greenhouse Gas (GHG) emissions on climate change ~~was~~ were not evaluated or disclosed in the 1993 MND. GHG emissions will continue to be generated by the ongoing operation of the subject oil and gas facility. These emissions will not increase from the existing baseline conditions as no new wells or other facilities are proposed. Thus, no new impact on climate change would result from project implementation.

Since the project was originally reviewed and the MND adopted, the role of greenhouse gas (GHG) emissions and their potential contribution to global climate change has become an important and widely debated scientific, economic and political issue. The GHG emissions associated with oil field operations results from oil well operation, flaring of gas, and emissions of trucks that transport produced fluids. In the case of the proposed project, there is essentially no long-term flaring of gas (i.e. 95 % of gas produced in the Sespe Oil Field is conveyed by pipeline to SoCalGas facilities for distribution to its residential and commercial customers) or any fluid

trucking. Thus, the ROC emissions due to the operation of the three existing oil wells would be the predominant source of GHG emissions. These emissions are estimated below based on the following factors provided by the VCAPCD.

VCAPCD ROC emission factor: 2 lb/day ROC per well
ROC emissions per year: 0.365 short tons ROC/year per well
Conversion to metric tonnes: 0.9072 MT/short ton
ROC emissions per well: 0.3311 MT ROC/year per well
Ratio of Methane emissions to ROC: 3.04
Methane emissions per year per well: 1.01 MT
Ratio of CO2 emissions per unit of methane: 25

Project GHG emissions: 3 wells x 1.01 MT methane/well/year x 25 = **75.7 MTCO_{2e}/year**

The estimated 75.7 MTCO_{2e}/year of GHG emissions due to the three existing oil wells is part of the existing environmental setting and not an impact of the proposed project. Similarly, any emissions from the flaring of a minor (approximately 5 percent) proportion of the produced gas is part of the existing environmental setting and not an impact of the proposed project. In any case, the GHG emissions generated by the subject facilities are far less than the 10,000 MTCO_{2e}/year Threshold of Significance recommended by the VCAPCD (Attachment 53). Impacts on climate change would be less than significant.

Impacts involving greenhouse gas emissions pertain to changes in global climate. This is a cumulative effect that would not involve project-specific or local impacts. As indicated above, the estimated GHG emissions would be less than the applicable threshold. Thus, the contribution of the project to the impact of global climate change is not cumulatively considerable.

It should be noted that the production of oil and gas at a local facility, such as the Sespe Oil Field, avoids the increased GHG emissions that would occur if oil and gas had to be obtained from an out-of-state source to meet consumer demand. Production operations in other states and foreign nations are not subject to the level of pollution-limiting regulation found in California. Thus, increased GHG generation from operations to produce oil along with the added GHG emissions generated during fluid transport to a local refinery would be expected if local oil sources had to be replaced.

b. Significant effects previously examined will be substantially more severe than shown in the previous EIR [§ 15162(a)(3)(B)].

The environmental conditions that currently exist on site are substantially the same as those that existed at the time the MND was adopted. The continued operation of the three oil and gas wells and related production facilities that existed at the time the previous MND was adopted will not result in any new significant effects not discussed in the previous MND.

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant

effects of the project, but the project proponents decline to adopt the mitigation measure or alternative [§ 15162(a)(3)(C)].

The potentially significant effects identified in the previous MND were related to the storage facilities that were located in the past on the Basenberg Lease “B” site. These facilities were largely removed more than 20 years ago with the installation of a pipeline system to convey produced oil, water and gas. The remaining 1-acre unvegetated pad is proposed to be used as a staging area for road and facility maintenance, ~~and as a site for the temporary placement of portable storage tanks in the event of an interruption of pipeline service.~~ No significant impacts have been identified for the proposed uses on and associated with the Basenberg “B” Lease site.

The environmental conditions that currently exist on Basenberg Lease “A” site are substantially the same as those that existed at the time the MND was adopted. The continued operation of the three oil and gas wells and related production facilities that existed at the time the previous MND was adopted will not result in any new significant effects not discussed in the previous MND. The proposed project primarily involves a continuation of the existing environmental setting.

d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative [§15162(a)(3)(D)].

Since the County adopted the MND in 1993, concerns about possible effects of oil and gas operations on the California condor have been raised in public testimony on other proposed oil and gas projects. To date, no substantial evidence has been presented or identified that a condor has ever been injured or killed as a result of oil and gas operations. Measures have nonetheless been developed in consultation with the U.S. Fish and Wildlife Service to minimize any potential adverse effect on the California condor and other nesting birds resulting from oil and gas operations. The California Department of Fish and Wildlife concurs with these measures. Although not required to address an identified potentially significant impact, these measures (reproduced below) will be incorporated into the recommended conditions of approval of the requested permit modification as best management practices to protect this important species.

Note that these measures were largely developed based on the experience gained in the Condor re-introduction efforts that have taken place in the vicinity of the Sespe Oil Field. The applicant, Carbon California Operating Company, LLC, and Carbon California Company, LLC, (Carbon), has implemented these measures in all of its operations in the Sespe Oil Field in consultation with the U.S. Fish and Wildlife Service (USFWS). By letter dated November 17, 2014 (Attachment 85), the USFWS states that *“this is to confirm that to our knowledge, no California Condors have been injured or killed as a result of Seneca’s operations.”*

California Condor Protection Best Management Practices (BMPs)

Purpose: To avoid significant impacts during construction and operation and ensure compatibility with conservation efforts outlined in the *Recovery Plan for*

California Condor (April 19, 1996) and direction provided by United States Fish and Wildlife Service (USFWS) for oil and gas facilities within the range of the California Condor in Ventura County (USFWS, 2013).

Requirement: During construction and operation, the Permittee shall adhere to the following USFWS recommended California condor Best Management Practices (BMPs):

Landing Deterrents

- a. All power lines, poles, and guy wires shall be retrofitted with raptor guards, flight diverters, and other anti-perching or anti-collision devices to minimize the potential for collision or electrocution of condors. Landing deterrents (e.g. Daddi Long Legs or porcupine wire) shall be attached to the walking beams on pumping units.
- b. All surface structures which are identified by the USFWS or County-approved qualified biologists as a risk to California condors, shall be modified (e.g. to include installation of raptor guards, anti-perching devices, landing deterrents) or relocated to reduce or eliminate the risk.

Microtrash

- c. All construction debris, food items, and other trash including micro-trash e.g. small items as screws, nuts, washers, nails, coins, rags, small electrical components, small pieces of plastic, glass, or wire, and anything that is colorful or shiny) will be covered or otherwise removed from a project site at the end of each day or prior to periods when workers are not present at the site.
- d. All hoses or cords that must be placed on the ground due to drilling operations that are outside of the primary work area (immediate vicinity of the drilling rig) will be covered to prevent California condor access. Covering will take the form of burying or covering with heavy mats, planks, or grating that will preclude access by California condors.
- e. All equipment and work-related materials (including, but not limited to, loose wires, open containers, rags, hoses, or other supplies or materials) shall be contained in closed containers either in the work area or placed inside vehicles.
- f. Poly chemical lines shall be replaced with stainless steel lines to preclude condors from obtaining and ingesting pieces of poly line.
- g. Prior to issuance of a Zoning Clearance for land clearing activities or construction, informational signs describing the threat that micro-trash poses to condors, and the cleanup or avoidance measures being implemented, shall be posted at the site.
- h. Prior to conducting work on-site, employees and contractors shall be made aware of the California condor, and how to avoid impacts on them. Special emphasis shall be placed on keeping the well pad site free of micro-trash and other hazards.

- i. Wells pads shall be inspected closely for micro-trash on a daily basis.

Chemicals

j. Ethylene glycol based anti-freeze or other ethylene glycol based liquid substances shall be avoided, and propylene glycol based antifreeze will be encouraged. Equipment or vehicles that use ethylene glycol based anti-freeze or other ethylene glycol based liquid substances shall be inspected daily for leaks, including (but not limited to) areas below vehicles for leaks and puddles. Standing fluid (e.g. a puddle of anti-freeze) will be remediated (e.g. cleaned up, absorbed, or covered) immediately upon discovery. Leaks shall be repaired immediately. The changing of antifreeze of any type shall be prohibited onsite.

k. Open drilling mud, water, oil, or other liquid storage or retention structures shall be prohibited. All such structures must have netting or other covering that precludes entry or other use by condors or other listed avian species.

l. The design and location of any flaring equipment shall be subject to review and approval by the Planning Director in consultation with the USFWS.

Miscellaneous

m. All food items and associated refuse shall be placed in covered containers that preclude access or use by California condors.

n. All equipment and work-related materials (including loose wires, open containers, rags, hoses, or other supplies) will be placed in closed containers or inside vehicles.

o. No dogs or other potentially predatory domesticated animals shall be allowed on the drill site unless on a leash or otherwise contained at all times.

p. All construction equipment, staging areas, materials, and personnel shall remain within the perimeter of the disturbed area authorized under the applicable permit.

q. The discharge of firearms at the project site or vicinity by any employee or contractor of the Permittee shall be prohibited.

r. Feeding of wildlife by any employee or contractor of the Permittee shall be prohibited.

s. Access to the project site shall be made available to the representatives of the State and Federal wildlife agencies (California Department of Fish and Wildlife (CDFW) U.S. Fish and Wildlife Service) upon reasonable notice to the Permittee and compliance with all required drill site safety measures. Access to the site shall be provided within 24 hours of the receipt of the notice.

t. The Permittee shall place signage on the project site to inform personnel and visitors of the above requirements.

The Permittee shall implement the BMPs listed above throughout the entire life of the project, unless modified by the County Planning Director in consultation with USFWS and CDFW. A County-approved qualified biologist shall confirm and photo-document the installation of the BMPs.

Documentation: The Permittee shall prepare photo documentation of the complete installation of the signage and above BMPs.

Timing: Prior to the issuance of the Zoning Clearance for Use Inauguration, the Permittee shall take the following actions:

- Install signage.
- Submit photo-documentation of the installation of the signage to the Planning Division.
- Arrange for a site inspection by County staff to confirm that the measures included in this condition have been implemented.

Monitoring and Reporting: Planning Division staff will review the submitted reports. The Planning Division has the authority to conduct site inspections to ensure ongoing compliance with this condition consistent with the requirements of § 8114-3 of the *Ventura County Non-Coastal Zoning Ordinance*.

Additional California Condor Protection Best Management Practices

Purpose: To avoid significant impacts during construction and operation and ensure compatibility with conservation efforts outlined in the *Recovery Plan for California Condor* (April 19, 1996) and direction provided by United States Fish and Wildlife Service (USFWS) for oil and gas facilities within the range of the California Condor in Ventura County (USFWS, 2013).

Requirement: During construction and operation, the Permittee shall adhere to the following additional USFWS recommended California condor Best Management Practices (BMPs):

- a. All food items and associated refuse shall be placed in covered containers that preclude access or use by California condors.
- b. All equipment and work-related materials (including loose wires, open containers, rags, hoses, or other supplies) will be placed in closed containers or inside vehicles.
- c. No dogs or other potentially predatory domesticated animals shall be allowed on the drill site unless on a leash or otherwise contained at all times.

- d. All construction equipment, staging areas, materials, and personnel shall remain within the perimeter of the disturbed area authorized under the applicable permit.
- e. The discharge of firearms at the project site or vicinity by any employee or contractor of the Permittee shall be prohibited.
- f. Feeding of wildlife by any employee or contractor of the Permittee shall be prohibited.
- g. Access to the project site shall be made available to the representatives of the State and Federal wildlife agencies (California Department of Fish and Wildlife, U.S. Fish and Wildlife Service) upon reasonable notice to the Permittee and compliance with all required drill site safety measures. Access to the site shall be provided within 24 hours of the receipt of the notice.

The Permittee shall implement the BMPs listed above throughout the entire life of the project, unless waived by USFWS or a County-approved qualified biologist in consultation with USFWS, California Department of Fish and Wildlife (CDFW), and the Planning Division. A County-approved qualified biologist shall confirm and photo-document the installation of the BMPs. The Permittee shall place signage on the project site to inform personnel and visitors of the above requirements.

Documentation: The application shall prepare photo documentation of the complete installation of the signage and implementation of the above BMPs.

Timing: Prior to the issuance of a Zoning Clearance for use inauguration, the Permittee must take the following actions:

- Install signage.
- Submit photo-documentation of the installation of the signage to the Planning Division.
- Arrange for a site inspection by County staff to confirm that the measures included in this condition have been implemented.

Prior issuance of a Zoning Clearance for Use Inauguration, the Permittee must provide the Planning Division with photo documentation of the implementation of the above requirements and obtain written concurrence by the Planning Division that the required BMPs are in place.

Monitoring and Reporting: Planning Division staff will review the submitted reports. The Planning Division has the authority to conduct site inspections to ensure ongoing compliance with this condition consistent with the requirements of § 8114-3 of the *Ventura County Non-Coastal Zoning Ordinance*.

Based on the information provided above, and the whole of the record, none of the conditions have occurred set forth in CEQA Guidelines section 15162 to require the preparation of a subsequent EIR or subsequent MND. The decision-making body shall consider this Addendum to the adopted MND prior to making a decision on the project.

D. PUBLIC REVIEW:

Pursuant to the State CEQA Guidelines section 15164(c), this addendum to the MND does not need to be circulated for public review, and shall be included in, or attached to, the adopted MND.

Prepared by:

Justin Bertoline

Justin Bertoline, Senior Planner
Commercial & Industrial Permits Section

Attachments to the MND Addendum

Attachment 1: November 30, 1993 adopted MND

~~Attachment 2: July 1, 2015 Environmental Impact Report: Analysis of Oil and Gas Well Stimulation Treatments in California; SCH No. 2013112046; Certified by the California Department of Conservation. (Certification statement by State Oil and Gas Supervisor only)~~

~~Attachment 3: August 28, 2014 report titled: Advanced Well Stimulation Technologies in California, An Independent Review of Scientific and Technical Information. This report was prepared by the California Council on Science and Technology and commissioned by the U.S. Bureau of Land Management.~~

Attachment ~~4~~2: Site plans

Attachment ~~5~~3: January 30, 2018 VCAPCD Memorandum Regarding GHG Threshold of Significance

Attachment ~~6~~4: September 6, 2017 VCAPCD memorandum on drilling operation emissions

~~Attachment 7: February 6, 2017 VCAPCD calculation of tanker truck emissions~~

Attachment ~~8~~5: November 17, 2014 USFWS letter to Seneca Resources

MITIGATED NEGATIVE DECLARATION

A. PROJECT DESCRIPTION:

1. Entitlement: CUP-2941, Modification No. 1
2. Applicant: Seneca Resources Corporation
3. Location: (see Exhibit "1"): Near terminus Goodenough Road, Fillmore, CA
4. Assessor Parcel No(s): 41-0-070-08; 41-0-040-33, -07, -09
5. Parcel Size: ± 134.70 acres (Sites "A" and "B")
6. General Plan Designation: Open Space
7. Existing Zoning: "O-S-160" (Open Space, 160 acre minimum)
8. Project Description: Modify CUP-2941 to add to the existing 120-acre permit area (Site "A") a 14-acre area (Site "B") which includes an existing but unpermitted oil storage and shipping facility. This Modification would authorize an existing unpermitted well (No. 4) on the existing drilling pad on Site "A", and approve the drilling of an additional five (5) exploration/production wells on the same drilling pad. The Modification would approve the transport by existing pipeline from Site "A" to Site "B" and then, as necessary, south on Goodenough Road to an existing facility located at the western terminus of Fourth Street in the City of Fillmore. The Modification would approve the use of Site "B" as a 24-hour shipping facility. (See Exhibits "2" and "3")
9. Responsible Agencies: Department of Conservation, Division of Oil and Gas

B. STATEMENT OF ENVIRONMENTAL FINDINGS

State law requires that an Initial Study (environmental evaluation) be conducted to determine if this project could significantly affect the environment. Based on the findings contained in the attached Initial Study, it has been determined that this project could have a significant effect on the environment; therefore, a Mitigated Negative Declaration (MND) has been prepared. The potentially significant effects identified can be reduced to less than significant levels if the proposed Mitigation Measures are adopted as Conditions of Approval.

C. LISTING OF POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS IDENTIFIED (See Initial Study Section Note for Mitigation Measures)

Biological Resources, Visual Resources, Noise and Vibration

D. PUBLIC REVIEW:

1. Legal Notice Method: Direct mailing to property owners within 300 feet of proposed project boundary, and a legal notice in a newspaper of general circulation.
2. Document Posting Period: January 25 - February 24, 1993
3. Comments: The public is encouraged to submit written comments regarding the adequacy of this MND no later than 5:00 p.m. on the last day of the above posting period to the Case Planner, RMA/Planning, 800 S. Victoria Avenue, Ventura, CA 93009. The FAX number is (805) 654-2509.

E. CONSIDERATION AND APPROVAL:

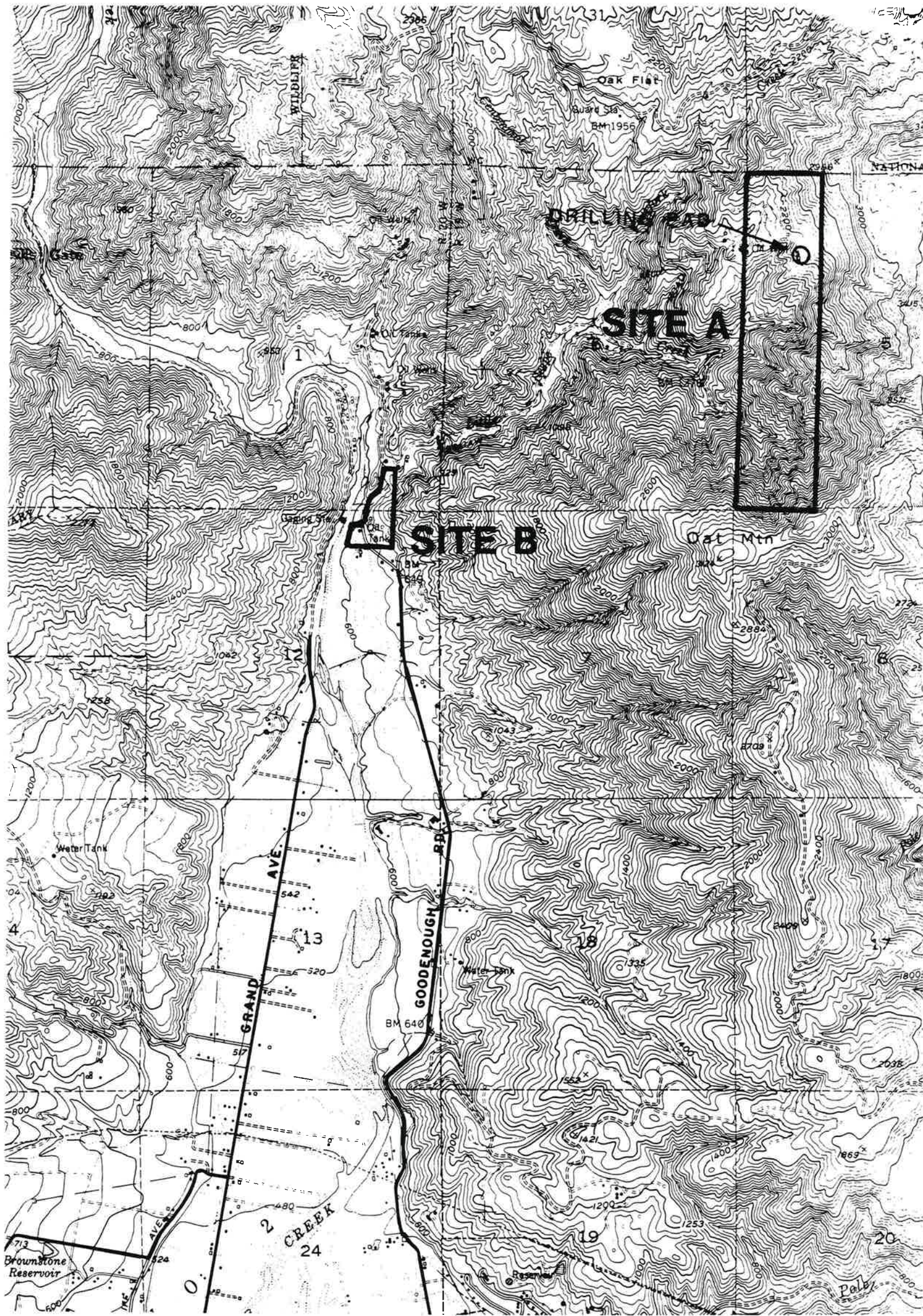
Prior to approving the project, the decision-making body of the Lead Agency must consider this MND and all comments received during public review. That body shall approve the MND if it finds that all the significant effects have been identified and that the proposed mitigation measures will reduce those effects to less than significant levels.

1. Prepared by: Kelly Scoles, Case Planner, Phone No. (805) 654-5042.
2. Reviewed for Release to the Public by: Robert K. Laughlin, *RVJ* Manager, Commercial/Industrial Land Use Section. *1-19-93*
3. Recommended for Approval by Lead Agency by: Keith Turner, Director, Planning Division.

KS:lm/1A146-7.93

Exhibit "1" - Location Map
Exhibit "2" - Site "A" Uses
Exhibit "3" - Site "B" Uses

Attachment 1 - November 30, 1993 adopted
MND

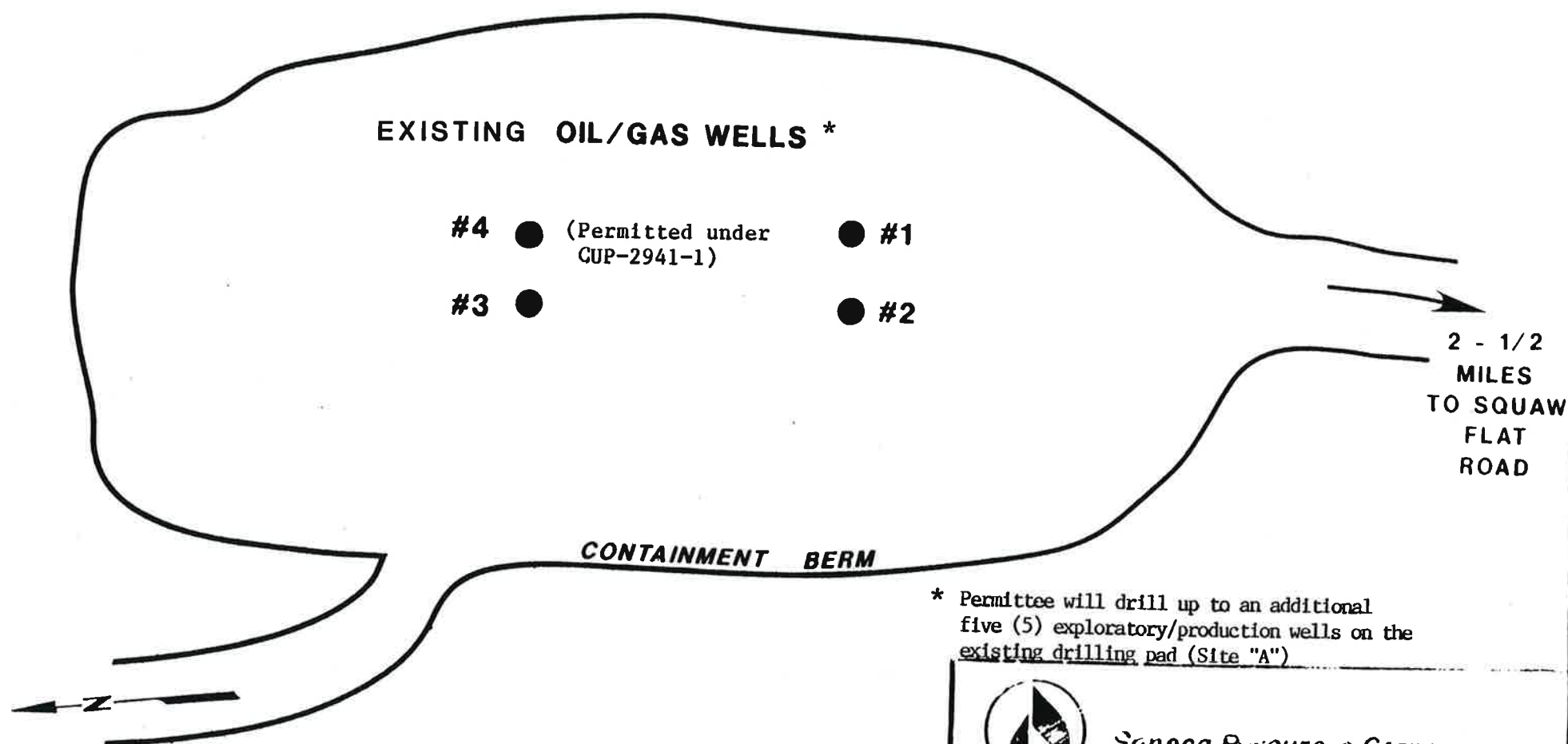


Ventura County
Resource
Management
Agency

CUP-2941-1

EXHIBIT "1"





* Permittee will drill up to an additional five (5) exploratory/production wells on the existing drilling pad (Site "A")



Seneca Resources Corporation

is National Fuel Gas Co. Company

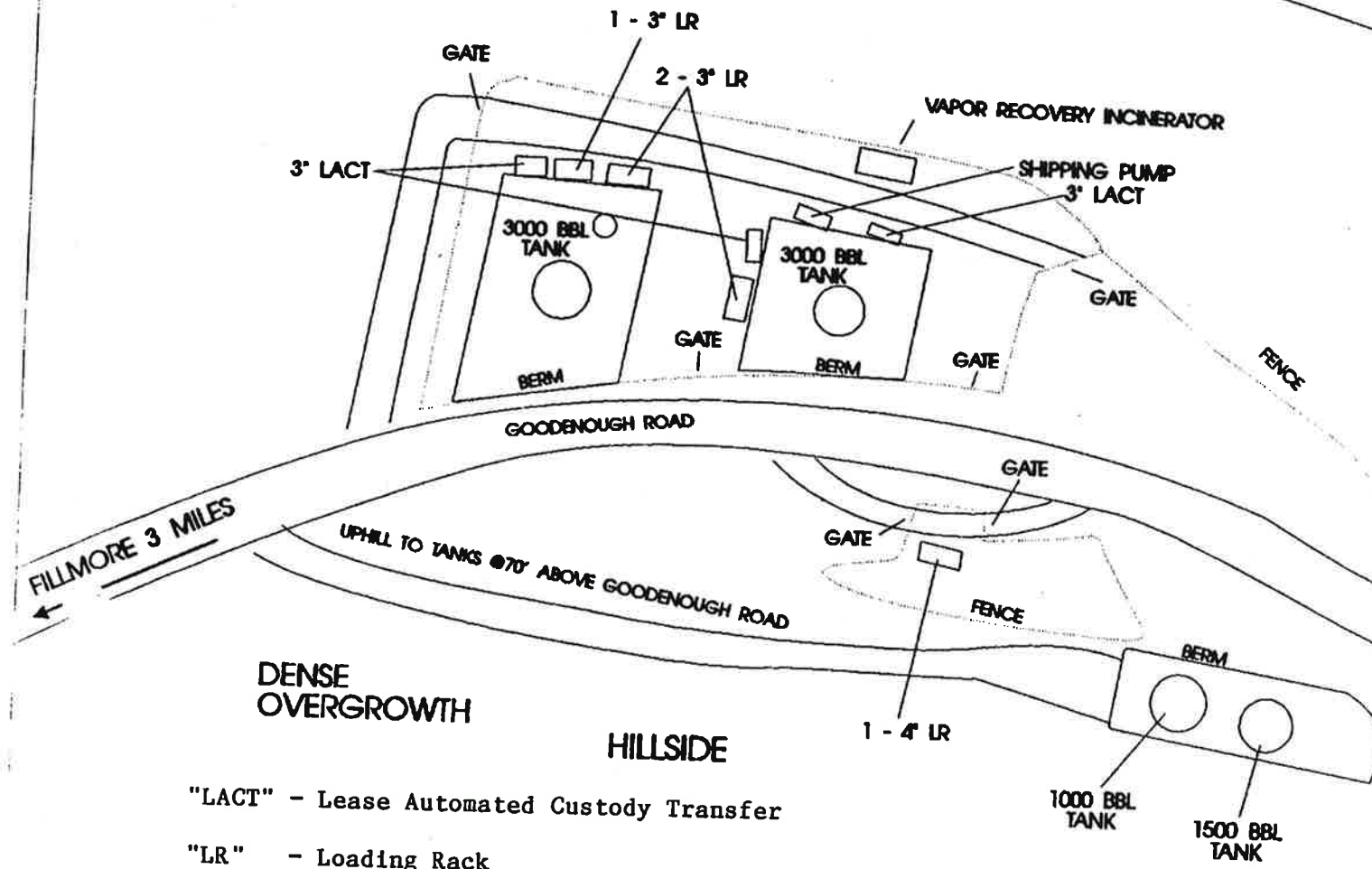
**BASENBERG LEASE
EXISTING DRILLSITE**

SITE PLAN - CUP 2941 Site "A"

Scale: NONE Date: 3-19-92 Geol. L.G.T.


Exhibit "2"

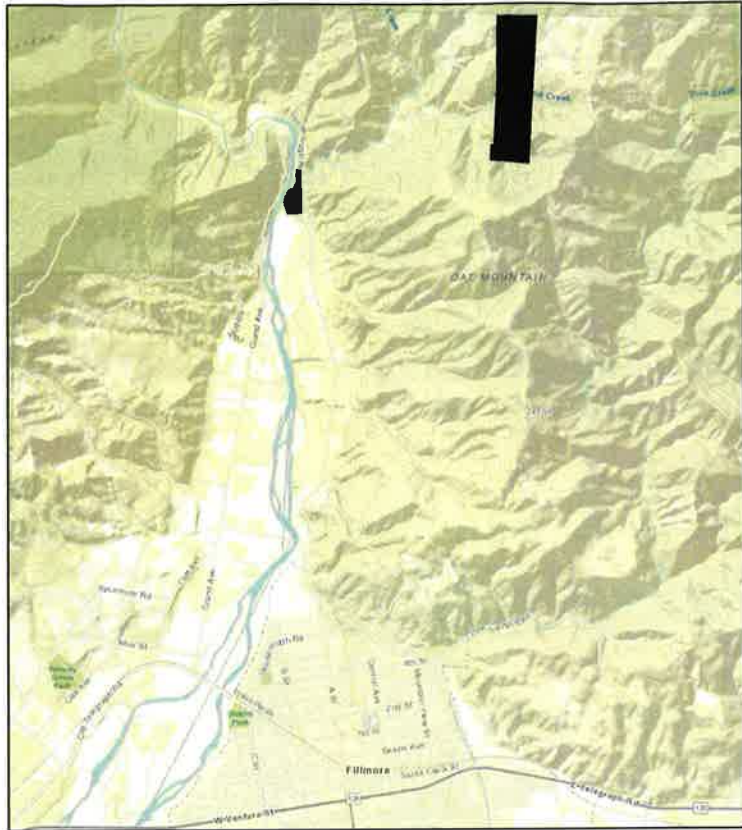
SESPE CREEK



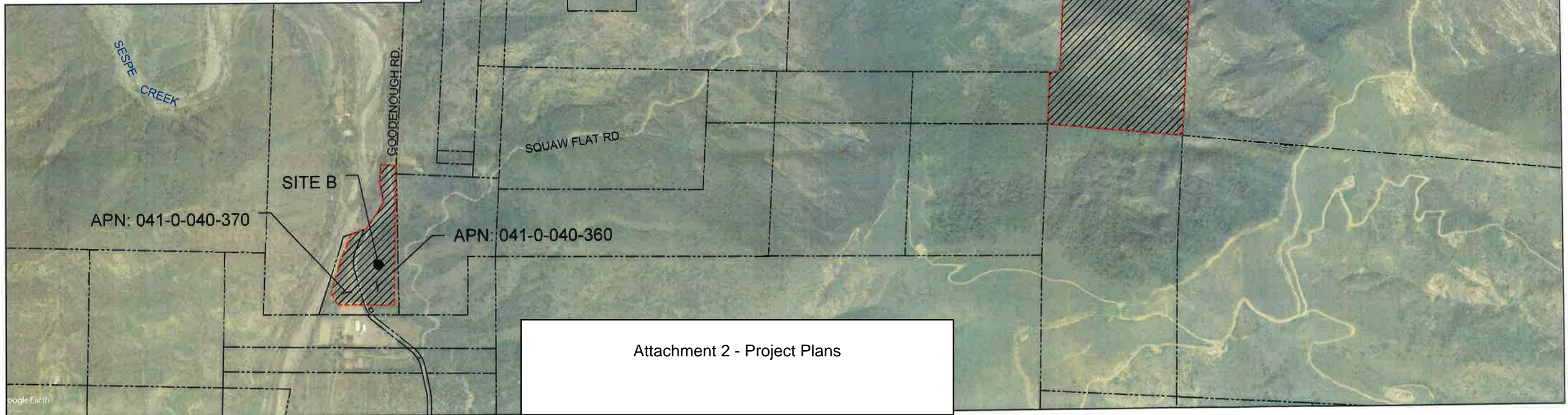
"LACT" - Lease Automated Custody Transfer
"LR" - Loading Rack

Exhibit "3"

 **Seneca Resources Corporation**
a National Fuel Gas Service company
CUP-2941 Mod. 1
**CRUDE OIL
SHIPPING FACILITY
SITE PLAN** Site "B"
NO SCALE





VICINITY MAP
N.T.S.



Attachment 2 - Project Plans

LEGEND

-  — CURRENT CUP BOUNDARY
-  — CARBON MINERAL LEASE




APPLICANT: CARBON CA COMPANY
279 QUAIL CT., SUITE B
SANTA PAULA, CA 93060

PREPARED BY:
SESPE
CONSULTING, INC.
374 Poli Street, Ste. 200 • Ventura, CA 93001
(805) 275-1515 www.sespeconsulting.com

CARBON
BASENBERG SITE PLAN
PL18-0058

SCALE: HORIZ. AS SHOWN	FIGURE NUMBER
VERT. AS SHOWN	1 OF 3
DRAWN BY: G. CAMUS	
CHECKED BY: J.F.	



LEGEND

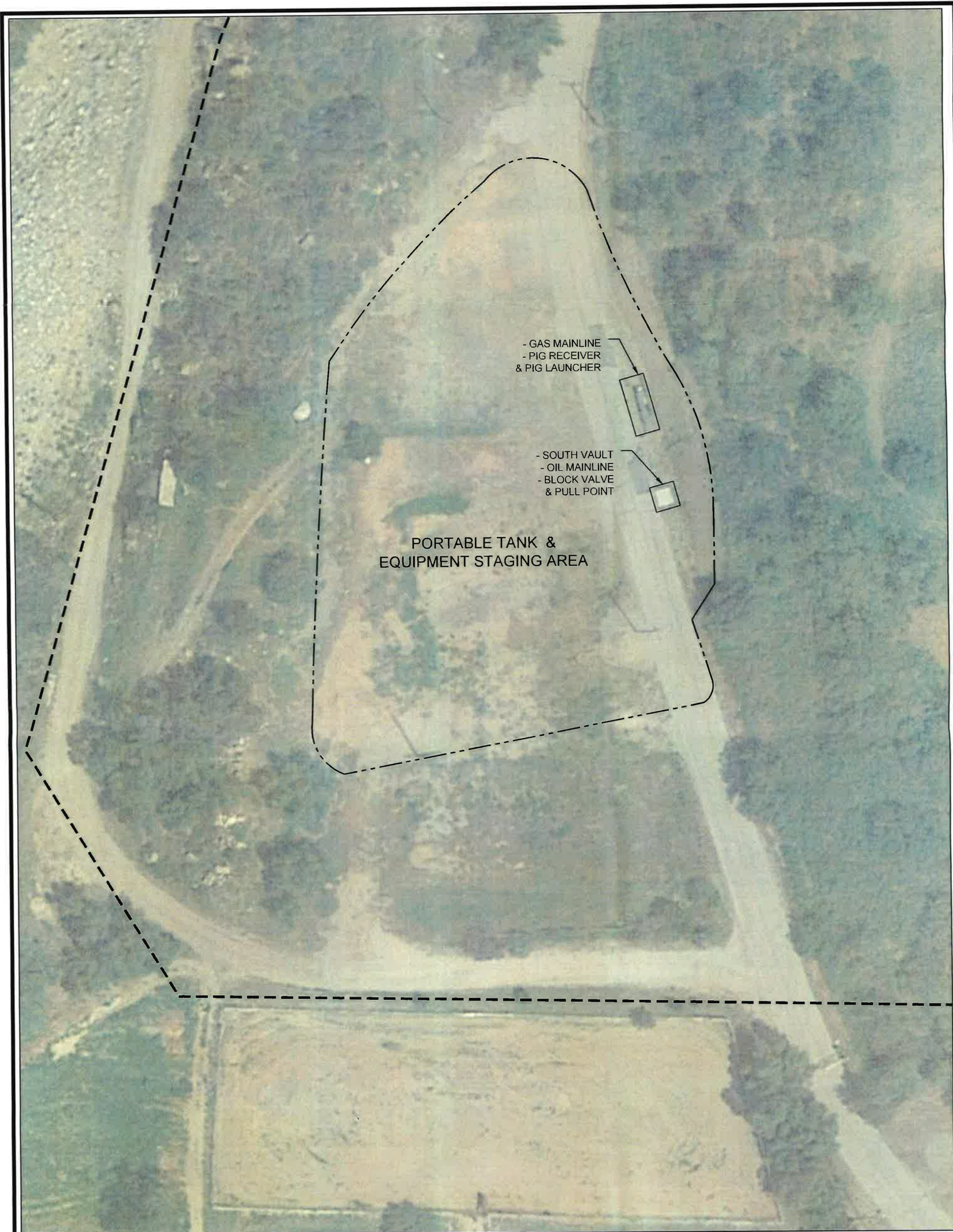
- FLUID FLOWLINE
- GAS FLOWLINE
- GROSS FLOWLINE
- WELL PAD (1.11 AC.)



carbon
California Company
APPLICANT: CARBON CA COMPANY
279 QUAIL CT., SUITE B
SANTA PAULA, CA 93060

PREPARED BY:
SESPE
CONSULTING, INC.
374 Poli Street, Ste. 200 • Ventura, CA 93001
(805) 275-1515 www.sespeconsulting.com

CARBON BASENBERG - PL18-0058 SITE A		FIGURE NUMBER
SCALE: HORIZ. AS SHOWN	VERT. AS SHOWN	2 OF 3
DRAWN BY: G.CAMUS		
CHECKED BY: J.F.		



LEGEND

- CUP BOUNDARY
- PORTABLE TANK & EQUIPMENT STAGING AREA (1.0 AC.)



APPLICANT: CARBON CA COMPANY
279 QUAIL CT., SUITE B
SANTA PAULA, CA 93060

PREPARED BY:



374 Poli Street, Ste. 200 • Ventura, CA 93001
(805) 275-1515 www.sespeconsulting.com

**CARBON
BASENBERG - PL18-0058
SITE B**

SCALE: HORIZ. AS SHOWN
VERT. AS SHOWN
DRAWN BY: G.CAMUS
CHECKED BY: J.F.

FIGURE NUMBER

3 OF 3

**VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT**
Memorandum

TO: Jennifer Scholl
Ventura County Resource Management Agency

DATE: January 30, 2018

FROM: Mike Villegas *MV*
Air Pollution Control Officer

SUBJECT: Recommended Greenhouse Gas (GHG) Threshold of Significance for
Stationary Source Projects

Background:

Neither the Ventura County Air Pollution Control District (VCAPCD) nor Ventura County has formally adopted a threshold of significance applicable to GHG emissions from projects subject to review pursuant to the California Environmental Quality Act (CEQA) as part of the County's discretionary land use permitting authority. The County has, however, routinely applied a 10,000-MTCO₂e/year¹ threshold of significance to such projects, in accordance with CEQA Guidelines section 15064.4(b)(2). VCAPCD has indicated concurrence with this numeric threshold, stating that "several air districts in California that have adopted or recommended a GHG emissions threshold of significance for a CEQA threshold of significance analysis related to stationary sources have all set the threshold at 10,000 MTCO₂e/year, including air districts adjacent to Ventura County." Stationary source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require a VCAPCD permit to operate.

The 10,000-MTCO₂e/year threshold of significance applied to the projects as recommended by the VCAPCD has been adopted by multiple agencies within the broader southern California region for use in evaluating discretionary projects involving stationary sources, including the South Coast Air Quality Management District (SQAQMD) [adopted by the SCAQMD Governing Board; December 5, 2008], San Diego County, and the Santa Barbara Air Pollution Control District (Santa Barbara County APCD CEQA Guidelines, adopted April 30, 2015). The SCAQMD exercises jurisdiction over 10,743 square miles with a population of 15 million in southern California, which includes the entirety of Orange County, and substantially developed portions of Los Angeles, San Bernardino, and Riverside Counties. The San Diego

¹ MTCO₂e = metric tonnes carbon dioxide equivalent

County Air Pollution Control District exercises jurisdiction over 4,300 square miles with 3,064,436 inhabitants (2009). In comparison, Ventura County, at 2,200 square miles, is approximately half the size of San Diego County, and has a population of approximately 850,500 (2015), as well as having far fewer commercial and industrial land uses than any of its southern neighbors.

The 10,000-MTCO₂e/year threshold is designed to capture at least 90 percent of the GHG emissions from stationary sources. SCAQMD staff originally developed this threshold by compiling the reported annual natural gas consumption for 1,297 permitted facilities for 2006 through 2007, and rank-ordering the facilities to estimate the 90th percentile of the cumulative natural gas usage for all permitted facilities. The data set was deemed to be the best information available at the time. Within the data set, approximately 10 percent of the facilities evaluated comprise more than 90 percent of the total natural gas consumption, which corresponds to 10,000 MTCO₂e/year (the majority of combustion emissions are comprised of CO₂).

Most GHG emissions from industrial facilities that require air district permits are generated from stationary sources, while a relatively small percent is generated by traffic, water usage, etc. related to these facilities. Therefore, although the GHG significance threshold was derived without considering offsite, indirect GHG emissions, the use of a 10,000-MTCO₂e/year threshold for stationary-source projects is appropriate because it captures 90 percent or more of the GHG emissions from industrial projects located within the southern California region.

The 10,000-MTCO₂e/year threshold adopted by SCAQMD is both low enough to capture a substantial amount of future industrial/stationary-source projects, while still high enough to intentionally exclude small projects which, in aggregate, will contribute only a relatively small amount to cumulative regional and statewide GHG emissions. The use of a threshold of 10,000 MTCO₂e/year is also more appropriate than a zero threshold, because the former will assure that all feasible GHG mitigation will be implemented for a large majority of emissions, while not resulting in substantial administrative requirements for projects which individually produce only a nominal contribution towards cumulative regional and statewide GHG emissions.

Finally, the fact that Ventura County's GHG emissions base is small compared to the greater southern California region suggests that the application of a higher capture rate threshold (greater than 90 percent) is not appropriate here. For comparison, if the GHG emissions from Ventura County were folded into an inventory for the larger SCAQMD and/or San Diego County APCD regions, the additional data would have no appreciable effect on the percentage of GHG emissions captured by a 10,000-MTCO₂e/year threshold for stationary-source projects in that larger region. Therefore, the VCAPCD considers a 10,000-MTCO₂e/year threshold, as applied by both the SCAQMD and San

Diego County, to be a reasonable numeric threshold of significance for GHG emissions emitted from stationary sources.

GHG emissions are being targeted for reduction based on their cumulative effects on climate. All projects in California are equally subject to state laws, regulations and programs designed to reduce overall GHG emissions to sustainable levels. Therefore, a stricter or lower threshold of significance in Ventura County would disproportionately burden project proponents in the County without providing any meaningful benefits in mitigating climate change. Keeping the Ventura County GHG threshold consistent with neighboring jurisdictions keeps a level playing field. Since greenhouse gases are a global pollutant, it does not matter where the gases are emitted. So emissions from the Bay Area (which also has a 10,000-MTCO₂e/year threshold for stationary sources which require air quality permits), or anywhere in the United States, are equivalent in their cumulative environmental impact. The United States Environmental Protection Agency (USEPA) initially set their major source threshold for GHGs at 100,000 tons per year. While this threshold was struck down by the U.S. Supreme Court, this was not due to the impacts or technical basis for the threshold but because it was inconsistent with the federal Clean Air Act requirements. In response to the threshold being vacated by the Court, USEPA proposed a 75,000-tpy CO₂e Significant Emission Rate (SER) for GHGs. The SER establishes a *de minimis* level below which best available control technology (BACT) is not required for this pollutant.

It should be noted that the County of Santa Barbara adopted a lower GHG threshold of significance than was recommended or adopted by the various air pollution control agencies cited above. On May 19, 2015, the County of Santa Barbara adopted an even more stringent 1,000-MTCO₂e threshold of significance for GHG emissions specifically for oil and gas projects. The Santa Barbara County Planning Commission voted 3-2 to recommend adoption of a 1,000-MTCO₂e/year bright-line threshold, which would capture an even higher rate (99 percent) of future GHG gas emissions than the 10,000-MTCO₂e/year threshold (90 percent), despite the fact that the 10,000-MTCO₂e/year threshold was recommended by Santa Barbara Planning and Development staff. Thus, the County of Santa Barbara's decision to select a more stringent capture rate for oil and gas projects reflected a discretionary policy decision that was not based on scientific evidence weighing against the use of a 10,000-MTCO₂e/year threshold.

Conclusion:

VCAPCD staff recommends a GHG threshold of significance of 10,000 MTCO₂e for stationary source projects located within Ventura County. Further, VCAPCD staff encourages the use of GHG thresholds that are consistent throughout California. GHGs are global pollutants and unlike criteria air pollutants there are not regions where GHG emission mitigation measures are more or less significant/effective than in other regions.

Board of Supervisors Hearing
March 13, 2018

Mitigated Negative Declaration Addendum

Attachment 11

**VCAPCD Memorandum
(Estimate of Drilling Emissions)**

Renaissance Petroleum Project

Case No. PL14-0103

(Minor Modification of CUP LU05-0086)

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Brian Baca
Planning/RMA

DATE: September 6, 2017

FROM: Chuck Thomas, Manager *CT*
Planning/Rules/Incentives

SUBJECT: Renaissance Petroleum Project (PL14-0103)

As you requested, we've estimated daily air emissions from drilling one generic oil well and 15 daily employee commute trips associated with the proposed Renaissance Petroleum Project near Oxnard.

Oil Well Drilling: 90 lbs/day (NOx + ROG)
Assumptions: Tier 3 diesel engine: 3.0 grams/BHP-hr
1,000 gallons diesel fuel/day

15 Daily Employee Commute Trips: 0.06 lbs/day NOx; 0.06 lbs/day ROG
Assumptions: 15 employees, 30 one-way trips/day; 10 miles/one-way trip

If you have any questions, please contact me at chuck@vcapcd.org or 805/645-1427.

c: Mike Villegas, VCAPCD
Kerby Zozula, VCAPCD



United States Department of the Interior



FISH AND WILDLIFE SERVICE
HUIPER MOUNTAIN NATIONAL WILDLIFE REHAB COMPLEX
CALIFORNIA CONDOR RECOVERY PROGRAM
P.O. Box 5809
Ventura, CA 93005
Tel: (805) 644-5185 Fax: (805) 644-1732

November 17, 2014

Gary Crissman
Operations Manager
Seneca Resources-West
4800 Corporate Ct.
Bakersfield, CA 93311
crissmang@srwx.com

Subject: Seneca Operations - No Condor Injury or Mortality

Dear Mr. Crissman:

This is to confirm that to our knowledge, no California condors have been injured or killed as a result of Seneca's operations. We appreciate Seneca's efforts to minimize and avoid conflicts between its operations in the Sespe oil field and the recovery of the California condor by routinely implementing the Service's July 18, 2013, Measures to protect the California Condor at Oil and Gas exploration, Development, and Production Facilities in Ventura County, California.

Please let me know if you need any additional information.

Sincerely,

Steve Kirkland
California Condor Field Coordinator