

Coalinga Oil Field Project Fact Sheet Conditional Use Permit Application Nos. 3538, 3539, & 3548

ProjectCoalinga Oil Field Improvements

Region, location Fresno County **Environmental Impact Report No. 7180**

Background

Chevron U.S.A. Inc. (Chevron) and Seneca Resources (Seneca) (the Applicants) have submitted applications to Fresno County (County) for Conditional Use Permits to conduct oil and gas exploration, drilling and production and related facilities within the State-designated Coalinga Oil Field and Coalinga East Extension Oil Field administrative boundaries.

The Coalinga Oil Field became active around 1890, and currently produces more than 10,000 barrels of oil per day. The field is depicted below in Figure 1. It has a rough semicircular shape open to the southeast. The town of Coalinga is located at the southwestern limit of the field and Pleasant Valley inside its boundaries. California State Routes 33 and 198 cut across the Coalinga field.

Petroleum reservoirs in the Coalinga field are sandstone and do not require use of hydraulic fracturing as sandstone reservoirs tend to have good permeability. Oil in the Coalinga field is "heavy", and responds well to

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steam injection which is described in greater detail below.

Proposed Improvements

The Project would involve construction of improvements over a 20-year period including upgrades to existing facilities and construction of new facilities in order to allow Chevron and Seneca to continue to recover crude oil and natural gas in a more efficient manner.

Project components proposed by Chevron:

- Upgraded oil cleaning plants
- Upgraded water cleaning plant
- Upgraded water injection plant and pipeline
- Upgraded solids drying facility
- New steam generators, steam generator retrofits, and associated equipment
- New wells, other facilities and infrastructure



Steam is injected into the oil reservoir.



step 2

Production wells extract oil mixed with gas, water and sediments.



step 3

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DOGGR Administration

Chevron Project Boundary
Seneca Project Boundary
Township Boundary

Oil cleaning plants separate the oil from these substances.



step 4

Clean oil is temporarily stored in shipping tanks before being shipped via pipeline to an oil storage tank facility near Coalinga.



step 5

A heated oil pipeline transports the oil to refineries in the San Francisco Bay Area.



Figure 1-Project Boundaries

Figure 2-Typical Operations Oil Steam Extraction

Project Components proposed by Seneca

- New oil cleaning plant
- New water cleaning plant
- New and/or upgraded water disposal wells and pipeline
- New or upgraded solids drying facility
- New steam generators and equipment
- New vapor recovery unites and equipment
- New wells, other facilities and infrastructure

Construction Activity

Temporary construction activities associated with the new wells, facilities, and infrastructure would require operation of large and small construction equipment used for grading and trenching, trucks to haul equipment and materials to the site, and installation of facilities and drilling to install new wells and replace existing wells.

Well installation generally includes the following activities, irrespective of the well type:

- Constructing well pads
- Drilling and completing wells
- Installing infrastructure
- · Specialized actions specific to well type

Operational Activity

In general, an oil and gas production well uses a pumping unit to create a vacuum that extracts the deposit from the ground, producing a mixture of oil and water. The oil/water mixture is pumped though pipelines to on-site production facilities for processing, sale, reuse and/or disposal.

The improvements proposed by the project would increase the efficiency of operations through expanded use of Enhanced Oil Recovery injection wells, which include a vertical pipe that places steam deep underground to heat the oil and reduce viscosity¹ (See Figure 2).

Specific production and treatment components proposed as part of the plant upgrades include:

Oil Cleaning Plants- Used to separate well-stream components – crude oil, gas, condensates, water, and solids – for processing, on-site use, distribution, and/or disposal.

Water Cleaning Plants- Used to treat produced water from the Oil Cleaning Plants. Produced water is processed for reuse and/or on-site disposal. Treatment includes oil/water separation and filtering.

Steam Generators- Steam generators are fueled by natural gas and receive treated produced water from the water cleaning plant

to make steam for use within the oil field for enhanced oil recovery. Steam generators may operate 24 hours a day and 365 days a year.

Solids drying- Manages mud generated during well drilling and material handling. The material is dried and transported off-site for disposal at a licensed facility.

Production, Observation, and Injection Wells-The Project includes installing and operating new injection and producing wells to support steam flood and cyclic steam enhanced oil recovery. In addition, the project includes plugging idle or nonproductive wells.

Environmental Review

The County as the Lead Agency pursuant to the requirements of the California Environmental Quality Act (CEQA) will be responsible for preparing an Environmental Impact Report (EIR).

The purpose of an EIR is to promote informed decisionmaking on the environmental effects associated with a proposed project. CEQA requires a lead agency to:

- Identify environmental impacts
- Incorporate alternatives or mitigation measures that avoid or lessen impacts if feasible
- Encourage public participation and disclose reasoning behind decisionmaking.

Issues requiring further study include:

- Land disturbance from grading
- Air emissions from construction equipment
- Fugitive dust exposure
- Sedimentation and erosion of soil
- Exposure to hazardous materials
- Impacts to wildlife & cultural resources
- Traffic impacts (Heavy Trucks)
- Noise exposure
- Release of criteria air pollutants
- Release of toxic air contaminants
- Impacts to water quality
- Impact unstable geology or soils
- Risks due to equipment upset
- Expose people to hazards

Your participation in this process through submission of comments can make a difference. Review the Notice of Preparation posted online at http://www.co.fresno.ca.us/EIR.

Comment letters postmarked by July 27 will be accepted for consideration. Send comments to:

Attn: Christina Monfette

Fresno County Department of Public Works and Planning Development Services and Capital Projects Division 2220 Tulare Street, Sixth Floor

Fresno, CA 93721
Email: cmonfette@FresnoCountyCA.gov

¹ The viscosity of a fluid is the measure of its resistance to gradual deformation by shear stress or tensile stress. For liquids, it corresponds to the informal concept of "thickness."