California
Department of Conservation
Geologic Energy Management

CEQA Guidance for Operators

Project Descriptions

Revised: April 7, 2021

Disclaimer: This document is for information purposes and should only be used as guidance. Project Description examples for each CalGEM program are provided below. This document has neither the force of law nor regulation, nor should it be cited as the authority on the CEQA requirement. Always refer to applicable laws and regulations and consult with an attorney for guidance on current legal requirements.

The project description is the starting point for every project that undergoes a California Environmental Quality Act (CEQA) environmental review at California Geologic Energy Management Division (CalGEM). The project description helps:

- Provide basic information for CalGEM to determine its CEQA agency role as either a Responsible Agency or Lead Agency.
- Identify potential environmental impacts resulting from the proposed activity.
- Determine the appropriate level of environmental analysis (exemption determination or completion of an Initial Study to determine the type of environmental document to prepare); and
- Identify any additional information needed during the environmental review.

It should be project specific and written in a narrative format that is clear and uses simple language where practical. An applicant may develop and use a template as long as each project description addresses the unique aspects of the project the template covers. Maps and acreage of the project area are requested, especially for complex projects.

The Project Basics section below discusses the content needed for a basic CEQA project description. Example project descriptions for different activities within the different programs at CalGEM are available to view at the end of this document.

This guidance document is for informational purposes only. The Project Description should be submitted as part of the CEQA Operator Checklist for geothermal projects, and as a document upload or entered in the Project Description text box in WellSTAR for all other projects.

If CalGEM is designated as the CEQA Lead Agency, additional information regarding the Project Description may be requested.

To the extent applicable, please include the following information on the proposed project:

Project Basics

Project Name
Enter the project name, as submitted to CalGEM. If there is also an assigned CalGEM project number, please add it here.

Operator Name
List name of operator or use letterhead to identify responsible party.

Project Proposal
Provide a statement of objectives describing the scope of the proposed work (e.g., new wells drilled in an existing oil field, rework or abandonment of an existing well, or modification or expansion of a previously permitted project) and the purpose of the project (e.g., to increase resource production, to enhance or comply with safety measures, to abandon idle wells).

Describe the surface activities associated with the project. It is important to understand the project's purpose as it relates to down-hole activities; however, it should be written in a narrative format that is clear and uses simple language where practical. If the project is a modification or expansion from an earlier permit, provide a brief description of the original permit and the purpose of the proposed changes.

Briefly describe each phase of the proposed project, including duration and equipment needed (e.g., construction, testing, completion, or operation), and associated construction activities (e.g., well pad, flow lines, new or widening of access roads, or power poles). If a project includes activities in more than one location, such as the construction of multiple well pads or the rework of multiple wells across an oil field, a list of the wells and their geographic coordinates should be included.

Quantify the area in acres that would be disturbed from project activity (temporary and permanent). Note if the project has an existing pad(s) or other facilities, pipelines, or if the ground surface is graded or otherwise developed. Describe the proposed water use, including quantity, source, and method of transportation. Include transportation required for chemicals, equipment, and waste. Describe the disposition of all waste materials and the facility where waste would be managed appropriately. For well stimulation projects, include a statement describing if the State Water Resources Control Board has determined if protected groundwater is present beneath the site, if an aquifer exemption has been approved, or if a groundwater monitoring program has been approved.

Discuss whether the project would increase production, thereby requiring expansion of associated facilities (e.g., product processing capacity, addition or expansion of flowlines, the addition of flares, or steam generation capacity).

Identify Best Management Practices (BMPs) proposed as part of the project intended to avoid or reduce any potential impact(s) to the environment that may result from this project.

If the project is included in the scope of another agency's (state or local) environmental document, include the name and date of approval or certification of the environmental document and the page numbers that identify and discuss the project's activities.

Project Location
Identify the county and/or city (and if it is within the city limits), oil field name, and identify whether the proposed (or existing) well(s) or project is located inside or outside of a designated oil field boundary. Note if the oil field is densely developed and include any critical well locational details, such as the presence of sensitive receptors and their locations.

Environmental Setting
Describe the current physical environmental conditions at the project location and the surrounding land use(s) (e.g., agricultural, residential, commercial, established oil field, or other industrial). Note if there are trees on-site and if vegetation management is regular maintenance for the project site.

The environmental setting should discuss the presence of any sensitive environments or natural resources which could be impacted by the project activities. This may include the presence of designated waterways, hazardous waste facilities, sensitive biological resources such as threatened or endangered species, or other environmental resources in proximity of the project.

Where supplemental information on the environmental setting exists (e.g., a biological assessment), provide it via upload in WellSTAR or email.

Local Agency Requirements
Briefly discuss the local zoning and local agency permitting requirements for the proposed activity (e.g., *The area is zoned agriculture with a mineral resource overlay district. The city requires permits for new drills, but not reworks*). Information can be found on the city/county webpage or by conversation with the local agency planning department.

Aerial Photos/Maps
Aerial photos and/or maps are requested for most projects (see each project description example below) submitted to CalGEM. Please submit photos and/or maps of the project vicinity and project boundary that include all activities related to the proposed project. Outlining the project in a red border can be helpful in delineating the area to be impacted. Add Public Land Survey System

or latitude and longitude information for specific activities, use a legend for features when possible, and date the map.

Note: A project description may be submitted that covers multiple NOIs, but if an operator chooses this method a list of wells associated with the project description is expected to be submitted as well.

Additional information on CEQA compliance may be found on CALGEM's CEQA Website at
https://www.conservation.ca.gov/calgem/CEQA

or by reaching out to the CEQA Unit at
CEQA@conservation.ca.gov

Project Description Example #1
Well Stimulation Application

Project Name
Pumpjack 1234

Operator Name
Pumpjack Energy, LLC

Project Proposal
Pumpjack Energy, LLC (Pumpjack) proposes to hydraulically fracture four wells in two stages, which is expected to take approximately ten days each (including placement of Baker©-type portable tanks and all ancillary equipment to support the closed-loop system and the well stimulation treatment).

The project's temporary equipment includes pumps and portable tanks for holding water, sand, flow back fluids, and mixing stimulation fluid. No permanent facilities would be constructed. There would be no new ground disturbance or expansion of existing facilities associated with this project. All fluids (flow back and unused stimulation fluids) from the well stimulation treatment (WST) operation would be collected in a closed system at the well site. The collected fluid would be transported from the well site for treatment in the Deer Hills Oil Field produced wastewater system in Section 209B for processing. The processed wastewater would then be injected into an existing permitted Class II wastewater disposal well (API# 07022222) located in the South Belmont field.

Pumpjack proposes to use 4,000 barrels of water for all stages of the WST operation, would purchase the water from West Side Water District, and transport the water to the site by truck.

The State Water Resources Control Board (SWRCB) has issued a concurrence letter to Pumpjack that protected water does not exist in the affected area; therefore, a groundwater monitoring program is not required. A Spill Contingency Plan, Spill Prevention, Control, and Countermeasures (SPCC) Plan, and a Waste Management Plan (WMP) for WST activities have been submitted to CalGEM, as part of the application package.

Project Location
The proposed project is in Kern County. The four existing wells are all situated on one pad, located within the densely developed South Belmont oilfield boundary established before April 5, 1973 (see attached map). The wells were directionally drilled in 2013.

Environmental Setting
The surrounding land use within a 3-mile radius of the proposed project consists of densely developed oil & gas fields.

Local Agency Requirements
California County Planning Department issues job cards for the proposed oil and gas activity.

Attachments to Project Description
Optional/only if requested by the CEQA reviewer.

Project Description Example #2 New Well Drill

Project Name
Pumpjack Mariposa Wells

Operator Name
Pumpjack Energy, LLC

Project Proposal
Pumpjack Energy, LLC (Pumpjack) proposes to drill four new wells (3759H, 3745R, 3755H, 3771HT) in the Sunrise oilfield to continue resource development. Work included in the project consists of site construction, drilling, testing, and ancillary construction to connect new production equipment to existing production piping and facilities. The purposed project is estimated to take a total of 75 days once work begins.

Site construction will include the preparation of one new well pad, expansion of two existing well pads, and extension of access roads, electrical lines, utility poles, and various above-ground piping to connect well sites to existing infrastructure. The well pads will accommodate the drill rig, staging of materials, other equipment, and worker parking. Drilling is expected to require approximately 15 days to reach target depth per well. The well will be tested to determine if it will be placed into production or plugged and abandoned. A production rig would be used to complete the well and prepare the well for production testing.

Temporary equipment needed for the project includes backhoe, crane, main and backup drill rigs, and vehicles to transport personnel, materials, mobilize and demobilize equipment, and transport waste. The total projected impacts will occur over approximately 3.55 acres, including 0.82 acres of permanent impacts to accommodate the new well pad and the expansion of facilities outlined above. Site construction will require disturbance of well-established vegetation.

Drilling will require the use of approximately 28,000 gallons of water each day. Water would be purchased from the Kings County Water District and trucked onto the site.

During testing, the well will be connected to a portable oil/gas separator. Any produced gas would be flared to mitigate VOC emissions. Separated crude oil and produced water would be stored on-site in 500-barrel portable tanks for transportation to off-site facilities. Oil would be transported to the Pumpjack production facilities 6 miles from the well site. Produced water would be transported by truck to the Central Valley Wastewater LLC Class II disposal well (SWCC-1) in the South Belridge oilfield for disposal.

If the well is determined to have economic production potential, the well would be completed, and production equipment installed. Electric power is located 930 ft., north of the proposed site, to power the pump jack motor. A new power

line and power poles would be installed from the existing power lines to the corner of the site.

Project Location

The new pad will be located on the Mariposa lease within the Sunrise oilfield in Kings County. The project area is zoned for Limited Agriculture, which includes oil and gas development as a permitted use. The nearest sensitive receptor location is Kingston township, located 1.75 miles east of the project.

Oil and gas production has been ongoing in the Sunrise oil field since 1923. The Mariposa lease and surrounding area consist largely of densely developed oil fields with existing access roads and other developed areas within proximity of the project. There are currently 47 active wells and 18 plugged and abandoned wells within the boundaries of the lease. Developed areas of the site are periodically maintained free of vegetation by mowing and chemical application.

Environmental Setting

The topography for the project area is a combination of flat terrain with some steep hills. The project area is approximately 0.25 miles from Swift creek. The majority of the site consists of developed areas such as access roads, working pads, and existing infrastructure, or is non-native annual grassland which is characterized by introduced grasses. Saltbush (Attiplex sp.) is also present within the project area. These vegetation communities provide suitable habitat for the San Joaquin kit fox and blunt-nosed leopard lizard. Non-native grassland and saltbush communities also provide suitable habitat for the state and federally listed plant species.

A reconnaissance-level survey was conducted by Environmental Associates LLC on November 5, 2019, but no focused surveys for listed species were conducted (see provided Biological Assessment). Survey methods consisted of walking belt transects spaced no more than 100 feet (30 meters) apart over the entire biological survey area (BSA) to compile an inventory of plants and wildlife present. Field notes included observations of all plant and wildlife species observed.

The California Natural Diversity Database (CNDDB) shows records of several blunt-nosed leopard lizard records within 5 miles of the project (California Department of Fish and Wildlife 2020). The presence of oilfield activities does not preclude occupancy by the lizard, although this type of development may degrade habitat values. The surveys within the BSA noted the presence of California ground-squirrels (Otospermophilus beecheye) and side-blotched lizards (Uta stansburiana). These species provide burrow and prey opportunities respectively.

No kit fox or their sign were documented during the biological surveys. A potential den was observed within the BSA but outside of the project site. There are several records of the species documented in CNDDB within 5 miles of the

project site and kit fox are known to be present in the grasslands north and east of Bakersfield (California Department of Fish and Wildlife 2020). Habitats within the project site are suitable for the species and California ground-squirrels found within the BSA provide both prey and denning opportunities.

Although the surveys were conducted after the blooming season, no state or federally listed plants were noted in the project area or BSA. There are no documented populations of the jewelflower, mallow, or woolly-threads within 5 miles of the project area.

Local Agency Requirements

The project is in an agricultural zone in California County. Oil and gas activities are considered compatible with the zoning. County planner, Isabela Martinez, confirmed on January 3, 2020, that the county does not issue permits for new drills. I.Martinez@CaliforniaCo.gov.

Attachments to Project Description

Aerial maps/photos of the project boundary and vicinity


August 4, 2020


August 4, 2020

Project Description Example #3
Well Rework/Well Abandonment

Project Name
Pumpjack Multiple Well Rework

Operator Name
Pumpjack Energy, LLC

Project Proposal
Pumpjack Energy, LLC, proposes to rework 15 wells over the next 12 months. The rework will remediate damages to various wells. The existing well pads and access roads are maintained free of vegetation by mowing and chemical application. Remedial grading of existing developed areas may be required, but no new land disturbance will occur.

The project consists of minor site preparation, rework, and testing for each well. Temporary equipment needed for the project includes a backhoe, workover rig, pumps, water trucks, and vehicles to transport personnel, materials, mobilize and demobilize equipment, and transport waste. No permanent facilities will be constructed. No expansion of associated facilities will be required. Waste materials will be properly disposed of as non-hazardous or hazardous waste, as appropriate, at a facility licensed to accept the waste.

The rework will increase in production. However, expansion of the associated facilities will not be necessary.

Project Location
The wells are located within the Arroyo Grande oil field in San Luis Obispo County.

Environmental Setting
The project site and surrounding areas consists of graded pads, wells, oilfield equipment, and roadways with areas of undisturbed vegetation. Several designated waterways pass through the oil field, but the closest, Green Creek, is 0.5 miles from the nearest project site.

Local Agency Requirements
The work will be conducted under an existing Conditional Use Permit approved by California County. No additional permits are required from the county for the work. Contacted County planner, Dae-Ho Lee, on December 18, 2019, at (123) 456-7891.

Project Description Example #4
Underground Injection Control - Project Application

Underground Injection Control (UIC) projects are generally more complex and more detailed information in the project description. In addition to the Project Basics described above, please follow the guidance below to submit a project description that captures the whole of the project. CalGEM may request additional information if the project description is not clear or complete.

- Briefly describe the UIC project as it was last approved by CalGEM. If this is a new UIC project, describe what is currently within the proposed project boundaries.
    - Generally describe the number of existing wells, facilities, pipelines, roads, well pads, and their locations. Describe the project boundaries using the Public Land Survey System or latitude and longitude, the project's relation to leases, the environmental setting including any trees located on-site, whether the project is located on private, federal land, or both, and any vegetation management practices.
    - Provide the date of the last UIC Project Approval Letter (PAL) approval, as applicable.
    - Submit an aerial photo of the site with labels and a date. For structures or groups of structures, a blown-up map of the project details can be helpful.
- Describe what changes are needed that require a new UIC PAL to be issued.
    - Describe in detail the conversion of existing wells, new wells, new facilities, new pipelines, new roads, new well pads, and their location.
    - Explain that changes will be taking place on land that has existing well pads or previously developed land. Include any expansion into previously undeveloped land.
    - Describe the project's relation to leases, the environmental setting, including trees located on-site, whether the project is located on private or federal land, and what best management practices will be used.
    - Submit an aerial photo of the site with labels and a date. For structures or groups of structures, a blown-up map of project details can be helpful.
    - List Kern County job cards issued before March 26, 2020, and whether CalGEM permits have been issued, where applicable. Attach a copy of the Kern Site Plan mentioned in the job card. Describe any changes that are not covered by Kern County job cards issued before March 26, 2020. This information may be provided in a table format.

Project Name
UIC 00012345

Operator Name
Pumpjack Energy, LLC

Project Proposal
Pumpjack Energy, LLC (Pumpjack), is applying to modify UIC project #00012345, last approved on May 5, 2018. The project is in the Puebla, South lease on BLM (Federal) land located approximately 40 miles southwest of Bakersfield in the Kern River oil field in unincorporated Kern County. Within the UIC project boundaries are 26 existing cyclic steam producing wells and 16 existing steam flood wells, 8 Temperature Observation (TO) wells, a wastewater processing facility, and seven idle wells. The existing UIC project has a total land disturbance of 14.6-acres comprised of existing well pads, roadways, pipelines, and facilities in a densely developed oil field. Well pads and roadways are maintained with a 10-foot vegetation buffer for everyday operations and fire control (see map with aerial photo and legend).

This UIC modification's primary purpose is to increased oil production by expanding the existing steamflood project into the adjacent lease, Puebla, North (private land). The expansion is directly north of UIC project #00012345 and has several existing roadways and wells pads that serve twelve idle wells.

Pumpjack proposes to do the following:

- Convert six idle wells in the Puebla, North lease to Class II injection wells.
- Drill two new wells in the Puebla, South lease for Class II injection wells.
- Drill three new wells in the Puebla, South lease for temperature observation wells.

Pumpjack has acquired permits from Kern County for wells in the Puebla, North lease, issued before March 26, 2020. Bureau of Land Management (BLM) Application to Drill (APD) permits have been acquired for wells the Puebla, South lease. CalGEM permits are in progress. Refer to the table below, and project area map.

No new roadways or well pads are required. Well pads and roadways in Puebla, North will be maintained with a 10-foot vegetation buffer for Pumpjack operations the same as they are for Puebla, South.

Project Location
The project is in the Puebla, South (federal) and Puebla, North (private) leases located approximately 40 miles southwest of Bakersfield in the Kern River oil field in unincorporated Kern County. The project area is in Section 00, Township 00, Range 00, Mount Diablo baseline meridian (see map).

Environmental Setting
The surrounding land use within a three-mile radius of the proposed project consists of densely developed oil and gas fields, and undeveloped land. The

land is zoned Natural Resource with a Petroleum Extraction Combining District overlay, and the vegetation outside of the maintained buffer zone is native grassland. There are no trees on either lease.

Local Agency Requirements

UIC project #00012345, approved on May 5, 2018, is covered by the Kern County EIR. Pumpjack has acquired permits from Kern County for wells in the Puebla, North lease, issued before March 26, 2020. BLM permits have been acquired for wells the Puebla, South lease. CalGEM permits have not yet been applied for (see table below).

Attachments to Project Description

Aerial maps of the vicinity with labels and boundaries of the project area including wells, roadways, pipelines, and blown-up aerial photos of facilities have been uploaded to WellSTAR.

Well Information	Well Information	Well Information	Well Information	WellSTAR Summary	WellSTAR Summary	Permits Issued	Permits Issued	Environmental Review Completed?	Environmental Review Completed?	Environmental Review Completed?
API	Lease Name	Jurisdiction	Well #	Well Type	Current Status	Kern County Job Card	BLM APD	Kern County EIR	CalGEM Permit/ CEQA Review	NEPA Review
403060012	Puebla, South	Federal	2-89	O&G	No NOI	NA	Injection	NA	-	Yes
403060017	Puebla, South	Federal	14-28	O&G	No NOI	NA	Injection	NA	-	Yes
403064578	Puebla, South	Federal	19-06	TO	No NOI	NA	TO	NA	-	Yes
403062864	Puebla, South	Federal	13-03	TO	No NOI	NA	TO	NA	-	Yes
403068503	Puebla, South	Federal	12-03	TO	No NOI	NA	TO	NA	-	Yes
403060067	Puebla, North	Private	10-81	O&G	No NOI	Injection	NA	Yes	-	NA
403060054	Puebla, North	Private	13-75	O&G	No NOI	Injection	NA	Yes	-	NA
403060023	Puebla, North	Private	14-31	O&G	No NOI	Injection	NA	Yes	-	NA
403060158	Puebla, North	Private	15-74	O&G	No NOI	Injection	NA	Yes	-	NA
403060164	Puebla, North	Private	21-8	O&G	No NOI	Injection	NA	Yes	-	NA
403064578	Puebla, North	Private	54-7	O&G	No NOI	Injection	NA	Yes	-	NA

Project Description Example #5
Geothermal Injection Well

Project Name
Herber Injection Well HGU-06A

Operator Name
Geothermal Power Company

Project Proposal
The Geothermal Power Company proposes to drill a new geothermal injection well on the Herber II power plant property. The well will be directionally drilled to the east-northeast, starting near the center of the power plant property. Several other existing wells are present at the same location.

Project Location
The proposed project is located one mile south of the town of Herber, in Imperial County. The proposed well is located within the approved power plant site.

Environmental Setting
The site is flat and completely developed. The surrounding land use within a 3-mile radius of the proposed project consists of agricultural with residential land to the north.

Local Agency Requirements
A minor amendment for CUP #06-0028 was obtained from California County Planning (see the attached document). The California County planner is Rashid Ali, R.Ali@imperial.co.gov. An Authority to Construct (permit #4588) was obtained from the California County Air Pollution Control District.

Attachments to Project Description
Optional/only if requested by the CEQA reviewer.