California
Department of Conservation
Geologic Energy Management

CEQA Guidance for Operators

Project Descriptions

Revised: 7/15/2020

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 must undergo 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 must be written in a narrative format that is clear and uses simple language where practical. Maps of the project area are strongly recommended, especially for complex projects.

It's important to note that this CEQA project description is focused on surface activities, and not on technical aspects of below-ground activities. 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, 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
Enter name here

Project Proposal
Provide a statement of objectives describing the project (e.g., a new well drill in an existing oil field, rework or abandonment of an existing well, or modification or expansion of a previously permitted project). 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). Include the area in acres that would be disturbed from project activity (temporary and permanent). Please note if the project has an existing pad(s) or other facilities, pipelines, or if the ground surface is graded or otherwise disturbed for vegetation management. 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 any 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 city (as applicable), 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 established before April 5, 1973 (pre-CEQA). When identifying where a project is located, if in a city, be sure the city is incorporated, and the project is located within the city's limits. Note if the oil field is densely developed and include any critical well locational details.

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.

Local Agency Requirements
Briefly discuss the local zoning and local agency permitting requirements for the proposed activity. Also, identify if the local agency was contacted regarding permits for the project when they were contacted, and their CEQA review requirements.

Aerial Photos/Maps
Aerial photos and/or maps are needed for all Underground Injection Control projects, and any new drills located on undisturbed land. Include photos and/or maps of the project vicinity and project boundary that include all activities related to the proposed project. Add Public Land Survey System (PLSS) or latitude and longitude information for specific activities, use a legend for features when possible, and add a date to the map.

Please note no actual maps or photos are provided for examples 1-5.

Additional information on CEQA compliance is available on CALGEM's CEQA Website at: https://www.conservation.ca.gov/calgem/CEQA

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
Kern County Planning Department issues job cards for the proposed oil and gas activity.

Attachments to Project Description
Aerial maps/photos of the project boundary and vicinity

Project Description Example #2
New Well Drill

Project Name
PUMPJACK 3759H

Operator Name
Pumpjack Energy, LLC

Project Proposal
Pumpjack Energy, LLC (Pumpjack) proposes to drill a new well (3759H) in the Sunrise oilfield to continue resource development. The new well will be located on an existing well pad with an existing access road. The well pad can accommodate the drill rig, staging of materials, other equipment, and worker parking. Drilling is expected to require approximately 15 days to reach target depth. 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. Testing operations would take approximately 60 days. Once Pumpjack determines to put the well into production, production equipment will be installed on the well.

The project's temporary equipment includes backhoe, crane, main and backup drill rigs, and various vehicles to transport personnel, materials, mobilize and demobilize equipment, and transport waste. There would be no new ground disturbance or expansion of existing facilities associated with this project.

Drilling will require the use of approximately 28,000 gallons of water each day. Water would be purchased from a local water purveyor of surface water supplies.

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 four 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 approximately three power poles would be installed from the existing power lines to the corner of the site.

Project Location
The proposed project is in Kings County. The four existing wells, as described above, are all situated on one single pad, located in the pre-April 5, 1973 field boundaries of the densely developed South Belmont oilfield (see attached map) and 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
The project is in an agricultural zone in Kings County. Oil and gas activities are considered compatible with the zoning. Kings' County planner, Isabela Martinez, confirmed on January 3, 2020, that the county does not issue permits for this work. IsabMartinez@KingsCo.gov.

Attachments to Project Description
Aerial maps/photos of the project boundary and vicinity

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.

Temporary equipment such as pumps and return bins will be needed. 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 well is located within the Arroyo Grande oil field in San Luis Obispo County. The oil field is densely developed, and the boundary was established before April 5, 1973.

Environmental Setting
The established oil field surrounding the project location consists of graded pads, wells, oilfield equipment, and roadways with areas of undisturbed vegetation.

Local Agency Requirements
The work will be conducted under an existing Conditional Use Permit approved by San Luis Obispo 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

Underground Injection Control- Project Application

Underground Injection Control (UIC) projects are generally more complex and require 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.
    - Give a general description of the number of existing wells, facilities, pipelines, roads, well pads, and their locations. Describe the project boundaries using the Public Land Survey System (PLSS) 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.
    - In addition to the written description, this information should also be submitted on a map(s) with an aerial photo of the site, in a table, or both. For structures or groups of structures, a blown-up map of the project details can be helpful.
    - Kern County - For projects located in unincorporated Kern County, list the uses approved by Kern County and CalGEM before March 25, 2020.
- 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 disturbed land. Include any expansion into previously undeveloped land.
    - Describe the project's relation to leases, the environmental setting, including any trees located on-site, whether the project is located on private or federal land, and what best management practices will be used.
    - In addition to the written description, this information can also be submitted in a table, on a map(s) with an aerial photo of the site, or both. For structures or groups of structures, a blown-up map of project details can be helpful.
    - Kern County - For projects located in unincorporated Kern County, list Kern County job cards issued before March 26, 2020, and whether CalGEM permits have been issued. 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.

Project Description Example #4

UIC Project Application

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. See the link to the Kern County zoning ordinance (pgs. xxx – xxx and xxx – xxx).

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 and project area map). See the link to the Kern County EIR (pgs. xx – xx; xx – xxx, & xxx – xxx) covering UIC activities.

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

** Kern County job cards in Puebla, North were issued before March 26, 2020.*

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, are attached.

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 Imperial County Planning (see the attached document). The Imperial County planner is Rashid Ali, R_Ali@imperial.co.gov. An Authority to Construct (permit #4588) was obtained from the Imperial County Air Pollution Control District.

Attachments to Project Description
See aerial maps/photos of the project area and vicinity.