



Initial Study Summary – Environmental Checklist

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING
 976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

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Project Title & No. Excelaron (Mankins) Conditional Use Permit ED09-039 (DRC2009-00002)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

| | | |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Hazards/Hazardous Materials | <input checked="" type="checkbox"/> Transportation/Circulation |
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Wastewater |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Population/Housing | <input checked="" type="checkbox"/> Water |
| <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Public Services/Utilities | <input type="checkbox"/> Land Use |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

John McKenzie

Prepared by (Print)

Signature

Date

Ellen Carroll

Reviewed by (Print)

Signature

Ellen Carroll,
Environmental Coordinator

(for)

Date

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The Environmental Division uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Environmental Division, Rm. 200, County Government Center, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. PROJECT

DESCRIPTION: Request by Excelaron LLC for a Conditional Use Permit (DRC2009-00002) on property owned by Howard Mankins, et al, to receive approval for a phased development to re-establish oil production on a previously explored oil field, as follows:

Phase I - Exploration and Testing (approximate 9 month duration) includes:

- a) minor improvements to existing access roads and three existing well pads to accommodate drilling and testing equipment; installation of gravel and/or the application of soil binders/dust suppressants is proposed on access roads;
- b) Site preparation and oil well drilling activities (approximately 3 months); each new well drilled will take about two weeks, 24-hours/day;
- c) Four (4) new production wells tested (over six-month period after oil wells drilled);
- d) If the four wells fail to yield commercial quantities of oil: the wells will be properly plugged and abandoned; the would be site remediated; no additional phases, except Phase III, would occur;
- e) Access would be from Hwy 166 to Alamo Creek Road to an existing private access road (Porter Ranch) to Huasna Townsite Road to the project site.
- f) Temporary facilities (i.e., portable "Baker" tanks, propane-driven generator, well pumps) will be installed to service the project during the testing phase;
- g) Installation of a new structural "deck" to the Huasna River Bridge;
- h) Approximately 71,500 square feet of ground disturbance

Phase II - Production, would be initiated if Phase I results are positive, and include:

- a) The construction of permanent oil recovery facilities on site,
- b) A maximum of six (6) tanker trucks (each with 7,000 gallon capacity) will transport product from the site daily to a nearby refinery;
- c) Production of up to 840 barrels of oil per day (based on estimated 2,400 barrels per day of gross throughput); separated out production water will be reinjected back into formation;
- d) Installation of accessory structures, including:
 - a. Up to 4,500 linear feet of above-ground production and water injection piping (4-inch diameter) installed to transport crude and processed water between wells and shipping

- site;
 - b. Storage tanks [two wash tanks at 1000 barrels [42,000 gallons] each; 2 stock tanks (1000 barrels each [42,000 gallons], one water tank (1000 barrels [42,000 gallons], two blend oil tanks (250 barrels each [10,500 gallons]), three fire water tanks (10,000 gallons each with one at each pad)];
 - c. Propane generator with 5,000 gallon propane tank as primary project power source at shipping site; smaller well pad generators with a 500-gallon propane tank at well pads #1 and #2;
 - d. Office trailer with portable toilets;
 - e. oil loading rack;
 - f. heaters;
 - g. Vapor recovery unit where recovered natural gas used to help power generators;
 - h. miscellaneous safety equipment;
 - i. Grading that would result in approximately 1.6 acres of disturbance and movement of approximately 5,150 cubic yards of material;
 - j. minor improvements to the southern access ranch road to Highway 166 (turnouts about every ½ mile = 5,000 sq. ft.);
 - k. improvements to Highway 166 and Alamo Creek Road intersection.
- e) One (1) new reinjection/disposal well;

Phase III – Site Cleanup and Existing Well Abandonment will include:

- a. Removal of any remaining equipment, including pipelines, tanks, etc. from the site;
- b. If the project does not move into the Production Phase, general site clean up shall be completed, as well as clean up and abatement of any existing facilities left from previous operations;
- c. If the project does move into the Production Phase, clean up and abate any existing facilities left from previous operations at beginning of this phase,
- d. Additionally, Excelaron cleaning and abating any identified hydrocarbon contaminated soils and associated oil contamination as these activities, excluding the existing seep.

Phase IV - Field Development would occur subsequent to Phase II (should it prove successful), and include:

- a) the drilling of up to an additional eight (8) production wells, over a four-year period after the first four wells going into production (overall total of twelve oil wells maximum from all phases).

Other Project Elements

- 1) The required vehicle haul route for all construction traffic and operational tanker trucks is as follows: from the proposed 'shipping site', vehicles will travel approximately one mile east to Huasna Townsite Road via existing ranch roads through the Mankin's property; then continuing south on Huasna Townsite Road, enter southern private ranch road (Porter Ranch properties) for approximately six miles on existing ranch road to Alamo Creek Road; use Alamo Creek Road to Highway 166; vehicles will then head west on Hwy. 166 to Highway 101; at Highway 101 trucks will continue north or south to an approved oil processing facility;
- 2) No fueling dispensary for vehicles/equipment (other than propane) is proposed;
- 3) No diluent shall be used;
- 4) All operational production water (extracted from formation) will be re-injected to its source; any reinjected production water will not exceed 211 degrees Fahrenheit (as measured at 1 atmosphere);
- 5) Production and hauling operations shall temporarily cease when, due to heavy storm events, the southern ranch road becomes "impassable" (project defines "impassable" as meaning when there is flowing surface water present). Operation/hauling cessation shall remain in effect until the road is deemed passable for tanker trucks and that any corrective measures have been

made prior to tankers using this access road; no other tanker truck route is authorized with this permit.

PROJECT LOCATION: The project is located approximately 3/4 mile west of the Mankins' ranchhouse, which is on the west side of Huasna Townsite Road, approximately 1.5 miles south of Huasna Road, approximately 12 miles east of the City of Arroyo Grande, in the South County (Inland) and Huasna-Lopez planning areas.

Due to the large number of acronyms used in this document, a "list of acronyms" can be found at the end of the document.

PROJECT BACKGROUND

PREVIOUS CONDITIONAL USE PERMIT DRC-2006-00222. A request to establish four test wells and two water reinjection wells. A proposed Negative Declaration was issued on the request. Prior to Planning Commission hearing, a fair argument was made to show that an EIR should be prepared. Project was withdrawn prior to hearing.

Public Involvement. As a part of this previous effort, several public information meetings were held by the County, the City of Arroyo Grande and the applicant. In addition, numerous letters from individuals have been received expressing concern over certain environmental issues.

PREVIOUS EIR AND TEST WELL APPROVAL. As a brief history, an Environmental Impact Report (Lorena of California, Inc. Meridian Anticline Project - Huasna Valley; 1980), or EIR, was prepared and certified for three production test wells. These test wells were constructed and testing was done. Three pads were established (Sherer-Dickes, Lavoie-Hadley, and the Shipping Site) with access roads to each. Due to the economics of the time and the quality of the crude found, these wells were vacated shortly after testing was concluded. Some equipment was left on site (e.g., disconnected well pump, above-ground piping, storage tanks, etc.). The status of these test wells are currently considered idle and orphaned.

The proposed project would use the existing access roads and pads created for this previous testing operation. The EIR provides additional details that are generally valid relating to the construction work necessary to prepare the site and well holes.

EIR Access Road Alternatives. The previous EIR compared the use of Huasna Road as the haul route with four access road alternatives, as follows, and determined the Huasna Road route to be superior:

Huasna River/Porter Ranch – Due to sections of this road being within the Twitchell Reservoir floodplain, the EIR did not consider it a viable option as being an all-weather access road, as this arm of the Twitchell Reservoir may periodically completely fill with water and cover several sections of this road. This existing six mile private dirt road starts at the southern end of Huasna Townsite Road and continues south to Alamo Creek Road and then to Highway 166. The road crosses a couple of unnamed blue line creeks that feed into Huasna River. Most of the parcels involved are large with little development on each. Road grades are mostly gentle and habitat is mostly grassland with some chaparral and oak woodland. The properties involved are owned by the Porter family. Historically, this arm of the Twitchell Reservoir has seldom retained any reservoir water.

Alamo Creek Road – This route is east of the Porter Ranch road and includes approximately 13 miles of private dirt roads that starts at the southern end of Huasna Townsite Road and continues south to Highway 166. A portion is within the Los Padres National Forest. This route spans several blue line creeks (several with "Arizona" crossings). Similar to the proposed project's first mile on the Mankins property, this alternate road has narrow, windy portions, as well as the 13 miles going through dense oak woodlands as well as some open grassland/chaparral areas. Road grades are mostly gentle with several moderate to steep areas. When compared to the proposed project, this alternate route would have greater impacts in the following areas: biological resources (more oaks removed/impacted, other unsurveyed sensitive and riparian species, need to install creek crossings); air quality (dust from 13 additional miles of dirt road), sedimentation and erosion (more road grading required to make it meet CalFire standards).

Suey Creek Road – This alternate route would use existing narrow and winding dirt roads (approximately three miles long) which would then connect to the paved portion of Suey Creek Road for five miles to Highway 166. The first three-mile section is heavily wooded, crosses or is adjacent to several blue line creeks, and portions are very steep. When compared to the originally proposed and revised project (see below), this alternate route would have greater impacts in the following areas: biological resources (more oaks removed/impacted, other unsurveyed sensitive and riparian species); air quality (dust from three additional miles of dirt road), sedimentation and erosion (more road grading required to make it meet CalFire standards).

Los Berros Canyon Road - This alternate route would use existing narrow and windy dirt roads (approximately five miles long) which would then connect to the unpaved portion of Upper Los Berros Road (approximate additional five miles), which then turns into a paved road for the remaining 2.5 miles to Highway 101. Due to the steepness of the roads immediately on the west side of the subject property it may be difficult for full tanker trucks to be able to make these grades without substantial road work. The first five-mile section is heavily wooded, crosses or is adjacent to several blue line creeks, and portions are very steep. When compared to the originally proposed and revised project (see below) this alternate route would have greater impacts in the following areas: biological resources (more oaks removed/impacted, other unsurveyed sensitive and riparian species); air quality (dust from ten additional miles of dirt road), sedimentation and erosion (more road grading required to make it meet CalFire standards), noise (exposure to more residences than the proposed project).

With the proposed project elements (see above) to not operate during the times when the southern ranch road is deemed impassable, along with the application of permanent dust control measures, the Porter Ranch Road route is considered to be the preferable and environmentally superior route.

ASSESSOR PARCEL NUMBER(S): 085-271-004, -001

Latitude: 120 degrees 23' 44,395" N Longitude: 35 degrees 5' 16.867" W SUPERVISORIAL DISTRICT # 4

B. EXISTING SETTING

PLANNING AREA: South County (Inland), Huasna/Lopez; Rural

LAND USE CATEGORY: Rural Lands, Agriculture

COMBINING DESIGNATION(S): None

EXISTING USES: Undeveloped. rangeland, agricultural roads, abandoned oil test wells

TOPOGRAPHY: Nearly level to very steeply sloping

VEGETATION: Grasses , chaparral , oak woodland, riparian

PARCEL SIZE: Two parcels totaling approximately 243.3 acres

SURROUNDING LAND USE CATEGORIES AND USES:

| | |
|--|---|
| <i>North:</i> Agriculture; undeveloped | <i>East:</i> Agriculture & Rural Lands; undeveloped |
| <i>South:</i> Rural Lands; sparsely scattered homes, undeveloped | <i>West:</i> Agriculture & Rural Lands; sparsely scattered homes, undeveloped |

C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, several issues were identified as having potentially significant environmental effects (see following Initial Study).

**COUNTY OF SAN LUIS OBISPO
INITIAL STUDY CHECKLIST**

| 1. AESTHETICS - Will the project: | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) <i>Create an aesthetically incompatible site open to public view?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Introduce a use within a scenic view open to public view?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) <i>Change the visual character of an area?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Create glare or night lighting, which may affect surrounding areas?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) <i>Impact unique geological or physical features?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) <i>Other: _____</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting. From the Huasna Valley vantage (due to project visibility from Huasna Townsite Road), the area can be generally described as a rural setting with sparsely scattered homes found throughout the area with various farming or ranching activities found in the valley foreground and the surrounding backdrop of prominent hills covered in fairly intact oak woodlands and chaparral habitats. Overall visual quality is considered "high".

Of the three proposed areas of development (Well Pad #1, Well Pad #2, Shipping Site) only Well Pad #2 is visible from a public roadway. The use of visibility software (GlobalMapper) provides additional information on approximately which sections of Huasna Townsite Road the project may be visible. Proposed well pad #2 is as close as 1.25 miles from Huasna Townsite Road, but becomes most visible at about 1.75 miles away. Proposed well pad #2 has partial screening from existing larger shrubs and topography and can be seen only from Huasna Townsite Road.

Vegetation previously removed for the previous test wells and accessory structures has successfully reestablished on the cut and fill portions of the existing access roads and well pads.

Proposed well pad #2 was originally created in the 1930's, with some testing done in the 1960's, and minor improvements made during the 1980's testing (Lorena EIR). The existing dimensions are approximately 470 feet long by 30 feet wide.

Most of the grading for the shipping site and Well Pad #1 was also done during these previous times. The shipping site and Well Pad #1, created during previous testing efforts, is not visible from Huasna Townsite Road (located in a valley floor between two ridges that block any direct views to Huasna Townsite Road). Access roads to the well pads and shipping site were created during these previous testing efforts.

Proposed nighttime lighting is limited to the shipping site.

Impact. Based on the previously withdrawn project, the applicant has incorporated a number of

mitigating measures intended to address visual impacts. The following are the main potential visual impacts associated with the project:

- ❖ Visual portions of existing access road to Well Pad #2 may become more visible as: minor grading is needed for sections; tree trimming/removal is necessary for trucks to access site, as well as provide for 10-foot CalFire fuel reduction requirement along access roads.
- ❖ Well Pad #2 will increase in visibility as: minor grading is needed to re-level previously graded areas; tree trimming/ vegetation removal may be necessary to remove existing abandoned drill testing equipment (include existing pipes); tree trimming/ vegetation removal will be necessary to address CalFire's fuel reduction requirement of at least 30 feet around proposed equipment, possibly 100 feet for certain equipment (this vegetation will need to be managed during the life of the project); remedial earthwork may be necessary which could remove key vegetation; long term use of the site may increase the potential of existing vegetation being exposed to harmful constituents, such as small releases of oil or lubricants to the soil; new permanent equipment may be installed should the project go into production; water storage tank proposed near pad for firewater needs.
- ❖ A portable, truck-mounted drilling rig will be used for any new oil well drilling. The drilling operations will take up to three months. When upright (about 60 feet tall), this drilling rig will be potentially visible on portions of the proposed well pads and not visible from the shipping site. *This is a short-term construction visual impact for the four oil wells and up to one reinjection well and not considered significant.*
- ❖ Existing visible storage tanks on the proposed well pads left from the previous testing operation shall be removed reducing visual impacts
- ❖ Existing abandoned oil/production water pipe may need to be removed, which may require brush clearing and access for heavy equipment; portions of this pipe alignment are visible from Huasna Townsite Road.
- ❖ Up to 4,500 linear feet of above-ground piping will be needed to transport unprocessed crude from the well pads to the shipping area and then the processed water back to the well pads and/or re-injection well; where piping is installed, this will result in at least a tractor width swath of disturbance to install these pipes; existing above-ground piping between the proposed well pad and the shipping site (from previous test wells) may be tested for usability
- ❖ Night lighting for safety and security is proposed only at the shipping area. Additional lighting may be necessary on a temporary basis when emergency or other intermittent operations that may occur in the darkness; construction-related drilling is expected to be a 24 hour-a-day process for each new well. Permanent night lighting will only be at the shipping area, which is not visible from any public vantage, and all shipping area lighting will be hooded and low intensity to reduce glare. Long-term night lighting impacts are considered less than significant. Construction-related temporary lighting is for a short duration and not considered significant.
- ❖ Should Production commence, drilling for new wells (two at a time) will occur 24 hours a day for a 30-day period up to four times over a four year period.

Mitigation/Action Required. Due to the potentially significant impacts to public views, a viewshed analysis from Huasna Townsite Road shall be prepared by qualified persons and shall include, but not be limited to, the following:

1. Evaluate the impacts to all project activities visible from Huasna Townsite Road (e.g., grading and clearing for Well Pad #2 and access road; CalFire fuel modification setback areas, removal of piping equipment; installation of new piping; location, size and color of operational equipment; introduction of incidental pollutants and impacts to "key screening" vegetation and ability of soil to grow vegetation; what landscaping will do well should screening be required, etc.); subsequent production well drilling for up to eight additional wells will need further

- evaluation for temporary visual impacts;
2. Recommendation and discussion of adequate and feasible mitigation measures, as applicable, to ensure that visual resources are adequately protected.

2. AGRICULTURAL RESOURCES
- Will the project:

| | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Convert prime agricultural land to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Impair agricultural use of other property or result in conversion to other uses? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Conflict with existing zoning or Williamson Act program? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Other: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting. Project Elements. The following area-specific elements relate to the property's importance for agricultural production:

Land Use Category: Rural Lands, Agriculture

Historic/Existing Commercial Crops: None

State Classification: Not prime farmland

In Agricultural Preserve? No

Under Williamson Act contract? Partially

The soil type and characteristics on the subject properties include:

Santa Lucia shaly clay loam (50 - 75% slope). This very steeply sloping, north-slope gravelly fine loamy soil is considered not well drained. The soil has low erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock. The soil is considered Class VII without irrigation and does not have a Class rating when irrigated.

The soil types and characteristics on the southern access road include:

Salinas loam (0 - 2 % slope). This nearly level loamy bottom soil is considered not well drained. The soil has moderate erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: slow percolation. The soil is considered Class III without irrigation and Class I when irrigated.

Riverwash. This variably-sloped soil has unrated drainage characteristics. The soil has unrated erodibility and unrated shrink-swell characteristics, as well as having unrated septic system constraints. The soil is considered Class VIII without irrigation and Class is not rated when irrigated.

Corralitos sand (0 - 2 % slope). This nearly level sandy bottom soil is considered well drained. The soil has moderate erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: poor filtering capabilities. The soil is considered Class VI without irrigation and Class IV when irrigated.

Pismo-Tierra complex (9 - 15 % slope)

Pismo. This moderately sloping soil is considered very poorly drained. The soil has low

erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: shallow depth to bedrock. The soil is considered Class VI without irrigation and Class is not rated when irrigated.

Tierra. This moderately sloping soil is considered very poorly drained. The soil has moderate erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: slow percolation. The soil is considered Class VI without irrigation and Class is not rated when irrigated.

Briones-Tierra complex, (15 - 50% slope)

Briones. This moderately to steeply sloping sandy soil is considered moderately drained. The soil has low erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: poor filtering capabilities, steep slopes, shallow depth to bedrock. The soil is considered Class VII without irrigation and Class is not rated when irrigated.

Tierra. This moderately to steeply sloping soil is considered very poorly drained. The soil has moderate erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, slow percolation. The soil is considered Class VII without irrigation and Class is not rated when irrigated.

Lopez very shaly clay loam (30 - 75% slope). This steeply to very steeply sloping, shallow gravelly fine loamy soil is considered very poorly drained. The soil has low erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: shallow depth to bedrock. The soil is considered Class VII without irrigation and Class is not rated when irrigated.

Santa Lucia shaly clay loam (50 - 75% slope). This very steeply sloping, north-slope gravelly fine loamy soil is considered not well drained. The soil has low erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock. The soil is considered Class VII without irrigation and Class is not rated when irrigated.

Perkins fine sandy loam (2 - 9 % slope). This gently sloping coarse loamy soil is considered not well drained. The soil has moderate erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: slow percolation. The soil is considered Class III without irrigation and Class II when irrigated.

Perkins gravelly fine sandy loam (9 - 30% slope). This moderately sloping gravelly coarse loamy soil is considered not well drained. The soil has moderate erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, slow percolation. The soil is considered Class IV without irrigation and Class is not rated when irrigated.

Land use designations and agricultural uses of the surrounding properties to the project site are as follows:

| | |
|--|---|
| North: Agriculture/undeveloped, rangelands | East: Agriculture/undeveloped, rangelands |
| South: Rural Lands/undeveloped | West: Rural Lands/undeveloped |

Due to a portion of the project site being on a property under a Williamson Act contract (for cattle grazing), the previous project (4 oil wells) went before the Agricultural Preserve Review Committee for review and consideration of this project and its potential impacts to on-site and nearby agricultural uses. The Committee determined that the previous project would not have a significant impact to agriculture. The proposed use is an allowed use for lands under contract. The revised project will be re-introduced for the Committee's reconsideration.

Impact. While the project site is partially within Williamson Act contracted land (shipping site which

includes one new well, southern access road), the Ag Preserve Committee reviewed the impacts of the proposed oil well site and shipping facility and on-site access road, and did not identify any potentially significant impact to the existing cattle grazing use. The project is expected to generate vehicle dust along the all-weather dirt access road (to Huasna Townsite Road) and to the adjacent Huasna Valley agricultural crops. The Ag Preserve Committee did suggest dust should be controlled to protect crops in Huasna Valley. The proposed use of the existing southern ranch road access to Highway 166 passes a range of agricultural uses including grazing and row crops, as well as the Porter Ranch headquarters. The applicant proposes to treat this road, on an ongoing basis, with dust control measures (e.g., gravel, soil binder, etc.). There are several CalFire turnouts proposed about every ½ mile on this ranch road. They have been located in areas that have either been previously disturbed or are not close to any existing agricultural activity.

An existing seep (circular in shape and about 20 feet in diameter) is near the Shipping Site and contains both surface water and oil. If consumed, this water/ oil mixture could be detrimental to wildlife and livestock. The county has requested from the applicant additional testing on the nature and make-up of the seep.

Mitigation/Action Required. The county’s impact analysis and applicant-proposed mitigation measures (see Exhibit B) shall be reviewed for adequacy. If any additional significant agricultural impacts are identified they shall be analyzed with measures proposed to reduce impacts to less than significant levels, if possible. The agricultural resource analysis should also include, but not be limited to, the following:

1. Consultation with the County Agricultural Commissioner's Office, County Planning & Building (Ag Preserve Program), and the California Department of Food and Agriculture.
2. A description of the existing and historical agricultural setting, uses and practices.
3. A description of adjacent agricultural uses.
4. A description of the agricultural suitability of the site, including soil types, soil capabilities, and the productivity of agricultural soils both for irrigated and non irrigated uses, and an analysis of crops and livestock uses suited to the site.
5. Identification and description of current and potential future water sources suitable for agricultural uses (see Water Resources).
6. Evaluation of the potential adverse impacts to agricultural capability resulting from the project.
7. Evaluation of the potential adverse impacts to the agricultural capability of adjacent or near by lands currently enrolled in the Agricultural Preserve Program.
8. Recommendation and discussion of adequate and feasible mitigation measures, if any, to ensure that agricultural resources are adequately protected.

| 3. AIR QUALITY - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|-------------------------------------|---|-----------------------------|--------------------------|
| a) <i>Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Expose any sensitive receptor to substantial air pollutant concentrations?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| 3. AIR QUALITY - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|---|-------------------------------------|--------------------------------|--------------------------|--------------------------|
| c) <i>Create or subject individuals to objectionable odors?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Be inconsistent with the District's Clean Air Plan?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting. The shipping/processing portion of the project is located within an unpopulated valley surrounded by steep hillsides with the Huasna Valley to the east. The closest residences from the shipping site are approximately 2,300 feet to the west and 2,500 feet to the east.

The private access road from Huasna Townsite Road to the shipping area of the project is about 3/4 mile and unpaved. The closest (and only) oil processing facility in the county is approximately 13 miles to the west on the Nipomo Mesa. Other possible locations the crude oil may be taken include Oxnard, approximately 100 miles from the project site, and south of the City of Santa Maria, approximately 23 miles from the project site.

The southern private access road to Highway 166 includes approximately 4.7 miles of unpaved ranch road.

The following provides a summary of historic and existing air quality conditions that relate to the project's potential impacts to or from existing or projected air quality.

Non-Attainment. The County is within the South Central Coast Air Basin, which is currently considered by the state as being in "non-attainment" (exceeding acceptable thresholds) for particulate matter (PM₁₀, or fugitive dust) and ozone.

The Air Pollution Control District (APCD) estimates that automobiles currently generate about 40% of the pollutants responsible for ozone formation. Nitrous oxides (NOx) and reactive organic gasses (ROG) pollutants (vehicle emission components) are common contributors towards this chemical transformation into ozone. Dust, or particulate matter less than ten microns (PM₁₀), that becomes airborne and finds its way into the lower atmosphere, can act as the catalyst in this chemical transformation to harmful ozone.

APCD Program. To address project impacts APCD has developed a program (CEQA Air Quality Handbook) to establish impact thresholds and mitigation measures to address most project-related air quality impacts. The Clean Air Plan (CAP) is the regional guidance document providing strategies to improve air quality for SLO County. The CAP is also periodically updated to review the effectiveness of the implemented strategies and if changes are appropriate.

Local Air Quality. The project is nearest to the Nipomo Regional Park and Black Mountain Air Quality Monitoring Stations. Based on the latest air monitoring station information, the trend in air quality in the general area is considered unchanged for PM10 and ozone, and below thresholds set for the State and Federal levels. These stations are a significant distance from the project and are considered very limited in value. Given the low population density with active agriculture limited to the valley floor, air quality for the general area is expected to be good.

Referral. As required by Section 22.10.030 of the County's LUO, the proposed project will be referred to the County of San Luis Obispo Air Pollution Control District (APCD) for review and determination of any air quality impacts potentially resulting during both the project's construction and operational phases. APCD has worked with the applicant and the applicant's consultant on the previous project. The applicant has prepared a revised air modeling assessment of the project's impacts.

Naturally-Occurring Asbestos. According to the APCD, the project site is located in an area containing potentially naturally occurring asbestos, serpentine or ultramafic rock. The State Air Resources Board considers asbestos a toxic air contaminant. If asbestos is present within the soil underlying the project site, future grading and site disturbance activities would release the asbestos into the air, resulting in a potentially significant air quality impact.

Developmental Burning. On February 5, 2000, the APCD prohibited developmental burning of vegetative material within San Luis Obispo County; however, in certain situations where no technically feasible alternative is available, limited burning under restrictions may be allowed. Unregulated burning would result in a potentially significant air quality impact.

Hydrocarbon-contaminated soil. The previous oil well testing efforts may have resulted in isolated spills or leaks of crude oil or other hydrocarbon based fluids. The County has requested of the applicant to provide an assessment on potential impacts from previous drilling that was incompletely abandoned.

Odors. As specified in the County’s LUO Section 22.10.030, any non-agricultural land use conducted in, or within one-half mile of an urban or village reserve line shall be operated so as not to emit matter causing noxious odors which are perceptible at the points of determination identified in the following table:

| Land Use Category where Odor-Producing Use is Located | Point of Determination |
|--|---|
| Residential, Office and Professional, Recreation, Commercial | At or beyond any lot line of the lot containing the use |
| Industrial | At or beyond the boundary of the Industrial category |

The project is well beyond one-half mile from an urban or village reserve line.

APCD Permitting. The project will be subject to APCD Engineering Permit and Controls for the proposed generator emissions, product storage tanks, truck loading rack (if applicable), and well gas emissions. If naturally-occurring asbestos is found, the project may need to prepare APCD Asbestos Dust Mitigation Plan and/or Asbestos Health and Safety Program.

Greenhouse Gasses. The California Air Resources Board (CARB), the California Environmental Protection Agency, and other governmental agencies with jurisdiction are in the process of developing guidelines and thresholds to address a project’s cumulative contribution to greenhouse gas (GHG).

There are seven greenhouses gases, as follows, and are in order of their global warming potential: Carbon dioxide, Methane, Nitrous oxide, Chlorofluorocarbons, Hydrofluorocarbons, Perfluorocarbons, and Sulfur hexafluoride.

Project GHG Impacts/Conclusion - As an initial effort, the following is a qualitative discussion of the project’s impacts, as well as existing measures to reduce the project’s GHG production. The proposed development will result in an increase of human activity, including increased use of vehicles and generating electricity through diesel generators, which will generate increased amounts of carbon dioxide, nitrous oxides, and hydrofluorocarbons. Small releases of methane gas are also possible.

Although not originally intended to reduce greenhouse gas emissions, California Code of Regulations Title 24 (Energy Efficiency Standards for Residential and Nonresidential Buildings) were first established in 1978 to reduce California's energy consumption, and may apply to a limited extent for the proposed office. Energy efficient buildings require less electricity; electricity production by fossil fuels results in greenhouse gas emissions (namely CO2, methane, nitrous oxide).

In addition, the project will be subject to several other requirements and post-1990 measures that will reduce GHG emissions as follows:

- The project proposes to either pay a tree replacement fee or provide on-site replanting for

trees impacted (carbon dioxide reduction);

- The Uniform Plumbing Code (UPC) requires low-flow fixtures, such as the 1.6 gpf toilet (which reduce electricity needs to pump water);
- At least 50% of construction wastes are required to be recycled;
- The project will install a vapor recovery system to collect gasses emitted from the oil formation to be then burned as a part of the oil/water fluid heating process.

Valley Fever. Coccidioidomycosis (also known as Valley Fever, San Joaquin Valley Fever, California valley fever, desert fever, and coccidiomycosis or ‘cocci’) is a fungal disease caused by *Coccidioides immitis* or *C. posadasii*. It is endemic in certain parts of Arizona, California, Nevada, New Mexico, Texas, Utah and northwestern Mexico.

C. immitis resides in the soil in certain parts of the southwestern United States, northern Mexico, and parts of Central and South America. It is dormant during long dry spells, then develops as a mold with long filaments that break off into airborne spores when the rains come. The spores, known as arthroconidia, are swept into the air by disruption of the soil, such as during construction or farming. Infection is caused by inhalation of the particles. The disease is not transmitted from person to person. *C. immitis* is a dimorphic saprophytic organism that grows as a mycelium in the soil and produces a spherule form in the host organism.

The disease is usually mild, with flu-like symptoms and rashes, and the Mayo Clinic estimates that half the population in some affected areas have suffered from the disease. On occasion, those particularly susceptible, including pregnant women, people with weakened immune systems, and those of Asian, Hispanic and African descent, may develop a serious or even fatal illness from valley fever. Serious complications include severe pneumonia, lung nodules, and disseminated disease, where the fungus spreads throughout the body. The disseminated form of valley fever can devastate the body, causing skin ulcers and abscesses to bone lesions, severe joint pain, heart inflammation, urinary tract problems, meningitis, and death.

It has been known to infect humans, dogs, cattle, and livestock, among other mammals.

The San Luis Obispo County Health Department conducted a 2007 study due to a Valley Fever outbreak in the northern part of the County. The report identifies construction crews involved with moving previously undisturbed soils in inland areas, especially in the Fall, are at a higher risk of coming in contact with this airborne fungus. The report includes a number of measures to reduce the potential for this organism from infecting humans, with 1) the use of dust control measures and 2) making sure workers are informed of the symptoms to provide for immediate medical attention if contracted, as the most effective means to avoid significant problems.

Impact. The applicant has retained a consulting firm (Golder) to prepare an air quality emissions analysis.

Regarding short-term construction impacts, the project impacts are summarized as follows:

- ✓ Disturbing approximately 1.64 acres to clean up existing pads and access road (up to 5,150 cubic yards),
- ✓ Installing approximately 8 CalFire turnouts along the southern ranch access road (approximately 5,000 square feet of disturbance),
- ✓ Resulting in short-term construction vehicle/equipment emissions and fugitive dust, including travel over approximately six miles of dirt roads,
- ✓ Installing above-ground, on-site crude oil and water distribution lines (up to approximately 4,500 linear feet),
- ✓ Possibly encountering soils containing “Valley Fever” spores during grading,

- ✓ Possibly encountering contaminated soils or natural occurring asbestos during grading/drilling,
- ✓ Demolishing/removing existing 'abandoned' equipment from previous testing,
- ✓ Removing substantial vegetation to meet CalFire fuel modification setback requirements.
- ✓ Should Production commence, drilling for new wells (two at a time) will occur 24 hours a day for a 30-day period up to four times over a four year period.

These impacts will result in the creation of construction dust, as well as short-term vehicle emissions. Based on APCD's response, complaints under the District's 402 "Nuisance" Rule could be received.

Regarding long-term operational emissions, the project impacts are summarized as follows:

- ✓ Portable/on-site generators to be used to operate oil wells and other on-site facility processes, including the heating of processed water to be reinjected;
- ✓ Minor occurrences of methane and natural gasses (e.g., Hydrogen sulfide, etc.) during extraction process (greenhouse gas emissions);
- ✓ Tanker haul truck emissions and fugitive dust to and from oil processing facility; service vehicle emissions; employee vehicle emissions; on-site vehicle emissions
- ✓ Gross plant throughput of pre-separated oil/water mix is up to 2,400 barrels per day (amount of "separated" crude oil is estimated at 840 barrels per day);
- ✓ Processing Odors;
- ✓ Vehicle travel will include approximately six miles of unpaved roads (access roads on Mankins and southern ranch), which are proposed to be graveled and/or stabilized with dust suppressant.

Mitigation/Action Required. Due to the project's potential impacts to air quality and that San Luis Obispo County has been designated non-attainment for PM10 (fine particulate) and ozone, additional analysis of air quality impacts shall be accomplished by a qualified air quality specialist competent in peer review of AQ modeling work (completed by others) and shall include, but not necessarily be limited to, the following:

1. Consultation with the Air Pollution Control District, California Air Resources Board, County Public Health Department and Environmental Health Division.
2. A description of the existing air quality in the project area, including:
 - a. Discussion of applicable State and Federal air quality standards.
 - b. Local climate and air pollution meteorology.
 - c. Local trends and patterns of air pollutant concentrations including air quality monitoring data from local monitoring stations.
3. Discussion of State and Federal attainment status and current air quality planning efforts within the County.
4. Discussion of other potentially hazardous air-borne contaminants (e.g., Valley Fever, H2S, etc.), including any existing thresholds of significance.
5. Discussion of County air quality policies relative to development, using thresholds of significance derived from the adopted Clean Air Plan.
5. Summary of the thresholds and air quality constraints for development of the property.
6. Conduct peer review of the Air Quality Emissions Modeling prepared by the applicant to ensure that: proper assumptions were used, the project as a whole was adequately

considered, and the scenario evaluated considered a reasonable worst case situation for each phase (exploration, testing, production [including supplemental drilling]) of development. Any deficiencies shall be identified early to convey to AQ modeler; subsequent peer review of this additional work would be expected, if such revisions determined necessary.

7. Based on this analysis, determine if any APCD thresholds will be exceeded. If mitigation measures are necessary, identify feasible measures and quantify associated reductions. This shall include consideration of measures proposed by the applicant. Evaluate effectiveness of project proposed measures (e.g., use of gravel for dust, etc.), and if any supplemental measures are needed.
8. Conduct a Greenhouse Gas analysis, that includes consideration of the most recently passed legislation.

| 4. BIOLOGICAL RESOURCES - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|---|-------------------------------------|---|-----------------------------|--------------------------|
| a) <i>Result in a loss of unique or special status species or their habitats?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Reduce the extent, diversity or quality of native or other important vegetation?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) <i>Impact wetland or riparian habitat?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Introduce barriers to movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting.

Project Elements. The following are existing elements on or near the proposed project relating to potential biological concerns:

On-site Vegetation: *Mankin's Ranch:* grassland, chaparral/coastal scrub, coast live oak woodland, riparian woodland; *Porter Ranch:* grassland, chaparral/coastal scrub, coast live oak woodland, riparian woodland;

Blue line creek(s): Mankin's Ranch: Project crosses Huasna Creek and one unnamed tributary; shipping area and well pads are at least ½ mile from Huasna Creek; Porter Ranch access road: access road crosses two tributaries to Huasna River; access road parallels portions of Huasna River.

Site's tree canopy coverage: General densities between 34 to 75% on the Mankins Ranch; 76% to 100% density for a small portion of southern access ranch road.

Based on the latest California Diversity database, and other biological references, the following is a list of sensitive vegetation, wildlife and/or habitat that have been identified as potentially being within the vicinity of the proposed project:

Miles's milk-vetch (*Astragalus didymocarpus* var. *milesianus*) has been found about one mile to the east. This annual herb is found on clay soils in coastal scrub habitat between the 20 and 90-

meter elevation (65 to 300 feet). The typical blooming period is March-June. Miles's milk-vetch is considered rare by CNPS (List 1B, RED 2-2-3).

Southwestern pond turtle (*Emys* (or *Clemmys*) *marmorata pallida*) has been found along Alamo Creek Road. Southwestern pond turtle is a federal and California Species of Special Concern. This is an aquatic turtle that uses upland habitat seasonally. They occur in ponds, streams, lakes, ditches, and marshes. The species prefers slow-water aquatic habitat with available basking sites nearby. Hatchlings require shallow water habitat with relatively dense submergent vegetation for foraging.

American badger (*Taxidea taxus*) have been found along Highway 166. In California, Badgers range throughout the state except for the humid coastal forests of northwestern California (Del Norte and Humboldt Co). Badger populations have declined drastically in California within the last century (Grinnell et al., 1937; Longhurst, 1940), where they now survive only in low numbers in peripheral parts of the central valley and adjacent lowlands to the west in eastern Monterey, Mendocino, San Benito and San Luis Obispo counties. In California, Badgers occupy a diversity of habitats. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated ground. Grasslands, savannas, and mountain meadows near timberline are preferred. Badgers prey primarily on burrowing rodents such as Gophers (*Thomomys*), Ground Squirrels (*Spermophilus*, *Ammospermophilus*), Marmots (*Marmota*), and Kangaroo Rats (*Dipodomys*). They are predatory specialists on these rodents, although they will eat a variety of other animals, including mice, Woodrats, reptiles, birds and their eggs, bees and other insects, etc.

Deliberate killing probably has been a major factor in the decline of Badger populations with many people regarding them as detrimental to their interests. Cultivation is adverse to Badgers, as they do not survive on cultivated land. Agricultural and urban developments have been the primary causes of decline and extirpation of populations of Badgers in California. Rodent and predator poisoning pose double threats through direct and secondary poisoning of Badgers and elimination of the food Badgers are dependent upon. Shooting and trapping of Badgers for animal "control" is another source of mortality.

California red-legged frogs (*Rana aurora draytonii*) has been found about 2,000 feet to the east of Huasna Townsite Road in the Huasna River. California red-legged frog is listed as federally threatened, and considered a California Special Concern species by the CDFG (CDFG, 2002). They historically have ranged from Marin County southward to northern Baja California. Presently, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining California red-legged frog populations within the state. The California red-legged frog is a large (85-138 millimeters) reddish-brown frog with variable red pigment on the ventral surfaces. Riparian habitat degradation, urbanization, predation by bullfrogs, and historic market harvesting have all reportedly contributed to population declines in this species.

The species occurs in varied habitats during its life cycle. Breeding areas include lagoons, streams and ponds, including siltation and irrigation ponds. California red-legged frogs typically breed from January to July, with peak breeding occurring in February. Juvenile frogs are found in open, shallow aquatic habitats containing dense emergent vegetation.

Adult California red-legged frogs prefer aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 0.7 meter (2.3 feet), and the presence of fairly sturdy underwater supports such as cattails. The largest densities of California red-legged frogs are typically associated with dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation. Although the species can inhabit ephemeral streams or ponds, populations probably cannot be maintained in ephemeral streams in which all surface water disappears. Adult California red-legged frogs are primarily nocturnal, although metamorphs and juveniles are known to be active during the day and night.

Vernal Pool Region. The project site occurs within the Santa Barbara Vernal Pool Region designated by the California Department of Fish and Game. Vernal pool habitat consists of seasonal wetlands (i.e. areas that pond water during the wet season and dry up during the summer months) that may provide habitat for sensitive aquatic plant and animal species.

Adjacent to the Shipping Site area, a circular seep (about 20 feet across) exists which contains both an emanation of oil and water. The applicant has been requested to provide additional information on the source of this seep.

Biological Reports. Numerous botanical and biological reports have been prepared for the applicant on the proposed project, the southern access ranch road, and at the intersection at Alamo Creek Road and Highway 166.

These reports identify habitats, sensitive plants (Well's manzanita (*Arctostaphylos wellsii*), leafy tarplant, native oaks), sensitive wildlife (American badger, southwestern pond turtle, California red-legged frog)

The previous Lorena EIR also recognized the presence of Well's manzanita.

A recent nearby biological report (Sharpe Residence- 6730 Huasna Townsite Road; Padre, April 2008) identified the following:

- ✓ Potential presence of the California red-legged frog (Federally threatened, California species of concern) in Huasna River (and referenced a nearby sighting);
- ✓ Potential presence of the Two-striped garter snake (California species of concern);
- ✓ Numerous birds observed during survey, including the following special status species: golden eagle, prairie falcon (California species of concern), Cooper's hawk, northern harrier and white-tailed kite.

Applicable Agency Regulations. On January 1, 2005, the State of California enacted an *Oak Woodland Conservation bill (SB1334)* that amended the Public Resource Code to include greater oak woodland protection measures from new discretionary development (California Environmental Quality Act, Sec 21083.4). The more significant changes include: defining the size of oak tree, requiring a fee or conservation easement to address at least one half of the impacts, requiring seven years of monitoring for replanting efforts.

As a part of the CEQA process relating to oak tree impacts, the County makes efforts to minimize impacts to existing oak trees. When that is not possible the County typically applies the following replacement ratios for "impacted" and "removed" oak trees: "removed" trees – replace with four in-kind seedlings; "impacted" trees - replace with two in-kind seedlings.

The project proposes to disturb more than one acre. Therefore, prior to work beginning, the project will be required to prepare and implement a *Stormwater Pollution Prevention Plan (SWPPP)* that has been approved by the Regional Water Quality Control Board or County. This Plan will include measures to reduce potential sedimentation, erosion and drainage impacts to existing downstream water sources.

The project is within a "high" or "very high" fire severity zone as defined by CAL FIRE. In addition to the minimum 30-foot clearance of vegetation around proposed structures, an additional 70 feet beyond (100 feet total) the edge of each new structure will require substantial fuel modification to reduce fire hazards. Ten feet along each side of the access road will also require heavy fuel modification. A 14-foot vertical clearance is also needed along this access road.

The federal *Migratory Bird Treaty Act* (16 U.S.C., Sec. 703, Supp. I, 1989), prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Birds of Prey are protected in California under the State Fish and Game Code, Section 3503.5, 1992).

Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. This approach applies to red-tailed hawks, American kestrels, burrowing owls, and other birds of prey. Project impacts to these species would not be considered "significant" unless they are known or have a high potential to nest on the site or rely on it for primary foraging.

Also, the federal *Bald Eagle Protection Act*, prohibits persons within the United States (or places subject to U.S. jurisdiction) from "possessing, selling, purchasing, offering to sell, transporting, exporting or importing any bald eagle or any golden eagle, alive or dead, or any part, nest, or egg thereof."

Impact. As proposed, the project will result in the following direct impacts to sensitive species:

- ✓ Oak impacts – two oaks are proposed for removal at Well Pad #2 (Sage biological report; 7/09); the report also identifies 183 oak trees requiring “pruning” within entire project boundaries;
- ✓ Due to the two oaks proposed for removal, and the 183 trees proposed for “pruning”, as well as establishment of the proposed activities, potential impacts could occur to nesting or roosting trees that may currently support migratory birds or birds of prey;
- ✓ Without adequate controls, erosion and sedimentation could adversely impact down gradient surface waters and associated wildlife;
- ✓ Spillage or leakage of crude oil and related toxic constituents could adversely impact sensitive vegetation near leak or spill, as well as to down gradient surface waters and associated wildlife;

Impacts to other sensitive species were identified as follows:

- Manzanita could be found during above-ground pipe installation;
- Approximately 16,200 leafy tarplants (CNPS List 1B.2) potentially impacted (total approximate population surveyed: 273,400 plants);
- Nesting birds could be found in and around project limits during exploration/testing activities;
- Other wildlife (American badger, California red-legged frog) may be found during exploration/testing;
- Red-legged frogs may be encountered near wet areas on or near southern ranch road and be impacted from operational vehicle traffic;
- Huasna River bridge work (top deck replacement) may temporarily impact riparian vegetation/wildlife;
- Should Production commence, drilling for new wells (two at a time) will occur 24 hours a day for a 30-day period up to four times over a four year period, resulting in potential disruption of surrounding wildlife.

Mitigation/Action Required. Due to the project's potential impacts to biological resources, additional analysis of biological resource impacts shall be accomplished by a qualified biologist to peer review biological reports (completed by others) and applicant-proposed mitigation measures. This effort shall also include, but not necessarily be limited to, the following:

1. Consultation with the State Department of Fish and Game and the United States Fish and Wildlife Service.

2. Consultation with the California Native Plant Society, the Audubon Society, and other conservation organizations, as appropriate.
3. Identification of all rare, threatened and/or endangered plant and animal species on site.
4. Identification of all rare, threatened and/or endangered plant and animal species off site which could potentially be affected by the proposed project.
5. Identification of other sensitive, unique or important plant and animal species and communities of the project area.
6. The consultant shall prepare mapping that illustrates the locations of the following (if any):
 - a. Location of individuals and groups of rare, threatened, and/or endangered plant species.
 - b. Habitat for rare, threatened and/or endangered plant and animal species.
 - c. Wetlands and riparian areas.
 - d. Other areas of sensitive, unique or important biological resources.
7. Identification of short term and long term impacts on rare, threatened, and/or endangered species and species habitat.
8. Identification of cumulative impacts on the area's ecosystem, which could result from the project.
9. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential adverse biological impacts to less than significant levels.

5. CULTURAL RESOURCES -
Will the project:

| | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|----------------------------|--------------------------------------|-------------------------------------|--------------------------|
| a) <i>Disturb pre-historic resources?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Disturb historic resources?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) <i>Disturb paleontological resources?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting

A Phase 1 (surface survey) was conducted for the subject property (Parker & Associates; April, 2007). As a result of the Phase 1 survey, archeological resources were identified on the subject property. While no pre-historic resources were found; the remains of an historical structure was encountered (oil field crew cabin built between 1880 and 1910). This structure is more than 50 years old and has been identified as having historic significance.

Some potential exists for paleontological resources to be present in this type of geological formation.

Additional surface work on cultural resources was conducted (Far Western, Dec., 2008) for the proposed intersection improvements at Alamo Creek Road and Highway 166.

Per Section 22.10.040 of the County's Land Use Ordinance (Inland), the following measure is in place to help reduce impacts to archeological resources during ground disturbance activities:

In the event archeological resources are unearthed or discovered during any construction

activities, the following standards apply:

- A. *Construction activities shall cease, and the Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.*
- B. *In the event archeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner shall be notified in addition to the Department so proper disposition may be accomplished.*

Impact. The project proposes disturbance of an approximate 1.54 acre area for improvements to the job site and the Mankins Ranch access road.. Up to an additional 5,000 square feet will be grubbed and “all-weathered” for the southern access road turnouts (CalFire requirement) every half mile.

The historic resource (oil crew cabin remains [foundation and chimney]) is located adjacent to the shipping site portion of the project. Design of the shipping site layout is proposed to avoid this historic resource.

Impacts to paleontological resources are considered to be less than significant due to the following reasons: almost all of the earthwork for road and pad work is less than three feet in depth (due to the use of previously graded areas for pads and access roads), up to thirteen new drill holes of narrow bore are anticipated, which is considered a relatively small amount of horizontal disturbance (less than 100 square feet as measured from the ground surface).

Mitigation/Action Required. The applicant proposes several protection measures to protect the historic resource during construction and during the operational life of the project. Combined with the above-referenced ordinance standard for unforeseen impacts that could occur during grading, cultural resource impacts can be mitigated to a less than significant level.

| 6. GEOLOGY AND SOILS - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|---|--------------------------------|---|-------------------------------------|-------------------------------------|
| a) <i>Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Be within a California Geological Survey “Alquist-Priolo” Earthquake Fault Zone”?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) <i>Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Change rates of soil absorption, or amount or direction of surface runoff?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| 6. GEOLOGY AND SOILS - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| e) <i>Include structures located on expansive soils?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) <i>Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) <i>Involve activities within the 100-year flood zone?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) <i>Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i) <i>Preclude the future extraction of valuable mineral resources?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| j) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting

Project Elements. The following conditions relating to soils and geology exist on or adjacent to the area proposed for development:

- ✓ Topography ranges from gently to very steeply sloping;
- ✓ Drainage characteristic of the soil ranges from very poorly to well drained;
- ✓ Shrink-swell characteristic of the soil is low;
- ✓ The closest water body is approximately ½ mile to the east (Huasna Creek); unnamed ephemeral tributaries are closer to the proposed project;
- ✓ The landslide risk potential is not known;
- ✓ The liquefaction potential during a ground-shaking event is considered low;
- ✓ Not in close proximity to an existing active, or “potentially capable” fault; Suey fault is approximately 1/2 mile to the west and considered potentially capable; nearby West Huasna fault considered inactive;
- ✓ While not within mapped areas known to contain serpentine or ultramafic rock or soils, APCD has identified such potential exists;
- ✓ Soil erodibility ranges from low to moderate.

Regulatory Policies. In addition to the Uniform Building Code, the County has two additional documents providing guidance for new development in areas with soil or geological challenges, which are the County's Safety Element and Land Use Ordinance. For projects over an acre in disturbance, Regional Water Quality Control Board requires that a Storm Water Pollution Prevention Plan be prepared to address surface water quality.

With regards to the County's Safety Element, it includes the following goal: *“Minimize the potential for loss of life and property resulting from geologic and seismic hazards”*. This Element also includes policies and standards intended on achieving this goal.

The County's Land Use Ordinance includes provisions to address geological problem areas, drainage, and sedimentation and erosion control.

The California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) has the responsibility to ensure oil resources are protected and then removed efficiently and safely. Under the California Code of Regulations, Title 14, Division 2, Chapter 2 explains their responsibilities under CEQA. As a part of their regulatory responsibility they will require the applicant to complete and execute an oil spill contingency plan. Other areas of responsibility includes 1) proper well casing to insure there is no contamination to soil and aquifers between the oil reservoir (usually well below any potable aquifers) and the surface of the soil; 2) proper plugging and abandoning when well production is terminated; 3) when injection proposed to insure proper methods are being applied; 4) new drilling using proper methods; 5) blowout prevention; and 6) subsidence detection and abatement.

The County of Santa Barbara has developed and updated a detailed program addressing oil well drilling, operation and closure within its county borders. As the SLO County's regulations appear limited on this subject, other Counties' regulations, such as Santa Barbara's, may provide additional measures that should be explored for this project.

Grading of one or more acres

Clean Water Act. The Clean Water Act has established a regulatory system for the management of storm water discharges from construction, industrial and municipal sources. The California State Water Resources Control Board (SWRCB) has adopted a National Pollutant Discharge Elimination System (NPDES) Storm Water General Permit that requires the implementation of a Storm Water Pollution Prevention Plan (SWPPP) for discharges regulated under the SWRCB program. Currently, construction sites of one acre and greater may need to prepare and implement a SWPPP which focuses on controlling storm water runoff. Municipal and industrial sources are also regulated under separate NPDES general permits. The Regional Water Quality Control Board and County are the local extensions of the SWRCB, who currently monitors these SWPPPs.

Sedimentation and Erosion Control

Sedimentation and Erosion. Erosion of graded areas and discharge of sediment down gradient will likely result if adequate temporary and permanent measures are not taken before, during and after vegetation removal and grading. If not properly mitigated, these impacts both on the project site and within surrounding areas may be significant.

A sedimentation and erosion control plan shall be prepared per County Land Use Ordinance [(Inland), Sec. 22.52.090] and incorporated into the project to minimize sedimentation and erosion. The plan will need to be prepared by a registered civil engineer and address the following to minimize temporary and long-term sedimentation and erosion: slope surface stabilization, erosion and sedimentation control devices and final erosion control measures.

History/Petroleum Occurrence

The Lorena EIR prepared for well testing in the 1980s identified that 58 wells had been drilled in the Huasna area, of which three were producing, 49 were "dry holes" and one abandoned. Forty three of these wells were considered "wildcat" wells, which are wells drilled in areas not previously known to produce oil.

The proposed wells are located on the Meridian Anticline (Huasna Oil Field), which is known to be a potential reservoir of oil. At the time of the original EIR records show that 20,000 barrels had been extracted consisting of 8° to 10° gravity (heavy) crude oil. Based on this older data, the reservoir was estimated to contain at least 10.8 million barrels of similar gravity oil. Other smaller formations, known as the Pt. Sal, Rincon and Vaqueros formations, contain oil with a lighter 32° gravity. The applicant has stated between 10 and 16 million barrels of crude oil may be available.

Drilling

The drilling process will use a truck-based drilling rig (up to 60-feet tall when fully erected). Drilling muds (commonly bentonite) are used in the drilling process. Once used, these drilling muds will be placed in containers and then hauled off of the property, usually reprocessed for reuse or disposed of at an approved facility. All drilling is required to follow DOGGR regulations.

Impact. As proposed, the project will result in the disturbance of approximately 1.5 acres and up to 5,150 cubic yards of material moved. All surface areas of disturbance are within areas previously disturbed that were a part of the previous test wells that go back as far as the 1930's. The new drilling will explore previously tested formations, as well as those not previously tested (Pt. Sal, Rincon and Vaqueros formations). Should groundwater be encountered during drilling, proper DOGGR protocols will need to be followed to insure that there is no well-related contamination to any water source (groundwater is not expected to be encountered).

Above ground spills and leaks onto the soil could occur during drilling, testing and operation. Drilling muds will be placed in containers and then hauled off of the property, usually reprocessed for reuse or disposed of at an approved facility. All production water extracted during testing will either be reinjected or hauled off to an approved facility. All crude oil extracted during testing shall be hauled off to an approved facility. All well pads and shipping area show that a berm will be constructed along the perimeter of these areas as a part of the spill prevention program, with the intent of keeping any spills contained outside of the unnamed tributary near the shipping site and Huasna Creek.

Mitigation/Action Required. Implementation of the previously-referenced sedimentation and erosion control plan, drainage plan and SWPPP will reduce sediment and drainage impacts to less than significant levels. The applicant-proposed mitigation measures recognize documents required by DOGGR which are intended to address the following geologically-related issues: proper well casing, proper closure of any abandoned mines, proper re-injection, and subsidence detection and abatement. Environmental Health will also be requiring additional documents and implementation (e.g., Spill Prevention Plan, etc.) of above-ground activities that may impact soils. RWQCB and CDFG may also include measures to address potential surface spills and soil contamination.

Due to the complication of multi-agency jurisdiction and potential for numerous agency permits, a registered engineer familiar with the regulations associated with oil well development shall evaluate the existing regulations, their implementation and effectiveness and determine if additional or revised measures are appropriate when compared to what is proposed by the applicant, including construction and operational monitoring. The analysis should include, but not be limited to, the following:

1. Consultation with the County Public Works Department, the United States Natural Resource Conservation Service, CA Department of Oil, Gas and Geothermal Resources, Regional Water Quality Control Board, and the CA Department of Fish and Game.
2. Identification and mapping of significant drainage courses and watersheds.
3. Identification and mapping of all areas within the project boundaries that currently experience drainage and/or flooding conditions.
4. Identification and mapping of all areas that could potentially be adversely affected by drainage, erosion, or sedimentation impacts resulting from the development the proposed project.
5. Evaluate existing regulations from all jurisdictions with permitting authority to determine where there is regulation overlap (that can be potentially eliminated) as well as if there are gaps that need to be addressed at the various stages of development.
6. Evaluate existing county ordinances on oil well development and compare with other similar counties having detailed oil well development programs (e.g., Santa Barbara, etc.) to determine if additional measures are appropriate.

7. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential adverse geological and soil impacts.

| 7. HAZARDS & HAZARDOUS MATERIALS - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|-------------------------------------|--------------------------------|-------------------------------------|--------------------------|
| a) <i>Result in a risk of explosion or release of hazardous substances (e.g. oil, pesticides, chemicals, radiation) or exposure of people to hazardous substances?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Interfere with an emergency response or evacuation plan?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) <i>Expose people to safety risk associated with airport flight pattern?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Increase fire hazard risk or expose people or structures to high fire hazard conditions?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) <i>Create any other health hazard or potential hazard?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting

Federal Laws/Regulations

Federal Water Pollution Control Act of 1972 (Clean Water Act). The Clean Water Act governs the control of water pollution in the United States. This Act includes the National Pollutant Discharge Elimination System (NPDES) program, which requires that permits be obtained for point discharges of wastewater. This Act also requires that storm water discharges be permitted, monitored, and controlled for public and private entities.

Resource Control and Recovery Act of 1974 (RCRA). RCRA was enacted as the first step in the regulation of the potential health and environmental problems associated with solid hazardous and non-hazardous waste disposal. RCRA, and the formation of the U.S. EPA to implement the RCRA, provide the framework for national hazardous waste management, including tracking hazardous wastes from point of origin to ultimate disposal.

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). Under CERCLA, owners and operators of real estate where there is hazardous substances contamination may be held strictly liable for the costs of cleaning up contamination found on their property. No evidence linking the owner/operator with the placement of the hazardous substances on the property

is required. CERCLA, also known as Superfund, established a fund for the assessment and remediation of the worst hazardous waste sites in the nation. Exceptions are provided for crude oil wastes that are not subject to CERCLA.

Hazardous and Solid Waste Amendments of 1984 (HSWA). The HSWA law was enacted to close RCRA loopholes and regulated leaking underground storage tanks (USTs) specifically. The SWRCB, the RWQCB, and the local County Division of Environmental Health, as a Certified Unified Program Agency (CUPA) program, oversee UST regulations and cleanup of leaking USTs. Asbestos Hazard Emergency Response Act of 1986 (AHERA). The AHERA is the federal legislation that governs the management and abatement of asbestos-containing materials in buildings.

National Emission Standards for Hazardous Air Pollutants; Asbestos, 40 CFR Part 61. This regulation requires the assessment and proper removal of asbestos-containing materials that could release asbestos when disturbed prior to the demolition of buildings.

Clean Air Act. The regulatory programs that govern stationary sources of air pollution apply to any facility that emits or has the potential to emit conventional pollutants: oxides of nitrogen and sulfur, carbon monoxide, VOCs or particulate matter. It may also apply to emission sources of certain toxic chemicals. In addition to the existing air district permitting programs required by state law and district rules, a new federal operating permit program must be implemented to meet EPA regulations adopted pursuant to Title V of the 1990 amendments of the Clean Air Act. Locally the Clean Air Act regulations are implemented and enforced by the San Luis Obispo APCD.

California Laws/Regulations

Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code). The Porter-Cologne Act established a regulatory program to protect water quality and protect beneficial uses of the state's waters. The Porter-Cologne Act also established the State Water Resources Control Board and nine regional boards as the main state agencies responsible for water quality in the state. Discharges of wastes (including spills, leaks, or historical disposal sites) where they may impact the waters of the state are prohibited under the Porter-Cologne Act, including the discharge of hazardous wastes and petroleum products. The assessment and remediation of these waters are regulated by the regional boards, the RWQCB administers such waters in the vicinity of the proposed project.

Title 22, California Code or Regulations. Title 22 of the CCR regulates the use and disposal of hazardous substances in California. It contains regulatory thresholds for hazardous wastes which are more restrictive than the federal hazardous waste regulations. The California Department of Conservation, Division of Oil Gas and Geothermal Resources (DOGGR) has the responsibility to implement the California Code of Regulations, under Title 14, Division 2, Chapter 2, which explains their responsibilities under CEQA.

California Health and Safety Code Sections 25500 et seq. The California community right-to-know hazardous material law applies to any facility that handles any hazardous material (chemical, chemical-containing products, hazardous wastes, etc.) in a quantity that exceeds reporting thresholds. The most common thresholds that trigger regulation based on that state statute are 500 pounds of solid, 55 gallons of liquid, and 200 cubic feet of compressed gas, based on the presence of individual chemicals. The basic requirements of hazardous materials and community right-to-know regulations for covered facilities include:

- ✓ Determining whether the facility handles hazardous materials;
- ✓ Immediate reporting of releases of hazardous materials;
- ✓ Submission and update of a Hazardous Materials Business Plan (including an accurate chemical inventory, site map showing hazardous materials storage locations, emergency response plan, and notification procedures) as required by the local administering agency;
- ✓ Notification of the local administering agency of the handling of specified quantities of acute

hazardous materials and submission of a Risk Management Plan (RMP) as required;

- ✓ Annual submission for manufacturing facilities of a Toxic Chemical Release Report (Form R) if threshold amounts of certain toxic chemicals are made, or processed for use; and,
- ✓ Requirements for hazardous materials storage imposed by local administering agencies, fire departments, and California Occupational Safety and Health Administration (Cal/OSHA) standards.

California Air Resources Board - Air Toxics Control Measure. Under the California Air Resources Board Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, prior to construction permit issuance, a geologic evaluation is required to determine the presence or absence of naturally-occurring asbestos. If naturally occurring asbestos is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM before grading may begin. These requirements may include, but are not limited to, 1) preparation of an “Asbestos Dust Mitigation Plan,” which must be approved by APCD before grading begins; and 2) an “Asbestos Health and Safety Program”, as determined necessary by APCD.

California Fire Code. The 2001 California Fire Code has been adopted by CalFire/County Fire, which is the fire agency with jurisdiction over the project site. The California Fire Code contains minimum standards for many aspects of fire prevention and suppression activities. These standards include provisions for access, water supply, fire protection systems and fire resistant building materials. The California Fire Code also includes provisions for required setbacks for oil wells from buildings, storage tanks, and streets and railways.

County of San Luis Obispo Regulations

Energy Element. In 1995, the County of San Luis Obispo adopted the Energy Element as part of the County’s General Plan. The Energy Element contains a goal of protecting public health, safety and environment, and several policies that promote the stated goal. Applicable policies are summarized below:

Policy 56. Encourage existing and proposed facilities to focus on measures and procedures that prevent oil, gas, and other toxic releases into the environment. This policy is to ensure that facilities: (1) take measures to prevent releases and spills, (2) prepare for responding to a spill or release, and 3) provide for the protection of sensitive resources. A review of a facilities spill response plan, or reports from other agencies, should be completed to monitor compliance.

Policy 64. Guideline 64.1. To reduce the possibility of injury to the public, facility employees, or the environment, the applicant shall submit an emergency response plan which details response procedures for incidents that may affect human health and safety or the environment. The plan shall be based on the results of the comprehensive risk analysis. In the case of a facility modification, the existing response plan shall be evaluated by the safety review committee and revisions made as recommended.

Flammable and Combustible Liquid Storage. County LUO section 22.10.070 includes requirements on flammable and combustible liquid storage relating to: applicability, permit requirements, limitation on use, limitation on quantity, setbacks, additional standards within the URL or VRL, and including Cal Fire recommendations, as applicable. Without approval through a Conditional Use Permit, above ground storage of combustible liquid is 20,000 gallons and 2,000 gallons for flammable liquids.

County of Santa Barbara. Due to Santa Barbara County’s extensive involvement with oil well drilling, they have developed and updated a detailed program addressing oil well drilling, operation and closure within its county borders. As the SLO County’s regulations appear limited on this subject, other Counties’ regulations, such as Santa Barbara’s, may provide additional measures that should be explored for this project.

Project-Related Elements

Oil production facilities commonly use potentially hazardous materials. Hazardous materials that are stored and used on such facilities include crude oil, natural gas, propane, diesel and various other chemically-based substances, such as corrosion inhibitors, solvents, lubricants and coolants. This request is not proposing an on-site fuel station and does not propose the use of any diluents.

As identified on Section B (Existing Setting) of the Initial Study, surrounding uses are mostly undeveloped, large lot properties with sparsely scattered residences. The closest residence to either the shipping site or well site is approximately 1,300 feet away with several more around two thousand feet away. When the Mankins and Porter ranch roads are considered, there are several residences within 100 feet of these access roads.

The project is within a high severity risk area for fire.

The project is not within the Airport Review area or within the regulated area of an adopted airport land use plan.

The project is not expected to conflict with any regional evacuation plan.

The proposed project is not within one-quarter mile of an existing or proposed school.

The project site is not included on the Cortese list of hazardous materials sites.

The previous test well facility did not remove all of the equipment and stored material used as part of the testing operation.

Referrals – The following agencies have various levels of oversight or responsibilities relating to hazardous wastes and materials and were contacted as a part of the previous request:

CalFire – review project for potential fire risks, and ways to reduce these impacts (e.g., require adequate setbacks and surrounding vegetation removal/modifications to minimize potential for wildland fires, etc.); a response was received with a focus on vegetation clearances;

Environmental Health – reviews and insures compliance of the following documents:

- ✓ Spill Prevention Countermeasure Control Plan (SPCC) for above ground petroleum storage (includes produced water);
- ✓ Hazardous Materials Business Plan;
- ✓ Hazardous Waste Management Plan;

A response was previously received recognizing that all of these plans need to be prepared and then reviewed for approval by Environmental Health;

Regional Water Quality Control Board – protect groundwater and surface waters; a response was previously received requesting that oil well casing be installed/ tested to show that there is no potential for contamination with the soil and/or aquifers that are potential potable water sources;

APCD – Reviews project to minimize hazardous wastes/materials becoming airborne or insuring any release is at less than significant levels; a response was previously received addressing stationary and mobile sources of air pollution;

Division of Oil, Gas and Geothermal Resources (DOGGR) – has responsibility to ensure oil resources are protected and then removed efficiently and safely, and are involved with the following aspects:

- ✓ Requires the applicant to complete and execute an Oil Spill Contingency Plan;
- ✓ Insures proper well casing to avoid contamination to soil and aquifers between the oil reservoir (usually well below any potable aquifers) and the surface of the soil;
- ✓ Requires proper plugging and abandoning when well production is terminated;

- ✓ When proposed, verifies any re-injection (e.g., water) is using proper methods;
- ✓ Verifies any new drilling is using proper methods;
- ✓ Reviews project to include blowout prevention elements;
- ✓ Reviews project for subsidence detection and abatement;
- ✓ Includes provisions on proper transport of fluids during testing period.

Department of Toxic Substance Control – review project for existing soil contamination issues that need to be resolved, as well as review any hazardous materials/waste spill plan(s).

CDFG – Reviewing project elements for adverse impacts to species connected with downstream surface waters and other sensitive vegetation/ wildlife.

In addition, the City of Arroyo Grande previously expressed concerns over spills resulting from tanker truck accidents and who is responsible for clean-ups from such spills.

Impact. As stated above, the project does propose use of hazardous materials or may generate small amounts of hazardous wastes. There is also some risk of explosion or oil release from the exploration aspect of the project. The potential for leakage from tanks and pipelines could occur without continual inspections and maintenance.

Water Treatment Facility. Operation of the proposed water treatment facilities does not propose to include the use of common oil processing hazardous-containing chemicals (such as soda ash, caustic soda, sulfuric acid, or anti-scaling additives) which could otherwise potentially impact a given site. No hazardous wastes are anticipated to be generated from this proposed project activities. The applicant will be required to submit a Hazardous Materials Business Plan with the County’s Division of Environmental Health, which will also evaluate this issue.

Contaminated Soils/Previous Testing Elements. Petroleum hydrocarbon-containing soil may be encountered during project construction activities due to the previous testing and hazardous storage material storage and potential soil contamination in these areas. Contaminated soils could be disturbed during construction activities which may pose a risk to on-site workers. Some of the equipment and storage containers left from the previous testing operation may contain hazardous substances. These items are likely too old to be used by the proposed operator and will need to be properly removed. Off-site disposal of contaminated soils and/or old containers could pose a safety risk to the public if not properly removed and disposed of to a licensed disposal facility. The applicant has been requested to prepare an Environmental Site Assessment for hazardous wastes.

Drilling. The project proposes to initially drill for and establish up to four production test wells. If production is determined viable, up to eight additional production wells could be drilled (two a year over following four years after production commences on first four wells). Drilling muds are proposed to be kept in containers (e.g., baker tanks, etc.) and hauled off for re-use or disposal at proper facilities. One water reinjection well is proposed for the entire development. Limited amounts of crude oil will be extracted during this process.

Increased Fire Risk. The California Department of Forestry and Fire Protection/San Luis Obispo County Fire Department (CAL FIRE), provides fire protection, emergency medical, and rescue services to the proposed project.

Based on the County’s fire severity map the project is within the “very high” fire risk area, which identifies the susceptibility to wildland and brush fires. Fire hazard severity is determined by a number of factors including but not limited to: remoteness of the area, denseness of vegetation, the area’s circulation network, the proximity to fire fighting facilities, the habitat type, and the degree of urbanization. These factors among others contribute to an area’s overall response time. CAL FIRE’s Response Time map shows it would take more than 20 minutes to reach the project once a call is received from the closest CAL FIRE station (Nipomo). The closest CAL FIRE station is approximately

23 miles to the southwest. CalFire conducted a “vehicle run” from the Nipomo station to the property site entrance, where it took 29 minutes (per Rick Swan e-mail, 8/6/08). Additional time would be needed to get to the shipping site (¾ mile from ranch entrance) or well pads.

Appropriate response times for fire protection services vary with the degree of urbanization. Appropriate response times for urban areas are up to six minutes, for suburban areas up to seven minutes, and rural areas up to twelve minutes. Response times exceeding 15 minutes for structure fires provide little possibility of saving the structure, and 60 minutes or more could mean fires approaching critical levels in steep, chaparral covered, remote areas. For structure fires, CAL FIRE has mutual aid agreements with all fire protection agencies in the County, including the City of Arroyo Grande. Their station is about 8 miles closer than the Nipomo Station. An air tanker squadron at Paso Robles Airport is also available if needed (CAL FIRE 2003).

The applicant will be required to prepare and maintain an emergency response plan which includes fires occurring at the oil field property. CalFire has reviewed the previous project and made recommendations on numerous aspects, including but not limited to, fire suppression equipment, fuel modification setbacks, fire water storage, access road clearances/capacities and signage.

Oil Storage and Distribution. Total gross throughput of extracted oil/water mix is proposed at a not-to-exceed amount of 2,400 barrels per day (at 42 gallons/barrel = 100,800 gallons). Storage tanks include: two wash tanks at 1000 barrels [42,000 gallons] each; 2 stock tanks (1000 barrels each [42,000 gallons], one water tank (1000 barrels [42,000 gallons], two blend oil tanks (250 barrels each [10,500 gallons]), three fire water tanks (10,000 gallons each with one at each pad)]

Approximately 4,500 linear feet of above-ground insulated fluid transport piping is proposed for the extracted crude oil/water mix and reinjection production water to be transported between the wells and the shipping site.

Independently-operated tanker trucks (with tank total capacity of up to 7,000 gallons) will be used to transport the crude oil from the site to an approved facility off-site (e.g., Santa Maria, Nipomo Mesa, Oxnard). A designated haul route for construction vehicles and operational tanker trucks will be required, which includes the crossing of “seasonal” tributaries to the Huasna River. One of these tributaries is an uppermost “finger” of the Twitchell Reservoir, where when the reservoir is full, this finger is covered in water. When surface water is present for any of these crossings, aside from the potential limitation for truck ability to successfully cross, there could be impacts to sensitive biological resources (CA red-legged frog). The applicant proposes that if the water reaches a certain reservoir elevation, vehicle traffic will cease until it falls below that level (599 feet). All other crossings over water are on existing bridges. A spill contingency plan is required of the applicant which will address potential vehicle spills along the haul route. It will be the applicant’s responsibility to pay for any clean up work necessary should there be a spill.

Natural Gas/Propane. The formation from which the oil will be extracted is expected to generate very little natural gas. A vapor recovery system will be installed and is expected to capture all natural gas encountered. No gas flares are expected as necessary. All natural gas collected will be used to help power on-site propane-powered equipment. Due to the small amounts expected, propane will be brought onto the site to normally power this equipment. A 5,000 gallon propane tank is proposed within the shipping site area with two smaller 500-gallon tanks at each well pad. This will be primarily used for on-site power generation and heating needs. Electricity is not proposed due to the limited capacity of the electrical lines available.

Mitigation/Action Required. Due to the complexity of multi-agency jurisdiction and potential for numerous agency permits relating to hazardous materials and/or hazardous wastes, a registered engineer familiar with all agency regulations associated with oil well development shall 1) evaluate these regulations, and 2) identify who is responsible for their implementation, and if that implementation has been generally effective and mitigated to less than significant levels. This

analysis shall include consideration of the applicant-proposed measures. The analysis should also include, but not be limited to, the following:

1. Consultation with CalFire, CA Department of Oil, Gas and Geothermal Resources, Regional Water Quality Control Board, and the CA Department of Fish and Game, Environmental Health, Department of Toxic Substance Control, Caltrans, Air Pollution Control District.
2. Evaluate existing conditions and regulations, as described above;
3. Identification of any sensitive receptors (human and biological) relating to hazardous materials/wastes;
4. Evaluate impacts associated with proposed drilling, storage and use of hazardous materials, and how hazardous wastes are addressed, and if existing regulations adequately address the impacts;
5. As needed, develop additional measures above current regulations to address potentially significant impacts.

| 8. NOISE - Will the project: | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|-------------------------------------|---|-------------------------------------|--------------------------|
| a) Expose people to noise levels that exceed the County Noise Element thresholds? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Generate increases in the ambient noise levels for adjoining areas? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Expose people to severe noise or vibration? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Other: <u>Perceptible Noise</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting

General Information on Noise. Noise is generally defined as unwanted or objectionable sound. Decibels and other technical terms are defined in Table 1. Noise levels are measured on a logarithmic scale because of physical characteristics of sound transmission and reception. Noise energy is typically reported in units of decibels (dB). Noise levels diminish (or attenuate) as distance to the source increases according to the inverse square rule, but the rate constant varies with type of sound source. Sound attenuation from point sources, such as industrial facilities, is about 6 dB per doubling of distance. Heavily traveled roads with few gaps in traffic behave as continuous line sources and attenuate at 3 dB per doubling of distance. Noise from more lightly traveled roads is attenuated at 4.5 dB per doubling of distance.

Types of decibels

A-weighted decibel (dBA). Community noise levels are measured in terms of the A-weighted decibel (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear.

Equivalent noise level decibel (dB Leq). Equivalent noise level (Leq) is the average noise level on an energy basis for a specific time period. The duration of noise and the time of day at which it occurs are important factors in determining the impact on communities. Figure 1 provides a graphical representation of sound energy and potential adverse effects of common sounds.

Community Noise Equivalent (CNEL) and Day Night Average Level (DNL or Ldn) decibels.

Noise is more disturbing at night and noise indices have been developed to account for the time of day and duration of noise generation. The Community Noise Equivalent (CNEL) and Day Night Average Level (DNL or Ldn) are such indices. These indices are time-weighted average values equal to the amount of acoustic energy equivalent to a time-varying sound over a 24-hour period. The CNEL index penalizes night-time noise (10 p.m. to 7 a.m.) by adding 5 dB to account for increased sensitivity of the community after dark. The Ldn index penalizes night-time noise the same as the CNEL index, but does not penalize evening noise.

Effects of Noise. People are subject to a multitude of sounds in the environment. Typical noise levels of indoor/outdoor environments and public response to these sounds are shown in Figure 1. Excessive noise cannot only be undesirable but may also cause physical and/or psychological damage. The amount of annoyance or damage caused by noise is dependent primarily upon three factors:

- ✓ the amount and nature of the noise,
- ✓ the amount of ambient noise present before the intruding noise, and
- ✓ the activity of the person working or living in the noise source area.

The difficulty in relating noise exposure to public health and welfare is one of the major obstacles in determining appropriate maximum noise levels. Although there has been some dispute in the scientific community regarding the detrimental effects of noise, a number of general conclusions have been reached:

- Noise of sufficient intensity can cause irreversible hearing damage;
- Noise can produce physiological changes in humans and animals;
- Noise can interfere with speech and other communication; and,
- Noise can be a major source of annoyance by disturbing sleep, rest, and relaxation.

Table 1. Definitions of Acoustical Terms

| Term | Definitions |
|--|---|
| Decibel, DB | A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the sample sound pressure to the standard sound pressure, which is 20 micropascals (20 micronewtons per square meter) |
| Frequency, Hz | The number of complete pressure fluctuations per second above and below atmospheric pressure |
| A-Weighted Sound Level, dB | The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear, and correlates well with subjective reactions to noise. All sound levels in this reports are A-weighted |
| Equivalent Noise Level, L_{eq} | The average A-weighted noise level during the measurement period |
| Community Noise Equivalent Level, CNEL | The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 P.M. to 10:00 P.M. and after addition of 10 decibels to sound levels in the night between 10:00 P.M. and 7:00 A.M. |
| Day/Night Noise Level, L_{dn} | The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 P.M. and 7:00 A.M. |
| Ambient Noise Level | The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location |
| Intrusive | That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, tonal or information content, as well as the prevailing ambient noise level |

Perceptibility. Per the State’s CEQA checklist, the following impact relating to perceptible changes in noise shall be considered:

- ❖ Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

The following is a general assessment of perceptibility by the average human ear:

- 1 dBA increase in sound level is perceived as a barely audible increase by most people;
- 3 dBA increase in sound level, is clearly perceived and is a clearly audible increase;
- 10 dBA increase in sound level, is perceived as a “doubling” of sound levels.

The County’s Noise Element and Noise Ordinance do not address the issue of perceptibility nor assign a threshold of acceptability from increased levels of perceptibility. Due to the wide range of ambient noise levels between the urban and rural environments and the range of noisy activities allowed within each, this issue is evaluated on a case-by-case basis.

Thresholds. For the purposes of CEQA, the county has determined that the following thresholds apply to new development:

- ❖ Any increase above background (ambient) noise that is less than 3 dBA is less than significant.
- ❖ When a project (plus the background noise) results in an increase in noise between 3 and 10 dBA as measured from the nearest sensitive receptor, it is considered adverse. Also, based on consideration of the factors specified below, there is a potential for a significant noise impact that needs further consideration.
- ❖ When a project (plus the background noise) results in an increase in noise greater than 10 dBA, as measured from the nearest sensitive receptor that is a potentially significant impact warranting mitigation.

Significance Criteria. A project-related noise increase of between 3 and 10 dBA is considered adverse, but could be either significant or insignificant, depending upon the particular circumstances of a particular case. Factors to be considered in determining the significance of an adverse impact as defined above include, but are not necessarily limited to:

1. the resulting noise level;¹
2. the duration and frequency of the noise;
3. the number of people affected; and
4. the land use designation of the affected receptor sites.

Noise due to construction activities is usually considered to be insignificant when it falls under the hours and definition specified in the County’s Noise Ordinance exception for construction activities.

¹ For example, a noise level of 40 dBA would be considered quiet in many locations. A noise limit of 40 dBA would be consistent with the recommendations of the California Model Community Noise Control Ordinance for rural environments and with industrial noise regulations adopted by European jurisdictions.

Regulatory - County Noise Element

The Noise Element of the County General Plan provides policy framework within which potential future noise impacts are minimized. Many communities and cities within the County have adopted noise ordinances. A noise ordinance may be used to address noise levels generated by existing industrial, commercial and residential uses that are not regulated by federal or state noise level standards. The regulation of noise sources such as traffic on public roadways, railroad line operations and aircraft in flight is preempted by existing federal and/or state regulations, meaning that such

sources generally may not be addressed by a noise ordinance. The County Noise Element addresses the prevention of noise conflicts from all of these sources.

Some land uses are considered more sensitive to ambient noise levels than others, due to the amount of noise exposure and the types of activities involved. Noise-sensitive uses that have been identified by the County include the following:

- Residential development, except temporary dwellings;
- Schools-preschool to secondary, college & university; specialized education & training;
- Health care services (hospitals);
- Nursing and personal care;
- Churches;
- Public assembly and entertainment;
- Libraries and museums;
- Hotels and motels;
- Bed and breakfast facilities;
- Outdoor sports and recreation; and
- Offices.

Stationary Noise Sources

The primary sources of stationary noise within the County include many industrial, commercial and agricultural processes. Federal and State employee health and safety regulations (OSHA and Cal-OSHA) control noise production within an industrial or commercial facility or in close proximity to many types of agricultural equipment. However, exterior noise emissions from such operations have the potential to exceed locally acceptable standards at nearby noise-sensitive land uses.

Stationary noise control issues focus upon two objectives: to prevent the introduction of new noise-producing uses in a noise sensitive area, and to prevent encroachment of noise-sensitive land uses upon existing noise-generating facilities. The County attempts to achieve these objectives by applying performance standards and by requiring that new noise-sensitive uses in proximity to existing noise sources include receiver-based mitigation measures.

County LUO Section 22.10.170 addresses stationary vibration noise where any land use conducted in or within one-half mile of an urban or village reserve line shall be operated to not produce detrimental earth-borne vibrations perceptible at the points of determination identified in the following table:

| Land Use Category in Which Vibration Source is Located | Point of Determination |
|--|--|
| Residential, Office & Professional, Recreation, Commercial | At or beyond any lot line of the lot containing the use. |
| Industrial | At or beyond the boundary of the Industrial category |

Project Setting. Due to the very rural aspects of the area, ambient noise levels are usually at or below 40 decibels (dB) during the evening and nighttime hours. During the day, due to the extensive farming and ranching activities, occasional diesel-engine noise is common from tractors, generators and other farming equipment, as well as larger diesel trucks hauling livestock trailers.

All construction and operational traffic (i.e., employee vehicles and tanker trucks) generated by the project will travel south from the project site to Highway 166. One exception would be those service vehicles (e.g., UPS, propane service, etc.) that commonly already serve the existing area would continue using Huasna Road as their means to access the area. Two homes near the Mankins Ranch entrance at Huasna Townsite Road are within 100 feet of the access road. Two homes are also found within close proximity of the Porter Ranch access road. Permanent employees (3 total) and service vehicles (that are already serving the area for others) would use Huasna Road. All operations would temporarily cease, including tanker truck travel, should the at-grade creek tributary

crossings show flowing water.

Stationary sources: The project is adjacent to the Agriculture land use category. The ordinance requires that new stationary noise sources shall not exceed a daytime 50 decibel threshold at the property line, nor a 45 decibel threshold at night.

No residences within at least ½ mile are within view (direct “line-of-site”) of the highest oil well pad (#2). Well pad #1 and the lower shipping site are completely shielded by the intervening mountain range. While the distance to the above mentioned residence is about the same distance, the interceding ridge will block all potential project noise. The closest Huasna Valley residence is about 2,500 feet to the east.

Noise Studies. Several noise studies have been prepared to evaluate the project’s impacts. Three studies for the previously proposed project were originally prepared (one for the applicant [David Dubbink Associates, 3/08]; and two for Huasna Valley Association [David Lord Acoustical Consulting, 2/09 & 3/09]). As a part of the current submittal, an additional report for the applicant has been prepared [David Dubbink Associates, 06/09] that discusses the revised project, as well as discusses all of the previous reports.

For the proposed replacement wells, the following noise is expected (based on Noise Study [David Dubbink Associates, March, 2008] from the construction equipment:

| | | | |
|------------------|----------------|----------------|-------------------|
| Drawworks Engine | 105 db @ 3 ft. | 81 db @ 50 ft. | 46 db @ 3,200 ft. |
| Shaker | 96 db @ 3 ft. | 72 db @ 50 ft. | |
| Generator House | 93 db @ 10 ft. | 79 db @ 50 ft. | |

Ongoing oil well pump noise is 50 dB at 325 feet and 44 db at 1,300 feet (assuming no shielding). Both noise consultants recognize the existing ridges, as they block the “line of site” to any sensitive resource, that there will be at least a 10 db drop from the projected “straight-line” numbers above.

The County’s Land Use Ordinance exempts construction noise between 7 am and 9 pm on weekdays and 8 am and 5 pm for weekends.

Impact. On short-term construction noise, construction work for each oil well is proposed for 24 hours a day continuously for about two weeks. All four wells could be ready for testing within an approximate three month period. Workers would be on 12-hour shifts with approximately 10 employees per shift. Both noise consultants estimate that the on-site construction noise levels at the closest residence will be about 42-43 db.

Once the wells are drilled the testing period would begin, which would last for approximately six months. Truck-mounted generators would be used to provide power for extraction, pumping, heating and reinjection of the oil and/or production water.

On operational stationary noises, “line of site” residences to the well pad #2 are almost ½ mile away. Generators and oil well pumps are expected to be the noisier sources that could be audible at all hours of the day. Per the noise consultant, all potential noises will be below county thresholds.

If production commences, additional drilling of up to eight production wells over a four year period is included as part of the project. The drilling for each well would be the same as for the first four wells, which would be drilling 24 hours a day for two weeks.

While perceptible changes in noise was touched upon, a more detailed assessment applying the above-mentioned criteria was not used. Additional analysis will be necessary to determine if the resulting increases are considered potentially significant or not.

The traffic study identified the following as it relates to the construction/exploration phase: a range between 16 and 25 average daily one-way trips (ADT) can be expected during the initial road improvements and surface preparation phase. This will result in a temporary increase in noise where an average of two vehicles per hour during daylight hours is expected, some of which will be diesel

engines. The County's Land Use Ordinance exempts construction noise between 7 am and 9 pm on weekdays and 8 am and 5 pm for weekends. The project will be conditioned to operate within these time periods.

On operational transportation noise, the noise consultant identifies the diesel engine noise at 78 dB @ 50 feet. For the proposed twelve one way trips per day for the tanker trucks between the subject property and Highway 166, it would be most noticeable to two residences along the proposed haul route near the Mankins Ranch that are within 100 feet, and a couple of homes along the Porter Ranch access route. Additional non-diesel vehicles (namely employees or small service vehicles) will likely add several round trips per day but are not expected to exceed the 60 db threshold for vehicles. Larger service vehicles with regular service to the site (e.g., propane or portable toilet services) when totaled may add one additional round trip per day. The most recent noise study does not quantify larger vehicle impacts to nearby residences along the proposed haul route.

While most, if not all, of the proposed noisier uses during construction and operations appear to be less than the county's Noise Element thresholds many of these will be perceptible (reaching a 3 db or greater increase above ambient noise levels for the nearest residences).

Mitigation/Action Required. Due to the potential for increased noise levels in a generally quiet, rural area, additional analysis of noise impacts shall be accomplished by a qualified person experienced in the field of environmental noise assessment and shall include, but not be limited to, the following:

1. Peer reviewing for accuracy and adequacy, those noise studies that have been completed to collectively assess potential noise impacts from the proposed project. Where found deficient, conduct additional noise analysis to ensure and adequate assessment of noise impacts has been completed. This shall include verification of existing sensitive noise receptor locations in relation to project components, as well as existing (e.g., mountain ridges) or proposed (applicant-proposed measures) means to attenuate noise.
2. Evaluate for potential significance of "perceptible" changes of noise to the closest sensitive noise receptors.
3. Recommendation and discussion of adequate and feasible mitigation measures to minimize potential noise impacts and reduce significant impacts to less than significant levels.

| 9. POPULATION/HOUSING - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| a) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Displace existing housing or people, requiring construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Create the need for substantial new housing in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Use substantial amount of fuel or energy? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Other: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting. In its efforts to provide for affordable housing, the county currently administers the Home Investment Partnerships (HOME) Program and the Community Development Block Grant (CDBG) program, which provides limited financing to projects relating to affordable housing throughout the county.

The County has recently adopted a revised Housing Element. The County has recently approved an Inclusionary Housing Ordinance, where commercial development is now required to pay a fee to support development of new affordable housing.

Impact. As the project will result in three 8-hour on-site employee shifts per day, the project will not result in a need for a significant amount of new housing, and will not displace existing housing. The tanker truck operators are contract labor and would not be considered new employees.

The project will require energy to extract, separate and transport the crude oil. Some of the energy used will be offset from the proposed extraction process (i.e., recovery and use of captured natural gas). Once processed, the crude oil will become a source of fuel for other uses.

Mitigation/Conclusion. No significant population and housing impacts or energy use impacts are anticipated, and no mitigation measures are necessary.

| 10. PUBLIC SERVICES/UTILITIES - <i>Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|-------------------------------------|---|-------------------------------------|--------------------------|
| a) Fire protection? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Police protection (e.g., Sheriff, CHP)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Schools? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Roads? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Solid Wastes? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Other: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting

Existing Regulations

The County-adopted Public Facilities Fee Ordinance (Title 18) provides for the collection of a fair-share fee from new development to help mitigate for cumulative impacts on public facilities. This fee currently being collected helps fund capital improvement projects in the following areas: libraries, fire, general government, parks and recreation, and sheriff’s patrol.

Fire Protection

The California Department of Forestry and Fire Protection/San Luis Obispo County Fire Department (CAL FIRE) is the primary responder to provide fire protection, emergency medical, and rescue services for the proposed project. A mutual aid agreement with the City of Arroyo Grande exists to assist CalFire when there is a fire outside of the City’s boundaries. CalFire is also available to the City should they request assistance. A provision of this agreement states that aid would be provided

as long as it does not place any undue hardship on the agency providing support to the primary responder.

Based on the County's fire severity map the project is within the "very high" fire risk area, which identifies the susceptibility to wildland and brush fires. Fire hazard severity is determined by a number of factors including but not limited to: remoteness of the area, denseness of vegetation, the area's circulation network, proximity to fire fighting facilities, habitat type, and the degree of urbanization. These factors among others contribute to an area's overall response time. CAL FIRE's Response Time map shows it would take more than 20 minutes to reach the project once a call is received from the closest CAL FIRE station (Nipomo). The closest CAL FIRE station is approximately 23 miles to the southwest.

As a part of the previous application, CalFire conducted a "vehicle run" from the Nipomo station (Olde Towne) to the property site entrance, where it took 29 minutes (per Rick Swan e-mail, 8/6/08) with an additional 5 to 10 minutes needed to get to the shipping site. The San Luis Obispo station (near Airport) also responds to calls in the Huasna Valley. The primary route for CalFire from Nipomo would be Highway 101 to Traffic Way to Cherry/Branch Mill to Huasna Road. The southern ranch road (Porter) would be available as a secondary CalFire access. The City of Arroyo Grande has indicated it would take their engines about a ½ hour to reach the site.

Appropriate response times for fire protection services vary with the degree of urbanization. Appropriate response times for urban areas are up to six minutes, for suburban areas up to seven minutes, and rural areas up to twelve minutes. Response times exceeding 15 minutes for structure fires provide little possibility of saving the structure, and 60 minutes or more could mean fires approaching critical levels in steep, chaparral covered, remote areas. For structure fires, CAL FIRE has mutual aid agreements with all fire protection agencies in the County, including the City of Arroyo Grande. Their station is about 8 miles closer than the Nipomo Station, which could mean a faster response time when compared to the CalFire vehicle run. However, as stated previously, the City has stated it would about ½ hour to reach the ranch entrance. An air tanker squadron at the Paso Robles Airport is also available if needed (CAL FIRE 2003).

The applicant will be required to prepare and maintain an emergency response plan which includes addressing of fires occurring at the oil field property. Relating to emergency response issues, this plan will include, but not be limited to: who are the primary and secondary responders to an incident and their ability to handle oil fires, what additional equipment/suppressants will need to be maintained on-site in case of such an event, the process to be used by the on-site operator to notify fire responders when such an event is occurring (which will need to include the installation of a hardwire land line (or cell tower installation via additional permit), etc. CalFire has reviewed the proposed project and made recommendations on numerous aspects, including but not limited to, fire suppression equipment, fuel modification setbacks, fire water storage, access road clearances/capacities and signage.

As a part of the previous application, the City of Arroyo Grande (9/23/08 letter) expressed concerns over fire safety and suggested that a fire station be constructed and a fire safety impact fee be developed.

Police Protection and Emergency Services

The County Sheriff's Department provides police and patrol services in the unincorporated areas of the County. The County is divided into three areas; North, Coast, and South. The Sheriff's Department is headquartered from the operational facility at Camp San Luis Obispo. Each area has its own substation, which is supervised by a sergeant and staffed with approximately 23 deputies and two legal clerks.

The project would primarily be served by the South Station, which is located at 1681 Front Street in Oceano. The South Station serves the communities of Oceano, Nipomo, Huasna, rural Arroyo Grande, New Cuyama, and Lopez Lake, totaling 950 square miles. Planning areas served by the

South Station include: Huasna – Lopez, South County Coastal, South County Inland, Los Padres, San Luis Obispo, and Shandon-Carrizo. Current average response times generally range from 5 to 30 minutes with longer response times to the more rural outlying areas of the south and southeast portions of the County.

The California Highway Patrol (CHP) services San Luis Obispo County's highways, with stations located in San Luis Obispo and Templeton. They are available to respond in emergency situations, but generally do not respond to residential calls.

Emergency services generally include ambulance and hospital service. Private companies based throughout the County provide ambulance service. Response times are generally good with the exception of the more rural portions of the County, such as Huasna Valley, where the large area being served and the distances involved lend to poorer levels of service. Hospital services are provided by Twin Cities Hospital in Templeton, Arroyo Grande Community Hospital in the City of Arroyo Grande, and by French and Sierra-Vista in the City of San Luis Obispo.

Solid Waste Collection

County LUO Section 22.10.150 determines when new land uses must include provision of identified trash collection, pickup and recycling areas, and sets design standards for such areas.

Trash collection and disposal for this project will be accomplished by the following method: individual direct haul to landfill. The County currently has three permitted public landfill facilities that accept a variety of municipal solid waste: Cold Canyon, Chicago Grade and Paso Robles. Cold Canyon Landfill will be the likely landfill to be used and is located approximately 6 miles south of the City of San Luis Obispo on Highway 227. The landfill is under the jurisdiction of, and permitted by, the California Integrated Waste Management Board. This facility not only accepts waste for disposal, but also provides recycling opportunities for the users.

Schools

The project is located in the Lucia Mar School District. The Resource Management System Annual Resource Summary Report identified the school district's "level of severity" on student capacity as a "III", which means the current "enrollment equals or exceeds school capacity".

School districts within the County provide enrollment and capacity information relative to individual schools within their jurisdiction. Capacity is defined as design or maximum. Enrollment at 28 out of 58 (48.3 percent) of the County's schools exceeds their design capacities (SLO County 2003). Design capacity is exceeded by the addition of re-locatable temporary classrooms to a school site, but there is a practical limit to the number of temporary facilities that can be added before core facilities become so burdened that the educational environment suffers. The maximum capacity is usually about 25 percent higher than design capacity. The County's Department of Planning and Building reports that 18 out of 23 communities in the County have severe school resources capacity problem, where the enrollment is higher than the school's design capacity.

Countywide, several districts have been experiencing significant enrollment declines over the last several years, particularly in elementary schools. The decline is generally attributed to high housing costs in some parts of the county, which deter families with young children from locating there (SLO County 2003).

Revenue for facilities construction comes from both State and local sources, including developer fees. A statutory fee that also contributes to funding facilities is the Stirling fee. This fee is based on the amount of building construction proposed and is adjusted annually. The State Building Program is the primary source of funding for school facility projects. Most County school districts participate in school construction programs, whereby new development contributes a portion of the cost of new facilities, while the remainder is supplied by State and local resident taxes. Local funding alternatives include community approval of a general obligation bond for school construction. The General Obligation (GEO) Bond election process requires two-thirds voter approval. From 1986 to June 2000, only 55%

of the school districts that held GEO Bond elections successfully earned the two-thirds voter approval for school facility funding. However, Proposition 39, which allows for approval of school construction bonds at a 55% threshold, was approved in the year 2000.

Due to gas price increases, many school districts are looking at ways to reduce costs to help offset these unanticipated costs. While not currently being considered by the District, reduction in school bus services is one option that could help offset these costs.

Currently and in the foreseeable future, school bus route times (approximate) are as follows:

Branch Elementary – 7:45 to 8:45, 3:20 to 4:30

Paulding – 6:45 to 7:15, 2:30 to 4:15

AGHS – 6:45 to 7:15, 3:45 to 4:30

No summer school buses on Huasna Road

Current school year started August 20, 2009

Impact. Based on the proposed project, there will be public service impacts in the following areas.

Fire/Life Safety

CAL FIRE as the primary responder, identified the following concerns on the previous project: potentially flammable vegetation near well pads, shipping area and access road. The applicant has proposed a number of measures to address these concerns. CalFire did not recommend the creation of a fire station as a result of this project. Based on the City of Arroyo Grande's previous comments, they may not have the resources to provide mutual aid should a fire occur outside of their city limits.

The project proposes to introduce an oil well field into a rural area in a very high fire severity area with a fire station response time greater than 20 minutes. The project will need to comply with the fuel modifications measures as set forth in the Uniform Fire Code, which requires all flammable vegetation be removed within 30 feet of the proposed structure, and that extensive modification or removal of vegetation between 30 feet and 100 feet from these uses may be needed to provide for a defensible space from wildland fires, as well as to reduce wildland fires from originating from the project areas. In addition, 10 feet of substantial fuel modification along each side of the access driveway will be required. Please refer to the Biological Resource section as this vegetation removal requirement relates to impacts on oak trees and other sensitive vegetation. The project will also be subject to meeting CAL FIRE's Fire Safety Plan, which includes other measures to reduce fire hazards and improve the fire department's ability to defend the area in the event of a fire or reduce response times in the case of a life safety emergency. These include making access road improvements to allow access to the site in all weather conditions.

CalFire did not identify the impacts from this project as warranting the need to construct a fire station. The project is subject to the county's Public Facility fee, which is intended to address cumulative impacts to various public services including fire safety. CalFire is supportive of voluntary efforts to improve response times or supplement their fire protection services in all areas of the county that exceed 20 minutes.

All containers with flammable or explosive potential (e.g., crude oil, propane tanks, etc.) shall be designed to meet the various regulatory codes on storage of such substances to minimize potential for fires or explosions.

The applicant is proposing to provide a "Helispot" near the subject project. A Helispot is a location near a fire where it is safe for helicopters to land and take off. At this designated location, a helispot manager and usually a few helitack crewmembers will be onsite to coordinate landings and take-offs as well as the manifesting, loading and unloading of equipment and personnel. Helispots are

temporarily located as the incident grows and can be found on ridges, meadows, parking lots (i.e., any clearing suitable and meeting rotor clearance and hazard (wires, trees, etc.) avoidance requirements.

School

For new employees that already live in the area, there would be no additional impacts from new students to the school district. For employees coming from out of the area, it is unknown if they will live in the Lucia Mar School District, or have children. Based on averages, assuming all employees are from out of the area and have school age children living within the District, up to four additional students could be expected. This will not have a significant impact on the existing school resources.

Relating to road safety, there will be three school buses on Huasna Road in the morning between 6:45 and 8:30 am and one after-school bus between 12:30 and 1:30 and two between 3:30 and 4:30. The project has been revised to eliminate large vehicles from using Huasna Road and avoid potential conflict with these school buses..

Roads

With regards to road impacts, please refer to the following Transportation section.

Mitigation/Action Required. Due to the potential for significant impacts to public services, additional analysis is needed to consider the following:

1. Consultation with the California Department of Forestry/County Fire Department (CalFire), the San Luis Obispo County Sheriff's Department, and the Lucia Mar Unified School District.
2. Evaluation and discussion of the past and present status of police, fire, and school services in the project area.
3. Identification and discussion of significant impacts to public services, or resulting from inadequate public services, that could result from the development of the project. This shall include a detailed discussion of the proposed project and applicant-proposed measures relating to fire/ life safety, and the adequacy of CalFire and project elements to adequately reduce fire risk.
4. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential impacts related to public services.

| 11. RECREATION - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|--------------------------------|---|-------------------------------------|--------------------------|
| a) <i>Increase the use or demand for parks or other recreation opportunities?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Affect the access to trails, parks or other recreation opportunities?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) <i>Other</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting. The County Trails Plan does not show that a potential trail goes through the proposed project. The project is not proposed in a location that will affect any recognized trail, park or other recreational resource. The 2005 County Bike Plan does not recognize Huasna or Huasna Townsite Roads as existing or future roads with or for bike improvements. Due to the road's scenic qualities, recreational cyclists can be found during the weekends.

Impact. With the creation of only three additional employees, the proposed project will not create a significant need for additional park or significant impact to recreational resources.

Mitigation/Conclusion. No significant impacts to recreational facilities are anticipated, and no mitigation measures are necessary.

| 12. TRANSPORTATION/ CIRCULATION - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|----------------------------|--------------------------------------|-------------------------------------|--------------------------|
| a) <i>Increase vehicle trips to local or areawide circulation system?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Reduce existing "Levels of Service" on public roadway(s)?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) <i>Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Provide for adequate emergency access?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) <i>Result in inadequate parking capacity?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) <i>Result in inadequate internal traffic circulation?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) <i>Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., pedestrian access, bus turnouts, bicycle racks, etc.)?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) <i>Result in a change in air traffic patterns that may result in substantial safety risks?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting. The county has established the acceptable Level of Service (LOS) on roads for this rural area as "C" or better. The existing county roads in the area, Huasna Townsite Road, Alamo Creek Road and Huasna Road) are operating at acceptable levels. Highways 166 and 101 are operating at acceptable levels. On traffic safety, the Alamo Creek Road/Highway 166 intersection currently experiences a "higher than state-wide" average for traffic accidents. A Traffic Safety Force for Highway 166 has been established and is active to evaluate existing and new conditions relating to traffic safety and make recommendations for traffic safety improvements.

The required vehicle haul route for all construction traffic and operational tanker trucks is as follows:

From the proposed 'shipping site', vehicles will travel approximately one mile east to Huasna Townsite Road via existing ranch roads; then going south on Huasna Townsite Road, enter southern private ranch road (Porter Ranch properties) for approximately six miles on existing ranch road to Alamo Creek Road; Alamo Creek Road continues south to Highway 166; trucks will then head west on Hwy. 166 to Highway 101; at Highway 101 trucks will continue south to an approved processing facility (e.g., Nipomo Mesa, Santa Maria, or Oxnard).

The only traffic to use Huasna Road will be regular service vehicles (already serving the area). Certain roads to the closest oil processing facility (Conoco-Phillips on Nipomo Mesa) are experiencing traffic problems (e.g., Tefft Street interchange in Nipomo).

The applicant retained a traffic engineer (Orosz Engineering Group; May, 2009) to evaluate traffic impacts. Several previous studies were also completed for the previous application (Orosz Engineering Group - April, 2007; July, 2008, Sept. 15, 2008; Jan 21, 2009) to evaluate traffic impacts related to the project. The earlier reports were reviewed by Public Works and Caltrans and found to be adequate. The following excerpts provide information on the existing conditions:

- ✓ Huasna Road has a capacity of 7,000 to 10,000 average daily trips; the average number of daily trips on this road (east of Lopez Drive) is 1,163 trips); it is currently operating at an acceptable level of service B.
- ✓ Huasna Townsite Road has a capacity of 3,000 average daily trips; the average number of daily trips on this road is estimated to be between 100-150 trips); it is currently operating at an acceptable level of service A.
- ✓ Alamo Creek Road has a capacity of 7,000 to 10,000 average daily trips; the average number of daily trips on this road is estimated to be between 100-150 trips); it is currently operating at an acceptable level of service A.
- ✓ Highway 166 is currently operating at an acceptable level of service.
- ✓ Highway 101 is currently operating at an acceptable level of service.

Per previous discussions with Public Works on traffic safety, the following summarizes accident information obtained by Public Works:

- ✓ Huasna Townsite Road (Huasna Rd to End) - Collision rate is below County average and below State average;
- ✓ Alamo Creek Road – no collision/accident data is available.

Public Works also considered the public roads and all of the bridges along the previous and current haul route and their ability to withstand the weight of the proposed tanker trucks. All county-maintained bridges on the current haul route were found previously to be capable of withstanding the weight of the previous tanker trucks (2800 gallon capacity). The currently proposed individual tanker size limit is 7,000 gallons. This additional weight/axle distribution will need to be reconsidered by the transportation agencies (i.e., Public Works, Caltrans).

The applicant's engineer has proposed measures (structural work to the deck) to further strengthen the Huasna River bridge, which is rated for 20 tons.

Caltrans was consulted on the previous project's impacts to Highways 166 and 101, and they provided recommendations for improvements to the intersection of Highway 166 and Alamo Creek Road.

The City of Arroyo Grande's provided several responses on the previous project, and had the following concerns: truck impacts to city streets; truck noise impacts; trucks carrying hazardous materials near schools and other sensitive uses; the need for adequate monitoring and enforcement; assurances that trucks will not be rerouted through the City should the southern ranch road become impassable; and hazardous material disposal not be routed through the City.

The subject project is within the South County planning area but outside of the South County Circulation Fee area and therefore not directly subject to these fees. The proposed haul route may impact some of the roads that are targeted for improvement under this fee program.

Impact. The revised OEG traffic reports identified an average range of 13 to 32 daily (one-way) trips per day during the construction and testing phases and about 20 daily (one-way) trips during the

operational phase with four potential 30-day periods to drill eight additional production wells. Vehicles to be used during construction include pick-up trucks, 3-axle trucks, tandem rigs, tandem service rig, vacuum truck, and 1-ton flatbed trucks. Vehicles to be used during the operation phase include tanker trucks (3-axle), pick-ups for employees, and occasional service vehicles (e.g., propane trucks, UPS, etc.). Tanker trucks will be owned and operated by independent drivers and the propane will be provided by a private propane service company, who already provides service to other propane users in the area.

With regards to Level of Service (LOS) impacts of the proposed project, the existing services levels are at an acceptable "A" level. Given that Huasna Road would see no construction vehicles or tanker trucks, and up to only three new post-construction passenger vehicle trips a day from employees, impacts were found to be insignificant. No project-generated tanker trucks or construction vehicles would use Huasna Road or enter the City of Arroyo Grande. In the event that the Porter Ranch Road became impassable, the tanker trucks/construction vehicles would return to their place of origin and not enter or leave the site until the southern ranch road became passable again. Also, on-site oil extraction would temporarily cease until this access road became passable. Neither the increase of temporary construction traffic nor the long-term operational traffic will change these acceptable road service levels.

With regards to physical impacts to roads associated with heavy truck travel, County Public Works previously reviewed the capacity ratings for Huasna Townsite and Alamo Creek Roads and determined that the roads were rated to handle the previously proposed tanker trucks (2800-gallon capacity). Additional analysis will be necessary for the larger 7,000-gallon capacity tanker trucks. Public Works previously recognized this heavy truck travel will accelerate the need to repair these roads over time and requested a specific "fee per trip" be collected for deposit into the County's Road Maintenance Fund. This County Road Maintenance Fund is used for repair and maintenance of all rural county roads.

With regards to traffic safety, Public Works has previously 1) reviewed the existing county road and bridge conditions of the proposed haul route; 2) reviewed the collision rates for all sections of Huasna and Huasna Townsite Roads (see above list under "Setting") and compared this information with County Board of Supervisor policy on when improvements are required; 3) reviewed the traffic reports (OEG) prepared for the project; 4) considered City of Arroyo Grande's comments and 5) compared these factors with the proposed project. It is expected that a similar analysis will be conducted for the revised project with the eight additional production wells.

With regards to traffic safety and project impacts at the Alamo Creek Road and Highway 166 intersection, Caltrans previously determined that the slow-moving project trucks combined with high-speed travel with limited sight distance and accident history, warranted the following mitigation measures prior to the production phase of the project:

- a) Design and construct left-turn channelization for the east bound Highway 166 turning movement onto Alamo Creek Road (see attached conceptual footprint);
- b) Design and construct appropriate right-turn/ flaring acceleration lane taper for the Alamo Creek Road right-turn movement onto westbound Highway 166 (see attached conceptual footprint);
- c) Obtain a Caltrans encroachment permit to conduct the above-listed items;

With the addition of 8 production wells, Caltrans will need to determine if there are any additional impacts warranting additional mitigation.

In addition, the project may have cumulative impacts to the Santa Maria Bridge on Highway 101. The bridge is nearing the end of its expected life span. Caltrans will need to reevaluate the impacts in light of the alternative haul routes and the addition of eight additional wells.

The applicant has proposed a number of traffic measures to reduce traffic impacts.

Due to the project's remote location, and small number of employees, alternative travel modes are not realistic or practical.

The project is not within close proximity of an airport nor could it have an influence on existing air traffic patterns.

Mitigation/Action Required. Due to the potential for significant traffic impacts an analysis will need to be performed by a registered Engineer with expertise in traffic, and shall include, but not be limited to, the following:

1. Consultation with the California Department of Transportation, the County Public Works Department, and the County of Santa Barbara).
2. Peer review of existing traffic reports on the adequacy of the analysis and appropriateness of the mitigation measures; this would also include review of applicant-proposed measures; any deficiencies shall be identified for work to be either completed by the applicant's traffic engineer, or the EIR consultant; if conducted by the applicant, additional peer review would be necessary of this additional work;
3. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential impacts related to traffic capacity or traffic safety.

| 13. WASTEWATER - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| a) <i>Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) <i>Adversely affect community wastewater service provider?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting. As described in the NRCS Soil Survey (see Agriculture section for soil types and descriptions), the main limitations for on-site wastewater systems relates to: steep slopes, shallow depth to bedrock. These limitations are summarized as follows:

Shallow Depth to Bedrock – indicates that there may not be sufficient soil depth to provide adequate soil filtering of effluent before reaching bedrock. Once effluent reaches bedrock, chances increase for the effluent to infiltrate cracks that could lead directly to groundwater sources or near wells without adequate filtering, or allow effluent to daylight where bedrock is exposed to the earth's surface. To comply with the Central Coast Basin Plan, additional information is needed prior to issuance of a building permit, such as borings at leach line locations, to show that there will be adequate separation between leach line and bedrock.

Steep Slopes – where portions of the soil unit contain slopes steep enough to result in potential day-lighting of wastewater effluent (no system is allowed on greater than 30% slopes). To comply with the Central Coast Basin Plan, additional information is needed prior to issuance of a

building permit, such as slope comparison with leach line depths, to show that there is no potential of effluent “day-lighting” to the ground surface.

Impact. During construction up to 25 employees will be on-site. Portable toilets will be brought on to the site and regularly serviced to provide for these needs. During the operational phase, an office trailer will be brought on-site to serve the one, on-site, 24-hour position (three employees during each 24-hour period). Per previous Building Division comments (telecon, Barry Tolle, 7/3/08), an on-site septic system will be required for the long-term employee needs. The applicant has been requested to conduct soil testing to identify acceptable location for the on-site septic system.

Mitigation/Conclusion. Given the size of the proposed parcel, it is expected that an acceptable area will be found to site an on-site septic system. Prior to Building Permit issuance, it will be evaluated in greater detail to insure compliance with the Central Coast Basin Plan for any constraints listed above (e.g., soil percolation test, soil boring, etc.), and will not be approved if Basin Plan criteria cannot be met. No significant impacts from disposal of wastewater effluent are anticipated.

| 14. WATER - Will the project: | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) <i>Violate any water quality standards?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, temperature, dissolved oxygen, etc.)?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) <i>Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Change the quantity or movement of available surface or ground water?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) <i>Adversely affect community water service provider?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting. Groundwater Basin. Based on county maps showing the extent of groundwater basins, the proposed shipping site, which includes an oil well and reinjection well, is approximately 1,000 feet outside of the Huasna Valley groundwater basin. The main well drilling areas (Well pads #1 and #2) are about 3,000 feet outside of this groundwater basin. However, the hydrogeologist retained by the applicant has indicated there is slight possibility of water bearing lens that could be encountered during drilling. The origin of the existing seep adjacent to the shipping site is unknown, and that an underground water source is closer than existing documents state.

Per the San Luis Obispo County Public Works Department “Water Years 2001-02 and 2002-03 Hydrologic Report” (Final Report May 16, 2005) Huasna Valley Groundwater Basin has a surface area of 4,700 acres (7.3 square miles) and underlies valleys drained by two branches of Huasna Creek in southern San Luis Obispo County. The basin is bounded by Miocene age marine rocks and the valleys are drained by Huasna Creek to Twitchell Reservoir (Jennings 1958). Precipitation ranges from 16 to 20 inches per year. No current estimates of basin yield or production were available at the

time the county's hydrologic report was published.

Twitchell Reservoir. Huasna Creek and Huasna River flow into Twitchell Reservoir, located in San Luis Obispo and Santa Barbara Counties. The dam and reservoir provide flood control and water conservation. The water is stored in the reservoir during big winter storms and released as quickly as possible while still allowing it to percolate into the soil and recharge the groundwater. This means that the reservoir is usually far from full. It is estimated that the project increases recharge by 20,000 acre-feet per year (800 L/s) into the Santa Maria groundwater basin. However, sedimentation is a problem for the reservoir, as the reservoir is being filled 70% faster than originally anticipated. This has reduced its capacity and can block the water inlet to the control gates. Some sediment has been removed by flushing it out during releases, but much of it is simply deposited immediately downstream, interfering with flows. There is no public access to the dam or reservoir.

Project Site Characteristics. The topography of the project is nearly level to very steeply sloping. The closest creek (Huasna) from the proposed development (shipping area) is approximately 1/2 mile away. The on-site access road crosses Huasna Creek. The southern access road to Highway 166 crosses and is adjacent to Huasna River. As described in the NRCS Soil Survey, the soil surface is considered to have low erodibility.

Surrounding water usage. Regarding area-wide water availability, individual wells provide water for agriculture and limited individual residences within the rural areas of Huasna-Lopez. There are no water purveyors that serve the planning area, all water is provided by small, isolated systems and individual wells. Future ground water extractions will be a function of economics (pumping costs), and surface impoundments depending on annual recharge by rainfall, stream flow, and return irrigation (SLO County 1996).

Water Usage – Dust control. Based on the Maricopa County (Arizona) Air District's "Guidance For Application For Dust Control Permit" water quantities needed to spray down the haul road to keep dust to a minimum for this type of soil (having only small amounts of clay), approximately 225 gallons per acre per application would be needed (assuming proper application rates and sprayers are used on water truck).

The dirt access road to the shipping site is approximately 9,300 feet in length. If the water spray width is 10 feet wide approximately 2.2 acres would need spraying. Applying the above rates, approximately 500 gallons per application would be necessary to wet down the haul road between Huasna Townsite Road and the project's shipping area. Between May and November, it is assumed that an average of two daily applications would control the dust. During the rest of the year, during the rainy season, it is assumed that watering would be needed once a day for 1/2 of this period. By applying this formula, approximately 287,500 gallons/year or 0.882 AFY.

Applying the above criteria for the 4.7 miles of dirt road on the southern ranch road, 5.7 acres would require spray, or 2.3 AFY of water.

The applicant is proposing another dust control option, which would be the use of soil binders or paving. Binders can be equally and sometimes more effective than water. If binders are used, they will need to be acceptable to both the Air Pollution Control District and the California Department of Fish and Game (to protect creek crossings and oak trees). If binders are used no watering for road-generated dust would be needed.

Water usage – replanting. Replacement tree watering is expected to require about two gallons per week per tree for about three years. If on-site replacement trees need to be planted for the trees proposed for removal or being impacted, approximately 0.1 AFY could be required. Fewer or no trees could be planted if the Oak Woodland tree fee were applied to any or all of the above referenced "impacted" trees. If no replacement trees were planted water needs could be reduced to zero.

Fire Water. According to CalFire on the previous project, the approximate 30,000 gallons of proposed fire water storage will adequately meet their needs.

Surface Water. With regards to surface water quality, projects involving more than one acre of disturbance are subject to preparing a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion. When work is done in the rainy season, the County Ordinance requires that temporary sedimentation and erosion control measures be installed during the rainy season.

In addition, several other required regulations or plans (e.g., Hazardous Materials Business Plan, Risk Management Plan, California Occupational Safety and Health Administration (Cal/OSHA) standards, Spill Prevention Countermeasure Control Plan, Hazardous Waste Management Plan, and Oil Spill Contingency Plan, etc.) will be required, which directly and indirectly reduce impacts to surface water quality.

Project Production Water. The following is a brief overview of the project's "production water". The formation from which the oil will be extracted is expected to include a high percentage of water. The oil formation is approximately 2,500 to 4,500 feet below ground and is not connected to the Huasna Valley groundwater basin (which is about 300 feet below the ground). Once extracted this "production" water is separated from the oil and returned to the formation from which it came. This production water will be heated (to about 150^o F) as it is reinjected back into its original formation with the intent to make the unextracted oil more viscous for easier extraction. As with the extraction wells, the reinjection well must be completely cased, per DOGGR specifications to avoid mixing with any aquifer that may exist above the oil formation. As stated above, the closest aquifer, which is used by Huasna Valley is estimated to be at least 1,000 horizontal feet to the east.

Impact. The project proposes to use off-site water for all project water needs. Water-related needs associated with temporary construction activities include: construction crew (bottled water), dust suppression, fire water, concrete washing, and other equipment washing. This water will be trucked in to the site.

Bottled water will also be provided for the potable needs of the one on-site, 24-hour employee (3 employees). Based on the county's worksheet, one "office" employee typically uses about 0.153 acre feet per year (AFY). The other office/trailer water needs will be trucked to an on-site storage tank. A small amount of landscaping is expected for screening purposes of well pad #2, which is water truck accessible. Water for oak replanting may be as much as 0.1 afy, but could be less if fewer oak trees are impacted during construction or the tree fee program is used. Planting is expected to be in areas accessible for a water truck. As proposed, there will be no water extracted from the Huasna Valley aquifer.

Based on the above mentioned project components, assuming the stored fire water is a "one time" activity (and not included in the annual needs), project water demands are estimated to be as much as 1.1 AFY. However, as stated above, most of the operational water needs can be reduced with alternative approaches, or obtained from off-site sources.

Regarding surface water quality, as proposed, the project will result in the disturbance of approximately 1.5 acres. As identified in the "Setting" section, a number of plans or regulations are required with the intent of reducing the chance for leakage or spillage of hazardous materials or wastes, as well as minimize sedimentation and erosion, thereby reducing the potential for surface water runoff impacts to the ephemeral tributary and Huasna Creek.

Should spillage or leakage occur of hazardous wastes or materials, without adequate prevention measures, impacts could be potentially significant (see discussion under Hazardous Waste and Materials).

All production water will be reinjected back into the formation from which it came via the one proposed water injection well.

All extraction or reinjection wells must meet DOGGR specifications (e.g., casing, etc.) to insure oil or production water does not make contact with any potable water supplies. Water monitoring of the

Huasna Valley aquifer will be required to determine if there is any contamination from the proposed project.

The origin of the existing seep adjacent to the shipping site is unknown. The applicant has been requested to conduct additional analysis on this seep to help make this determination, as well as what, if any, remedial work is needed.

Mitigation/Conclusion. While no potentially significant groundwater quantity or quality impacts were identified when existing requirements are followed, a certified engineering geologist shall be retained to evaluate these issues and include, but not be limited to, the following analysis:

1. Consultation with the County Public Works Department, RWQCB, Environmental Health, California Department of Fish & Game.
2. Peer review the applicant's water report for accuracy and adequacy, including such things as review current and future projections of water demand, evaluation and discussion of on site water availability, evaluation and discussion of project impacts to the ground water basin; this would include review of the applicant-proposed measures; analysis of potential water quality impacts, if any, from past drilling activities and proposed drilling activities.
3. Detailed discussion on the extraction and processing efforts as it relates to production water separation and reinjection; The relationship of the "nearby" potable groundwater basin shall be discussed;
4. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential impacts related to groundwater availability.

Water Quality. Due to potentially significant water quality impacts, additional analysis is necessary by a qualified professional and shall include, but not be limited to, the following:

1. Consultation with the Regional Water Quality Control Board, Environmental Health Division, County Agricultural Commissioner's Office, California Department of Fish & Game, and U.S. Fish & Wildlife Service .
2. Evaluation and discussion of past and present potable water quality in the area of the project site. "Area" will need to be defined as a "study area" by the consultant, and should include groundwater basins supplying adjacent properties as well as municipal water users.
3. Identification and discussion of the potential for potable water contamination to occur as a result of:
 - a. Surface water runoff.
 - b. Topographical alteration.
 - c. Development.
4. Identification of nearby watercourses and their potential to support sensitive aquatic life. Evaluation of project's impacts on surface water quality as it relates to any sensitive resources identified.
5. Identification and discussion of feasible mitigation measures, if any, which could be included in the project to minimize potential impacts related to water quality.

| | | | | |
|--|---------------------|-------------------------------------|-------------------|---------------------------|
| 15. LAND USE - <i>Will the project:</i> | Inconsistent | Potentially Inconsistent | Consistent | Not Applicable |
|--|---------------------|-------------------------------------|-------------------|---------------------------|

| 15. LAND USE - <i>Will the project:</i> | Inconsistent | Potentially Inconsistent | Consistent | Not Applicable |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) <i>Be potentially inconsistent with land use, policy/regulation (e.g., general plan [county land use element and ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) <i>Be potentially inconsistent with any habitat or community conservation plan?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) <i>Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) <i>Be potentially incompatible with surrounding land uses?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) <i>Other:</i> _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Setting/Impact. Surrounding uses are identified on Page 2 of the Initial Study. The proposed project was reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (e.g., County Land Use Ordinance, Local Coastal Plan, etc.). Referrals were sent to outside agencies to review for policy consistencies (e.g., CAL FIRE for Fire Code, APCD for Clean Air Plan, etc.). The County’s Land Use Ordinance’s chapter on Petroleum Resource Development (Ch. 22.34) was reviewed for and found to be consistent with this chapter. The County’s Energy Element Policy and Guidance discussion on Fossil Fuel Production was reviewed and found to be consistent with the project, as proposed with the mitigation measures included in the Initial Study. The project was also found to be consistent with the above-referenced documents, as well as those referred to in Exhibit A.

The project is not within or adjacent to a Habitat Conservation Plan area. The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study.

Mitigation/Conclusion. No inconsistencies were identified and therefore no additional measures above what will already be required was determined necessary.

| 16. MANDATORY FINDINGS OF SIGNIFICANCE - <i>Will the project:</i> | Potentially Significant | Impact can & will be mitigated | Insignificant Impact | Not Applicable |
|--|-------------------------------------|--------------------------------|--------------------------|--------------------------|
| a) <i>Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

b) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

For further information on CEQA or the county’s environmental review process, please visit the County’s web site at “www.sloplanning.org” under “Environmental Information”, or the California Environmental Resources Evaluation System at: http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines for information about the California Environmental Quality Act.

Exhibit A - Initial Study References and Agency Contacts

The County Planning or Environmental Divisions have contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an) and when a response was made, it is either attached or in the application file:

| <u>Contacted</u> | <u>Agency</u> | <u>Response</u> |
|-------------------------------------|---|------------------------------------|
| <input checked="" type="checkbox"/> | County Public Works Department | In File**(previous project) |
| <input checked="" type="checkbox"/> | County Environmental Health Division | In File**(previous project) |
| <input checked="" type="checkbox"/> | County Agricultural Commissioner's Office | In File**(previous project) |
| <input type="checkbox"/> | County Airport Manager | Not Applicable |
| <input type="checkbox"/> | Airport Land Use Commission | Not Applicable |
| <input checked="" type="checkbox"/> | Air Pollution Control District | In File**(previous project) |
| <input type="checkbox"/> | County Sheriff's Department | Not Applicable |
| <input checked="" type="checkbox"/> | Regional Water Quality Control Board | In File**(previous project) |
| <input type="checkbox"/> | CA Coastal Commission | Not Applicable |
| <input checked="" type="checkbox"/> | CA Department of Fish and Game | In File**(previous project) |
| <input checked="" type="checkbox"/> | CA Department of Forestry (Cal Fire) | In File**(previous project) |
| <input checked="" type="checkbox"/> | CA Department of Transportation | In File**(previous project) |
| <input type="checkbox"/> | Community Service District | Not Applicable |
| <input checked="" type="checkbox"/> | Other <u>City of Arroyo Grande, SB County</u> | In File**(previous project) |
| <input checked="" type="checkbox"/> | Other <u>CA Div of Oil & Gas</u> | In File**(previous project) |

** "No comment" or "No concerns"-type responses are usually not attached

The following checked ("") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

| | | | |
|-------------------------------------|---|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Project File for the Subject Application | <input checked="" type="checkbox"/> | South County (Inland) Area Plan and Update EIR |
| <input checked="" type="checkbox"/> | <u>County documents</u> | <input type="checkbox"/> | Circulation Study |
| <input type="checkbox"/> | Airport Land Use Plans | <input checked="" type="checkbox"/> | <u>Other documents</u> |
| <input checked="" type="checkbox"/> | Annual Resource Summary Report | <input checked="" type="checkbox"/> | Archaeological Resources Map |
| <input checked="" type="checkbox"/> | Building and Construction Ordinance | <input checked="" type="checkbox"/> | Area of Critical Concerns Map |
| <input type="checkbox"/> | Coastal Policies | <input checked="" type="checkbox"/> | Areas of Special Biological Importance Map |
| <input checked="" type="checkbox"/> | Framework for Planning (Coastal & Inland) | <input checked="" type="checkbox"/> | California Natural Species Diversity Database |
| <input checked="" type="checkbox"/> | General Plan (Inland & Coastal), including all maps & elements; more pertinent elements considered include: | <input checked="" type="checkbox"/> | Clean Air Plan |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> Agriculture & Open Space Element | <input checked="" type="checkbox"/> | Fire Hazard Severity Map |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> Energy Element | <input checked="" type="checkbox"/> | Flood Hazard Maps |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> Environment Plan (Conservation, Historic and Esthetic Elements) | <input checked="" type="checkbox"/> | Natural Resources Conservation Service Soil Survey for SLO County |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> Housing Element | <input checked="" type="checkbox"/> | Regional Transportation Plan |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> Noise Element | <input checked="" type="checkbox"/> | Uniform Fire Code |
| <input type="checkbox"/> | <input type="checkbox"/> Parks & Recreation Element | <input checked="" type="checkbox"/> | Water Quality Control Plan (Central Coast Basin – Region 3) |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> Safety Element | <input checked="" type="checkbox"/> | GIS mapping layers (e.g., habitat, streams, contours, etc.) |
| <input checked="" type="checkbox"/> | Land Use Ordinance | <input type="checkbox"/> | Other _____ |
| <input type="checkbox"/> | Real Property Division Ordinance | | |
| <input checked="" type="checkbox"/> | Trails Plan | | |
| <input checked="" type="checkbox"/> | Solid Waste Management Plan | | |

In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

DOCUMENTS SUBMITTED WITH PROPOSED PROJECT (AND ON WEB SITE)

APPENDIX A ENGINEERING REPORTS

Porter Ranch Access Road/Twitchell Reservoir Report Huasna Oil Field

Prepared by Cannon Associates ,July 6, 2009

Facilities Engineering Report Huasna Valley Oil Field

Prepared by Cannon Associates, July 1, 2009

Structural Evaluation: Huasna Bridge

Prepared by Lampman & Smith, June 23, 2009

APPENDIX B AIR EMISSIONS ANALYSIS AND REPORT

Air Quality Impact Analysis, Excelaron LLC Huasna Valley Oil Exploration Project

Prepared by Golder Associates, Inc., July 2009

APPENDIX C BOTANICAL/BIOLOGICAL REPORTS

Excelaron LLC Huasna Site Well Pad Development and Porter Ranch Haul Road California Red-legged Frog Site Assessment

Prepared by Sage Institute, Inc., July 21, 2009

Excelaron LLC Huasna Site Well Pad Development and Porter Ranch Haul Road Supplemental Floristic Inventory and Rare Plant Survey, and Updated Oak Tree Impact Analysis

Prepared by Sage Institute, Inc., July 21, 2009

Botanical Study Roadside along Cuyama Highway (Highway 166) 500 Feet and 1000 Feet West of Alamo Creek Road Intersection

Prepared by V.L. Holland, Ph.D., January 28, 2009

Botanical Survey – Private Easement Road Corridor Southwestern San Luis Obispo County, California

Prepared by David J. Keil, Ph.D., September 18, 2008

Addendum to Wildlife Survey for the Huasna Site

Prepared by Michael T. Hanson, Ph.D., April 20, 2008

Addendum to Oak Tree, Wells’s Manzanita, and Creek Crossing Evaluations Huasna Well Sites and Access Roads

Prepared by V.L. Holland, Ph.D., April 19, 2008

Oak Tree, Wells’s Manzanita, and Creek Crossing Evaluations Huasna Well Sites and Access Roads

Prepared by V.L. Holland, Ph.D., March 12, 2008

Wildlife Survey for the Huasna Site

Prepared by Michael T. Hanson, Ph.D., June 6, 2007

Huasna Well Sites and Access Roads

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APPENDIX D CULTURAL RESOURCES (CONFIDENTIAL – NOT AVAILABLE FOR PUBLIC REVIEW)

Archaeological Survey Report for the State Route 166/Alamo Creek Road
Prepared by Far Western Anthropological Research Group, Inc., June 2009

Archaeological Mitigation Plan for the Excelaron Oil Field
Prepared by Parker and Associates, February 21, 2008

Cultural Resource Investigation of the Excelaron Oil Field
Prepared by Parker and Associates, April 22, 2007

APPENDIX E GEOLOGICAL HAZARDS

Geologic Hazards Report, Excelaron Conditional Use Permit, Huasna Valley San Luis Obispo Co., CA
Prepared by Earth Systems Pacific, July 2, 2009

Correspondence with Dr. Beebe, San Luis Obispo County Health Agency, Public Health Department
Re: Valley Fever; June 12, 2009

APPENDIX F HYDROLOGY

Water Resources Studies for the Proposed Huasna Oil Field Project, Huasna Valley, California
Prepared by Cleath-Harris Geologists, Inc., July 21, 2009

APPENDIX G ACOUSTICAL ANALYSIS

Noise Analysis Excelaron Oil Project, Huasna Valley
Prepared by David Dubbink Associates, June 10, 2009

APPENDIX H TRAFFIC STUDY

Traffic Analysis for Huasna Proposed Oil Exploration and Production Facility with Southerly Private Easement Access, San Luis Obispo County
Prepared by Orosz Engineering Group, Inc., May 15, 2009

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“Wildlife Survey for the Huasna Site”, Michael T. Hanson (April, 2007)

“Botanical Report – Huasna Well Sites and Access Roads”, V.L. Holland (May, 2007)

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“Botanical Survey—Private Access Easement Road Corridor, Southwestern San Luis Obispo County, California”, David J. Keil, Ph. D. (Undated – submitted Sept., 2008)

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- “Acoustic Study for Huasna Valley Well Sites”, David Dubbink Associates, (March, 2008)**
- “Air Emissions Calculations for Excelaron, LLC, Huasna Road Oil Exploration”, Rincon Consultants, Inc. (July, 2008)**
- “Mobile and Stationary Air Emissions Calculations for Excelaron, LLC, Huasna Road Oil Exploration”, Rincon Consultants, Inc. (July, 2008)**
- “Revised Mobile and Stationary Air Emissions Calculations for Excelaron, LLC, Huasna Road Oil Exploration”, Rincon Consultants, Inc. (Sept., 2008)**
- “Mobile and Stationary Air Pollutant Emissions Study” for Excelaron, LLC, Huasna Road Oil Exploration”, Rincon Consultants, Inc. (Dec., 2008)**
- “Safety Analysis Highway 166 at Alamo Creek Road – Excelaron, LLC Project”; OEG (Jan., 2009)**

GRAPHICS

