



# San Luis Obispo County

## Department of Planning and Building Environmental Division

**TO: PLANNING COMMISSION**  
**FROM: JOHN MCKENZIE, COUNTY DEPARTMENT OF PLANNING AND BUILDING**  
**VIA: ELLEN CARROLL, ENVIRONMENTAL COORDINATOR**  
**DATE: JANUARY 14, 2010**  
**SUBJECT: PLANNING COMMISSION EIR SCOPING MEETING FOR EXCELARON (MANKINS) CONDITIONAL USE PERMIT (DRC2009-00002)**

The Excelaron Conditional Use Permit will be subject to the preparation of an Environmental Impact Report (EIR). As a part of this EIR a Scoping Meeting is being held to receive input prior to the EIR analysis being completed. Today's Planning Commission Scoping Meeting will focus on input relating to the proposed project as follows: testimony from the Planning Commission and the public on 1) environmental issues, 2) feasible ways in which project impacts may be minimized, and 3) potential alternatives to the project. Staff will first provide a short overview of the project description and environmental issues.

### **ACTION TO BE TAKEN**

It is recommended the Planning Commission receive today's testimony with no further action. To insure Scoping Meeting comments are included in the EIR analysis, they shall be submitted to the County no later than February 16, 2010.

### **PROJECT DESCRIPTION**

This is a 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 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 site would be 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:
  - 1) 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;
  - 2) 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)];
  - 3) 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;
  - 4) Office trailer with portable toilets;
  - 5) Oil loading rack;
  - 6) Heaters;
  - 7) Vapor recovery unit where recovered natural gas used to help power generators;
  - 8) Miscellaneous safety equipment;
  - 9) Grading that would result in approximately 2.2 acres of disturbance and movement of approximately 71,850 cubic yards of material;
  - 10) Minor improvements to the southern access ranch road to Highway 166 (turnouts about every ½ mile = 5,000 sq. ft.);
  - 11) Improvements to Highway 166 and Alamo Creek Road intersection.

12) 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" (the applicant requests "Impassable" be defined or triggered when the water level reaches the 599-foot contour elevation; the analysis should also consider "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.

## **ISSUES TO BE COVERED IN THE EIR**

The following is a brief summary of the main issues to be considered in the EIR. The applicant has prepared numerous technical reports and, as a part of the project description, has proposed a number of mitigation measures for each issue area (See Exhibit A). Applicant-prepared work will be peer reviewed and additional work will be done as necessary.

Aesthetics – A portion of the project (one well pad and access road) will be visible from Huasna Townsite Road.

Agriculture – A portion of the project is on land under a Williamson Act agricultural contract (grazing). Existing roads and pads will be used with minimal changes to existing landforms.

Air Quality – The project will generate emissions due to dust, vehicles and equipment. Hydrogen sulfide may be present within the oil formation. Valley Fever spores may be present.

Biological Resources – Several sensitive plants and wildlife have been identified in the vicinity of the project.

Cultural Resources – Remains of an historic structure exist near the shipping site. This area will be protected during construction and operation.

Geology and Soils - Topography ranges from gently to very steeply sloping; soil erodibility ranges from low to moderate; Suey fault is approximately 1/2 mile to the west and considered potentially capable; nearby West Huasna fault considered inactive.

Hazards/Hazardous Materials – Equipment/materials from previous test drilling will need clean-up; project will extract, separate and transport crude oil to refinery; propane gas will be used to generate power; project within very high fire hazard area with fire response times exceeding 20 minutes; several other regulatory agencies involved with oversight of oil well operations; numerous existing bodies of regulation exist on addressing potentially hazardous conditions relating to oil well development.

Noise – project proposed in very quiet rural area; proposed exploration, testing and operational activities will be generating audible noise from stationary and transportation sources; the main operational noise source will be the processing area (“shipping site”), which is nestled at the bottom of a parallel valley adjacent to Huasna Valley.

Transportation – The project's truck route will be to Huasna Townsite Road, south to a private ranch road (Porter Ranch properties), then southwest on Alamo Creek Road to Highway 166, and then west to Highway 101; proposes. All of these roads have a Level of Service rating “A”, which indicates a very low number of vehicles present at any one time; the project's proposed number of trips will not change this LOS; Caltrans has

identified operational traffic safety concerns as slow-moving trucks enter Highway 166 at Alamo Creek Road and recommends improvements.

Wastewater – Applicant proposes all waste generated to be regularly removed by truck.

Water – Employee/construction water needs to be trucked in during construction and operations; “production” water emanating from oil extraction process will be reinjected into oil formation; vertically, oil formation is several thousand feet below potable groundwater basin used by Huasna Valley; horizontally, groundwater basin edge appears to be about 1,00 feet to the east of proposed drilling; existing seep near shipping site will need additional consideration on its potential connection to the potable groundwater unit and/or if its source is man-made, with remedial work identified as appropriate; evaluation of surface water leaving site will need careful analysis to avoid contaminants from leaving site.

### **ADDITIONAL INFORMATION**

Additional information about the proposed project can be found on the County’s website at: <http://www.slocounty.ca.gov/planning/environmental/EnvironmentalNotices/excelaron.htm>)

Such information includes applicant information and technical reports prepared for the project, County’s Environmental Initial Study, Public Agency responses to the Notice of EIR Preparation, etc.

## **Exhibit A (Excerpted from Applicant's Project Description)**

### **Aesthetics - Applicant Proposed Measures**

The following measures, incorporated into the project description, will reduce impacts to aesthetic resources to less than significant levels: • All existing oaks and larger shrubs that provide screening for pads, equipment, or access roads will be identified as "Key Screening Vegetation" on all applicable construction plans. Great care will be taken so that any negative impact to these plants (from new grubbing or grading) will be avoided. Specifically, the plants will be protected with fencing prior to initiation of any of these activities.

- Should the location of new equipment, well pads, or access roads be visible by the unaided eye from Huasna Townsite Road, a landscape plan will be prepared with the intent of providing full screening of the proposed well pad. Plant material will be limited to appropriate native trees and shrubs (e.g., oaks, manzanita, etc.)
- Additional tree planting will be provided should any project-related operation (e.g., pad equipment, etc.) or grading (e.g., newly visible cut and fill slopes, etc.) activities result in new publicly visible impacts (i.e., from Huasna Townsite Road).
- All equipment (e.g., storage tanks, oil pumps, etc.) left in place on the proposed well pads for more than 30 days will be painted a dark, muted non-reflective color.
- The pre-existing storage tanks, currently visible on the proposed Well Pad 2 will be removed, and therefore will not require CalFire fuel modification. Any fuel modification of vegetation will be conducted by hand (i.e., no use of mechanized equipment) with a focus on providing the minimum pruning required by CalFire and retention of trees/sensitive species. Fuel modification for understory plants will be provided by leaving the base of the plants intact to retain root structures; this will minimize erosion and maximize the potential regrowth into a low fuel load state.
- The construction plans will identify clean topsoil to be set aside and stockpiled, and be used for any revegetation efforts on visible cuts from Huasna Townsite Road. Sufficient clean topsoil will be reapplied or re-keyed over these visible cut areas to provide at least 8" of topsoil for the reestablishment of vegetation. A native or non-invasive seed mix (developed by a biologist or landscape architect familiar with native plants in the area) will be used to revegetate disturbed areas.
- A cost estimate for a planting plan, installation of landscaping, and maintenance of new landscaping (should the county determine these necessary) for a period of three years will be prepared by a qualified individual, and reviewed by the County Department of Planning and Building.
- Regular and routine repair of transmission piping will be carried out to minimize potential leak impacts to trees.
- The visible portion of the access road width will be limited to the minimum required by CalFire.
- At the time of application for construction permits, it will be specified that no

permanent night lighting will be installed for Well Pads 1 and 2. All night lighting for the Shipping Site will be hooded, and will use the lowest lumens and lowest glare possible, while still being OSHA compliant.

- Weekly inspections for leaks or spills in the following areas will be carried out: all above-ground distribution lines, Well Pad 1 and Well Pad 2 (including 15 feet outside of the bermed areas) and the Shipping Site (including 15 feet outside of the bermed areas). At a minimum, a report/checklist will be prepared that includes the date and time surveyed and the ground conditions for each of the above specified areas, as well as note the health of the “key viewing” vegetation within these areas.
- Should a leak occur, all efforts will be made to immediately take appropriate measures to stop the leak, remove any contaminated soils, and protect existing vegetation; any permanently impacted trees will be replaced at a 4:1 ratio. Additionally, the County will be notified immediately if any leak or spill is found.

### **Agriculture - Applicant Proposed Measures**

No direct impacts to existing agriculture were identified by the Agricultural Preserve Review Committee. Nonetheless, the following measures will be incorporated into the project description:

- Soil binders and gravel will be used on on-/off-site access ranch roads on an ongoing basis in order to control dust. This method will achieve APCD’s 20 % opacity requirement and will not have an adverse impact to oaks and downgradient water sources (i.e., approved by CDFG).
- At the time of application for construction permits, a sturdy fence (withstand cattle rubbing) and mesh, will be shown on the construction plans. This fence will be placed around (above high water line) the existing natural water/oil seep (adjacent to the lower shipping site) with the intent of keeping out cattle, livestock, birds, and moderately-sized mammals (e.g., foxes, badgers, etc.) and amphibians (e.g., frogs, etc). In addition to the fencing, netting on the top of the fencing will be installed with the intent of keeping birds from entering the seep from overhead. The fencing and netting will have as small of mesh size as possible to minimize wildlife entering the seep area through the fencing/ netting, and will be installed prior to the second notice to proceed.
- The fence and mesh will be inspected weekly at a minimum by an employee, or when a monitor is on-site, and repaired within seven (7) days of discovery of disrepair. If the oil seep expands and/or spreads beyond the fenced area, the fencing and netting will be expanded to surround the entire oil seep area. If any animal becomes trapped within the enclosure and appears to be non-oiled and in good health, a temporary opening in the fencing/netting will be created to allow the animal to escape. If the animal is oiled, distressed, or in an unhealthy state, the California Department of Fish and Game (“CDFG”) or county-approved animal rescue group (e.g., Pacific Wildlife Care) will be contacted to handle the animal.

Telephone numbers of such approved organizations will be kept posted for easy reference for all employees.

## **Air quality - Applicant Proposed Measures**

The following measures have been incorporated into the project description. Each mitigation measure will be employed as necessary to ensure that the emissions from each of the project phases do not exceed the applicable significance threshold levels.

### Site Preparation and Exploratory/ Testing Phases

- Should construction activities reveal NOA, the project will prepare an APCD Asbestos Dust Mitigation Plan and/or Asbestos Health and Safety Program.
- To minimize nuisance dust impacts, APCD fugitive dust (PM10) mitigation measures will be implemented. These measures include reducing the amount of disturbed area where possible; the use of water trucks or sprinkler systems to water down airborne dust; daily spraying of dirt stock-pile areas; paving of applicable surfaces as soon as possible after grading; and installing permanent structures as soon as possible.
- To eliminate “visible” dust (with opacity of 20% or more) the access roads, well pads and shipping site on the Mankins Ranch and ungraveled portions of the access road on the Porter Ranch will be graveled. A CARB and EPA approved dust suppressant will be applied to the graveled roads to supplement the dust control efforts.
- To minimize the effects of vegetative burning on regional air quality, burning of vegetation will be avoided. If no alternative is available, a burn permit will be obtained from the APCD and CalFire. (No vegetative burning is proposed.)
- If any hydrocarbon-contaminated soil is discovered during grading activities, the project operator will notify APCD within 48 hours of the discovery; APCD will determine if a permit is necessary. Any existing spills will be cleaned up as part of the project.
- No standardized methods for testing for Valley Fever (*Coccidioides immitis*) exist. Nonetheless, the San Luis Obispo County Health Agency recommends implementation of the following measures. See correspondence from Dr. James L. Beebe for a comprehensive list of measures.
  - o Update the Injury and Illness Prevention Program and/or Worker Safety Plan;
  - o Train all employees regarding Valley Fever, its symptoms, precautionary and control measures;
  - o Implement dust control measures;
  - o Prevent transport of cocci outside endemic areas; and
  - o Improve medical surveillance for employees.

### Production and Field Development Phases

- Prior to the start of any drilling activities and first notice to proceed, a permit from the APCD will be obtained, as required. To minimize potential delays, the applicant will contact the APCD Engineering Division for specific information regarding permitting requirements as far as possible in advance to the start of the project.

- Any portable equipment, 50 horsepower (hp) or greater, used during construction or operation of the facility will require California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit.

The following list is provided as a guide to equipment and operations that may have permitting requirements (to be obtained prior to first notice to proceed), but should not be viewed as exclusive. For a more detailed listing, refer to page A-5 in the District's CEQA Handbook.

- o Drilling Rig
  - o Power screens, conveyors, diesel engines, and/or crushers;
  - o Portable generators and equipment with engines that are 50 hp or greater;
  - o IC engines;
  - o Concrete batch plants;
  - o Rock and pavement crushing;
  - o Tub grinders; and
  - o Trommel screens.
- There will be no discharge of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort repose, health or safety of any such person or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
  - An Odor Monitoring and Complaint Response Plan will be prepared. This plan will be jointly approved by the APCD and Environmental Health, prior to the start of construction and first notice to proceed, and fully implemented during the life of the project.
  - All petroleum facilities will be operated and maintained so as to prevent the escape of hazardous or noxious vapors and any other hazardous emissions.
  - Prior to construction permit issuance, evidence of review and approval from Environmental Health that the air quality impact assessment was adequately completed will be provided to the County.
  - Petroleum operations in designated “potentially hazardous emission areas” shall be subject to the following requirements.
    - o Within sixty (60) days of notification by Environmental Health to proceed, a plan for detecting and monitoring emissions of hydrogen sulfide, organic sulfides or a combination thereof will be submitted to Environmental Health.
    - o Said detection and monitoring plan will include:
      - An appropriate number of sensing points;
      - Recording tape instrumentation with a demonstrated capability to detect and record in the range five to five hundred ppm hydrogen sulfide, and to activate visible and audible alarms;

Provisions for registering an alert at ten ppm and an emergency at thirty ppm, with appropriate health and safety response steps for each stage as approved by Environmental Health;

An implementation schedule for said plan. Approval of the plan will not be unreasonably withheld by Environmental Health.

- Operations will be conducted so that ambient gas concentrations will not exceed any of the following hydrogen sulfide concentrations for the corresponding time intervals:
  - o Ten ppm for more than eight hours.
  - o Thirty ppm for more than one hour.
  - o One hundred ppm for more than ten minutes.
  - o Two hundred ppm for more than five minutes.
  - o Three hundred ppm for more than one minute.
  - o Five hundred ppm for instantaneous.
- Operations of petroleum facilities where ambient concentrations exceed ten ppm at any sensing point designated in the approved monitoring plan will immediately take steps to reduce such ambient concentrations to below ten ppm for the above specified time period, with facility shutdown required if necessary. Facilities at which concentrations exceed the above specified limits more than twice in one month or four times in one year, except for acts of God, riots and vandalism, will require shutdown until the facility can be operated within the required regulations.
- Personnel safety and protection will comply with the requirements of the State Division of Industrial Safety and/or the regulations of the State Occupational Safety and Health Act, whichever is the more restrictive.
- Removal of existing equipment from previous exploration efforts will be removed during initiation of the Production Phase of the project. As a part of this effort, the project will be subject to various regulatory jurisdictions, including, but not limited to the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M – asbestos NESHAP). These requirements include, but are not limited to: 1) notification requirements to the District, 2) asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM.

This requirement will also apply to all new project-related equipment. All equipment will be properly removed at the point when production is determined infeasible or the wells are no longer producing oil. A County acceptable financial instrument for this work will be posted prior to construction permit issuance.

- Low NOx heaters and late model propane generators will be used.
- Process heaters will meet a stringent NOx emission concentration limit of 20 ppm.
- Engines that power the drill rig(s) will be certified to meet Tier 3 or better emissions standards.
- Vapor recovery system(s) (“VRS”) will be installed and maintained for the life of the

project per APCD permit requirements. The VRS will capture natural and methane gasses to be burned as an onsite fuel source, if those gases are present.

- GHG emissions will be reduced as a result of the use of mandated emissions reductions of criteria pollutants, primarily NOx. The production equipment to be used will be new and meet current energy efficiency guidelines. The storage tanks will be insulated to minimize heat loss and fuel use.

### **Biological Resources - Applicant Proposed Measures**

The following measures, as incorporated into the project description, will reduce biological impacts to less than significant levels.

#### **General Measures**

- All equipment staging areas, construction-crew parking areas, and construction access routes will be established in previously disturbed or developed areas.
- Exclusionary fencing will be erected at the boundaries of construction areas to avoid equipment and human intrusion into adjacent habitats with emphasis on protection of areas containing special status species and oaks. The fencing will remain in place throughout the construction phase for each individual project component.
- To protect biological resources from spills, a Spill Contingency Plan will be prepared to ensure the undertaking of prompt and adequate response and removal action in case of an oil spill or spill of other deleterious material. The Spill Contingency Plan will include provisions for preventing and responding to spills to avoid and/or minimize impacts to the environment including the tributary to Huasna Creek.
- The following measures will be implemented to avoid impacts to Huasna Creek and Huasna River (and their tributaries), and to avoid potential long-term degradation of nearby wetland habitat areas from projected long-term utilization of the site. These measures will be depicted on construction plans.
  - o All work at Mankin's Ranch tributary crossings will be limited to within 10 feet of each side of the existing crossings.
  - o A Sedimentation and Erosion Control Plan will be prepared, per the County's Land Use Ordinance standards;
  - o Any site improvements will be completed outside of the rainy season unless a Sedimentation and Erosion Control Plan is approved.
  - o All necessary permits for placement of permanent structures over any blue line creek/tributary (including fill activities) will be obtained (e.g., permit from the U.S. Army Corps of Engineers pursuant to 404 of the Clean Water Act, Water Quality Certification from the Regional Water Quality Control Board pursuant to 401 of Clean Water Act, and/or a Streambed Alteration Agreement or waiver from the California Department of Fish and Game pursuant to Section 1600 et seq. of the California Fish and Game Code).
- During project construction, equipment refueling and concrete washing will be

conducted in non-sensitive areas (i.e., at least 100 feet from any blue line creek shown on a 7.5 minute quad map), and in a manner that any spills can and will be easily and quickly contained and cleaned up without entering the creek, its tributaries, or groundwater. As appropriate, the refueling area and concrete washout areas will be specified on construction plans with clear signage installed to denote these areas.

- Project tanks located in areas where damage to natural resources might occur as a result of tank leakage will employ methods for control of the spilled fluid and detection of tank-bottom leaks. This may be accomplished by employing a combination of the following containment and detection methods, which will be shown on all applicable plans.
  - o For containment:
    - A drainage system for safe fluid containment;
    - Diversion walls to direct fluids to a preferred collection point;
    - Dikes or fire walls will be capable of containing 150% of the largest tank's volume. Tank settings in urban areas will have dikes;
    - Structures enclosing tanks shall be impervious and contain 150% of the largest tanks volume.
  - o For leak detection:
    - A tank installation that allows the exterior surface, including the bottom of the tank and connection piping, to be monitored by direct viewing;
    - A tank foundation of concrete;
    - A tank bottom leak detection system.
- The following oilfield facilities and equipment maintenance measures will be denoted on all applicable construction plans, and will be implemented during the life of the project:
  - o Well cellars will be covered and kept drained. Grating or flooring will be installed and maintained in good condition so as to exclude people, wildlife, and domestic animals. Cellars will be protected from surface runoff water;
  - o Production facilities, including but not limited to, tanks, pipelines, flow lines, wellheads, and separators will be maintained in a manner to prevent leakage;
  - o Other production facilities and equipment, including but not limited to pumping units, compressors, tanks, and skimming devices, will be installed and maintained properly for the protection of people, wildlife, and domestic animals;
  - o Pipelines will be designed, constructed, tested, operated, and maintained in accordance with good oil field practice and applicable standards, such as the American Petroleum Institute (API)(API Rec. Prac. 1110, 3rd Ed., Dec. 1991, and API Spec. effective 1990) or American Society for Testing and Materials (ASTM) (ASTM Designation Stand. Spec., 1991), Code of Federal Regulations 49, Part 192, or other applicable standards for the transportation of oil, gas, produced water, and other fluids. Good oilfield practice includes, but is not limited to, the

following:

Utilization of preventative methods such as cathodic protection and corrosion inhibitors, as appropriate, to minimize external and internal corrosion;

Employment, where practical, of equipment such as low-pressure alarms and safety shut-down devices to minimize spill volume in the event of a leak;

Evaluating the applicability of locating any new pipelines or parts of a pipeline system that are being relocated or replaced above ground;

The use of pipe clamps or screw-in plugs are not considered good oilfield practice for permanent repair of pipeline leaks.

- All above-ground pipelines will be inspected visually for leaks and corrosion at least once a year. If such leaks or serious corrosion is encountered, they will be fixed as soon as possible, but not longer than within 48 hours of discovery.
- Maps of all pipelines will be maintained and updated whenever pipelines are installed, repaired or removed.
- A mechanical integrity test will be performed on all above ground pipelines, every two (2) years. Pipelines less than ten (10) years old are exempt from the two year testing requirement. These tests will be performed to ensure the pipeline does not present a threat to public health, safety, or the environment by using at least one (1) of the following methods:
  - o Nondestructive testing using ultrasonic or other techniques approved by the Supervisor, to determine wall thickness;
  - o Hydrostatic testing using the guidelines recommended in Publication API RP 1110 (3d Ed., Dec. 1991), Testing of Liquid Petroleum Pipelines, or the method approved by the State Fire Marshal, Pipeline Safety and Enforcement Division;
  - o Internal inspection devices such as a smart pig, as approved by the Project Supervisor;
  - o Or any other method of ensuring the integrity of a pipeline that is approved by the Project Supervisor.
- Copies of test results will be maintained for six (6) years and made available to the Division of Oil, Gas and Geothermal Resources ("CDOGGR") and the County of San Luis Obispo, upon request. Any pipeline that fails the mechanical integrity test will be repaired and retest or removed from service. The CDOGGR will be promptly notified in writing of any pipeline taken out of service due to a test failure.
- A qualified hydrogeologist will prepare a surface water testing program to be implemented during construction and for the life of the project, and submit it to the County for approval, to accomplish the following:
  - o Establish a surface water quality baseline for Huasna Creek and its tributary near the Shipping Site;
  - o This program will also incorporate other related plans (e.g., Spill Prevention Plan, etc.) and regulations (Environmental Health, RWQCB) relating to the course of

action to take should elevated amounts of these harmful constituents be coming from the proposed project. At a minimum, surface water testing will be initiated in the fall immediately after the season's "first flush" (i.e., large enough storm event resulting in running water), and then monthly through the rainy season, or as long as there is a live creek;

- o Should contaminants from the project site exceed baseline concentrations or exceed any regulatory threshold harmful, a qualified person will evaluate impacts to the biological and/or water quality resources to determine appropriate remedial actions to be approved by all necessary agencies.
- o Should any harmful contaminant be found above baseline, that is associated with the project, drilling operations will cease temporarily until the problem has been fixed, as deemed appropriate by the County.
- Preconstruction/Tailgate training will be conducted by the Environmental Monitor to discuss all construction-related biological issues. All workers will complete this training prior to conducting work within the project boundaries, including driving on southern ranch access road. For on-site workers, an obvious visible indicator (e.g., "completed training" decal on hardhat, etc.) will be worn at all times.

#### Vegetation Related Measures

- All efforts will be made during construction to minimize impacts to native vegetation.
- Tree impacts from construction activities will be limited as follows: a) no removal of any tree having a five (5) inch diameter or larger at four (4) feet from the ground; and b) "impacting\*" no more than approximately 185 trees having a five (5) inch diameter or larger at four (4) feet from the ground. This impact to oak trees qualifies as oak woodland habitat loss warranting "oak woodland" mitigation.

\* Impact is defined as follows. If any of the following conditions exist, the tree is considered "impacted" for the purposes of applying the 2:1 replacement:

1. More than 10% of the tree mass is removed (using certified arborist practices), or any limb larger than 5", whichever is less;
2. New encroachment within the tree's root zone, which is defined as any area within the tree canopy edge/dripline before any oak branch trimming.
3. Encroachment activities include:
  - a. Any cutting or trenching into soil (directional boring that is more than 24 inches below surface is exempt)
  - b. Adding any fill
  - c. Compaction of soil from vehicle (one single pass within canopy footprint is exempt) or any other compacting activity
  - d. Any grubbing that involves soil disturbance
  - e. Any storage of materials or equipment
  - f. Paving within dripline

- g. Irrigation/overspray within tree dripline
  - h. Establishment of non-native, invasive understory plants
4. If 50% or more of the root zone is impacted or tree mass is removed, the tree will be considered "lost" and be replaced at a 4:1 basis.
  5. All trees impacted through prior, approved practices preceding the proposed project shall be noted before work begins and not counted as tree impacts;
  6. Any storage of liquids, including washout areas for concrete, etc., will not be allowed within the tree canopy edge/dripline; any spills or leaks of toxic substances within the canopy edge/dripline and 10 feet beyond the canopy edge/dripline would constitute an impacted tree, or potentially lost tree if the spill or leak is extensive.
- Construction plans will clearly delineate all trees within 50 feet of the proposed project, and will show which trees are to be impacted, and which trees are to remain unharmed. Adequate protection measures (e.g., sturdy fencing) per the approved construction plans will be installed to protect those trees identified to remain unharmed as well as to minimize impacts for those trees identified as being impacted.
  - Unless previously approved by the County, the following activities will not be allowed within the root zone of existing or newly planted oak trees: 1) year-round irrigation (no summer watering, unless "establishing" new tree or native compatible plants); 2) grading (includes cutting and filling of material); 3) compaction (e.g., regular use of vehicles, etc.); 4) placement of impermeable surfaces (e.g., pavement, etc.); 5) disturbance of soil that impacts roots (e.g., tilling, etc.).
  - Trimming of oaks will be minimized as follows. Removal of larger lower branches should be minimized to: 1) avoid making tree top heavy and more susceptible to "blow-overs"; 2) reduce having larger limb cuts that take longer to heal and are much more susceptible to disease and infestation; 3) retain the wildlife that is found only in the lower branches; 4) retain shade to keep summer temperatures cooler (retains higher soil moisture, greater passive solar potential, provides better conditions for oak seedling volunteers); and 5) retain the natural shape of the tree. Tree trimming will be limited in any one season as much as possible to limit tree stress and/or shock.
  - Oak tree impacts will be mitigated as follows:
  - No less than ½ of the "impacted" (see previous definition above) trees will be mitigated through one or a combination of the following approaches:
    - Tree Fee – for each "impacted" tree a fee of \$485 shall be applied, which will be given either to a County-recognized organization with an oak woodland restoration/acquisition program, or to the Wildlife Conservation Board; and/or
    - Conservation Easement – either establish an on-site Conservation Easement with a county-approved land trust (or similar organization) to protect an in-kind number and size of trees (an "impacted" tree equals ½ of a removed tree), or pay into a county-recognized Conservation Easement program being administered by a land trust (or equivalent);

- For the remainder of impacted trees not addressed above, on-site replanting will be performed, if required pursuant to the following.
  - o For on-site replacement/planting purposes, each “impacted” tree will be replanted by the applicant with two (2), in-kind seedlings. Replanting will be completed as soon as it is feasible. Replant areas will be either in native topsoil or areas where native topsoil has been reapplied. If the latter, topsoil shall be carefully removed and stockpiled for spreading over graded areas to be replanted.
  - o Location of newly planted trees should adhere to the following, whenever possible: on the north side of and at the canopy/dripline edge of existing mature native trees; on north-facing slopes; within drainage swales (except when riparian habitat present); where topsoil is present; and away from continuously wet areas (e.g. lawns, leach lines).
  - o Newly planted trees will be maintained until successfully established. This will include protection from animals, regular weeding of at least a three-foot radius out from plant, and adequate watering. Watering should be controlled so only enough is used to initially establish the tree, and reducing to zero over a three year period.
  - o A cost estimate prepared by the applicant for a planting plan, installation of new trees, and maintenance of new trees for a period of seven (7) years will be prepared by a qualified individual and will be reviewed and approved by the County Department of Planning and Building. A performance bond, equal to the cost estimate (plus administrative costs), will be posted.
  - o Prior to any grading or site grubbing, all trees to remain on-site that are within fifty feet of construction or grading activities will be marked for protection and their root zone will be fenced. The outer edge of the tree root zone to be fenced will be outside of the canopy 1/2 again the distance as measured between the tree trunk and outer edge of the canopy (i.e., 1-1/2 times the distance from the trunk to the drip line of the tree), unless otherwise shown on the approved construction plans.
  - o Grading, utility trenching, compaction of soil, or placement of fill will be avoided within these fenced areas. If grading in the root zone cannot be avoided (per approved construction plans), retaining walls will be constructed where feasible to minimize cut and fill impacts. Care will be taken to avoid surface roots within the top 18 inches of soil. If any roots must be removed or exposed, they will be cleanly cut and not left exposed above the ground surface.
  - o Weed removal around newly planted vegetation will be completed as follows: 1) no herbicides will be used; 2) either installation of a) a securely staked “weed mat”, or b) hand removal of weeds and use of weed-free mulch with regular replenishment, will be completed for each new plant. If the hand removal weeding option is selected it will be kept up on a regular basis at least once in late spring (April) and once in early winter (December) until plant is 3 feet tall or for seven (7) years, whichever occurs first.
- To minimize impacts to the sensitive oak woodland understory, the following measures will be implemented for the life of the project:
  - o All native vegetation removal will be shown on all applicable grading/ construction

or improvement plans, and reviewed/ approved by the County (Planning and Building Dept.) before any work begins;

- o Vegetation removal of native habitat will be limited to what is shown on the county-approved grading/ improvement;
- o Vegetation clearance for fire safety purposes will be limited to the minimum setbacks required by CalFire. Where feasible, all efforts will be made to retain as much of this vegetation within the setback as possible (e.g. remove/trim only enough vegetation to create non-contiguous islands of native vegetation);
- o No livestock will be allowed in any restoration areas.
- Above ground distribution piping will be located to avoid sensitive resources to the greatest extent possible. While no manzanita were identified for removal, some potential for impacts exists should new above ground pipelines need to replace the existing pipelines. During grubbing and/or grading for installation of any aboveground pipeline, a County-approved biological monitor will be a part of the survey crew to identify any sensitive species that could be impacted, including Well's manzanita (*Arctostaphylos wellsii*). Prior to removal of any such species, sufficient cuttings or seed will be taken for nursery propagation, if feasible.
- To minimize impacts to the paniculate (leafy) tarplant the following measures will be implemented for the entire access easement area.
  - o Areas of paniculate (leafy) tarplant occurrence will be avoided to the greatest extent feasible;
  - o Turnout areas will be located at least 50 feet away from leafy tarplant occurrences;
  - o Where disturbance to paniculate (leafy) tarplant is unavoidable, the top four to six inches of surface material (including plant duff and leaf litter) will be salvaged and stockpiled separately for use in a one time effort for restoring new areas of paniculate (leafy) tarplant;
  - o Given the CNPS List 4 status under the current naming convention, no success criteria are recommended for this annual species beyond documenting the salvage and use of the surface material in impacted areas (primarily Well Pad 2).

#### Wildlife Measures

- To minimize impacts to the California red-legged frog on the southern ranch road access, the following measures will be implemented:
  - o Large metal signs will be installed on each side of the two (2) low-lying areas connecting to Huasna River with the following information that can be easily read by drivers: "5 mph max between signs when ground is wet. Do not pass if surface water is present on road".
  - o These signs will be kept in good working order for the life of the project, as long as this road is used for project vehicle access.
- The following measures relating to the Huasna River Bridge improvements will be

implemented:

Any improvements made to Huasna River Bridge (e.g., installation and/or replacement of the top deck, etc.) will be completed in a manner that stays out of the riverbed and all work is conducted above the top of bank.

To reduce sediment entering the river, the existing dirt road between the south end of Huasna Townsite Road and the bridge, as well as the first 100 feet south of the bridge will be paved with a rumble strip installed.

- A pre-construction survey will be conducted by a qualified biologist on the project to identify if badgers are using any portion of the site near where disturbance is proposed. The survey will cover the entire project boundaries (and 100 feet beyond), including the southern access ranch road, and will examine both old and new dens.
- If the pre-construction survey finds potential badger dens, they will be inspected to determine whether they are occupied by badgers. Occupation of the den will be determined by one or more of the following methods:
  - o Use a fiber optic scope to examine the den to the end;
  - o Partially obstruct the den entrance with sticks, grass, and leaves for three (3) consecutive nights and examine for signs that animals are entering or leaving the den;
  - o Dust the den entrance with a fine layer of dust or tracking material for three consecutive nights and examine the following mornings for footprints.
- Inactive dens will be excavated by hand with a shovel to prevent re-use of dens during construction. If badgers are found in dens between August and January, a qualified biologist will establish a 50-foot diameter exclusion zone around the den entrance. To avoid disturbance and the possibility of direct take of badgers, no construction, grading, or staging of equipment will be conducted within the buffer area until the biologist has determined that the badgers have vacated the den. If badgers are found in dens between February and July, nursing young may be present.

Therefore, a qualified biologist will establish a 100 foot diameter buffer area around the den. No construction, grading, or staging or equipment will be conducted within the buffer area until the biologist has determined that the badgers have vacated the den.

- To avoid conflicts with nesting raptors, construction activities will not be allowed during to the nesting season (March to July), unless a County-approved, qualified biologist has surveyed the impact zone and determined that no nesting activities will be adversely impacted. At such time, if any evidence of nesting activities are found, the biologist will determine if any construction activities can occur during the nesting period and to what extent. The results of the surveys will be immediately provided to the County Environmental Division, with recommendations for variable buffer zones, as needed, around individual nests.

## **Cultural Resources - Applicant Proposed Measures**

The following measures, incorporated into the project description, will reduce impacts to cultural resources to less than significant levels.

- The historic site (oil crew cabin) will be delineated as an Environmentally Sensitive Area (“ESA”) on all applicable project plans. The plan will also identify the placement of temporary orange construction fencing along the edge of this ESA where there is any potential for construction or operational activities to occur (e.g., vehicles, storage, etc.). During construction, the protection fencing will be kept in good working order. All workers will attend a preconstruction/tailgate environmental monitor meeting that discusses this protection fence and activities not allowed within the fenced area.
- Evidence that a qualified archaeologist (approved by the Environmental Coordinator), who will periodically monitor key earth disturbing activities will be provided. If any significant archaeological resources or human remains are found during monitoring, work will stop within the immediate vicinity (precise area to be determined by the archaeologist in the field) of the resource until such time as the resource can be evaluated by an archaeologist and any other appropriate individuals. Any additional mitigation will be implemented, as required by the Environmental Coordinator. The archaeologist will prepare a “Mitigation and Monitoring Summary” report and submit to the county.

### **Geological Resources - Applicant Proposed Measures**

The following measures, incorporated into the project description, will reduce geology/soils impacts to less than significant levels.

- A geotechnical engineering report (prepared and certified by a State of California licensed geotechnical engineer and/or geologist) that addresses slope stability, landslides, liquefaction, settlement, seismic hazards, and expansive soils at the area of proposed facilities will be provided to the County. The geotechnical engineer or geologist will also take baseline measurements that can be used to compare with future measurements in order to determine if any subsidence has resulted from the proposed extraction/reinjection process. The recommendations contained in the geotechnical engineer’s report will be implemented in the preparation of grading plans and during construction. The geotechnical engineer or geologist will verify these measures were adhered to and submit their assessment.
- Applicable construction plans will show that construction activities will be limited to the dry season (April 15 through October 15). If construction activities cannot take place during the dry season, a temporary sedimentation and erosion control plan will be prepared by a qualified individual. A qualified biologist or county monitor, will determine if the proposed erosion and sedimentation control measures are adequate to protect down-gradient wetland and riparian resources, or if additional measures are required. All proposed mitigation measures will be incorporated.
- All disturbed areas will be restored as soon as possible. A compatible native seed mix will be used to revegetate the areas to be restored (see following mix(es)). The same revegetation treatment will apply for any areas to be left undisturbed for more than 30 days. Applicable construction plans will show seed mix or biologist

recommended mix.

- Permanent rumble strips or other erosion control tracking devices will be permanently installed and maintained on both the project access road, and the Porter Ranch access road to clean the tires of all vehicles prior to entering Huasna Townsite Road public right-of-way.
- To further reduce sediment into Huasna River, especially during the rainy season, the following sections of the southern access road will be paved: between the Huasna River bridge and the end of Huasna Townsite Road; the first 100 feet south of the Huasna River bridge. This will be kept in good working order during the duration of the project.
- A portion of the access road located between Huasna Townsite Road and the project site is partially located within a Flood Hazard Area. Access road improvements will require Drainage and Flood Hazard Review by the Department of Public Works, and any necessary improvements will be installed. Any additional permits required from other agencies to allow for road improvement or bridge related impacts near the existing creek will be obtained.
- Applicable construction plans will show how all grading will be done in accordance with Appendix 33 of the Uniform Building Code.
- The project will enrolled for a Statewide Storm Water Permit for Construction Activities with the Regional Water Quality Control Board (see [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/construction.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml)). Evidence that the county that RWQCB has received the application will be submitted. If a SWPPP is required, all elements will be incorporated into applicable construction plans.
- The project will comply with the requirements of the National Pollutant Discharge Elimination System Phase I and/or Phase II storm water program and the County's Storm Water Pollution Control and Discharge Ordinance. Best management practices will be incorporated onto all applicable construction plans.

### **Hazards/Hazardous Materials - Applicant Proposed Measures**

The following measures, incorporated into the project description, will reduce hazards and hazardous material impacts to less than significant levels. In general, the focus of these measures is to recognize the numerous agencies involved with the regulation of hazardous materials and wastes relating to the proposed project and to provide measures to insure compliance.

- The following will be added as notes on all applicable construction plans regarding oilfield wastes/refuse, and will be followed during the life of the project:
  - o Oilfield wastes, including but not limited to oil, water, chemicals, mud, and cement, will be disposed of according to all applicable County, State and Federal laws, regulations, ordinances, etc. and in such a manner as not to cause damage to life, health, property, freshwater aquifers or surface waters, or natural resources, or be a menace to public safety. Disposal sites for oilfield wastes will

also conform to regulations from the following: State Water Resources Control Board, California Regional Water Quality Control Board, County Department of Public Health (Environmental Health Division), State Department of Toxic Substances Control.

- o Dumping harmful chemicals where subsequent surface waters might wash significant quantities into freshwaters will be prohibited. Drilling mud will not be permanently disposed of into open pits. Cement slurry or dry cement will not be disposed of on the surface and will be removed to approved facilities.
- o Unused equipment and scrap associated with oilfield operations will be properly removed from a production or injection operations area and/or stored in such a manner as to not cause damage to life, health, or property, health, or become a public nuisance or a menace to public safety. Trash and other nontoxic waste materials related to oilfield operations will be removed and disposed of properly (Cold Canyon Landfill).
- The following well site and lease restoration notes will be added on all applicable construction plans, and will be followed during the life of the project:
  - o In conjunction with well plugging and abandonment operations, any auxiliary holes, such as rat holes, will be filled with earth and compacted properly; all construction materials, cellars, production pads, and piers will be removed and the resulting excavations filled with earth and compacted properly to prevent settling; well locations will be graded and cleared of equipment, trash, or other waste materials, and returned to as near a natural state as practicable. Well site restoration must be completed within sixty (60) days following plugging and abandonment of the well.
  - o Unstable slope conditions created during site preparation will be mitigated in such a manner as to prevent slope collapse.
  - o Access roads to well locations will not be subject to restoration requirements; however, any condition that creates a hazard to public safety or property or causes interference with natural drainage will be restored or rectified prior to approval of final well abandonment.
  - o Prior to the plugging and abandonment of the last well or group of wells on a lease or other similar property-use agreement, a plan and schedule will be submitted for completing lease restoration. The lease-restoration plan will also include the locations of any existing or previously removed, where known, tanks, pipelines, and facility settings. Lease restoration must begin within three (3) months and be completed within one (1) year after the plugging and abandonment of the last well(s) on the lease, unless an alternative schedule is approved by the County.
  - o Lease restoration will include the removal of all tanks, above-ground pipelines, buried pipelines, debris, and all other related facilities and equipment. A permit must be obtained from County Department of Public Health (Environmental Health Division). Toxic or hazardous materials will be removed and disposed of in accordance with State Department of Toxic Substances Control, and County

Department of Public Health (Environmental Health Division) requirements. The County will consult with the property owners prior to release of any financial bonds relating to restoration work.

- If the owner of the mineral estate of the property fails to pay for the costs of an abatement or compliance action or any other above described fees upon demand by the County, the Board of Supervisors by resolution may order the cost of the abatement or unpaid fees to be specially assessed against the mineral estate parcel.  
Such assessment will be collected at the same time and in the same manner as ordinary county taxes are collected and will be subject to the same penalties and the same procedure and sale in case of the delinquency as are provided for ordinary county taxes.
- To the extent that the ownership of the surface estate is the same as or similar to (that is, any common owner) the ownership of the mineral estate of the property involved in such abatement or compliance action, or if the mineral and surface estates (property owners) are not separate, the enforcement fee or other unpaid fees may be assessed, collected and attached to the surface estate in the same manner as the mineral estate. Such assessment will be collected at the same time and in the same manner as ordinary property taxes are collected and will be subject to the same penalties and the same procedure and sale in case of the delinquency as are provided for ordinary property taxes.
- The assessment of, and tax lien upon an owner for the enforcement fee or other unpaid fees will not absolve an operator, other owners or other responsible parties of joint liability to pay any assessed enforcement fee.
- The following notices will be submitted to the County (Planning Department) in writing, prior to commencement of said operation:
  - o Change of idle well status to producing or injection status;
  - o Intention to engage in secondary recovery operations;
  - o CDOGGR notice of intent to drill new well;
  - o CDOGGR permit to conduct new well drilling operations;
  - o CDOGGR final summary of operations and history report on new well completion;
  - o Intention to install, remove, re-start, or replace permanent production facilities (i.e., piping, vessels, tanks, and equipment) that have been idle for more than five (5) years;
  - o CDOGGR notice of intent to plug and abandon well;
  - o CDOGGR permit to conduct plugging and abandonment operations;
  - o CDOGGR report of well abandonment and history report on abandonment operations;
  - o The County will be notified within ten (10) days of the transaction closing date of any well, property, or equipment appurtenant thereto, whether by purchase, transfer, assignment, conveyance, exchange or otherwise. The notice will contain

the following:

The names and addresses of the person from whom and to whom the well(s) and property changed;

The name and location of the well(s) and property;

The date of acquisition;

The date possession changed;

A description of the properties and equipment transferred; and

The new operator's agent or person designated for service of notice and his address.

- o The County will be notified in writing, of the suspension of any drilling operations, greater than five (5) days, and upon the resumption of operations giving the date thereof;
- o Notification of reportable oil and/or gas releases will be given to the State Office of Emergency Services, California State Warning Center (800) 852-7550 and the County immediately upon release. Additionally, a copy of the community awareness and emergency response (CAER) form will be submitted within twenty-four hours; and,
- o The County will be notified of the following operations in advance, but need not be in writing, when:
  - Drilling operations start;
  - Plugging at base of fresh water and at the surface.
- The County will have a copy of the project's spill prevention, control and countermeasure plan(s) ("SPCC plan") on file. This plan is required by the United States Environmental Protection Agency (USEPA) and will be approved by the County's Environmental Health Division. In the event that the operation is exempt from the requirement to develop an SPCC plan, or the plan does not cover all of the leases in San Luis Obispo County, a Pollution Control Plan (PCP) will be developed. Said SPCC/PCP will meet the requirements of county, state, and federal authorities. The SPCC plan will be subject to review by the County (Environmental Health). PCP plans will be subject to review and approval by the County. The PCP will describe how the operator will control spillage from the operator's facilities in the county.
- An agent who is a resident of the state upon whom all orders and notices provided may be served in person, or by registered or certified mail, will be designated. The County will be notified within ten (10) days, in writing, if there are any changes in such agent or such mailing address, unless operations within the County are discontinued. Service by registered or certified mail, or in person, to the agent so designated, will constitute service for all purposes of this measure.
- Applicable construction plans will show all drilling wells, and wells being worked over will be equipped with adequate blowout equipment. The controls of which must be located outside of the sub-base of the drilling rig, or such greater distance as may be

specified by the construction manager for special circumstances, and must be capable of closing off the well with pipe in or out of the hole. CDOGGR Publication MO7 or as amended specifications will be a minimum guideline. These measures will be installed and kept in good working order for the life of the project.

- Cementing operations will be in accordance with current CDOGGR requirements.
- Applicable construction plans will show that containment facilities (including walls and berms) will be designed and constructed to: be impervious, prevent the escape of fluids from the immediate storage area, and be of sufficient size to contain one and one-half (1 ½) times the capacity of the largest tank. These measures will be installed and kept in good working order for the life of the project.
- Construction plans will show petroleum storage tanks that are designed in accordance with all applicable laws and regulations. These tanks will be installed and maintained per the approved plans.
- Construction plans will show new storage facility tank locations installing an impervious liner (not less than forty mil), or equivalent, to prevent seepage. These measures will be installed and kept in good working order for the life of the project. This requirement may be modified at the discretion of the County.
- All waste substances (such as drilling muds, oil brine, or acids produced or used in connection with oil drilling operations, or oil production) will be retained in watertight receptors, from which they can be hauled for terminal disposal in a dumping area specifically approved for such disposal by the RWQCB, and any other controlling agency.
- Construction plans will show all piping systems to be designed in accordance with all applicable laws and regulations. These piping systems will be installed and maintained per the approved plans.
- During construction/ground disturbing activities, and for the life of the project, if the pipeline systems are found to be unreliable or deficient, the repair or replacement of the pipeline section or system, repairs or replacement will be completed immediately to remedy the situation. Initial testing and inspections will be completed prior to the initial use of the pipeline, and thereafter on a regular ongoing basis. The testing is to establish the reliability of all pipeline systems including those not specifically regulated by state or federal authority (including testing, treating, and storage facilities), as well as to determine what measures are needed to keep them in good working order, which includes no leaks. All repairs will be made. Pipelines that are replaced will be removed under direction of the County Department of Public Health (Environmental Health Division).
- Well Abandonment. Prior to starting the plugging and abandonment of any well, the County will be provided with a copy of the CDOGGR permits to conduct abandonment operations and the anticipated date the plugging and abandonment operations are to commence. Any substantial changes in procedure or schedule will also be provided to the County. Additionally, the following will be added as notes on all applicable construction plans, and will be followed during the life of the project:
  - o The subsurface plugging and abandonment of the well will be completed in

accordance with current CDOGGR regulations. The County will be provided with the CDOGGR notice to verify compliance with all CDOGGR requirements.

- o All drilling, production and appurtenant equipment, including pipelines, designated for the exclusive use of the subject well will be removed. Existing pipelines and equipment designated for current operations may be left in place. The County may be petitioned to leave equipment and pipelines, designated for future use, in place.
- o The well casing will be cut off at least five (5) feet below the ground level. Nothing will be placed in the excavation above the point of cutoff until the cutoff has been inspected by the County.
- o The surface cement plug depth will conform to the requirements of the CDOGGR.
- o A steel cap of not less than the same thickness as the well casing will be welded to the casing. The steel cap will be located via GPS and the well number and API number will be welded on the top of the casing.
- o All Cellars and Surface Concrete Structures will be removed. Tie downs will be removed to a minimum of six (6) feet below ground surface. Soil below the cellars will be tested for hydrocarbon contamination. If contamination is found to be present the area will be remediated. All excavations and depressions will be filled with clean soil. All oil, waste oil, refuse and waste material will be removed from the drill site pursuant to all applicable laws and regulations.
- The following items will be added as notes on all applicable construction plans as a part of the lease area restoration, and will be followed during the life of the project:
  - o Prior to the abandonment of the last well on a lease, a plan will be filed with the County, for approval, to restore the lease to a condition in conformance with state, County, and local ordinances.

Partial lease restoration/remediation activities may be conducted at any time. The record of any partial lease restoration will be kept on file by the County as part of the final restoration package.

Facilities idle for over fifteen (15) years that have no reasonable potential of future use and:

- i. Are a potential threat to public health; or
- ii. Are a potential threat to the environment; or
- iii. At the request of the surface owner will be removed in a timely manner. For the purposes of this paragraph, a lack of reasonable potential of future use may be indicated by the cancellation of APCD permits, a continuous lack of maintenance around the facility, or similar indications as determined by the County of de facto abandonment. Upon request, the County will be provided with a list of all facilities that have been idle for over ten (10) years. To retain such facilities after the fifteen (15) year limitation, a letter justifying why said facility is of value and should not be removed will be submitted to the County for approval.

- The following items will be added as notes on all applicable construction plans as a part of the final equipment removal process, and will be followed during the life of the project:
  - o Tank batteries, production islands, gas treating/compression areas, all appurtenant equipment areas, pipelines and foundations will be removed. An investigation will be conducted to determine if soil contamination is present. If soil contamination is found, the area will be remediated per the plan approved by County Department of Public Health (Environmental Health Division).
  - o All flow lines, gathering lines and other lease pipelines will be flushed with water and removed, unless due to location the removal will cause more environmental damage than the potential benefit by its removal. The soil will be sampled before pipe removal along the lines as follows: at all pipe joints and significant visible cracking or corrosion areas, unless greater frequency specified in other approved plans.
  - o All buildings will be removed from the lease. Buildings and areas used for storage and/or testing will have an investigation to determine if soil contamination exists. If soil contamination is found the impacted area will be remediated per an approved plan.
  - o An investigation will be conducted in locations of historic pits and known soil contamination. If soil impacts are identified, the areas will be remediated per the approved plan. The original soil contamination locations will be determined by GPS coordinates and will be permanently kept on file by the County.
  - o Roads and well sites will be removed and the areas re-contoured to as close to natural slope as reasonable, as required.
  - o Upon completion of full site restoration the County will provide a letter of closure.
  - o Any of the above conditions may be waived by the County for appropriate purposes such as, but not limited to, requests to leave in place:
    - Roads and well site pads;
    - Pipelines;
    - Concrete pads; and
    - Buildings.
- The County will be furnished with sufficient evidence to verify compliance with all state requirements.
- Construction plans will include notes that drilling operations in any well will be diligently implemented until the well is completed or abandoned. All drilling equipment and the derrick will be removed from the drill site and leased premises within sixty (60) days following the completion or abandonment of any well, unless permitted to be temporarily stored on the drill site by written authority of the County after the derrick has been lowered. Service equipment for existing wells will likewise be removed within sixty (60) days of completion of the rework, unless otherwise permitted by the County.

- The County, or its designee, in the performance of the duties herein prescribed, will have the authority to enter upon and into any and all premises under its jurisdiction at all reasonable hours for the purpose of inspecting the same to determine whether or not the provisions of this permit and of all other applicable laws or ordinances are observed therein; provided that a reasonable effort will be made to request entry and explain the reason for entering.

Notwithstanding the foregoing, if the County has reasonable cause to believe that there exists any condition on the property unsafe or dangerous which may require immediate inspection to safeguard the public safety, the County will have the right to immediately enter and inspect such property and may use any reasonable means required to effect such entry and make such inspection. The County will be permitted to enter, and held harmless and indemnified from any liability in connection with lawful entry hereunder.

If there are any locked gates, a key or combination will be made available to the County for emergency purposes. Such key or combination is for this specific purpose only, and any other use will be a misdemeanor.

- Public agency inspections will be performed as discussed in other measures of this project. Any noncompliance items noted during an inspection will be brought to attention for corrective action. Failure to correct noncompliance items will be a violation of the provisions of this permit, and thereby constitutes grounds for revoking this permit to continue operation.
- In the event that the County staff determines, at any time, that any operations covered under this permit constitute an imminent threat to public health, safety or the environment, he/she will have the right to require appropriate action be taken, within a time frame identified by the County, to mitigate the situation. If an Excelaron representative is unavailable, the County may take the necessary steps to mitigate the immediate threat and stabilize the situation, until such time as an Excelaron representative can respond. The County will be reimbursed for all reasonable costs associated with the mitigation activities.
- In the event that substantial damage to the environment and/or public health results from the project, remediation of such damage will be carried out within a reasonable period of time. If, in the judgment of the County, such remediation activities are not initiated within a reasonable period of time, the County may issue a notice of intent to initiate remediation and that an Excelaron representative will be responsible for funding. The County will issue said notice at least thirty (30) days prior to commencement of remedial activities. The response may include: (1) initiating remedial activities within the thirty day (30) period, or (2) filing an appeal. In the absence of one (1) of these actions the County may order the remediation.
- Construction plans will include notes that equipment and appurtenances hazardous to life or limb will be attended twenty-four hours a day, or enclosed, in all inhabited places or public use areas where there is reasonable likelihood of potential danger to life and limb. Such enclosure, where such danger to humans exists, will provide adequate fencing protection.

- Construction plans will include notes that any discharge of oil or wastes to surface or subsurface waters or land, by oil field operations, will not be allowed except when authorized by permit, ordinance or law. Oil spills or wastes will be kept to a minimum and will be prevented from entering stream courses or adjacent property by the construction of dams, levees, ditches or other structures consistent with requirements of county, state and federal authorities. Evidence will be provided that a fully compliant Hazardous Material Business Plan and Hazardous Waste Management Plan have been prepared and subsequently approved by the County's Environmental Health Division. At a minimum, the Hazardous Waste Management Plan will address:
  - o Waste determination (22 CCR §66262.11);
  - o On-site container/tank management (22 CCR §66265.171 - .191);
  - o Proper disposal (22 CCR §66266.3, HSC §25250.4);
  - o Accumulation times (22 CCR §66262.34); and
  - o Contingency plans (22 CCR §66265.50).
- The following notes regarding the transportation of oilfield wastes will be added on all applicable construction plans, and will be followed during the life of the project:
  - o Oil field wastes determined to be hazardous materials, as defined by the State of California, and that are to be transported offsite, will be handled and disposed of at an approved hazardous materials disposal location or remediated to a non-hazardous level with the appropriate approvals. Such hazardous waste materials transported offsite will have manifests documenting the disposition of the material. The transporter of the hazardous waste material will have all state, county, and local licenses and approvals to haul the material and will be responsible for delivery of the wastes to the disposal location.
  - o Non-hazardous oilfield wastes will be disposed of in an appropriate method for the material with the appropriate approvals by County Department of Public Health (Environmental Health Division), Regional Water Quality Control Board, Cal-EPA, etc., for the safe handling and transportation.
  - o Materials transported between locations on the same lease will be transported in a manner that minimizes spills of oil, produced water and hazardous materials.
- Construction plans will show that each cellar will be constructed in accordance with generally accepted safe oil field practice. Except as may be occasionally necessary, during drilling and servicing operations, such cellars will not exceed a liquid depth of fifty percent of the depth of the cellar. The oil/petroleum depth may not exceed two (2) inches and be kept free from water, petroleum, drilling fluids or other substances which might constitute a hazard. Cellars will be covered any time they are unattended, sufficiently to prevent people, animals or items from falling inside.
- Construction plans will include notes or show that each formal point of public entry will have signage indicating operator name, contact information and site address or lease name. Each well and each tank setting will have a sign or other designation, clearly legible from a distance of twenty-five (25) feet, which contains the current operator's name, the lease name and well number. In the event there are more than

two (2) wells on one drill site, it will be sufficient if the entrance to said drill site is posted with a sign bearing the name of the operator and the name of the lease, together with a plainly visible sign on each producing well designating the particular number thereof, all clearly legible from a distance of twenty-five feet (25). These measures will be installed and kept in good working order for the life of the project by the applicant.

- The required Mitigation Monitoring Plan (“MMP”) will include, at a minimum, a County annual inspection that compares environmental conditions of approval with the following project components: each lease site, each tank site, each producing well site, any idle well sites and lease tank site, (including headers and associated pipelines), and access roads for the purpose of ascertaining conformity with the county conditions of approval. Additional inspections, as needed, would be included in the MMP.

A County trust account will be established to insure adequate funds are available for regular environmental monitoring inspections, as well as for any well/facility abandonment, soil remediation work or enforcement activities.

- The state has adopted provisions of law in the California Public Resources Code and other codes, the basic purposes of which are to conserve and protect natural petroleum and other hydrocarbon resources and fresh water sources and to protect the environment. Accordingly, where there is conflict with state regulations or laws, such state regulations or laws will prevail over any conflicting measures for this permit or contradictory prohibitions or requirements made pursuant thereto.
- Evidence will be provided to the Planning and Building Department that the County Environmental Health Division has received and approved a Phase I Environmental Site Assessment study that will determine environmental liabilities and impacts arising from the development and operation of this facility.
- An evaluation will be provided to the County to determine if the facility requires a Large Quantity Generator permit from the State Department of Toxic Substances Control (DTSC), as per 22 CCR §66270.1 - §66270.73. If yes, further evidence will be provided to the County that an application has been received by DTSC.
- The following information (regarding items left from the previous oil testing operation) will be provided to, and approved by, the County Environmental Health Division:
  - o Determine the contents, if any, of all existing above ground storage tanks (“AGT’s”) in the project area;
  - o Present a plan for the reuse or dismantling of AGTs;
  - o Identify how AGT contents will be properly recycled or dispose of, if applicable;
  - o Assess and properly recycle all drums from the project area;
  - o A work plan to assess and mitigate all evident spills.
- The County may modify any of the above Hazardous Waste/Materials conditions upon demonstration of good cause that the intent of the above conditions has been met.

- Obtain approval from County Department of Public Health (Environmental Health Division) for an SPCC Plan for the site, which includes spill mitigation, for all Above Ground Storage Tanks storing petroleum oils, products etc. The SPCC is required to be prepared by a Registered Professional Engineer (“RPE”).
- All metal structures (e.g., storage tanks, well pumps, etc.) containing flammable, explosive or hazardous wastes or materials will be properly grounded for lightning strikes.
- All above-ground piping for produced water will be shown to be fully insulated to avoid pipes from reaching “below freezing” temperatures (i.e., at or below 10 degrees Fahrenheit) for extended periods. This insulation will be kept in good working order during the life of the project.
- The designated haul route will be the only route used for construction vehicles and operational tanker trucks and transport of any hazardous wastes. All project related vehicles, (i.e., construction vehicles and operational tanker trucks) may use the southern ranch access road crossing into Huasna River tributaries, as long as there is no running surface water within these tributaries. The ranch road must also be in good working order. Should there be running water, all such vehicles will turn around and return to their point of origin. All other water crossings are on county or state maintained bridges. If surface water is present for these crossings, tanker trucks will not pass, and the oil extraction will temporarily cease until there is no surface water running in the creek and the access road is in good working order. A spill contingency plan is required which will address potential vehicle spills along the haul route. Any clean up work necessary will be paid for should there be a spill.
- No diluents will be used during the life of the project.
- No hydraulic fracturing methodologies will be used during the life of the project.

### **Water Quality - Applicant Proposed Measures**

The following measures, incorporated into the project description, will mitigate potentially significant impacts to surface and/or groundwater.

- Bottled water will be used for all project potable water needs. All other water delivery points will be clearly labeled as “Non-Potable Water Source – Do Not Drink”.
- To reduce water use and protect surface water quality, existing unpaved roadway surfaces will be graveled. An approved and/or certified (EPA and/or ARB) soil binder will also be applied.
- A Storm Water Pollution and Prevention Plan will be prepared and approved by the Regional Water Quality Control Board prior to the initiation of construction activities.
- A Sedimentation and Erosion Control Plan will be prepared and approved by the County of San Luis Obispo prior to construction activities.
- A Spill Contingency Plan will be prepared and approved by the County of San Luis Obispo, et al. prior to the initiation of construction activities.

- All oil field related activities (e.g., drilling, testing, production) will strictly adhere to all CDOGGR rules and regulations for the life of the project.
- Off-site wells within the area of influence (i.e., wells on properties within the boundaries of areas subject to potential groundwater related impacts) will be identified. If available, information related to their construction (i.e., depth, location of pipe perforations, location of pump, flow, etc.) will be noted and plotted on cross sections. This information will be used to determine how these zones are projected across the project site. Should this analysis reveal that the oil well has been drilled into the same strata as the off-site water wells, a cement slurry annular seal will be installed to isolate the strata tapped by the water well.
- All oil wells will be designed to avoid all impacts to off-site water wells per CDOGGR regulations.

### **Noise - Applicant Proposed Measures**

The project description includes the following measures to reduce potential noise impacts to less than significant levels.

- Noise from the movement of medium to large trucks on the road, will only be allowed between 7 am and 9 pm on weekdays and 8 am and 5 pm for weekends.
- The truck operators will be instructed to use only the approved truck haul route.
- For the duration of the project, all potential noise-generating operational equipment, including well pumps, will be kept in good working order, which will include any repairs necessary to maintain equipment to operate at manufacturer's specifications for decibel levels.

### **Public Services - Applicant Proposed Measures**

The project description includes the following measures to reduce potential public service impacts to less than significant levels.

- To minimize potential fire safety impacts, recommendations made by the California Department of Forestry/CalFire (see 7/27/07 letter) and the Fire Safety Standards (LUO Sec. 22.05.086) will be abided by. This includes: minimum road widths will be 18 feet wide, all-weather surface and support 20 tons; road grades exceeding 12% will be non-skid surface; vegetation clearance/modification will be 100 feet around oil wells and oil production facilities and 10 feet along access roadway. All efforts will be made to minimize impacts to all oak trees within 100 feet from the well pad and shipping area and within 10 feet from the access road and any new above-ground piping. All-weather turnouts will be installed approximately every ½ mile over the approximate 6 (six) mile length of the southern ranch road access. Construction plans will include notes or show all applicable Fire Safety Plan elements, as approved by CalFire. All required elements will be implemented, as approved by CalFire.
- A "Helispot" (i.e., a location near a fire where it is safe for helicopters to land and take off) will be located on site. At this designated location, a helispot manager will

coordinate landings and take-offs, as well as the manifesting, loading, and unloading of equipment and personnel. If necessary, Helispots could also be temporarily located on ridges, meadows, and parking lots (i.e., any clearing suitable and meeting rotor clearance and hazard (wires, trees, etc.) avoidance requirements).

- As a part of the Fire Safety Plan, at a minimum, the following will be included on the construction plans:
  - A minimum of two (2) fire extinguishers will be maintained at each tank battery and at least one (1) at each well location where drilling, servicing or repair work is being conducted (located within 30 feet). Each such extinguisher will have a minimum classification of 40 BC as set forth in N.F.P.A. No. 10, "Standard for the Installation for Portable Fire Extinguishers," and any amendments or successors thereto.
  - No smoking will be permitted on the project site.
  - A fire water storage tank will be installed per CalFire requirements that will provide for no less than 20,000 gallons (larger if required by CalFire). The tank location will result in a gravity fed system for the hydrants. If adequate line pressure cannot be achieved through gravity alone, at least one additional back-up generator of adequate size and design will be kept on-site in good working order to provide emergency back-up power. If the water tank(s) will be located at or above the well pad, it will be located and designed to not be visible from any public road, and not require the removal of any oak trees. At least one hydrant will be installed within 50-150 feet of each oil well and within 8 feet of the access road.
  - An automatic fire suppression system will be installed for the oil production facility, per CalFire recommendations.
  - The facility will be clearly addressed at Huasna Townsite Road (with minimum 6-inch numbers) and reflective directional signage at all internal road forks.
  - All combustible or flammable substances stored on site will be in approved metal storage lockers/containers.
  - Material Safety Data Sheets will be stored on site and easily accessible to CalFire.
  - If a gate is installed near the Huasna Townsite Road entrance, it will be no closer than 30 feet from the edge of pavement. Any gates or locked facilities (including the southern access ranch road) will have a KNOX box installed allowing access to the fire department.
  - Any bridges on the access road must be at least 10 feet wide, support 20 tons, and be properly signed with load weight limits.
  - Provide a permit application to CalFire and County Building Division for the installation of the proposed propane storage tanks, oil storage tanks and delivery pipelines. This application will include all required ICC Fire Code requirements for this equipment.
  - A fire/emergency plan will be implemented, and each employee will be instructed

upon hiring and reminded on a yearly basis of the policies and procedures to keep all of the required elements in good working order.

- o A portable fire extinguisher will be kept in close proximity of any welding work, including any repairs to or installation of the above-ground lines.
- o All on-site long-term or permanent metal structures/equipment will be properly grounded for lightning strikes.
- o A fire/life safety inspection will be required.
- o The southern ranch access road will display the following:
  - a) Huasna River Bridge – a new top deck will be installed to insure a 25-ton vehicle capacity.
  - b) All-weather turnouts, sized for dual tankers, at approximate ½ mile increments, or as approved by CalFire.
- All contractors (e.g., for grading, construction, etc.) will be provided with the list of companies that offer recycling services or drop box service. 50% of waste generated by the project's construction activity will be recycled. Waste includes anything discarded from the site, such as wood scraps, cardboard, flashing, paint or other finishing products, tools, drywall, concrete, asphalt, plastic bags, remnants of insulation, etc. The "Recycling Required at Construction Sites" pamphlet will be provided to all contractors prior to commencement of construction work.
- Construction plans will show the installation of garbage and recycling bins to be used by employees (permanent and contract) for all non-toxic refuse. To minimize vector problems, these bins will be taken to Cold Canyon Landfill at least twice a month, or more often when needed. These bins will be kept in good working order during the life of the project.

### **Transportation - Applicant Proposed Measures**

The project description includes the following measures to reduce potential transportation impacts to less than significant levels.

- All construction traffic and operational tanker truck traffic will adhere to the approved truck haul route, which will direct truck traffic from the project site as follows: Huasna Townsite Road south to Porter Ranch access road to Alamo Creek Road to Highway 166, then west to Highway 101, and south on Highway 101. All tanker truck drivers will be notified of this required haul route.
- Prior to the commencement of the production phase, the following will be implemented on the Alamo Creek Road and Highway 166 intersection:
  - o Design and construct left-turn channelization for the east bound Highway 166 turning movement onto Alamo Creek Road;
  - o Widening of westbound State Route 166 and Alamo Creek Road in accordance with California Highway Design manual Figure 405.7. A separate encroachment permit may be obtained from County Public Works if the work encroaches within

- the county right-of-way on Alamo Creek Road; and,
- o Obtain a CalTrans encroachment permit to conduct the above-listed items.
  - An agreement with the County will be made, in a form acceptable to County Counsel, to deposit into the County Road Fund not to exceed an initial amount of \$20.81 per haul oil truck trip (trip) over the following County-maintained roads: Huasna Townsite Road, Alamo Creek Road. The agreement will provide for reports of number of trips, and corresponding payment, to be made quarterly. The cost per trip will be subject to annual adjustment based on the CalTrans Construction Cost Index. However, in no case will a negative cost index be allowed to reduce the previous year's fee. The beginning index date will be the date that the project receives approval by the hearing body.
  - Prior to the issuance of a construction permit, the following will occur:
    - o In accordance with County Public Improvement Standards, an encroachment permit from the Department of Public Works will be obtained for all proposed improvements within the county public right-of-way; and
    - o Verification of the southern ranch road easement agreement will be submitted to the county to determine that no conflicting provisions exist when compared to county conditions of approval. Any renewed easement will be submitted to the county to verify that no substantive changes have been made from the original approval.
  - A driveway approach on Huasna Townsite Road (Road No. 1071) at the project entry will be constructed in accordance with County Public Improvement Standards. All driveway approaches constructed on county roads will obtain an encroachment permit.
  - During the life of the permit, a separate Transportation Permit from the Public Works Department for each vehicle in excess of legal limits utilizing county maintained roads will be secured.
  - In the event that any portion of the approved truck haul route on the southern access ranch road becomes "impassable" due to the Twitchell Reservoir receiving runoff to reach a water surface elevation of 599 feet or above, the following will occur:
    - o Any stored oil will be transported off site prior to road closure;
    - o All tank contents will be drained and the facility will cease operation;
    - o All employees and contractors will be placed on notice of the above mentioned conditions.
    - o If and when Twitchell's water surface level reaches above the 599-foot elevation, any project related traffic will cease along the Porter Ranch access road and operations will temporarily shut in. Shutting in the facility would eliminate the necessity for regular project related traffic during that period of time. Operation of the facility and access to the site would remain closed until the following has been completed:
      - o The water surface elevation of the Twitchell Reservoir recedes below elevation

599’;

- o A thorough inspection of the Porter Ranch access roads has been made and any deficiencies identified; and
- o The proper repairs have been made to any deficiencies.
- To address cumulative impacts to the Santa Maria Bridge on Highway 101, a contribution of \$4,500 to CalTrans will be made towards its reconstruction.
- To accommodate HL-93 loading, installation of a new top deck and additional stringers for the Huasna River Bridge (at the south end of Huasna Townsite Road) will be completed.



# DEPARTMENT OF PLANNING AND BUILDING

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## Vicinity Map & Access Road

