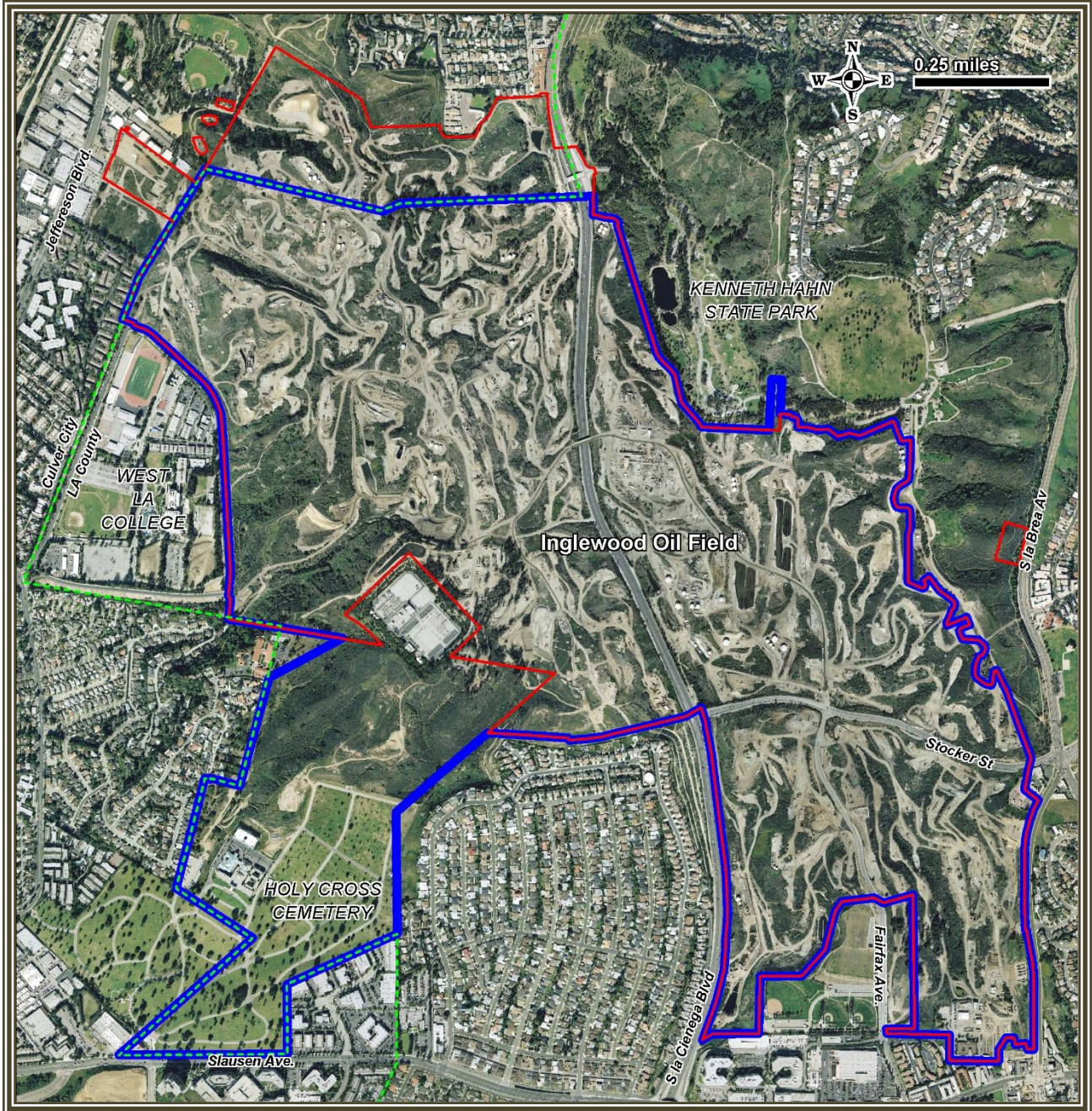


Baldwin Hills Community Standards District Periodic Review II

Project Number: R2015-02225/RPPL2019005203



Initial Draft REPORT September 2019

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ACRONYMS

AOR	Area of Review
API	American Petroleum Institute
AQMP	Air Quality Management Plan
ASTM	American Society for Testing and Materials
Bbl	barrels
BMP	Best Management Practices
Bpd	barrels per day
BTEX	Benzene, Toluene, Ethyl Benzene, and Xylenes
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CAN	Community Alert Notification
CAP	Community Advisory Panel
CAP	Clean Air Plan
CARB	California Air Resources Board
CCC	California Coastal Commission
CCFD	Culver City Fire Department
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHC	Community Health Councils
CNEL	Community Noise Equivalent Level
CPUC	California Public Utilities Commission
CSD	Community Standards District
CUP	Conditional Use Permit
CWPPP	Construction Storm Water Pollution Prevention Plan
dB	decibel
dBA	decibels, A-weighted
DOGGR	Division of Oil, Gas and Geothermal Resources
DOT	U.S. Department of Transportation
DPH	Department of Public Health
DPW	Department of Public Works
DRP	Department of Regional Planning
ECC	Environmental Compliance Coordinator
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
EQAP	Environmental Quality Assurance Program

ERP	Emergency Response Plan
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Areas
FEIR	Final Environmental Impact Report
GHG	greenhouse gases
GIS	Geographic Information System
H ₂ S	Hydrogen sulfide
HAZOP	Hazards and Operability
InSAR	Satellite aperture radar
LACoFD	Los Angeles County Fire Department
LADPW	Los Angeles County Department of Public Works
Leq	equivalent noise level
MACC	Multiple Agency Coordination Committee
MATES	Multiple Air Toxics Exposure Study
Mscfd	thousand standard cubic feet per day
MTBE	methyl tert butyl ether
NFPA	National Fire Protection Agency
NGL	natural gas liquid
NOP	Notice of Preparation
NOV	Notice of Violation
NO _x	Oxides of Nitrogen
NPDES	National Pollution Discharge Elimination System
OPR	Office of Planning and Research
OSC	on-scene coordinator
OSCP	Oil Spill Contingency Plan
OSPR	Office of Spill Prevention and Response
PPM	part per million
QMDP	Quiet Mode Drilling Plan
RECLAIM	Regional Clean Air Incentives Market
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SIMQAP	Safety, Inspection, Maintenance, and Quality Assurance Program
SPCC	Spill Prevention, Control, and Countermeasures Plan
SPR	Sentinel Peak Resources
SWPPP	Stormwater Pollution Prevention Plan
THC	total hydrocarbons
UIC	Underground Injection Control
VOC	volatile organic compounds

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Executive Summary

The majority of the Baldwin Hills Inglewood Oil Field (Inglewood Oil Field), except for the northern-most areas of the field which are within Culver City, is in the unincorporated area of Los Angeles County. As such, the permitting and operations of that portion of the Inglewood Oil Field are under the land use authority of the Los Angeles County Department of Regional Planning (DRP). The DRP performs all land use planning functions for the unincorporated areas of Los Angeles County including the County General Plan, community plans, ordinances, and Community Standard Districts (CSD). A CSD is a supplemental district used to address special issues that are unique to certain geographic areas within the unincorporated areas of Los Angeles County.

On October 28, 2008, the Los Angeles County Board of Supervisors adopted the Baldwin Hills Community Standards District. The CSD is an amendment to the Los Angeles County Zoning Code and establishes additional development standards and operating procedures for the oil and gas production operations at the Inglewood Oil Field. The CSD provides a means for implementing enhanced regulations to address the unique compatibility concerns associated with operating an oil field amid urban development. In addition to the Los Angeles County Zoning Code and the Baldwin Hills CSD, operation of the Inglewood Oil Field is also subject to other local, State, and federal regulatory agencies including; County Public Works, County Fire Department, the South Coast Air Quality Management District, the California Department of Conservation, Division of Oil, Gas and Geothermal Resources, the California Regional Water Quality Control Board, and the California Department of Transportation.

Each provision, or permit condition, of the CSD addresses a specific potential environmental impact or administrative requirement associated with the continuing operation of the Inglewood Oil Field. Provision 22.310.070.G, *Periodic Review*, requires the County to conduct a comprehensive review of the requirements of the CSD every 5 years to determine if the provisions are adequately protecting the health, safety, and general welfare of the public. The first Periodic Review covered years 2008 through 2014 and was approved in September 2015. This report covers years 2014 through 2018 and is jointly prepared by the DRP and the consulting firm MRS Environmental and is the second analysis conducted pursuant to the Periodic Review requirement of the CSD Section 22.310.070.G.

Periodic Review Results

As detailed in the following pages of this report, the results of this Periodic Review demonstrates that the provisions of the CSD have been effective and adequate to protect the health, safety, and general welfare of the public. The report also determined that no recommendations to change the language of the CSD are necessary at this time. The report analysis did determine areas where the implementation of a CSD provision could be improved. These recommendations are summarized in the following list.

1. Based on public input, it is recommended the operator consider the use of an alternate geotechnical engineering firm for the property damage complaint follow-up investigations. The use of an alternate firm would bring an additional team of subject matter experts to the issue (22.310.050.D).

2. Recommendation that the Operator continue the use of metal and or plastic bins and tanks consistent with current practice as the elimination of the use of below ground sumps is a significant environmental benefit (22.310.060.O).
3. Due to the fact that unannounced drills have not taken place in the past, it is recommended that efforts be made to ensure that unannounced drills take place at the oil field as allowed for by the provision of the CSD. The Department of Regional Planning may coordinate with the Fire Department to ensure that unannounced drills occur in the future (22.310.060.D).
4. Based on evidence of some incomplete complaint data, it is recommended that the operator meet with staff involved with the complaint process and the 1-800 telephone line vendor to review the required information necessary for filing a complete complaint. Better complaint documentation will improve the quality of the data collected for a complaint, assist in investigation of the complaint, and therefore upgrade the complaint process and data base (22.310.070.G).
5. To improve the communication of oil field activities to the public outlined in CSD Provisions 22.310.100, Public Outreach, it is recommended that the operator post updates of oil field incidents on the oil field website.

Through the provisions of the CSD, and along with the oversight of local and State agencies, DRP staff will continue to monitor the operations at the Inglewood Oil Field to protect the health, safety, and general welfare of the public and the environment. More information on the Inglewood Oil Field is located on the DRP CSD and the Sentinel Peak Resources (SPR) (operator of the oil field) websites:

- <http://planning.lacounty.gov/baldwinhills>
- <http://www.inglewoodoilfield.com>

1.0 Introduction

On October 28, 2008, the Los Angeles County Board of Supervisors adopted the Baldwin Hills Community Standards District (CSD). The CSD is an amendment to the Los Angeles County Zoning Code and establishes additional development standards and operating procedures for the oil and gas production operations at the Inglewood Oil Field. Provision G.7, *Periodic Review*, requires the County to conduct a comprehensive review of the requirements of the CSD every five years after the effective date of the ordinance to determine if the provisions are adequately protecting the health, safety, and general welfare of the public. The initial Periodic Review process was initiated in mid-2013, covered the compliance period from the inception of the CSD through December 2013, and was finalized September 2015. This September 2019 report is the second analysis conducted pursuant to the Periodic Review requirement of the CSD. This review was initiated in October 2018 and covers the compliance period for the calendar years 2014 through 2018.

1.1 CALIFORNIA DEPARTMENT OF CONSERVATION

The California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells. DOGGR has jurisdictional authority to regulate all well downhole activities including well stimulation techniques. As such, the County, the CSD, and DOGGR work together to regulate and oversee the operations of the Inglewood Oil Field. The CSD provisions reference DOGGR regulations and authority where applicable.

1.2 INGLEWOOD OIL FIELD BACKGROUND

The Inglewood Oil Field has been in operation for over 85 years with over 1,600 wells being drilled during that time throughout the historical boundaries of the oil field. Current activities at the Inglewood Oil Field involve extracting oil and gas from subsurface reservoirs located between 500 and 10,000 feet deep, processing the crude oil to remove water and processing the gas to remove hydrogen sulfide and gas liquids. Crude oil is then shipped by pipeline to area refineries to be processed into gasoline and other products. The gas is shipped by pipeline to The Gas Company for end use by consumers and industry or is shipped to area refineries for use in the refining processes. Processing activities at the Inglewood Oil Field include, but are not limited to, the following:

- Gross Fluid Production Gathering and Testing;
- Crude Oil Handling;
- Water Processing;
- Water Injection;
- Gas Gathering/Gas Processing;
- Well Drilling, Maintenance and Workovers; and
- Ancillary Systems.

The average production volumes from the Inglewood field for the years 2014 through 2018 are listed in the table below.

Year	Barrels Oil Per Day (BOPD)	Gas - Thousand Standard Cubic Feet per Day (MSCFD)	Barrels Water Per Day (BWPD)
2014	7,298	3,484	349,088
2015	6,512	2,919	339,608
2016	5,702	2,606	330,433
2017	5,567	2,510	337,547
2018	5,463	2,497	351,802

Note: One barrel = 42 gallons.

The current operator of the oil field is Sentinel Peak Resources (SPR), a Quantum Energy Partners portfolio company. SPR’s oil and gas operations are located throughout central and southern California, with corporate headquarters located in Englewood, Colorado. SPR took over operations of the Inglewood Oil Field beginning January 1, 2017 from the previous operator Freeport-McMoRan Oil & Gas (FM O&G).

1.3 BALDWIN HILLS COMMUNITY STANDARD DISTRICT

The CSD established new development standards and operating procedures for the oil and gas production operations at the Inglewood Oil Field. The ordinance, number 2008-0057, amended Title 22 Planning and Zoning Code of the County of Los Angeles with the intent to implement regulations, safeguards, and controls for the oil and gas production activities of the Inglewood Oil Field. Further, the supplemental zoning regulations are intended to ensure that oil field operations are compatible with surrounding land uses, to minimize potential adverse impacts, and to enhance appearance of the site with landscaping and other property maintenance requirements. The boundaries of the CSD are shown on Figure 1.1.

Title 22 Zoning Code Update

The Department of Regional Planning completed a technical update to Title 22: Zoning Code to reorganize, clarify, and simplify Title 22. The new ordinance became effective on February 28, 2019. The Baldwin Hills CSD remained intact, but the regulation numbering was changed to reflect the update. The Baldwin Hills CSD is found in Chapter 22.310 of the revised ordinance and is organized as follows:

Title 22 Chapter 22.310 Baldwin Hills Community Standards District
(Previous CSD Title 22.144.22 Ordinance References in Parentheses)

- Section**
- 22.310.010. Purpose (A)
- 22.310.020 Definitions (C)
- 22.310.030 District Map (B)
- 22.310.040 Area Specific Development Standards (D)
 - A. Operational Limits (D.1)
- 22.310.050 Oil Field Development Standards (E)
 - A. Fire Protection and Emergency Response (E.1)
 - B. Air Quality and Public Health(E.2)
 - C. Safety and Risk of Upset (E.3)
 - D. Geotechnical (E.4)
 - E. Noise Attenuation (E.5)
 - F. Vibration Reduction (E.6)
 - G. Biological Resources (E.7)
 - H. Cultural / Historical Resources (E.8)

- Section**
- I. *Lighting (E.9)*
 - J. *Landscaping, Visual Screening, Irrigation and Maintenance (E.10)*
 - K. *Oil Field Waste Removal (E.11)*
 - L. *Construction of Private Roads (E.12)*
 - M. *Signs (E.13)*
 - N. *Painting (E.14)*
 - O. *Sumps (E.15)*
 - P. *Well Cellars (E.16)*
 - Q. *Stormwater Drainage Management (E.17)*
 - R. *Water Management Plan (E.18)*
 - S. *Groundwater Monitoring (E.19)*
 - T. *Fencing (E.20)*
 - U. *Oil Field Cleanup and Maintenance (E.21)*
 - V. *Security (E.22)*
 - 22.310.050 W. *Vehicle Parking (E.23)*
 - X. *Sanitation (E.24)*
 - Y. *Storage of Hazardous Materials (E.25)*
 - Z. *Drilling, Redrilling, and Reworking Operations (E.26)*
 - AA. *Processing Operations (E.27)*
 - BB. *Well Reworking Operations (E.28)*
 - CC. *Tanks (E.29)*
 - DD. *Well Production and Reporting (E.30)*
 - EE. *Idle Well Testing and Maintenance (E.31)*
 - FF. *Abandoned Well Testing (E.32)*
 - GG. *Well and Well Pad Abandonment (E.33)*
 - HH. *County Request for Review of Well Status (E.34)*
 - II. *Reduced Throughput Triggering Review (E.35)*
 - JJ. *Abandonment Procedures (E.36)*
 - 22.310.060 *Monitoring and Compliance*
 - A. *Environmental Quality Assurance Program (EQAP)(F.1)*
 - B. *Environmental Compliance Coordinator (ECC) (F.2)*
 - C. *Safety, Inspection, Maintenance and Quality Assurance Program (SIMQAP) (F.3)*
 - D. *Annual Emergency Response Drills of LA County and Culver City Fire Departments (F.4)*
 - E. *Noise Monitoring F.5)*
 - F. *Vibration Monitoring (F.6)*
 - G. *Complaints (F.7)*
 - 22.310.070 *Administrative Items (G)*
 - A. *Costs of Implementing Monitoring and Enforcing Conditions (G.1)*
 - B. *Draw Down Account (G.2)*
 - C. *Indemnification (G.3)*
 - D. *Insurance Requirements (G.4)*
 - E. *Performance Security (G.5)*
 - F. *Other Obligations (G.6)*
 - G. *Periodic Review (G.7)*
 - H. *Multiple Agency Coordination Committee (MACC) (G.8)*
 - I. *Related County Code Provision (G.9)*
 - 22.310.080 *Permitting (H)*
 - A. *Ministerial Site Plan Review Required (H.1)*
 - B. *Conditional Use Permit (CUP) Required (H.2)*
 - C. *Conditional Use Permit (CUP) Requirements (H.3)*
 - D. *Application Where Violation Exists (H.4)*
 - 22.310.090 *Enforcement (I)*
 - A. *Civil Penalties and Performance Security*

Section

- B. Access to Records and Facilities*
- C. Right of Entry*
- 22.310.100 *Public Outreach (J)*
 - A. Community Advisory Panel (CAP) (J.1)*
 - B. Community Relations (J.2)*
 - C. Ombudsperson (J.3)*
- 22.310.110 *Modification of Development Standards (K)*
- 22.310.120 *Implementation Provisions (L)*

Baldwin Hills Community Standards District (CSD)

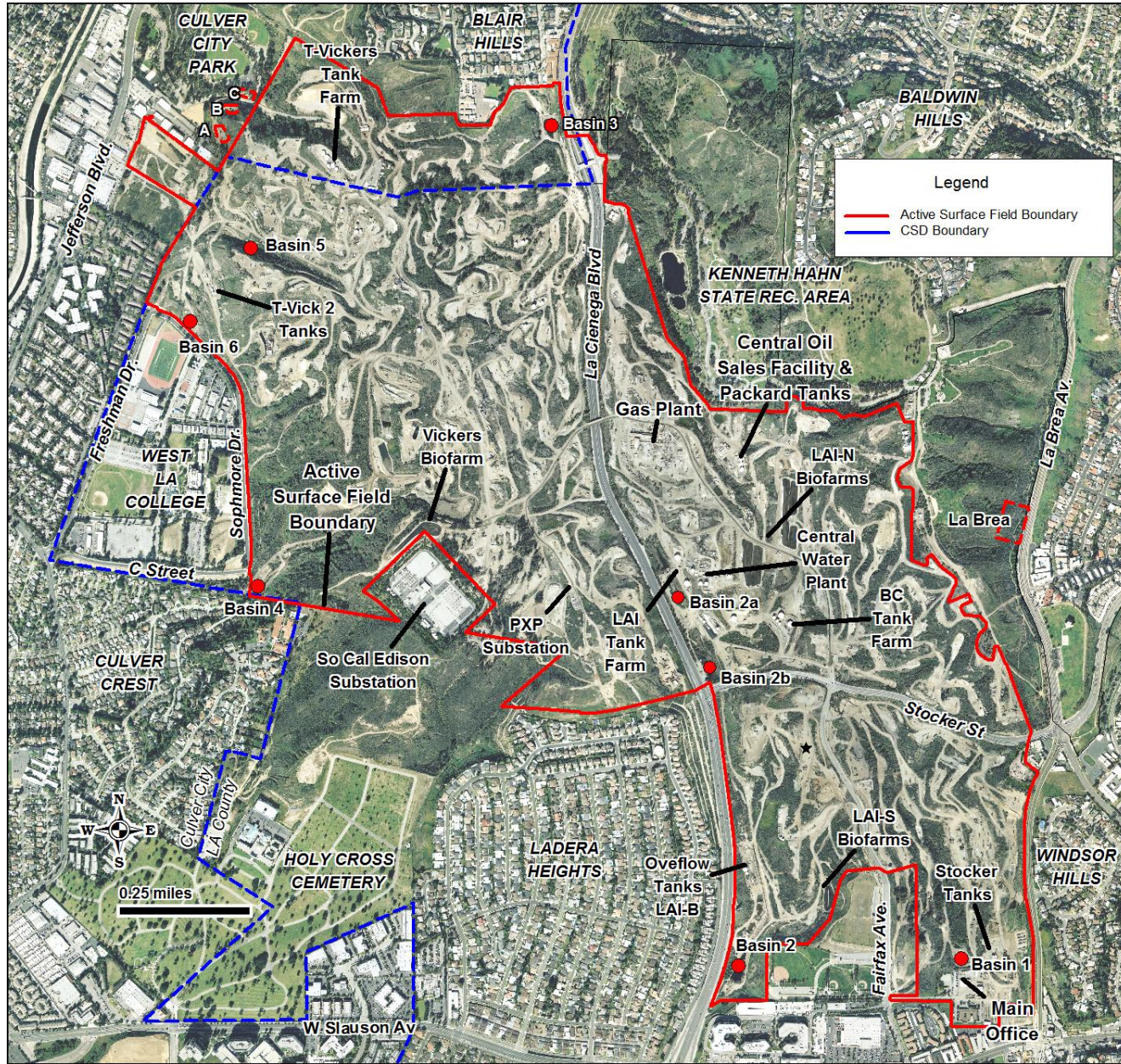


Figure 1.1
Baldwin Hills
Community
Standards
District (CSD)
Boundary Map

1.4 CSD PERIODIC REVIEW (22.310.070 G) PROVISION

Provision 22.310.070.G of the CSD reads as follows:

22.310.070 G. Periodic Review. *The county shall conduct a comprehensive review of the provisions of this section at least every five years to determine if the provisions of this section are adequately protecting the health, safety, and general welfare. Such reviews shall, among other things, consider whether additional provisions should be added, appended, or removed. One of the main goals of the Periodic Review shall be to evaluate if proven technological advances that would further reduce impacts of oil operations on neighboring land uses should be incorporated into the provisions of this section.*

- 1. Review Requirements. Each review shall include a report by a hearing officer designated by the director, which shall be prepared after public notice and an opportunity for public comment. The report shall include a comprehensive analysis of the effectiveness of this section, and shall review and consider enforcement activity, operational records, and any other issues relating to oil operations. The report, at the option of the county, may include a survey of residents near the oil field regarding noise, odors, vibrations, and other issues requested by the director of public health. A draft of the report shall be provided to the CAP and the operator for review and comment. All comments on the draft report from the CAP and the operator shall be submitted to the hearing officer in writing, and will be considered, if timely received, before the report is finalized. The final report by the hearing officer shall include a recommendation as to whether the director should prepare proposed amendment to this section for submission to the board of supervisors.*
- 2. Early Reviews. At the discretion of the director, reviews of this section may be conducted more frequently than every five years. Without limiting such discretion, the director shall consider whether an early review should be undertaken if more than three material violations occur within any 12-month period.*
- 3. Initial Review. The initial review shall occur no sooner than three years and no later than five years after the effective date of the ordinance establishing this section unless the director determines that such initial annual review shall occur at an earlier time pursuant to subsection b, above.*

1.5 ORIGIN OF THE PERIODIC REVIEW

This review is the second comprehensive review of the CSD provisions as required by Provision 22.310.070 G. As outlined in the provision above, the requirement identifies the timeline for the Periodic Review process as at least five years after the adoption of the CSD and at earlier intervals, if deemed necessary by the County. As noted above, the initial Periodic Review process covered the first five compliance years of the CSD through December 2013 and this review covers the second five-year period from January 2014 through December 2018. There have been no significant non-compliance issues at the Inglewood Oil Field since the provisions of the CSD have been implemented through December 2018. In addition, the County continuously monitors compliance with the CSD through the Environmental Quality Assurance Program. The County has not required the initiation of a Periodic Review of the CSD prior to the five-year schedule requirement.

1.6 PERIODIC REVIEW METHODOLOGY

The Periodic Review process was initiated during a Community Advisory Panel (CAP) meeting on October 25, 2018 with a presentation by the County a CAP meeting on January 24, 2019. The CAP was established to foster communication between the community, the County, and the oil field operator (SPR) regarding oil field operations (see discussion for Provision 22.310.100 A for more detail on the CAP). The January 2019 presentation provided an overview of the Periodic Review provision of the CSD and solicited public input on the effectiveness of the CSD for input to the Periodic Review. The County received comments on the Periodic Review at CAP meetings and emails with the comment period ending May 31, 2019. All input was considered in the preparation of the Periodic Review public draft document.

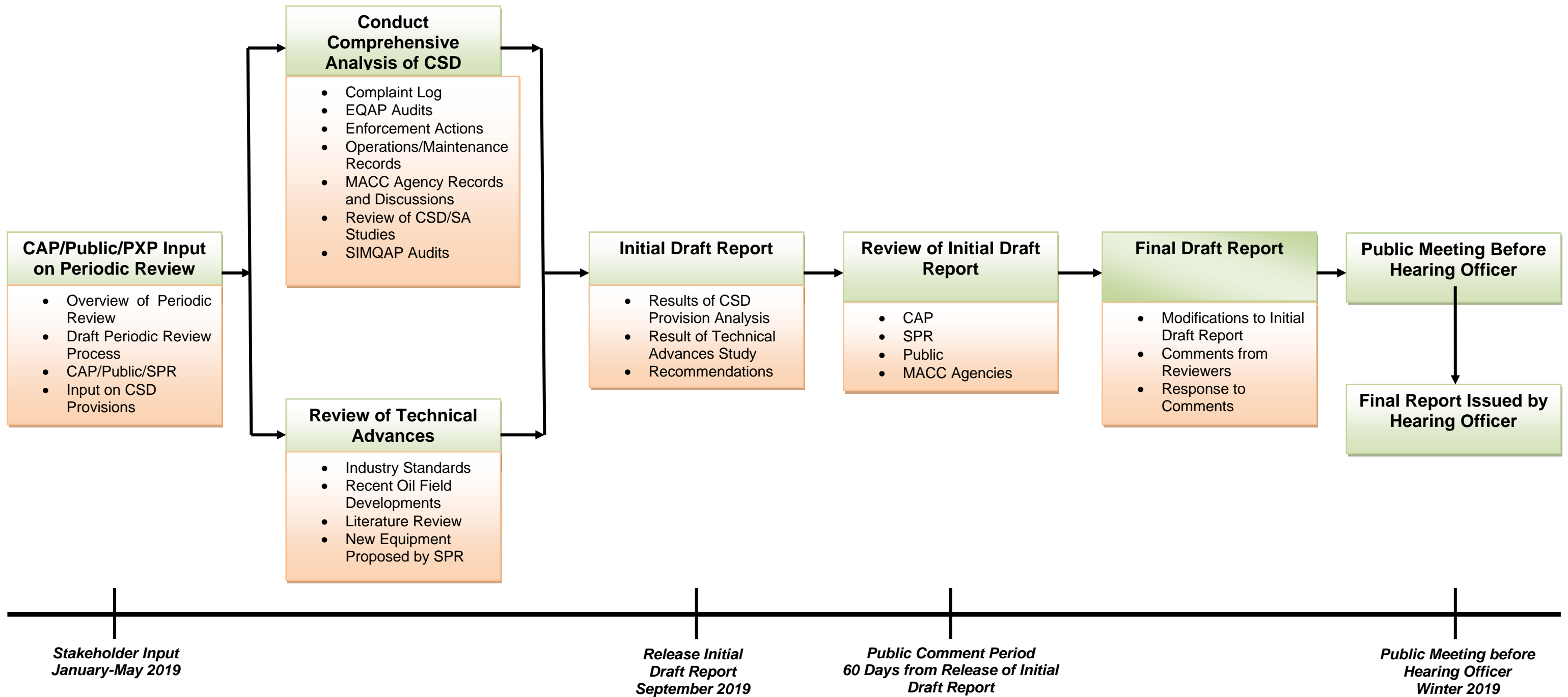
The analysis reviewed a variety of compliance records and plans to determine the effectiveness of the CSD for protecting the health, safety, and general welfare of the public including:

- Compliance plans
- Compliance records
- Operations and maintenance records
- Results of the Environmental Quality Assurance Program (EQAP) and EQAP Audit
- Multi Agency Coordination Committee (MACC) records
- Violations or enforcement actions
- Incident reports
- CSD administrative requirements
- Regulatory permits activity
- Technological advancements in the operation of oil fields

The draft Periodic Review document was released and distributed to the CAP, MACC, the public and the oil field operator for review and comment in September 2019. Appendix A summarizes the scoping comments and provides responses. Figure 1.2, Periodic Review Flowchart, presents a timeline of the steps taken in preparation of the Periodic Review document.

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**Figure 1.2
Baldwin Hills CSD
Periodic Review Flowchart**



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1.7 PERIODIC REVIEW REPORT FORMAT

This report provides a review of the effectiveness and adequacy of the provisions of the CSD to protect the health, safety, and general welfare of the public. The analysis also determines compliance of the oil field with the operational limits, development standards, monitoring, administrative, and permitting requirements of the CSD. Sections 4.0 through 11.0 provide detail on the implementation of each CSD provision and a determination as to whether the requirements have worked as intended.

The review for the development standards contained in CSD Sections 22.310.040 through 22.310.100 are organized as follows:

- Provision Language
- Summary of Complaints
- Summary of Issues Raised by the Public
- Analysis of Compliance and Effectiveness
- New Technology
- Recommendations to Changes in Implementation
- Recommendations to Changes in CSD Language

The Summary of Complaints section discusses whether complaints have been made by the public on the subject CSD provision through the complaint procedure pursuant to Provision 22.310.060 G., *Complaints*. Input from the public outside of the complaint process is discussed in the Summary of Issues Raised by the Public section. This section provides an overview of input received by the County during Community Advisory Panel (CAP) meetings, from the results of email and letter input solicited for comment on the Periodic Review, and from the public concerns that led to the additional requirements stipulated in the lawsuit Settlement Agreement and Mutual Release agreement dated July 15, 2011; a brief overview of the settlement agreement is included in Section 3.0.

The Analysis of Compliance and Effectiveness section provides detail on the implementation of the condition and a determination as to whether the requirements have worked as intended. The applicability of potential new technologies that may improve and or lessen the environmental impact of oil field operations is noted in the New Technology section. Finally, recommendations to changes in the implementation or language of the provision are discussed in the last two sections of the review.

CSD Sections 22.310.090, *Enforcement* and 22.310.110, *Modification of Development Standards*, have not been implemented through the end of 2018. As such, the analysis for these two subsections is a brief summary of the intent of the provision. Section 22.310.120, *Implementation Provisions*, provides a schedule for completion of many of the compliance plans and action item requirements of the CSD upon the original approval; those milestones have been completed by the oil field operator. The discussion of Section 22.310.120 is therefore provided in a tabular format providing the completion date of each requirement.

1.8 SUMMARY OF RECOMMENDATIONS

This Periodic Review has resulted in several recommendations to enhance the implementation of the provisions of the CSD. These recommendations do not require a modification or change to the language of the CSD ordinance; rather, the recommendations are improvements in the method of implementation or compliance effort of the subject provision as summarized in the table below.

CSD Provision	Summary of Recommendation
22.310.050.D	Based on public input, it is recommended the operator consider the use of an alternate geotechnical engineering firm for the property damage complaint follow-up investigations. The use of an alternate firm would bring an additional team of subject matter experts to the issue.
22.310.050.O	Recommendation that the Operator continue the use of metal and or plastic bins and tanks consistent with current practice as the elimination of the use of below ground sumps is a significant environmental benefit.
22.310.060.D	Due to the fact that unannounced drills have not taken place in the past, it is recommended that efforts be made to ensure that unannounced drills take place at the oil field as allowed for by the provision of the CSD. The Department of Regional Planning may coordinate with the Fire Department to ensure that unannounced drills occur in the future.
22.310.070.G	Based on evidence of some incomplete complaint data, it is recommended that the operator meet with staff involved with the complaint process and the 1-800 telephone line vendor to review the required information necessary for filing a complete complaint. Better complaint documentation will improve the quality of the data collected for a complaint, assist in investigation of the complaint, and therefore upgrade the complaint process and data base.
22.310.100	To improve the communication of oil field activities to the public it is recommended that the operator post updates of oil field incidents on the oil field website.

2.0 Summary of Previous Environmental Reviews

Prior environmental reviews on the Inglewood Oil Field with a nexus to the provisions of the CSD include the *Final Environmental Impact Report, Baldwin Hills Community Standards District, October 2008*, the *Settlement Agreement and Mutual Release, July 15, 2011*, the *Annual Well Increase Evaluation, December 2011*, and the initial *Periodic Review Report, September 2015*. In addition, Stipulation 8 of the Settlement Agreement required a supplemental air quality monitoring study which was initiated (Baldwin Hills Air Quality Study) in June 2012 with the final report dated February 2015.

2.1 BALDWIN HILLS CSD FEIR

The *Final Environmental Impact Report, Baldwin Hills Community Standards District, October 2008* (FEIR) is the environmental document that was prepared under the California Environmental Quality Act (CEQA). The FEIR was used to provide information to the general public and by Los Angeles County as one element in the decision-making process for adoption of the CSD for the Inglewood Oil Field. The provisions and requirements of the CSD were developed in part from the mitigation measures identified in the FEIR. The FEIR is available on the Los Angeles County Department of Regional Planning web site.

2.2 SETTLEMENT AGREEMENT

In November 2008 the adequacy of the CSD measures in protecting human health and the environment and the FEIR were legally challenged. The litigation was brought by the following petitioners representing the public and public groups; Community Health Councils, Inc., Natural Resources Defense Council, Mark Salkin, the City of Culver City, Citizens Coalition for a Safe Community and the Concerned Citizens of South-Central Los Angeles. The result of this legal action was the *Settlement Agreement and Mutual Release, July 15, 2011* as negotiated by the various parties, Los Angeles County and Plains Exploration and Production Company (PXP), the operator of the oil field at the time. The Settlement Agreement contains additional or revised requirements on: slant drilling, noise, the number of drill rigs, the number of wells, a health assessment and environmental justice study, a clean technology assessment, an electrical distribution study, supplemental air quality monitoring, flaring stipulations, well plug dimensions, landscaping requirements, oil field cleanup plan, a hydraulic fracturing study, and revised review based on reduced production.

The additional or revised requirements are discussed where applicable in the following analysis of the CSD provisions sections of this document and the *Settlement Agreement and Mutual Release* document is attached as Appendix B. Stipulation 5 of the Settlement Agreement, the *Health Assessment and Environmental Justice Study*, required a study in addition to the updated health risk assessment condition of CSD Provision 22.310.050 B.11. The study followed a report completed by the County Department of Public Health dated February 2011. The February 2011 Study analyzed the mortality rates, low birth rate births, birth defects, and cancer rates of the communities surrounding the Inglewood Oil Field as compared to Los Angeles County as a whole. The report was followed with an updated report, dated May 22, 2012, as required by the Settlement Agreement, based on community input, a community survey, and additional data obtained from drilling activities at the oil field. A second health study is currently under preparation by Public Health with the assistance of a Health Working Group composed of members of the public and the CSD Community Advisory Panel (CAP).

2.3 ANNUAL WELL INCREASE EVALUATION

Provision 4.b of the Settlement Agreement allows for a modification to the number of wells drilled in a calendar year. For the modification to be approved, the County must evaluate whether the CSD has been effective in protecting the health, safety, and general welfare of the public. This analysis, the *Annual Well Increase Evaluation*, was completed in December 2011 and included a review of the following CSD compliance subject areas; noise, vibration, air emissions, odors, ground movement, visual and aesthetics, hazards, fire protection and emergency response, and ground water quality. The results of the review concluded that for these areas of review, the CSD has been effective in protecting the health, safety, and general welfare of the public. Additional detail on the report is provided in the following applicable analysis of the CSD provision sections of this document; the *Annual Well Increase Evaluation* is included as Appendix C.

2.4 BALDWIN HILLS AIR QUALITY STUDY

Stipulation 8, *Air Quality Monitoring*, of the Settlement Agreement required a supplemental air quality monitoring study to address stakeholder concerns on potential acute and chronic exposure to air contaminants from the Inglewood Oil Field. Sonoma Technology Inc. was selected by the County to perform the Air Quality Study (Study) which commenced June 2012 consistent with the Settlement Agreement deadline of July 15, 2012. The monitoring was conducted between November 2012 and November 2013, and the report was finalized in February 2015.

The primary focus of the Study was to quantify the air toxic emissions from the Inglewood Oil Field operations and assess the health risk of both acute and chronic exposure to the emissions of oil field operations. The Study also estimated other area sources of toxic emissions and, to the extent feasible, assessed the contribution of the oil field to the overall health risk in the areas surrounding the oil field.



The Study reviewed 37 air toxics emitted by Inglewood Oil Field operations and conducted a hazard prioritization analysis to identify the pollutants of greatest concern to be analyzed in the Study. The following pollutants were identified as pollutants of potential concern; diesel particulate matter (DPM), cadmium, benzene, nickel, formaldehyde, mercury, manganese, acrolein, arsenic, and lead. Four monitoring stations were set up along the perimeter of the oil field in approximate north, south, east, and west locations. The Study was conducted for one year for DPM and, due to the availability and expense of the monitoring devices, 2.5 months for the other pollutants.

Results of the air monitoring data were used to calculate the health risk of acute and chronic exposure to the air toxics emitted from oil field operations. The health risk estimates were completed pursuant to the risk assessment guidelines outlined by the California EPA Office of Environmental Health Hazard Assessment (OEHHA) following the same methodology as used in the SCAQMD Multiple Air Toxic Exposure Study (MATES) studies. The MATES study is a monitoring and evaluation study conducted in the South Coast Air Basin; the study included a monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling

effort to characterize risk across the Basin. The study focuses on the carcinogenic risk from exposure to air toxics. The fourth such study, MATES IV, was completed with the final report dated May 1, 2015. SCAQMD has initiated a fifth effort, MATES V, which includes a fixed site monitoring program with ten stations, an updated emissions inventory of toxic air contaminants, and an updated risk assessment.

The Baldwin Hills Air Quality Study determined the primary toxic pollutant associated with excess cancer risk to be DPM; the determination is consistent with the MATES IV study results. The results for excess cancer risk attributed to Inglewood Oil Field operations ranged from less than 1 per million to the west and south of the oil field to 6.7 per million on the east side of the oil field. Total excess cancer risk from all area sources plus the oil field was estimated at 340 per million, with vehicle exhaust the primary cause. Therefore, results of the Study indicate the Inglewood Oil Field contribution to the total area excess cancer risk is less than 2% of the total. Results of the MATES IV determined an average excess cancer risk value for the Los Angeles Basin at 418 per million. Both the MATES IV study and the Baldwin Hills Air Study determined that the primary cancer risk in the area is attributable to vehicle diesel exhaust (DPM), a determination further evidenced by the fact that the highest cancer risk areas identified in the MATES IV study were near the Port of Long Beach, the Port of LA, and along transportation corridors. Results for non-cancer chronic hazard potential and acute exposure values from oil field operations were both below 1.0, the health reference level where no adverse human health effects would occur.

2.5 INITIAL PERIODIC REVIEW

The first Periodic Review resulted in several recommendations to enhance the implementation of the provisions of the CSD. The recommendations did not require a modification or change to the language of the CSD ordinance; rather, the recommendations detailed improvements in the method of implementation or compliance effort of the subject CSD provision. The recommendations and status are summarized in the table below. The CSD provision citation used prior to the February 2019 ordinance update is included in *parentheses* as that was the regulation reference used in the first Periodic Review.

CSD Provision	Summary of Recommendation	Status
22.310.050 A.1 (E.1.a)	In response to requests made by the public, it is recommended that the annual Community Alert Notification (CAN) tests include interested residents.	The operator has included all interested CAP members in the annual tests performed. It is noted that at least one community member appears to not be receiving the annual notifications. It is recommended that the operator continue to work with all interested community members to be included on the notification list.
22.310.050 J (E.10)	Recommendation that FM O&G (now SPR) schedule installation of the remaining landscaping phases to achieve the landscaping required by this provision in a timely manner.	All landscaping was completed in December 2018.
22.310.050 O.1 (E.15.a)	Recommendation that the Operator continue the use of metal and or plastic bins and tanks consistent with current practice as the elimination of the use of below ground sumps is a significant	The operator has continued the use of this practice as confirmed by the County Environmental Compliance Coordinator (ECC).

Baldwin Hills Community Standards District (CSD)

CSD Provision	Summary of Recommendation	Status
	environmental benefit.	
22.310.050 S (E.19)	Based on comments by the RWQCB regarding potential additional monitoring locations, it is recommended that the Operator coordinate with the RWQCB and install additional groundwater monitoring wells if deemed necessary.	SPR received updated RWQCB permit in February 2018, no additional monitoring wells are required.
22.310.050 T (E.20)	Due to un-authorized access through damaged fencing, it is recommended the ECC and the Operator increase monitoring of the condition of the perimeter fencing and conduct any necessary repairs as soon as possible.	The ECC and the Operator have increased monitoring of the facility perimeter fencing. Recent ECC inspections have not noted any fence issues.
22.310.050 Z.3.j (E.26.c.x)	In consideration of the usefulness and substantial costs associated with the preparation of the topographic vertical profiles, it is recommended considering removing the subject figures/maps from the Annual Drilling Plan until the information is deemed useful for inclusion in future plans.	The subject graphics are not included in the annual drilling plan submittals.
22.310.050 BB.2 (E.28.b)	It is recommended that the Operator facilitate better coordination when scheduling reworking and the other types of rigs at the oil field to avoid concentrating too many rigs in one area.	The ECC has not noted over concentration of rigs in one area during recent inspections. The County has not received any recent complaints on the subject.
22.310.060 C (F.3)	A comprehensive SIMQAP audit has not been conducted to date. It is recommended that a SIMQAP audit be conducted over the next year in coordination with the EQAP audit and that appropriate interested regulatory agencies be noticed of the audit for participation as applicable.	Two SIMQAP audits have been completed to date with reports dated July 2016 and August 2018.
22.310.060 D (F.4)	Due to the fact that unannounced drills have not taken place in the past, it is recommended that efforts be made to ensure that unannounced drills take place at the oil field as allowed for by the provision of the CSD. The Department of Regional Planning will coordinate with the Fire Department to ensure that unannounced drills occur in the future.	Up to the discretion of the Fire Department. No unannounced drills have occurred to date.
22.310.100 A.1 (J.1.a)	In response to requests by the public to update CAP membership, allow new members to fill vacant panel seats and replace absentee members, the DRP Director will review CAP membership and determine how to proceed under the existing provision of the CSD.	The Director of Regional Planning notified the public of three vacant seats on the CAP on June 13, 2017. Currently two of the three CAP vacancies have been filled.
22.310.100 B.1 (J.2.a)	In response to public input on the 2013 Community Meeting, it is recommended that agendas for future Community Meetings be specific to oil field operations and issues and that measures be implemented to ensure questions from the public are addressed appropriately.	The Community Meetings held in 2014 through 2018 have been specific to oil field operations. The 2018 meeting was held at the oil field and was well attended.

3.0 Area Specific Development Standards (22.310.040)

CSD Section 22.310.040 contains a single requirement which limits the areas for drilling and operations.

3.1 A. OPERATIONAL LIMITS

No surface drilling or other surface oil operations shall be allowed within the portions of the district consisting of the Southern California Edison facility, the Holy Cross Cemetery, and the small non-contiguous parcel located east of La Brea Avenue.

Summary of Complaints:

The County has not received any complaints regarding the operational limits provision of the CSD.

Summary of Issues Raised by the Public:

In the past, the public has expressed concern at the Community Advisory Panel (CAP) meetings about the potential, due to slant drilling technology, for the oil field operator to drill outside the boundaries of the CSD. The concern was not specific to the operational limits provided by this provision but rather the potential for well bottom hole locations to be under a residence and thus outside the CSD boundary. The County and the oil field operator have confirmed that no surface or bottom hole well locations have been drilled outside the DOGGR established boundaries of the CSD/Inglewood Oil Field. Down-hole operations are regulated by DOGGR.

Analysis of Compliance and Effectiveness:

As noted above, no surface or bottom hole well locations have been drilled outside the boundaries of the Inglewood Oil Field. In addition, no surface drilling operations have been conducted within the areas consisting of the Southern California Edison facility, the Holy Cross Cemetery, or the small non-contiguous parcel located east of La Brea Avenue. All new drill sites are subject to review and approval by the County pursuant to Provision 22.310.050 Z, the *Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan* and this provision prevents approval of surface hole locations in those subject areas.

The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

This provision prevents drilling from occurring in certain geographic areas, thus a discussion on new technology is not applicable.

Recommendations to Changes in Implementation:

The provision has been implemented and is considered fully effective at this time, no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The provision is fully effective at this time, no recommendations to the CSD language are recommended.

4.0 Oil Field Development Standards (22.310.050)

Section E provides the development standard requirements of the CSD.

4.1 A. FIRE PROTECTION AND RESPONSE

The operator shall comply with the following provisions:

1. Community Alert Notification System ("CAN"). The operator shall maintain and test on an annual basis a CAN for automatic notification of area residences and businesses in the event of an emergency arising at the oil field that could require residents or inhabitants to take shelter, evacuate, or take other protective actions.

2. Spill Containment Response Training. The operator shall conduct annual spill containment response training and shall at all times have available, on-site, sufficient and properly maintained equipment and/or facilities so that a spill of the entire contents from the largest oil tank on the oil field can be responded to and contained in a timely manner to reduce the likelihood that the spill reaches a catch basin.

3. Emergency Response Plan ("ERP"). The operator shall at all times maintain and fully implement and comply with all provisions of an emergency response Plan and shall further ensure that the then current ERP satisfies all rules and regulations of the United States Environmental Protection Agency and California Code of Regulations relating to emergency action plans and spill prevention control and countermeasure plans, as well as the rules, regulations, and requirements of the California Office of Spill Prevention and Response. The ERP shall also satisfy the rules and regulations of the United States Department of Transportation relating to onshore pipeline spills.

Summary of Complaints:

No complaints regarding the annual operation testing of the CAN system have been received by the County and the CAN system has not been utilized for an emergency at the Inglewood Oil Field to date. Spill containment response training is conducted annually onsite and no complaints have been received by the County regarding the training. County has not received any complaints regarding the ERP.

Summary of Issues Raised by the Public:

The CAN system has been discussed at CAP meetings noting that the annual system tests did not include residents that have requested to be on the test notification list. SPR has updated the test notification list and all interested residents will be included in the 2019 test. Additional input was received regarding the public notification after the tank overflow incident on November 22, 2018 resulted in odors in the Ladera Heights community, see discussion for 22.310.050 C and CC for discussion of the release. Input from the public and in scoping comments for this review noted that the CAN system should have been used for that incident and potentially for other odor compliant incidents. However, the CAN system is not activated by the operator alone and requires the input from the applicable Fire Department, the agency that makes the ultimate decision on notification to residents. With respect to the odor incident on November 22, 2018, the incident was reported and responded to by Cal-OES, DOGGR, and local CUPA/Fire Departments. None of these agencies required activation of the CAN system.

Input was also received during the scoping of this document requesting that the CSD require neighborhood or community health and safety/evacuation plans in addition to the ERP. Evacuation plans and the safety of the public is under the jurisdiction of first responder agencies such as local Fire Departments, law enforcement, and other emergency response agencies such as the County Office of Emergency Management and the Culver City Fire Department Emergency Services. These agencies have their own plans/protocols and operate under an Incident Command System (ICS), which is a standardized approach to the command, control, and coordination of emergency response agencies for an effective response from multiple agencies. As such, the implementation of an additional emergency plan for the public from the operator is not appropriate and could conflict with the agencies responsible for the safety of the public. As noted below, local first response agencies attend the annual oil field spill drills and are therefore familiar with the ERP and practice the coordination and implementation of the plan on an annual basis.

No issues on the spill containment response training or the ERP have been raised by the public to date.

Analysis of Compliance and Effectiveness:

A CAN system is a system that allows for an emergency alert, message, or notification to people located within a specific area. The oil field CAN system is designed to provide such notification to area residents and businesses of an emergency that would require one to take shelter, evacuate or take other protective actions. The *PXP 2009 Community Alert Notification (CAN) System* was approved by the Los Angeles County Fire Department (County Fire Department) on February 18, 2010. The reverse dialing system provided by the vendor *CodeRED* was installed on September 16, 2010. The system has been successfully tested each year since installation with test dates over the last five years occurring on December 22, 2014, December 10, 2015, December 15, 2016, December 27, 2017, and December 5, 2018. The CAN test connects to a subset of the notification list made up of local agency and Fire Department contacts; the general public is not contacted during the test to avoid the potential for unnecessary alarm. The *PXP 2009 Community Alert Notification (CAN) System Plan* is available at www.inglewoodoilfield.com.

Annual spill containment response training for the years 2014 to 2018 was completed by the operator on October 3, 2014, November 5, 2015, November 3, 2016, June 29, 2017, and March 14, 2018. As documented in the *PXP 2009 Tank Leak Detection and Containment at Inglewood Oil Field* report, approved in May 2009, all tanks have secondary containment consisting of a wall, berm, or combination of the two types. The report also concluded that all tank secondary containment structures comply with California Division of Oil, Gas and Geothermal Resources (DOGGR) requirements and that the volume of the available secondary containment can contain volumes in excess of the full volume of each tank.

The *Spill Prevention, Control and Countermeasure Plan (SPCCP)*, required under CSD Provision 22.310.050.Q.2, provides detail on the maintenance of tank and related equipment at the oil field which include inspection programs, corrosion prevention/corrosion monitoring techniques, and clean up equipment. The Plan, current version dated July 2018, also includes potential spill scenarios for each tank with containment calculations documenting the adequacy of the containment structures. Review and use of this Plan is a component of the annual spill containment response exercise.

The ERP, current version dated June 2019, is submitted to the following agencies: DOGGR, California Department of Fish and Wildlife Office of Spill Prevention and Response (OSPR),

U.S. Environmental Protection Agency Region 9, California State Lands Commission Marine Facilities Division Planning Branch, and the U.S. Department of Transportation Office of Pipeline Safety. Specific response considerations for biological resources were added to the ERP in March 2010 per CSD Provision 22.310.050.G.1.

The ERP is utilized in annual emergency response drills as required by CSD Provision 22.310.060.D. The annual drills may be attended by County and Culver City Fire Departments. CSD Provision 22.310.060.D requires that the drills demonstrate the adequacy of the ERP. As noted above, emergency response/spill drills were conducted annually by the operator on October 3, 2014, November 5, 2015, November 3, 2016, June 29, 2017, and March 14, 2018.

This provision of the CSD is considered fully effective at this time, no further modifications in implementation or language are recommended.

New Technology:

The CAN system was recently upgraded to include notifications via cellular phones and email in addition to the original land line-based system; this represents a significant improvement in the ability of the system to contact the public that could potentially be affected by an emergency at the oil field.

The SPCCP is reviewed, evaluated, and updated as necessary every five years as required by Section 1.5 of the Plan. A component of the evaluation includes review of the applicability of new prevention and control technology which may significantly reduce the likelihood of a spill event. The annual spill response training also allows for new technology to be reviewed and implemented as applicable.

The annual emergency response drills and updates to the ERP document allow for new technology and techniques to be introduced and included as they become available.

Recommendations to Changes in Implementation:

The CAN, spill containment response training and ERP have been fully implemented and are tested each year, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The existing CSD language requires annual updating and testing of the fire protection and response provisions, thus no changes in CSD language are needed or recommended at this time.

4.2 B. AIR QUALITY AND PUBLIC HEALTH

The operator shall at all times conduct oil operations to prevent the unauthorized release, escape, or emission of dangerous, hazardous, harmful and/or noxious gases, vapors, odors, or substances, and shall comply with the following provisions:

1. Emission Offsets. The operator shall obtain emission offsets or RECLAIM credits as defined and required by SCAQMD Regulations for all new or modified emission sources that require a new or modified SCAQMD permit.

2. *New Gas Plant.* No new gas plant or flare shall be installed at any steam drive plant that may be constructed on the oil field. The operator shall connect any such steam drive plant to the existing gas plant to eliminate the need for a new gas plant or flare at the steam drive plant.

3. *Odor Minimization.* At all times the operator shall comply with the provisions of an odor minimization Plan that has been approved by the director. The odor minimization Plan shall include any measures requested by the director. The Plan shall provide detailed information about the facility and shall address all issues relating to odors from oil operations. Matters addressed within the Plan shall include setbacks, signs with contact information, logs of odor complaints, method of controlling odors such as flaring and odor suppressants, and the protocol for handling odor complaints. The odor minimization Plan shall be reviewed by the operator on an annual basis to determine if modifications to the Plan are required. Any modifications to the odor minimization Plan shall be submitted to the director for review and approval.

4. *Air Monitoring Plan.* At all times the operator shall comply with the provisions of an air monitoring Plan that has been approved by the director. The air monitoring Plan shall include any measure requested by the director. During drilling, redrilling, and reworking operations, the operator shall monitor for hydrogen sulfide and total hydrocarbon vapors as specified in the approved Plan. Total hydrocarbon vapors shall be monitored at the gas plant as specified in the approved Plan. Such monitors shall provide automatic alarms that are triggered by the detection of hydrogen sulfide or total hydrocarbon vapors. For drilling, redrilling, or reworking monitors, the alarms shall be audible and/or visible to the person operating the drilling, redrilling, or reworking equipment. For the gas plant monitors, the alarms shall be audible or visible to the gas plant operator. Actions to be taken shall be as follows when specified alarm levels are reached:

a. At a hydrogen sulfide concentration of equal to or greater than five parts per million but less than 10 parts per million, the operator shall immediately investigate the source of the hydrogen sulfide emissions and take prompt corrective action to eliminate the source. The corrective action taken shall be documented in the drilling, redrilling, or reworking log. If the concentration is not reduced to less than five parts per million within four hours of the first occurrence of such concentration, the operator shall shut down the drilling, redrilling, or reworking operations in a safe and controlled manner, until the source of the hydrogen sulfide emissions has been eliminated, unless shutdown creates a health and safety hazard.

b. At a hydrogen sulfide concentration equal to or greater than 10 parts per million, the operator shall promptly shut down the drilling, redrilling, or reworking operations in a safe and controlled manner until the source of the hydrogen sulfide emissions has been eliminated, unless shutdown creates a health and safety hazard. The corrective action taken shall be documented in the drilling, redrilling, or reworking log. When an alarm is received, the operator shall promptly notify the county fire department - Health Hazardous Materials Division, the Culver City Fire Department, the Office of Emergency Services, and the SCAQMD.

c. At a total hydrocarbon concentration equal to or greater than 500 parts per million but less than 1,000 parts per million, the operator shall immediately investigate the source of the hydrocarbon emissions and take prompt corrective action to eliminate the source. The corrective action taken shall be documented in the drilling log for drilling, redrilling, or reworking and in the gas plant log for the gas plant. If the concentration is not reduced to less than 500 parts per million within four hours of the first occurrence of

such concentration, the operator shall shut down the drilling, redrilling, reworking, or gas plant operations in a safe and controlled manner, until the source of the hydrocarbon emissions has been eliminated, unless shutdown creates a health and safety hazard.

d. At a total hydrocarbon concentration equal to or greater than 1,000 parts per million, the operator shall promptly shut down the drilling, redrilling, or reworking or gas plant operations in a safe and controlled manner, until the source of the hydrocarbon emissions has been eliminated, unless shutdown creates a health and safety hazard. The corrective action taken shall be documented in the drilling log for drilling, redrilling, or reworking and in the gas plant log for the gas plant. When an alarm is received, the operator shall promptly notify the county fire department - Health Hazardous Materials Division, the Culver City Fire Department, and the SCAQMD.

e. All the monitoring equipment shall keep a record of the levels of total hydrocarbons and hydrogen sulfide detected at each of the monitors, which shall be retained for at least five years. The operator shall, on a quarterly basis, provide a summary of all monitoring events where the hydrogen sulfide concentration was at five parts per million or higher and the total hydrocarbon concentration was at 500 parts per million or higher to the fire chief. At the request of the fire chief, the operator shall make available the retained records from the monitoring equipment.

5. Portable Flare for Drilling. The operator shall have a gas buster and a portable flare, approved by the SCAQMD, at the oil field and available for immediate use to remove any gas encountered during drilling operations from drilling muds prior to the muds being sent to the shaker table, and to direct such gas to the portable flare for combustion. The portable flare shall record the volume of gas that is burned in the flare. The volume of gas burned in the flare shall be documented in the drilling log. The operator shall notify the fire chief and the SCAQMD within 48 hours in the event a measurable amount of gas is burned by the flare and shall specify the volume of gas that was burned in the flare. No drilling or redrilling shall be conducted in areas that are known to penetrate the Nodular Shale zone unless a fully operational and properly maintained gas buster and portable flare are installed on the rig. All other drilling and redrilling operations shall be conducted so that any measurable gas that is encountered can, and will, be retained in the wellbore until the gas buster and portable flare are installed on the rig, after which the gas will be run through the system. The operator shall immediately notify the fire chief and the SCAQMD in the event any gas from drilling or redrilling operations is released into the atmosphere without being directed to and burned in the flare.

6. Oil Tank Pressure Monitoring and Venting. All oil tanks that contain or could contain oil shall have a fully operational pressure monitoring system that continuously measures and digitally records the pressure in the vapor space of each tank. The detection system shall notify the operator via an alarm when the pressure in the tank gets within 10 percent of the tank relief pressure. In the event of an alarm, the operator shall immediately take corrective action to reduce the tank pressure. The corrective action shall be documented in the operator's log. The operator shall notify the fire chief and the SCAQMD within 24 hours if the pressure in any tank covered by this subsection ever exceeds such tank's relief pressure. Within seven calendar days after any tank vapor release, the operator shall report the incident to the SCAQMD as a breakdown event pursuant to Rule 430, and shall provide the fire chief with a written report of the event and the corrective measures undertaken and to be undertaken to avoid future oil tank vapor releases. The operator shall make any changes to such report that may be required to obtain approval from the fire chief and the SCAQMD and shall promptly institute all corrective measures called for by the report.

7. *Odor Suppressant for Bioremediation Farms.* When loading material or tilling material at the bioremediation farms, the operator shall use an odor suppressant such that no odor from the bioremediation farms can be detected at the outer boundary line.

8. *Odor Suppressant for Drilling and Redrilling Operations.* The operator shall use an odor suppressant spray system on the mud shaker tables for all drilling and redrilling operations to ensure that no odors from said operations can be detected at the outer boundary line.

9. *Closed Systems.* The operator shall ensure all produced water and oil associated with production, processing, and storage, except those used for sampling only, are contained within closed systems at all times.

10. *Meteorological Station.* The operator shall maintain and operate a meteorological station at the oil field in good operating condition and in compliance with all applicable Environmental Protection Agency ("EPA") and SCAQMD rules, regulations, and guidelines, and to the satisfaction of the director. The operator shall conduct an audit of the meteorological station on an annual basis and submit the results of the audit to the SCAQMD and the director. The operator shall maintain the data files for the meteorological station for a period of not less than 10 years. All such data shall be available upon request to the SCAQMD and the director.

11. *Updated Health Risk Assessment.* After every five years of operation of the meteorological station, the operator shall provide the previous five years of metrological data to the SCAQMD and the director. If the SCAQMD or the director determines that the previous five years of metrological data from the oil field could result in significant changes to the health risk assessment that was conducted as part of the Baldwin Hills Community Standards District Environmental Impact Report, then the county may elect to re-run the health risk assessment using the previous five years of metrological data from the metrological station.

12. *Off-Road Diesel Construction Equipment Engines.* All offroad diesel construction equipment shall comply with the following provisions:

a. *Utilize California Air Resources Board ("CARB") EPA Certification Tier III or better certified engines or other methods approved by the CARB as meeting or exceeding the Tier III standard or Tier II certified engines as long as no drilling or redrilling occurs during construction.*

b. *Utilize a CARB Verified Level 3 diesel catalyst. The catalyst shall be capable of achieving an 85 percent reduction for diesel particulate matter. Copies of the CARB verification shall be provided to the director. Said catalysts shall be properly maintained and operational at all times when the off-road diesel construction equipment is in use.*

13. *Drill Rig Engines.* All drilling, redrilling, and reworking rig diesel engines shall comply with the following provisions:

a. *Utilize CARB/EPA Certification Tier II or better certified engines, or other methods approved by CARB as meeting or exceeding the Tier II standard.*

b. *Utilize second generation heavy duty diesel catalysts capable of achieving 90 percent reductions for hydrocarbons and for particulate matter smaller than 10 microns. Said*

catalysts shall be properly maintained and operational at all times when the diesel engines are running.

14. Drilling and Redrilling Setbacks. The following setbacks shall apply within the oil field for drilling or redrilling:

- a. At least 400 feet from developed areas.*
- b. At least 20 feet from any public roadway.*

15. Construction Schedule. To reduce construction air emissions, no overlap shall be permitted in major facility construction and installation activities such as the steam drive plant, the water processing facility, or the oil cleaning plant.

16. Fugitive Dust Control Plan. The operator shall comply with the provisions of a fugitive dust control Plan that has been approved by the director. The Plan shall be based upon the requirements of SCAQMD Rule 403 and the SCAQMD CEQA Guideline Fugitive Dust Control Measures. The fugitive dust control Plan shall be reviewed by the operator every five years to determine if modifications to the Plan are required. Any modifications to the fugitive dust control Plan shall be submitted to the director for review and approval. The fugitive dust control Plan shall include any measured requested by the director.

Summary of Complaints:

The County has logged 104 odor complaints and 4 dust complaints from the public on oil field operations for the years 2014 through 2018. Determining the source of an odor is an extremely difficult task due to the transient nature of an odor itself and the myriad of potential odor sources both from the oil field and the urbanized areas surrounding the oil field. As such, the source for most of the complaints associated with odors was not able to be unequivocally identified in follow up investigations as documented in the table below. Sources of odor in addition to the oil field have been identified as dead animals, skunks, So Cal Gas operations, area sewers, and home improvement projects such as roofing. Air quality monitoring data, the wind speed and direction from the onsite meteorological monitoring station, field visits, and assistance from SCAQMD staff have been used to investigate odor complaints. As discussed below, the oil field air monitoring equipment has not detected an exceedance of the pollutant criteria stipulated in subsection 22.310.050.B.4.a through 22.310.050.B.4.d nor has any elevated data been correlated with the time and day of any of the odor complaints.

Odor Complaints with Source Determination	
Number of Complaints	Cause
14	November 22, 2018 Tank Overflow
3	Sewer System
3	Southern Cal Gas Odorant System
2	Skunk
1	Non-Oil Field Roofing Project
81	Unknown
Total	104

One of the four complaints for dust were associated with very high wind events where the onsite meteorological station measured wind speeds above 30 mph.

Summary of Issues Raised by the Public:

Input on air quality issues was received in the scoping comments for this document and can be grouped into the following two categories; requests for updated air quality and toxic air quality studies including the use of the forthcoming SNAPS and Department of Public Health (DPH) Health Assessment reports and climate change/GHG emissions. Several commenters provided a list of reports on other oil fields for input into the Periodic Review, however, studies on other oil wells, oil fields and other areas are not relevant to the Inglewood Oil Field and are outside the scope of the Periodic Review. Oil fields have different characteristics depending on what reservoirs are targeted and what method of extraction is being used. In addition, different regulations and requirements may be in place to mitigate potential impacts of oil and gas production for any given oil field. Oil or gas fields where fracking is occurring in different areas with different regulations and different geology are not applicable to the Inglewood Oil Field. It should be noted here that the Periodic Review is a review of the provisions of the CSD and the potential impacts of the Inglewood Oil Field, therefore, reports on different operations without the regulations and mitigations found in the CSD are not applicable to this analysis. Both the SNAPS and DPH Health Assessment Projects have not been completed, thus, use of those studies is not possible in this review. The County is looking forward to the results of the SNAPS monitoring effort and will consider the results in future reviews.

The Settlement Agreement required supplemental air quality monitoring to assess the risk of both acute and chronic exposure to air contaminants from oil field operations. The monitoring study included sampling and analysis for air toxics including diesel particulate matter, gaseous volatile organic compounds (VOCs), and trace metals. Four monitoring sites were identified and used at the perimeter of the oil field corresponding to locations to the north, south, east, and west of the facility. The monitoring equipment was housed in a trailer with meteorological instrumentation located on a 10-meter tower to collect study site specific wind speed, wind direction and temperature data. The study took place from November 2012 to November 2013, a time period when significant drilling activity was occurring, no drilling has taken place at the oil field since June 2014. The air monitoring study was completed in the fall of 2013; the final report was released in February 2015.

The Settlement Agreement also contains a requirement regarding operation of the gas plant back up flare. The stipulation allows for the operation of only one gas plant flare at any given time and requires the installation of the new flare be completed within 180 days of receipt of the SCAQMD permit for the flare. The Operator does not operate the gas plant flares simultaneously; the installation of the new flare was completed in 2012.

Climate change, sea level rise and other associated issues are beyond the scope of the Periodic Review analysis. The CSD does not have a requirement specific to GHG emissions as the SCAQMD and the County did not have significance thresholds for that pollutant at the time of adoption of the CSD. As GHG emissions are under the jurisdiction of CARB and the SCAQMD, the County currently uses the SCAQMD threshold to determine the significance of a project's GHG emissions impact. Current GHG emissions at the IOF are under the SCAQMD's 10,000 metric ton CO₂ equivalent per year threshold for industrial facilities as documented on Annual Emissions Reports (AERs) submitted to SCAQMD. This is primarily due to the fact that the oil field is powered by electricity and all oil field pumps at the IOF are electric. Sources of air emissions, and thus GHGs, at the oil field include heaters and treaters and other equipment at the gas plant, fugitive emissions, the maintenance rigs, and other mobile sources. Total GHG emissions for these sources are less than the SCAQMD GHG threshold, therefore, the Inglewood Oil Field is not a significant source of GHG emissions and further mitigation, or analysis is not required.

On the evening of November 22, 2018, a tank at the Inglewood Tank Battery overflowed due to the failure of a level controller. A level controller is a device that, when working properly, can control the operation of one or more pumps that move fluid through a tank or system of tanks. In this case, the controller failed, and a pump was not activated resulting in an overflow of produced water into the secondary containment area of the tank battery. Approximately 630 gallons (15 barrels) of oil/water mixture was spilled over a 15 to 20-minute time frame into the secondary containment area. Odors from the spill were noted by residents living to the east of the oil field in the Ladera Heights neighborhood with fourteen odor complaints filed on the Inglewood Oil Field complaint system. Follow up investigation into the incident by the County included an engineering analysis with the Canary® Model, an application-specific hazard model for vapor dispersion, fire radiation, and vapor cloud explosions. Results of the analysis showed short term health effects from benzene and odor impacts approximately eight times the odor threshold in the Ladera Heights neighborhood. The analysis report was discussed at the Community Advisory Panel (CAP) meeting on April 25, 2019 and is available on the County DRP Baldwin Hills website. Additional investigation into the tank level controller device is discussed in CSD 22.310.050.CC.

Analysis of Compliance and Effectiveness:

Subsection 22.310.050.B.1 requires the operator of the oil field to obtain emission offsets or RECLAIM credits for all new or modified emission sources requiring a SCAQMD permit. No activities or emission sources requiring SCAQMD oversight required emission offsets or the purchase of RECLAIM credits during this review period 2014 through 2018. The requirements listed under 22.310.050.B.2 have also not been implemented to date because a new gas plant or new steam drive plant has not been proposed or installed.

The Odor Minimization Plan was submitted on February 25, 2009 and revised and approved on April 15, 2010. The Plan describes the four main sources of potential odors at the oil field as fugitive emissions from equipment, operation of the bioremediation farms, drilling muds, and accidental release from drilling activities. The Plan identified the use of suppressants for odor minimization at the bioremediation farms and for drilling muds and the use of a portable flare/gas buster for drilling operations. The Plan is reviewed by the operator and the County annually and has not been required to be updated to date. The use of closed systems for all equipment associated with produced water and oil, consistent with provision 22.310.050.B.9, is described for odor minimization from fugitive emissions.

Operation of the bio farms has not occurred during this 2014 to 2018 review period. During drilling activity, the drilling muds and cuttings are sprayed with suppressants as they pass through the “mud shakers” via overhead misters connected to a drum of liquid suppressant. A portable flare/gas buster, as required by provision 22.310.050.B.5, is available for use at drilling and re-drilling sites for potential odors from drilling operations. These odor minimization measures are inspected for operation to document compliance during the periodic inspections completed by the County Environmental Compliance Coordinator (ECC). It should be noted here that no drilling has occurred at the oil field since June 2014.

The Air Monitoring Plan was submitted on February 29, 2009, revised in November and December of 2009 and approved by the County on January 4, 2010. The Plan is reviewed by the operator and the County annually and has not been required to be updated to date. The Plan presents information on meteorological conditions at the oil field, air contaminants associated with oil and gas operations, air monitoring instrumentation and procedure requirements, and Air Monitoring Plan training for oil field personnel. Portable air monitoring

trailers with Total Hydrocarbon (THC) and Hydrogen Sulfide (H₂S) monitors that meet the specifications outlined in the Plan are employed at drilling and redrilling sites. The drilling site monitor data is recorded on a data logger which is downloaded and transferred to the oil field air monitoring data base at the end of each drilling project. The portable monitoring system includes an alarm system with both visual and auditory capabilities; the sound alarm is turned off at night pursuant to the requirements of the Quiet Mode Drilling Plan (QMDP).



Air monitoring at the gas plant consists of THC sensors located at each of the four corners of the gas plant facility footprint. The sensors are connected to the gas plant computer Supervisory Control and Data Acquisition (SCADA) system which provides for real time data access by gas plant personnel and alarm capability. The SCADA system logs the monitoring data for later download to the oil field air quality monitoring database. The sensors are calibrated monthly with the calibration documents reviewed during the periodic inspections completed by the ECC. In addition, the ECC conducts independent monitoring for emissions and odors with the use of a portable gas monitor during each site inspection.

The CSD does not require an annual compliance report for the air quality monitoring data, however, the data must be available to the County for review upon request. Air monitoring results along with the monitoring sensor calibration data are reviewed by the County ECC periodically during site visits and at the annual Environmental Quality Assurance Program (EQAP) audit. To date, no exceedance of the air monitoring criteria specified in subsections 22.310.050.B.4.a through d has been measured at the oil field and thus the drilling or gas plant corrective actions required by these subsections have not been necessary to implement.

The portable flare for drilling required by subsection 22.310.050.B.5 was custom built by PXP, a former operator of the oil field. The flare system was reviewed, approved, and permitted by the SCAQMD and meets the requirement for recording the volume of gas burned. The oil field has SCAQMD permits for two of these portable flare systems. Current operating procedure at the oil field calls for the flare to be installed at every drilling and re-drilling operation whereas subsection 22.310.050.B.5 requires that only drilling activity in the Nodular Shale zone require the installation of the flare system or if gas in the well bore is encountered. As noted above, no gas has been flared through the portable gas flare system to date.

All tanks that contain oil and/or produced water are connected to the oil field operational pressure monitoring system as required by subsections 22.310.050.B.6 and 9. The system is connected to the SCADA system and is monitored by gas plant personnel. The tanks and associated valves, pipeline flanges, and pressure relief systems are subject to SCAQMD permit requirements and the associated fugitive emissions program. The fugitive emissions program requires quarterly inspections of oil field equipment for fugitive emissions with the use of a portable handheld organic vapor analyzer. The results of these inspections are submitted to the SCAQMD. The oil field uses a third-party consultant specializing in air quality monitoring for the fugitive emissions inspection program. The SCAQMD audits the results of the fugitive inspection monitoring program by performing an annual inspection of the subject oil field equipment. The tanks and associated equipment are also subject to the breakdown provisions of AQMD Rule 430. Failure of the pressure monitoring system requires notification and calculation of any air emissions associated with the breakdown. Two were filed for this review

period, the first in April 2016 for a broken tank hatch connector due to high winds and the second in November 2018 for the level controller failure incident discussed above.

As discussed above regarding the Odor Minimization Plan, odor suppressants are used at the bioremediation farms (when in operation) and for drilling and redrilling operations as required by subsections 22.310.050.B.7 and 8. Odor suppressant at the bioremediation farms is applied manually with a sprinkler system when odors are detected during loading, pre-tilling and tilling operations. The odor suppressant system for the drill rig is a custom-made mister system where the suppressant is pumped from a drum source up to tubing installed across the top of the mud shaker. Sprinkler type misters are installed in the tubing every few feet and spray the odorant downward over the mud and drill cuttings material. Periodic inspections by the County ECC, including monitoring for odors with the use of a portable gas monitor during each site inspection, document the installation and operation of these odor suppressant systems.



The meteorological monitoring system required by subsection 22.310.050.B.10 was approved by the SCAQMD in July 2009, installed and tested in December 2009, and was operational on January 21, 2010. Monitoring data is collected on a data logger which is downloaded monthly to the oil field air monitoring data base. Some data collected during the December 2016 through March 2017 was lost due to data logger download issues. The County researched the data download problems and recommended an alternate approach to both the data download and calibration procedures for the meteorological station. Those changes have been implemented and a new data logger is scheduled for installation in the Fall of 2019. The meteorological instrumentation is calibrated annually by instrumentation vendor technicians. The annual Data Validation Reports are posted on the oil field website at www.inglewoodoilfield.com. Operation of the meteorological station is checked by the ECC during periodic site inspections and the annual Data Validation Report is reviewed during the EQAP audit.

The updated Health Risk Assessment required by subsection 22.310.050.B.11 has not been required to date. The required 5 years of onsite meteorological data was collected in January 2015 and the data was reviewed and found to be consistent with the data used for the analysis in the Baldwin Hills Environmental Impact Report (EIR). Therefore, the County determined an updated Health Risk Assessment was not required. Subsections 22.310.050.B.12 and 13 require that engines associated with off road diesel construction equipment and drill rig engines, respectively, meet California Air Resources Board (CARB) emission reduction requirements. Subsection 22.310.050.B.14 provides setbacks for drilling or redrilling sites. Review and approval of the *Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan* confirms compliance with these provisions where engine certification documents are checked, and drilling locations are reviewed for compliance with setback requirements. Subsection 22.310.050.B.15 construction schedule limitations for major facility construction, has not been implemented to date because no major construction projects have been proposed or constructed to date.

Pursuant to Provision 22.310.050.B.13, CARB/EPA Certification Tier II or better certified engines and heavy-duty diesel catalysts are required for all drilling, re-drilling, and reworking rig diesel engines. All rigs operated at the Inglewood Oil Field meet the CARB/EPA Tier III engine standards.

The Fugitive Dust Control Plan was submitted on March 26, 2009 and revised and approved in April 2010. The Plan describes potential dust generating activities associated with oil field operations and outlines dust control measures to minimize offsite dust. Some of the primary dust control measures included in the Plan are limiting oil field vehicle speeds to 15 mph, the use of water trucks on unpaved roads, limiting vehicle travel on unpaved roads and parking surfaces, and the use of tarps or soil stabilizers to prevent dust from soil stockpiles. Other dust control measures include procedures for loading and unloading material from trucks, pipe track out grid devices to knock mud from vehicles leaving the oil field, and minimizing dust generating activities during high wind speed times. As noted above, one of the four dust complaints was associated with a day with wind speeds in excess of 30 mph.

The air quality and public health requirements of this provision have been implemented and are ongoing. This condition is considered fully effective at this time, no further evaluation is recommended.

New Technology:

New emission sources at the oil field require permitting by the SCAQMD and may require offsets or RECLAIM credits. The compliance plans for odor minimization, air monitoring, meteorological monitoring, and fugitive dust are required to be updated periodically or as required by the County. Closed monitoring systems and oil field engines are subject to SCAQMD or CARB rules, respectively. The oil field drill rigs are subject to CARB diesel exhaust reducing programs, those programs include the exhaust emission standards program that require engine replacement and/or installation of emission control devices on diesel engines. For example, CARB Rule 2449 requires that the diesel engines in the oil field rigs meet specific emissions limitations for pollutants such as NO_x and diesel particulate matter (DPM). The allowable emissions requirements decrease each year through the year 2023, providing a significant annual decrease in air pollutants from oil well drilling, re-working and maintenance activities associated with the operation of the rigs.

Therefore, technical improvements that provide cleaner burning drill rig engines are currently required at the oil field through the year 2023 as part of the SCAQMD regulatory framework. In addition, as new technology is developed in air quality monitoring, emission controls, or oil field equipment that can lower the air quality impact of oil field operations, that technology can be implemented by this provision by reference.

Recommendations to Changes in Implementation:

This requirement has been implemented and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.3 C. SAFETY AND RISK OF UPSET

The operator shall at all times conduct oil operations in a manner that minimizes risk of accidents and the release of hazardous materials, and shall comply with the following provisions:

1. Natural Gas Liquid Blending. Natural gas liquids at the gas plant shall be blended with the oil to the maximum allowable pipeline system vapor pressure. Natural gas liquids storage shall be limited to the volume allowed in the risk management Plan approved by the fire department.

2. Propane and Natural Gas Liquids Bullet Fire-Proofing. The operator shall install and maintain fire-proofing insulation on all propane and natural gas liquids bullets within the oil field. The fire-proofing insulation shall have a minimum two-hour fire rating and otherwise be acceptable to the fire chief. All propane and natural gas liquid bullets shall be equipped with an automatic deluge system.

3. Steam Drive Plant Setback. The steam drive plant, if constructed, shall be located at least 1,000 feet from a developed area and shall use urea or equivalent, low toxicity material for any nitrogen oxide emission reduction that is required by the SCAQMD.

4. Secondary Containment for Oil. The operator shall comply with the following provisions:

a. The operator shall ensure that all existing oil tank areas in the oil field, unless determined by the director to be infeasible, and all the new oil tank areas shall have secondary containment (berms and/or walls) that can contain at least 110 percent of the largest oil tank volume to reduce the likelihood of oil spills entering the retention basins. In the event the director determines that it would be infeasible to provide 110 percent containment for a particular existing oil tank, the operator shall provide such containment as the director determines is feasible.

b. All retention basins in the oil field shall be adequately sized, and maintained to handle a 100-year storm event plus a potential spill of the volume of the largest tank that would drain into each basin.

c. All above ground piping in the oil field that contains or could contain oil shall be protected by basins or secondary containment measures (berms and/or walls).

Summary of Complaints:

The County has not received any public input on the natural gas liquid blending or the fire proofing of the propane and natural gas liquid bullets requirements to date. A steam drive plant has not been constructed to date and no public input has been received by the County. No complaints regarding secondary containment for oil have been received by the County.

Summary of Issues Raised by the Public:

Provisions 22.310.050.C.1 through 3 are operational requirements developed from the EIR to minimize potential impacts to public safety from the operation of the gas plant, the propane storage and loading facilities, and a potential new steam drive plant. The County has not received any public input on natural gas blending or the propane and natural gas liquid fireproofing; a new steam drive plant has not been constructed or proposed to date.

Analysis of Compliance and Effectiveness:

SPR blends the natural gas liquids (NGLs) to the maximum allowable pipeline system vapor pressure as required by the subject CSD provision requirement and for economic reasons. Blending of NGLs can provide several main benefits when added to crude oil; the NGLs can decrease the viscosity and improve the API gravity value of the oil and reduce offsite transportation costs. Current production and operation of the oil field allow for all NGL produced to be blended with the oil and transported off site with the crude oil via pipeline. The storage of the NGL tank is in compliance with the criteria in the Risk Management Plan.

The propane and natural gas liquids bullet fire proofing was completed on February 23, 2009 with the associated documentation submitted to the LA County Fire Department on February 25, 2009. The approved fire proofing system has a two-hour fire rating and is equipped with an automatic deluge system. With this fireproofing and deluge system the potential for a propane or natural gas fire at the bullets has been substantially reduced. The *PXP 2009 Third Party Audit of Fire Protection Capabilities at Inglewood Oil Field* report analyzed the oilfield's fire protection capabilities for compliance with National Fire Protection Agency (NFPA) Requirements, the County Fire Code, County Fire Department Regulations, California Code of Regulations, and American Petroleum Institute (API) Standards and Recommended Practices. The report, completed in March 2009, determined that all the tanks, vessels, and other equipment associated with fire potential were in compliance with all referenced codes and requirements and the report further documented the oil field is in compliance with industry best practices for similar facilities.

The *Annual Well Increase Evaluation, December 2011*, included a review of the fire proofing and automatic deluge systems. The report concluded that the potential for a propane or natural gas fire at the bullet storage area has been substantially reduced. The report also concluded that the secondary containment and retention basin systems, discussed in more detail below, are adequately sized for both a worst-case spill and a 100-year storm event.

A steam drive plant has not been constructed to date. An analysis of the location and emission reduction equipment will be completed by the DRP and SCAQMD during the processing of the project application if such a new plant is proposed. SPR does not currently Plan to construct a new steam drive plant.

As documented in the *PXP 2009 Tank Leak Detection and Containment at Inglewood Oil Field* report, approved in May 2009, all tanks have secondary containment consisting of a wall, berm, or combination of the two types. The report also concluded that all tank secondary containment structures comply with DOGGR requirements and that the volume of the available secondary containment is capable of containing volumes in excess of the full volume of each tank.

The oil field contains six retention basins; Dabney Lloyd, Vickers 2 Upper, Vickers 2 Lower, Vickers 1, Stocker, and LAI Last Chance. If these basins discharge, they discharge directly or indirectly to the Los Angeles Department of Public Works (LADPW) storm drains. During the dry season, the basins are maintained to be free of debris and are periodically inspected by the County ECC. The basins have two stage outlet control features consisting of outlet orifices and dual water and oil weir systems to prevent oil from reaching the storm drain system. The *PXP Retention Basin Study*, completed in March 2009 and revised in September 2009 and January 2010, analyzed and modeled the capacities of the basins along with a 100-year storm event. The study concluded that the onsite basins have the capability to handle a 100-year storm event without flooding per the CSD requirement. The study further determined that in the event of an oil tank failure during a 100-year storm event, the basin weir system would prevent oil from

going offsite. The County Public Works Department has reviewed and approved the retention basin capacities.

Most of the above ground piping throughout the oil field is not protected by individual pipeline specific secondary containment or basin structures; however, the oil field retention basin system is designed to prevent any fluid from the above ground piping from traveling offsite. Although outside this review period and the CSD boundary, it should be noted that, on April 1, 2019, oil from a leaking pipe was able to flow offsite and into the Culver City storm drain system. Investigation of the path of the oil flow from the leaking pipe indicated a breach in the earthen berm system of the well pad area near the leak. The cause of the damaged berm was determined to be erosion from recent rain fall and damage by service vehicles. As a result of the offsite consequence of the spill, the operator has added a formal inspection protocol of areas to inspect the integrity of the berms necessary to ensure storm water and any other fluid is routed to the oil field retention basin system. The County, through routine inspections completed by the Environmental Compliance Coordinator, is also reviewing the containment berms on a regular basis.

The mitigations for safety and risk of upset required by this provision have been implemented and are considered fully effective at this time, no further analysis is recommended.

New Technology:

Blending of NGLs with oil is standard industry best practice and the transportation of NGL by pipeline significantly reduces the risk to public safety when compared to other modes of transportation such as truck or rail.

As noted above, the propane and natural gas liquids bullets are subject to regulatory agency codes and requirements, therefore, new or modified equipment will be updated as required by future changes to those codes and requirements. New technologies associated with the operation of a steam drive plant will be reviewed by the DRP, SCAQMD, and other interested agencies during review of a project application should a new plant be proposed.

The facility oil tank secondary containment and retention basin systems are sufficient to handle a worst-case oil spill along with a 100-year storm event. As applicable plans such as the ERP and SPCCP are periodically updated and through the annual EQAP audit process, new technologies for the prevention and control of potential leaks or spills are reviewed and can be implemented as applicable, without the need to modify the CSD.

Recommendations to Changes in Implementation:

The requirements for safety and risk of upset to minimize risk of accidents and the release of hazardous materials of this provision have been implemented, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The provision is considered fully effective at this time and no changes to the CSD language are recommended.

4.4 D. GEOTECHNICAL

The operator shall comply with the following provisions:

1. Grading. The operator shall comply with all of the following provisions:

a. All proposed grading shall be subject to prior review and approval by the director of public works.

2. Grading involving up to 5,000 cubic yards and grading associated with the bioremediation farms may be undertaken pursuant to a county master grading Plan stamped by a registered professional engineer and a California certified engineering geologist and approved by the director of public works.

3i. No slope of cut or fill shall have a gradient steeper than two to one (2:1) unless specifically approved by a site specific geotechnical report.

4. Cuts and fills shall be minimized to avoid erosion and visual impacts.

2. Geotechnical Investigations. The operator shall comply with the following provisions:

a. A site-specific geotechnical investigation shall be completed for grading in excess of 5,000 cubic yards, unless associated with the on-site Bioremediation Farms and approved pursuant to a master grading Plan approved by the director of public works, and for any grading that supports or impacts a critical facility as determined by the director. The investigation shall be completed by a California certified engineering geologist and submitted to the director and the director of public works for review and approval, in conjunction with an application for a revised grading permit.

b. A site-specific geotechnical investigation shall be completed for all proposed permanent structures. The investigation shall include analysis and recommendations associated with potential seismically induced ground failure, such as differential settlement and lateral spreading. The geotechnical investigation shall be completed by a California-certified engineering geologist and submitted to the director of public works for review and approval.

3. Erosion Control. The operator shall comply with the following provisions:

a. The operator shall comply with all provisions of an erosion control Plan that has been approved by the director. The erosion control Plan shall be reviewed by the operator every two years to determine if modifications to the Plan are required. Any modifications to the erosion control Plan shall be submitted to the director for review and approval. The erosion control Plan shall include any measures requested by the director.

b. Erosion shall be controlled on all slopes and banks so that no mud or other substances are washed onto public streets or surrounding property. Such control measures may consist of planting and irrigation, dams, cribbing, riprap, sand bagging, netting, berms, or other devices.

4. Restoration of Slopes. Slopes shall be restored to their original grade once the use that required the grading of the slope has been discontinued. However, if restoration of a slope

would negatively affect existing drainage patterns or slope stability, then the slope shall be restored to a grade that avoids these negative effects.

5. *Ground Movement Surveys.* The operator shall conduct ground movement surveys once every 12 months, or more frequently if determined necessary by the director of public works, following all provisions of a ground movement monitoring Plan that is acceptable to DOGGR and the director of public works, that calls for both vertical and horizontal ground movement surveys, at specified survey locations within, and in the vicinity of, the oil field, utilizing high precision Global Positioning System technology, in combination with a network of ground stations (or any alternative technology specified in the ground movement monitoring Plan approved by the director of public works), and following other survey methods outlined in the Plan. The surveys shall be conducted by a California-licensed surveyor. The survey results shall be analyzed in relation to oil field activities, such as production, steam injection, and waterflooding, taking into consideration individual oil producing zones, injection schedules, rates, volume, and pressure. The analysis shall be completed in collaboration by a California-registered professional petroleum engineer, registered geotechnical engineer, and certified engineering geologist. The results of the annual monitoring survey and analysis shall be forwarded to DOGGR and the director of public works. If requested by DOGGR or the director of public works, the operator shall make modifications to the ground movement monitoring Plan. In the event that survey indicates that on-going ground movement, equal to or greater than 0.6 inches at any given location, or a lesser value determined by the director of public works is occurring in an upward or downward direction in the vicinity of or in the oil field, the operator shall review and analyze all claims or complaints of subsidence damage that have been submitted to the operator or the county by the public or a public entity in the 12 months since the last ground movement survey. Based thereon, the operator shall prepare a report that assesses whether any of the alleged subsidence damage was caused by oil operations and submit said report to DOGGR and the department of public works. The department of public works shall review the report to determine if it concurs with its conclusions. If the report concludes that damage has not been caused by oil operations, and the department of public works does not concur in that conclusion, it shall forward its conclusions to DOGGR for its review and possible action. If the report concludes that damage was caused by oil operations and the department of public works concurs with any such conclusion, the department of public works shall forward the department of public works' conclusions to DOGGR and ask DOGGR to evaluate the operator's fluid injection and withdrawal rates to determine whether adjustments to these rates may alleviate the ground movement, and if so, where in the oil field such adjustments should be made. The operator shall implement whatever adjustments in the rates of fluid injection and/or withdrawal that DOGGR determines are necessary and appropriate to alleviate any ground movement damage. The county shall promptly notify the CAP of any such action that is taken pursuant to this subsection. Injection pressures associated with secondary recovery operations (i.e., water flooding) or disposal of produced fluids shall not exceed reservoir fracture pressures as specified in Title 14 of the California Code of Regulations, section 1724.10, and as approved by the DOGGR.

6. *Construction of Permanent Structures.* No permanent structures shall be constructed in an Alquist-Priolo Fault Zone without preparation of a fault study by a California-certified engineering geologist. Following the fault study, no permanent structures shall be placed within 50 feet of a known active fault. The fault investigation report shall be submitted to the director of public works for review and approval.

7. *Oil Field Accelerometer.* The operator shall operate and maintain an accelerometer at the oil field to determine site-specific ground accelerations as a result of any seismic event in the

region (Los Angeles/Orange County and offshore waters of the Santa Monica Bay and San Pedro Channel). Readings from the accelerometer shall be recorded at the oil field and transmitted in real-time to the Caltech Seismological Laboratory. The operator shall cease operations and inspect all oil field pipelines, storage tanks, and other infrastructure following any seismic event that exceeds a ground acceleration at the oil field of 13 percent of gravity (0.13 g) and promptly notify the director. The operator shall not reinstitute operations at the oil field and associated pipelines until it can reasonably be determined that all oil field infrastructure is structurally sound.

8. Pipeline Management Plan. The operator shall maintain and implement a pipeline management Plan that meets the requirements of DOGGR regulations.

9. Paleontological Monitor. The operator shall have a qualified paleontologist, approved by the director, monitor all rough grading and other significant ground disturbing activities in paleontological sensitive sediments. The sensitive sediments that have been identified within the oil field include the Lower to Middle Pleistocene San Pedro Formation and the Middle to Upper Pleistocene Lakewood Formation. A paleontologist will not be required on site if excavation is only occurring in artificial fill or Holocene alluvium.

Summary of Complaints:

Six complaints on property damage were received by the County for this review period (2014 through 2018); the County did not receive any complaints on ground movement. The property damage complaints listed various types of property damage from cracks in walls, garages, driveways, and hills sides. As listed in the analysis section below, each of the complaints was followed up with a property damage claim investigation.

Summary of Issues Raised by the Public:

Members of the public have expressed frustration with the requirements of the provision of the CSD on ground movement. The primary issue involves the lack of updated input from DOGGR on the subject to date, however, all data requested from the operator has been submitted and is under review by DOGGR. As additional input from DOGGR on the ground movement subject in the Baldwin Hills is received, the County will provide the information to the public via the Community Advisory Panel (CAP) meetings and/or the DRP Baldwin Hills website. In the past, DOGGR has expressed that there isn't sufficient data over the years of ground movement testing to suggest a pattern that requires regulatory intervention.

Additional input was received during recent 2019 CAP meetings whereby members of the public have expressed a desire to have the follow up geotechnical investigations performed by a different consulting firm than those involved in the annual ground movement survey reports. Currently, and consistent with Provision 22.310.050.D.5, the geotechnical consulting firm that assists with the preparation of the annual ground movement survey reports performs the follow-up investigations for property damage complaints. Also, consistent with CSD requirements, the property damage reports are completed by California-registered geotechnical engineers and certified engineering geologists. As these subject matter experts assist in the preparation and review the ground movement survey reports, they are very familiar with the geotechnical issues of the Baldwin Hills and are therefore uniquely qualified to perform the property damage complaint investigations. Since the current practice meets the requirements of the CSD the County does not recommend a change at this time, however, in deference to the interest of the

public on the issue, the County suggests the operator consider the use of an alternate firm for the property damage complaint investigations.

Analysis of Compliance and Effectiveness:

All grading at the oil field has been reviewed and approved by the County Public Works Department by the annual submittal of a master Grading Plan, submitted in October or November of each year. Grading associated with the operation of the bio farms is also included in the master Grading Plan. The Plan is prepared by a registered professional engineer and a California certified engineering geologist. Approval of the master Grading Plan by the County ensures no slopes have a gradient greater than two to one without a geotechnical report and that cut and fill is minimized to avoid erosion and visual impacts. The grading projects at the oil field to date have been 5,000 cubic yard or less, therefore, a site-specific geotechnical investigation pursuant to Provision 22.310.050.D.2.a has not been required. Geotechnical investigations have been completed for the installation of permanent structures at the oil field with the geotechnical reports submitted along with the County DRP Site Plan and Building and Safety permit applications. Examples of permanent structures requiring this analysis include the installation of two water tanks at the Upper Water Plant.

The *PXP 2009 Erosion Control Plan Inglewood Oil Field* was initially submitted on May 26, 2009, revised in October 2009 and approved by County Public Works in May 2010. The Plan describes the oil field site and the surrounding public streets and includes a discussion on typical erosion control strategies and the erosion control strategies used onsite at the oil field. Restoration of slopes at the oil field from grading activities has been completed consistent with the Erosion Control Plan and the master Grading Plan. In addition to the Erosion Control Plan, the oil field Storm Water Pollution Prevention Plan (SWPPP) contains measures and management practices to control mud from washing onto public streets or surrounding properties. The operator utilizes an environmental consulting company with expertise in storm water management to assist them in the implementation of the provisions of the SWPPP.



Ground movement surveys have been completed annually as required pursuant to the *Accumulated Ground Movement Plan* approved by County Department of Public Works (DPW) on November 10, 2009 and DOGGR on November 30, 2009. The surveys are completed using Global Positioning (GPS), Geodetic Leveling, and DifSAR processes and procedures as documented in the Ground Movement Monitoring Plan as approved by DPW and DOGGR. Baseline survey reports were submitted in January 2011 with revisions in March and October 2012. Annual survey reports are submitted each year to DOGGR and the DPW as required, the reports are available on the Inglewood Oil Field web site at www.inglewoodoilfield.com.

Results of the ground movement surveys for 2014 through 2018 indicated vertical movement equal or greater than 0.6 inches in each year except 2015. CSD Provision 22.310.050.D.5 requires the operator to investigate all property damage complaints from the public in any year the 0.6-inch trigger is recorded. The previous and current operators have provided follow-up geotechnical investigations for each of the damage complaints independent of the Provision 22.310.050.D.5 trigger requirement. As noted above, six property damage complaints were received during this review period and five

follow-up investigation reports were completed (one complaining party did not provide access to the subject property). Results of the reports, and as concurred by Public Works and DOGGR geologists, determined local factors to be the most likely cause of the cracking of structures. These factors include construction in areas with substantial slopes on unconsolidated, unstable material that was not properly compacted at the time of construction; and that the construction of many residences preceded modern building codes and therefore were not built to today's more stringent construction standards. In addition, the areas surrounding the oil field are all within a seismically active location. The combination of all these factors is more likely to contribute to ground movement and potential property damage than the operations at the Oil Field which is monitored by the County and DOGGR.

No permanent structures have been constructed in an Alquist-Priolo Fault Zone since the adoption of the CSD, therefore, the preparation of a fault study required by subsection D.6 has not been required to date. The office, warehouse, and associated buildings are built within the fault zone overlay; however, construction of these structures predates the CSD requirement.

The oil field accelerometer seismic station was installed and began collecting data on May 20, 2009. The data is transmitted in real time by cell link to the CalTech Seismological Laboratory where the data is recorded and stored. The accelerometer has not measured ground acceleration in excess of the 13 percent of gravity (0.13 g) criteria of this provision to date, thus the oil field has not been required to shut in due to a ground acceleration event.

The Pipeline Management Plan required by subsection D.8 was submitted to DOGGR as required in December 2009; it has not been necessary to update the Plan to date.

The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

The scientific equipment used for the technical studies required pursuant to this provision is considered to be state of the art. The accelerometer is scheduled to be updated by CalTech in 2019. No recommendations for new technology are recommended at this time.

Recommendations to Changes in Implementation:

As discussed above, the County recommends the operator consider the use of an alternate geotechnical engineering firm for the property damage complaint follow-up investigations. The use of an alternate firm would bring an additional team of subject matter experts to the issue.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.5 E. NOISE ATTENUATION

All oil operations on the oil field shall be conducted in a manner that minimizes noise and shall comply with the following provisions:

- 1. Noise Limits. The operator shall comply with the following provisions:*

a. All oil operations on the oil field shall comply with the noise provisions of Chapter 12.08 of Title 12 (Environmental Protection) of the County Code, with the exception of drilling, re-drilling, and reworking, which are exempt from the provisions of said chapter.

b. Hourly, A-weighted equivalent noise levels associated with drilling, re-drilling, and reworking shall not elevate existing baseline levels by more than five dBA at any developed area. For daytime activities (7:00 a.m. to 7:00 p.m.) existing baseline noise levels shall be defined as the maximum daytime equivalent noise level (Leq) at the closest monitoring site as shown in Table 4.9.3 of the 2008 Baldwin Hills Community Standards District Environmental Impact Report. For nighttime activities (7:00 p.m. to 7:00 a.m.), existing baseline noise levels shall be defined as the minimum nighttime equivalent noise level (Leq) at the closest monitoring site as shown in Table 4.9.3 of the 2008 Baldwin Hills Community Standards District Environmental Impact Report. Updated baseline noise levels may be set, and additional monitoring sites may be established, from time to time by the director. In no case shall baseline noise levels include any drilling, re-drilling, or reworking operations.

c. Noise produced by oil operations shall include no pure tones when measured at a developed area.

2. *Backup Alarms.* Backup alarms on all vehicles operating within the oil field shall be disabled between the hours of 8:00 p.m. and 8:00 a.m. During periods when the backup alarms are disabled, the operator shall employ alternate, low-noise methods for ensuring worker safety during vehicle backup, such as the use of spotters.

3. *Quiet Mode Drilling Plan.* All drilling and re-drilling on the oil field between the hours of 6:00 p.m. and 8:00 a.m. shall be conducted in conformity with a quiet mode drilling Plan that has been approved by the director and the director of public health. The quiet mode drilling Plan shall be reviewed by the operator every year to determine if modifications to the Plan are required. The operator shall make changes to the Plan if requested by the director or the director of public health. Any modifications to the quiet mode drilling Plan shall be submitted to the director and the director of public health for review and approval. The quiet mode drilling Plan shall include any measures requested by the director or the director of public health.

4. *Equipment Servicing.* All noise producing oil field equipment shall be regularly serviced and repaired to minimize increases in pure tones and other noise output over time. The operator shall maintain an equipment service log for all noise-producing equipment.

5. *Deliveries to the Oil Field.* Deliveries to the oil field shall not be permitted after 8:00 p.m. and before 7:00 a.m. except in cases of emergency. Deliveries on Sundays or legal holidays shall not be permitted after 8:00 p.m. or before 9:00 a.m., except in cases of emergency.

6. *Deliveries within the Oil Field.* Deliveries to areas of the oil field located within 500 feet of any residential property shall not be permitted after 5:00 p.m. or before 7:00 a.m. except in cases of emergency. Deliveries to such areas on Sundays or legal holidays shall not be permitted after 5:00 p.m. and before 9:00 a.m., except in cases of emergency.

7. *Time Limits for Construction.* Construction of permanent structures shall not be permitted after 7:00 p.m. and before 7:00 a.m., or during Saturdays, Sundays, or legal holidays.

8. *Construction Equipment.* All construction equipment shall be selected for low-noise output. All construction equipment powered by internal combustion engines shall be properly muffled and maintained.

9. *Construction Equipment Idling.* Unnecessary idling of construction equipment internal combustion engines is prohibited.

10. *Worker Notification.* The operator shall instruct employees and subcontractors about the noise provisions of this subsection E.5 prior to commencement of each and every drilling, redrilling, reworking, and construction operation, and shall annually certify to the director that such employees and subcontractors have been properly trained to comply with such noise provisions. The operator shall prominently post quiet mode policies at every drilling and redrilling site.

Summary of Complaints:

A total of 23 complaints for the years 2014 through 2018 have been logged regarding noise from the oil field with 10 identified with oil field activities, 2 associated with the SCE facility located on the oil field, 2 with offsite sources and 9 unknown as listed in the table below.

Noise Complaints 2014 through 2018	
Number of Complaints	Source
9	Unknown
2	SCE Facility
2	Drilling Rig
2	Maintenance Rig (banging pipe)
1	Crane Use
1	Pumping Unit
1	Well Abandonment near West LA College
1	Gas Meter Equipment
1	Heavy Equipment for Catch Basin Cleanout Activities
1	Oil Field Equipment
1	Offsite Construction Activities
1	Fourth of July Fireworks
23	Total

For noise that was identified with a source from the oil field, a drill rig, maintenance rig, or piece of oil field equipment was identified to be the primary cause of noise. Noisy equipment operation, such as the pumping unit noted in the table above, was ceased when identified and the equipment was repaired or replaced by the operator in a timely fashion. Maintenance of the catch/debris basins is required by the CSD and the noise from the equipment necessary to perform the work was limited to daytime, weekday hours.

Summary of Issues Raised by the Public:

Noise from the oil field has not caused any significant issues nor has the County received any input on noise during this review period.

Oil field noise was a discussion issue of the Settlement Agreement dated July 15, 2011 negotiated between concerned public parties, the County and the operator. The agreement revised the CSD with regards to allowable nighttime maximum noise levels at baseline monitoring locations. The agreement lowered the nighttime (10:00 p.m. to 7:00 a.m.) maximum noise level above the baseline value from the 5 dBA referenced in this provision to 3 dBA for

drilling, redrilling, and reworking activities. The agreement also stipulated that if those operations elevate nighttime baseline noise levels by more than 10 dBA for more than 15 minutes in any one hour, the source of the noise must be identified, and steps implemented to avoid such a noise elevation in the future.

Analysis of Compliance and Effectiveness:

Noise measurements were taken at seven sites around the perimeter of the oil field to assist in the preparation of the noise analysis section of the Final Environmental Impact Report, Baldwin Hills Community Standards District, October 2008 (FEIR). The FEIR was prepared as part of the environmental documentation used to develop the CSD. The seven monitoring sites were selected to represent the closest residential, recreational and educational uses to the oil field and included locations in Ladera Heights, Windsor Hills, Culver Crest, Kenneth Hahn State Recreation Area, and West Los Angeles College. The results of the noise monitoring were used to set baseline values for the noise limit criteria of sub-section E.1.b. of this provision.

The revised baseline monitoring locations were developed by a team of noise experts from the County Health Department, County DRP, the County ECC, and noise consultants assisting the County. PXP, the operator at the time, also provided noise expert consultants to assist with the determination of the baseline monitoring site selection. Six new monitoring sites were selected (the Settlement Agreement incorrectly references 11 monitoring locations) and monitoring occurred for 72 hours to generate the revised baseline data. The baseline monitoring data reports are available at the oil field web site at www.inglewoodoilfield.com.

Sub-section E.1.b requires that noise levels from the operation of the oil field drilling, redrilling, and reworking shall not elevate existing baseline levels by more than 5 dBA at any developed area. As noted above, this requirement was revised to a maximum of 3 dBA from 10:00 p.m. to 7:00 a.m. by the Settlement Agreement for nighttime operations. Prior to the commencement of drilling, redrilling or reworking operations, noise monitoring equipment is set up at one of the six baseline monitoring stations and monitoring occurs 24 hours a day until the well work activity is completed. The monitoring location is selected by a noise expert consulting for the operator during an onsite visit; this review also includes direction to the operator in sound wall installation locations.

The County Department of Public Health (DPH) conducts noise monitoring at sampling points, dates, and times of day selected at random in locations within the surrounding communities with the highest risk of noise exposure from field operations. Noise monitoring was completed by DPH 59 times between February 12, 2014 and August 7, 2018 during both day and night hours, on weekends, and during different seasons with 60-minute sampling intervals. The average noise level recorded is 54.5 dBA, which is within the community noise background level.

Sub-section E.1.c requires that noise produced by oil operations shall include no pure tones when measured at a developed area. Pure tone noise is noise in which a single frequency stands out, usually high pitched, and can be more noticeable than sources that do not contain pure tones. The County has not documented any issues regarding pure tone noise to date.

The Quiet Mode Drilling Plan (QMDP) was first submitted in February 2009 and revised in April, July and September 2009. The Plan provides for quiet mode measures to reduce noise from drilling activities. Many of the measures are intended to reduce metal to metal contact activities known to increase noise around drilling operations. The QMDP also includes training of service personal and subcontractor staff and quiet mode signage posted at drilling sites listing the quiet mode drilling rules. The training occurs twice each day prior to the start of each drilling shift. As

noted above, two noise complaints associated with the drilling rig occurred during this review period. The drilling rig was approximately 600 feet from a residence for both subject complaints which occurred in March 2014. No recent drilling activity has occurred at the oil field with the last well drilled in June 2014.

The Annual Well Increase Evaluation, December 2011, included a discussion of the effectiveness of the CSD noise provisions. The report identified that some of the noise complaints may have been associated with operation of the pipe storage rack. In response to this finding, the storage rack was relocated to the center of the oil field east of the Vickers bioremediation farm. The new location is a greater distance from residential noise receptors. The report also concluded that none of the noise complaints were found to be related to drilling operations. The report concluded that the CSD has been effective at keeping noise to a level that would be considered protective of the health and general welfare of the public.

The County ECC checks field operations with a portable noise meter for compliance during the regular EQAP site inspections and annual audits. The QMDP also includes the other noise minimization measures required by this provision. Back-up alarms are not used during nighttime hours and deliveries to the oil field and within the oil field are restricted as required in sub-sections E.5 and E.6. The delivery restrictions are posted at the main gates consistent with the requirements of Provision 22.310.050.M, *Signs*. The operator complies with the time limits for construction of permanent structures, no construction occurs after 7:00 p.m. and before 7:00 a.m., or during Saturdays, Sundays, or legal holidays.

Subsections E.8 and E.9 list requirements for construction equipment maintenance and operation. Equipment is serviced and is properly muffled pursuant to the manufacturer's specifications. Subsection E.10 lists the requirement for worker notification of the noise minimization measures listed by this condition. All employees and sub-contractors are trained to comply with these noise provisions each year during annual certification training.

As documented above, the noise provisions of the CSD have been implemented, are ongoing, and considered to be fully effective at this time, with no further analysis recommended.

New Technology:

The noise minimization measures required by this provision and as contained in the QMDP represent current best industry practice to limit noise from the operation of an oil field. In addition, this provision requires that *"oil operations on the oil field shall be conducted in a manner that minimizes noise..."*, thus new technologies in noise minimization methods can be implemented as applicable to oil field operations in the course of ongoing compliance monitoring without the need for amendments to the CSD.

Recommendations to Changes in Implementation:

This provision is implemented as intended and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No recommendations in the CSD language are recommended at this time.

4.6 F. VIBRATION REDUCTION

All oil operations on the oil field shall be conducted in a manner that minimizes vibration. Additionally, vibration levels from oil operations at the oil field shall not exceed a velocity of 0.25 mm/s over the frequency range 1 to 100 Hz at any developed area.

Summary of Complaints:

The County has received five complaints associated with vibration from 2014 through 2018. Two of the complaints were associated with heavy equipment used to clean out a debris basin in advance of winter weather as required by CSD Provision 22.310.050.C.4.b. One complaint was associated with a resident landscaping project and the source of two complaints was not identified.

Summary of Issues Raised by the Public:

The County did not receive any input on vibration during the 2014 through 2018 time frame except for the complaints discussed above.

Analysis of Compliance and Effectiveness:

The *Final Environmental Impact Report, Baldwin Hills Community Standards District, October 2008 (FEIR)*, prepared as part of the documentation necessary to develop the CSD, analyzed potential vibration issues at the oil field. Section 4.9 of the FEIR, *Noise and Vibration*, includes vibration monitoring data for typical drilling activities at the oil field. Results of the drilling activity vibration monitoring indicated the measured vibration levels did not exceed the criteria specified by this provision. The vibration criteria were not exceeded even with some monitoring data points as close as 50 feet from the drilling rig. Based on these monitoring results, the FEIR concluded that vibration impacts from drilling would not be considered significant.

The report prepared by the County in response to the request by PXP in October 2011 to increase the annual number of wells allowable for drilling or re-drilling, the *Annual Well Increase Evaluation, December 2011*, includes analysis on the implementation of the vibration provision of the CSD. The report concluded that the CSD requirements have been effective at keeping vibration to a level that is considered protective of the health and general welfare of the public. Section 22.310.060.F of the CSD, *Vibration Monitoring*, provides for the County Public Health Department to request vibration monitoring as deemed necessary in areas surrounding the oil field. Based on the compliance reports documented for the oil field and the minimal amount of public complaints on vibration; additional vibration monitoring has not been deemed necessary to date.

The condition is considered fully effective at this time, no further evaluation is recommended.

New Technology:

No other new technologies for vibration minimization for oil field operations have been identified at this time.

Recommendations to Changes in Implementation:

This requirement has been implemented and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.7 G. BIOLOGICAL RESOURCES

All oil operations on the oil field shall be conducted in a manner that minimizes impacts to biological resources and shall comply with the following provisions:

1. Oil Spill Response. The operator shall comply with all provisions of an Emergency Response Plan ("ERP") that has been approved by the director, to protect biological species and to revegetate any areas disturbed during an oil spill or clean-up activities. The operator shall make changes to the ERP if requested by the director. Any modifications to the ERP shall be submitted to the director for review and approval. The ERP shall include any measures to protect biological species that may be requested by the director.

2. Special Status Species and Habitat Protection. The operator shall comply with all provisions of a special status species and habitat protection Plan that has been approved by the director. The operator shall make changes to the Plan if requested by the director. Any modifications to the Plan shall be submitted to the director for review and approval. The special status species and habitat protection Plan shall include any measures requested by the director.

3. Habitat Restoration and Revegetation Plan. Prior to any disturbance of sensitive natural habitat areas, as identified in the special status species and habitat protection Plan, the operator shall hire a biologist, approved by the county, to conduct a survey of the area to determine if significant impact to sensitive natural habitat, including coastal sagebrush, coyote bush scrub, riparian scrub, and oak woodland will occur. If the biologist determines that significant impact to sensitive natural habitat will occur, then the operator shall have a county-approved restoration specialist, with expertise in southern California ecosystems and revegetation techniques, prepare a habitat restoration and revegetation Plan. The Plan shall be submitted to the director for review and approval. The director shall make best efforts to complete the review of the Plan as expeditiously as possible and shall then either approve the Plan or provide the operator with a list of specific items that must be included in the Plan prior to approval. No removal of sensitive natural habitat shall occur until the Plan has been approved by the director. The habitat restoration and revegetation Plan shall include any measures requested by the director.

4. Pre-Construction Surveys. The following surveys shall be conducted prior to any significant vegetation removal in sensitive natural habitat as identified in the special status species and habitat protection Plan.

a. The operator shall hire a county-approved ecologist/botanist to conduct sensitive plant surveys.

b. The operator shall hire a county-approved biologist to conduct sensitive wildlife surveys in habitat areas that could support sensitive wildlife species.

c. The operator shall hire a county-approved biologist to conduct breeding and nesting bird surveys if the construction activities would occur during the breeding season (February 1 to August 31 for raptors, and March 15 to September 15 for sensitive/common birds).

d. The operator shall hire a county-approved wetland delineator to delineate any wetlands that would be affected by construction.

5. *Listed Plant or Wildlife Species.* If federal- or State-listed plant or wildlife species are found, then the operator shall comply with all applicable United States Fish and Wildlife and California Department of Fish and Game rules and regulations.

6. *Construction Monitoring.* If the pre-construction surveys find sensitive plant, wildlife species, or nesting birds, a biological monitor hired by the operator, and approved by the County, shall be on site during construction to monitor the construction activities. The biological monitor shall be responsible for the following:

- a. *Establishing a 300-foot buffer around any active breeding bird nests.*
- b. *Assuring that vegetation removal does not harm sensitive wildlife species.*
- c. *Monitoring the construction area for sensitive wildlife species and relocating them to suitable habitat outside of the construction area.*
- d. *Ensuring that exclusionary fencing is installed around the construction area to prevent sensitive wildlife species from entering the construction area.*

7. *Tree and Riparian Scrub Removal.* Removal of native or non-native trees and riparian scrub vegetation shall be scheduled, as possible, for removal outside the nesting season to avoid impacts to nesting birds. If avoidance of removal of trees or riparian scrub during the recommended periods is not possible, a county-approved biologist shall perform a survey to ensure that no nesting birds are present prior to removal. If for any reason a nest must be removed during the nesting season, the operator shall provide written documentation to the director demonstrating concurrence from the United States Fish and Wildlife Service and California Department of Fish and Game authorizing the nest relocation and a written report documenting the relocation efforts.

8. *Habitat Restoration.* Within 60 days of completion of construction activities that have significantly impacted sensitive natural habitat, the operator shall begin habitat restoration consistent with the approved native habitat restoration and revegetation Plan discussed in subsection E.7.c. Restoration priority shall be given to areas of degraded habitat connecting areas of higher quality habitat and where restoration would produce larger corridors to support the migration and movement of wildlife. The operator shall replace any significant loss of sensitive natural habitat at the following ratios:

- a. *1:1 for each acre of coastal sagebrush or coyote bush scrub.*
- b. *2:1 for each acre of riparian scrub or oak woodland.*

Summary of Complaints:

No complaints regarding the biological resources or the provisions for protection of biological resources have been received by the County.

Summary of Issues Raised by the Public:

No issues have been raised by the public on biological resources or the provisions for protection of biological resources.

Analysis of Compliance and Effectiveness:

The Emergency Response Plan (ERP), current version dated June 2019, was updated for specific response considerations for biological resources in March 2010. The ERP is submitted to the following agencies; California Division of Oil, Gas, Geothermal Resources (DOGGR), California Department of Fish and Wildlife Office of Spill Prevention and Response (OSPR), U.S. Environmental Protection Agency Region 9, California State Lands Commission Marine Facilities Division Planning Branch, and the U.S. Department of Transportation Office of Pipeline Safety. To date, the ERP has not been needed to be activated to protect biological resources at the oil field.

The *Special Status Species and Habitat Protection Plan* was first prepared in 2009 and was approved on November 15, 2010. The Plan was prepared by a County approved ecologist/biologist. Compliance with subsections G.2 through G.8 is documented annually since 2010. Annual compliance documentation consists of a *Special Status Species Compliance Report*. The report documents the status and activities for the subject year involving biological resources at the oil field and includes an appendix compliance matrix which details the construction and well activities, any impacts to biological resources and the associated surveys or compliance requirements conducted pursuant to this provision. The reports are reviewed each year by the County.

Prior to the initiation of drilling activities for each year, the operator provides a County approved biologist with the forthcoming drilling schedule and associated compliance matrix for review. The biologist prepares a schedule for pre-construction biological surveys required by subsection G.4 and the surveys are completed within one week of the initiation of construction activities or vegetation removal. Monitoring occurs if necessary and a final survey is conducted upon completion of construction activities to document final impacts. Biological surveys are submitted with each of the site Plan permit requests submitted to the county for each well proposed to be drilled. Drilling activities during this review compliance period (2014 through 2018) were completed by June 2014 with a total of 18 wells drilled; none of these wells required a biological survey.

Construction projects may also impact sensitive resources and require pre-construction biological surveys. Biological surveys for construction projects for the years 2014 through 2018 are summarized in the table below.

Construction Project Biological Survey Summary 2014-2018					
Year	Number Projects	Nesting Bird	Additional Bird Surveys Required	Vegetation	Wildlife
2014	12	Yes	No	No	No
2015	2	Yes	No	No	No
2016	3	Yes	No	No	No
2017	0	No	No	No	No
2018	0	No	No	No	No

The habitat restoration requirements of subsection G.8 have not been triggered to date because the cumulative amount of sensitive habitat disturbed has not reached the one-acre criterion, therefore, no habitat restoration activities have occurred at the oil field. A habitat restoration plan will be prepared and submitted to the County for review and approval when the impact to sensitive habitat reaches the one-acre trigger.

The provision is considered fully effective at this time noting that the habitat restoration requirements have not been triggered to date, no further analysis is recommended.

New Technology:

The ERP, special status species and habitat protection, and habitat restoration plans required by this provision are submitted and approved by regulatory agencies. As these plans are periodically updated and/or the CSD language allows flexibility for additional measures as required by the County, improvements in habitat protection and restoration can be required by the County without the need for amendments to the CSD and can be adopted as they arise. No improvements are deemed necessary at this time and none are proposed.

Recommendations to Changes in Implementation:

This requirement has been implemented and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.8 H. CULTURAL/HISTORIC RESOURCES

The operator shall comply with all of the following provisions:

- 1. Cone Trust House. Oil operations shall not result in impacts to the Cone Trust House.*
- 2. Archeological Training. The operator shall provide archeological training for all construction personnel who will be involved with ground disturbance activities at the oil field. All such construction personnel shall be required to participate in the training and will receive training material prepared by a qualified archaeologist prior to working on ground disturbance activities.*
- 3. Construction Treatment Plan. The operator shall comply with all provisions of a construction treatment Plan, approved by the director, to ensure that any new archeological discoveries are adequately recorded, evaluated, and, if significant, mitigated. In the event that unknown archaeological artifacts are encountered during grading, clearing, grubbing, and/or other construction activities, work shall be stopped immediately in the vicinity of the find and the resource shall be evaluated by a qualified archaeologist, approved by the director. The construction treatment Plan shall include any measures requested by the director.*

Summary of Complaints:

No complaints on cultural or historic resources have been received from the public. The oil field is private property and is not open to the public.

Summary of Issued Raised by the Public:

The County received comments during the scoping comment period for the Periodic Review from an Environmental Group coalition. The comments concerned consultation with the Tongva Nations, Tongva Nation resources and suggested mitigation measures for tribal cultural resources. Section 4.12 of the Baldwin Hills CSD EIR addressed cultural resources including the potential for presence of archaeological resources at the oil field. Over 30 cultural resource investigations have been conducted within ½ mile of the Inglewood Oil including a study completed in April/May 2007 specific to the EIR to identify any existing resources that would be potentially affected by activities on the oil field. Two historic archaeological sites, both trash

scatters consisting of bottles and other refuse dated between 1915 and 1935, and a historic architectural resource, the Cone Trust house, were identified.

Due to the fact that field survey could not exclude the possibility that unrecorded buried archaeological material could exist and be encountered during grading, clearing, grubbing, and/or other construction activities mitigation measures were developed to protect potential cultural resources. Baldwin Hills CSD EIR mitigations measures CR.2-1 and CR.2-2 as summarized in the table below were incorporated into the CSD as Provision 22.310.050.H.

Cultural Resource Mitigation Measures/CSD Requirements		
Mitigation Measure	Summary	CSD Provision
CR.2-1	Training of construction workers to identify sensitive archeological resources.	22.310.050.G.1 Worker Training
CR.2-2	Contract with a qualified archeologist to evaluate and record any unknown cultural sites that may be discovered during construction.	22.310.050.G.2 Construction Treatment Plan

Analysis of Compliance and Effectiveness:

The Cone Trust House and surrounding area are off limits to oil field staff to prevent any impacts to the historic building. A representative from the Cone Fee Family Trust sits on the Community Advisory Panel (CAP). A discussion of the significance of the Cone Trust House is included in the cultural resource sensitivity training of the oil field archaeological training program.

The archeological training program, as required by subsection H.2, was initially conducted on May 26, 2009. This training program is repeated annually along with the other employee awareness training requirements of the CSD.

The *Construction Treatment Plan* was initially submitted in May 2009, revised in July 2010, and was formally approved on January 24, 2011. The Plan includes a cultural history of the oil field site, an overview of cultural resource artifacts, the presence of cultural resources at the oil field, a discussion of the Cone Trust House, and a section on cultural resources sensitivity training. The Plan also includes the Inadvertent Cultural Resource Discovery and Impact Form, Cultural Resource Training Materials, and an Inadvertent Cultural Resource Discovery Communication Chart. The Plan is available on the oil field web site at www.inglewoodoilfield.com. No incidents requiring the implementation of the Inadvertent Cultural Resource Discovery procedure occurred during the 2014 through 2018 time period covered by this report.

The cultural resource training along with the Cultural Resource Discovery and Impact Form and Inadvertent Cultural Resource Discovery Communication Chart provide measures to protect potential cultural resources. In addition, the qualified archaeologist as required through CSD subsection H.2 can consult with representatives from the Tongva Nations as applicable for a discovery of cultural resources. The condition is considered fully effective at this time and no further evaluation is recommended.

New Technology:

The annual cultural sensitivity and archaeological training required under Provision 22.310.050.H.2 allows for the introduction and implementation of new technologies in cultural resource protection as they become available and applicable to the oil field. However, no

improvements are identified at this time. If in the future improvements are deemed merited, they can be adopted as part of compliance review without the need for a Periodic Review.

Recommendations to Changes in Implementation:

This requirement has been implemented and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.9 I. LIGHTING

Outdoor lighting shall be restricted to only those lights which are required by code for the lighting of building exteriors, drilling, and redrilling rigs and for safety and security needs. In addition, the operator shall comply with the following provisions:

1. Screening. All new point lighting sources within the oil field shall be screened and directed to confine direct rays to the oil field and to prevent offsite spillover lighting effects to the extent feasible.

2. Lighting Plan. A detailed lighting Plan shall be prepared for each new permanent structure and submitted to the director for review and approval. No work may be commenced on such permanent structure until the lighting Plan therefore has been approved by the director. The lighting Plan shall include any measures requested by the director.

Summary of Complaints:

No complaints regarding lighting have been documented for the period 2014 through 2018.

Summary of Issues Raised by the Public:

The County has not received any concerns regarding the lighting at the Inglewood Oil Field.

Analysis of Compliance and Effectiveness:

Lighting at the oil field is primarily associated with the gas plant and tank farm facilities. Additional lighting is used with drill rig equipment as those operations occur 24 hours a day; office and outbuilding security lighting, and with limited vehicle traffic. The gas plant and the tank farms require lighting for operational and safety reasons. The lighting fixtures are screened to orient the light downward toward the area requiring illumination as feasible. Other lighting, such as security lighting at the office building, uses hood type screening fixtures to focus the light downward. Shortly after the CSD was implemented in November 2008, an assessment of all oil field lighting was completed to confirm compliance with the CSD lighting provisions and to confirm that there were no offsite lighting impacts.

Lighting for drilling rig operations at the oil field has been minimized to the maximum extent feasible given the operational and safety requirements necessary. Lights are focused downward from the monkey board of the drilling derrick as opposed to ground-based flood lighting orientated upwards. Other rig operations at the oil field such as well reworking rigs are limited to daytime operations from 7:00 am to 7:00 pm as required by subsection BB.3. Except for drill rigs which are required and permitted to operate 24 hours a day, SPR operations policy for all other rig operations in the oil field is to limit work activities to day light hours only and to avoid using lighting whenever possible. When operational or safety issues require working past sundown, as may occur during the wintertime, portable lights are brought in to complete the

necessary work. These portable lights are shielded and focused downward toward the work area and work is halted by 7:00 pm as required by the CSD.

No new permanent structures requiring a lighting Plan have been proposed by the previous operators or SPR, therefore, CSD provision E.9.b has not been activated to date.

Lighting at the oil field meets the criteria outlined in CSD Provision 22.310.050.I. Lighting has not been an issue with the public, the provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

New permanent structures at the oil field are subject to CSD Provision 22.310.050.I.2 which requires a lighting Plan approved by the County. As such, as new technologies in lighting become available, the County can require implementation of those technologies through the lighting Plan review and approval process for any new permanent structure.

Recommendations to Changes in Implementation:

The lighting at the oil field is consistent with the CSD requirements for lighting and thus the provision has been implemented; no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The lighting at the oil field is in compliance with the CSD requirement and there have been no complaints or public issues from oil field lighting to date. Therefore, no changes in the CSD language are recommended.

4.10 J. LANDSCAPING, VISUAL SCREENING, IRRIGATION AND MAINTENANCE

The operator shall comply with the conceptual landscaping Plan for the oil field prepared by Mia Lehrer & Associates, dated October 2008, on file at the department of regional planning, which is intended to beautify and screen the oil field from adjoining residential, recreational, and institutional areas or adjacent public streets or highways. Landscaping required by this Plan shall be completed in phases over a two-to five-year period as approved by the director. All landscaping on the oil field shall be routinely inspected (on at least a monthly basis) and maintained in a neat, clean, and healthful condition, including proper watering, pruning, weeding, fertilizing, and replacement of plants as needed. Litter shall also be removed on a regular basis.

Summary of Complaints:

Two complaints were received on landscaping during this review period. One complaint stated the landscaping was unacceptable, but the complaining party did not follow up with the operator on the issue. The second complaint involved landscaping trees/plants damaged by high winds in March 2015. The ECC followed up on the damaged trees on March 26, 2015 with an inspection and noted several recently planted trees required readjustment of support poles which was corrected by the landscape contractor. Subsequent inspections found the subject trees growing normally and in good condition.

Summary of Issues Raised by the Public:

Input on the aesthetics of the oil field relative to vegetation and landscape screening was received by the County in comments solicited for the Periodic Review. Culver City commented that the landscaping does not adequately screen the oil field from Culver City and requested the

CSD be revised to include more landscaping measures to screen the oil field from adjacent residences, parks, and public view areas. However, it should be noted that Culver City was a participating litigant in, and in agreement with the terms of, the Settlement Agreement which revised and enhanced the CSD landscaping plans. The landscaping section of the Settlement Agreement is further discussed below.

Input on the landscaping effort was also received as part of the Settlement Agreement dated July 15, 2011 negotiated between concerned public and government parties, the County and PXP (now SPR). The agreement requires the operator to prepare and implement a series of landscaping plans that enhance the *Mia Lehrer Landscape Improvements Concept Plan* referenced by this provision. The agreement further requires the landscape plans be submitted to the Community Advisory Panel (CAP) for review, and to install the first two phases of landscaping within nine months of County final approval of the plans. The agreement further required the operator will complete the entire landscaping required by the County-approved Landscape Plans within three years after approval by the County of the final phase. As noted below, the landscaping plans and installations were completed pursuant to the revised agreement.



Analysis of Compliance and Effectiveness:

The *Landscaping Plan Inglewood Oil Field* was first submitted in May 2009 and was revised in November 2010. This base Plan outlines seven phases of landscaping effort, prioritized by concerns for screening areas of public corridors and water conservation considerations with subsequent plans prepared for each landscaping phase. Landscaping for Phase 1 and 2 involved the areas at the Ladera Crest residential viewshed looking north and along the Windsor Hills/La Brea traffic corridor viewshed, respectively. Phase 3 landscaping addresses the Ladera Crest residential viewshed looking east. Phases 4 and 5 involve a roadway buffer along La Cienega Boulevard. Phase 6 is a landscape buffer for the Fairfax Avenue roadway and Phase 7 is a landscaping buffer for Stocker Street. All landscaping was completed in December 2018 as listed in the table below.

Phase	Plan	Landscaping
1 - Ladera Crest View-shed North	Approved May 2011	Completed October 2011
2 – Windsor Hills/ La Brea View-shed	Approved October 2011	Completed June 2012
3– La Brea View-shed East/La Cienega Blvd.	Approved June 2013	Completed December 2018.
4 - La Cienega Blvd. Roadway	Approved June 2013	Completed November 2016
5 – La Cienega Blvd. Roadway	Approved June 2013	Completed November 2016
6 – Fairfax Avenue Roadway	Approved April 2016	Completed November 2017
7 – Stocker Street Roadway	Approved April 2016	Completed December 2018.

The ECC reviews the landscaping during site inspections and the landscaping contractor is monitoring the progress of the recently completed phases and will replace any trees or shrubs as necessary during the calendar year 2019. All landscaping required by the CSD and Settlement Agreement has been completed. This provision is considered fully effective at this time, no further analysis is recommended.

New Technology:

Water saving drip irrigation is used where feasible; use of recycled water has not been implemented to date because it is not available to the oil field at this time.

Recommendations to Changes in Implementation:

As noted above, all required landscaping has been completed and is being monitoring by the County and the operator. This provision is implemented as intended, no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

This provision has been implemented and was augmented by the Settlement Agreement and no changes in the CSD language are recommended.

4.11 K. OIL FIELD WASTE REMOVAL

The operator shall comply with the following provisions:

1. Waste Collection. All drilling, redrilling, and reworking waste shall be collected in portable steel bins compliant with United States Department of Transportation standards. Any drilling, redrilling, and reworking wastes that are not intended to be injected into a Class II Well, as permitted by DOGGR, shall be removed from the oil field no later than 30 days following completion of the drilling, redrilling, and reworking. This provision does not apply to active sumps and mud pits.

2. Waste Discharge. No oil field waste shall be discharged into any sewer, storm drain, irrigation systems, stream or creek, street, highway, or drainage canal. Nor shall any such wastes be discharged on the ground provided that the foregoing shall not prohibit the proper use of active drilling sumps and mud pits.

3. Recycling Plan. The operator shall comply with all provisions of a recycling Plan that has been approved by the director. The recycling Plan shall include any elements requested by the director.

Summary of Complaints:

No complaints associated with waste removal at the Inglewood Oil Field have been received by the County.

Summary of Issues Raised by the Public:

The County has not received any public input regarding waste removal for the period 2014 through 2018.

Analysis of Compliance and Effectiveness:

Waste generated by drilling, re-drilling, and reworking activities is collected in bins and emptied with the use of a vacuum truck as necessary. The previous operators and SPR do not use sumps or mud pits (see discussion for CSD Provision 22.310.050.O), and all such waste is contained in metal or plastic bins. All waste from drilling, re-drilling, and reworking sites is removed within 30 days of the completion of the activity; waste is trucked to several facilities permitted to accept the subject materials. Inspection of drilling, re-drilling, and reworking is part of the periodic inspections completed by the County ECC as required by CSD Provision 22.310.060.B. As noted above, the subject waste is collected in bins and is not discharged to the ground. As mentioned in the discussion for CSD Provision 22.310.050.C.4 and as documented in the *PXP Retention Basin Study*, the oil field retention basins are adequately size and maintained to handle the contents of the largest tank at the oil field along with 100-year storm event precipitation volume. Therefore, any spilled fluid waste material will remain within the oil field secondary containment and or retention basin system and not cause any offsite impacts. The retention basins are visually inspected during the dry months by the County ECC to confirm they are clean and free of debris and are prepared for each rain year by a storm water management consultant.

Subsection K.3 requires compliance with an approved Recycling Plan. The *PXP Recycling Plan Inglewood Oil Field* was approved on October 3, 2011. The Plan, originally submitted as required by CSD Provision 22.310.120, on May 26, 2009, details the approach to recycling various types of waste at the oil field. The Plan provides protocols for the following types of recycled waste; tires, cell phones, batteries, scrap metal, computer components, industrial waste, office waste, and landscaping waste. The Plan also includes an education program for employees and contact information for waste recycling and disposal vendors.

The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

The oil field waste removal system currently implemented at the oil field is consistent with current technology. The oil field contains all waste from drilling, re-drilling, and reworking activities in bins and does not use in-ground sumps or pits. The Recycling Plan approved by the County includes current recycling techniques and waste streams, however, new technologies in recycling in the future should be considered as applicable at the oil field.

Recommendations to Changes in Implementation:

This provision is implemented as intended, oil field waste is contained and recycled as required; therefore, no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

This requirement is implemented as intended consistent with the CSD language, and no changes in CSD language are recommended.

4.12 L. CONSTRUCTION OF PRIVATE ROADS

Roads and other excavations shall be designed, constructed, and maintained to provide stability of fill, minimize disfigurement of the landscape, prevent deterioration of vegetation, maintain natural drainage, and minimize erosion. Prior to construction of any new road, the operator shall prepare and submit to the director of public works for review and approval a private road construction Plan. The operator shall thereafter comply with all provisions of the approved

private road construction Plan. All new private access roads leading off any surfaced public street or highway shall be paved with asphalt or concrete not less than three inches thick for the first 50 feet of said access road from the public street or highway.

Summary of Complaints:

No private roads have been constructed at the Inglewood Oil Field since the adoption of the CSD; no complaints on this provision have been received by the County.

Summary of Issues Raised by the Public:

No private roads have been constructed at the Inglewood Oil Field since the adoption of the CSD and no issues regarding the construction of private roads have been raised by the public to date.

Analysis of Compliance and Effectiveness:

No private roads have been constructed to date and all oil field activities utilize existing access roads. This requirement has not been activated to date, and no further evaluation is recommended.

New Technology:

No private roads have been constructed at the oil field since the adoption of the CSD; however, as required by the CSD provision, any new road requires the preparation and approval of a private road Construction Plan. Required review of any plan for a private road by the director of public works will allow for review of new technology or updated County grading requirements. Therefore, implementation of such new technology can be required as applicable.

Recommendations to Changes in Implementation:

This requirement has not been activated to date; therefore, no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

This requirement has not been activated to date and no changes to the CSD language are recommended.

4.13 M. SIGNS

All signage shall comply with Chapter 22.114 (Signs). In addition, the operator shall comply with the following provisions:

1. Perimeter Identification Signs. Identification signs, at intervals acceptable to the director, shall be posted and maintained in good condition along the outer boundary line fence and along the fences adjoining the public roads that pass through the oil field. Each sign shall prominently display current and reliable emergency contact information that will enable a person to promptly reach, at all times, a representative of the operator who will have the expertise to assess any potential problem and recommend a corrective course of action. Each sign shall also have the telephone number of the county department of regional planning zoning enforcement section and the number of SCAQMD that can be called if odors are detected.

2. Main Entrance Sign. A sign shall be posted and maintained in good condition at the main entrance of the oil field prominently displaying a telephone number by which persons may

contact a representative of the operator at all times to register complaints regarding oil field operations.

3. *Other Required Signs.* All identification signs, warning signs, no trespassing signs, and other signs required by county, State and federal regulations shall be properly posted and maintained in all required locations and in good condition.

4. *Well Identification Signs.* Well identification signs including the well name and well number shall be posted and maintained in good condition at each well location.

5. *No Littering Signs.* "No littering" signs shall be prominently posted and maintained in good condition on all oil field entrance gates.

Summary of Complaints:

The County approved the *Signage Plan Inglewood Oil Field* on May 18, 2009 and the required signage was installed. No complaints regarding the signage have been received by the County.

Summary of Issues Raised by the Public:

The County has not noted any issues raised by the public regarding the facility signage.

Analysis of Compliance and Effectiveness: The installation of the signage required by this CSD provision was completed upon approval of the *Signage Plan Inglewood Oil Field* dated January 2009 (Revision 1) approved by the County on May 18, 2009. The required signage is periodically reviewed during inspections completed by the County ECC. Faded or damaged signage is noted and recommended for repair or replacement. The 1-800 24-hour contact number, the South Coast Air Quality Management District, and the L.A. County Department of Regional Planning Zoning Enforcement section have all received calls from the public inquiring about oil field activities since the installation of the signs. Some of this correspondence indicates the signage may be providing the public with contact information as intended under CSD Provisions M.1 and M.2 (the contact information is also available via the Inglewood Oil Field and County DRP web sites).



SPR has completed the process of reviewing and replacing applicable signs to reflect the name change from FM O&G to SPR. The provision is considered fully effective at this time, no further analysis is recommended.

New Technology:

As noted above, the County ECC inspector notes when signage requires replacement or repair. Therefore, signs will be updated periodically to ensure they are legible and meet the requirements of the CSD.

Recommendations to Changes in Implementation:

The required signage at the oil field was installed per the Signage Plan approved on May 18, 2009; no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.14 N. PAINTING

All oil operation-related structures visible from public roadways and surrounding properties within the oil field shall be painted or otherwise surfaced or textured with a color that is compatible with the surrounding areas and has been approved by the director. The painting or other surfacing of all structures covered by this subsection shall thereafter be maintained in good condition.

Summary of Complaints:

No complaints regarding the painting of the Inglewood Oil Field have been received by the County.

Summary of Issues Raised by the Public:

The County has not noted any issues raised by the public about the painting of the Inglewood Oil Field.

Analysis of Compliance and Effectiveness:

The painting of the Inglewood Oil Field structures and equipment was completed on November 12, 2012. The paint color, *licorice*, was chosen with assistance of a landscape architect and was approved by the LA County Department of Regional Planning. The color, which is much darker than the previous industry standard paint color tan or light brown, is intended to blend and be compatible with surrounding areas. The *Annual Well Increase Evaluation, December 2011*, included a discussion of the painting of the oil field facilities and the darker color of paint. The report concluded that the dark color helps to blend the equipment into the background, thereby reducing the visual and aesthetics of the oil field.

Prior to completion of the painting in November 2012, semi-annual status reports were submitted to the County for review to document progress of the facility painting. Although the initial painting effort for the oil field was completed in late 2012, maintenance of the painting and coatings of the equipment and structures at the oil field is a continuous process. The operator maintains a painter and a specialty painter on contract along with a schedule and priority list for the painting contractors to maintain the coatings on the structures and equipment at the oil field.

The Inglewood Oil Field has been painted with a color approved by the County and the coatings are maintained by the operator. The provision is considered fully effective at this time, no further analysis is recommended.

New Technology:

As noted above, the painting color approved is darker than the previous industry standard color of tan or light brown. Darker colors have been shown to blend and be more compatible with surrounding areas than the lighter shades previously chosen for oil field facilities.

Recommendations to Changes in Implementation:

The required painting of the Inglewood Oil Field was completed with the approved color in November 2012. The coatings are maintained by the operator; therefore, the implementation of the condition is complete and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The required painting and maintenance of the coatings of the Inglewood Oil Field structures and equipment has been implemented; no changes to the CSD language are recommended.

4.15 O. SUMPS

The operator shall comply with the following provisions:

1. Sump Clean Out. All sumps that are used, installed, or maintained for use in connection with any well, and which have not been used for 90 days for the operation of or the drilling, re-drilling, or reworking of such well or any other well in the vicinity, shall be cleaned out, and all oil, rotary mud, and rubbish removed.

2. Sump Fencing. Around each sump of any depth, there shall be erected and continuously maintained a fence that encloses the sump and complies with the requirements of Sections 11.48.010 - 11.48.050, Title 11 (Health and Safety) of the County Code. This provision shall not apply to sumps that are constantly and immediately attended while drilling, re-drilling, and reworking operations are proceeding as specified in Section 11.48.020 in Title 11 (Health and Safety) of the County Code.

Summary of Complaints:

All sumps were cleaned out, filled in with clean soil and re-graded to surrounding topography in 2007. No new sumps have been installed or used for any oil field activities since the adoption of the CSD; no complaints regarding sumps have been received by the County.

Summary of Issues Raised by the Public:

As noted above, all oil field sumps have been cleaned out and filled in and no new sumps have been installed since the adoption of the CSD. The County has not noted any issues raised by the public regarding sumps.

Analysis of Compliance and Effectiveness:

As discussed above, all historical sumps that existed on site were cleaned out, filled in with clean soil, and re-graded to match the surrounding topography in 2007. No operator, including SPR, has installed or used sumps for any oil field activities since the adoption of the CSD. The use of bins and portable tanks, often called by the vendor name "Baker Tanks", is now common and standard practice in most oil and gas fields in California. These metal and plastic container structures have eliminated the need for the installation and use of in the ground sumps. The use of these portable structures has also eliminated the need for provision language requiring the clean out of sumps upon cessation of the associated drilling activity as the structures are not permanent and are moved from one job site to the next.

The requirement has not been activated to date because the oil field no longer contains sumps or sump fencing and the use of portable metal or plastic bins and tanks have replaced the need for them. It is recommended that the Operator continue the use of metal and or plastic bins and tanks consistent with standard industry practice. Eliminating the use of below-ground sumps with above-ground metal or plastic containment structures is considered to be an environmental benefit due to the fact that the oil, drilling mud and other fluids are confined to a better containment structure that is both easier to clean and remove from the drill site, and does not have the potential to contaminate surrounding soils.

New Technology:

As noted above, the use of below ground sumps has been widely replaced by metal or plastic bins and tanks for most oil and gas facilities in California. SPR does not use below-ground sumps at the oil field and continues the use of the portable bins and tanks as standard operating procedure for all drilling activities.

Recommendations to Changes in Implementation:

As previously discussed, the Inglewood Oil Field does not contain sumps and the use of sumps was discontinued prior to the adoption of the CSD. It is recommended that the Operator continue the practice of using above-ground bins, and no other changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.16 P. WELL CELLARS

All well cellars shall be constructed in accordance with the most current American Petroleum Institute standards. In addition, the operator shall comply with the following provisions:

- 1. Cellar Fluids. Well cellars shall be kept free of all oil, water, or debris at all times. During drilling, re-drilling, and reworking, the cellar shall be kept free of excess fluids by a pump which discharges into a waste tank, mud pit, vacuum truck, or other approved disposal system.*
- 2. Access to Multi-Well Cellars. All multi-well cellars exceeding three feet in depth and 25 feet in length shall have two means of entrance and exit and an additional exit for every 50 feet in length thereafter. At least one means of entrance or exit for all multi-well cellars of 25 feet in length shall be a stairway constructed to California Division of Industrial Safety standards.*
- 3. Single-Cellar Covers. All single-cellars shall be covered with open grating and have no openings larger than three inches at any point. Covers shall be capable of supporting vehicle weight or guardrails shall be erected to prevent vehicle access.*
- 4. Cellar Ladder Openings. All openings for ladders through grating shall be designed to allow exit from underside without obstruction and shall be kept free of storage of any type. Said openings shall not be less than 24 inches on either side.*

Summary of Complaints:

No complaints regarding the oil field well cellars have been received by the County.

Summary of Issues Raised by the Public:

There have been no issues raised by the public regarding well cellars.

Analysis of Compliance and Effectiveness:

The well cellars at the oil field are inspected annually by DOGGR and any time the associated well is re-worked, a DOGGR permit is required and thus reviewed. The cellars are kept free of fluid and debris and are inspected daily by operations staff. The well cellars are also checked periodically by the County ECC during site inspections. As noted in the discussion on CSD Provision 22.310.050.O, bins and tanks are used for all drilling, re-drilling and reworking activities

on the oil field; mud pits or sumps are no longer utilized. The oil field does not contain any multi-well cellars; all well cellars are of the single-well cellar type; therefore, subsection P.2 does not currently apply to any existing oil field structures.

All well cellars in the oil field are covered with an open grating and surrounded with fencing to prevent vehicle access. The well fencing includes signage depicting the name of the well per the requirements listed in CSD Provision 22.310.050.M.4. None of the wells require cellar ladder openings due to the shallow depth of the cellars.

Well cellars at the oil field meet current API standards as required and reviewed during DOGGR and County inspections, the provision is considered fully effective at this time, no further analysis is recommended.

New Technology:

As noted above, the well cellars on the oil field are required to meet the standards and specifications of the API. Therefore, as new technologies for well cellars are developed and adopted by the API; those technologies would be required by the CSD without a need for any specific provision language changes.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No recommendations in the CSD language are recommended at this time.

4.17 Q. STORMWATER DRAINAGE MANAGEMENT

The operator shall comply with the following provisions:

1. Construction Storm Water Pollution Prevention Plan ("CWPPP"). The operator shall maintain and implement all provisions of a storm water pollution prevention plan ("SWPPP") that has been inspected by the Regional Water Quality Control Board and the county department of public works. The operator shall provide the director and the director of public works with a copy of the SWPPP, and any future modifications, revisions, or alterations thereof, or replacements therefore. The SWPPP shall be updated prior to new construction activities as required by the Regional Water Quality Control Board.

2. Spill Prevention, Control, and Countermeasure Plan ("SPCCP"). The Operator shall maintain and implement all provisions of a spill prevention, control, and countermeasure Plan ("SPCCP") which meets the requirements of the Local California Unified Program Agency and the United States Environmental Protection Agency. The operator shall provide the director and the fire chief with a copy of the SPCCP and any future modifications, revisions, or alterations thereof, or replacements therefore.

3. Hydrological Analysis. A site-specific hydrologic analysis shall be completed to evaluate anticipated changes in drainage patterns and associated increased runoff at the site for any new grading that results in the loss of vegetated, sandy, permeable ground areas, which could alter surface runoff at the site. The analysis shall be completed consistent with Standard Urban Stormwater Mitigation Plan regulations, as specified in the county department of public works

Hydrology Manual as amended. The hydrological analysis shall be submitted to the director of public works for review and approval. The new grading that required the hydrologic analysis shall not occur until approval of the analysis by the director of public works.

Summary of Complaints:

A member of the public expressed concern via the oil field complaint process in February 2017 regarding stormwater drainage below the Vickers 1 basin in a Culver Crest neighborhood (Flaxton Street and Youngworth Road). The operator was discharging rainwater consistent with their CSD and Regional Water Quality Control Board permit requirements. The rainwater entered the storm drain system and then entered the street from a storm drain system street discharge point, sheet flowed down the street, and then reentered the system at a curb opening. The operator and ECC investigated the situation and determined the storm drain system was designed to flow onto the street and confirmed the water routing with the DPW. The subject storm drain system is in Culver City.

Summary of Issues Raised by the Public:

The County has not received any input from the public on the oil field SWPPP or SPCCP.

Analysis of Compliance and Effectiveness:



The oil field SWPPP is updated as needed and submitted to the RWQCB and the DPW for review. Recent versions of the SWPPP include the requirements and associated general permit (CAS000002) for compliance with the National Pollution Discharge Eliminations System (NPDES). Recent updates to the SWPPP have been submitted annually along with the Master Grading Plan, the current SWPPP is

dated June 2018. SPR utilizes an environmental consulting company with expertise in storm water management to assist with implementation of the provisions of the SWPPP and prepare the oil field for each storm season.

The *Spill Prevention, Control and Countermeasure Plan* (SPCCP), required under subsection Q.2, provides detail on the maintenance of tank and related equipment at the oil field which include inspection programs, corrosion prevention/corrosion monitoring techniques, and clean-up equipment. The Plan also includes potential spill scenarios for each tank with containment calculations documenting the adequacy of the containment structures. The Plan is updated every five years, current version dated July 2018; the most recent spill containment response training was completed on March 27, 2019.

The hydrologic analysis listed under subsection Q.3 has not occurred to date because no oil field projects have triggered the requirement. Projects at the oil field to date, as detailed and reviewed in the annual master grading plan submittals, have not resulted in enough disturbance

or loss of vegetated, sandy, or permeable ground areas that have altered surface runoff at the site. Therefore, this provision has not been triggered to date.

The provision is considered to be effective at this time, no further analysis is recommended.

New Technology:

Both the SWPPP and the SPCCP are reviewed by applicable regulatory agencies. As noted above, agencies involved in overseeing these plans include the County, RWQCB, the Local California Unified Program Agency and the United States Environmental Protection Agency. These evaluations allow for new technologies in storm water drainage management and spill control to be added to the subject plans as needed, and those new technologies can be required by the CSD through Plan changes and compliance and do not necessitate amendments to the CSD language.

Recommendations to Changes in Implementation:

The required storm water and spill control plans and measures are current and in place, therefore, no change in the implementation of the provision is recommended.

Recommendations to Changes in CSD Language:

The CSD language allows for review and revision of the subject plans through the oversight of the agencies listed above, thus the requirements of this provision can be updated as necessary; therefore, no changes in CSD language are recommended.

4.18 R. WATER MANAGEMENT PLAN

The operator shall comply with all provisions of a water management plan that has been approved by the director and the director of public works. The plan shall include best management practices, water conservation measures, the use of a drip irrigation system, and shall include provisions for the use of surface water runoff in the retention basins for dust suppression and landscaping. The plan shall also address the availability of reclaimed water for use at the oil field. The water management plan shall be reviewed by the operator every three years to determine if modifications to the plan are required. The operator shall make changes to the plan if requested by the director or the director of public works. Any modifications to the water management plan shall be submitted to the director and the director of public works for review and approval. The water management plan shall include any elements requested by the director or the director of public works. In addition, the operator shall comply with the water conservation measures and reporting requirements specified in Sections 20.09.020 - 20.09.080, Title 20 (Utilities) of the County Code.

Summary of Complaints:

No complaints associated with the water management plan for the oil field have been received by the County.

Summary of Issues Raised by the Public:

The public has not provided any input on the water management plan for the oil field.

Analysis of Compliance and Effectiveness:

The *Water Management Plan Inglewood Oil Field* was initially submitted in May 2009 and was formally approved by County Public Works on August 8, 2012 and the County DRP on September 13, 2012. The Plan includes water conservation measures for office, landscaping,

operations, and maintenance water uses. The Plan also includes a section on employee awareness to encourage water conservation. One of the main water conservation measures is the use of water contained in retention basins for dust suppression. This measure has been fully implemented as documented by the County ECC during periodic inspections. A pump and portable above-ground storage tank system is currently at use at the Dabney-Lloyd retention basin to supply water for dust control applications. Starting with the 2014/2015 rain season, the previous operator FM O&G installed temporary pumps and storage tanks at all the oil field retention basins to allow for recycling of storm water when feasible.

The CSD does not require submittal of water usage records, however, 2018 water use was obtained from the operator for this report at 15,242,000 gallons or approximately 41,760 gallons per day water use. The Baldwin Hills CSD EIR provided the average water use for 2006-2007 as 160,104 gallons per day, therefore, current water use at the oil field is one fourth the baseline level from the CSD EIR. The Plan has been submitted and approved as required and current water use is below previous levels, the provision is considered fully effective at this time.

New Technology:

The CSD provision language includes requirements for operator review of the Plan every three years to determine if modifications are required and for the operator to make changes to the Plan if requested by the director of DPW. In addition, the language also requires compliance with the water conservation measures as specified in the County Code. Therefore, as new technologies in water management are developed and new requirements are added to the County Code, the CSD provision allows for implementation of those new technologies as directed by the director of DPW or by reference to the County Code.

Recommendations to Changes in Implementation:

The Water Management Plan is approved and implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.19 S. GROUNDWATER MONITORING

The operator shall develop, implement, and carry out a groundwater quality monitoring program for the oil field that is acceptable to the director and consistent with all requirements of the Regional Water Quality Control Board. Pursuant to the approved program, the operator shall install and maintain groundwater monitoring wells in the vicinity of each surface water retention basin, which is permitted by the Regional Water Quality Control Board. Such monitoring wells shall be completed to the base of the permeable, potentially waterbearing, alluvium, Lakewood Formation, and San Pedro Formation, and to the top of the underlying, non-water bearing Pico Formation, as determined by a California-certified professional geologist. The Regional Water Quality Control Board and the director shall be regularly advised of the results of such monitoring and shall be immediately advised if such monitoring indicates a potential problem.

Summary of Complaints:

No complaints associated with the groundwater monitoring program for the Inglewood Oil Field have been received by the County.

Summary of Issues Raised by the Public:

Comments have been received at several CAP meetings regarding questions on the monitoring results and on arsenic levels in the monitoring data. Questions on the laboratory detection limits, laboratory quality assurance/quality check sample blanks, and how the monitoring results compare to the drinking water standard have also been noted by the public. Arsenic, because it is prevalent in the geology throughout the LA basin, is often detected in the monitoring wells at the oil field. Both the data questions and the arsenic issue have been discussed and have been resolved at past and recent CAP meetings.

Analysis of Compliance and Effectiveness:

The *Groundwater Monitoring Program and Work Plan Inglewood Oil Field Plan* was submitted in August of 2009. The Plan described the groundwater quality monitoring program including the site geology/hydrology, proposed monitoring well locations, the sampling and monitoring procedures, well installation method, data collection, and data quality assurance and control procedures. The Plan was approved by the RWQCB in September 2009 and by the County in November 2009. Monitoring wells were installed between January 2010 and March 2010 with monitoring reports starting the first quarter of 2010. Monitoring reports have been submitted quarterly to the RWQCB and the County since the monitoring effort began in early 2010.



Groundwater monitoring samples are analyzed for a variety of contaminants and compared to State Maximum Contaminant Levels (MCLs) for drinking water standards. Sampled contaminants include petroleum hydrocarbons, diesel range organics, benzene, toluene, ethyl benzene, xylenes (BTEX), Methyl Tert Butyl Ether (MTBE), metals, oxygen, nitrate, and nitrite. Results from the monitoring program for all sampled parameters to date are below the applicable MCL for drinking water standards except for arsenic. As noted above, naturally occurring arsenic is common throughout the LA basin geology. The groundwater sampling program has also determined that the water bearing zones at the oil field are discontinuous with each other and are discontinuous with the water supply aquifers in the Los Angeles Basin.

The groundwater monitoring program has been implemented and is ongoing with quarterly reports submitted to the RWQCB and the County as required. The provision is considered fully effective at this time.

New Technology:

The CSD provision language requires that the monitoring program be consistent with all requirements of the RWQCB. As new technologies in groundwater monitoring are reviewed and adopted by the RWQCB, the new technologies can be required pursuant to RWQCB direction.

Recommendations to Changes in Implementation:

No changes to the provision implementation are recommended.

Recommendations to Changes in CSD Language:

The groundwater monitoring program has been implemented with the required reports submitted to the RWQCB and the County. No change to the CSD language is recommended.

4.20 T. FENCING

All portions of the oil field on which oil operations are conducted shall be enclosed with a fence compliant with DOGGR regulations codified at California Code of Regulations Title 14, Article 3, sections 1778 and 1779, or as may be subsequently amended by the State.

Summary of Complaints:

The oil field is completely fenced with a chain-link type fence that meets the requirements of the CSD fencing provision; the County has not received any complaints on the facility fencing.

Summary of Issues Raised by the Public:

The oil field is completely fenced with a chain-link type fence that meets the requirements of the CSD fencing provision; no issues on the facility fencing have been raised by the public.

Analysis of Compliance and Effectiveness:

The CSD requirement references the California Code of Regulations, DOGGR regulations for oil field enclosures (fencing). The oil field is completely fenced with chain-link type of fencing. The DOGGR requirement for chain link fencing is as follows; *(1) fences shall be not less than 5 feet high and mounted on 1 1/4" diameter steel posts with at least three strands of barbed wire mounted at a 45-degree angle from the top of the fence, (2) the fence shall be constructed of chain link or other industrial-type fencing of not less than 11-gauge wire and of not greater than 2-inch nominal mesh, (3) supporting posts shall be securely anchored to the surface, spaced no more than 14 feet apart, and (4) Tension wires of at least No. 9 gauge coil spring wire, or equivalent, shall be stretched at the top and bottom of the fence fabric and shall be fastened to the fabric at 24-inch intervals, there shall be no aperture large enough to permit any child to crawl under.*

The DOGGR fencing requirement further lists criteria for gates and sump screening. Gates are required to be *of a structure substantially the same as the required fences and shall be kept secured when not attended by an adult.* The gates at the oil field are chain link and are constructed consistent with the chain link fencing structure. As discussed for CSD Provision 22.310.050.O, *Sumps*, the facility does not have sumps nor are sumps used for any current oil field activity thus the DOGGR requirement for sumps is not applicable.

The ECC has requested that fencing be inspected by the Operator on a regular basis to address vulnerable areas and ensure that breaches can be avoided. Overall, the chain link fencing at the Inglewood Oil Field meets the DOGGR requirements listed above, therefore the provision is effective at this time.

New Technology:

As listed above in the CSD Provision language, the requirement lists the DOGGR regulation as *may be subsequently amended by the State.* Therefore, if the regulation is amended to reflect new technologies or requirements in fencing, the new requirements will be incorporated into the CSD as needed.

Recommendations to Changes in Implementation:

The installed fencing at the Inglewood Oil Field meets the CSD provision requirements. Further, the fencing is periodically reviewed during the County ECC inspection process. With continued inspections by the operator and the ECC no additional implementation changes are recommended.

Recommendations to Changes in CSD Language:

The installed fencing at the Inglewood Oil Field meets the CSD Provision requirements. In addition, the requirement provides for amended language should the State regulations change; therefore, no changes in the CSD language are recommended.

4.21 U. OIL FIELD CLEANUP AND MAINTENANCE

The operator shall maintain the site in a clean and orderly condition and shall comply with the following provisions:

1. Equipment Removal. All facilities that have reached the end of their useful economic life shall be properly decommissioned and removed from the oil field within one year. Areas not slated for future use shall be restored and revegetated within 90 days of termination of use, unless such restoration and revegetation would interfere with fire safety or access to oil operations.

2. Equipment Maintenance. All equipment, improvements, facilities, and other personal property or fixtures located on the oil field shall be maintained in good condition to the satisfaction of the director and the director of public works.

3. Site Debris and Vegetation. The operator shall keep the property free of debris and vegetation overgrowth to the satisfaction of the director. All outside storage of parts or equipment shall comply with Chapter 22.140.430 (Outdoor Storage).

Summary of Complaints:

No complaints regarding the cleanup and maintenance of the Inglewood Oil Field have been received by the County.

Summary of Issues Raised by the Public:

Input on equipment removal, and the equipment removal plan required by CSD Provision 22.310.120.N, was received as part of the Settlement Agreement dated July 15, 2011 negotiated between concerned public parties, the County and PXP (now FM O&G). The Unused or Abandoned Equipment Removal Plan Inglewood Oil Field was submitted and implemented as required in 2009. Term 12 of the Settlement Agreement requires the operator to update the Plan periodically should equipment not included in the 2009 Plan become unused or abandoned. The Plan was most recently updated in December 2012. The public has not provided any input on the oil field clean up or maintenance at the oil field.

Analysis of Compliance and Effectiveness:

The *Unused or Abandoned Equipment Removal Plan Inglewood Oil Field* describes the equipment removal activities completed since the adoption of the CSD. Figure 1 of the Plan provides a table listing 64 pieces of equipment that were removed in 2008 and 2009. The table also includes four tanks that were removed in 2012 documenting that the update of the Plan required by the Settlement Agreement has been implemented. The Plan includes removal

procedures to ensure equipment is removed with appropriate removal measures for safety and to minimize environmental impact.

Equipment at the oil field is inspected and maintained by the field operations staff with operators completing rounds of the facility daily. All oil field equipment, and the associated maintenance of that equipment, is tracked and scheduled with a vendor-supplied computer-based maintenance management program. The operator also conducts annual internal safety audits of the facility which provide for review and inspection of the oil field equipment. There have been no issues with equipment maintenance requiring County DRP or Public Works involvement since the adoption of the CSD.

Section 22.140.430 of the County Code stipulates that a property cannot be used for outside storage or display of raw materials, equipment or finished products unless the storage meets certain Code requirements. Outside storage of equipment at the oil field is consistent with this requirement and typical for an oil and gas operation. Examples of outside equipment storage include the pipe rack yard and hazardous materials area.

The operation of the oil field meets the requirements of the site cleanup and equipment maintenance stipulations of this provision. The amended requirement for periodic updating of the Equipment Removal Plan ensures equipment no longer in use will be removed from the facility in a timely fashion. Equipment at the oil field is maintained and stored as required, therefore, the provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

The Equipment Removal Plan includes measures for the safe and environmentally beneficial removal of equipment at the oil field. The Plan is updated and reviewed periodically by the County which will allow for new technologies associated with equipment removal to be implemented as they are developed.

Recommendations to Changes in Implementation:

The requirements for site cleanup and equipment maintenance of this provision have been implemented. Further, the periodic update of the Equipment Removal Plan required by the Settlement Agreement strengthens the intent of the requirement. No changes to implementation are recommended.

Recommendations to Changes in CSD Language:

As noted above, the Settlement Agreement augmented the existing CSD language to require periodic updates to the Equipment Removal Plan. No changes in the CSD language are recommended.

4.22 V. SECURITY

All unmanned entrances to the oil field shall be equipped with sliding gates which shall be kept closed at all times except when authorized vehicles are entering or leaving the oil field. The operator shall have a security guard on duty 24 hours per day.

Summary of Complaints:

The Inglewood Oil Field is completely fenced with a chain-link type fence that meets the requirements of the CSD fencing provision with sliding gates at all unmanned entrances. The County has not received any complaints regarding security at the Inglewood Oil Field.

Summary of Issues Raised by the Public:

The County has not received any concerns regarding security at the Inglewood Oil Field.

Analysis of Compliance and Effectiveness:

CSD requirement 22.310.050.T requires the oil field facility to be enclosed by fencing that meets DOGGR regulations. The gates associated with the facility fencing are also required to meet the DOGGR regulations for oil field enclosures. All gates at the oil field are consistent with these regulations and all unmanned entrances are equipped with the required sliding type gates. Current security at the oil field includes a 24-hour guard at the main entrance gate to the field off Stocker Street and a gated entrance with a call box to the field and offices off of Fairfax Street. All vehicles must check in with the guard and sign in prior to gaining access to the oil field. The guard shack facilities have land line telephone access to the main office building to obtain authorization clearance to allow access for visitors not previously cleared for entrance. The oil field security provisions are inspected annually by DOGGR.

The unmanned gates and site security at the oil field meet the requirements of the CSD provision and no significant issues regarding the security of the facility have occurred during this review period. This provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

As noted above, CSD provision 22.310.050.T, requires that facility gates meet DOGGR regulations as *may be subsequently amended by the State*. Therefore, if the regulation is amended to reflect new technologies with regards to gates, the new requirements will be incorporated into the CSD provision by reference.

Recommendations to Changes in Implementation:

The unmanned gates and site security at the oil field meet the requirements of the CSD provision; no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The unmanned gates and site security at the Inglewood Oil Field meet the requirements of the CSD provision and no significant issues regarding the security of the facility have occurred, therefore, no changes in the CSD language are recommended.

4.23 W. VEHICLE PARKING

Vehicular parking shall comply with Chapter 22.112 (Parking).

Summary of Complaints:

The parking facilities at the Inglewood Oil Field meet both the requirements of the CSD provision and the demand of the SPR oil field operations. The County has not received any complaints with regards to vehicle parking.

Summary of Issues Raised by the Public:

All vehicle parking for SPR oil field operations occurs on-site and does not impact the public; no issues relating to vehicle parking have been raised by the public.

Analysis of Compliance and Effectiveness:

The CSD requirement references the parking requirements of the LA County Code. The applicable requirements for an industrial land use are detailed in Section Table 22.112.070-A as follows; *one space per 500 square feet and 1 space per vehicle directly used for business.*

The oil field contains sufficient parking for all employee, subcontractor, visitor, and heavy equipment vehicles. Marked parking spaces at the office building and warehouse areas are consistent with County code requirements. No vehicles associated with oil field operation park off-site; therefore, parking of vehicles for oil field operations does not impact any public parking facility. This provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

The vehicle parking capacity at the oil field is sufficient and meets County code requirements, a discussion on new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement has been appropriately implemented, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

4.24 X. SANITATION

The operator shall comply with the following provisions:

1. Garbage and Refuse. The oil field shall be maintained in a clean, sanitary condition, free from accumulations of garbage, refuse, and other wastes.

2. Toilets and Wash Facilities. Sanitary toilet and washing facilities shall be installed at any site where personnel are permanently stationed. Portable facilities shall be provided wherever crews are temporarily employed. Such facilities shall be maintained in a clean and sanitary condition at all times.

Summary of Complaints:

No complaints associated with garbage and refuse at the oil field have been received by the County. Oil field toilets and wash facilities are not open to the public.

Summary of Issues Raised by the Public:

No issues regarding garbage and refuse at the Inglewood Oil Field have been raised by the public. Oil field toilets and wash facilities are not open to the public.

Analysis of Compliance and Effectiveness:

Garbage and refuse are picked up and removed weekly by a subcontractor garbage collection company. Garbage bins are located at the office, the warehouse, and other locations throughout the oil field.

Permanent toilet and wash facilities are located at the office building, the warehouse, the gas plant, the “halfway house” across from the gas plant, and at two modular buildings used by sub-contractors. The restroom facilities are maintained by a sub-contractor janitorial service. Portable facilities are located throughout the field and moved as needed, the portable restrooms are maintained by the subcontractor providing the units.

The provision is considered fully effective at this time, no further analysis is recommended.

New Technology:

New technologies in garbage and refuse collection such as improvements in the collection trucks would be implemented by the subcontractor providing the service as required by regulations outside the scope of the CSD.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

4.25 Y. STORAGE OF HAZARDOUS MATERIALS

The operator shall comply with all provisions of a hazardous materials business plan that has been submitted to the fire chief. The operator shall deliver to the fire chief for review and approval an updated hazardous material business plan on an annual basis. This plan shall provide the location of where hazardous materials are stored at the oil field. Hazardous materials shall be stored in an organized and orderly manner and identified as may be necessary to aid in preventing accidents and shall be reasonably protected from sources of external corrosion or damage to the satisfaction of the fire chief.

Summary of Complaints:

No complaints associated with the Hazardous Materials Business Plan for the Inglewood Oil Field have been received by the County.

Summary of Issues Raised by the Public:

No issues regarding the Hazardous Materials Business Plan for the Inglewood Oil Field have been raised by the public.

Analysis of Compliance and Effectiveness:

The Hazardous Materials Business Plan (HMBP) for the oil field is submitted to the Fire Department for review and approval on an annual basis as required. Hazardous materials at the oil field are primarily stored in a location near the facility pipe yard. The storage area consists of a concrete pad with secondary containment to capture potential spills. Hazardous materials are organized by chemical type and containers are labeled per Department of

Transportation (DOT) and National Fire Prevention Association (NFPA) regulations. Hazardous materials in small amounts are also used in various locations throughout the field and are placed in individual secondary containment bins. The hazardous materials storage area is periodically inspected by the Fire Department.



On September 17, 2014 LA County Fire and the DRP issued the operator, FM O&G at the time, a Notice of Violation (NOV) for inaccurate and missing information on the HMBP resulting from an inspection completed by LA County Fire. The HMBP data was subsequently corrected and approved by the Fire Department and the DRP NOV was cleared by the DRP on October 22, 2014. No other compliance issues have occurred regarding the storage of hazardous materials during this review period. The provision is considered fully effective at this time, no further analysis is recommended.

New Technology:

The Hazardous Materials Business Plan is submitted to, reviewed, and approved by the Fire Department annually. As new technologies are developed in the storage of hazardous materials the Fire Department can request implementation of those new technologies through the Business Plan review and approval process.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

4.26 Z. DRILLING, REDRILLING, AND REWORKING OPERATIONS

The operator shall comply with all of the following provisions:

- 1. DOGGR Regulations. All DOGGR regulations related to drilling, redrilling, and reworking operations.*
- 2. Number of Drilling and Redrilling Rigs. No more than three drilling or redrilling rigs shall be present within the oil field at any one time.*
- 3. Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan. Before the end of each calendar year, the operator shall develop and deliver to the director an annual drilling, redrilling, well abandonment, and well pad restoration plan, which shall describe all drilling, redrilling, well abandonment, and well pad restoration activities that may be conducted during the upcoming calendar year. Drilling and redrilling shall be scheduled to avoid over concentration of such activities in that year in any one area if located near a developed area. The operator may at any time submit to the director proposed amendments to the then current*

annual plan. No drilling, redrilling, or abandonment activity may be commenced unless it is described in a current annual plan (or an amendment thereto) which has been approved by the director. The annual plan (and any amendments) shall be provided to the CAP for review and comment. All comments on the annual plan from the CAP shall be submitted to the director in writing, and, if timely submitted, will be considered as part of the director's review and approval. The director shall complete the review of the annual plan (and any amendments) within 45 days of receipt and shall either approve the annual plan or provide the operator with a list of deficiencies. The annual plan shall comply with the provisions of this subsection, and shall include the following:

- a. The maximum number of wells proposed to be drilled or redrilled;
- b. Approximate location of all wells proposed to be drilled or redrilled;
- c. Approximate location of all proposed new well pads, including their size and dimensions;
- d. Estimated target depth of all proposed wells and their estimated bottom hole locations;
- e. A discussion of the steps that have been taken to maximize use of existing well pads, maximize use of redrilled wells, and maximize the consolidation of wells;
- f. Location of all proposed well abandonments, if known, in accordance with DOGGR integrity testing program of idle wells;
- g. Location of all well pads proposed to be abandoned and restored;
- h. A proposed schedule and phasing of the drilling, redrilling, well abandonment, well pad abandonment, and restoration activities;
- i. A discussion of the latest equipment and techniques that are proposed for use as part of the drilling and redrilling program to reduce environmental impacts; and
- j. A topographic vertical profile showing proposed location of new wells that reflects local terrain conditions and that addresses the potential visibility of existing and proposed wells and other production facilities from residential and recreation areas.

4. *Drill Rig Engines.* All engines used for drilling and redrilling operations shall be operated by muffled internal-combustion engines or by electric motors.

5. *Fire Safety Regulations.* All drilling, redrilling, and reworking shall be in conformance with applicable fire and safety regulations.

6. *New Technology.* Proven reasonable and feasible technological improvements which are capable of reducing the environmental impacts of drilling and redrilling shall be considered as they become, from time to time, available.

7. *Derricks and Portable Masts.* All derricks and portable masts used for drilling, redrilling, and reworking shall meet the standards and specifications of the American Petroleum Institute as they presently exist or as may be amended.

8. *Equipment Removal.* All drilling and redrilling equipment shall be removed from the site within 90 days following the completion of drilling or redrilling activities unless the equipment is to be used at the oil field within five days for drilling or redrilling operations.

9. *Drill Site Conditions.* All drilling sites shall be maintained in a neat and orderly fashion.

10. *Belt Guards.* Belt guards shall be required over all drive belts on drilling, redrilling, and reworking equipment. Guarding shall be as required by Title 8 of the California Code of Regulations, section 6622, or as may be subsequently amended.

Summary of Complaints:

The County has received complaints on several different issues that have the potential to be associated with drilling, redrilling and reworking operations at the oil field, however, no drilling has occurred at the oil field since June 2014. The complaints included issues with odor, noise, vibration, and property damage. Discussion of these issues is included in the applicable analysis section of this Periodic Review.

Summary of Issues Raised by the Public:

Aside from the comments on the annual drilling plans, no significant issues regarding drilling have been received by the County during this review period. As noted earlier, no drilling has occurred at the oil field since June 2014.

Hydraulic fracture well enhancement techniques are not in use at the oil field at this time nor are they proposed in any of the Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plans for this review period. In addition, the Operator has committed to providing advance notice of any potential future hydraulic fracturing that could occur at the field.

Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan

The public provided input on the 2014 and 2015 *Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plans* that are submitted to the County on an annual basis as required by this provision (no public comments were received on those plans submitted in 2016 – 2018). For both the 2014 and 2015 Plans, the public requested a review of the feasibility analysis of using a natural gas-powered rig the operator presented in the plan. The County review of the analysis concurred that that the use of a natural gas rig was infeasible or more impactful than the current proposed operations. The other comment on the plans involved the extensive use of graphics in the viewshed analysis of the report; the County concurred, and the graphics are no longer required as was discussed in the first Periodic Review.

The 2011 Settlement Agreement

The Settlement Agreement resulted in additional documentation requirements for wells that involve slant drilling and for wells located in certain mid-zone and shallow depth locations. Operations that meet the criteria for these types of wells must be detailed in a supplemental review section of the annual drilling Plan. Other requirements included revising the limit on the number of drilling rigs, as discussed below, clean technology for drilling equipment, and increasing the length of cement well plugs. Well plugs are discussed in the analysis of Provision 22.310.050.GG, *Well and Well Pad Abandonment*.

Analysis of Compliance and Effectiveness:

Subsection Z.1 requires that all well activities related to drilling, redrilling, and reworking operations meet the applicable DOGGR regulations. Drilling, redrilling, and reworking and

operations at the oil field are regularly inspected by DOGGR to ensure compliance with these State regulations. The DOGGR inspections often include specific review for the drilling rig blow out preventer (BOP) system. The Operator is required to notify DOGGR to witness BOP function for all permitted new or redrilled production and injection wells.

The Settlement Agreement revised the provision subsection regarding the allowable number of drilling and redrilling rigs at the oil field. The original provision listed a maximum of three of these rig types; the Settlement Agreement limits that number to two. Current and historic operations since the applicability of the CSD have had a single drilling rig onsite; however, the 2014 drilling Plan contained a drilling schedule set up for two such rigs, however, a single drill rig was used during 2014. At no time since the adoption of the CSD has the oil field had three drilling and redrilling rigs operating at the same time.

The *Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan* has been submitted to the County on an annual basis as required. The Plan is reviewed and approved prior to the initiation of drilling activities for the given year. The Plans have also been provided to the CAP for comment consistent with this provision. County review of the plans includes consideration of input received from the CAP. These annual drilling plans must contain the information required under subsections Z.3.a. through 3.j to be approved by the County. Annual plans have been amended as necessary, as allowed by subsection Z.3 to reflect changes that may occur during the drilling year. The annual Plans for the calendar years 2014 through 2018 were approved by the County. The plans are available at the Inglewood Oil Field web site at www.inglewoodoilfield.com.

Drill rig engines used at the oil field are properly muffled as required. Fire and safety regulations and orderly drill site conditions are followed at all drilling, redrilling, reworking sites in the oil field; compliance for these requirements is checked periodically during DOGGR and County ECC inspections. As noted above the Operator is required to notify DOGGR for specific permitted well operations. The County inspections and permits document compliance with the rig standards for derricks, portable masts and belt guards as required under subsections Z.7 and



10. New technology for reducing the environmental impacts of drilling and redrilling is discussed in the annual drilling plans submitted to the County for review prior to each drilling activity year. Natural gas-powered drill rigs have been discussed in recent drilling plans, but this technology has not been proven feasible to date due to the lack of available rigs using this technology. In addition, gas rigs are typically significantly taller and would have a bigger

footprint than a standard rig. Air emissions were also found to have a negligible benefit when compared with using the conventional rigs with the CSD mandated emission controls.

Because the drilling, redrilling, and reworking rigs at the oil field are provided and operated by sub-contractors to SPR, these rigs are not idle and are removed from the oil field pursuant to subsection Z.8 if no longer scheduled for use on the oil field.

The number of wells drilled and redrilled is limited on an annual and overall project basis by the conditions of Provision 22.310.080.A, *Ministerial Site Plan Review Required*. The drilling limits prescribed in the CSD were revised by the Settlement Agreement; please see the analysis for Provision 22.310.080 for a discussion on the well limits for the oil field.

It should be noted here that hydraulic fracture well enhancement techniques are not in use at the oil field at this time nor are they proposed in any of the Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plans for this review period. In addition, the Operator has committed to providing advance notice of any potential future hydraulic fracturing that could occur at the field.

The provision is considered fully effective at this time, no further analysis is recommended.

New Technology:

Subsection Z.6 requires that reasonable and feasible technological improvements capable of reducing the environmental impacts of drilling and re-drilling activities be considered as they become available. The *Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan* includes a discussion on applicable new technologies with this Plan submitted to the County for review. See discussion for Provision 22.310.050.B for information on CARB oil rig engine technology and emissions requirements.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

4.27 AA. PROCESSING OPERATIONS

The operator shall comply with the following provisions:

1. Limits on Processing Operations. Unless otherwise expressly required by DOGGR, the only processing operations permitted at the well site shall be the dehydration of oil and gas produced from the well; the storage, handling, recycling, and transportation of such materials; and those processing operations required for water injection purposes.

2. Refining. No refining shall be conducted within the oil field.

3. Well Pump Motors. All well pumping units shall be operated by electric motors.

4. Well Pumps. Downhole submersible pumps and low-profile pumping units for production wells must be used wherever feasible.

5. *Removal by Pipeline Only.* All oil, gas, and other hydrocarbons produced from any well in the oil field shall be shipped and transported through pipelines, except in case of an emergency or when access to a pipeline becomes unavailable. Excluded from this requirement are propane and other related natural gas liquids that are in amounts in excess of what can be blended into the pipeline. Should any pipeline through which oil or gas is currently transported become unavailable for the safe transportation of said products due to maintenance problems with the pipeline, or lack of sufficient capacity within the pipeline to handle the volume of oil and gas needing transportation, or because the owner or operator of such pipeline elects to discontinue transporting oil or gas through such pipeline, then the operator shall within 180 days of the date the existing pipeline becomes unavailable, seek to acquire a private right of way or easement, or shall file an application for a right of way, easement, encroachment permit, or franchise for the construction of a replacement pipeline and shall diligently prosecute such application until such pipeline is completed. During any emergency situation, or during such time as any existing pipeline becomes unsafe or unavailable, oil and gas may be transported by truck until the emergency situation is resolved or until a replacement pipeline shall be permitted and constructed in compliance with all applicable laws and regulations.

6. *Pipelines.* The operator shall comply with the following provisions:

a. *New pipelines that remove oil or gas from the oil field shall be buried below the surface of the ground;*

b. *All pipelines which are not enclosed within a fence shall be placed underground or covered with materials approved by the fire chief. Said covers shall be maintained in a neat, orderly, and secure manner;*

c. *Any and all water or brine produced during pipeline construction shall either be injected in accordance with DOGGR requirements, or disposed of in accordance with other local, State or federal regulations;*

d. *New pipeline corridors shall be consolidated with existing pipelines or electrical transmission corridors where feasible; and*

e. *Upon completion of pipeline construction, the site shall be restored to the approximate previous grade and condition.*

7. *Active Pipeline Plot Plan.* The operator shall submit to the fire chief a plot Plan depicting the approximate location of all active pipelines regulated by the United States Department of Transportation or California State Fire Marshall owned by the operator that are located outside the outer boundary line, including waste water, and trunk and gathering lines to transport oil or petroleum products. The plot Plan shall be submitted within 30 days of the installation of any new pipelines or the relocation of an existing pipeline.

8. *Machinery Enclosures.* The operator shall maintain enclosures around machinery with moving parts consisting of a fence, screening, or housing. Said enclosures shall be installed in compliance with Section 11.16.020, Title 11 (Health and Safety) of the County Code.

9. *Opening Protections.* The operator shall cap, close, or protect the openings in all oil wells, test holes, and similar excavation in compliance with Section 11.54.010, Title 11 (Health and Safety), of the County Code.

Summary of Complaints:

No complaints associated with the requirements on the processing operations at Inglewood Oil Field have been received by the County.

Summary of Issues Raised by the Public:

No issues specific to the requirements on the processing operations at the oil field have been raised by the public.

Analysis of Compliance and Effectiveness:

The processing operations at Inglewood Oil Field follow the requirements of this provision. The only processing occurring at the oil field is associated with the dehydration of oil and gas; the storage, handling, recycling, and transportation of those materials; and water injection operations. The oil field does not need to process hydrogen sulfide or other impurities prior to transportation to offsite refineries.

All well pump motors at the oil field are powered electrically; the field does not have any internal combustion engine well pump motors. Down hole submersible pumps require specific engineering and geologic conditions to be feasible. Specifically, the amount of sand in the formation is the primary determining factor in the use of submersible pumps because high levels of sand cause significant deterioration of the pump mechanisms. As of May 2019, 113 well pumps out of the total of 442 producing wells (25.6%) are using submersible pump technology. The oil field does not currently have any low-profile pumping units in operation. All oil, gas, and other hydrocarbons produced in the oil field are shipped and transported via pipelines and all natural gas liquids are blended into the oil and thus transported by pipeline. No trucking offsite of oil or gas occurred between the years 2014 and 2018.

No new pipelines that transport oil or gas from the oil field have been constructed since the adoption of the CSD. As noted in the discussion regarding CSD Provision 22.0310.050.T regarding oil field fencing, the oil field is completely fenced in with chain link fencing that meets the DOGGR requirements, thus all oil field pipelines are also enclosed by a fence.

All water or brine generated at the oil field is injected in accordance with DOGGR requirements, new injection wells are subject to review through the annual drilling Plan submittal to the County and the DOGGR Area of Review (AOR) process. Pipeline construction within the oil field is consolidated to the maximum extent feasible in existing pipeline routes and corridors. Pipeline corridors are returned to pre-existing grade and condition upon completion of construction consistent with the Oil Field Master Grading Plan. The Active Pipeline Plot Plan was submitted to the Fire Department on December 9, 2009 and has not been required to be updated to date.

Machinery enclosures and openings associated with wells, test holes, and excavations are inspected by oil field operators during daily rounds. This equipment is also reviewed annually during safety audits performed by the operator and periodically inspected by the County ECC. The equipment at the oil field complies with the referenced County code requirements under Title 11 for health and safety requirements for hazards. Maintenance, safety inspections, and safety audits of this equipment are implemented consistent with the Safety, Inspection, Maintenance, and Quality Assurance Program (SIMQAP) as required by CSD Provision 22.310.060.C.

The provision is considered fully effective at this time, no further analysis is recommended.

New Technology:

Any new pipelines that transport oil or gas offsite from the oil field would require permits from local and State regulatory agencies. The assessment and potential implementation of new technology in pipelines or pipeline construction would be part of the review and approval process of the pipeline permit applications. The machinery enclosure and opening protection requirements outlined in subsections AA.8 and 9 above; are linked to County Code requirements, updates to those requirements are therefore incorporated by reference to the CSD.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

4.28 BB. WELL REWORKING OPERATIONS

The operator shall comply with the following provisions:

- 1. DOGGR Regulations. The operator shall comply with all DOGGR regulations related to well reworking operations.*
- 2. Number of Reworking Rigs. No more than eight reworking rigs shall be present within the oil field at any one time, unless an emergency condition requires additional Reworking rigs. This does not include equipment used for well maintenance or well abandonment.*
- 3. Hours of Operation. With exception of emergencies, well reworking operations shall not be allowed after 7:00 p.m. or before 7:00 a.m., nor on Sundays or legal holidays.*
- 4. Specifications. Reworking rigs shall meet the standards and specifications of the American Petroleum Institute.*
- 5. Equipment Removal. Reworking rigs shall be removed from the oil field within seven days following the completion of reworking operations unless such rig will be used on another well at the oil field within five days.*

Summary of Complaints:

The County has received complaints regarding noise associated with rig operations at the oil field. The most common complaint is noise from pipe sections banging against each other. Two complaints regarding noise were identified with maintenance rig operations during the 2014 through 2018 compliance period.

Summary of Issues Raised by the Public:

The public has noted the observation of too many rigs in one area in the past, however, this has not been an issue during the 2014 to 2018 compliance period.

Analysis of Compliance and Effectiveness:

Wells associated with reworking operations require a permit from DOGGR and thus must meet the applicable well reworking requirements. It should be noted that these well activities are not

part of the *Annual Drilling, Redrilling, Well Abandonment, and Well Restoration Plan*; the permitting is a separate process completed directly with DOGGR with permits copied to the County. Compliance with the number of reworking rigs at the oil field is documented by weekly email updates to the County listing the number of reworking rigs and the well location of the work. This data is confirmed by periodic County ECC inspections.

Standard policy for the operation of reworking rigs operation is daylight hours only. Operation during non-daylight hours only occurs when necessary to complete a critical task or for an emergency. Reworking rigs are not operated outside 7:00 am to 7:00 pm or on Sundays or legal holidays consistent with the CSD requirements. The reworking rigs at the oil field are provided and operated by a sub-contractor. The rigs must have a valid Department of Motor Vehicles license and meet the specifications of the American Petroleum Institute (API) to operate in California. The reworking rigs are removed from the field to be used elsewhere by the sub-contractor unless scheduled for use at another well in the oil field.

The provision is effective at this time, no further analysis is recommended.

New Technology:

As noted above, the well reworking rigs are required to meet the standards and specifications of the API. Therefore, as new technologies are developed and adopted by the API, those technologies would be consequently required by the CSD. See discussion for Provision 22.310.050.B for information on CARB oil rig engine technology and emissions requirements.

Recommendations to Changes in Implementation:

This provision is implemented as intended, no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

4.29 CC. TANKS

The operator shall comply with the following provisions:

- 1. New Tank Specifications. All new tanks and appurtenances shall be designed, constructed, installed, and maintained in accordance with current County Fire Code, American Petroleum Institute, DOGGR, California Division of Industrial Safety, Environmental Protection Agency Standards, applicable provisions of Title 14 of the California Code of Regulations section 1774, and applicable CalARP Program requirements.*
- 2. Setbacks. No new storage Tank, excluding a replacement tank, shall be constructed closer than 500 feet from any developed area, or closer than 200 feet from a public road. No building shall be constructed within 50 feet of any oil storage tank.*
- 3. Vapor Recovery. Oil, wash, and produced water tanks shall be vapor tight and shall be equipped with a vapor recovery system.*
- 4. Specifications for New Tank Piping, Valves, Fittings, and Connections. All new tank piping, valves, fittings, and connections including normal and emergency relief venting, shall be installed and maintained in accordance with current American Petroleum Institute standards to the satisfaction of SCAQMD and DOGGR.*

5. *Detection of Tank Bottom Leaks.* The operator shall design, implement, and comply with a program, approved by the fire chief, for controlling and detecting tank bottom leaks on all tanks at the oil field. The operator may use a combination of methods including but not limited to diversion walls, dikes, tank foundations of concrete or gravel, and a tank bottom leak detection system in compliance with Title 14 of the California Code and Regulations section 1773, or subsequently enacted State regulations regarding tank bottom leaks.

Summary of Complaints:

As discussed in CSD 22.310.050.B, on November 22, 2108 a tank at the Inglewood Tank Battery overflowed due to the failure of a level controller. A level controller is a device that, when working properly, can control the operation of one or more pumps that move fluid through a tank or system of tanks. In this case, the controller failed, and a pump was not activated resulting in an overflow of produced water into the secondary containment area of the tank area. Approximately 630 gallons (15 barrels) of oil/water mixture was spilled over a 15 to 20-minute time frame into the secondary containment area causing multiple odor complaints from the community, the odor complaints are discussed above for CSD provision 22.310.050.B. The County follow up of the tank overflow and subject level controller is discussed below.

Summary of Issues Raised by the Public:

No issues other than the tank overflow discussed above regarding the operation of tanks at Inglewood Oil Field have been received by the County during this review period.

Analysis of Compliance and Effectiveness:

Two new tanks have been constructed during this 2014 through 2018 review period. Both tanks were installed at the Water Plant in 2015. Construction of the new tanks required County building and land use permits and a South Coast Air Quality Management permit for the vapor recovery system. The permitting of these tanks included the tank piping, valves, fittings, and connections. Neither tank was built within the setback criteria described in subsection CC.2. No buildings have been constructed within 50 feet of



an oil tank. Thus, the tanks were built pursuant to the agency requirements for new tank specifications outlined in subsections CC.1 and 4 above.

All oil, wash, and produced water tanks at the Inglewood Oil Field are vapor tight and are equipped with a vapor recovery system; this requirement is enforced and documented by annual and periodic inspections by the South Coast Air Quality Management District and by periodic ECC inspections. The level controller failure on November 22, 2108 discussed above resulted in a SCAQMD Notice of Violation (NOV) for Rule 402, Nuisance, due to the number of complaints due to the odor release from the released fluids. As discussed above for Provision 22.310.050.B, Air Quality and Public Health, the County completed an engineering analysis which documented the level of odor and health issues from the tank overflow incident. The follow-up investigation by the County also required the operator to install a second, redundant, alarm system to the tank to prevent a future overflow incident. The second system, a high-level alarm, was installed and tested in May 2019 with the County ECC observing a test of the system on May 15, 2019. The high-level alarm provides notification to the operator via a visual

red light at the tank farm, a notice on the tank farm control panel and an alert sent to field operators via cellphones. Other tanks at the oil field with similar VOC gas levels are under review for similar additional alarm sensors.

As outlined in the Safety, Inspection, Maintenance, and Quality Assurance Program (SIMQAP) required under Provision 22.310.060.C, all tanks at the Inglewood Oil Field have a program to detect tank bottom leaks. The SIMQAP and leak detection program are required to be reviewed and approved for compliance with Title 14 of the California Code of Regulations and other State regulations. The leak detection for all tanks at the oil field consists of either direct view monitoring of the exterior surface and bottom or using tank foundations of either concrete or gravel. A Tank Leak Detection and Containment Plan was approved by County Fire on 2/18/10. The *Annual Well Increase Evaluation, December 2011*, also confirmed that the required tank leak detection measures are in place.

The provision is considered fully effective at this time; no further analysis is recommended.

New Technology:

All new tanks require permits from County Departments of Public Works and Regional Planning and from the South Coast Air Quality Management District. New technologies in the construction and monitoring of oil field tanks would be part of the review and approval process for the permitting of those tanks. Therefore, any new technologies applicable to oil field tanks can be required pursuant to the subject agency permitting requirements and would be consequently incorporated into the CSD by reference.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

4.30 DD. WELL PRODUCTION AND REPORTING

The operator shall deliver annual production reports to the director and the fire chief. The reports shall provide the following information:

- 1. A copy of all DOGGR Forms 110 and 11 OB submitted during the previous 12 months.*
- 2. Number and mapped location of wells drilled or redrilled, including well identification numbers.*
- 3. Number and mapped location of water injection wells, including well identification numbers.*
- 4. Number and mapped location of idled wells, including well identification numbers and the date each well was idled.*
- 5. Number and mapped location of abandoned wells, including date each well was abandoned and/or re-abandoned.*
- 6. Any additional information requested by the director or the fire chief.*

Summary of Complaints:

No complaints regarding the well reports required by this provision have been received by the County.

Summary of Issues Raised by the Public:

The public has not raised any issues specific to this CSD requirement; the public does provide comment on the oil field wells through the public outreach provisions of the CSD by commenting on the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan*. Community Advisory Panel (CAP) members have requested to have information on the start and end date for the drilling of each well. Information summarizing the start and end dates of each well drilled for the previous quarter has been recently provided verbally by the County at the CAP meetings.

Analysis of Compliance and Effectiveness:

The reports requested by this provision have been submitted annually to the County and Fire Chief as required. The forms listed under subsection DD.1 are submitted to DOGGR monthly and are compiled for the annual submittal to the County. The County submittal consists of three document packets; Well and Production Report Maps, Well and Production Report Production Forms, and Well and Production Report Injection Forms. These documents are available at the oil field web site at www.inglewoodoilfield.com.

Projected location of wells drilled or redrilled is provided in the Annual Drilling Plan submitted according to CSD Provision 22.310.050.Z. The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

This CSD provision is not directly linked to technology; however, as new technologies in well reporting are implemented by DOGGR and added to the reporting forms, the new reporting information would be incorporated into the CSD provision by reference.

Recommendations to Changes in Implementation:

The provision has been implemented and is considered fully effective at this time; therefore, no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The provision is considered fully effective at this time, and no changes to the CSD language are recommended.

4.31 EE. IDLE WELL TESTING AND MAINTENANCE

The operator shall comply with Title 14 of the California Code of Regulations section 1723.9 regarding testing and maintenance of idle wells, or subsequently enacted State regulations regarding testing and maintenance of idle wells. The operator shall carry out all additional tests, remedial operations, and mitigation measures required by DOGGR if any idle wells do not meet the test standards.

Summary of Complaints:

This provision is administrated and regulated by DOGGR. The County has not received any complaints or comments on idle well testing or maintenance.

Summary of Issues Raised by the Public:

The public has not raised any issues specific to this CSD requirement; however, wells at the oil field are discussed in the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan* and the public has the opportunity to provide comments on the Plan through the public outreach provisions of the CSD. In comments received during the scoping of this document the public noted that updates to the DOGGR updates to idle well regulations be considered in the review.

Analysis of Compliance and Effectiveness:

In California, an idle well is a well that has not been used for two years or more and has not yet been properly plugged and abandoned to DOGGR satisfaction. Updated regulations to improve maintenance of idle wells became effective on April 1, 2019. The regulations specify far more rigorous testing requirements that better protect public safety and the environment from the potential threats posed by idle wells. The regulations require idle wells to be tested and, if necessary, repaired, or permanently sealed (plugged and abandoned).

The DOGGR idle well updates include a Long-Term Idle Well Management & Elimination Plan (Plan) pursuant to Section 3206 of the Public Resources Code (PRC). The Plan contains three components: the terms of the Plan and operator agreement to the terms, the long-term idle well elimination schedule, and an annual review. Included in the plan is an elimination schedule for idle wells.

The well testing includes the determination of the fluid level of the well and may include other diagnostic tests as required by DOGGR. FMO&G and now SPR complete the required testing and maintenance pursuant to the DOGGR and submit the results to DOGGR pursuant to the regulations in an annual report. DOGGR inspects or waives the right to inspect at the various points stipulated in the permit during the plug and abandonment process. DOGGR also witnesses setting of the surface plug, capping the well, and remediating the immediate area around the well.

The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

This CSD provision is not directly linked to technology; however, the requirement language is linked to DOGGR regulations. As new technology regarding idle well testing and maintenance is developed and added to the State regulations, those requirements would be incorporated into the CSD provision by reference.

Recommendations to Changes in Implementation:

The provision has been implemented and is considered fully effective at this time, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The provision considered fully effective at this time, and no changes to the CSD language are recommended.

4.32 FF. ABANDONED WELL TESTING

The operator shall conduct annual hydrocarbon vapor testing of areas within the oil field that contain abandoned wells. The testing shall be done using a soil gas vapor probe, or another method approved by the director. The results of the testing shall be submitted to the director and DOGGR on an annual basis. Abandoned wells that are found to be leaking hydrocarbons that could affect health and safety shall be reported to the director and DOGGR within 24 hours of the abandoned well test. If directed by DOGGR, the operator shall re-abandon the well in accordance with DOGGR rules and regulations. If the test results for an abandoned well area are at or below the background levels for two consecutive years that area shall thereafter be tested every five years.

Summary of Complaints:

Abandoned well area testing has occurred annually since the adoption of the CSD as required; no complaints associated with the testing have been received by the County.

Summary of Issues Raised by the Public:

No issues regarding the abandoned well testing have been raised by the public. However, as part of the Settlement Agreement dated July 15, 2011 between concerned public parties, the County and PXP, the length of cement plugs used in the well abandonment process at the Inglewood Oil Field was increased from the 25 feet required by DOGGR to 150 feet.

Analysis of Compliance and Effectiveness:

Abandoned well area hydrocarbon vapor testing has been completed annually by a third-party consultant since the adoption the CSD. Results of the sampling were compared to the regulations and requirements of the City of Inglewood, LA County Department of Public Works, LA County Fire Department, the California Code, and the South Coast Air Quality Management District in reports submitted to LA County and DOGGR. The reports completed for this review period, 2014 through 2018 concluded that there is no evidence of leaking or natural seepage from abandoned wells at the oil field. However, the sampling for the 2018 compliance year did indicate very high levels of methane in the data for the area around Well BC-14. The sampling results for Well BC-14, completed in September 2018, contained methane at 72,000 ppmv. As a result of this very high level, and in coordination with the County, the operator researched the plug and abandonment data for the subject well and excavated the area surrounding the well down to the well cap. Results of the investigation documented that the well was plugged and abandoned properly in 1994. Further, the excavated well head was in good condition with the top containing an intact welded cap; test results of the well head and surrounding area did not indicate any significant amount of methane.

As a result of the non-conclusive tests surrounding the BC-14 well head the operator expanded sampling in the area with the installation of three permanent soil gas monitoring well locations. During follow-up testing of the three area wells, results showed elevated readings to the east and north-east of Well BC-14 and lower readings immediately above the well head. As a result of the re-testing, the operator excavated the area with the elevated readings and identified a gas pipeline with a pin hole leak; approximately 300 feet of the leaking pipeline was replaced. Both the operator and the County ECC test the area and the three permanent soil gas monitoring locations on a monthly basis and all three locations are scheduled for formal testing for the 2019 testing schedule.

With the exception of the leaking gas pipeline found in late 2018, the annual abandoned well area hydrocarbon vapor testing program to date has concluded that there is no evidence of leaking wells or natural seepage. The reports further conclude that the low levels of hydrocarbons detected are likely the result of natural degradation of crude oil in the near surface soil resulting from historic oil operations. The Annual Abandoned Well Testing reports are available at the Inglewood Oil Field web site at www.inglewoodoilfield.com.

Finally, all wells abandoned since the settlement agreement was adopted have exceeded the 150 feet length of cement plugs as verified by the County. The annual abandoned well area hydrocarbon vapor testing has been completed as required. The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

The annual abandoned well area hydrocarbon vapor testing is performed by a third-party consultant consistent with accepted sampling procedures and lab analysis per the American Society for Testing and Materials (ASTM) D1945 analytical techniques. As new techniques in soil testing and analysis are developed and implemented, the testing program will be modified accordingly.

Recommendations to Changes in Implementation:

The required annual abandoned well area hydrocarbon vapor testing has been completed as required; no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The provision has been completed as required to date and no abandoned wells have been found to be leaking hydrocarbons that could affect health and safety. No wells have been required by DOGGR to be re-abandoned due to leaking hydrocarbons. Therefore, no changes to the CSD language are recommended.

4.33 GG. WELL AND WELL PAD ABANDONMENT

If DOGGR orders the operator to plug and abandon any wells on the oil field, the operator shall deliver to the fire department, on a timely basis, all notices of intent to plug and abandon a well that the operator files with DOGGR and shall commence promptly and proceed diligently with the plugging and abandonment operations in accordance with DOGGR rules and regulations and the terms of the DOGGR permit to plug and abandon the well. Well abandonment may commence once all necessary permits and approvals are obtained. If the well pad associated with the abandoned well does not contain other production, injection, or idle wells, and will not be used for future drilling, then the operator shall promptly abandon the well pad consistent with the following provisions:

1. Closure of Sumps. The operator shall clean out all sumps, cellars, and ditches, and level and fill all sumps and depressions pursuant to DOGGR requirements. If sumps are lined with concrete, bottoms and walls shall be broken up and removed. Sumps shall be closed in accordance with Regional Water Quality Control Board and California Department of Toxic Substances Control requirements.

2. *Well Pad Site Cleanup.* The operator shall leave the site entirely free of oil, rotary mud, oil-soaked earth, asphalt, tar, concrete, litter, debris, and other substances to the satisfaction of DOGGR and in compliance with federal requirements.

3. *Contaminated Materials.* All contaminated soils and materials within the well pad boundaries shall be removed and treated or disposed of in accordance with all local, county, State, and federal regulations.

4. *Well Pad Revegetation.* The Well pad shall be revegetated following the requirement of the native habitat restoration Plan.

Summary of Complaints:

This provision has not been implemented by DOGGR to date and the County has not received any complaints on the requirement to date.

Summary of Issues Raised by the Public:

There have been no issues raised by the public specific to this provision and DOGGR has not ordered any wells to be plugged or abandoned pursuant to this requirement. Wells at the oil field associated with plugging and abandonment activities are discussed in the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan* and may be subject to DOGGR Area of Review (AOR) requirements as discussed below. The public has the opportunity to provide comments on the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan* through the public outreach provisions of the CSD.

While no public input was received on this CSD provision, the terms of the Settlement Agreement negotiated between concerned public parties, the County and PXP (now SPR) included additional requirements to the CSD regarding well plugs. The agreement language increases the length of the cement surface plug from the 25-foot DOGGR requirement to 150 feet. The applicable language from the settlement agreement is listed below.

Well Plugs. DOGGR requires oil field operators to utilize a minimum 25-foot cement surface plug at the top of a well when abandoning any such well pursuant to Title 14 of the California Code of Regulations section 1723.5. To augment this requirement, for all wells abandoned at the Oil Field from the date of this Agreement, PXP shall utilize a total of 150-foot cement surface plug.

Analysis of Compliance and Effectiveness:

As noted above, DOGGR has not implemented this provision to require the operator to plug and abandon any wells to date. Wells voluntarily scheduled for plugging and abandonment are included in the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan* subject to DOGGR and the County review and approval. In addition, idle or previously plugged and abandoned wells are subject to the DOGGR Area of Review (AOR) process which is implemented when a new injection well is proposed as summarized below.

In California, injection wells associated with oil and natural gas production operations (Class II injection wells) are regulated by DOGGR pursuant to their Underground Injection Control (UIC) Program. The program is coordinated with the EPA for regulation of Class II injection wells under the federal Safe Drinking Water Act. When injection wells are included in the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan*, DOGGR implements the AOR process for the area with the potential to be affected by the proposed injection well. DOGGR defines the AOR surrounding a proposed injection well bore as a minimum one quarter mile

radius, with local geology and reservoir characteristics providing other input to the determination of the size of an AOR. The Inglewood oil field is divided into 15 AOR sections. The AOR process analyzes all wells, including idle and abandoned wells, in the area of a proposed new injection well to ensure the wells will not cause damage to life, health, property, or natural resources.

The provision language also includes requirements for closure of sumps, well pad clean up, contaminated materials, and well pad revegetation. As discussed for CSD 22.310.050.O *Sumps*, the Inglewood Oil Field does not contain any sumps and sumps are no longer used at the oil field. Existing well pads have been cleaned up but are not scheduled for abandonment or restoration because SPR standard practice is to re-use the well pad sites as feasible to avoid the impact of developing new well pad areas.

The provisions requiring abandonment of wells, closure of sumps and well pads cleanup have not been activated to date, however, the intent of the requirement is met through other CSD and DOGGR regulations, no further analysis is recommended.

New Technology:

This CSD provision is not directly linked to technology; however, the requirement language is linked to DOGGR regulations. As new technology or requirements regarding plugging and abandonment of wells are developed and added to the State regulations, those requirements would be incorporated into the CSD provision by reference.

Recommendations to Changes in Implementation:

The provision requirement has not been implemented to date; however, the intent of the requirement is accomplished through DOGGR requirements and other CSD provisions. No further analysis is recommended.

Recommendations to Changes in CSD Language:

The provision requirement has not been activated to date and the oil field wells are reviewed annually through DOGGR requirements and other CSD provisions. There is the potential for DOGGR to require the plugging and abandonment of a well that is not part of an annual Plan or associated with an injection well project in the future. Therefore, the requirement should remain and no changes to the CSD language are recommended at this time.

4.34 HH. COUNTY REQUEST FOR REVIEW OF WELL STATUS

The director may periodically review the status of the operator's wells and submit to DOGGR a list of wells the director believes should be plugged and abandoned as specified in Public Resources Code section 3206.5 or any subsequently enacted State law related to a local jurisdiction's right to request State-agency review of idle wells.

Summary of Complaints:

There have been no complaints regarding the County's discretion to request DOGGR review of wells as provided for in this provision.

Summary of Issues Raised by the Public:

There have been no issues raised by the public specific to County's discretion to request DOGGR review of wells as provided for in this requirement. The public can provide comments

on oil field documents such as compliance reports, plans, audits, and studies including the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan*.

Analysis of Compliance and Effectiveness:

The County has not requested that DOGGR require the Operator to plug or abandon any wells pursuant to this provision to date; therefore, the requirement has not been activated to date. Well status is reviewed by the County through other provisions of the CSD such as the *Well Abandonment and Well Restoration Plan* which must be approved prior to the initiation of each year's drilling program. CSD provision 22.310.050.FF, *Abandoned Well Testing*, requires abandoned well areas to be tested for hydrocarbon contamination and these reports be submitted to the County and DOGGR on an annual basis. If the County discovers any anomalies regarding the well testing, the County can request that DOGGR require the Operator to abandon or plug a well that could be emitting hydrocarbons. As stated above, this has not been necessary to date.

The provision requirement has not been activated to date and no further analysis is recommended.

New Technology:

This CSD provision is not directly linked to technology; however, the requirement language does include the associated State law, Public Resources Code section 3206.5. Should the State law be revised, operational status of wells, or the plugging and abandonment schedules of wells based on new technology, the new law would be incorporated into the CSD provision by reference.

Recommendations to Changes in Implementation:

The provision requirement has not been implemented to date and County review of the status of wells is accomplished through other CSD provisions. No further analysis is recommended.

Recommendations to Changes in CSD Language:

The provision requirement has not been activated to date and well status is reviewed annually through other CSD provisions. There is the potential for the need to review a well or wells that may not be part the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan* or other required plans. Therefore, the requirement should remain and no changes to the CSD language are recommended at this time.

4.35 II. REDUCED THROUGHPUT TRIGGERING REVIEW

When oil or gas throughput is less than 630 barrels per day, the director shall conduct a public hearing to determine if shut down of the oil field or other actions are appropriate.

Summary of Complaints:

This provision is intended to be implemented at or near the end of the Inglewood Oil Field's project life to determine if the oil production at the site remains economically viable and whether abandonment of the oil field is merited. The oil field has not reached the production levels that trigger this review and this provision has not been activated to date. The County has not received any complaints on the requirement.

Summary of Issues Raised by the Public:

The public, specifically the parties involved in the Settlement Agreement dated July 15, 2011, requested additional language be added to the requirement. The Settlement Agreement details additional requirements to the CSD as negotiated between the concerned public parties, the County and PXP (now SPR). The additional language from the Settlement Agreement regarding *CSD 22.310.050.II, Reduced Throughput Triggering a Review* is listed below:

CSD Review Based On Reduced Production. When production drops to three percent of the estimated peak production of 21,000 barrels of oil per day, the County will review the CSD to consider whether modifications or closure of the Oil Field is necessary or appropriate or at such earlier date as the County determines appropriate.

Analysis of Compliance and Effectiveness:

As noted above, the intent of this provision is to assist in the determination of the end of the project life of the oil field and therefore has not been activated to date. The provision requirement was augmented by additional language documented in the 2011 Settlement Agreement dated July 15, 2011, which provided for County review prior to the production throughput trigger of 3 percent of the estimated peak production to date of 21,000 barrels. The original CSD language required oil production throughput to reach 630 barrels per day to trigger County review. It should be noted that the numerical trigger for throughput review in both the original CSD language and the additional language from the Settlement Agreement is the same, 630 barrels per day (3% of 21,000 = 630).

The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

This provision is intended to assist in the determination of the end of the project life of the oil field based on a production throughput value. However, the additional language from the Settlement Agreement allows for County review *“at such earlier date as the County determines appropriate”*. Therefore, should the County decide that a review is appropriate prior to the oil production reaching the trigger value in the provision; the County can initiate the review.

Recommendations to Changes in Implementation:

The provision is intended to be implemented at or near the end of the oil fields project life and therefore has not been activated to date. The existing language and the amendments made through the Settlement Agreement provide sufficient flexibility to allow a review as the County considers appropriate. No changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The provision has not been activated to date and the requirement has been revised by additional language from the Settlement Agreement dated July 15, 2011. No additional changes to the CSD language are recommended.

4.36 JJ. ABANDONMENT PROCEDURES

Within 180 days of permanent facility shut down, the operator shall submit an abandonment Plan to DOGGR and submit to the director for review and approval a timeline for facility removal, site assessment, and remediation as necessary. The operator shall begin abandonment of the site no later than 20 days after the director's approval of the timeline and

shall provide to the director quarterly updates on the abandonment process until such time as the oil field is abandoned and remediated. The operator shall post a performance bond to insure compliance with all provisions of this subsection and the operators and landowners shall continue to pay property taxes at the rates assessed during oil field operation until all site restoration work has been fully completed, as determined by the director.

Summary of Complaints:

This provision is intended to be implemented at the cessation of oil field activities and permanent shut down of the Inglewood Oil Field; therefore, the provision has not been activated to date. The County has not received any complaints on the requirement.

Summary of Issues Raised by the Public:

This provision will not be implemented until permanent shut-down of the Inglewood Oil Field occurs. The County has not received any public input on the requirement.

Analysis of Compliance and Effectiveness:

As noted above, the provision will not be implemented until the Inglewood Oil Field is permanently shut down. The requirement includes that the facility Abandonment Plan be submitted to DOGGR and reviewed and approved by the County. This review process will allow for both DOGGR and the County to ensure the abandonment Plan meets all applicable requirements for plugging and abandonment of wells, equipment removal and remediation of the site. The requirement also includes a performance bond and the continuation of property tax payments until the County determines all site restoration work has been successfully completed. The Operator has provided an abandonment bond consistent with the provisions of this subsection.

The actual abandonment provision of this subsection has not been activated, and no further analysis is recommended at this time.

New Technology:

As the facility has not been shut down to date, this provision has not been activated. However, the condition language requires that the Abandonment Plan be submitted to DOGGR and to the County for approval. Therefore, new technologies involving facility removal, site assessment, and remediation available at the time the facility ceases operation may be reviewed, required and implemented as applicable to the abandonment Plan.

Recommendations to Changes in Implementation:

The provision involves requirements for abandonment and restoration of the Inglewood Oil Field and therefore has not been implemented. No changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The provision has not been activated. In addition, new technology or improvements in facility removal, site assessment, and remediation can be included to the CSD requirement through the review and approval of the abandonment Plan. Therefore, no changes to the CSD language are recommended.

5.0 Monitoring and Compliance (22.310.060)

This section of the CSD outlines the monitoring, compliance, and the complaint process requirements of the CSD.

5.1 A. ENVIRONMENTAL QUALITY ASSURANCE PROGRAM ("EQAP")

The operator shall comply with all provisions of an environmental quality assurance program that has been approved by the director. The following provisions relate to the EQAP:

*1. EQAP Requirements. The EQAP shall provide a detailed description of the steps the operator shall take to assure compliance with **all** provisions of this section, including but not limited to, all of the monitoring programs called for by this section.*

2. Annual EQAP Reports. Within 60 days following the end of each calendar year, the operator shall submit to the director an annual EQAP report that reviews the operator's compliance with the provisions of the EQAP over the previous year and addresses such other matters as may be requested by the director. The annual EQAP report shall include the following:

a. A complete list and description of any and all instances where the provisions of the EQAP, or any of the monitoring programs referred to therein or in this section, were not fully and timely complied with, and an analysis how compliance with such provisions can be improved over the coming year.

b. Results and analyses of all data collection efforts conducted by the operator over the previous year pursuant to the provisions of this section.

3. EQAP Updates. The EQAP shall be updated as necessary and submitted to the director for approval along with the annual EQAP report. The EQAP updates shall be provided to the CAP and MACC for review and comment. Comments from the CAP and MACC, if timely received, shall be considered by the director before making a decision to approve the same. The director shall complete the review of EQAP updates as soon as practicable, and shall either approve the updated EQAP or provide the operator with a list of specific items that must be included in the EQAP prior to approval. The operator shall respond to any request for additional information within 30 days of receiving such request from the director, unless extended by the director.

Summary of Complaints:

The County has not received any complaints regarding the EQAP provision of the CSD.

Summary of Issues Raised by the Public:

The public has not raised any issues specific to the EQAP provision. CAP members have received briefings at the CAP meetings regarding audits conducted at the oil field by the ECC and the ECC responded to questions from the CAP members as appropriate.

Analysis of Compliance and Effectiveness:

The EQAP was approved by the County in February 2009 and was revised on August 25, 2009. The EQAP contains sections on the background and operations of the oil field, the relationship of the EQAP with other CSD monitoring compliance programs, the EQAP compliance program and the compliance monitoring conducted by the oil field operator. The document also discusses the organization and relationship of the oil field compliance team consisting of County staff, the Environmental Compliance Coordinator (ECC), the MACC, the CAP, third-party

consultants and auditors, the ombudsperson, and the oil field operator staff. The EQAP contains the documentation requirements for the compliance program including the Environmental Quality Control Report, reporting of onsite inspection visits, and the format for the annual EQAP report. Subsection A.3 requires periodic updates to the EQAP as determined by the County. The EQAP has not been required to be updated since August 2009.

Annual EQAP compliance reports have been prepared and submitted by the operator as required by this provision with the first report completed on March 1, 2010. Reports for the compliance years 2014 through 2018 have been submitted to the County in March of each of the following compliance years. The annual reports are typically composed of three components; a narrative summary of the compliance status of the oil field, a compliance matrix in tabular format, and records of compliance documents completed for the subject year. The annual EQAP reports are reviewed by the County and are one of the primary documents analyzed during the compliance audits completed by the ECC.

EQAP audits have been completed for the operating years 2010, 2011, 2012, and 2016. EQAP audits were not completed for the years 2013, 2014, 2015, 2017, and 2018 due to preparation of the initial Periodic Review and SIMQAP audits completed in 2016, and 2018. Note the annual EQAP compliance reports are reviewed along with the associated compliance data and reports every year.

The audits are scheduled after review of the annual EQAP reports submitted by the Operator. Results of the audits are documented in a report that includes findings and recommendations for potential improvements in continued compliance with the EQAP-related provisions of the CSD. The suggestions are then tracked and monitored by the ECC to document the implementation of the recommendations. Overall, the Operator has been found to be in substantial compliance with all provisions of the CSD and the results of the audits have been favorable. However, recommendations for improvement have been provided after each yearly audit. Compliance verification with recommendations is reviewed by the County during ECC inspections and compliance report reviews.

The annual EQAP audits provide the County with the opportunity to complete a formal review of compliance activities and compliance documentation of the provisions of the CSD. The results of the audits indicate that the oil field is being operated in compliance with those requirements. The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

Subsection A.3 requires periodic updates to the EQAP as required by the County, therefore, as new technologies are developed for environmental protection and compliance for oil field operations, those requirements may be added to the EQAP as applicable.

Recommendations to Changes in Implementation:

The provision has been implemented and is considered fully effective at this time, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The provision is considered fully effective at this time, and no changes to the CSD language are recommended.

5.2 B. ENVIRONMENTAL COMPLIANCE COORDINATOR

The operator shall recommend and fund the environmental compliance coordinators. The number of environmental compliance coordinators shall be determined by the county and shall take into account the level of oil operations at the oil field. The environmental compliance coordinator(s) shall be approved by, and shall report to, the director. The responsibilities of the environmental compliance coordinator(s) shall be set forth in implementation guidelines that may be developed by the county for the oil field and shall generally include:

1. On-site, day-to-day monitoring of construction or drilling and redrilling activities as determined by the director.
2. Taking steps to ensure that the operator, and all employees, contractors, and other persons working in the oil field, have knowledge of, and are in compliance with all applicable provisions of this section.
3. Evaluating the adequacy of drilling, redrilling, and construction impact mitigations, and proposing improvements to the operator or contractors and the county.
4. Reporting responsibilities to the various county agencies with oversight responsibility at the oil field, as well as other agencies such as DOGGR, and SCAQMD.

Summary of Complaints:

The County has not received any complaints regarding the ECC provision.

Summary of Issues Raised by the Public:

The County received input on the ECC in the scoping comments solicited for the Periodic Review regarding the current ECC. Input included requests that a different third-party consultant be considered by the County and that public input be included as part of the selection process for the ECC. As allowed for by this provision, the current ECC is not a singular individual but rather a third-party consulting firm familiar with the oil and gas industry and the CSD as further discussed below. The ECC is required to be approved by, and report to, the Director of DRP.

Analysis of Compliance and Effectiveness:



An ECC position has been funded by the operator as required by this provision since the adoption of the CSD. The ECC has met the qualification requirements for the position and have been approved by the County. The ECC is familiar with the compliance requirements of the CSD and the environmental impacts and mitigation associated with oil field operations. The oil field site visits performed by the ECC include an inspection of the drilling or

redrilling rig to check compliance on the CSD provisions such as the Quiet Mode Drilling Plan, air quality monitoring equipment, and noise monitoring equipment. The ECC site inspections

are coordinated with oil field management to gain access to oil field staff, oil field contractors and for access to the oil field to check on the compliance provisions of the CSD. The ECC also participates in reviewing and commenting of all plans submitted by the Operator in compliance with the CSD. The ECC also includes a number of oil field related subject matter experts that can be used at any given time depending on the compliance needs of the County in ensuring compliance with the CSD. Experts include acoustical engineers, air quality, biology, landscape architects, risk assessment and planning experts, among others. As outlined in the EQAP, the ECC is part of the coordinated compliance effort of the County, other resource agencies, and the oil field operator.

The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

The EQAP and ECC provisions allow new technologies in environmental compliance equipment to be used by the ECC as those technologies are developed.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

5.3 C. SAFETY INSPECTION, MAINTENANCE, AND QUALITY ASSURANCE PROGRAM ("SIMQAP")

The operator shall comply with all provisions of a safety inspection, maintenance, and quality assurance program that has been approved by the director and the fire chief.

1. *SIMQAP Requirements. The SIMQAP shall, at a minimum provide for:*

- a. Inspection of construction techniques;*
- b. Regular maintenance and safety inspections;*
- c. Periodic safety audits;*
- d. Corrosion monitoring and leak detection; and*
- e. Inspections of all trucks carrying hazardous and/or flammable material prior to loading.*

2. *SIMQAP Updates. The operator shall periodically review and revise the SIMQAP to incorporate changes in procedures, and new safety and maintenance technologies and procedures. The operator shall make such revisions at least every five years, or more frequently, if the operator determines changes are necessary or if requested by the director or the fire chief. The operator shall submit SIMQAP updates to the director and the fire chief for their review and approval. The director shall complete the review of SIMQAP updates as soon as practicable, and shall either approve the updated SIMQAP or provide the operator with a list of specific items that must be included in the SIMQAP prior to approval. The operator shall*

respond to any request for additional information within 30 days of receiving such request from the director, unless extended by the director.

3. Worker Notification. The operator shall ensure that all persons working on the oil field comply with all provisions of the currently approved SIMQAP.

4. Inspections. The SIMQAP shall provide for involvement of county staff or the environmental compliance coordinator in all inspections required by this section.

Summary of Complaints:

The County has not received any complaints regarding the SIMQAP provision of the CSD.

Summary of Issues Raised by the Public:

Input from the scoping comments for this review was received on the SIMQAP documentation and reports. The comments requested links to the SIMQAP updates and SIMQAP documents, however, the SIMQAP documentation for both the SIMQAP document itself and the audit reports are available on the oil field website.

Maintenance and maintenance frequency were discussed at CAP meetings after a level controller failure and subsequent tank overflow event on November 22, 2018. The tank overflow event resulted in 14 odor complaints in the Ladera Heights neighborhood and a request by the public for more information on the amount and type of gas released by the overflow event. As a result of this request, the County ECC staff coordinated with the operator to obtain gas sample data from the subject tank and performed a modeling analysis to calculate the offsite concentrations and health impacts of the gas release. The results of the analysis were presented and discussed at the April 25, 2019 CAP meeting. The Tank Overflow Modeling analysis report is available in a power point format on the County DRP oil field website.

The level controller that failed was part of the inspection and maintenance program required by subsection C.1.b of this provision. While the piece of equipment failed, it had been inspected as part of the maintenance program on November 2, 2018, approximately 20 days before the failure. The inspection and maintenance program provide for sufficient inspection and maintenance of equipment but cannot completely ensure against potential malfunctions that could occur to various pieces of equipment. Due to the fact that the November 22, 2018 tank level controller failure resulted in offsite impacts to the public, the County required the installation of a second, redundant backup system, to prevent the potential re-occurrence of a tank overflow event. The backup system, a high-level alarm, was installed in May 2019 and successfully tested for the ECC on May 23, 2019. Additional tanks are under review by the operator and the County to determine applicability of additional alarm systems.

Analysis of Compliance and Effectiveness:

The SIMQAP was completed and implemented in May 2009 and approved on April 13, 2011. The document was prepared with the assistance of a professional engineer familiar with the equipment, environmental impacts, and environmental regulations of oil field facilities. The SIMQAP includes requirements for facility staffing, fire protection systems, process controls, gas detection, emergency systems, and leak prevention and detection measures. The inspection and maintenance section of the document provides details on the preventive maintenance program, safety device inspections, equipment inspections, electrical equipment inspection, and the inspection and maintenance of flow lines. The document also includes a discussion of the Transportation Security Plan which lists the requirements for trucks carrying hazardous and/or

flammable materials as required by subsection C.1.e. Oil field staff has received training on the SIMQAP as a component of the training on the CSD completed on an annual basis.

All oil field equipment, and the associated maintenance of that equipment, is tracked and scheduled with a vendor-supplied computer-based maintenance management program. This schedule is linked to the requirements of the SIMQAP. The operator also conducts annual internal safety audits of the facility which provide for review and inspection of the oil field equipment.

The previous Periodic Review recommended that SIMQAP audits be completed pursuant to subsection C.1.c, two SIMQAP audits have been completed with reports dated July 2016 and August 2018. The next SIMQAP Audit is scheduled for 2020.

The provision is considered fully effective at this time and no further analysis is recommended.

New Technology:

The SIMQAP is required by this provision to be periodically reviewed and revised to incorporate changes in procedures, new safety technologies, and new maintenance technologies. As noted above, the oil field tanks are under review by the County for additional alarms with one additional redundant alarm system installed in May 2019.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

5.4 D. ANNUAL EMERGENCY RESPONSE DRILLS OF THE COUNTY AND CULVER CITY FIRE DEPARTMENTS

The operator shall demonstrate the effectiveness of the emergency response Plan by responding to one planned emergency response drill per year which shall be conducted in conjunction with the county and Culver City fire departments. Emergency response drills required by other agencies that involve the county and Culver City fire departments can be used to satisfy this provision. In addition, the operator shall demonstrate the effectiveness of the emergency response Plan by responding to not more than two unannounced drills each year which may be called by the county fire department at the oil field. If critical operations are then underway at the oil field, the operator need not respond to a unannounced drill to the extent such a response would, as a result of such critical operations, create an undue risk of personal injury or property damage, but in such case the operator must promptly explain the nature of the critical operations, why response is not possible, and when the critical operations will be completed.

Summary of Complaints:

The County has not received any complaints regarding the emergency response provision of the CSD.

Summary of Issues Raised by the Public:

In the comments received for the scoping of this document, Culver City requested that the County encourage that the unannounced drills allowed for under this provision occur

periodically. This issue was noted and was a recommendation in the first Periodic Review (see Section 2.5) and is also a recommendation in this review (see Section 1.8).

Analysis of Compliance and Effectiveness:

Emergency response drills were conducted annually by the operator on October 3, 2014, November 5, 2015, November 3, 2016, June 29, 2017, and March 14, 2018. Each drill is coordinated by the State Office of Spill Prevention and Response (OSPR) with notice to other resource agencies including the County and Culver City fire departments. The emergency response drills include a demonstration of the field capabilities and equipment for emergency response and are well attended by regulatory agencies; the drill conducted on March 14, 2018 included staff from the Culver City Fire Department, LA County Fire Department, Fish and Wildlife Service, OSPR, and the County ECC. All agencies involved in the March 2018 drill passed the operator, SPR, with high marks for preparedness, documentation, and coordination with agency staff. In addition to operator staff and the regulatory agencies, the drills also include staff from local spill response contractors. The spill response contractor is the same contractor that would be utilized in the event of a spill and their participation in the annual drills provides with familiarity with both the oil field, oil field equipment, and oil field staff.

This provisions also calls for up to two unannounced drills per year at the discretion of the Fire Department; no unannounced drills have taken place at the oil field to date.

The provision is considered fully effective at this time and no further analysis is recommended. However, it is recommended that efforts be made to ensure that unannounced drills take place at the oil field as allowed for by the provision of the CSD. The Department of Regional Planning may coordinate with the County Fire Department to encourage that unannounced drills occur in the future.

New Technology:

The annual emergency response drills and updates to the ERP document allow for new technology and techniques to be introduced and included as they become available.

Recommendations to Changes in Implementation:

This provision is implemented as intended, and no changes to implementation are recommended. However, as stated above, it is important to encourage that unannounced drills are conducted periodically at the oil field.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

5.5 E. NOISE MONITORING

The public health department shall retain an independent qualified acoustical engineer to monitor ambient noise levels in the areas surrounding the oil field as determined necessary by the director or the director of public health. The monitoring shall be conducted unannounced and within a time frame specified by the director or the director of public health. Should noise from the oil operations exceed the noise thresholds specified in this section, no new drilling or redrilling permits shall be issued by the county until the operator in consultation with the director and director of public health identifies the source of the noise and the operator takes the steps necessary to assure compliance with thresholds specified in this section. The results of all such monitoring shall be promptly posted on the oil field website and provided to the CAP.

Summary of Complaints:

The County has not received any complaints regarding the requirement for noise monitoring of this provision. Noise complaints are discussed in the analysis for CSD Provision E.5.

Summary of Issues Raised by the Public:

See the discussion of CSD Provision 22.310.050.E, *Noise Attenuation*, for detail on noise issues with the oil field.

Analysis of Compliance and Effectiveness:

The provision requires that the County Department of Public Health use of an independent qualified acoustical engineer for noise monitoring if deemed necessary. As discussed in the analysis for the noise attenuation provision, no exceedances of the noise regulations in the County Code or of the noise limits specified in subsection 22.310.050.E.1 of the CSD have been recorded. Therefore, the County has not determined that the additional noise monitoring required by this provision has been necessary.

The provision has not been activated to date and no further analysis is recommended.

New Technology:

The provision requires the use of an independent qualified acoustical engineer for noise monitoring; therefore, any noise monitoring required by this provision would be completed with current noise measurement technology.

Recommendations to Changes in Implementation:

This provision has not been implemented to date; however, no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

5.6 F. VIBRATION MONITORING

The public health department shall retain an independent qualified acoustical engineer to monitor vibration in the areas surrounding the oil field as determined necessary by the director or the director of public health. The monitoring shall be conducted unannounced and within a time frame specified by the director or the director of public health. Should vibration from the oil operations exceed the vibration thresholds specified in this section, no new drilling or redrilling permits shall be issued by the county until the operator in consultation with the director and director of public health identifies the source of the vibration and the operator takes the steps necessary to assure compliance with thresholds specified in this section. The results of all such monitoring shall be promptly posted on the oil field web site and provided to the CAP. A telephone number by which persons may contact the operator at all times to register complaints regarding oil operations shall be posted in the main entrance sign to the facility and included in the annual newsletter required by subsections Section 22.310.100.B.2 (Newsletter) and on the oil field web site required by subsection Section 22.310.100.B.3 (Oil Field Web Site).

Summary of Complaints:

The County has not received any complaints regarding the requirement for vibration monitoring of this provision. Vibration is discussed in the analysis for CSD Provision 22.310.050.F.

Summary of Issues Raised by the Public:

See the discussion of CSD Provision 22.310.050.F, *Vibration Reduction*, for detail on vibration issues within the oil field.

Analysis of Compliance and Effectiveness:

The provision requires that the County Department of Public Health use an independent qualified acoustical engineer for vibration monitoring if deemed necessary. As discussed in the analysis for the vibration reduction provision, no exceedances of the vibration criteria specified in Section 22.310.050.F of the CSD have been recorded. Therefore, the County has not determined that the additional vibration monitoring required by this provision has been necessary.

The provision has not been activated to date and no further analysis is recommended.

New Technology:

The provision requires the use of an independent qualified acoustical engineer for vibration monitoring; therefore, any vibration monitoring required by this provision would be completed with current vibration measurement technology.

Recommendations to Changes in Implementation:

This provision has not been implemented to date, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

5.7 G. COMPLAINTS

All complaints related to oil operations received by the operator shall be reported on the same business day to the environmental compliance coordinator and to the director. In addition, the operator shall maintain a written log of all complaints and provide that log to the director, the MACC, and CAP on a quarterly basis. Depending upon the nature of the complaint, the operator shall report the complaint to the SCAOMD, DOGGR, and any other appropriate agencies with oversight authority regarding the complaint at issue. If the complaint is received after normal business hours, it shall be reported to the environmental compliance coordinator and the agencies at the opening of the next business day

Summary of Complaints:

The County has received complaints on a variety of issues regarding the operation of the oil field including odor, noise, vibration, property damage, and dust. These complaints are discussed in the applicable sections of this Periodic Review and are summarized in the table below.

Summary of Issues Raised by the Public:

Comments have been noted on the complaint process with requests by the public for more detail in both the follow-up investigation of complaints and the documentation of that follow-up investigation. Complaint logs are posted on the County web site by quarter. The public has also expressed dissatisfaction with the results of the follow-up investigation and documentation of complaints, particularly odor complaints. In addition, the County Department of Public Health

noted in scoping comments for this document that the complaint system should be audited by an independent party to follow up on complaints and evaluate the complaint system.

Analysis of Compliance and Effectiveness:

The oil field assigns a primary and a back-up staff person to be on call to respond to complaints. In addition, the oil field ombudsperson is available to coordinate directly with the public to discuss complaint issues with the oil field. Oil field personnel responding to a complaint follow a procedure for logging in and responding to complaints from the public. The procedure first requires that oil field staff call back the complaining party and obtain the following information:

- Name, address, phone number.
- Location of the issue (noise, odor, vibration, other).
- Specific detail on the complaint (sound type, smell, other).
- Time the issue was first noticed.
- Confirm with caller that the issue will be investigated.

The next step in the complaint procedure is to contact the oil field operator currently in charge of the field and initiate an investigation on the complaint. The oil field operator is required to correspond back as soon as possible on the results of the investigation. The oil field staff person handling the complaint then reports the results of the investigation back to the member of the public that filed the complaint and updates the complaint log. The incident is reported to the oil field ombudsperson no later than the next business day and the Director, ECC, and any other appropriate agency staff with oversight authority are notified of the complaint. A follow-up of the complaint is then a component of the ECC site inspection. The SCAQMD has also assisted the oil field operator on complaint investigations and their input is noted on the complaint logs.

The complaint procedure required by this provision has been implemented, is ongoing, and has improved over time. Improvements during this Periodic Review period from the initial years of the CSD to the complaint process follow up investigations include the addition of meteorological data and mapping analysis. The County ECC has also provided neighborhood onsite follow-up on certain complaints such as the odor issues noted by the Village Green community in the third quarter of 2018 where the ECC visited the community and interviewed select residents. A summary of the complaint log for the years 2014 through 2018 is provided in the table below.

Complaint Log Summary						
Type/Year	2014	2015	2016	2017	2018	Total
Odor	28	9	13	13	41	104
Noise	7	6	2	3	5	23
Vibration	5	0	0	0	0	5
Property Damage	1	2	0	3	0	6
Dust	1	2	1	0	0	4
Other	0	2	1	1	1	5
Total	42	21	17	20	47	147

As noted above, the complaint process has improved over time with the addition of meteorological and mapping data, but review of the complaint logs indicates some of the documentation on the complaint itself is not documented completely. Specifically, the address, phone number, or pertinent detail on the complaint is not provided by the complaining party. Therefore, it is recommended that the operator and the 1-800 telephone line vendor improve the

data collected for each complaint to provide a more effective follow-up investigation and tracking of oil field complaints.

New Technology:

Complaint logs are posted to the County web site quarterly and the equipment used for follow-up investigations, such as noise or air quality monitoring equipment or air, odor, and noise modeling, represent current technology. The monitoring equipment and modeling software can be updated as this new technology becomes available.

Recommendations to Changes in Implementation:

This provision is adequately implemented; however, as stated above, it is recommended that the operator meet with staff involved with the complaint process and the 1-800 telephone line vendor to review the required information necessary for filing a complete complaint; this will improve the quality of the data collected for a complaint, assist in investigation of the complaint, and therefore upgrade the complaint process and data base.

Recommendations to Changes in CSD Language:

No changes in the CSD language are recommended at this time.

6.0 Administrative Items (22.310.070)

This section of the CSD outlines the administrative requirements including cost of enforcement, insurance and bond obligations.

6.1 A. COST OF IMPLEMENTING MONITORING AND ENFORCING CONDITIONS

The operator shall be fully responsible for all reasonable costs and expenses incurred by the county or any county contractors, consultants, or employees, in implementing, monitoring, or enforcing this section, including but not limited to, costs for permitting, permit condition implementation, mitigation monitoring, reviewing and verifying information contained in reports, undertaking studies, research and inspections, administrative support, and including the fully burdened cost of time spent by county employees on such matters.

Summary of Complaints:

This requirement involves the County cost recovery methodology for CSD compliance; no complaints from the public have been received on this provision.

Summary of Issues Raised by the Public:

The public is not involved in this condition; the payment of CSD compliance and enforcement costs is a legislative procedure implemented through the CSD and the Los Angeles County Code requirements. No public input has been received on this provision.

Analysis of Compliance and Effectiveness:

SPR and prior operators (FM O&G and PXP), have made timely payments on all CSD monitoring and enforcement costs to the County through the draw down account required by CSD Provision 22.310.070.B.2. All costs from the implementation of the CSD, permit processing, mitigation monitoring, compliance report research, review and verification, inspections, and administrative costs have been paid by the operator from this account. Review of the payment history since the adoption of the CSD shows no late payments or other issues with the legislative cost reimbursement outlined in this provision.

The condition is considered fully effective at this time and is administrative in its intent, and no further evaluation is recommended.

New Technology:

This provision of the CSD is a County administrative process and a discussion of new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement has been implemented, the subject payments are made by the operator in a timely manner, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

6.2 B. DRAW-DOWN ACCOUNT

The operator shall maintain a draw-down account with the Department of Regional Planning from which actual costs will be billed and deducted for the purpose of defraying the expenses

involved in the county's review and verification of the information contained in any required reports and any other activities of the county, including but not limited to, enforcement, permitting, inspection, coordination of compliance monitoring, administrative support, technical studies, and the hiring of independent consultants. The initial amount to be deposited by the operator shall be \$500,000. In the first year, if withdrawals from the account have reduced its balance to less than 50 percent of the amount of the initial deposit (\$250,000), the operator shall deposit \$50,000 in supplemental funds within 30 business days of notification. After the first year, if the balance in the draw-down account is reduced at any time to \$50,000, the operator shall deposit \$50,000 in supplemental funds on each occasion that the account is reduced to \$50,000 or less within 30 business days of notification. There is no limit to the number of supplemental deposits that may be required. At the discretion of the operator, the amount of an initial or supplemental deposit may exceed the minimum amounts specified in this subsection. The director may, from time to time, increase the minimum \$50,000 figure to account for inflation or the county's experience in obtaining funds from the account.

Summary of Complaints:

This requirement involves the payment method of CSD compliance and enforcement costs between the County and the operator; no complaints have been received by the County on this provision.

Summary of Issues Raised by the Public:

This provision details the accounting and payment method of CSD compliance and enforcement costs between the County and operator; no public issues have been raised on this requirement. The County received input from Culver City in the scoping comments for this report requesting that the draw down account be used for studies such as the Public Health, Ground Movement, and Air Quality Studies. The draw down account is used to pay the costs of review of the technical reports referenced in the Culver City comment. If review of the subject reports determines additional or expanded studies are necessary, the County can require such reports. The County has not made that determination for any of the studies completed pursuant to CSD requirements for this Periodic Review period.

It should be noted that The Public Health Study is administered and funded by the DPH as stipulated by the Settlement Agreement; the CSD does not fund these studies. The Air Quality study funding amount was determined in the Settlement Agreement at \$250,000 as specified in Condition 8 of the agreement.

Analysis of Compliance and Effectiveness:

As noted in the discussion for CSD Provision 22.310.070.A, FM O&G and now SPR, have made timely payments on all CSD monitoring and enforcement costs. These payments have been made via the draw-down account as required by this provision. The draw-down account has been maintained at or above the \$50,000 balance as required by this requirement since the adoption of the CSD. The account balance on December 31, 2018 was \$50,332.61 and the County has not required an increase of the minimum balance of the draw-down account to date.

The condition is considered fully effective at this time and is administrative in its intent, and no further evaluation is recommended.

New Technology:

This condition is a financial agreement between the operator and the County, and a discussion on new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement has been implemented the draw-down account is maintained by the operator as required; and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

6.3 C. INDEMNIFICATION

The operator shall enter into an agreement with the county to indemnify and hold harmless the county, its elected and appointed officials, agents, officers, and employees from any claim, action, or proceeding for damages arising from its oil operations, including water, air or soil contamination, health impacts, or loss of property value during the oil operations, well abandonment, and post-abandonment activities with terms approved by, and in a form acceptable to, the CEO.

Summary of Complaints:

This provision is administrative in its intent requiring an indemnification agreement; no complaints have been received by the County on this provision.

Summary of Issues Raised by the Public:

As noted above, this is an administrative requirement that is a standard County permit condition, and no public input has been received by the County on this provision.

Analysis of Compliance and Effectiveness:

This provision is administrative in its intent requiring an indemnification agreement. The required agreement was documented in a letter signed by the operator and the County dated November 12, 2009; the agreement is on file with the County. The County recently reviewed (August 2017) the indemnification documentation and determined the language is appropriate to protect the interests of the County.

The condition is considered fully effective at this time and is administrative in its intent, and no further evaluation is recommended.

New Technology:

This condition is an administrative requirement for an indemnification agreement, and a discussion on new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement is a standard County administrative requirement and has been implemented, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

6.4 D. INSURANCE REQUIREMENTS

Within 90 days following the effective date of the ordinance creating this section or such later time as may be approved by the director for good cause shown, and without limiting the operator's indemnification of the county as required in the preceding subsection, the operator

shall provide evidence of insurance coverage that meets county requirements as required and approved by the CEO including identifying the county and its elected and appointed officers and employees as additional insureds. Such coverage shall be maintained so long as oil operations are conducted within the district and until such time as all abandonment requirements are met and certified by the appropriate local, State, and federal agencies. Such insurance coverage shall include but is not necessarily limited to the following: general liability, auto liability, professional liability, and environmental impairment liability coverage insuring clean-up costs and endorsing for 'Sudden and Accidental' contamination or pollution. Such coverage shall be in an amount sufficient to meet all applicable State and federal requirements, with no special limitations. At the operator's request and only with county approval by the CEO, the operator may self-insure all or any part of the above coverage obligations in lieu of purchasing commercial coverage. These insurance requirements shall be in addition to all other indemnification, insurance and performance security required by federal, State, and local regulations and permits.

Summary of Complaints:

This provision is administrative in its intent requiring an insurance policy for operation of the oil field; the County has not received any complaints from the public on the insurance requirement except as discussed below.

Summary of Issues Raised by the Public:

Input on both the insurance and the performance security bond required by CSD Provisions 22.310.070 D and E was received by the County in comments solicited for the Periodic Review. The comments can be summarized as requesting the CSD contain insurance and bonding requirements for disasters, abandonment and clean-up costs and that those requirements be reviewed for adequacy.

Analysis of Compliance and Effectiveness:

PXP, the operator at the time of CSD adoption, provided the County with an insurance policy meeting the liability and environmental impairment liability requirements of this provision on January 18, 2010. The current operator of the oil field, SPR, updated this insurance to reflect the change in operator from FM O&G to SPR in December 2016/January 2017. The updated insurance policy has been reviewed by the County and meets all applicable State and federal requirements. The County recently evaluated (August 2017) the amount of coverage currently provided by the Operator and has determined that given the nature of the operations at the oil field, the coverage amounts are adequate. Further, the CSD does not determine the amount of insurance required under Provision 22.0310.070.D or the performance bond amount required under Provision 22.0310.070.E; the financial and technical requirements of these provisions are determined by the County CEO. In addition, the County may conduct additional review at any time independent of the Periodic Review process.

The condition is administrative in its intent and is considered fully implemented, and no further evaluation is recommended.

New Technology:

This condition is an administrative requirement, and new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement is an administrative requirement that has been implemented, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

6.5 E. PERFORMANCE SECURITY

The operator shall be subject to the following provisions:

1. Performance Bond. Prior to issuance of the first drilling or redrilling permit pursuant to this section, the operator shall provide to the department of regional planning a faithful performance bond or financial instrument in the sum to be determined by the CEO, payable to the county and executed by a corporate surety acceptable to the county and licensed to transact business as a surety in the State of California. Such bond shall be conditioned upon the faithful performance by the operator of duties related to well abandonment, site restoration, and environmental cleanup and shall be in a format and include terms approved by the CEO.

2. Change of Operator. The performance bond shall continue in force for one year following any sale, transfer, assignment, or other change of operator of the oil field, or of the current operator's termination of activities at the oil field. The county may release said bond prior to the end of the one-year period upon satisfaction by the operator of all its obligations. Notwithstanding the foregoing, the performance bond shall not be terminated or released upon the sale, transfer, assignment, or other change of operator until the new operator has delivered a replacement bond complying with the provisions of this Section 22.301.070 .

3. Funding Options. At its sole option, the county may accept certificates of deposit, cash deposits, or U.S. government securities in lieu of commercial bonds to meet the above bonding requirements on terms approved by the CEO.

Summary of Complaints:

This provision is administrative in its intent requiring a bond regarding the abandonment, site restoration, and environmental cleanup of the oil field. The County has not received any complaints on the performance security required by this provision apart from the public input noted below and in the discussion for CSD Provision 22.0310.070.D.

Summary of Issues Raised by the Public:

As noted in the discussion for CSD Provision 22.0310.070.D, the County received comments for the scoping of this document. The comments requested that the amounts of insurance and bonding be reviewed for adequacy.

Analysis of Compliance and Effectiveness:

PXP, the operator at the time of CSD adoption, provided the County with a performance bond issued by an acceptable corporate surety licensed to transact business in the State of California on September 29, 2009. The bond has been updated by subsequent operators consistent with the requirements of this provision.

As noted in the discussion on Provision 22.0310.070.D above, the CSD does not determine the amount of insurance required or the performance bond amount required these administrative provisions; the financial and technical requirements of these provisions are determined by the County CEO. The County completed an analysis of the bond amount in January 2017 and determined the amount should be increased from \$5,000,000 to \$6,800,000 to be appropriate for the current levels of operations at the oil field. The current operator, SPR, has updated the

bond to reflect the revised bond amount. Further, the County may conduct additional review at any time independent of the Periodic Review process; therefore, the County has the ability, through this provision, to amend the amounts required if deemed necessary in the future.

The condition is administrative in its intent and is considered fully implemented, and no further evaluation is recommended.

New Technology:

This condition is an administrative requirement, and a discussion on new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement is an administrative requirement that has been implemented; no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

6.6 F. OTHER OBLIGATIONS

The insurance, indemnification, and performance security requirements in subsections C, D and E, above, shall be in addition to all other indemnification, insurance, and performance security required by federal, State and local regulations, and permits.

Summary of Complaints:

This provision is administrative in its intent and references the requirements to the operation of oil field in addition to those outlined in the CSD; the County has not received complaints on this provision.

Summary of Issues Raised by the Public:

The County has not received input on the other agency requirements referenced by this condition. Any input received by these other agencies regarding those regulations is outside the scope of this Periodic Review.

Analysis of Compliance and Effectiveness:

The condition is administrative in its intent and is considered fully implemented, and no further evaluation is recommended.

New Technology:

This condition is an administrative requirement; a discussion on new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement is an administrative requirement, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

6.7 G. PERIODIC REVIEW

The county shall conduct a comprehensive review of the provisions of this section at least every five years to determine if the provisions of this section are adequately protecting the health, safety, and general welfare. Such reviews shall, among other things, consider whether additional provisions should be added, appended, or removed. One of the main goals of the Periodic Review shall be to evaluate if proven technological advances that would further reduce impacts of oil operations on neighboring land uses should be incorporated into the provisions of this section.

1. Review Requirements. Each review shall include a report by a hearing officer designated by the director, which shall be prepared after public notice and an opportunity for public comment. The report shall include a comprehensive analysis of the effectiveness of this section, and shall review and consider enforcement activity, operational records, and any other issues relating to oil operations. The report, at the option of the county, may include a survey of residents near the oil field regarding noise, odors, vibrations, and other issues requested by the director of public health. A draft of the report shall be provided to the CAP and the operator for review and comment. All comments on the draft report from the CAP and the operator shall be submitted to the hearing officer in writing, and will be considered, if timely received, before the report is finalized. The final report by the hearing officer shall include a recommendation as to whether the director should prepare proposed amendment to this section for submission to the board of supervisors.

2. Early Reviews. At the discretion of the director, reviews of this section may be conducted more frequently than every five years. Without limiting such discretion, the director shall consider whether an early review should be undertaken if more than three material violations occur within any 12-month period.

3. Initial Review. The initial review shall occur no sooner than three years and no later than five years after the effective date of the ordinance establishing this section unless the director determines that such initial annual review shall occur at an earlier time pursuant to Subsection G.2, above.

Summary of Complaints:

No complaints to date have been received by the County on the Periodic Review. The first Periodic Review was completed with a final report dated September 2015.

Summary of Issues Raised by the Public:

The County solicited input on the CSD for this Periodic Review as required by this provision. Input from the public was obtained by comments provided by letter, email, and/or at the Community Advisory Panel (CAP) meetings. Comments have been received on a variety of CSD provisions and are acknowledged and discussed in the analysis of the relevant CSD condition of this report.

Analysis of Compliance and Effectiveness:

This report, prepared subject to this provision, documents compliance with the Periodic Review requirement. The review provides a comprehensive analysis of the effectiveness of the requirements of each CSD provision. Information sources and input for this review included:

- Compliance records, reports, plans, and training records.
- Monitoring data.

- Operational records.
- ECC site inspections.
- Annual EQAP audit reports.
- Enforcement actions.
- Interviews of FM O&G staff.
- Results of the electronic survey.
- CAP meeting comments.
- Written comments.
- Complaint records.

The draft report was circulated for review and comment to the CAP, members of the public, other agencies, and the operator. Comments on the draft report were considered in the preparation of the final draft. The report was prepared consistent with the five-year time frame requirement stipulated in subsection G.3.

This report was prepared pursuant to the CSD requirement, and therefore the condition is considered fully implemented; no further evaluation is recommended.

New Technology:

This Periodic Review of the CSD discusses new technology, as applicable, in the analysis of each condition of the CSD permit of the report.

Recommendations to Changes in Implementation:

This requirement has been implemented, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

6.8 H. MULTIPLE AGENCY COORDINATION COMMITTEE (“MACC”)

A MACC shall be established to coordinate activities and communications between the various agencies with regulatory authority over the oil operations within the district. While each agency will continue to make its own decisions with regard to their respective areas of authority, the MACC will allow for collection and analysis of data and for discussion of both strategic evaluations and enforcement actions taken by the various agencies at the oil field.

1. MACC Members. The director shall establish a MACC that includes representatives from the following agencies: the county department of regional planning, the county fire department, the county department of public works, and the county department of public health. The SCAQMD, the Regional Water Quality Control Board, DOGGR, and Culver City fire department shall be invited to appoint a representative from their agency as a member of the MACC.

2. MACC Chair. The director or his designee shall chair the MACC meetings and shall coordinate all MACC activities including scheduling and keeping minutes of MACC meetings.

3. MACC Meetings. The MACC shall determine its meeting schedule.

4. Documents Provided to the MACC. Copies of all monitoring and compliance reports, plans, and other documents that are requirements of this section shall be submitted to the MACC.

Summary of Complaints:

The County has not received any complaints on the MACC.

Summary of Issues Raised by the Public:

The County received input during the scoping period of this document that the MACC meet with the CAP on an annual basis. As detailed in the provision, the MACC is composed of the regulatory agencies listed in subsection H.1 of the provision and is not a public meeting. The CSD provides for interaction with the public under Provision 22.310.100, Public Outreach which includes the CAP, community meetings, the community letter, the oil field web site, and the ombudsperson. Further, the CAP provides for staff from other regulatory agencies such as DOGGR and the SCAQMD to attend and present information to the public as demonstrated by past and recent CAP meetings.

Analysis of Compliance and Effectiveness:

The MACC held its first meeting on March 16, 2009. Subsequent meetings have been held on April 20, 2009, July 16, 2009, September 17, 2009, February 11, 2010, July 8, 2010, November 4, 2010, April 12, 2011, May 13, 2013, January 28, 2014, and March 29, 2016. MACC members include the following representative agencies:

- Culver City Fire Department (CCFD).
- County of Los Angeles
- Department of Regional Planning (DRP)
- Fire Department (LACoFD)
- Department of Public Works (DPW)
- Department of Public Health (DPH)
- State of California
- Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR)
- Department of Justice, Office of the Attorney General
- California Environmental Protection Agency
- Regional Water Quality Control Board (RWQCB)
- South Coast Air Quality Management District (SCAQMD)

Minutes from these meetings are available on the County web site at:
www.planning.lacounty.gov/baldwinhills/macc.

Pursuant to this requirement, MACC meetings are facilitated by a meeting Chair, meetings are scheduled by the committee as deemed appropriate, MACC members are copied on all email oil field update correspondence, and any oil field documents requested by the MACC are submitted in a timely manner.

New Technology:

This provision is administrative in its intent outlining the requirements for the MACC, and a discussion of new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement has been implemented, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

6.9 I. RELATED COUNTY CODE PROVISIONS

The county code contains a number of provisions related to oil wells and oil field operations. Where the regulations of this section differ from any other provisions in the county code, these regulations shall supersede unless the contrary provisions are mandated by State law.

Summary of Complaints:

This provision is standard administrative County language to clarify jurisdiction on similar county code requirements; there have been no complaints on this provision.

Summary of Issues Raised by the Public:

As noted above, this requirement is a standard administrative condition; no public issues have been noted on this provision.

Analysis of Compliance and Effectiveness:

The provision is a standard County requirement to clarify jurisdiction between similar codes and regulations. The CSD was developed to augment and strengthen the existing requirements codified in the County code for oil and gas operations. The requirements of the CSD supersede other provisions unless mandated by State law. There have been no conflicts between contrary code provisions requiring the County to invoke this provision to date.

This provision is standard County permit language and has not been activated to date, and no further analysis is recommended.

New Technology:

This provision is a standard County administrative requirement; a discussion of new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement has not been activated to date; however, no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

7.0 Permitting (22.310.080)

This section of the CSD describes the requirements for additional permitting for activities not included in the CSD provisions.

A. Ministerial Site Plan Review required

The operator shall apply for and receive approval of a Ministerial Site Plan Review (Chapter 22.186) prior to any new drilling and redrilling. New drilling and redrilling approved through a director's review procedure shall be limited to no more than 53 wells per year, with the maximum number of newly drilled wells of that total, limited to 45 per year, except that during the first year following the effective date of the ordinance establishing this section, new drilling and redrilling shall be limited to no more than 24 wells. Approval through director's review for drilling new wells shall be limited to 600 wells over 20 years, beginning on the effective date of this ordinance. Drilling and redrilling shall be planned to avoid over concentration of such activities in one area in anyone year, if near developed areas. The director's review procedures shall also apply to emergency actions determined by the director as necessary to prevent an imminent hazard, or to other immediate measures required for the purposes of protecting health and safety. No new permits for drilling or redrilling shall be approved by the director unless the subject wells have been approved as part of an annual drilling Plan as described in Section 22.310.050.Z.3 (Annual Drilling, Redrilling, Well Abandonment, and Well Restoration Plan. Approval shall not be granted until copies of all related permits have been submitted to the director; other permits include, but are not limited to, the permits required by DOGGR, the county fire department, the county department of public works, the county sanitation district, RWQCB, SCAOMD, and other pertinent agencies identified by the director.

Summary of Complaints:

No complaints specific to this provision has been received by the County for the time period covered in this review.

Summary of Issues Raised by the Public:

In part since no drilling has occurred at the IOF since June 2014, no public input on the number of wells allowed at the oil field has been received for the time period covered in this review. The number of wells provided for in this provision has been revised based on past public input and the Settlement Agreement, a summary of which is provided below.

Analysis of Compliance and Effectiveness:

Provision 22.310.050.Z.3, *Drilling, Redrilling, and ReWorking Operations*, requires an annual submittal of a drilling Plan which identifies the number and other details of wells proposed to be drilled for a given year; however, it does not provide limits for the number of wells allowed on either an annual or total project basis. This provision provides the limits on wells to be drilled at the oil field on an annual basis and for the life of the CSD. These limits have been augmented by the requirements of the Settlement Agreement and the Annual Well Evaluation dated December 5, 2011. The maximum number of wells allowed per year under this provision is as follows:

- 53 new and re-drilled wells per year.
- New wells limited to 45 of the 53 well total.
- New and re-drilled wells limited to 24 for year 2009.
- 600 total wells for 20-year time frame starting at the adoption of the CSD.

The Settlement Agreement revised the annual well drilling limits and introduced the “Bonus Well” concept. The bonus wells program was developed to encourage moving well activities away from developed areas by establishing the area within 800 feet of any developed area as a target zone for well abandonment as opposed to well drilling activities. For each well abandoned in this target zone, the Settlement Agreement allowed for two new wells to be drilled outside the target zone. These “bonus wells” did not count against the annual new well limit, thus allowing for additional wells above the annual new well limit to encourage abandonment of well activities near developed areas. The Settlement Agreement also identified two drilling periods for well limits. These time periods were defined as before and after the first 50 wells are drilled, referred to as “Time Period One” and the “Full Operational Period”. In addition to reaching the 50-wells-drilled milestone, the Full Operational Period also required that the County determine that the CSD has been effective in protecting the health, safety, and general welfare of the public; this analysis, the *PXP Baldwin Hills Community Standards District Annual Well Increase Evaluation*, was completed in December 2011.

The *Annual Well Increase Evaluation* reviewed the following CSD compliance subject areas; noise, vibration, air emissions, odors, ground movement, visual/aesthetics, hazards/fire protection/emergency response, and ground water quality. The results of the review concluded that for these areas of review, the CSD has been effective in protecting the health, safety, and general welfare of the public. The 50 wells drilled milestone was reached in October 2011.

As discussed above, the oil field entered the Full Operational Period in December 2011; the revised well limits for the CSD are as follows:

- 35 new or re-drilled wells per year.
- 18 bonus wells per year.
- 53 total wells per year.
- 500 total wells through October 1, 2028 or during the remaining life of the CSD, whichever is later.

The actual number of wells drilled at the oil field through the end of 2018 is summarized in the table below.

Number of Wells Drilled Since the Adoption of the CSD			
Year	Wells per Year	Bonus Wells Used	Cumulative Total
2009	0	0	0
2010	19	0	19
2011	40	5	64
2012	20	0	84
2013	30	0	114
2014	18	0	132
2015	0	0	132
2016	0	0	132
2017	0	0	132
2018	0	0	132
Total (through 2018)	127	5	132

As shown in the above table, the number of wells drilled at the oil field was within the allowable limits of the CSD and the CSD as revised by the Settlement Agreement. The requirements for County and other agency approval of the drilling activities stipulated by this provision are met by

the annual submittal, review, and approval of the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan* required under Provision 22.310.050.Z.3.

The condition is considered fully effective at this time, and no further evaluation is recommended.

New Technology:

New technologies in oil well drilling and associated activities are discussed in the *Annual Drilling, Redrilling, Well Abandonment and Well Restoration Plan* as submitted to the County for review and approval.

Recommendations to Changes in Implementation:

The condition is considered fully effective at this time, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

The language of this CSD provision has been augmented by the terms of the Settlement Agreement, and no additional changes to the CSD language are recommended.

7.1 B. CONDITIONAL USE PERMIT (CUP) REQUIRED

Provided a conditional use permit (Chapter 22.158) has first been obtained and while such permit is in full force and effect in conformity with the conditions of such permit, the following uses may be established:

- 1. Drilling or redrilling that exceeds the maximum number allowed pursuant to a Ministerial Site Plan Review (Chapter 22.186);*
- 2. Steam drive plant; and*
- 3. New tanks with a capacity of greater than 5,000 barrels.*

Summary of Complaints:

This provision is administrative in its intent allowing for certain additional uses subject to a conditional use permit; no such permit has been obtained or applied for by the oil field operator to date. No complaints have been received by the County on the provision.

Summary of Issues Raised by the Public:

As noted above, this is an administrative requirement for a land use permit process that has not been implemented to date by the oil field operator; no input on this provision has been received by the County.

Analysis of Compliance and Effectiveness:

This provision is administrative in its intent and details specific uses allowed under a conditional use permit at the oil field. The operator has not obtained nor applied for such a permit to date. Drilling and redrilling activities at the oil field have been under the maximum number allowed by the CSD except for those wells allowed for under the Settlement Agreement dated July 15, 2011 and the Annual Well Evaluation dated December 5, 2011. A steam drive plant has not been built or proposed for the oil field and all new tanks constructed to date have been sized at 5,000 or less barrels capacity.

The condition is considered fully effective at this time, is administrative in its intent, and has not been activated to date; no further evaluation is recommended.

New Technology:

This condition is an administrative requirement and is linked to the conditional use permit process of the County. Any technological improvements the County deems appropriate to this provision may be implemented during the review and approval of the subject County permit.

Recommendations to Changes in Implementation:

This provision is administrative in its intent allowing for certain uses subject to a conditional use permit and has not been activated to date. No changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

7.2 C. CONDITIONAL USE PERMIT (CUP) REQUIREMENTS

For those uses requiring a conditional use permit, in addition to the requirements of Chapter 22.158, the applicant shall substantiate to the satisfaction of the hearing officer that:

- 1. The requested use is in compliance with the provisions of this section; and*
- 2. All reasonable measures were taken to reduce and minimize potential impacts from the proposed operation.*

Summary of Complaints:

This provision is administrative in its intent and has not been activated to date; no complaints have been received by the County on the provision.

Summary of Issues Raised by the Public:

As noted above, this is an administrative requirement for a land use permit process that has not been implemented to date by the oil field operator; no input on this provision has been received by the County.

Analysis of Compliance and Effectiveness:

This provision is administrative in its intent and details specific additional requirements applicable to the oil field regarding the approval of a conditional use permit (CUP). The operator has not applied for a CUP to date.

The condition is considered fully effective at this time, is administrative in its intent, and has not been activated to date; no further evaluation is recommended.

New Technology:

This condition is an administrative requirement and provides additional specific requirements to the conditional use permit process of the County applicable to the oil field. The provision requires that in addition to existing CUP requirements mandated by the County ordinance, any proposal for a new permit substantiate that *“All reasonable measures were taken to reduce and minimize potential impacts from the proposed operation.”* Therefore, new technologies

developed to minimize impacts from operation of the oil field can be required pursuant to the review and approval of the subject County permit.

Recommendations to Changes in Implementation:

This provision is administrative in its intent and allows for additional mitigation measures be required for any new CUP at the oil field. The provision has not been activated to date, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

As noted above, the existing CSD language allows for the County to require all reasonable measures to minimize impacts from operations at the oil field when a new CUP is approved. Therefore, no changes to the CSD language are necessary or recommended.

7.3 D. APPLICATION WHERE VIOLATION EXISTS

No application required pursuant to this section shall be accepted for processing or approved where any existing use in the district is being maintained or operated by the operator or its agents in violation of any material provision of this Title 22.

Summary of Complaints:

This provision is administrative in its intent requiring the operator to resolve any violations prior to the application of any new permit at the oil field. No complaints on this provision have been received by the County.

Summary of Issues Raised by the Public:

This provision has not been implemented to date, and the County has not received any input on this provision.

Analysis of Compliance and Effectiveness:

This provision is administrative in its intent and has not been implemented to date. The condition requires the operator to resolve any land use violations prior to the application of any new permit application at the oil field. The requirement also states that no permit application may be approved if such a violation exists.

The condition is considered fully effective at this time, is administrative in its intent, and has not been activated to date, and no further evaluation is recommended.

New Technology:

This condition is an administrative requirement linked to the County permitting process requirements; a discussion of new technology is not applicable.

Recommendations to Changes in Implementation:

This requirement is a County administrative requirement that has not been activated to date and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

8.0 Enforcement (22.310.090)

This subsection of the CSD provides enforcement provisions that augment the enforcement procedures specified in Chapter 22.242 of the County Code. Section A details monetary amounts for violations and the procedures for payment and appeal of those violations and penalties. Section B is the administrative requirement documenting that access to all records and facilities for enforcement of the CSD be made available to the County, and Section C provides for access to the oil field for inspections or as deemed necessary by the County.

Two enforcement actions were taken by the County through this Periodic Review period. The first involved a follow-up enforcement action on October 22, 2014 (14-006243/EF141385) to CSD Provision 22.310.050.Y Storage of Hazardous Materials. The action followed a County Fire Department inspection that uncovered a violation involving the storage of hazardous materials. The violation involved a discrepancy between the location of the storage of hazardous materials as annotated in the oil field facility Hazardous Materials Business Plan document and the actual location of the stored hazardous materials as found on site during the inspection. The issue was corrected within 30 days and signed off by County Fire. No monetary penalty was assessed.

The second enforcement action, a Notice of Violation (NOV) for missing meteorological data (CSD Condition 22.310.050 B.10) was issued on November 12, 2018 (RPCE2018006074). The missing meteorological data issue was due to a download issue with the station data logger and was subsequently corrected, no monetary penalty was assessed.

The condition is considered fully effective at this time. There have been no issues regarding access to compliance documentation or for access to the oil field; no further evaluation is recommended.

9.0 Public Outreach (22.310.100)

This section outlines the CSD requirements regarding communication with the public, community meetings and community relations.

9.1 A. COMMUNITY ADVISORY PANEL (“CAP”)

A community advisory panel shall be established by the director to foster communication about ongoing operations at the oil field and to allow the community representatives to provide input to the county and the operator.

1. CAP Members. The CAP may include representatives of the county, the city of Los Angeles, the city of Culver City, West Los Angeles College, the operator, the landowners, and each of the major neighborhoods surrounding the oil field (including Ladera Heights, Windsor Hills, Oak Park, View Park, Culver Crest, Blair Hills, and Raintree). The operator and each of the governmental entities previously referred to may each designate a representative to the CAP. Each landowner and neighborhood organization of the surrounding communities may submit a nomination to the director for appointment to the CAP. Where there is no neighborhood organization, a community resident may make a request to the director to be appointed to the CAP. School districts with schools in the vicinity of the oil field and the lessors may make a request to the director to have a representative appointed to the CAP.

2. CAP Meetings. The CAP shall determine its meeting schedule.

3. Documents Provided to the CAP. A notice of availability of all monitoring and compliance reports and results, all plans, audits and studies, and any other available documents that are required by this section shall be submitted to the CAP promptly after they are prepared or otherwise available. Copies of these reports, documents, and other items shall be provided to CAP members upon request except to the extent information therein may not be legally disclosed. Prior to each CAP meeting, the county shall provide to the CAP a list of all violations of the provisions of this section that have occurred since the last CAP meeting.

Summary of Complaints:

CAP meetings have occurred approximately monthly since the first meeting on March 26, 2009. The County has received input on the CAP meetings as discussed below.

Summary of Issues Raised by the Public:

Input on the CAP process has been made during discussion at the CAP meetings and for comments solicited for the scoping of this Periodic Review. Several comments were made regarding CAP attendance, the need to update the CAP membership to allow new members and to have meeting guidelines. The County addressed the attendance and membership issue in 2014 whereby the Director of the DRP sent a letter out to CAP members reminding them of their obligations as a member of the CAP. Subsequently, several CAP members were removed allowing for potential new groups to submit applications for membership. As a result, the City of Los Angeles Office of Petroleum and Natural Gas Administration and Safety, Los Angeles Unified School District, and the Ladera Crest Homeowners Association recently joined the CAP. Guidelines for the CAP were created and approved by the CAP in June 2009.

Several comments involved moving the location of the CAP meetings and the use of a third-party facilitator. The location of the CAP meetings has been a topic at many recent meetings with the discussion of improving bicycle, pedestrian and mass transit access of the location of the meetings. The feasibility of several alternate locations has been debated, however during the July 25, 2019 CAP meeting, a vote to remain at the current location was passed. The CAP meetings are co-facilitated by members of the CAP, which are members of the public, consistent with the CAP bylaws. The bylaws allow for the CAP to elect a member to serve as facilitator or assistant facilitator at any time.

Comments were also received during the scoping of this document on information transparency, public notification, and public outreach. Section 22.310.100, *Public Outreach*, was specifically developed to provide information, notification, and outreach to the public on oil field operations. As noted in the discussion for 22.310.200.B, *Community Relations*, the oil field and DRP Baldwin Hills CSD websites contain over a hundred CSD compliance documents. Many of these documents are discussed at the monthly CAP meetings where public input is encouraged, and public comments are addressed by the operator or the County in a timely fashion. Further, pursuant to CSD 22.3120.050.Z.3, the County must consider comments made by the CAP on the *Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan* prior to approval of the plan.

Consistent with the CAP bylaws, the *“purpose and goal of the CAP is to foster communication about ongoing operations at the Inglewood Oil Field located in the Baldwin Hills, and to allow community representatives to provide input to the County and the operator of the oil field..”*. Members of the public may contact the County or their CAP community representatives for information, attend CAP meetings or contact the oil field ombudsperson for information on oil field activities. Community outreach is also accomplished by the annual neighborhood meetings and newsletter required under CSD 22.310.200.B.

Analysis of Compliance and Effectiveness:

The CAP was established to foster communication and ensure continued community input for the County and for operator. Twenty-one panel seats were allocated to the categories specified in subsection 22.310.100.A.1 by the Director of Planning. Nominations were accepted on a first-come, first-serve basis and the introductory meeting was held March 26, 2009. CAP membership is currently filled based on a metric made by the Director and published on June 13, 2017. Panelists on the CAP serve in a representative capacity and all meetings are open to the public. As noted above, bylaws were created and approved by the CAP on June 25, 2009. Current CAP members are designated from the following entities:

- Governmental Entities
 - Department of Regional Planning
 - City of Culver City
 - West Los Angeles College
 - City of Los Angeles

- Oil Field Operator
 - SPR

- Landowners
 - Vickers Family Trust
 - Cone Fee Family Trust

- Neighborhood Organizations (Recognized Homeowners Association)
 - Ladera Heights Civic Association
 - Windsor Hills HOA
 - United HOA (View Park)
 - Culver Crest Neighborhood Association
 - Blair Hills HOA
 - Raintree Community HOA
 - Baldwin Hills Estates HOA
 - Ladera Crest HOA

- Neighborhood Organizations (No Recognized Homeowners Association)
 - Baldwin Vista Homeowner

- School Districts
 - Los Angeles Unified
 - Culver City Unified

- Other Organizations
 - Windsor Hills Block Club
 - Community Health Council
 - Baldwin Hills Conservancy

The meeting schedule for CAP meetings is determined during the monthly meetings. Monitoring reports, compliance reports, plans, audits, studies, and other documents required by the CSD are provided to the CAP as required by subsection 22.310.100.A.3. Documentation made available to the CAP is typically posted on the Inglewood Oil Field website with some materials distributed at CAP meetings in hardcopy format. Meeting minutes and informational handouts are available at the County DRP web site.

The CAP, along with the other public outreach requirements of the CSD, provide several robust methods for both the dissemination of information to the public and for public involvement in the compliance and requirements of the CSD. Membership in the CAP is an ongoing process and potential new members may contact the Director of DRP for consideration of CAP membership at any time. As noted above, the bylaws of the CAP allow for the election of a new facilitator or assistant facilitator at the discretion of the CAP. The CAP allows for direct communication between the public, the County, other regulatory agencies, and the operator on oil field activities and CSD compliance documentation. The condition is considered fully effective at this time, and no further evaluation is recommended.

Recommendations to Changes in Implementation:

This requirement has been implemented, is ongoing, and allows for both new membership and new meeting facilitators. No changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

9.2 B. COMMUNITY RELATIONS.

1. Community Meetings. The operator shall hold community meetings on an annual basis to provide updates on oil operations.

2. Newsletter. The Operator shall publish an informational newsletter annually, which shall contain updated information on oil operations including drilling, redrilling, maintenance, repair, and reworking activities and all recently granted conditional use permits or applications filed for conditional use permits for the oil field. The newsletter shall be mailed by the operator to all owners of property located within 1,000 feet of the outer boundary line; all owners of property within 1,000 feet of the perimeter of the district as shown in the records of the county assessor's office; to any person or entity who has filed a written request therefore with the director; and to neighboring cities. The operator shall also make these newsletters available on the oil field web site. The oil field web site address shall be publicized in each newsletter.

3. Oil Field Web Site. The operator shall maintain and update on a regular basis an oil field web site that shall include information on oil operations at the oil field, including drilling and production activities. All monitoring and compliance reports and results, plans, audits and studies, and any other available documents that are required by this section (except to the extent they contain information that may not legally be disclosed) shall be promptly posted on the Oil Field Web Site in pdf format.

Summary of Complaints:

The County did not receive any complaints on the community meeting, newsletter, or web site for the time period of this review.

Summary of Issues Raised by the Public:

Input on community relations has been provided by the public at both Community Advisory Panel (CAP) meetings and for comments solicited for the Periodic Review. Specific comments include requests for better communication between the oil field operator and the public and better communication between the County and the public. The public has also requested that documentation that is posted to the oil field web site should be made available sooner. Input was also received on the complaint process; see the discussion for Provision 22.310.060.G for more detail.

Analysis of Compliance and Effectiveness:

Community meetings have occurred annually since the adoption of the CSD with the first meeting occurring on May 26, 2009. Meetings for the years 2014 through 2018 occurred on November 18, 2014, November 10, 2015, November 15, 2016, November 8, 2017, and October 20, 2018. The 2018 meeting occurred at the oil field on a Saturday afternoon and included lunch and a new format. The new format provided oil field and County staff availability to answer questions or discuss topics as opposed to a formal presentation. The newsletters required by subsection B.2 have been prepared annually and are mailed out prior to the community meetings with noticing of the forthcoming meeting date, time, and location. The newsletters are distributed to the public as required and are posted on the oil field web site.

The oil field web site, www.inglewoodoilfield.com, was launched on January 19, 2010. The web site includes information on the history and future of the oil field, oil field operations, operational plans, compliance plans, community and environmental sections, and information on the CSD. The web site contains over 100 documents related to operational and compliance information with the documentation posted in .pdf format as required by this provision. The web site

provides contact information and includes an interactive email system to allow for direct input to the operator for questions and information.

Most of the input received on community relations involved the previous operator. The current operator has improved both the quantity and quality of information provided to the public, updated the web site and revised the approach to the annual community meeting.

The condition is considered fully effective at this time with the community meetings, newsletter and web site implemented and ongoing; and no further evaluation is recommended.

Recommendations to Changes in Implementation:

This requirement has been implemented, however, to improve the communication of oil field activities to the public, it is recommended that the operator post updates of oil field incidents on the oil field website.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

9.3 C. OMBUDSPERSON

The operator shall designate employees or authorized agents to serve as ombudspersons to respond to questions and concerns concerning the oil operations. Each ombudsperson shall be familiar with all the provisions of this section and all conditions of approval related to permits and approvals issued by the county or the State of California. It shall be the further responsibility of the ombudsperson to facilitate, to the extent feasible, the prompt resolution of any issues that may arise relating to the above-stated matters or the impacts of the oil operations. The name, title, email address, and telephone number of the ombudsperson shall be posted on the oil field web site, prominently displayed in the newsletter, distributed twice per year to the CAP and MACC, and provided to any other persons requesting such information. An ombudsperson shall be available at all times and shall respond within one hour after an initial call. An ombudsperson shall also meet at reasonable times with interested parties in an attempt to resolve issues related to oil operations. An ombudsperson shall have authority to initiate a response on behalf of the operator in all foreseeable matters. The operator shall be required to maintain a written log of all calls to the ombudspersons registering complaints or concerns regarding oil operations or other matters. The log shall include the complainant's name, date, time, phone number, nature of complaint, and the response or resolution offered. A copy of the log shall be provided to the director, the MACC, and the CAP on a quarterly basis.

Summary of Complaints:

No complaints on the ombudsperson provision have been received by the County.

Summary of Issues Raised by the Public:

As noted in the discussion for Provision J.2, *Community Relations*, comments on the interface between the operator and the public have been provided at both Community Advisory Panel (CAP) meetings and for comments solicited for the Periodic Review. The main issue raised by the public involved the ombudsperson from the previous operator regarding the information provided by the ombudsperson at the CAP meetings. The public requested that more information be provided and that more detail be provided on the information that is presented.

Analysis of Compliance and Effectiveness:

The ombudsperson system has been in place since the adoption of the CSD and serves as primary contact between the oil field operator and the community. The ombudsperson contact information is included in the annual newsletters and in the agendas for CAP meetings. In addition to the ombudsperson, the oil field maintains two staff members on an on-call basis to coordinate and respond to calls from the public or regulatory agencies regarding oil field operations. The current ombudsperson, Ms. Amanda Parsons is joined by Mr. Dan Taimuty. Mr. Taimuty has a technical background and is therefore able to provide a much-improved level of information about oil field operations. As such, the information provided by the operator at CAP meetings has improved in both timeliness and technical accuracy from the previous operator. The ombudsperson contact information is:

Ms. Amanda Parsons
Email: AParsons@sentinelpeakresources.com
Phone: 1-800-766-4108

Sentinel Peak Resources
5640 S. Fairfax Ave.
Los Angeles, CA 90056

The County will remain vigilant to ensure that the Operator continues to provide information to the public through the ombudsperson as appropriate. The condition is considered fully effective at this time and no further evaluation is recommended.

Recommendations to Changes in Implementation:

This requirement has been implemented, and no changes to implementation are recommended.

Recommendations to Changes in CSD Language:

No changes to the CSD language are recommended.

10.0 Modifications to Development Standards (22.310.110)

This subsection of the CSD lists the requirements and permit processing procedures for a request for a modification to the development standards specified in subsection 22.310.050 of the CSD. The County may approve a modification to these standards if the oil field operator can provide documentation that satisfactorily meets the criteria specified in this provision. Subsections A through D require that a proposed modification be necessary for a substantial property right of the operator, that the modification will not create an adverse safety impact to the community or environment, the modification will not be contrary to the improvements from or purpose of the CSD, and that the proposed change be consistent with the County General Plan and permitting requirements.

Subsections A through D describe specific requirements for the application, noticing, permit processing procedure, notification of decision, and appeal procedures, respectively, for a modification of development standards proposal. No proposal or application for a modification of the development standards of CSD Section 22.310.050 has been applied for to date. The condition is considered fully effective at this time, is administrative in its intent, and has not been activated to date; no further evaluation is recommended.

11.0 Implementation Provisions (22.310.120)

This subsection of the CSD lists the various implementation plans and other stipulations required for initial compliance along with a submittal schedule for the subject compliance. The schedule requirements for the Plan and compliance submittals required under this provision range from 30 days to two years following the effective date of the CSD (October 28, 2008). All plans and initial requirements of this CSD subsection were completed; therefore, this requirement is no longer applicable and Periodic Review is not merited. A discussion of the ongoing implementation of the plans and conditions required by this provision is provided in the review and analysis of CSD Provisions 22.310.050, *Oil Field Development Standards*, 22.310.070 H, *Multiple Agency Coordination Committee*, and 22.310.100, *Public Outreach*. The table below provides a summary of the plans and initial compliance requirements of this CSD subsection along with the associated submittal date.

CSD Section 22.310.120 Compliance Summary		
CSD Section 22.310.120 Implementation Provision	Submittal Schedule Requirement (Days)	Submittal or Completion Date
A. Fire Protection and Emergency Response		
1. Fire Protection Audit	120	March 3, 2009
2. "CAN" System	120	March 2009
3. Spill Containment Response Training	90	February 4, 2009
2. Air Quality and Public Health		
4. Odor Minimization Plan	90	February 2009
5. Air Monitoring Plan	90	February 2009
6. Oil Tank Pressure Monitoring and Venting	180	May 26, 2009
7. Meteorological Station	120	March 26, 2009
8. Fugitive Dust Control Plan	120	March 2009
9. Well Amortization Report	120	March 2009
3. Safety and Risk of Upset		
10. Propane and Natural Gas Liquids Bullet Fireproofing	90	February 23, 2009
11. Gas Plant Audit	120	March 11, 2009
12. Oil Tank Secondary Containment	One Year	January 23, 2010
13. Retention Basins	120	January 23, 2010
14. Above Ground Piping	One Year	January 23, 2010
4. Geotechnical		
15. Accelerometer	180	May 26, 2009
16. Tank Seismic Assessment	180	May 26, 2009
17. Erosion Control Plan	180	May 26, 2009
18. Accumulated Ground Movement Study	90	May 26, 2009
19. Ground Movement Monitoring Plan	90	May 26, 2009
5. Noise Attenuation		
20. Drilling Quiet Mode Plan	90	February 2009

Baldwin Hills Community Standards District (CSD)

CSD Section 22.310.120 Compliance Summary		
CSD Section 22.310.120 Implementation Provision	Submittal Schedule Requirement (Days)	Submittal or Completion Date
21. New Gas Plant Flare	120	March 29, 2009
6. Biological Resources		
22. Special Status Species and Habitat Protection Plan	180	May 2009
23. Emergency Response Plan	180	February 17, 2010
7. Cultural/Historic Resources		
24. Worker Training	120	March 26, 2009
25. Construction Treatment Plan	180	May 2009
8. Landscaping, Visual Screening, and Irrigation		
9. Oil Field Waste Removal	180	May 2009
10. Signs		
26. Perimeter Identification Signs	60	May 18, 2009
27. Oil Field Entrance Sign	30	May 18, 2009
28. Other Required Signs	60	May 18, 2009
29. Well Identification Signs	180	May 18, 2009
30. No Littering Signs	120	May 18, 2009
11. Painting	Two Years	November 12, 2012
12. Water Management Plan	180	May 2009
13. Groundwater Monitoring	One Year	August 2009
14. Oil Field Cleanup and Maintenance	180	May 18, 2009
15. Storage of Hazardous Materials	30	December 22, 2008
16. Drilling, Redrilling, Well Abandonment, and Well Restoration Plan	60	January 2009
17. Processing Operations		
31. Pipelines	180	May 26, 2009
32. Active Pipeline Plot Plan	One Year	December 26, 2009
18. Tanks	180	May 26, 2009
19. Monitoring and Compliance		
33. Environmental Quality Assurance Program (EQAP)	90	February 25, 2009
34. Safety, Inspection, Maintenance, and Quality Assurance Program (SIMQAP)	180	May 26, 2009
20. Administrative Items (MACC)	60	March 16, 2009
21. Public Outreach		
35. Community Advisory Panel (CAP)	60	March 26, 2009
36. Oil Field Web Site	90	January 1, 2009
37. Community Meeting	180	May 26, 2009

Appendix A
Public Scoping Comments

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CAP-1	Ground Movement	The subsidence and ground movement were issues noted by CAP as an area for discussion in Periodic Review although DOGGR has not provided updated input on the subject to date.	See Periodic Review discussion on CSD requirement 22.310.050.D.5.
CAP-2	Idle Wells	It was recommended that the DOGGR updates to idle well regulations be considered in the review.	See Periodic Review discussion on CSD requirement 22.310.050.EE.
CAP-3	Ground Movement	Recommendation that the operator utilize a separate consultant from the consultant that prepares the annual ground movement reports to perform property damage investigations.	See Periodic Review discussion on CSD requirement 22.310.050.D.5.
EG1-1	Spills	Two oil field incidents between November 2018 and April 2019.	See Periodic Review discussion on CSD requirements 22.310.050.A, 22.310.050.B, and 22.310.050.C.
EG1-2	Air Quality, Health, Environmental Justice	Request to consider a provided list of reports on various aspects of air quality and health issues from other oil fields/areas, the CARB SNAPS Study and the DPH Health Assessment and Environmental Justice Study.	The Periodic Review is a comprehensive review of the provisions of the CSD to determine if the provisions of this section are adequately protecting the health, safety, and general welfare. As such, studies on other oil wells, oil fields and other areas are outside the scope of the Periodic Review. The information in these studies may be helpful to the County as it moves forward with the forthcoming amendment to the County Code for oil and gas operations. The CARB SNAPS project and the DPH Health Assessment and Environmental Justice Study have not been completed to date. Impacts regarding air quality and health issues are discussed in the applicable Periodic Review sections.
EG1-3	Climate Change	Climate Change and fossil fuels.	The CSD does not have a requirement specific to GHG emissions as these pollutants are under the jurisdiction of CARB and the SCAQMD. Current GHG emissions at the IOF are under the SCAQMD's 10,000 metric ton CO2 equivalent per year threshold for industrial facilities as documented on Annual Emissions Reports (AERs) submitted to SCAQMD.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
EG1-4	Wildlife Parks	Kenneth Hahn State Park is habitat for wildlife and the Baldwin Hills Master Plan goal is to transform the IOF into park space.	Comment acknowledged, however, analysis of a future park at the IOF is outside the scope of the Periodic Review.
EG1-5	Tribal Cultural Resources	Request the consultation with Tongva Nations regarding any potential impacts to cultural resources.	See Periodic Review discussion on CSD requirement 22.310.050.H.
EG1-6	Information	Access to information.	See Periodic Review discussion on CSD requirements 22.310.100 and note that two web sites have been established and are maintained to provide information to the public on oil field compliance along with monthly CAP meetings whereby information is provided to the public.
KKG-1	Ground Movements	Recommendation that drilling activities be ceased due to earthquakes.	A definitive link between drilling oil wells and earthquakes has not been established. Further, CAP meetings have had earthquake experts, including a CalTech professor, discuss this topic and have provided information on oil drilling not being a significant cause of earthquakes. In addition, this determination is outside the scope of the Periodic Review.
KKG-2	Setbacks	Recommendation for 2,500-foot setback for drilling.	The CSD provides setback distances based on the analysis conducted for the Baldwin Hills CSD EIR. The County has not received any complaints or issues from the existing setback distances for the IOF. No wells have been drilled at the IOF since June 2014. The County is assessing the setback issue as part of the update to the County oil code and results of that process can be reviewed regarding the CSD when that process is completed.
KKG-3	ECC	Recommendation for a different entity from MRS be the next ECC.	Comment acknowledged. Note that the ECC must be approved by, and report to, the Director of DRP.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
FFLA-1	Health/Cancer Risk	The CSD EIR Health Risk Assessment and the MATES studies completed by SCAQMD show CSD regulations are not working to protect the public from cancer risk.	The referenced cancer risk information in the comment is not accurate. Page ES-2 of the MATES-IV Final Report states <i>“The levels of air toxics continued to decline compared to previous MATES studies. The most dramatic reduction is in the level of diesel particulate, which showed 70% reduction in average level measured at the 10 monitoring sites compared to MATES III.”</i> Further, the reports states <i>“About 90% of the risk is attributed to emissions associated with mobile sources, with the remainder attributed to toxics emitted from stationary sources, which include large industrial operations such as refineries and metal processing facilities, as well as smaller businesses such as gas stations and chrome plating”</i> ; note that the IOF is not included in this list of primary sources. In addition, the referenced cancer risks noted in the comment were for total risk from all sources in the LA Basin, not the IOF. The mitigated cancer risk for the IOF was calculated at 7.5 and re-calculated by the STI Air Study in 2014 at 6.7, both values are below the 10 in a million criteria threshold.
FFLA-2	Revised Regulations	Revised regulations should include safety risks.	The Periodic Review is an analysis of the existing CSD regulations and does not propose revised regulations unless the analysis determines a need for such a revision. Safety risk was analyzed in the Baldwin Hills CSD EIR and mitigation measures were developed and adopted in the CSD.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
FFLA-3	Earthquakes	Wastewater injection well cause earthquakes, therefore, their use at the IOF should cease.	The referenced earthquake issues caused by injection wells in the Midwest have been determined to be related to unbalanced extraction/injection practices. Water injection to an area without any fluid extraction activities can cause pressure of the reservoir, and potentially, earthquakes. The wastewater injection practices at the IOF are balanced with the extraction activities and are monitored and approved by DOGGR. In addition, CSD Provision 22.310.050.D.5 provides for ground movement surveys and monitoring. The ground movement reports are reviewed by County Public Works and DOGGR.
FFLA-4	Fire and Explosions	Reference to a list of explosions and fires at various locations.	The referenced incidents involved five high pressure natural gas operations in Pennsylvania and other incidents involving natural gas. The IOF is not a high-pressure gas facility. Note that the referenced April 1, 2019 oil spill at the IOF did not reach Ballona Creek as documented by the LA County Fire Department.
FFLA-5	Earthquakes and Pipeline Safety	Recommendation for testing and inspection of pipelines.	The testing of pipelines and valves at the IOF is part of normal oil field operations and is required by the regulations under the CSD, the DOGGR and the SCAQMD. Encasing such infrastructure in concrete is not feasible because the equipment needs to be accessible for maintenance, inspection and safety testing.
FFLA-6	Bonding Insurance	Bonding, insurance, and indemnification should be required.	See Periodic Review discussion on CSD requirement 22.310.070.G. subsections B, C, D, and E.
FFLA-7	CAN System	Request that the CAN system be implemented, and that evacuation plans be prepared.	The CAN system is fully operational and is tested on an annual basis. Evacuation plans for the public is beyond the scope of the CSD and any such plans would be administered by the applicable Fire and Police agencies. See discussion on CSD requirement 22.310.050.A.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
FFLA-8	Climate Change	Climate change requires a sunset date for oil field operations and a move to fossil free energy.	Climate change, sea level rise and other associated issues are beyond the scope of the Periodic Review. Instigating a moratorium on the activities at the IOF or a sunset data for operations is a legal issue and beyond the scope of the Periodic Review analysis. The CSD does not have a requirement specific to GHG emissions as these pollutants are under the jurisdiction of CARB and the SCAQMD. Current GHG emissions at the IOF are under the SCAQMD's 10,000 metric ton CO2 equivalent per year threshold for industrial facilities as documented on Annual Emissions Reports (AERs) submitted to SCAQMD.
SC-1	Oil Field Operations	Ban well stimulation, enhanced oil recovery, and wastewater injection.	Banning of permitted and regulated operations is a legal issue and beyond the scope of the Periodic Review analysis.
SC-2	Permitting	End permitting of wells and infrastructure.	Banning of permitted and regulated operations is a legal issue and beyond the scope of the Periodic Review analysis.
SC-3	Setbacks	Recommendation for a 2,500-foot setback.	The CSD provides setback distances based on the analysis conducted for the Baldwin Hills CSD EIR. The County has not received any complaints or issues from the existing setback distances for the IOF. No wells have been drilled at the IOF since June 2014. The County is assessing the setback issue as part of the update to the County oil code and results of that process can be reviewed regarding the CSD when that process is completed.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
SC-4	Monitoring	Request for monitoring.	<p>The CSD requires a variety of monitoring programs including air quality/odor monitoring around the gas plant, storm water testing, groundwater monitoring, fugitive emissions inspections and ground movement surveys. In addition, the CSD provides for paleontological, noise, and vibration monitoring if determined to be necessary by County DRP or County DPH. Further, the Environmental Compliance Coordinator performs inspections of the oil field and is available to respond as necessary to events or issues at the oil field.</p> <p>Regarding air quality monitoring, the STI Air Quality study, completed in December 2014, provided a site-specific air quality monitoring program for air toxics utilizing four monitoring locations. Each monitoring station included both air quality and meteorological instrumentation. Results of the study were consistent with the air quality impact analysis in the Baldwin Hills CSD EIR and the studies completed by the SCAQMD in the MATES programs. The County is looking forward to the forthcoming CARB SNAPS monitoring effort scheduled to begin in late 2019. The County will review the results of the SNAPS monitoring effort to determine the applicability of additional air quality monitoring at the oil field.</p>
SC-5	ECC	Request for public input on oil field monitor.	The current ECC is a third-party contractor approved by the Director of DRP.
SC-6	Spill Plans	Recommendation for site specific spill plans.	As required by the CSD, the IOF has a site-specific Emergency Response Plan (ERP) and a site-specific Spill Prevention, Control, and Countermeasures Plan (SPCC). See discussion on CSD Provisions 22.3010.050 A.2, A.3 and Q.2.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
SC-7	Community Safety Plan	Request for a community safety plan and notification.	The CAN system for community notification is fully operational and is tested on an annual basis. Evacuation plans for the public is beyond the scope of the CSD and any such plans would be administered by the applicable Fire and Police agencies. See discussion on CSD requirement 22.310.050.A.
SC-8	Financial Safeguards	Request for financial safeguards.	See Periodic Review discussion on CSD requirement 22.310.070.G. subsections B, C, D, and E.
SC-9	Oil Operations	Request to phase out oil operations.	Phasing out of permitted and regulated operations is a legal issue and beyond the scope of the Periodic Review analysis.
SC-10	Oil Field Incidents	Reference to several oil field incidents.	Note that this Periodic Review covers the time frame from 2014 through 2018. The two incidents noted in the comment in that time frame are discussed in the Periodic Review in Provisions 22.310.050 C.4 and CC.
SC-11	Setbacks	Recommendation for a 2,500-foot setback.	The CSD provides setback distances based on the analysis conducted for the Baldwin Hills CSD EIR. The County has not received any complaints or issues from the existing setback distances for the IOF. No wells have been drilled at the IOF since June 2014. The County is assessing the setback issue as part of the update to the County oil code and results of the that process can be reviewed regarding the CSD when that process is completed.
SC-12	Ongoing Studies	Request for SNAPS and DPH Health Assessment and Environmental Justice Study be included in the future.	This Periodic Review covers the time frame from 2014 through 2018, the referenced studies have not been completed. Results of the studies mentioned will be considered in future periodic reviews as appropriate.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
SC-13	Monitoring	Request for monitoring.	<p>The CSD requires a variety of monitoring programs including air quality/odor monitoring around the gas plant, storm water testing, groundwater monitoring, fugitive emissions inspections and ground movement surveys. In addition, the CSD provides for paleontological, noise, and vibration monitoring if determined to be necessary by County DRP or County DPH. Further, the Environmental Compliance Coordinator performs inspections of the oil field and is available to respond as necessary to events or issues at the oil field.</p> <p>Regarding air quality monitoring, the STI Air Quality study, completed in February 2015, provided a site-specific air quality monitoring program for air toxics utilizing four monitoring locations. Each monitoring station included both air quality and meteorological instrumentation. Results of the study were consistent with the air quality impact analysis in the Baldwin Hills CSD EIR and the studies completed by the SCAQMD in the MATES programs.</p> <p>The County is looking forward to the forthcoming CARB SNAPS monitoring effort scheduled to begin in late 2019. The County will review the results of the SNAPS monitoring effort to determine the applicability of additional air quality monitoring at the oil field.</p>
SC-14	Climate Change	Discussion on climate change.	<p>Climate change, sea level rise and other associated issues are beyond the scope of the Periodic Review. The CSD does not have a requirement specific to GHG emissions as these pollutants are under the jurisdiction of CARB and the SCAQMD.</p> <p>Current GHG emissions at the IOF are under the SCAQMD's 10,000 metric ton CO2 equivalent per year threshold for industrial facilities as documented on Annual Emissions Reports (AERs) submitted to SCAQMD.</p>

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
SC-15	Wildlife Parks	Kenneth Hahn State Park is habitat for wildlife and the Baldwin Hills Master Plan goal is to transform the IOF into park space.	Comment acknowledged, however, analysis of a future park at the IOF is outside the scope of the Periodic Review.
SC-16	Information Transparency	Requests for information transparency and to move the location of the CAP meetings.	See Periodic Review discussion on CSD requirements 22.310.100 and note that two web sites have been established and are maintained to provide information to the public on oil field compliance along with monthly CAP meetings whereby information is provided to the public.
EG2-1	Oil Field Incidents	Reference to several oil field incidents.	The two incidents noted in the comment in that time frame are discussed in the Periodic Review in Provisions 22.310.050 C.4 and CC.
EG2-2	Health and Environmental Justice Studies	Comment provides a list of studies regarding health and environmental justice and the oil industry.	Comment acknowledged. Note that several studies specific to the Inglewood Oil Field have been completed and the SNAPS and DPH Health Assessment and Environmental Justice Study are forthcoming.
EG2-3	Ongoing Studies	Request for SNAPS and DPH Health Assessment and Environmental Justice Study be included in the future.	This Periodic Review covers the time frame from 2014 through 2018, the referenced studies have not been completed.
EG2-4	Climate Change	Discussion on climate change.	Climate change, sea level rise and other associated issues are beyond the scope of the Periodic Review. The CSD does not have a requirement specific to GHG emissions as these pollutants are under the jurisdiction of CARB and the SCAQMD. Current GHG emissions at the IOF are under the SCAQMD's 10,000 metric ton CO2 equivalent per year threshold for industrial facilities as documented on Annual Emissions Reports (AERs) submitted to SCAQMD.
EG2-5	Wildlife Parks	Kenneth Hahn State Park is habitat for wildlife and the Baldwin Hills Master Plan goal is to transform the IOF into park space.	Comment acknowledged, however, analysis of a future park at the IOF is outside the scope of the Periodic Review.
EG2-6	Tribal Cultural Resources	Request the consultation with Tongva Nations regarding any potential impacts to cultural resources.	See Periodic Review discussion on CSD requirement 22.310.050.H.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
EG2-7	Information Transparency	Requests for information transparency and to move the location of the CAP meetings.	See Periodic Review discussion on CSD requirements 22.310.100 and note that two web sites have been established and are maintained to provide information to the public on oil field compliance along with monthly CAP meetings whereby information is provided to the public.
SPR-1	Regulatory Oversight	Comment notes the IOF is overseen by numerous Federal, State and local agencies in addition to the CSD which is unique to the IOF.	Comment acknowledged.
SPR-2	CAP	Comment notes the CAP provides information to the public, has met over 100 times, and is a process unique to the CSD.	Comment acknowledged; the CAP is discussed in the Periodic Review Provision 22.310.100.A.
SPR-3	Ground Movement Surveys	Comment describes the ground movement survey process and agency oversight.	Comment acknowledged; the CAP is discussed in the Periodic Review Provision 22.310.050.D.5.
SPR-4	Groundwater Monitoring	Comment describes the groundwater monitoring process and agency oversight.	Comment acknowledged; the CAP is discussed in the Periodic Review Provision 22.310.050.S.
SPR-5	Stormwater Monitoring	Comment describes the stormwater monitoring process and agency oversight.	Comment acknowledged; the CAP is discussed in the Periodic Review Provision 22.310.050.Q.
SPR-6	CSD Provisions	Statement that the CSD meets the goals of the Periodic Review.	Comment acknowledged.
SPR-7	Oil Field Studies	Comment notes recent studies and health assessments on various oil field activities.	Comment acknowledged.
SPR-8	Setbacks	Comment notes that the CSD has setback requirements and that larger setbacks such as a 2,500-foot setback does not provide additional safety and would provide a negative economic impact to the community.	Comment acknowledged. The County has not received any complaints or issues from the existing setback distances for the IOF. No wells have been drilled at the IOF since June 2014. The County is assessing the setback issue as part of the update to the County oil code and results of the that process can be reviewed regarding the CSD when that process is completed.
CC-1	Well Stimulation	Request the CSD prohibit well stimulation techniques.	Prohibition of permitted and regulated operations is a legal issue and beyond the scope of the Periodic Review analysis. It should be noted that no drilling has occurred at the oil field since June 2014 and well stimulation as defined under SB4 is not occurring at the Oil field.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CC-2	Landscaping	Request for additional landscaping plans and landscaping for Culver City viewshed.	The landscaping pursuant to CSD Provision has been completed as discussed in the Periodic Review Provision 22.310.050.J. Note that Culver City was a participant in the Settlement Agreement dated July 2011 where an enhanced landscaping plan was approved by the agreement of all participants. In addition, the Culver City Inglewood Oil Field Specific Plan Draft EIR determined that with the implementation of Drilling Regulations, the aesthetic impacts to scenic vistas and aesthetic impacts to the existing visual character of the Culver City IOF would be less than significant and no mitigation was required. No drilling has occurred in the City portion of the IOF since the implementation of the CSD.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CC-3	Funding of Compliance Studies	Funding should be increased for various technical studies including the Public Health Study, ground movement and air quality studies.	<p>The Public Health Study is administered and funded by the DPH as stipulated by the Settlement Agreement; the CSD does not fund these studies. The Air Quality study funding amount was determined in the Settlement Agreement at \$250,000 as specified in Term 8 of the agreement. Note that Culver City was a participant and agreed to the conditions of the Settlement Agreement. The comment statement “...that many of the studies conducted under the CSD, including the Public Health, Ground Movement, and Air Quality Studies lacked sufficient funding to produce an accurate and meaningful analysis of these important issues” is not accurate. These studies have been peer reviewed by issue area experts, for example, the Air Quality Study was reviewed by staff at the SCAQMD and the ground movement studies are reviewed by DPW and DOGGR staff. The reports are accurate and provide important data in the understanding of the potential environmental impacts of oil field operations. The draw down account, Provision 22.310.070.B, is used to pay the costs of review of the technical reports required by the CSD. If review of the subject reports determines additional or expanded studies are necessary, the County can require such reports. The County has not made that determination for any of the studies completed pursuant to CSD requirements for this Periodic Review period.</p>
CC-4	Public Notice/Notifications	The public outreach provisions of the CSD are not sufficient.	Section 22.310.100 of the CSD provides for public outreach to foster communication about ongoing operations at the IOF and allow for public input to the County and the operator. The provisions of Section 22.310.100 include the CAP, community meetings, a newsletter, a web site, and a designated ombudsperson. See section 22.310.100 of the Periodic Review.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CC-5	Ground Movement Survey	The existing ground movement studies are not adequate and do not provide enough data.	<p>The comment that the County has “...accepted, without clear evidence, the conclusion of the Oil Field Operator” on ground movement at the IOF is not accurate. The ground movement reports are not prepared by the operator nor does the operator provide a determination on same to the County. Per CSD Provision 22.310.050, the ground movement surveys and reports are prepared by a California-licensed surveyor in collaboration by a California-registered professional petroleum engineer, registered geotechnical engineer, and certified engineering geologist.</p> <p>The comment that <i>“This lack of a clear conclusion seems to allow the Oil Field Operator to deny any potential liability for property damage that may originate from operations related to the Oil Field, including conditions of subsidence”</i> is not accurate. CSD Provision 22.310.050 provide for multiple review by County DRP, County Public Works, and DOGGR all claims or complaints regarding a property damage due to upward or downward movement in the vicinity of the oil field.</p> <p>The comment <i>“Although this issue has been raised repeatedly through CAP, it does not appear that the County has taken steps to make any progress toward a satisfactory resolution of this issue”</i> is not accurate. The County has required the operator to provide the geotechnical data required by DOGGR and that data has been submitted to DOGGR. Additional ground movement surveys are required and are completed on an annual basis and DOGGR has not required any other additional information to date.</p>
CC-6	MACC Meetings	Request that the CAP and the MACC meet on an annual basis.	The MACC meeting schedule is determined by MACC members, see Periodic Review discussion on CSD Provision 22.310.070.H.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CC-7	Emergency Response	Periodic Review should include review of ERP, discuss neighborhood evacuation plans. Fire Department should do unannounced drills.	The ERP is discussed in CSD Provision 22.310.050.A.3. Neighborhood and/or public evacuation plans are under the jurisdiction of the applicable Fire and Police departments under those agencies incident command system, including the Culver City Fire Department, and therefore not part of the CSD requirements. Annual and unannounced drills by County Fire is provided for in CSD Provision 22.310.060.D. This issue was noted in the first Periodic Review document, see applicable Periodic Review recommendation.
CC-8	Air Quality, GHGs, and Public Health	Request for an updated air quality study and assessment of GHGs. Periodic Review schedule.	An updated air quality/air toxics study was completed in December 2014 and an additional study, the CARB SNAPS Study, is scheduled for 2020. See Periodic Review discussion for CSD Provision 22.310.050.B. Current GHG emissions at the IOF are under the SCAQMD's 10,000 metric ton CO2 equivalent per year threshold for industrial facilities as documented on Annual Emissions Reports (AERs) submitted to SCAQMD. See discussion for CSD Provision 22.310.050.B. CSD Provision 22.310.070.G.7.2 allows for the Periodic Review to be conducted more frequently than every 5 years.
CC-9	New Technology	The Periodic Review should include discussions on new technology.	New technology is discussed for every applicable CSD Provision in the Periodic Review.
CC-10	Insurance and Bonding	The Periodic Review should include review of insurance and bonding requirements.	Insurance and bonding issues are discussed in the discussion for CSD Provision section 22.310.070, specifically subsections D and E.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CC-11	CAP	CAP, guidelines, management and membership.	Guidelines for the CAP were created and approved by the CAP in June 2009. The Director of the DRP sent a letter out to CAP members in 2014 reminding them of their obligations as a member of the CAP. See Periodic Review discussion for Provision 22.310.100.A.
CC-12	Climate Change DOGGR Regulations	Periodic Review should include updates to DOGGR and GHG regulations.	Updated DOGGR regulations as discussed in applicable sections of the Periodic Review. Current GHG emissions at the IOF are under the SCAQMD's 10,000 metric ton CO2 equivalent per year threshold for industrial facilities as documented on Annual Emissions Reports (AERs) submitted to SCAQMD.
DPH-1	CAP	Request for third party CAP facilitator.	The comment that the County is the facilitator of the CAP meetings is not accurate. The CAP meetings are facilitated by a member of the CAP, which are members of the public, consistent with the CAP bylaws: <i>"The members of the CAP shall, from time to time, elect members to serve as facilitator and assistant facilitator. The facilitator (or the assistant, in the absence of the facilitator) shall preside over meetings of the CAP."</i>
DPH-2	Complaint System	Request for third party audit of complaint system.	See Periodic Review discussion for Provision 22.310.060.G.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
DPH-3	Health and Safety Plan	Request for a Community Health and Safety Plan and access to such plan by the public. Information about the oil field should be available to the public.	<p>The facility has and Emergency Response Plan (ERP) as required by CSD Provision 22.310.050.A.3. The ERP is submitted to the following agencies: DOGGR, California Department of Fish and Wildlife Office of Spill Prevention and Response (OSPR), U.S. Environmental Protection Agency Region 9, California State Lands Commission Marine Facilities Division Planning Branch, and the U.S. Department of Transportation Office of Pipeline Safety. The ERP is not available to the public for security reasons consistent with County policy.</p> <p>Regarding data on the oil field, the CAP, community meetings, a newsletter, a web site, and a designated ombudsperson as required under CSD Provision 22.310.100.J provide multiple avenues for the public to access oil field information.</p> <p>Contact information for the oil field is available from all the information sources listed above and on the oil field fence and main gates. The Community Alert Notification (CAN) system, requirement under CSD Provision 22.310.050.A.1, provides an alert system for community notification.</p>
DPH-4	Emergency Response Plan	Request for an Emergency Response Plan and that it be made accessible to the public.	See response for DPH-3 above.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
DPH-5	CAN System	Request to enhance the CAN system.	<p>The comment that the CAN system only notifies residents that “opt in” to the system on issues at the oil field is not accurate. The commenter may be referring to the annual test of the CAN system whereby a select subset of the total notification list is used to test the system. The list for the CAN test includes all government safety and oversight agencies required and several members of the CAP and public that chose to be included. In the event of an actual emergency and use of the CAN system, the entire CAN list would be contacted automatically. The determination to activate the CAN system is not made by the oil field operator alone and requires the input from the applicable Fire Department and other public safety agencies. Regarding the referenced odor incident on November 22, 2018, the incident was reported and responded to by Cal-OES, DOGGR, and local CUPA/Fire Departments. None of these agencies required activation of the CAN system.</p>

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
DPH-6	Monitoring	Request for fence line monitoring.	<p>The CSD requires a variety of monitoring programs including air quality/odor monitoring around the gas plant, storm water testing, groundwater monitoring, fugitive emissions inspections and ground movement surveys. In addition, the CSD provides for paleontological, noise, and vibration monitoring if determined to be necessary by County DRP or County DPH. Further, the Environmental Compliance Coordinator performs inspections of the oil field, which includes spot air monitoring and is available to respond as necessary to events or issues at the oil field.</p> <p>Regarding air quality monitoring, the STI Air Quality study, completed in December 2014, provided a site-specific air quality monitoring program for air toxics utilizing four monitoring locations. Each monitoring station included both air quality and meteorological instrumentation. Results of the study were consistent with the air quality impact analysis in the Baldwin Hills CSD EIR and the studies completed by the SCAQMD in the MATES programs. The County is looking forward to the forthcoming CARB SNAPS monitoring effort scheduled to begin in late 2019. The County will review the results of the SNAPS monitoring effort to determine the applicability of additional air quality monitoring at the oil field.</p>

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
DPH-7	Information	Request the CSD include a provision for submitting data to the DPH.	<p>The CSD includes provisions for submittal of certain information, monitoring data, and reports to applicable agencies such as the SCAQMD, DOGGR, and DPW. Most of this data is available on either the oil field website or the DRP Baldwin Hills website. It is not clear from the comment what “operations data” the DPH is requesting; operations data is available in the <i>Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan</i> which is submitted on an annual basis and available on the web sites.</p> <p>DPH may request additional data from other agencies or the operator, however, the regulatory requirements of other governmental agencies is beyond the scope of the CSD and the Periodic Review.</p>

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
DPH-8	Risk Assessment	Request for a risk assessment matrix.	<p>A health risk assessment was completed as part of the Baldwin Hills CSD EIR (see Section 4.3, Public Health Risk). The setbacks for drilling required by CSD Provision 22.310.050.B.14 are based on the results of that risk assessment.</p> <p>The County has not received any complaints or issues from the existing setback distances for the IOF. No wells have been drilled at the IOF since June 2014. The County is assessing the setback issue as part of the update to the County oil code and results of that process can be reviewed regarding the CSD when that process is completed.</p> <p>The potential for fires and explosions was analyzed in the Baldwin Hills CSD EIR (see Section 4.1, Safety and Risk of Upset) and seven mitigation measures were developed. These mitigation measures are captured in CSD Provisions 22.310.050 C.1, C.2, C.3, C.4, and 22.310.120.L.</p> <p>Note that the studies referenced above included the emissions and other impacts of drilling and that no well has been drilled at the IOF since June 2014.</p>
DPH-9	City and County Ordinance Update	Request to apply updated oil code ordinances to the CSD.	<p>The CSD, under Provision 22.310.070.G Periodic Review, states: <i>Such reviews shall, among other things, consider whether additional provisions should be added, appended, or removed. One of the main goals of the Periodic Review shall be to evaluate if proven technological advances that would further reduce impacts of oil operations on neighboring land uses should be incorporated into the provisions of this section.</i> Therefore, additional provisions may be added if the Periodic Review analysis makes such a recommendation.</p>
CCSC-1	CSD and Settlement Agreement	CSD and Settlement Agreement should be integrated for compliance.	<p>The two referenced documents do not need to be integrated for compliance. All requirements of the Settlement Agreement are incorporated into the CSD by reference.</p>

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CCSC-2	Bonding Indemnification	Request that surface and sub-surface owners be included in the financial indemnification of the oil field.	The CSD provides for indemnification, insurance and performance security as listed in Provision 22.310.070. Financial issues between operators of the oil field and property/mineral rights owners is beyond the scope of the CSD and Periodic Review.
CCSC-3	Document Definitions	Request that the CSD document definitions be revised consistent with other agencies.	The Periodic Review is a process to determine if the provisions are adequately protecting the health, safety, and general welfare of the public. Revisions of definitions or a re-write of the CSD does not assist toward that goal and is therefore not a consideration of the Periodic Review. A table of acronyms is available on Page iv of the Periodic Review.
CCSC-4	Digital Data	Oil field data should be available in digital format.	The provisions of Section 22.310.100 include the CAP, community meetings, a newsletter, a web site, and a designated ombudsperson to provide information to the public. The oil field website and the DRP Baldwin Hills website provide a plethora of information electronically.
CCSC-5	Abandoned Wells	Recommendation to use historical aerial photographs to identify abandoned wells.	The abandoned wells at the IOF were analyzed in the Baldwin Hills CSD EIR (see Section 4.4 Geology). CSD Provision 22.310.050.FF provides for soil vapor testing in the areas of abandoned wells.
CCSC-6	Document Definitions Information Request	Request that the CSD document definitions be revised consistent with other agencies. Information request; rigs and derricks.	Please see response to CCSC-3. Information requests are outside the scope of the Periodic Review.
CCSC-7	Document Definitions Information Request	Request for CSD document language revisions. Information request; drilling.	Please see response to CCSC-3. Please note information requests are outside the scope of the Periodic Review.
CCSC-8	Document Definitions Information Request	Request for CSD document language revisions. Information request; ECC.	Please see response to CCSC-3. Information requests are outside the scope of the Periodic Review.

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Comment #	Issue Area	Brief Description	Response
CCSC-9	Document Definitions Information Request	Request for CSD document language revisions. Information request; EQAP.	Please see response to CCSC-3. Information requests are outside the scope of the Periodic Review. Compliance information is available in EQAP and SIMQAP audit documents, the Periodic Review, CAP minutes, and CAP meetings.
CCSC-10	Document Definitions	Request for CSD document language revisions.	Please see response to CCSC-3.
CCSC-11	Document Definitions	Request for CSD document language revisions.	Please see response to CCSC-3.
CCSC-12	SIMQAP	SIMQAP information.	See Periodic Review discussion for Provision CSD 22.310.060.C.
CCSC-13	SIMQAP	SIMQAP information.	See Periodic Review discussion for Provision CSD 22.310.060.C.
CCSC-14	Document Definitions SPCC	Request for CSD document language revisions. SPCC information.	See Periodic Review discussion for Provision CSD 22.310.050.Q.
CCSC-15	Document Definitions Information Request	Request for CSD document language revisions. Information request.	Please see response to CCSC-3. Information requested is outside the scope of the Periodic Review.
CCSC-16	Document Definitions Information Request	Request for CSD document language revisions. Information request; ERP.	Please see response to CCSC-3. Information requested is outside the scope of the Periodic Review.
CCSC-17	Information Request	Request for information on property and mineral rights owners.	Information requested is outside the scope of the Periodic Review.
CCSC-18	Document Definitions Information Request	Request for CSD document language revisions. Information request.	Please see response to CCSC-3. Information requested is outside the scope of the Periodic Review.
CCSC-19	Document Definitions Information Request	Request for CSD document language revisions. Information request.	Please see response to CCSC-3. Information requested is outside the scope of the Periodic Review.
CCSC-20	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-21	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CCSC-22	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. DOGGR has maps of the delineation of the Oil Field for reference.
CCSC-23	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-24	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. DOGGR reviews and permits reinjection of water at the oil field.
CCSC-25	Information Request	Information request.	Information requests is outside the scope of the Periodic Review.
CCSC-26	Document Definitions	Request that the CSD document definitions be revised consistent with other agencies.	Please see response to CCSC-3.
CCSC-27	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Gas busters are used as part of drilling operations. Vapor recovery systems are included for all tanks. Please see Periodic Review discussion for Provision 22.310.050.CC.3 on vapor recovery requirements.
CCSC-28	Document Definitions	Request that the CSD document definitions be revised consistent with other agencies.	Please see response to CCSC-3.
CCSC-29	Document Definitions Information Request	Request for CSD document language revisions. Information request.	Please see response to CCSC-3. Definitions are included in the CSD. Information requested is outside the scope of the Periodic Review.
CCSC-30	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.CC.3 on vapor recovery requirements.
CCSC-31	Information Request	Information request; meteorological station.	Information requested is outside the scope of the Periodic Review.
CCSC-32	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.C.3, C.4 and the Retention Basin Survey for subject information.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CCSC-33	CSD and Settlement Agreement	CSD and Settlement Agreement should be integrated for compliance.	The two referenced documents do not need to be integrated for compliance. All requirements of the Settlement Agreement are incorporated into the CSD by reference.
CCSC-34	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.D.4 and D.5 and the Ground Movement Monitoring Plan for subject information.
CCSC-35	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.D.1.
CCSC-36	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note that the previous and current operators do not use sumps as documented in the previous Periodic Review and annual EQAP reports.
CCSC-37	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-38	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-39	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-40	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. The Groundwater Monitoring Plan is available on the oil field website.
CCSC-41	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note the Hazardous Materials Business Plan program is administered by County Fire CUPA.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CCSC-42	Information Request	Information request. CSD and Settlement Agreement.	Information requested is outside the scope of the Periodic Review. Note the annual drilling plans provide a historical summary of wells drilled and the plans are available on the oil field website.
CCSC-43	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. The two referenced documents do not need to be integrated for compliance. All requirements of the Settlement Agreement are incorporated into the CSD by reference.
CCSC-44	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Data on bottom hole locations and drilling sites are provided every year as part of the Annual Drilling Plan.
CCSC-45	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-46	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Data on bottom hole locations and drilling sites are provided every year as part of the Annual Drilling Plan.
CCSC-47	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-48	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-49	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CCSC-50	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note that no produced water is removed from the oil field and is re-injected after treatment consistent with DOGGR requirements.
CCSC-51	Document Definitions Information Request	Request for CSD document language revisions. Information request.	Please see response to CCSC-3. Information requested is outside the scope of the Periodic Review.
CCSC-52	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note the annual drilling plans provide a historical summary of wells drilled and the plans are available on the oil field website.
CCSC-53	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-54	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-55	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-56	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-57	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-58	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-59	Sumps	Information request; sump closure plan.	Information requested is outside the scope of the Periodic Review. Note that the previous and current operators do not use sumps as documented in the previous Periodic Review and annual EQAP reports.
CCSC-60	Document Definitions Information Request	Request for CSD document language revisions. Information request.	Please see response to CCSC-3. Information requested is outside the scope of the Periodic Review.

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Comment #	Issue Area	Brief Description	Response
CCSC-61	Document Definitions Information Request	Request for CSD document language revisions. Information request.	Please see response to CCSC-3. Information requested is outside the scope of the Periodic Review.
CCSC-62	Throughput Review Trigger	Request for derivation of throughput review value of 630 barrels a day.	The derivation of the throughput review trigger in CSD Provision 22.310.050.II was discussed in the initial Periodic Review. See Periodic Review for CSD Provision 22.310.050.II.
CCSC-63	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Financial issues between operators of the oil field and property/mineral rights owners are beyond the scope of the CSD and Periodic Review.
CCSC-64	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-65	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note all requirements of the Settlement Agreement are incorporated into the CSD by reference.
CCSC-66	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note all requirements of the Settlement Agreement are incorporated into the CSD by reference.
CCSC-67	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note all requirements of the Settlement Agreement are incorporated into the CSD by reference.
CCSC-68	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note all requirements of the Settlement Agreement are incorporated into the CSD by reference.
CCSC-69	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Note all requirements of the Settlement Agreement are incorporated into the CSD by reference.
CCSC-70	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CCSC-71	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-72	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-73	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-74	Information Request Periodic Review	Information on Periodic Review process and notices.	Information requested is outside the scope of the Periodic Review. Regarding the schedule and noticing of the Periodic Review and Periodic Review process, both are provided on the County DRP website and announced at the monthly CAP meetings.
CCSC-75	Information Request Periodic Review	Information on Periodic Review process.	The Director of Public Health has not required any of the referenced surveys to date.
CCSC-76	Information Request Periodic Review	Information on Periodic Review process.	The draft report will be available to the CAP and operator for comment and will include an appendix with all comments received.
CCSC-77	Document Definitions Information Request	Request for CSD document language revisions. Information request.	Please see response to CCSC-3. Information requests are outside the scope of the Periodic Review. The Periodic Review document will be available to the public.
CCSC-78	Information Request Periodic Review	Information on Periodic Review process.	The Director of Public Health has not required any of the referenced surveys to date. The Periodic Review will contain a discussion of any violations and all recommendations determined by the review analysis.
CCSC-79	Information Request Periodic Review	Information on Periodic Review process.	The Director of Public Health has not required any of the referenced surveys to date.
CCSC-80	Information Request Periodic Review	Information on Periodic Review process.	The draft report will be available to the CAP and operator for comment and will include an appendix with all comments received.
CCSC-81	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-82	Information Request Periodic Review	Information on Periodic Review process.	The initial Periodic Review, completed in 2015, is available on the County DRP website.

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Comment #	Issue Area	Brief Description	Response
CCSC-83	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Annual Drilling Plan documents for the requested information.
CCSC-84	Definitions	Request for CSD document language revisions.	County in the CSD refers to the County of Los Angeles.
CCSC-85	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-86	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. The Unused or Abandoned Equipment Removal Plan is available on the oil field website.
CCSC-87	Information Request CAP	Information request.	Information requested is outside the scope of the Periodic Review. Guidelines for the CAP were created and approved by the CAP in June 2009 and is available on the County DRP Baldwin Hills website.
CCSC-88	Information Request Neighborhood Meetings	Information request.	Information requested is outside the scope of the Periodic Review. Notices for the annual meetings are posted on the County DRP Baldwin Hills website, the oil field website and announced at CAP meetings.
CCSC-89	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.
CCSC-90	Information Request Web Site	Information request.	Information requested is outside the scope of the Periodic Review. See Periodic Review discussion for Provision 22.310.100.B3 for a discussion on the oil field web site.
CCSC-91	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.C.3, C.4 and the Retention Basin Survey for subject information.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CCSC-92	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.D.7 for subject information.
CCSC-93	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.D.4 and D.5 and the Ground Movement Monitoring Plan for subject information.
CCSC-94	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.D.4 and D.5 and the Ground Movement Monitoring Plan for subject information.
CCSC-95	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.S for subject information.
CCSC-96	Information Request	Information request.	Information requested is outside the scope of the Periodic Review. Please see Periodic Review discussion for Provision 22.310.050.CC for subject information.
CCSC-97	Information Request	Information request.	Information requested is outside the scope of the Periodic Review.

Periodic Review Scoping Comments

Comment #	Issue Area	Brief Description	Response
CCSC-98	Monitoring Public Notification	Request for drone monitoring and public notification of hazards.	<p>The CSD requires a variety of monitoring programs including air quality/odor monitoring around the gas plant, storm water testing, groundwater monitoring, fugitive emissions inspections and ground movement surveys. In addition, the CSD provides for paleontological, noise, and vibration monitoring if determined to be necessary by County DRP or County DPH. Further, the Environmental Compliance Coordinator performs inspections of the oil field and is available to respond as necessary to events or issues at the oil field.</p> <p>Regarding air quality monitoring, the STI Air Quality study, completed in December 2014, provided a site-specific air quality monitoring program for air toxics utilizing four monitoring locations. Each monitoring station included both air quality and meteorological instrumentation. Results of the study were consistent with the air quality impact analysis in the Baldwin Hills CSD EIR and the studies completed by the SCAQMD in the MATES programs. The County is looking forward to the forthcoming CARB SNAPS monitoring effort scheduled to begin in late 2019. The County will review the results of the SNAPS monitoring effort to determine the applicability of additional air quality monitoring at the oil field.</p>
CCSC-99	Subsurface Safety Valves	Request for subsurface safety valves.	Downhole operations are under the jurisdiction of DOGGR.
CCSC-100	DOGGR Regulations	Include DOGGR regulations.	Applicable DOGGR regulations are included in the CSD by reference.

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Appendix B

Settlement Agreement and Mutual Release, July 15, 2011

SETTLEMENT AGREEMENT AND MUTUAL RELEASE

This Settlement Agreement and Mutual General Release (hereinafter "Agreement") is entered into as of July 15, 2011 by and between Community Health Councils, Inc., Natural Resources Defense Council, Mark Salkin, the City of Culver City ("City"), Citizens Coalition for a Safe Community and Concerned Citizens of South Central Los Angeles (hereinafter collectively "Petitioners"), the County of Los Angeles (hereinafter "County") and Plains Exploration & Production Company (hereinafter "PXP"). All parties may be referred to herein as Parties or Party.

RECITALS

- A. This Agreement is entered into with respect to the following four consolidated cases (hereinafter collectively the "Consolidated Cases"), each of which was filed in the Superior Court of the State of California, County of Los Angeles:
- i. Lead case *Community Health Councils, Inc., Natural Resources Defense Council and Mark Salkin, petitioners, v. County of Los Angeles, respondents, and Plains Exploration and Production Company, et al., real parties in interest* (Case No. BS118018);
 - ii. *City of Culver City, petitioner and plaintiff, v. County of Los Angeles, Los Angeles County Board of Supervisors, respondents, and Plains Exploration and Production Company, et al., real parties in interest* (Case No. BS118023);
 - iii. *Concerned Citizens of South Central Los Angeles, petitioner, v. County of Los Angeles, respondents, and Plains Exploration and Production Company, et al., real parties in interest* (Case No. BS118039); and
 - iv. *Citizen's Coalition for a Safe Community, petitioner, v. County of Los Angeles, Board of Supervisors of the County of Los Angeles, respondents, and Plains Exploration and Production Company, et al., real parties in interest* (Case No. BS118056).
- B. On October 28, 2008, the County, by and through its Board of Supervisors (hereinafter "Board"), approved the Baldwin Hills Community Standards District ("CSD"), an amendment to its zoning code establishing development standards and operating procedures for oil and gas production operations for the unincorporated portion of the Inglewood oil field ("Oil Field") located in the Baldwin Hills Zoned District, which took effect on or about December 1, 2008 and remains in effect. The Board certified the Final Environmental Impact Report ("EIR") for the proposed CSD on October 21, 2008. PXP

had filed an application for establishment of the CSD pursuant to Title 22 of the Los Angeles County Code ("County Code").

- C. Petitioners filed the petitions for writs of mandate identified in paragraph A above under the California Environmental Quality Act ("CEQA") challenging, among other things, the adequacy of the EIR and the Board's approval of the CSD, naming the County or the County and the Board as Respondents and PXP as Real Party in Interest. Thereafter, certain property owners were named as Real Parties in Interest ("Landowners").
- D. The Parties desire to resolve certain matters, including any and all claims raised in the Consolidated Cases and/or arising out of, or related to, or connected with the matters referred to in paragraph B above, by way of compromise.
- E. This Agreement relates to all claims and disputes presented in the Consolidated Cases that may exist as of the date of this Agreement and any and all other claims and disputes that exist between, in any combination, the County, PXP, and Petitioners that concern or in any way relate to the Board's approval of the Baldwin Hills CSD and certifications of its EIR referred to in paragraph B above.

TERMS OF SETTLEMENT

NOW, THEREFORE, in consideration of the facts recited above and the covenants, conditions, and promises contained herein, the Parties agree as follows:

1. *Slant Drilling.*

- a. *Deep Zone Wells.* Pursuant to the CSD, PXP is required to develop and submit to the County an annual drilling, redrilling, well abandonment and well pad restoration plan (hereinafter "Annual Drilling Plan"). For any and each well that PXP proposes to drill where the Top Hole (as defined in paragraph 1.e below) is closer than 800 feet to a Sensitive Developed Area (as defined in paragraph 1.e below) and the Bottom Hole (as defined in Paragraph 1.e below) is located in any deep zone (presently identified as the Nodular Shale and Sentous zones and any other zones approximately 8,000 feet or deeper), as a supplement to its Annual Drilling Plan ("Deep Zone Supplement"), PXP will provide a study of the technical feasibility and commercial reasonability of Slant Drilling (as defined in paragraph 1.e below) each of the new deep zone wells in order to locate the Top Hole of any such well away from any Sensitive Developed Area in order to further mitigate potential impacts to such Areas. The Deep Zone Supplement will be reviewed by the County and County-retained expert or experts as part of the County's review of the Annual Drilling Plan. This study will provide a narrative to justify the proposed surface location and shall provide sufficient detail to allow the County to review the extent to which it may be technically feasible and commercially reasonable to locate the Top Hole away from Sensitive Developed Areas in order to further mitigate potential impacts to such Areas and still reach the targeted Bottom Hole location. PXP shall provide to the County any additional information as may be reasonably requested by the County or its expert which is necessary to complete its review. If such information is considered proprietary, the County and its expert will enter into a confidentiality agreement with PXP to protect such information. The narrative will be reviewed by the Director of Regional Planning prior to the approval of the Deep Zone Supplement. If approved by the Director, PXP will Slant Drill in order to locate the Top Hole away from Sensitive Developed Areas consistent with the narrative prepared by PXP that justifies the surface location.

- b. *Mid-Zone Wells.* For wells where the Top Hole is closer than 800 feet to a Sensitive Developed Area and the Bottom Hole is located in a mid-zone (approximately 3,500 to 7,999 feet deep, presently identified as the Rubel, Moynier, Bradna and City of Inglewood zones), PXP shall document such locations in a supplement to the Annual Drilling Plan ("Mid-Zone Supplement"). PXP shall use commercially reasonable efforts to locate new mid-zone wells and well pads away from Sensitive Developed Areas in order to further mitigate impacts to such Areas. The Mid-Zone Supplement shall explain why it is not technically feasible and commercially reasonable to locate the Top Hole away from Sensitive Developed Areas in order to further mitigate impacts to such Areas. The referenced mid-zone well pad assessment will be reviewed by County-retained experts and the County. PXP shall provide to the County any additional information as may be reasonably requested by the County or its expert which is necessary to complete its review. If such information is considered proprietary, the County and its expert will enter into a confidentiality agreement with PXP to protect such information. The County shall approve the mid-zone well locations as part of its review of the Mid-Zone Supplement if consistent with this paragraph.
- c. *Shallow Wells.* Drilling of wells where the Bottom Hole is less than approximately 3,500 feet deep (hereinafter "Shallow Wells") and above the zones identified in 1(b) as mid-zones, shall be located away from Developed Areas (as defined in the CSD) and shall be identified in the Annual Drilling Plan. Drilling of Shallow Wells may proceed pursuant to said drilling plan after the County approves the portion of the Annual Drilling Plan related to Shallow Wells as set forth in the CSD.
- d. *Supplement Review.* Upon receipt, the County shall promptly forward the Drilling Plan Supplements ("Supplements" defined to be a Deep Zone Supplement, a Mid-Zone Supplement, or both) filed by PXP to the Community Advisory Panel ("CAP") established pursuant to the CSD for its review and comment. The County will allow the CAP or CAP members two weeks from the date the County provided Supplements to the CAP to provide their written comments on the Supplement to the County. The County may review and approve the Annual Drilling Plan and related Supplements in phases consistent with the terms herein, but shall conduct its review of the Annual Drilling Plan and Mid-Zone Supplement within 45 calendar days after their submission to the County and either approve the Supplement or provide PXP with a list of deficiencies within that 45-day timeframe as set forth in the CSD. The Drilling Plan Supplements will only include the study referenced in 1(a) and other relevant or required information related to the location of proposed wells. The County

shall conduct its review of the Deep Zone Supplement within 45 calendar days after its submission and either approve the Supplement or provide PXP with a list of deficiencies within that 45-day timeframe after considering any timely CAP comments concerning the Deep Zone Supplement. The County will not delay its review of the Annual Drilling Plan or any supplements thereto. PXP may drill any wells approved under the Annual Drilling Plan regardless of the status of the County's review of the Supplements. Similarly, PXP may drill any wells approved under a Supplement regardless of the status of the Annual Drilling Plan review and approval. Changes to well pad locations that result from review of the Supplements will not require resubmittal of the Annual Plan or delay any drilling under the Annual Plan, beyond the time necessary to implement such changes.

- e. *Definitions.* "Top Hole" shall mean the surface location from which drilling is commenced. "Bottom Hole" shall mean the underground location at which drilling terminates. "Slant Drilling" shall mean non-vertical drilling, directional drilling, or drilling at a relatively significant angle. "Sensitive Developed Area" shall mean a lot or parcel that contains a single or multi-family residence, existing park, school or health care facility.
- f. *Environmental Consideration.* The County shall lessen or disapprove any otherwise required Slant Drilling if more remote drilling would result in more significant adverse environmental impacts on balance and the County shall consider any timely comments by the CAP assessing this balance.
- g. *Non-interference.* This paragraph 1 of the Agreement shall be construed in connection with the entire CSD. Except as expressly set forth above, this paragraph shall not be construed to interfere with PXP's business in the Oil Field.

2. *Noise.*

- a. The CSD currently provides that hourly, A-weighted equivalent noise levels associated with drilling, re-drilling and reworking wells shall not elevate baseline levels (which shall not include drilling, re-drilling or reworking operations) by more than five A-weighted decibels ("dBA") at the Oil Field boundary of any Developed Area. Instead of the referenced five dBA provision, PXP shall limit the night time (10 p.m. to 7 a.m.) noise levels at Developed Areas to no more than three dBA above a one-hour baseline average for the defined nighttime period, but at no time will PXP be required to maintain noise levels below the baseline nighttime noise levels. Furthermore, PXP and the County determined the baseline noise levels at four additional Oil Field boundary locations near Developed Areas,

selected by PXP and the County, in addition to the seven utilized in the EIR for a total of 11 locations. If PXP violates the above noise requirements, no new drilling or redrilling permits shall be issued by the County until PXP, in

consultation with the County, identifies the source of the noise and PXP takes steps necessary to assure compliance with the above-specified threshold.

- b. If drilling, redrilling or reworking operations elevate nighttime baseline noise levels by more than 10dBA for more than 15 minutes in any one hour as independently verified and determined by the County, PXP, in consultation with the County, shall identify the cause and source of the noise and take steps to avoid such extended periods of noise elevation in the future. This provision does not negate the CSD noise limits between 7 a.m. to 10 p.m.
3. *Number of Drill Rigs.* Notwithstanding the CSD's allowance for operation of a maximum of three drill rigs at any one time on the Oil Field, PXP shall limit to two the number of drill rigs in use at any one time.
 4. *Number of wells.* Notwithstanding the aggregate and annual well-drilling limits in the CSD, PXP shall comply with the following limits:
 - a. Notwithstanding Section 22.44.142.H of the CSD, no more than 500 new wells (inclusive of Bonus Wells and wells drilled since approval of CSD) shall be drilled pursuant to the CSD (hereinafter "Director's Review") through October 1, 2028, or during the remaining life of the CSD, whichever is later.
 - b. Until such time as PXP has drilled or redrilled 50 wells since the adoption of the CSD, or 24 months from the date of this Agreement, whichever is sooner ("Time Period One"), no more than 30 wells may be drilled or re-drilled in any calendar year pursuant to a Director's Review as set forth in the CSD (hereinafter Director's Review). At the end of Time Period One, and if the County determines, pursuant to its review of the CSD by the Director of Regional Planning, that the CSD has been effective in protecting the health, safety, and general welfare of the public, thereafter (the "Full Operational Period") no more than 35 wells may be drilled or re-drilled in the calendar year pursuant to Director's Review.
 - c. In Time Period One, for each well abandoned within 800 feet of any Developed Area (the "800-foot zone") by PXP since adoption of the CSD and in full compliance with the California Department of Conservation's Division of Oil, Gas

and Geothermal Resources ("DOGGR") standards for abandonment at the time of abandonment, PXP may drill two additional new wells outside of the 800-foot zone (hereinafter "Bonus Wells"), up to a maximum of 45 drilled and re-drilled wells (30 wells plus 15 Bonus Wells) in any calendar year within Time Period One pursuant to Director's Review and subject to review and approval in the Annual Drilling Plan. Subject to the annual and aggregate limits on number of wells, Bonus Wells earned by abandonment may be drilled at any time during the life of the CSD.

- d. In the Full Operational Period, for each well abandoned within the 800-foot zone, PXP may drill two additional new wells outside the 800-foot zone up to a maximum of 53 drilled and re-drilled wells (35 wells plus 18 Bonus Wells) in that year pursuant to Director's Review and subject to review and approval in the Annual Drilling Plan. Subject to the aggregate and annual limits on number of wells, Bonus Wells earned by abandonment may be drilled at any time during the life of the CSD.
- e. The Developed Area as used in the CSD with respect to the 400-foot buffer zone (Section 22.44.142.E.) shall remain unchanged (static or fixed) from what it was determined to be on the effective date of the CSD.

5. *Health Assessment and Environmental Justice Study.* The County shall complete a Community Health Assessment of the communities surrounding the Oil Field which shall include an Environmental Justice component by June 2012 and ensure additional assessments are completed every five to seven years throughout the life of the CSD. In future Community Health Assessments, the County Department of Public Health ("Public Health") shall review other agencies' reports regarding air quality, water quality and seismic data, where feasible, in its assessment. Public Health will analyze the information by socio-economic and demographic data to accommodate and reflect an Environmental Justice component. The Community Health Assessment shall include, but not be limited to, an analysis of cancer rates, mortality rates, birth outcomes and a survey of other pertinent health indicators. The County will consult with the CAP and the Health Working Group regarding the Community Health Assessment and consider reasonable comments by the CAP and the Health Working Group. Public Health will comply with all applicable state and federal requirements including Title VI of the Civil Rights Act of 1964 and corresponding regulations, and California Government Code Section 11135 and corresponding regulations.

6. *Clean Technology Assessment.* The CSD requires PXP to consider proven reasonable and feasible technological improvements which are capable of reducing the

environmental impacts of drilling and re-drilling. (County Code section 22.44.142.E.26.f) The CSD also requires that the Annual Drilling Plan include a discussion of the latest equipment and techniques that are proposed for use as part of its drilling and re-drilling program to reduce environmental impacts. (County Code section 22.44.142.E.26.c.ix) Pursuant thereto, PXP shall address in each Annual Drilling Plan the availability and feasibility of the use of natural gas-powered drill rigs or other technology capable of reducing environmental impacts, for the drilling of wells proposed in the Annual Drilling Plan (collectively "Clean Technology"). During the Periodic Review provided in 22.44.142 G.7, the County will evaluate such technology for brand new equipment that PXP intends to lease, acquire or otherwise use and require PXP to implement such technology to the extent the technology is feasible and available on a commercially reasonable basis.

7. *Electrical Distribution Study.* The County will propose to Southern California Edison ("SCE") and the Los Angeles Department of Water and Power ("DWP") that a study be conducted in cooperation with SCE, DWP, the County and PXP regarding opportunities to streamline and consolidate electrical lines distributed throughout the Oil Field and that SCE and DWP each fund one-fourth of the cost of such study. PXP will fund one-fourth of the cost of any such study. The County will fund one-fourth of the cost of any such study.
8. *Air Quality Monitoring.* Supplemental to the air monitoring required by the CSD, the County will develop and implement an air quality monitoring plan that takes into consideration review and comments from Petitioners, interested stakeholders and the public. Such air monitoring shall be designed to assess the risk of both acute and chronic exposure to air contaminants from Oil Field operations, and endeavor to determine and distinguish the source of emissions, to the extent feasible, using available and affordable monitoring technology. Such air monitoring may be performed by SCAQMD, or an independent qualified consultant selected by County, and shall be commenced within 12 months of the date of this Agreement. The protocol for the air monitoring plan shall be peer reviewed prior to commencement. The plan shall be completed, and a peer reviewed report issued, within 12 to 24 months after commencement. The County commits to spending up to \$250,000 of its own funds toward implementing the plan and shall use reasonable efforts to seek additional funding sources, if necessary, to implement the plan. PXP shall reasonably cooperate with SCAQMD, the County and/or the independent consultant regarding any and all air monitoring related to the Oil Field.
9. *Back-Up Flare.* The CSD (County Code section 22.44.142.L.5.b) allows PXP to maintain its existing gas plant flare as back-up equipment at the facility's gas plant after

a new flare is permitted and installed. PXP and the County agree that this provision of the CSD allows only one gas plant flare to be operated at one time at the Oil Field. PXP shall comply with said limitation of only one gas plant flare operating at one time at the Oil Field. PXP shall install and have operational the new flare within 180 days of receiving the SCAQMD permit or at such later date as approved by the Director of Regional Planning for good cause shown.

10. *Well Plugs.* DOGGR requires oil field operators to utilize a minimum 25-foot cement surface plug at the top of a well when abandoning any such well pursuant to Title 14 of the California Code of Regulations section 1723.5. To augment this requirement, for all wells abandoned at the Oil Field from the date of this Agreement, PXP shall utilize a total of 150-foot cement surface plug.
11. *Landscaping.* PXP agrees to prepare and implement a series of landscape plans ("Landscape Plans") that enhance the Mia Lehrer Landscape Improvements Concepts plan dated November 4, 2008 to include, but not be limited to, landscaping along or near the border of the Oil Field in consultation with the County and subject to the County's approval. PXP's Landscape Plans shall be forwarded to the CAP for review. PXP will use best efforts to complete installation of the first two phases of the Landscape Plans along La Brea, between Stocker and Slauson, and Ladera Crest, within nine (9) months of County's final approvals of each of those first two Landscaping Plans using best landscaping practices. PXP agrees that it will complete the entire landscaping required by the County-approved Landscape Plans within three years after approval by the County of the final phase.
12. *Clean-Up Plan.* The CSD requires PXP to decommission and remove facilities that have reached the end of their useful economic life (County Code section 22.44.142.E.21.a) and submit to the County for its approval an unused or abandoned equipment removal plan (County Code section 22.44.142.L.14). PXP has submitted such a plan in 2009 and shall periodically update the plan should additional equipment, not identified in PXP's original removal plan, become unused or abandoned. Equipment and materials not necessary to oil field operations as identified by the Director of Planning shall be promptly removed from view of Sensitive Developed Areas as addressed in the plan.
13. *Fracking Study.* PXP shall pay for an independent consultant to conduct a study of the feasibility and potential impacts (including impacts to groundwater and subsidence) of the types of fracturing operations PXP may conduct in the Oil Field. The study will also consider PXP's historic and current use of gravel packing. Such study will be completed within twelve (12) months of the date of this Agreement. Such study and all

the back-up information for such study shall be provided to a qualified peer reviewer selected by the County and PXP, who shall review the study, back-up materials, and conclusions for completeness and accuracy. PXP must provide the independent expert with all materials requested and reasonably necessary for an accurate and verifiable study. The peer reviewer will be provided with access to all the data and materials provided to the independent expert. The peer reviewer shall agree to keep all proprietary information confidential. If the peer reviewer determines that the study is materially inadequate, incomplete or inaccurate, it shall so advise PXP's consultant who will complete the study as reasonably recommended by the peer reviewer and provide the revised study to the peer reviewer within 90 days. Upon acceptance by the peer reviewer, the study and all supporting material, including comments by the peer reviewer, shall be forwarded to the County, DOGGR, the Regional Water Quality Control Board ("RWQCB"), CAP and Petitioners and be available to the public, with any proprietary information redacted.

14. *CSD Review Based On Reduced Production.* When production drops to three percent of the estimated peak production to date of 21,000 barrels of oil per day, the County will review the CSD to consider whether modifications or closure of the Oil Field is necessary or appropriate or at such earlier date as the County determines is appropriate.
15. *CSD Provisions.* The CSD and all of its standards and requirements remain in full force and effect except to the extent that PXP has agreed to be limited by stricter or more rigorous controls or standards as reflected in this Agreement. Nothing herein shall limit or abrogate the County's discretion in amending the CSD, or other action pursuant to the County's legislative or police powers, to impose more restrictive requirements. This Agreement neither establishes nor abrogates any vested rights to drill new wells in the Oil Field. The County will provide written guidance on the additional limits and controls regarding operation of the Oil Field which are required by this Agreement to County staff and departments responsible for implementing the CSD and enforcing the CSD, and any other personnel the County deems necessary. The County shall recirculate this written guidance on an annual basis.
16. *General Releases between Petitioners and County.* In consideration of the terms and provisions of this Agreement, the County and Petitioners on behalf of themselves and their respective predecessors, successors, heirs, assigns, owners, attorneys, affiliates, parent corporation(s), divisions, officers, directors, employees, agents, representatives, partners, servants, executors, administrators, shareholders, board, councils, commissions, department, members, and each of them, in any and all capacities, do hereby mutually relieve, release and forever discharge the others and their respective predecessors, successors, heirs, assigns, owners, attorneys, affiliates, parent

corporation(s), divisions, officers, directors, employees, agents, representatives, partners, servants, executors, administrators, shareholders, board, councils, commissions, departments, members, and each of them, in any and all capacities, of and from all claims, rights, debts, liabilities, demand, obligations, liens, promises, acts, agreements, costs and expenses (including, but not limited to, attorneys' fees, costs and interest), damages, actions and cause of action, of whatever kind or nature (including without limitation, any statutory, civil or administrative claim, or any claim, arising out of acts or omissions occurring before the execution of this agreement), whether now known or unknown, suspected or unsuspected, fixed or contingent, apparent or concealed, relating to the Board's certification of the EIR and approval of the CSD; PROVIDED, HOWEVER, that this mutual release is not intended to and shall not constitute a release of the Parties' rights, obligations or warranties under this Agreement nor the rights and obligations of the County under the provisions of, or as set forth in, the CSD subject to the terms of paragraph 15. This release shall become final and take effect as to all Parties at the time upon which dismissals are to be filed pursuant to paragraph 28. Nothing herein shall release any claim for personal injury property damage or other claims, including any claim for nuisance, arising out of or related to acts or omissions in the operation of the Oil Field. Nothing herein shall release any claim or limit any right to challenge any future approval or action by the County, or other agency, relating to the CSD or the Oil Field.

17. *General Releases between Petitioners and PXP.* In consideration of the terms and provisions of this Agreement, PXP and Petitioners on behalf of themselves and their respective predecessors, successors, heirs, assigns, owners, attorneys, affiliates, parent corporation(s), divisions, officers, directors, employees, agents, representatives, partners, servants, executors, administrators, shareholders, board, councils, commissions, department, members, and each of them, in any and all capacities, do hereby mutually relieve, release and forever discharge the others and their respective predecessors, successors, heirs, assigns, owners, attorneys, affiliates, parent corporation(s), divisions, officers, directors, employees, agents, representatives, partners, servants, executors, administrators, shareholders, board, councils, commissions, departments, members, and each of them, in any and all capacities, of and from all claims, rights, debts, liabilities, demand, obligations, liens, promises, acts, agreements, costs and expenses (including, but not limited to, attorneys' fees, costs and interest), damages, actions and cause of action, of whatever kind or nature (including without limitation, any statutory, civil or administrative claim, or any claim, arising out of acts or omissions occurring before the execution of this agreement), whether now known or unknown, suspected or unsuspected, fixed or contingent, apparent or concealed, relating to the Board's certification of the EIR and approval of the CSD; PROVIDED, HOWEVER, that this mutual release is not intended to and shall not

constitute a release of the Parties' rights, obligations or warranties under this Agreement nor the rights and obligations of PXP under the provisions of, or as set forth in, the CSD subject to the terms of paragraph 15. Notwithstanding anything herein to the contrary, no person or entity that has or acquires an interest in the Oil Field, but contends or is adjudicated to not be bound by this Agreement, notwithstanding the intent of the Parties that such persons or entities are so bound, shall not be entitled to the benefits of the releases herein. This release shall become final and take effect as to all Parties at the time upon which dismissals are to be filed pursuant to paragraph 28. Nothing herein shall release any claim for personal injury, property damage or other claims, including any claim for nuisance, arising out of or related to acts or omissions in the operation of the Oil Field. Nothing herein shall release any claim or limit any right to challenge any future approval or action by the County, or other agency, relating to the CSD or the Oil Field. Nothing in this Agreement shall affect the City's rights, police powers or authority to regulate that portion of the Inglewood oil field within Culver City, nor shall this Agreement affect PXP's rights and operations, of that portion of the Inglewood oil field within Culver City.

18. *Settlement of Claims for Attorneys' Fees and Costs.* In settlement of each of Petitioners' claims for attorneys fees and costs, PXP shall pay \$1,250,000 and County shall pay \$350,000 ("Payments"). Before the time provided in Paragraph 28 below for dismissal of the Consolidated Cases expires, Petitioners may elect to provide written notice to PXP and County that it intends to dismiss the Consolidated Cases and, if so, shall provide counsel for PXP executed requests for dismissal of the Consolidated Cases ("Requests"). PXP and County will make their respective Payments to the Greenberg Glusker Fields Claman and Machtinger LLP Client Trust Account by check or wire transfer (with instructions to be provided) within twenty (20) days after receipt of the notice and Requests unless that would result in payment sooner than 45 days after the County Board of Supervisors approves the settlement, in which case Payment will be delivered no later than the 45th day after Board approval. If the above-referenced notice is not provided, the Payments will be made at the expiration of the time provided in Paragraph 28 below with PXP and the County making their respective Payments to the Greenberg Glusker Fields Claman and Machtinger LLP Client Trust Account by check or wire transfer (with instructions to be provided) after the Requests have been delivered to counsel for PXP. In either case, counsel for PXP shall hold the Requests in trust until the Payments by PXP and County have been delivered to Greenberg Glusker Fields Claman and Machtinger and shall thereafter file the Requests with the Court.
19. *Parties Bound.* This Agreement shall inure to the benefit of and shall be binding upon the successors and assigns of the Parties to this Agreement, including any successors to

any rights of PXP to operate in the Oil Field, and each of them. This Agreement may be enforced by any Party to the Agreement.

20. *Integration.* The Agreement constitutes a single, integrated written contract expressing the entire agreement of the Parties relative to the subject matter hereof and, with the sole and exclusive exception of any contemporaneous or subsequent written agreement between the Parties hereto subscribed by them or their duly authorized officers or agents, all prior and contemporaneous discussions and negotiations have been and are merged and integrated into, and are superseded by, this Agreement. Thus, no covenants, agreements, representations, or warranties of any kind whatsoever, whether express or implied in law or fact, have been made by any Party, except as specifically set forth in this Agreement or any contemporaneous or subsequent written agreement between the Parties subscribed by them or their duly authorized officers or agents.
21. *Non-Assignment of Claims.* Each of the Parties represents and warrants that it has not assigned or transferred any portions of any claim or interest arising out of, related to, or connected with the matters referred to in paragraphs A, B and C of the Recitals in this Agreement to any other individual, firm, corporation or other entity and that no such individual, firm, corporation or other entity has any lien, claim or interest in any of such claims. Each Party shall indemnify each other Party, defend, and hold it harmless from and against any claims, rights, debts, liabilities, demands, obligations, liens, promises, acts, agreements, costs and expenses (including, without limitation, attorneys' fees and costs), damages, actions and causes of action, of whatever kind or nature (including, without limitation, any statutory, civil or administrative claim, or any claim, arising out of acts or omissions occurring before the execution of this Agreement) of whatever kind or nature, whether now known or unknown, suspected or unsuspected, fixed or contingent, apparent or concealed, arising out of, related to or connected with any such prior assignment or transfer, or any such purported assignment or transfer.
22. *Settlement of Disputed Claims.* The Parties explicitly acknowledge and covenant that this Agreement represents a settlement of disputed rights and claims and that, by entering into this Agreement, no Party hereto admits or acknowledges the existence of any liability or wrongdoing, all such liability being expressly denied. No provisions hereof, or of any related documents, shall be construed as any admission or concession of liability, or any wrongdoing or of any preexisting liability.
23. *Additional terms.* Each of the Parties represents, warrants and agrees as follows:
 - a. Each of the Parties has received prior independent legal advice from legal counsel of its choice with respect to the advisability of making the settlement provided for

herein and with respect to the advisability of executing this Agreement. Each Party's attorney has reviewed the Agreement at length, made any desired changes, and signed the Agreement to indicate the attorney approved the Agreement as to form.

- b. Except for statements expressly set forth in this Agreement, no Party has made any statement or representation to any other Party regarding a fact relied upon by the other Party in entering into this Agreement and no Party has relied upon any statement, representation, or promise of any other Party, or of any representative or attorney for any other Party, in executing this Agreement or in making the settlement provided for herein.
- c. Each of the Parties has read the Agreement carefully, knows and understands the contents thereof, and has made such investigation of the facts pertaining to the settlement and this Agreement and of all matters pertaining hereto as it deems necessary and desirable.
- d. The terms of the Agreement are contractual, not a mere recital, and are the result of negotiations between the Parties.
- e. Each of the Parties to the Agreement agrees that such Party will not take any action which would interfere with the performance of this Agreement by any of the other Parties or which would adversely affect the rights provided for herein.
- f. This Agreement is intended to be final and binding between the Parties and further intended to be effective as a full and final accord and satisfaction between them as to any issue or claim arising out of, related to, or connected with the matters referred to in paragraphs A, B and C of the Recitals in this Agreement. Each Party relies on the finality of this Agreement as a material factor inducing that Party's execution of this Agreement.
- g. The failure by any Party to insist on performance of any of the terms or conditions of this Agreement shall not void any of the terms or conditions hereto, or constitute a waiver or modification of any of the terms or conditions hereto, nor be construed as a waiver or relinquishment by such Party of the performance of any such terms or conditions.

24. *Modifications.* No modification, amendment or waiver of any of the provisions contained in this Agreement, or any future representation, promise or condition in connection with the subject matter of this Agreement, shall be binding upon any Party

unless made in writing and signed by such Party or by a duly authorized officer or agent of Party, and except, that the County, as required by law, retains the right to amend the CSD, so long as done pursuant to the requirements of law.

25. *Execution.* This Agreement may be executed and delivered in any number of counterparts or copies ("Counterparts") by the Parties. Signatures may be provided via telefacsimile or electronically in PDF format. When each Party has signed and delivered at least one counterpart to the other Parties, each counterpart shall be deemed an original and, taken together, shall constitute one and the same Agreement, which shall be binding and effective as to the Parties.
26. *Authority to Execute.* Each Party executing this Agreement further represents and warrants that each has the full right and authority to enter into and perform this Agreement on behalf of the Party for whom each has signed and the full right and authority to bind fully said party to the terms and obligations (including, without limitation, the representations and warranties set forth herein) of this Agreement. The execution and delivery of this Agreement and the performance of the Parties' obligations have been or will be duly authorized by all necessary actions on the part of each of the Parties. This Agreement constitutes the legal, valid and binding obligations on, and of, the Parties.
27. *Covenant Not to Sue.* Each Party covenants not to assert any claim, right or defense that the Agreement is illegal, invalid, void or unenforceable and irrevocably waives any such claim, right or defense.
28. *Dismissal of Consolidated Cases.* Unless Petitioners elect to dismiss the Consolidated Cases sooner in accordance with Paragraph 18 above, within 180 days after execution of this Agreement by all Parties, Petitioners, and each of them, shall cause to be delivered to counsel for PXP the Requests; provided, however, that if a petition or other challenge to this Agreement has been timely filed, or is alleged to be, such Requests shall be delivered to counsel for PXP only if the petition or other challenge is unsuccessful and all avenues of appeal have been exhausted or the time has run to do so. PXP shall file the Requests after the Payments have been delivered as provided in Paragraph 18 above. After such time, the Parties shall take any other steps necessary to dismiss the Consolidated Cases. The Parties, through their counsel of record, shall sign the Stipulation and Proposed Order attached hereto as Exhibit B to be filed with the Court upon execution of this Agreement.
29. *Public Notice.* Following the execution of this Agreement, the Parties shall make an individual and/or joint public statement that shall include each of the elements of

Exhibit A. On an annual basis, the County shall schedule a public discussion at the CAP concerning this Agreement and the status of compliance with its terms. Additionally, the County shall post a copy of this Agreement on the County's Baldwin Hills Community Standards District webpage.

30. *Remedies for Breach.* The County will monitor and enforce PXP's compliance with the terms of the Agreement in the same manner and to the same extent as the County monitors and enforces the terms of the CSD.
 - a. The County shall not approve any Annual Drilling Plan nor any application for any new permits on the Oil Field, including any permit to drill or redrill any wells, if PXP is in violation of any of the material terms of paragraphs 1 – 4 and 11.
 - b. The terms of this Agreement may be enforced by bringing a breach of contract claim, or any other appropriate claim, in a court of competent jurisdiction.
 - c. Nothing herein shall be construed to limit any Parties' claims for damages or other relief, arising out of the breach of the terms of paragraphs 1 through 12 of this Agreement.
31. *Governing Law.* This Agreement shall be construed and enforced in accordance with the laws of the State of California where it is deemed to have been executed and delivered.
32. *Captions and Headings.* Captions and paragraph headings used herein are for convenience only. They are not a part of this Agreement and shall not be used in construing it.
33. *Survival.* Each and all of the covenants, representations and warranties of the Parties set forth in this Agreement shall survive the execution and delivery of this Agreement and the execution and delivery of any other document provided for herein.
34. *Good Faith Provision.* The Parties agree to cooperate fully, reasonably, and in good faith in the implementation of this Agreement. The Parties also agree to execute any and all supplemental documents, and to take all additional lawful and reasonable actions which may be necessary or appropriate to give full force and effect to the basic terms and to fully implement the goals and intent of this Agreement.

IN WITNESS WHEREOF, the Parties and their respective attorneys of record have approved and executed this Agreement on the dates specified below:

RESPONDENTS

COUNTY OF LOS ANGELES,
CALIFORNIA

Date: July 14, 2011

By: Elaine M. Lemke (for)
ELAINE M. LEMKE,
Principal Deputy County Counsel
Property Division

PETITIONERS

MARK SALKIN

Date: _____, 2011

MARK SALKIN, as an individual

COMMUNITY HEALTH COUNCILS, INC.

Date: _____, 2011

By: _____

NATURAL RESOURCES DEFENSE
COUNCIL

Date: _____, 2011

By: _____

[SIGNATURES CONTINUED ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties and their respective attorneys of record have approved and executed this Agreement on the dates specified below:

RESPONDENTS

**COUNTY OF LOS ANGELES,
CALIFORNIA**

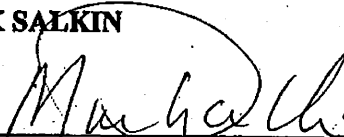
Date: _____, 2011

By: _____
ELAINE M. LEMKE,
Principal Deputy County Counsel
Property Division

PETITIONERS

MARK SALKIN

Date: July 14, 2011



MARK SALKIN, as an individual

COMMUNITY HEALTH COUNCILS, INC.

Date: _____, 2011

By: _____

**NATURAL RESOURCES DEFENSE
COUNCIL**

Date: _____, 2011

By: _____

[SIGNATURES CONTINUED ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties and their respective attorneys of record have approved and executed this Agreement on the dates specified below:

RESPONDENTS

**COUNTY OF LOS ANGELES,
CALIFORNIA**

Date: _____, 2011

By: _____
ELAINE M. LEMKE,
Principal Deputy County Counsel
Property Division

PETITIONERS

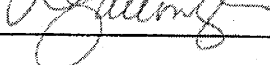
MARK SALKIN

Date: _____, 2011

MARK SALKIN, as an individual

COMMUNITY HEALTH COUNCILS, INC.

Date: 7/13/2011, 2011

By: _____


**NATURAL RESOURCES DEFENSE
COUNCIL**

Date: _____, 2011

By: _____

[SIGNATURES CONTINUED ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties and their respective attorneys of record have approved and executed this Agreement on the dates specified below:

RESPONDENTS

**COUNTY OF LOS ANGELES,
CALIFORNIA**

Date: _____, 2011

By: _____
ELAINE M. LEMKE,
Principal Deputy County Counsel
Property Division

PETITIONERS

MARK SALKIN

Date: _____, 2011

MARK SALKIN, as an individual

COMMUNITY HEALTH COUNCILS, INC.

Date: _____, 2011

By: _____

**NATURAL RESOURCES DEFENSE
COUNCIL**

Date: July 11, 2011

By: Janice K. Nayani

[SIGNATURES CONTINUED ON NEXT PAGE]

Date: _____, 2011

CITY OF CULVER CITY

By: Michael O'Leary
MICHEÁL O'LEARY, Mayor

**CONCERNED CITIZENS OF SOUTH
CENTRAL LOS ANGELES**

Date: _____, 2011

By: _____

**CITIZEN'S COALITION FOR A SAFE
COMMUNITY**

Date: _____, 2011

By: _____

REAL PARTY IN INTEREST

**PLAINS EXPLORATION & PRODUCTION
COMPANY**

Date: _____, 2011

By: _____

APPROVED AS TO FORM

**COUNTY OF LOS ANGELES OFFICE OF
THE COUNTY COUNSEL**

Date: _____, 2011

By: _____
ELAINE M. LEMKE
Attorneys for Respondents COUNTY OF
LOS ANGELES AND LOS ANGELES
COUNTY BOARD OF SUPERVISORS

[SIGNATURES CONTINUED ON NEXT PAGE]

CITY OF CULVER CITY

Date: _____, 2011

By: _____

**CONCERNED CITIZENS OF SOUTH
CENTRAL LOS ANGELES**

Date: 7/12, 2011

By: [Handwritten Signature]

**CITIZEN'S COALITION FOR A SAFE
COMMUNITY**

Date: _____, 2011

By: _____

REAL PARTY IN INTEREST

**PLAINS EXPLORATION & PRODUCTION
COMPANY**

Date: _____, 2011

By: _____

APPROVED AS TO FORM

**COUNTY OF LOS ANGELES OFFICE OF
THE COUNTY COUNSEL**

Date: _____, 2011

By: _____

ELAINE M. LEMKE
Attorneys for Respondents COUNTY OF
LOS ANGELES AND LOS ANGELES
COUNTY BOARD OF SUPERVISORS

[SIGNATURES CONTINUED ON NEXT PAGE]

Date: _____, 2011

CITY OF CULVER CITY

By: _____

**CONCERNED CITIZENS OF SOUTH
CENTRAL LOS ANGELES**

Date: _____, 2011

By: _____

**CITIZEN'S COALITION FOR A SAFE
COMMUNITY**

Date: July 12, 2011

By: Merid J. Glass

REAL PARTY IN INTEREST

**PLAINS EXPLORATION & PRODUCTION
COMPANY**

Date: _____, 2011

By: _____

APPROVED AS TO FORM

**COUNTY OF LOS ANGELES OFFICE OF
THE COUNTY COUNSEL**

Date: _____, 2011

By: _____

ELAINE M. LEMKE
Attorneys for Respondents COUNTY OF
LOS ANGELES AND LOS ANGELES
COUNTY BOARD OF SUPERVISORS

[SIGNATURES CONTINUED ON NEXT PAGE]

CITY OF CULVER CITY

Date: _____, 2011

By: _____

**CONCERNED CITIZENS OF SOUTH
CENTRAL LOS ANGELES**

Date: _____, 2011

By: _____

**CITIZEN'S COALITION FOR A SAFE
COMMUNITY**

Date: _____, 2011

By: _____

REAL PARTY IN INTEREST

**PLAINS EXPLORATION & PRODUCTION
COMPANY**

Date: _____, 2011

By: 
DOSS R. BOURGEOIS, EXEC. VP E&P

APPROVED AS TO FORM

**COUNTY OF LOS ANGELES OFFICE OF
THE COUNTY COUNSEL**

Date: _____, 2011

By: _____
ELAINE M. LEMKE
Attorneys for Respondents COUNTY OF
LOS ANGELES AND LOS ANGELES
COUNTY BOARD OF SUPERVISORS

[SIGNATURES CONTINUED ON NEXT PAGE]

CITY OF CULVER CITY

Date: _____, 2011

By: _____

**CONCERNED CITIZENS OF SOUTH
CENTRAL LOS ANGELES**

Date: _____, 2011

By: _____

**CITIZEN'S COALITION FOR A SAFE
COMMUNITY**

Date: _____, 2011

By: _____

REAL PARTY IN INTEREST

**PLAINS EXPLORATION & PRODUCTION
COMPANY**

Date: _____, 2011

By: _____

APPROVED AS TO FORM

**COUNTY OF LOS ANGELES OFFICE OF
THE COUNTY COUNSEL**

Date: July 11, 2011


By: KLemke for

ELAINE M. LEMKE
Attorneys for Respondents COUNTY OF
LOS ANGELES AND LOS ANGELES
COUNTY BOARD OF SUPERVISORS

[SIGNATURES CONTINUED ON NEXT PAGE]

**HARDING LARMORE KUTCHER &
KOZAL LLP**

Date: July 14, 2011

By: 
KENNETH L. KUTCHER
Attorneys for Petitioners COMMUNITY
HEALTH COUNCILS; NATURAL
RESOURCES DEFENSE COUNCIL &
MARK SALKIN

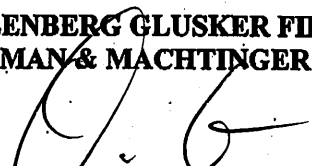
**NATURAL RESOURCES DEFENSE
COUNCIL**

Date: _____, 2011

By: _____
DAMON NAGAMI
Attorneys for Petitioners COMMUNITY
HEALTH COUNCILS; NATURAL
RESOURCES DEFENSE COUNCIL &
MARK SALKIN

**GREENBERG GLUSKER FIELDS
CLAMAN & MACHTINGER LLP**

Date: July 14, 2011

By: 
DAVID E. CRANSTON
Attorney for Petitioner CITY OF CULVER
CITY

[SIGNATURES CONTINUED ON NEXT PAGE]

**HARDING LARMORE KUTCHER &
KOZAL LLP**

Date: _____, 2011

By: _____
KENNETH L. KUTCHER
Attorneys for Petitioners **COMMUNITY
HEALTH COUNCILS; NATURAL
RESOURCES DEFENSE COUNCIL &
MARK SALKIN**

**NATURAL RESOURCES DEFENSE
COUNCIL**

Date: July 11, 2011

By: Damon K. Nagami
DAMON NAGAMI
Attorneys for Petitioners **COMMUNITY
HEALTH COUNCILS; NATURAL
RESOURCES DEFENSE COUNCIL &
MARK SALKIN**

**GREENBERG GLUSKER FIELDS
CLAMAN & MACHTINGER LLP**

Date: _____, 2011

By: _____
DAVID E. CRANSTON
Attorney for Petitioner **CITY OF CULVER
CITY**

[SIGNATURES CONTINUED ON NEXT PAGE]

Date: July 12, 2011

THE CITY PROJECT
A 501(c)(3) Public Benefit Corporation

By: Robert Garcia
ROBERT GARCIA
Attorneys for Petitioners CONCERNED
CITIZENS OF SOUTH CENTRAL LOS
ANGELES

LAW OFFICES OF TODD T. CARDIFF

Date: _____, 2011

By: _____
TODD T. CARDIFF
Attorneys for Petitioners CITIZENS
COALITIONS FOR A SAFE
COMMUNITY

GIBSON DUNN & CRUTCHER LLP

Date: _____, 2011

By: _____
JEFFREY D. DINTZER
Attorneys for Real Parties in Interest
PLAINS EXPLORATION AND
PRODUCTION COMPANY

THE CITY PROJECT
A 501(c)(3) Public Benefit Corporation

Date: _____, 2011

By: _____
ROBERT GARCIA
Attorneys for Petitioners CONCERNED
CITIZENS OF SOUTH CENTRAL LOS
ANGELES

LAW OFFICES OF TODD T. CARDIFF

Date: July 13, 2011

By: Todd T. Cardiff
TODD T. CARDIFF
Attorneys for Petitioners CITIZENS
COALITIONS FOR A SAFE
COMMUNITY

GIBSON DUNN & CRUTCHER LLP

Date: _____, 2011

By: _____
JEFFREY D. DINTZER
Attorneys for Real Parties in Interest
PLAINS EXPLORATION AND
PRODUCTION COMPANY

THE CITY PROJECT
A 501(c)(3) Public Benefit Corporation

Date: _____, 2011

By: _____
ROBERT GARCIA
Attorneys for Petitioners CONCERNED
CITIZENS OF SOUTH CENTRAL LOS
ANGELES

LAW OFFICES OF TODD T. CARDIFF

Date: _____, 2011

By: _____
TODD T. CARDIFF
Attorneys for Petitioners CITIZENS
COALITIONS FOR A SAFE
COMMUNITY

GIBSON DUNN & CRUTCHER LLP

Date: July 14, 2011

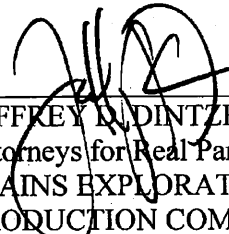
By: _____

JEFFREY M. DINTZER
Attorneys for Real Parties in Interest
PLAINS EXPLORATION AND
PRODUCTION COMPANY

EXHIBIT A - Public Statement - Paragraph 29 (Public Notice)

- i. The parties have negotiated in good faith a settlement containing important improvements to the Baldwin Hills Community Standards District ("CSD") that could not have been compelled by a court order resulting from the current litigation challenging the County's Environmental Impact Report and the CSD.
- ii. The terms of the settlement adequately augment the protections contained in the CSD and, when combined with the existing provisions of the CSD, provide a satisfactory framework for safeguarding community health, safety and security.
- iii. The settlement expedites the resolution of significant community concerns and allows the focus of this process to shift to constructive dialogue, implementation, monitoring and establishment of a more effective working relationship between the parties.

EXHIBIT B

1 CAROL A. SCHWAB (SBN 120183)
City Attorney
2 HEATHER S. BAKER (SBN 193058)
Assistant City Attorney
3 CITY OF CULVER CITY
9770 Culver Blvd
4 Culver City, California 90232
Telephone: 310.253.5660
5 Fax: 310.253.5664

6 DAVID E. CRANSTON (SBN 122558)
DCranston@GreenbergGlusker.com
7 GARRETT L. HANKEN (SBN 057213)
GHanken@GreenbergGlusker.com
8 SEDINA L. BANKS (SBN 229193)
SBanks@GreenbergGlusker.com
9 GREENBERG GLUSKER FIELDS CLAMAN &
MACHTINGER LLP
10 1900 Avenue of the Stars, 21st Floor
Los Angeles, California 90067-4590
11 Telephone: 310.553.3610
12 Fax: 310.553.0687

13 Attorneys for Petitioner
CITY OF CULVER CITY

14 SUPERIOR COURT OF THE STATE OF CALIFORNIA
15 COUNTY OF LOS ANGELES
16

17 COMMUNITY HEALTH COUNCILS,
18 INC. et al.

19 Petitioner,

20 v.

21 COUNTY OF LOS ANGELES, and DOES
22 1 - 30, Inclusive,

23 Respondents,

24 PLAINS EXPLORATION AND
25 PRODUCTION COMPANY, a Delaware
corporation et al.,

26 Real Parties in Interest.

27 AND CONSOLIDATED CASES
28

Lead Case No. BS118018
(Consolidated with BS118023, BS118039,
BS118056)

Assigned To: Hon. James C. Chalfant

**STIPULATION TO STAY ACTION AND
[PROPOSED] ORDER**

Action filing dates: Nov. 25, Nov. 26 &
Dec. 1, 2008

Trial date: July 15, 2011

EXHIBIT B

1 **IT IS HEREBY STIPULATED AND AGREED** by and among Petitioners, the City of
2 Culver City, Community Health Councils, Inc., Natural Resources Defense Council, Mark Salkin,
3 Concerned Citizens of South Central Los Angeles, and Citizens Coalitions for a Safe Community
4 (collectively "Petitioners"), Respondent, County of Los Angeles ("County") and Real Party-in-
5 Interest, Plains Exploration and Production Company ("PXP")(referred to herein collectively as
6 the "Settling Parties"), through the undersigned, their respective counsel of record, in reference to
7 the following facts:

8 WHEREAS, the following four consolidated cases (hereinafter collectively the
9 "Consolidated Cases"), were each filed in the Superior Court of the State of California, County of
10 Los Angeles:

- 11 a. Lead case *Community Health Councils, Inc., Natural Resources Defense Council*
12 *and Mark Salkin, petitioners, v. County of Los Angeles, respondents, and Plains*
13 *Exploration and Production Company, et al., real parties in interest* (Case No.
 BS118018);
- 14 b. *City of Culver City, petitioner and plaintiff, v. County of Los Angeles, Los Angeles*
15 *County Board of Supervisors, respondents, and Plains Exploration and*
16 *Production Company, et al., real parties in interest* (Case No. BS118023);
- 17 c. *Concerned Citizens of South Central Los Angeles, petitioner, v. County of*
18 *Los Angeles, respondents, and Plains Exploration and Production Company, et*
19 *al., real parties in interest* (Case No. BS118039); and
- 20 d. *Citizen's Coalition for a Safe Community, petitioner, v. County of Los Angeles,*
21 *Board of Supervisors of the County of Los Angeles, respondents, and Plains*
22 *Exploration and Production Company, et al., real parties in interest* (Case No.
 BS118056).

23 WHEREAS, the Settling Parties have been engaged in settlement negotiations of the
24 Consolidated Cases and have reached a settlement of the Consolidated Cases, and have entered
25 into a written settlement agreement (the "Settlement Agreement");

26
27 WHEREAS, the Settling Parties believe that all necessary and appropriate approvals have
28 been obtained and that the Settlement Agreement is procedurally proper, and enforceable; but to

14314-00017/1783304.3

**GREENBERG GLUSKER FIELDS CLAMAN
& MACHTINGER LLP**
1900 Avenue of the Stars, 21st Floor
Los Angeles, California 90067-4590

EXHIBIT B

1 preserve the Settling Parties' rights in the event a challenge is brought against the County's
2 approval of the Settlement Agreement, the Settling Parties have agreed that the dismissal of the
3 Consolidated Cases should not be filed until the time has run for any challenge to be asserted
4 against the County's approval;

5
6 WHEREAS, in consideration of the obligations and promises as set forth in the Settlement
7 Agreement, Petitioners have agreed to file requests for dismissal of the Consolidated Cases and
8 take any other necessary steps to dismiss the Consolidated Cases (the "Dismissal Request")
9 within 180 days after execution of the Settlement Agreement by all Settling Parties, unless the
10 County's approval of the Settlement Agreement is timely challenged, or alleged to be, in which
11 case, Petitioners will file the Dismissal Request only if the challenge is unsuccessful and all
12 avenues of appeal have been exhausted or the time has run to do so (collectively the "Challenge
13 Period");

14
15 WHEREAS, the Settling Parties desire a stay of the action until the Challenge Period has
16 expired and thereafter dismissal of the Consolidated Cases are effected or, in the alternative, in
17 the unlikely event that any challenge is brought and it succeeds in setting the County approval
18 aside, voiding the Settlement Agreement or otherwise rendering it unenforceable, then the
19 Settling Parties desire that the stay then be lifted and a trial date set;

20
21 WHEREAS, the Settling Parties each consent to the proposed stay; and

22
23 **IT IS THEREFORE HEREBY STIPULATED AND AGREED** by and between
24 Petitioners, the County and PXP as follows:

- 25 1. The action before the Court shall be stayed in its entirety until the later of (1) 180
26 days after execution of the Settlement Agreement, January ____, 2012 or (2) if
27 the Settlement Agreement is timely challenged, or alleged to be, until the
28 Challenge Period has expired.

EXHIBIT B

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- 2. Petitioners will file requests for dismissal of the Consolidated Cases and take any other necessary steps to dismiss the Consolidated Cases immediately following the end of the Challenge Period.
- 3. Alternatively, if the County's approval is set aside, the Settlement Agreement is determined to be unenforceable or void, and all avenues of appeal have been exhausted or waived, then Petitioners shall promptly give notice of same to the Court, the stay shall be lifted and will request that a trial date shall be set.

IT IS SO STIPULATED.

DATED: July __, 2011

COUNTY OF LOS ANGELES

By: _____

ELAINE M. LEMKE
Attorneys for Respondent
COUNTY OF LOS ANGELES

DATED: July __, 2011

GIBSON DUNN & CRUTCHER LLP

By: _____

JEFFREY D. DINTZER
Attorneys for Real Parties in Interest
PLAINS EXPLORATION AND
PRODUCTION COMPANY, PLAINS
RESOURCES, INC. AND THE LLOYD
CORPORATION

DATED: July __, 2011

GREENBERG GLUSKER FIELDS CLAMAN
& MACHTINGER LLP

By: _____

DAVID E. CRANSTON
Attorneys for Petitioner CITY OF CULVER
CITY

EXHIBIT B

1 DATED: July __, 2011

HARDING LARMORE KUTCHER & KOZAL
LLP

2

3

4

By: _____
KENNETH L. KUTCHER
Attorneys for Petitioners COMMUNITY
HEALTH COUNCILS, INC., NATURAL
RESOURCES DEFENSE COUNCIL &
MARK SALKIN

5

6

7 DATED: July __, 2011

NATURAL RESOURCES DEFENSE
COUNCIL

8

9

10

By: _____
DAMON NAGAMI
Attorneys for Petitioners COMMUNITY
HEALTH COUNCILS; NATURAL
RESOURCES DEFENSE COUNCIL &
MARK SALKIN

11

12

13

14

15 DATED: July __, 2011

LAW OFFICES OF TODD T. CARDIFF

16

17

By: _____
TODD T. CARDIFF
Attorneys for Petitioner CITIZEN'S
COALITION FOR A SAFE COMMUNITY

18

19 DATED: July __, 2011

THE CITY PROJECT

20

21

By: _____
ROBERT GARCIA
Attorneys for Petitioner CONCERNED
CITIZENS OF SOUTH CENTRAL LOS
ANGELES

22

23

24

25

ORDER

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27

28

The Court having considered the foregoing Stipulation of the Settling Parties, and good
cause appearing therefore,

EXHIBIT B

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IT IS HEREBY ORDERED:

(1) All terms of the foregoing Stipulation are hereby adopted as an Order of this Court;

(2) The action before the Court shall be stayed in its entirety until the later of (1) 180 days after execution of the Settlement Agreement, January _____, 2012 or (2) if the Settlement Agreement is timely challenged, or alleged to be, until such time the challenge is determined to be unsuccessful and all avenues of appeal have been exhausted or the time has run to do so (collectively the "Challenge Period").

(3) Petitioners will either:

a. file requests for dismissal of the Consolidated Cases and take any other necessary steps to dismiss the Consolidated Cases immediately following the end of the Challenge Period; or,

b. if the Settlement Agreement is set aside, or determined to be unenforceable or void, and all avenues of appeal challenging such a decision have been exhausted or waived, then Petitioners shall promptly give notice of same to the Court, the stay shall be lifted and a trial date shall be set.

IT IS SO ORDERED.

DATED: _____

HON. JAMES C. CHALFANT
JUDGE OF THE SUPERIOR COURT

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Appendix C
Annual Well Increase Evaluation



Los Angeles County
Department of Regional Planning



Planning for the Challenges Ahead

Richard J. Bruckner
Director

December 12, 2011

Laura Vlk, Senior EH&S Specialist
Plains Exploration & Production Company (PXP)
5640 S. Fairfax Avenue
Los Angeles, CA 90056

RE: Baldwin Hills Community Standards District (CSD)
Request for Annual Well Increase in Accordance with the
Settlement Agreement and Mutual Release Effective July 15, 2011

Dear Ms. Vlk:

Pursuant to the Baldwin Hills CSD Settlement Agreement and Mutual Release, on behalf of the Los Angeles County Department of Regional Planning, I am responding to your request dated October 10, 2011 to allow an increase of the number of wells that may be drilled or re-drilled annually in the unincorporated portion of the Baldwin Hills oil field. Paragraph 4.b of the subject Settlement Agreement entered into by the parties to the litigation challenging the County's approval of the CSD allowed for the increase of the number of wells annually drilled. In order to increase the number of wells allowed in a calendar year from 30 to 35, the Director of Regional Planning, after review, must determine that the CSD has been effective in protecting the health, safety, and general welfare of the public. As required by the Settlement Agreement, this review was conducted after Plains Exploration and Production Company ("PXP") had drilled the 50th well since the adoption of the CSD. Attached is the report documenting the County's findings. I concur with and adopt the findings and conclusions in that report.

Based on the attached report, we have concluded that the CSD has been effective in protecting the health, safety and general welfare of the public. Accordingly, PXP may drill or re-drill up to 35 wells per calendar year pursuant to a Director's Review for the individual oil wells. Thus, for the remainder of this year and future calendar years, PXP may drill up to 35 oil wells per calendar year, pursuant to a Director's review and so long as any wells to be drilled are identified in the current year's Annual Drilling Plan and so long as the drilling and activities associated with the drilling are otherwise consistent and in compliance with the provisions of the CSD.

If you have any additional questions, you may contact Rena Kambara or Pat Hachiya at (213) 974-6453.

Sincerely,


Richard J. Bruckner
Director

Attachment

**PXP BALDWIN HILLS COMMUNITY STANDARDS DISTRICT (CSD)
ANNUAL WELL INCREASE EVALUATION**

Provision 4.b of the Settlement Agreement and Mutual General Release (“Settlement Agreement”) entered into July 15, 2011 states the following:

“Until such time as PXP has drilled or redrilled 50 wells since the adoption of the CSD, or 24 months from the date of this Agreement, whichever is sooner (“Time Period One”), no more than 30 wells may be drilled or re-drilled in any calendar year pursuant to a Director’s Review as set forth in the CSD (hereinafter Director’s Review). At the end of Time Period One, and if the County determines, pursuant to its review of the CSD by the Director of Regional Planning, that the CSD has been effective in protecting the health, safety, and general welfare of the public, thereafter (the “Full Operational Period”) no more than 35 wells may be drilled or re-drilled in the calendar year pursuant to Director’s Review”.

In October of 2011 PXP drilled the 50th well since the adoption of the CSD. On October 10, 2011 PXP submitted a request to Los Angeles County (“County”) Department of Regional Planning (“Regional Planning”) asking for the annual increase to 35 wells as allowed by provision 4.b of the Settlement Agreement.

In order for Regional Planning to approve the request to increase the number of annual wells to 35, the Director of Regional Planning (“Director”) must review the CSD and find that the CSD has been effective in protecting the health, safety, and general welfare of the public.

This document presents the result of the CSD review that was conducted to determine if the CSD has been effective in protecting the health, safety, and general welfare of the public. The review focused on the areas of the CSD that are related to health, safety and general welfare of the public. The relevant areas of the CSD included the following:

- Noise
- Vibration
- Air Emissions
- Odors
- Ground Movement
- Visual/ Aesthetics
- Safety and Risk of Upset
- Fire Protection/Emergency Response
- Ground Water Quality

For each of these areas a review was conducted of the relevant CSD provisions to determine if they have been effective in protecting the health, safety, and general welfare of the public. The remainder of this document presents the results of the review for each area. Based upon this

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review the CSD has been found to be effective thus far in protecting the health, safety, and general welfare of the public.

A. Noise

CSD Section 22.44.142.E.5 of Title 22 of the County Code addresses noise related impacts. Provision E.5.a covers noise limits for the oil field. These noise limits were established to ensure that the noise from the oil field would not represent a significant impact to the areas surrounding the oil field. Noise limits cover construction, general operations and drilling. PXP, The Los Angeles County Department of Public Health (“Public Health”), and the County’s Environmental Compliance Coordinator (MRS) have conducted extensive noise monitoring at the oil field and in the areas surrounding the oil field to determine if PXP has been in compliance with the noise limits specified in the provision E.5.a of the CSD.

As part of the 2010 Environmental Quality Assurance Program (EQAP) audit conducted by Regional Planning, Steve Rogers Acoustics (SRA) conducted a review of the noise monitoring performed to date by Behrens & Associates, Inc. during the drilling of selected new well. During this review SRA checked for apparent compliance with the drilling noise limits and noise monitoring requirements of the CSD. The report by SRA dated August 31, 2011 identified no noise exceedences resulting from drilling operations.

Noise monitoring conducted by MRS and Public Health showed that the oil field has been in compliance with the noise limits specified in provision E.5.a of the CSD.

As part of the 2010 EQAP audit, Regional Planning reviewed compliance with the quiet mode drilling plan (CSD provision E.5.c). The audit found that PXP was implementing all of the requirements of the plan, and that all of the required noise pads and boards were in place. As discussed above, a review of the noise monitoring data for drilling showed that the drilling operations were in compliance with the CSD noise limits. These results indicate that the quiet mode drilling plan is effective at limiting noise from drilling to levels below what would be considered detrimental to the health and welfare of the public.

Between January 2009 and the end of the third quarter of 2011, there were 22 noise complaints. PXP, in consultation with the County, investigated each complaint. Eleven of these complaints were determined not to be related to oil field operations, and were identified to be related to other noise sources. Four of the complaints were possibly related to oil field activities, and the remaining seven could not be identified or confirmed to have originated from the oil field. A review of noise monitoring data indicates that the four events possibly related to oil field operations did not exceed the noise limits specified in the CSD.

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Two of the noise complaints possibly related to oil field activities appeared to stem from operations at the pipe storage rack. PXP is in the process of relocating the pipe rack storage area from the southeast portion of the oil field, near the main office, to the center of the oil field, just east of the Vickers bioremediation farm. This new location is a greater distance from residential noise receptors. None of the noise complaints were found to be related to the drilling operations. As a result of the CSD requirements, PXP has actively addressed noise complaints related to oil field operations and made changes to operations to reduce the level of noise impacting surrounding areas using techniques such as installing additional sound walls around specific pieces of equipment.

Review of the PXP 2010 EQAP Compliance Report, the 2010 EQAP Audit Report prepared by the County, the noise monitoring data collected by PXP, Public Health, and the County's Environmental Compliance Coordinator, and the complaint log shows that the CSD has been effective at keeping noise to a level considered protective of the health and general welfare of the public.

B. Vibration

CSD Section 22.44.142.E.6 of Title 22 of the County Code addresses vibration related impacts. Provision E.6 requires vibration levels related to oil field operations not exceed a velocity of 0.25 mm/s over a frequency range of 1 to 100 Hz at any developed area. This vibration level was established by the County to be protective of health and welfare of the public. Vibration monitoring for drilling operations have shown that the drilling operations do not exceed the 0.25 mm/s level. Drilling vibration has been measured at a high of 0.1 mm/sec at a distance of 50 feet from the drill rig, which is well below the standard established in the CSD.

Between January 2009 and the end of the third quarter of 2011 there were five vibration complaints. Three of these complaints were determined to be related to operations at the gas plant flare. These three complaints occurred in 2009 and the first quarter of 2010. PXP made changes to the operations of the flare, as required by the CSD (provision L.5.b), to reduce the vibration caused by the flare. Since early February 2010, there have been no vibration complaints related to the operation of the flare.

PXP, in consultation with the County, investigated the two remaining complaints and determined they were likely unrelated to oil field operations. One of the complaints was a concern about drilling vibration, but at the time of the complaint the drill rig was not in operation.

Review of the PXP 2010 EQAP Compliance Report, the 2010 EQAP Audit Report prepared by the County, drilling vibration data, and the complaint log shows that the CSD has been effective

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at keeping vibration to a level considered protective of the health and general welfare of the public.

C. Air Emissions

CSD Section 22.44.142.E.2 of Title 22 of the County Code addresses air quality and public health related to air emission impacts. Provision E.2.d requires an Air Monitoring Plan to detect emissions of hydrocarbon and hydrogen sulfide that could impact the health and general welfare of the public. The monitoring plan covers the gas plant, drilling, and redrilling operations. The County reviewed the air monitoring data for 2010 through the end of the second quarter of 2011, and found no exceedences of the limits specified in the provision E.2.d of the CSD.

CSD provision E.2.e requires PXP to have a portable flare available for use during drilling, and to have the flare in operation when drilling through the Nodular Shale. PXP has had the portable flare connected, and in operation, for all wells drilled since the resumption of drilling in 2010. Review of the drilling records for 2010 through the second quarter of 2011 show that no gas has been directed to the flare as part of the drilling operations, and that the flare has been connected and in operation for all wells drilled, which is above and beyond the requirements of the CSD.

CSD provision E.2.f requires PXP to install a pressure monitoring system on all tanks that contain or could contain oil. This monitoring system is used to monitor the pressure in the vapor space of the tanks to ensure that hydrocarbon vapors are not released into the atmosphere due to over pressurization of the tanks. The County reviewed the pressure monitoring data for 2010 through the end of the second quarter of 2011, and found that there had been no pressure readings that would have indicated a vapor release from the tanks.

CSD provision E.2.l covers the installation of controls for air emission from off road construction equipment. PXP provided the County with California Air Resources Board (“CARB”) certifications for the off road construction equipment that demonstrates engine compliance with the Tier III standard. This ensures that the engines have an 80 percent or greater reduction in hydrocarbon emissions. PXP also provided the County with CARB certificates demonstrating that the off road construction engines are equipped with a Level 3 diesel catalyst. These level 3 catalysts reduce diesel particulate by at least 85 percent. The County Environmental Compliance Coordinator field-verified that applicable off road construction equipment engines matched the CARB certifications provided by PXP. The October 2008 Baldwin Hills Community Standard District Final EIR found that diesel particulate emissions were the largest contributor to health risk from oil operations.

CSD provision E.2.m covers the installation of controls for air emission from drill rigs. The County Environmental Compliance Coordinator verified that the drill rig used at the oil field is

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equipped with Tier II or better engines. PXP provided the County with source test data for the drill rig that demonstrates engine compliance with the CSD requirements. These requirements ensure that the engines have a 90 percent or greater reduction in hydrocarbon and diesel particulate matter emission smaller than 10 microns. The County Environmental Compliance Coordinator field-verified that drill rig engines have the heavy duty diesel catalysts installed for both hydrocarbon and particulate matter control. The Baldwin Hills EIR found that diesel particulate emissions were the largest contributor to health risk from oil operations.

CSD provision E.2.p requires PXP to implement a Fugitive Dust Control Plan. The PXP 2010 EQAP Compliance Report and the 2010 EQAP Audit Report prepared by the County showed that PXP has been implementing the requirements of the approved Fugitive Dust Control Plan. Review of the complaint log from 2009 through third quarter of 2011 show that there have been no dust complaints since the fourth quarter of 2009, which is about the time the Fugitive Dust Plan was fully implemented. In the fourth quarter of 2009 there were two dust complaints in the early evening of the same day. An Air Quality Management District (AQMD) inspector found that the wind had been blowing at 30 to 40 mph that day, and was likely generating dust from areas within the field. PXP had stopped all work at the site two hours prior to the first complaint. The following morning, PXP resumed watering of the roads within the oil field. With full implementation of the Fugitive Dust Control Plan, the issue of dust from the oil field appears to have been reduced to acceptable levels as reflected by the absence of dust complaints since the end of October 2009.

Provision E.32 of the CSD requires PXP to conduct annual soil gas testing in the vicinity of abandoned wells. This testing is required to determine if hydrocarbon vapors are being emitted from the ground in concentrations that could present a risk to public health. In 2010, a total of 96 locations were tested for soil gas hydrocarbons. Of the 96 locations, only six showed soil gas methane reading above 500 ppm. The highest reading was 2,468 ppm. As part of the soil gas testing study surface air testing was conducted at the twelve locations where soil gas levels were above 50 ppm. In all 12 tests, no methane in the surface air was detected. The South Coast Air Quality Management District (SCAQMD) Rule 1150.1 regulates methane emissions from soil. This rule limits surface air emissions of methane to less than 500 ppm. All of the surface air samples collected were below this level. The study found that there was no evidence of leaking wells, pipeline or natural seepage.

Review of the PXP 2010 EQAP Compliance Report, the 2010 EQAP Audit Report prepared by the County, air monitoring records, soil gas monitoring studies, equipment records, field verification, and the complaint log shows that the CSD has been effective at keeping air emissions to levels considered protective of the health and general welfare of the public.

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D. Odors

CSD Section 22.44.142.E.2 of Title 22 of the County Code addresses odors. Provision E.2.c requires PXP to implement an Odor Minimization Plan. This plan serves to reduce odors from the operation and requires a log of odor complaints and steps to be taken to reduce odors from the facility. As part of this plan, PXP is required to use odor suppressants for the bioremediation farms (CSD provision E.2.g) and for the drilling operations (CSD provision E.2.h). The County Environmental Compliance Coordinator has routinely verified that the odor suppressants are being regularly used at the bioremediation farms and for the drilling operations. Soil remediation activities at all three bioremediation farms have been ongoing since the CSD became effective and odor suppressants have been used during material loading and tilling of each farm.

Between January 2009 and the end of the third quarter of 2011 there have been 48 odor complaints. This represents over 50 percent of all of the complaints received since the adoption of the CSD. PXP, in consultation with the AQMD and the County, investigated each complaint. It is very difficult to pinpoint the source of an odor based upon a complaint because there typically is a delay between when the odor is reported and when an investigation can begin. In most instances, the odor is gone by the time an investigator arrives at the site of the complaint.

As part of the CSD requirements, PXP was required to install a meteorological station at the oil field (CSD provision E.2.j), which continuously monitors and records the wind direction and speed. In conducting odor complaint investigations, PXP and the County have used the meteorological station wind speed and direction to determine if the odor could have originated from the oil field. For any odor to have originated at the oil field, the wind would had to have been blowing from the oil field in the direction of the location of the complaint at the time the complaint was made.

Review of the odor complaints and associated meteorological data indicates that for 36 of the 48 complaints, it is unlikely the oil field was the source of the odor because the wind was not blowing in the correct direction at the time of the odor complaint. Three of the remaining odor complaints were determined to be skunks. For one of the remaining complaints, an AQMD inspector thought the odor could have been coming from a workover rig that was working on a well nearby the area of the complaint. The County determined that two of the odor complaints were likely due to an instrument air line breakdown. The source of the remaining six odor complaints could not be confirmed, but could have originated from the oil field.

The County also reviewed the air monitoring data at the time of each odor complaint, and found that there had been no unusual increase in the levels of hydrocarbons or hydrogen sulfide. This fact indicates that the level of odor was not high enough to represent a health risk to the public. Given that in over two and three-quarter years only one odor complaint was likely attributable to

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a workover rig operation, two attributable to a breakdown at the oil field, and an additional six could have been from the oil field but the source was never definitively identified, the County concludes that the CSD has been effective at keeping odors to levels considered protective of the health and general welfare of the public.

E. Ground Movement

CSD Section 22.44.142.E.4 of Title 22 of the County Code addresses ground movement. Provision E.4.e requires PXP to perform annual ground movement surveys to determine the extent of ground movement over the past year. If the ground movement has been equal to or greater than 0.6 inches at any given location in an upward or downward direction in the vicinity of or in the oil field, then PXP must conduct a study to review and analyze all claims or complaints of subsidence damage that have been submitted to the PXP or the County by the public or a public entity in the 12 months since the last ground movement survey. If this study determines that the ground movement was the result of oil operations, then DOGGR will evaluate the fluid injection and withdrawal rates at the oil field to determine whether adjustments to these rates may alleviate the ground movement, and if so, where in the oil field such adjustments should be made.

The first annual ground movement survey was conducted in 2011 and found that seven of the 42 monitoring stations in and around the oil field showed ground movement in excess of the 0.6 inches. Five of these locations were in the southeast area of the oil field including two in the Windsor Hills area. The other two were located in the north area of the oil field. One was just outside of the oil field near the corner of La Cienega Boulevard and Kenneth Hahn State Park. The final location is just northwest of the oil field in Culver City.

Based upon the survey results, the Los Angeles County Department of Public Works (“Public Works”) has requested that PXP conduct a study to determine if these ground movements are related to oil field operations and to review and analyze all claims or complaints of subsidence damage that have been submitted to PXP or the County by the public or a public entity in the 12 months since the last ground movement survey. Because this was the first ground movement survey, PXP will need to investigate all subsidence damage claims and complaints since the implementation of the CSD. To date there have been 12 complaints covering ground movement and structural damage.

The conclusion from the ground movement survey and Geotechnical Report was that there did not appear to be any trends in the land-based ground level survey, the satellite survey, and oil field activities over the 2010 reporting period from which correlations can be drawn relative to oil field activities resulting in ground movement. At this time, the data suggested that the recorded ground movement may be related to movement of the Newport-Inglewood fault zone.

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However, the final determination of whether oil field operations are causing ground movement sufficient to result in the reported structural damage will be based upon the study that is currently being conducted by PXP. If it is determined that the oil field operations have resulted in ground movement sufficient to cause structural damage, then as required by the CSD, DOGGR will evaluate the fluid injection and withdrawal rates at the oil field to determine whether adjustments to these rates may alleviate the ground movement, and if so, where in the oil field such adjustments should be made.

Review of the US Geological Survey's online earthquake database for the calendar year 2010 shows that only one earthquake, a magnitude 2.0, occurred within a two kilometer radius of the oil field. The USGS information indicates that the epicenter of that earthquake was located to the southwest of the limits of the oil field near Overland Street at a depth of approximately 12 km (7 miles) below oilfield activities. This would indicate that the oil field operations are not inducing seismic activity in the area.

As discussed above, the CSD provision covering ground movement has specific requirements of actions to be taken to alleviate ground movement causing structural damage if the ground movement is being caused by oil field operations. As such, the CSD provides a mechanism to ensure that ground movement is identified and maintained or mitigated to a level that is considered protective of the safety, health and general welfare of the public.

F. Visual/ Aesthetics

CSD Sections 22.44.142.E and L of Title 22 of the County Code addresses visual and aesthetic impacts. Provision E.10 requires PXP to install landscaping around the oil field based upon a Landscaping Plan approved by Regional Planning. PXP is currently in the process of installing landscaping along various portions of the perimeter of the field. As identified in the approved Landscaping Plan, the landscaping is being installed in phases. Once complete, the landscaping will improve the overall visual impacts and aesthetics of the area around the oil field.

Provision L.14 of the CSD requires PXP to prepare an Equipment Removal Plan, which identifies unused or abandoned equipment and materials to be removed from the oil field. To date, PXP identified and removed over 60 unused or abandoned pieces of equipment from the oil field, which reduced the amount of visible blight at the site. PXP continues to identify unused equipment and then remove the equipment from the oil field.

Provision E.14 of the CSD has required PXP to paint all oil operation related structures visible from public roadways and surrounding properties a dark color approved by Regional Planning. PXP has completed painting of the visible structures. The dark color has helped to blend the

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equipment into the background, thereby reducing the visual and aesthetic impacts of the oil field equipment.

Provision E.21.c requires PXP to remove and keep the oil field free of debris and vegetation overgrowth. As discussed above, PXP removed unused and abandoned equipment and conducted a vegetation clearing program to control the overgrowth of vegetation at the site. These activities have improved the overall visual and aesthetic appearance of the oil field.

As a result of the CSD, PXP has removed unused and abandoned equipment, painted the visible oil-related structures, removed debris and vegetation overgrowth, and is installing landscaping around portions of the oil field. All of these actions have improved the visual and aesthetic appearance of the oil field, which serves to enhance the general welfare of the public.

G. Safety and Risk of Upset

CSD Sections 22.44.142.E.3, 22.44.142.F, and 22.44.142.L.3 of Title 22 of the County Code addresses safety and risk of upset impacts. Provision E.3.b required the fire-proofing of all propane and natural gas liquid bullets (pressurized tanks used to store propane and natural gas liquids) and the use of an automatic deluge system. PXP fire-proofed these bullets and installed a deluge system. With this fire-proofing and deluge system, the potential for a propane or natural gas fire at the bullets has been substantially reduced.

Provision E.3.d required that PXP ensure that the secondary containment for oil tanks are capable of holding 110 percent of the capacity of the largest oil tank. This provision also required that the retention basins be capable of handling the 100-year storm event, and that all above ground pipelines be protected by basins for secondary containment to prevent spills from leaving the oil field. PXP conducted a number of studies to demonstrate that the proper secondary containment was in place and that the retention basins were adequately sized. The County Environmental Compliance Coordinator visually inspected the secondary containment, and Public Works reviewed and approved the retention basin capacities. All of these measures serve to assure that in the unlikely event of an oil or produced-water spill that the spilled material would be contained within the oil field and not impact areas outside of the oil field. Since implementation of the CSD, there have been no spills of oil or produced-water that have migrated or spilled offsite.

Provision E.29.e of the CSD required PXP to install tank bottom detection systems on all tanks at the oil field. PXP has these systems in place, which serve to detect any leaks from tank bottoms, thereby minimizing any potential spills by early detection of leaks.

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Between January 2010 and the end of the third quarter of 2011, there have been three reportable spills at the oil field that ranged in size from 30 barrels to 2.25 barrels. Two of the spills were oil and one was a mixture of oil and produced-water. All of these spills were contained within the oil field and were quickly cleaned up by PXP staff. There were no complaints that occurred during the period around these incidents.

Provision F.3 of the CSD required PXP to implement a Safety Inspection, Maintenance, and Quality Assurance Program ("SIMQAP"). This program, which is now in place, requires regular maintenance and safety inspections of oil field equipment. The program serves to improve overall safety and reliability of the oil field equipment, thereby reducing the likelihood of equipment failure that could lead to a release of hydrocarbons into the environment. The SIMQAP was reviewed as part of the 2010 EQAP audit conducted by the County.

Provision L.3.b of the CSD required PXP to conduct a gas plant safety audit. The audit identified approximately 20 corrective action items, all of which have been completed. Implementation of the corrective action items from the audit has improved the overall safety of the gas plant. The corrective action plan from the gas plant audit was reviewed as part of the 2010 EQAP audit conducted by the County.

Between January 2010 and the end of the third quarter of 2011, there have been only three reportable breakdowns at the oil field. One of the breakdowns was due to an electrical power loss that resulted from a hawk landing on one of Southern California Edison's transmission lines, which caused a short. This resulted in the 30 barrel spill of produced-water and oil as discussed above. The spill was contained with the secondary containment. The second breakdown was due to failure of a valve controller. The third breakdown was due to a failure of an instrument air line. These two breakdowns did not result in any spill of oil or produced-water, but did result in the release of approximately 7.5 pounds of hydrocarbon air emissions. In all cases, PXP took immediate steps to shutdown the facilities to minimize any releases. The County determined that two of the odor complaints were likely due to the instrument air line breakdown. There were no complaints associated with the other two breakdowns.

As a result of the CSD, PXP substantially reduced the likelihood of spills occurring at the facility, reduced the likelihood of spills traveling outside of the oil field, and improved the overall safety of the oil field operations. All of these actions reduce the likelihood of an event occurring at the oil field that could impact the public, and have increased the protection of the safety, health and general welfare of the public.

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H. Fire Protection/Emergency Response

CSD Sections 22.44.142.E.1 and 22.44.142.L.1 of Title 22 of the County Code addresses fire protection and emergency response. Provision E.1.a required PXP to install a community alert notification system (CAN) to allow for automatic notification of area residences and businesses in the event of an emergency arising at the oil field that could require residents or inhabitants to take shelter, evacuate, or take other protective actions. PXP installed the CAN system and tests the system on an annual basis. To date, the CAN system has not had to be activated.

Provision E.1.b of the CSD requires that PXP conduct spill containment response training on an annual basis, and that the sufficient oil spill containment and clean up equipment be maintained on site to handle the contents of the largest oil tank on the oil field. The 2010 EQAP audit conducted by the County verified that spill response training had been conducted in 2010, and that sufficient oil spill response equipment was on site to deal with the maximum spill size. The training received by employees helps to ensure that in the unlikely event of a spill it would be contained quickly and within the oil field.

Provision E.1.c of the CSD requires that PXP maintain and fully implement an emergency response plan. The 2010 EQAP audit conducted by the County verified that an updated emergency response plan was in place and was being fully implemented. This plan provides a number of spill prevention control and counter measure items that have reduced the likelihood of an oil spill, and ensured that in the unlikely event of a spill it would be contained quickly and within the oil field.

Provision L.1 of the CSD requires PXP to conduct a fire protection audit of the oil field's fire protection capabilities to evaluate compliance with NFPA requirements, the County fire code, the County Fire Department regulations, California Code of Regulations, and API requirements. PXP conducted the audit in consultation with County and Culver City Fire Departments. The results of the audit showed that the oil field was in compliance with all applicable fire protection regulations.

Between January 2010 and the end of the third quarter of 2011, there were eight small fires at the oil field that were quickly contained by PXP staff. Six of these fires were caused by electrical power line issues that sparked and started the fire. Two of these electrical fires were caused by small animals. One of the fires started outside of the oil field and moved onto the field. The County Fire Department determined that the last fire was attributed to a cigarette thrown out of car. PXP quickly responded to all of these fires and was able to extinguish the fires before they spread.

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As a result of the CSD, PXP substantially reduced the likelihood of spills and fires at the oil field, and improved the overall safety of the oil field operations. All of these actions reduce the likelihood of an event occurring at the oil field that could impact the public. These CSD provisions have also improved the ability of PXP to respond to and manage incidents at the oil field before they can impact the public. The CSD provisions for fire protection and emergency response have increased the protection of the safety, health and general welfare of the public.

I. Ground Water Quality

The CSD contains a provision that requires ground water monitoring to evaluate the impacts of oil operations on ground water quality. This monitoring is covered in Section 22.44.142.E.19 of Title 22 of the County Code, which requires quarterly ground water monitoring at the oil field. Ground water monitoring began in 2010, and all of the water samples have had hydrocarbon concentrations below the Maximum Contaminant Level (MCL) for drinking water. In 2011 levels of arsenic were found in one well that were above the MCL, but this is likely due to naturally occurring arsenic found in soil and rock.

The results of the ground water sampling program indicate that the CSD has been effective at controlling ground water contamination to levels that are considered protective of the health and general welfare of the public.