

**PLANNING AND COMMUNITY
DEVELOPMENT DEPARTMENT**

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DEVELOPMENT SERVICES AGENCY

Planning and Community Development
Engineering, Surveying and Permit Services
Roads Department

NOTICE OF PREPARATION

DATE: August 30, 2013

To: See Attached Mailing List

FROM:

Kern County Planning and Community
Development Department
Attn: Christopher Mynk, AICP
2700 "M" Street, Suite 100
Bakersfield, CA 93301
(661) 862-8607; MynkC@co.kern.ca.us

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR AN AMENDMENT TO TITLE 19 – KERN COUNTY ZONING ORDINANCE, FOCUSED ON CHAPTER 19.98 (OIL AND GAS PRODUCTION) FOR OIL AND GAS LOCAL PERMITTING

The Kern County Planning and Community Development Department as Lead Agency (per CEQA Guidelines Section 15052) has required that an Environmental Impact Report (per CEQA Guidelines Section 15161) be prepared for the project identified below. The Planning and Community Development Department solicits the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval of projects.

Due to the limits mandated by State law, your response must be received by **September 30, 2013 at 5pm.** In addition, comments can be submitted at one of our **four scoping meetings** that will be held at **6:30 p.m.** at the following locations and dates:

Lost Hills Recreation Building, Lost Hills Park, Hwy 46, Lost Hills, CA	September 16, 2013
Taft Veterans Hall, Room 1, 218 Taylor Street, Taft, CA	September 18, 2013
Kern County Board Chambers, 1 st Floor Board Chambers, 1115 Truxtun Ave, Bakersfield, CA	September 23, 2013
Shafter Veterans Building, Room 2, 309 California Avenue, Shafter CA	September 25, 2013

PROJECT TITLE: Amendment to Title 19 – Kern County Zoning Ordinance, focused on Chapter 19.98 (Oil and Gas Production) of the Kern County Zoning Ordinance for Oil and Gas Local Permitting (PP13016)

PROJECT LOCATION: The project boundary encompasses 3,700 square miles and generally includes the San Joaquin Valley Floor portion of Kern County up to an elevation of 2,000 feet. The boundary includes: west side – the San Luis Obispo County line, north side- the Kings and Tulare county lines, east side – the 2,000-foot elevation contours, squared off to the nearest section line and south side – the northern boundary of the Los Padres National Forest.

PROJECT DESCRIPTION: The proposed project consists of an amendment to Title 19 Kern County Zoning Ordinance focused on Chapter 19.98 (Oil and Gas Production) to include updated development standards and conditions for oil and gas exploration, extraction, operations, and production activities in unincorporated Kern County by: (a) establishing updated development standards and conditions to address environmental impacts of pre-drilling exploration, well drilling, and the operation of wells, including the exploration, production,

completion, stimulation, reworking, injection, monitoring and plugging and abandonment; and (b) establishing a new "Oil and Gas Conformity Review" ministerial permit procedure for County approval of well drilling and operation projects, to ensure compliance with the updated development standards and conditions and provide for ongoing tracking and compliance monitoring.

Signature:



Name:

Christopher B. Mynk, AICP
Supervising Planner

Zoning Ordinance Revisions
PP13280
I:\WP\LABELS\ZO Ord Rev
2013.nop.docx

City of Arvin
P.O. Box 548
Arvin, CA 93203

Bakersfield City Planning Dept
1715 Chester Avenue
Bakersfield, CA 93301

Bakersfield City Public Works Dept
1501 Truxtun Avenue
Bakersfield, CA 93301

California City Planning Dept
21000 Hacienda Blvd.
California City, CA 93515

Delano City Planning Dept
P.O. Box 3010
Delano, CA 93216

City of Maricopa
P.O. Box 548
Maricopa, CA 93252

City of McFarland
401 West Kern Avenue
McFarland, CA 93250

City of Ridgecrest
100 West California Avenue
Ridgecrest, CA 93555

City of Shafter
336 Pacific Avenue
Shafter, CA 93263

City of Taft
Planning & Building
209 East Kern Street
Taft, CA 93268

City of Tehachapi
115 South Robinson Street
Tehachapi, CA 93561-1722

City of Wasco
764 E Street
Wasco, CA 93280

Inyo County Planning Dept
P.O. Drawer "L"
Independence, CA 93526

Kings County Planning Agency
1400 West Lacey Blvd, Bldg 6
Hanford, CA 93230

Los Angeles Co Reg Planning Dept
320 West Temple Street
Los Angeles, CA 90012

San Bernardino Co Planning Dept
385 North Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182

San Luis Obispo Co Planning Dept
Planning and Building
976 Osos Street
San Luis Obispo, CA 93408

Santa Barbara Co Resource Mgt Dept
123 East Anapamu Street
Santa Barbara, CA 93101

Tulare County Planning & Dev Dept
5961 South Mooney Boulevard
Visalia, CA 93291

Ventura County RMA Planning Div
800 South Victoria Avenue, L1740
Ventura, CA 93009-1740

U.S. Bureau of Land Management
Caliente/Bakersfield
3801 Pegasus Drive
Bakersfield, CA 93308-6837

U.S. Bureau of Land Management
Ridgecrest Field Office
300 South Richmond Road
Ridgecrest, CA 93555

China Lake Naval Weapons Center
Tim Fox, RLA - Comm Plans & Liaison
429 E Bowen, Building 981
Mail Stop 4001
China Lake, CA 93555

Edwards Air Force Base
AFFTC/XXR Bldg 0001, Room 110
#1 South Rosamond Blvd.
Edwards AFB, CA 93524-1936

Federal Aviation Administration
Western Reg Office/
Airport Div - AWP 600
P.O. Box 92007
Los Angeles, CA 90009

Federal Communications Comm
18000 Studebaker Road, #550
Cerritos, CA 90701

U. S. Fish & Wildlife Service
Division of Ecological Services
2800 Cottage Way #W-2605
Sacramento, CA 95825-1846

U.S. Fish & Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003

U.S. Fish and Wildlife Service
Hopper Mtn. (Bitter Creek)
National Wildlife Refuge
Attention Debora Guillot
P.O. Box 5839
Ventura, CA 93005

U.S. Forest Service
Los Padres National Forest
6755 Hollister Avenue, Suite 150
Goleta, CA 93117

Sequoia National Forest
Kern River Ranger Station
P.O. Box 3810
Lake Isabella, CA 93240-3810

Environmental Protection Agency
Region IX Office
75 Hawthorn Street
San Francisco, CA 94105

U.S. Dept of Agriculture/NRCS
5000 California Avenue, Ste 100
Bakersfield, CA 93309-0711

U.S. Army Corps of Engineers
P.O. Box 997
Lake Isabella, CA 93240

U.S. Army Corps of Engineers
Regulatory Division
1325 "J" Street, #1350
Sacramento, CA 95814-2920

U.S. Postal Service
Address Management Systems
28201 Franklin Parkway
Santa Clarita, CA 91383-9321

State Air Resources Board
Stationary Resource Division
P.O. Box 2815
Sacramento, CA 95812

So. San Joaquin Valley Arch Info Ctr
California State University of Bkfd
9001 Stockdale Highway
Bakersfield, CA 93311

Caltrans/Dist 6
Planning/Land Bank Bldg.
P.O. Box 12616
Fresno, CA 93778

Caltrans/Dist 9
Planning Department
500 South Main Street
Bishop, CA 93514

Caltrans/
Division of Aeronautics, MS #40
P.O. Box 942873
Sacramento, CA 94273-0001

Caltrans/
Division of Structures
Attn: Jim Roberts
P.O. Box 1499
Sacramento, CA 95807

State Clearinghouse
Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812-3044
CERTIFIED MAIL

State Dept of Conservation
Director's Office
801 "K" Street, MS 24-01
Sacramento, CA 95814-3528

State Dept of Conservation
Division of Oil & Gas
4800 Stockdale Highway, Ste 417
Bakersfield, CA 93309

State Dept of Conservation
Division of Oil & Gas
801 "K" Street, MS 20-20
Sacramento, CA 95814-3530

Office of the State Geologist
Headquarters
801 "K" Street, MS 12-30
Sacramento, CA 95814

State Dept of Conservation
Office of Land Conservation
801 "K" Street, MS 18-01
Sacramento, CA 95814

State Dept of Conservation
Office of Mine Reclamation
801 "K" Street MS 09-06
Sacramento, CA 95814-3529

State Dept of Conservation
Div Recycling Cert. Sec.
801 "K" Street, MS 19-01
Sacramento, CA 95814

State Mining and Geology Board
801 K Street, MS 20-15
Sacramento, CA 95814

California State University
Bakersfield - Library
9001 Stockdale Highway
Bakersfield, CA 93309

California Energy Commission
James W. Reed, Jr.
1516 Ninth Street
Mail Stop 17
Sacramento, CA 95814

California Fish & Wildlife
1234 East Shaw Avenue
Fresno, CA 93710

State Dept of Food & Agriculture
1220 "N" Street
Sacramento, CA 95814

California Highway Patrol
Planning & Analysis Division
P.O. Box 942898
Sacramento, CA 94298-0001

State Office of Historical Pres
Attention Susan Stratton
P.O. Box 942896
Sacramento, CA 95296-0001

Integrated Waste Management
P.O. Box 4025, MS #15
Sacramento, CA 95812-4025

State Dept of Parks & Recreation
Tehachapi District
Angeles District - Mohave Desert Sector
15701 E. Avenue M
Lancaster, CA 93535

Calif. Dept of Public Health
Drinking Water Field Operations
4925 Commerce Drive, Suite 120
Bakersfield, CA 93309

Public Utilities Comm Energy Div
505 Van Ness Avenue
San Francisco, CA 94102

California Regional Water Quality
Control Board/Central Valley Region
1685 E Street
Fresno, CA 93706-2020

California Regional Water Quality
Control Board/Lahontan Region
14440 Civic Drive, Suite 200
Victorville, CA 92392-2306

State Lands Commission
100 Howe Avenue, Ste 100-South
Sacramento, CA 95825-8202

State Dept of Toxic Substance Control
Environmental Protection Agency
1515 Tollhouse Road
Clovis, CA 93612

State Department of Toxic
Substances Control
8800 Cal Center Drive
Sacramento, CA 95826

State Dept of Water Resources
San Joaquin Dist.
3374 East Shields Avenue, Room A-7
Fresno, CA 93726

State Dept of Water Resources
Div. Land & Right-of-Way
P.O. Box 942836
Sacramento, CA 94236

Kern County
Agriculture Department

Kern County Airports Department

County Clerk

Kern County Administrative Officer

Kern County Engineering, Surveying,
& Permit Svs/Floodplain

Kern County Engineering, Surveying,
& Permit Svs/Survey

Kern County
Env Health Services Department

Kern County Fire Dept
Brian Marshall, Fire Chief

Kern County Fire Dept
Benny Wofford

Kern County Fire Dept
Dave Goodell

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Sherry Gomez

Kern County Museum
3801 Chester Avenue
Bakersfield, CA 93301

Kern County Parks & Recreation

Development Services Agency
Special Projects/Fiscal Analysis

Kern County Sheriff's Dept
Administration

Kern County Roads Department

Kern County
Waste Management Department

Kern County ESS Dept/
Code Compliance Div

Inyokern Municipal Advisory Council
1429 Broadway Avenue
P.O. Box 1418
Inyokern, CA 93527

Mountain Communities Municipal
Advisory Council
P.O. Box 1902
Frazier Park, CA 93225

Rosamond Municipal Advisory Council
P.O. Box 626
Rosamond, CA 93560

Tehachapi Municipal Advisory Council
Attn: Ed Grimes
117 Sunrise Way
Tehachapi, CA 93561

Kern High School Dist
5801 Sundale Avenue
Bakersfield, CA 93309

Kern County Superintendent of Schools
Attention Mary Baker
1300 17th Street
Bakersfield, CA 93301

KernCOG
1401 19th Street - Suite 300
Bakersfield, CA 93301

Local Agency Formation Comm/LAFCO
5300 Lennox Avenue, Suite 303
Bakersfield, CA 93309

Kern County Water Agency
P.O. Box 58
Bakersfield, CA 93302-0058

East Kern Air Pollution
Control District

San Joaquin Valley
Air Pollution Control District
1990 East Gettysburg Avenue
Fresno, CA 93726

Golden Empire Transit
1830 Golden State Avenue
Bakersfield, CA 93301

Delano Mosquito Abatement Dist
Attention John G. Davis
P.O. Box 220
Delano, CA 93215

Kern Mosquito Abatement Dist
4705 Allen Road
Bakersfield, CA 93312-3429

South Fork Mosquito Abatement Dist
P.O. Box 750
Kernville, CA 93238-1298

West Side Mosquito
Abatement Dist.
P.O. Box 205
Taft, CA 93268

Bakersfield Municipal Airport
4101 Truxtun Avenue
Bakersfield, CA 93309

California City Airport
22636 Airport Way, #8
California City, CA 93505

City of Delano
Transit and Airport Department
1120 Glenwood Street
Delano, CA 93215

Inyokern Airport
P.O. Box 634
Inyokern, CA 93527

Minter Field Airport District
201 Aviation Street
Shafter, CA 93263

Mojave Airport
1434 Flightline
Mojave, CA 93501

East Kern Airport Dist
Attention Stuart Witt
1434 Flightline
Mojave, CA 93501

East Kern Airport Dist Engineer
3900 Ridgemoor Avenue
Bakersfield, CA 93306

Northcutt and Associates
4220 Poplar Street
Lake Isabella, CA 93240-9536

Mountain Valley Airport
P.O. Box 100
Tehachapi, CA 93581

Aero Sports Skypark Corporation
P.O. Box 2567
Rosamond, CA 93560

Rosamond Skypark/Airport
P.O. Box 2617
Rosamond, CA 93560

Tehachapi City Hall/Airport
115 South Robinson Street
Tehachapi, CA 93561

Adam Lazar
Center for Biological Diversity
351 California Street, #600
San Francisco, CA 94104

Adams, Broadwell, Joseph & Cardozo
Attention: Janet M. Laurain
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

U.S. Air Force
Attn: Steve Arenson
Western Regional Environmental Officer
50 Fremont Street, Suite 2450
San Francisco, CA 94105-2230

U.S. Army
Attn: Philip Crosbie, Chief
Strategic Plans, S3, NTC
P.O. Box 10172
Fort Irwin, CA 92310

U.S. Army
Attn: Tim Kilgannon
Region 9 Environmental Coordinator
Office of Strategic Integration
721 - 19th Street, Room 427
Denver, CO 80202

U.S. Navy
Attn: Steve Chung
Regional Community Plans & Liasion
Officer
1220 Pacific Highway
San Diego, CA 92132-5190

U.S. Marine Corps
Attn: Patrick Christman
Western Region Environmental Office
Building 1164/Box 555246
Camp Pendleton, CA 92055-5246

AT&T California
OSP Engineering/Right-of-Way
4540 California Avenue, 4th Floor
Bakersfield, CA 93309

Kern Audubon Society
P.O. Box 3581
Bakersfield, CA 93385

Los Angeles Audubon
926 Citrus Avenue
Los Angeles, CA 90036-4929

Center on Race, Poverty
& the Environmental
47 Kearny Street, Suite 804
San Francisco, CA 94108-5528

Center on Race, Poverty
& the Environmental/
CA Rural Legal Assistance Foundation
1012 Jefferson Street
Delano, CA 93215

Communities for a Better Environment
1904 Franklin Street, Suite 600
Oakland, CA 94612-2922

Construction Materials Assoc of CA
1029 "J" Street, Suite 420
Sacramento, CA 95814

Defenders of Wildlife/
Cynthia Wilkerson, M.S.
California Representative
1303 "J" Street, Suite 270
Sacramento, CA 95814

Desert Tortoise Preserve Committee
4067 Mission Inn Avenue
Riverside, CA 92501

California Farm Bureau
2300 River Plaza Drive, NRED
Sacramento, CA 95833

Friant Water Users Authority
854 North Harvard Avenue
Lindsay, CA 93247-1715

DUP

Mojave Chamber of Commerce
P.O. Box 999
Mojave, CA 93502

Native American Heritage Council
of Kern County/Fay Van Horn
P.O. Box 1507
Bakersfield, CA 93302

DUP

Beth Boyst
Pacific Crest Trail Program Manager
1323 Club Drive
Vallejo, CA 94592

Anitra Kass
Pacific Crest Trail Association
P.O. Box 3398
Idyllwild, CA 92549

Pacific Gas & Electric Co
Land Dept
1918 "H" Street
Bakersfield, CA 93301

Pacific Gas & Electric Co
Land Projects
650 "O" Street, First Floor
Fresno, CA 93760-0001

Sheppard Mullin
Attn: Kendra Joy Casper
333 South Hope Street
Los Angeles, CA 90071

Sierra Club/Kern Kaweah Chapter
Arthur Unger

Smart Growth - Tehachapi Valleys
P.O. Box 1894
Tehachapi, CA 93581-1894

PUT IN BUCKET

Southern California Edison
120 Woodlands Drive
Wofford Heights, CA 93285

Southern California Edison
P.O. Box 410
Long Beach, CA 90801

Southern California Edison
Planning Dept.
421 West "J" Street
Tehachapi, CA 93561

Southern California Edison
Planning Dept.
510 S. China Lake Blvd.
Ridgecrest, CA 93555

Southern California Edison
Planning Dept.
25625 West Rye Canyon
Valencia, CA 91355

Southern California Gas Co
1510 North Chester Avenue
Bakersfield, CA 93308

Southern California Gas Co
Transportation Dept
9400 Oakdale Avenue
Chatsworth, CA 91313-6511

Verizon California, Inc.
Attention Engineering Department
520 South China Lake Boulevard
Ridgecrest, CA 93555

Chumash Council of Bakersfield
P.O. Box 902
Bakersfield, CA 93302

David Laughing Horse Robinson
P.O. Box 1547
Kernville, CA 93238

Kern Valley Indian Council
Attn: Robert Robinson, Chairperson
P.O. Box 401
Weldon, CA 93283

Kern Valley Indian Council
Historic Preservation Office
P.O. Box 401
Weldon, CA 93283

Santa Rosa Rancheria
Clarence Atwell, Chairperson
P.O. Box 8
Lemoore, CA 93245

Tejon Indian Tribe
Kathy Morgan, Chairperson
1731 Hasti-acres Drive, Suite 108
Bakersfield, CA 93309

Kitanemuk & Yowlumne Tejon Indians
Chairperson
115 Radio Street
Bakersfield, CA 93305

Tubatulabals of Kern County
Attn: Robert Gomez, Chairperson
P.O. Box 226
Lake Isabella, CA 93240

Tule River Indian Tribe
Neal Peyron, Chairperson
P.O. Box 589
Porterville, CA 93258

San Fernando Band of Mission Indians
Attn: John Valenzuela, Chairperson
P.O. Box 221838
Newhall, CA 91322

Terra-Gen
Steve Yatsko
11512 El Camino Real, Suite 100
San Diego, CA 92130

Renewal Resources Group
Holding Company
Rupal Patel
5700 Wilshire Blvd, Suite 330
Los Angeles, CA 90036

Sempre Generation
Marilyn Burke
101 Ash Street HQ-14A
San Diego, CA 92101

Element Power Solar Dev, LLC
John Gaglioti
864 Portola Drive
Monterey, CA 93940

Congentrix Sunshine, LLC
Rick Neff
9405 Arrowpoint Blvd
Charlotte, NC 28273

Fotowatio Renewable Ventures
Sean Kiernan
44 Montgomery Street, Suite 2200
San Francisco, CA 94104

Jon VanDerZee
EDP Renewables Company
North America, LLC
53 SW Yamhill Street
Portland, OR 97204

Nautilus Solar
Paul Steinway
P.O. Box 188
Fort Lupton, CO 80621

First Solar
Rick Williams
18300 Von Karman Ave, Ste 930
Irvine, CA 92612

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5000 Executive Parkway, Suite 140
San Ramon, CA 94583

Wind Stream, LLC
Albert Davies
1275 - 4th Street, No. 107
Santa Rosa, CA 95404

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Bakersfield, CA 93306

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Altadena, CA 91001

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Renewal Dev, T&D Intercon
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San Francisco, CA 94105

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Dir Tech Serv
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Portland, OR 97209

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Iberdrola Renewables, Sr Proj Mgr
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Portland, OR 97209

Recurrent Energy
Seth Israel
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San Francisco, CA 92109

Kelly Group
Kate Kelly
P.O. Box 868
Winters, CA 95694

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Association Executive, IOM
Tehachapi Area Assoc of Realtors
803 Tucker Road
Tehachapi, CA 93561

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Vice President of Development
EcoPlexus, Inc.
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San Francisco, CA 94103

T.T. Case
P.O. Box 2416
Tehachapi, CA 93581

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Gestamp Energy
2414 Tulare Street
Fresno, CA 93721

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Beyond Coal Campaign/Sierra Club
1417 Calumet Avenue
Los Angeles, CA 90026

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9261 - 60th Street West
Mojave, CA 93501

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The Gorman Law Firm
1346 E. Walnut Street, Suite 220
Pasadena, CA 91106

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701 Partridge Avenue
Bakersfield, CA 93309

Rainbow Ranches
Michael Andrews
13650 Copus Road
Bakersfield, CA 93313-9636

Angelo Fanucchi
1110 Fairway Drive
Bakersfield, CA 93309

Aron Narderoslan
P. O. Box 988
Weldon, CA 93283

ATCO Property Management
Darren Powers
101 H Street
Bakersfield, CA 93304

Barbara Smithson
3112 Ashby Street
Bakersfield, CA 93308

Bear Valley Community Services Dist
28999 South Lower Valley Road
Tehachapi, CA 93561-6529

Bear Valley Springs Assoc
Environmental Control Committee
29541 Rolling Oak Drive
Tehachapi, CA 93561

Bellanave Corporation
George Borba
11461 Taft Highway
Bakersfield, CA 93311

Bill Bondorov
Route 4, Johnson Road
Bakersfield, CA 93312

Bob Houle
17548 Kranenburg Avenue
Bakersfield, CA 93312

Bolthouse Properties
Attn: Stephan DeBranch
2000 Oak Street, Suite 250
Bakersfield, CA 93301

Capitol Oil Corporation
1545 River Park Drive
Sacramento, CA 95815

Carol Bender
13340 Smoke Creek Avenue
Bakersfield, CA 93314-9025

Carol Vaughn
509 West Ward
Ridgecrest, CA 93555

Clifford, Jenkins & Brown
1430 Truxtun Avenue, Suite 900
Bakersfield, CA 93301

Country Oak Homeowners Assoc
PO Box 1424
Tehachapi, CA 93581

Crimson Resource Management
Attention Kristine Boyer
5001 California Avenue, Suite 206
Bakersfield, CA 93309

Cuddy Valley Statistical
11667 Steinhoff Road
Frazier Park, CA 93222

Cummings Valley Protective Association
P.O. Box 1020
Tehachapi, CA 93581

Dominick Arburua
14530 South Farifax Road
Bakersfield, CA 93307

Eight Bar Ranch
Jon and Helen Lantz
11300 Cameron Canyon Road
Mojave, CA 93501

Stream Energy
Engineering & Operations
James C. Kromer
5001 California Avenue, Suite 110
Bakersfield, CA 93309

Eric Anderson
1309 Leisure Lane
Frazier Park, CA 93225

Fairmont Town Council
Attn: Barbara Rogers
P.O. Box 2320
Rosamond, CA 93560

Fairview Ranch Owners Assoc
P.O. Box 1024
Tehachapi, CA 93561

Native American Heritage Council
of Kern County/Fay Van Horn
P.O. Box 1507
Bakersfield, CA 93302

Rosamond Skypark
Attn: George Fischer
P.O. Box 1808
Rosamond, CA 93560

Glenn Baumann
785 Tucker Road, No. G243
Tehachapi, CA 93561

Greg Garrett
20502 Tiffany Circle
Tehachapi, CA 93561

Guy Hoss
10130 Rosedale Highway
Bakersfield, CA 93312

State Dept of Parks/Hungry Valley
PO Box 1360
Lebec, CA 93243

DUP

Hurlbutt, Clevenger,
Long, Vortmann & Rauber
615 South Atwood Street
Visalia, CA 93277

Indian Wells Valley Water Dist
P.O. Box 1329
Ridgecrest, CA 93556

DUP

Janice Armstrong
25101 Bear Valley Boulevard
PMB 20
Tehachapi, CA 93561

Jerry Davis
P.O. Box 102
Rosamond, CA 93560

Joyce LoBasso
P.O. Box 6003
Bakersfield, CA 93386

Keith & Carla Thorn
P.O. Box 280
Kernville, CA 93238

Kenneth H. Hunter III
P.O. Box 5275
559 San Ysidro Road
Santa Barbara, CA 93150

Kern Equestrians for Preservation of Trails
Attn: Carolyn Belli
5025 Panorama Drive
Bakersfield, CA 93301

Kern River Parkway Committee
PO Box 1861
Bakersfield, CA 93303

Kern River Valley Chamber of Commerce
Katherine Evans
P.O. Box 567
Lake Isabella, CA 93240

Kern River Valley Revitalization, Inc.
Attention: Kris Cardoza, Secretary
P.O. Box 83
Bodfish, CA 93205

Kern River Watermaster
P.O. Box 81435
Bakersfield, CA 93380-1435

Kern Wheelmen
P.O. Box 9662
Bakersfield, CA 93389

Leroy Cass
202 Minner Avenue
Bakersfield, CA 93308

Lunette Morrison
483 Azalea Street
Thousand Oaks, CA 91360

Mary Ann Lockhart
P.O. GG
Frazier Park, CA 93225

Mary Tiffany
19020 Palm Aveune
Bakersfield, CA 93312

McAllister Ranch Irrigation District
1800 - 30th Street, 4th Floor
Bakersfield, CA 93301-1919

Metro Water Dist of So CA
Ms. Rebecca De Leon
Environmental Planning Team
700 N. Alameda Street, US3-230
Los Angeles, CA 90012

DUP

Metrostudy
5001 California Avenue, Suite 210
Bakersfield, CA 93309

National Public Lands News
P.O. Box 403
Inyokern, CA 93527

Pipe Trades Council of No. CA
PO Box 5049
San Mateo, CA 94402

Pleistocene Foundation
2362 Lumill Street
Ridgecrest, CA 93555

Poso Creek Dairy
8919 Merrill Avenue
Chino, CA 91710-8511

Raymond Kelso/
Pleistocene Foundation
2362 Lumill Street
Ridgecrest, CA 93555

Reid Hopkins
P.O. Box 646
Kernville, CA 93238

Tehachapi Resource Cons Dist
321 West "C" Street
Tehachapi, CA 93561-2011

Rich Breedweld
6907 Lassalette Drive
Bakersfield, CA 93308

R.L. Abbott and Associates
1903 Mineral Court
Bakersfield Airport Business Center
Bakersfield, CA 93308

Rob Rosen
Box 1581
Lebec, CA 93243

Roberta Greenwood
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Kernville, CA 93238

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29200 Woodview Court
Tehachapi, CA 93561-7484

Terri Middlemiss
8016 Lorene Avenue
Inyokern, CA 93527

Nature Conservancy West Reg Office
201 Mission Street, 4th Floor
San Francisco, CA 94105

Thomas Roads Improvement Program
PARSONS/Heather Ellison
900 Truxtun Avenue, Suite 201
Bakersfield, CA 93301

Tony Occhionero
6595 Chesapeak Place
Warrenton, VA 20187

Tricor Energy, LLC
190 Newport Center Drive, Suite 100
Newport Beach, CA 92660

Tulare Basin Wetlands Association
Attention Dennis Slater
2020 Eye Street, Suite 202
Bakersfield, CA 93301

URS Corporation
Planning Department
3500 Porsche Drive, Suite 300
Ontario, CA 91764

Vestas
1881 Southwest Naito Parkway
Portland, OR 97201

Vintage Production California, LLC
9600 Ming Avenue, Suite 300
Bakersfield, CA 93311

Wendell Weller
Star Route, Box 3
Granite Station, CA 93308

William Nelson
P.O. Box 308
Tehachapi, CA 93581-0308

WZI, Inc.
1717 B 28th Street
Bakersfield, CA 93301

Law Office of Todd T. Cardiff
Attn: Todd T. Cardiff
1901 First Avenue, Suite 219
San Diego, CA 92101

Santa Barbara County Planning
and Development Services
Attn: Gary Kaiser
123 E. Anapamu Street, Floor 3
Santa Barbara, CA 93101

Kern County Library
Arvin Branch
201 Campus Drive
Arvin, CA 93203

Kern County Library
Baker Branch
1400 Baker Street
Bakersfield, CA 93305

Kern County Library
Boron Branch
26967 Twenty Mule Team Road
Boron, CA 93516

Kern County Library
Buttonwillow Branch
116 Buttonwillow Avenue
Buttonwillow, CA 93206

Kern County Library
California City Branch
9507 California City Boulevard
California City, CA 93505

Kern County Library
Delano Branch
925 - 10th Street
Delano, CA 93215

Kern County Library
Frazier Park Branch
3015 Mount Pinos Way
Frazier Park, CA 93225

Kern County Library
Holloway/Gonzales Branch
506 East Brundage Lane
Bakersfield, CA 93307

Kern County Library
Kernville Branch
48 Tobias Street
Kernville, CA 93238

Kern County Library
Kern River Valley Branch
7054 Lake Isabella Boulevard
Lake Isabella, CA 93240

Kern County Library
Lamont Branch
8304 Segrue Road
Lamont, CA 93241

Kern County Library
Jackson/McFarland Branch
500 Kern Avenue
McFarland, CA 93250

Kern County Library
Mojave Branch
16916 1/2 Highway 14, Space D2
Mojave, CA 93501

Kern County Library
Northeast Branch
3725 Columbus Avenue
Bakersfield, CA 93306

Kern County Library
Rathbun Branch
200 West China Grade Loop
Bakersfield, CA 93308

Kern County Library
Ridgecrest Branch
131 East Las Flores
Ridgecrest, CA 93555

Kern County Library
Wanda Kirk/Rosamond Branch
3611 Rosamond Boulevard
Rosamond, CA 93560

Kern County Library
Shafter Branch
236 James Street
Shafter, CA 93263

Kern County Library
Southwest Branch
8301 Ming Avenue
Bakersfield, CA 93311

Kern County Library
Taft Branch
27 Emmons Park Drive
Taft, CA 93268

Kern County Library
Tehachapi Branch
1001 West Tehachapi Blvd - Suite 400
Tehachapi, CA 93561

Kern County Library
Wasco Branch
1102 Seventh Street
Wasco, CA 93280

Kern County Library
Wilson Branch
1901 Wilson Road
Bakersfield, CA 93304

Kern County Library
Wofford Heights Branch
6400 B Wofford Boulevard
Wofford Heights, CA 93285

Bear Mountain Rec & Parks Dist
P.O. Box 658
Lamont, CA 93241

Buttonwillow Rec & Parks Dist
133 East 1st Street
Buttonwillow, CA 93206

North of the River Rec & Parks Dist
405 Galaxy Avenue
Bakersfield, CA 93308

Shafter Rec & Parks Dist
700 East Tulare Avenue
Shafter, CA 93263

State Dept of Parks/Hungry Valley
PO Box 1360
Lebec, CA 93243

State Dept of Parks & Recreation
Tehachapi District
Angeles District - Mojave Desert Sector
15701 East Avenue M
Lancaster, CA 93535

Tehachapi Parks & Recreation Dist
P.O. Box 373
Tehachapi, CA 93561

Tehachapi Valley Rec & Parks Dist
P.O. Box 373
Tehachapi, CA 93561

DUP

West Side Rec & Parks Dist
P.O. Box 1406
Taft, CA 93268

Bakersfield City Parks & Rec Dept
4101 Truxtun Avenue
Bakersfield, CA 93301

DUP
Desert Lake Community Service District
P.O. Box 567
Boron, CA 93516

Arvin Community Services Dist
309 Campus Drive
Arvin, CA 93203

Rosamond Community Serv Dist
3179 - 35th Street West
Rosamond, CA 93560

So. San Joaquin Muni Utility Dist
P.O. Box 279
Delano, CA 93216

State Dept of Public Utilities Commission
505 Van Ness Avenue, Rm 2003
San Francisco, CA 94102-3214

Boron Community Service Dist
P.O. Drawer B
Boron, CA 93516

California City Public Works Dept
8190 California City Blvd.
California City, CA 93505

Desert Lake Community Service District
P.O. Box 567
Boron, CA 93516

East Niles Community Serv Dist
P.O. Box 6038
Bakersfield, CA 93306

Enos Lane Public Utility Dist
22820 Sidding Road
Bakersfield, CA 93314

Frazier Park Public Utility Dist
P.O. Box 1512
Frazier Park, CA 93225

Golden Hills Community Serv Dist
P.O. Box 637
Tehachapi, CA 93581

Highland Park Public Utility Dist
343 Arvin Street
Bakersfield, CA 93308

Inyokern Community Serv Dist
P.O. Box 1418
Inyokern, CA 93527

Lake Isabella Community Serv Dist
P.O. Box 3502
Lake Isabella, CA 93240

Lamont Public Utility Dist
8624 Segrue Road
Lamont, CA 93241

Lost Hills Utility Dist
P.O. Box 249
Lost Hills, CA 93249

Mojave Public Utility Dist
15844 "K" Street
Mojave, CA 93501

Shafter-Wasco Resource Cons Dist
5000 California Avenue, Ste. 100
Bakersfield, CA 93309-0711

Wasco Public Works Dept.
801 - 18th Street
Wasco, CA 93280

Stallion Springs Community Services Dist
28500 Stallion Springs Drive
Tehachapi, CA 93561

Semi Tropic Water Storage Dist
P.O. Box Z
Wasco, CA 93280

Shafter-Wasco Irrigation Dist
P.O. Box 1168
Wasco, CA 93280-8068

Quail Valley Water Dist
3200 21st Street, Ste 401
Bakersfield, CA 93301

Aerial Acres Water Company
19161 Alma Street
Edwards, CA 93523

Stockdale Mutual Water Co
P.O. Box 788
Bakersfield, CA 93302

Superior Mountain Water Co
19474 Enos Lane
Bakersfield, CA 93312-9501

Tehachapi-Cummings Co Water Dist
P.O. Box 326
Tehachapi, CA 93561

Rosedale-Rio Bravo Water Dist
P.O. Box 20820
Bakersfield, CA 93390-0820

Alta Sierra Vista Mutual Water Co
13557 Ottoman
Arleta, CA 91331

Antelope Valley-East Kern
Water Agency
6500 West Avenue N
Palmdale, CA 93551

Arvin-Edison Water Storage Dist
P.O. Box 175
Arvin, CA 93203

Ashe Water Dist
Dept of Water Resources
4101 Truxtun Avenue
Bakersfield, CA 93309

Bakersfield City Water Resource Dept
1000 Buena Vista Road
Bakersfield, CA 93311

Bella Vista Water Co
Attn: Gerald Hyneman
P.O. Box 15309
Weldon, CA 93283

Belridge Water Storage Dist
21908 Seventh Standard Road
McKittrick, CA 93251

Berrenda Mesa Water Dist
14823 Highway 33
Lost Hills, CA 93249-9734

Bodfish Water Co
P.O. Box 842
Lake Isabella, CA 93240

Brock Mutual Water Co
12001 Brockridge Court
Bakersfield, CA 93309

Buena Vista Water Storage Dist
P.O. Box 756
Buttonwillow, CA 93206

Buttonwillow County Water Dist
P.O. Box 874
Buttonwillow, CA 93206

Buena Vista Water Storage Dist
525 "N" Street
Bakersfield, CA 93304

Tejon-Castaic Water Dist
P.O. Box 1000
Lebec, CA 93243

California Water Service Company
7138 Lake Isabella Boulevard
Lake Isabella, CA 93240

Casa Loma Water Co
1016 Lomita Drive
Bakersfield, CA 93307

Cawelo Water Dist
17207 Industrial Farm Road
Bakersfield, CA 93308-9801

California Water Service Co
3725 South "H" Street
Bakersfield, CA 93304

Country Lane Water Co
P.O. Box 132
Onyx, CA 93255

Davenport Mutual Water Assn.
P.O. Box 1503
Rosamond, CA 93560

Edmonston Acres Muni Water Co
25465 Barbara Street
Arvin, CA 93203

Edgemont Acres Mutual Water Co
16638 Vista Del Oro Avenue
Edwards, CA 93523

Edgemont Acres Water Co
P.O. Box 966
North Edwards, CA 93523

Erskine Creek Water Co
P.O. Box 656
Lake Isabella, CA 93240

Fuller Acres Water Company
6106 Cope Lane
Bakersfield, CA 93307

Friant Water Users Authority
854 North Harvard Avenue
Lindsay, CA 93247-1715

Goose Lake Water Co
2515 Wheeler
Bakersfield, CA 93308

Vaughn Water Co.
10014 Glenn Street
Bakersfield, CA 93312

West Kern Water Dist
P.O. Box 1105
Taft, CA 93268-1105

Wheeler Ridge-Maricopa Water Dist
12109 Highway 166
Bakersfield, CA 93313-9630

Gosford Road Water Assoc
13958 Gosford Road
Bakersfield, CA 93313

Greenfield County Water Dist
551 Taft Highway
Bakersfield, CA 93307

Indian Wells Valley Water Dist
P.O. Box 1329
Ridgecrest, CA 93556

Indian Wells Water
Management Committee
P.O. Box 1329
Ridgecrest, CA 93556

Camp Nelson Water Company
2001 Nelson Drive
Springville, CA 93265

Kern Delta Water Dist
501 Taft Highway
Bakersfield, CA 93307

Twin Pines Water Company
5712 Alberta Street
Bakersfield, CA 93304

Kern River Valley Water Co
P.O. Box 1260
Lake Isabella, CA 93240

Kern-Tulare Water Dist
5001 California Avenue, Suite 202
Bakersfield, CA 93309-1692

Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield, CA 93311

Lake of the Woods Mutual
Water Co.
7025 Cuddy Valley Road
Frazier Park, CA 93225

Lamont Storm Water Dist
P.O. Box 543
Lamont, CA 93241

La Hacienda Water Co, Inc.
P.O. Box 60679
Bakersfield, CA 93386-0679

Lebec County Water Dist
P.O. Box 910
Lebec, CA 93243

Long Canyon Water Co
903 Monterey Street
South Pasadena, CA 91030

Los Angeles Dept of Water & Power
111 North Hope Street, Rm 1121
Los Angeles, CA 90012

Lost Hills Water Dist
3008 Sillect Avenue, Ste 205
Bakersfield, CA 93308-6340

Keene Water District
246 Powers Road
Keene, CA 95127

Mettler County Water Dist
1822 Stevens Drive
Bakersfield, CA 93313

Mountain Mesa Water Company
12707 Highway 178
Lake Isabella, CA 93240

North Edwards Water Dist
13001 Claymine Road
North Edwards, CA 93523

North Kern Water Storage Dist
P.O. Box 81435
Bakersfield, CA 93380-1435

North of the River Muni Water Dist
4000 Rio Del Norte Street
Bakersfield, CA 93308-1024

Oildale Mutual Water Co
P.O. Box 5638
Bakersfield, CA 93388

Olcese Water Dist
P.O. Box 60679
Bakersfield, CA 93386-0679

Pinion Pines Mutual Water Co
1467 Tecuya Street
Frazier Park, CA 93225

Palm Mutual Water Company
12147 Cliff Avenue
Bakersfield, CA 93306

Metro Water Dist of So CA
Ms. Rebecca De Leon
Environmental Planning Team
700 N. Alameda Street, US3-230
Los Angeles, CA 90012

Rand Communities Co Water Dist
P.O. Box 198
Randsburg, CA 93554

Riverkern Mutual Water Co
P.O. Box 856
Kernville, CA 93238

Western Kern Resources Dist
P.O. Box 2393
Bakersfield, CA 93309

Antelope Valley Resource Cons Dist
44811 Date Avenue, #G
Lancaster, CA 93534-3136

Buena Vista Resource Cons Dist
P.O. Box 756
Buttonwillow, CA 93206

Eastern Kern Resource Cons Dist
300 South Richmond Road
Ridgecrest, CA 93555-4436

Kern Valley Resource Cons Dist
P.O. Box 58
Weldon, CA 93283

North West Kern Resource Cons Dist
5000 California Avenue, Suite 100
Bakersfield, CA 93309

Western Kern Conservation Dist.
c/o Vernon Chinn
8 Follett
Lemoore, CA 93245

Lerdo School Dist
331 Shafter Avenue
Shafter, CA 93263

Lost Hills Union School Dist
P.O. Box 158
Lost Hills, CA 93249

Midway School Dist
P.O. Box 39
Fellows, CA 93224

Mojave Unified School Dist
3500 Douglas
Mojave, CA 93501

Mountain View School Dist
8201 Palm Avenue
Lamont, CA 93241

Muroc Unified School Dist
17100 Foothill Avenue
North Edwards, CA 93523

Norris School Dist
6940 Calloway Drive
Bakersfield, CA 93312

Pond Union School District
29585 Pond Road
Wasco, CA 93280-9772

Richland-Lerdo Union School Dist
331 Shafter Avenue
Shafter, CA 93263

Rio Bravo-Greeley Union School Dist
6521 Enos Lane
Bakersfield, CA 93314

Rosedale Union School Dist
2553 Old Farm Road
Bakersfield, CA 93312

Semi Tropic School Dist
25300 Highway 46
Wasco, CA 93280-9540

Shafter High School Dist
526 Mannel Avenue
Shafter, CA 93263

Sierra Sands Unified School Dist
113 Felspar
Ridgecrest, CA 93555

South Fork Union School Dist
5225 Kelso Valley Road
Weldon, CA 93283

Southern Kern Unified School Dist
P.O. Box CC
Rosamond, CA 93560

Standard School Dist
1200 North Chester Avenue
Oildale, CA 93308

Taft City School Dist
820 North 6th Street
Taft, CA 93268

Taft Union High School Dist
701 7th Street
Taft, CA 93268

Tehachapi Unified School Dist
300 S Robinson
Tehachapi, CA 93561

Vineland School Dist.
8301 Sunset Blvd.
Bakersfield, CA 93307

Wasco Union High School Dist
P.O. Box 250
Wasco, CA 93280

Wasco Union Elementary School Dist
639 Broadway
Wasco, CA 93280

Maricopa Unified School Dist
Star Route 2, Box 618
Maricopa, CA 93252

Arvin High School
900 Varsity Street
Arvin, CA 93203

Bakersfield City School Dist
Education Center
1300 Baker Street
Bakersfield, CA 93305

Beardsley School Dist
1001 Roberts Lane
Bakersfield, CA 93308

Blake School Dist
P.O. Box 53
Woody, CA 93287

Panama-Buena Vista School Dist
4200 Ashe Road
Bakersfield, CA 93313

Buttonwillow Union School Dist
42600 Highway 58
Buttonwillow, CA 93206

Caliente Union School Dist
12400 Caliente Creek Road
Caliente, CA 93518

West Kern Community College Dist
P.O. Box 22
Taft, CA 93268

Delano Joint Union High School Dist
1747 Princeton Street
Delano, CA 93215

Delano Union School Dist.
1405 12th Avenue
Delano, CA 93215

DiGiorgio School Dist
Route 1, Box 34
Arvin, CA 93203

Edison School Dist
P.O. Box 368
Edison, CA 93220-0368

El Tejon Unified School Dist
P.O. Box 876
Lebec, CA 93243

Elk Hills School Dist
P.O. Box 129
Tupman, CA 93276

Fairfax Union School Dist
1501 South Fairfax Road
Bakersfield, CA 93307

Fruitvale School Dist.
7311 Rosedale Highway
Bakersfield, CA 93308-5738

General Shafter School Dist
1316 Shafter Road, RR 7
Bakersfield, CA 93313

Greenfield Union School Dist
Attn: Darrell Hawley, Dir of Facilities
1624 Fairview Road
Bakersfield, CA 93307

Kern Community College Dist
2100 Chester Avenue
Bakersfield, CA 93301

McFarland Unified School Dist
601 Second Street
McFarland, CA 93250

Kern Valley High School
P.O. Box 1027
Lake Isabella, CA 93240

Kernville Union School Dist
3240 Erskine Creek Road
Lake Isabella, CA 93240

Lakeside Union School Dist
14535 Old River Road
Bakersfield, CA 93311

Lamont School Dist
8201 Palm Avenue
Lamont, CA 93241

Maple School Dist
29161 Fresno Avenue
Shafter, CA 93263

Mono County
Planning Division
PO Box 8, 74 N. School St., Annex 1
Bridgeport, CA 93517
Attn: Scott Burns, Director

Alameda County
Community Development Agency
224 W. Winton Avenue, Room 111
Hayward, CA 94544
Attn: Albert Lopez, Director

Alpine County
Community Development Department
50 Diamond Valley Road
Markleeville, CA 96120
Attn: Brian Peters, Director

Amador County
Planning Department
810 Court Street
Jackson, CA 95642
Attn: Susan Grijalva, Planning Director

Butte County
Department of Development Services
7 County Center Drive
Oroville, CA 95965
Attn: Tim Snellings, Director

Calaveras County
Planning Department
891 Mountain Ranch Road
San Andreas, CA 95249
Attn: Rebecca L. Willis, Director

Colusa County
Planning and Building Department
220 12th Street
Colusa, CA 95932
Attn: Steve Hackney, Director

Contra Costa County
Dept. of Conservation & Development
30 Muir Road
Martinez, CA 94553
Attn: Catherine Kutsuris, Director

Del Norte County
Community Development Department
Crescent, CA 95531
Attn: Heidi Kunstal, Deputy Director
Building/ Planning

El Dorado County
Development Services
2850 Fairlane Court
Placerville, CA 95667
Attn: Roger Trout, Director

Fresno County
Public Works and Planning
2200 Tulare Street
Fresno, CA 93721
Attn: Alan Weaver, Director

Glenn County
Planning and Public Works Agency
777 N. Colusa Street
Willows, CA 95988
Attn: John Linhart, Executive Director

Humboldt County
Planning and Building Department
3015 H Street
Eureka, CA 95501
Attn: Kevin Hamblin AICP, Director

Imperial County
Planning and Development Services
801 Main St
El Centro, CA 92243
Attn: Armando G. Villa, Director

Inyo County
Planning Department
168 North Edwards Street
Independence, CA 93526
Attn: Joshua Hart, Director

DUP

Kings County
Community Development Agency
1400 West Lacey Boulevard, Building 6
Hanford, CA 93230
Attn: Gregory Gatzka, Director

DUP

Lake County
Community Development
255 North Forbes Street
Lakeport, CA 95453
Attn: Richard Coel, Director

Lassen County
Planning and Building Services Dept.
707 Nevada Street, Suite 5
Susanville, CA 96130
Attn: Maurice Anderson, Director

Los Angeles County
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, CA 90012
Attn: Richard J. Bruckner, Director

DUP

Madera County
Planning Department
2037 W. Cleveland Avenue
Madera, CA 93637
Attn: Norman Allinder, Director

Marin County
Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903
Attn: Brian Crawford, Director

Mariposa County
Planning Commission
5100 Bullion Street
Mariposa, CA 95338
Attn: Sarah Williams, Director

Mendocino County
Planning and Building Services
860 North Bush Street
Ukiah, CA 95482
Attn: Steve Dunicliff, Director

Merced County
Planning and Community Development
2222 M Street
Merced, CA 95340
Attn: Mark J. Hendrickson, Director

Modoc County
Planning Department
203 West 4th Street
Alturas, CA 96101
Attn: Jory Stewart, Director

Mono County
Planning Division
PO Box 8, 74 N. School St., Annex 1
Bridgeport, CA 93517
Attn: Scott Burns, Director

Monterey County
Resource Management Planning
168 W. Alisal Street, 2nd Floor
Salinas, CA 93901
Attn: Mike Novo, Director

Napa County
Planning, Building & Environmental
1195 Third Street, Room 210
Napa, CA 94559
Attn: Hillary Gitelman, Director

Nevada County
Planning Director
950 Maidu Avenue, Suite 170
Nevada City, CA 95959
Attn: Brian Foss, Director

Orange County
Planning - Community Development
300 North Flower St.
Santa Ana, CA 92703
Attn: Ignacio Ochoa, Director

Placer County
Planning Services Division
3091 County Center Drive, Suite 140
Auburn, CA 95603
Attn: Paul Thompson, Deputy Director

Plumas County
Planning Services
555 Main Street
Quincy, CA 95971
Attn: Randy Wilson, Director

Riverside County
Planning Department
4080 Lemon Street
Riverside, CA 92501
Attn: Carolyn Syms Luna, Director

Sacramento County
Community Development
827 7th Street
Sacramento, CA 95814
Attn: Leighann Moffitt, Director

San Benito County
Planning and Building Department
3224 Southside Road
Hollister, CA 95023
Attn: Gary Armstrong, Director

San Francisco County
Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103
Attn: John Rahaim, Director

San Mateo County
Planning and Building Dept
455 County Center, 2nd Floor
Redwood City, CA 94063
Attn: Jim Eggemeyer, Director

Santa Cruz County
Planning Department
701 Ocean Street 4th Floor
Santa Cruz, CA 95060
Attn: Kathy Previsich, Director

Siskiyou County
Planning Division
806 South Main Street
Yreka, CA 96097
Attn: Greg Plucker, Deputy Director

Stanislaus County
Planning and Community Development
1010 10th Street
Modesto, CA 95354
Attn: Angela Freitas, Director

Trinity County
Planning Department
61 Airport Road
Weaverville, CA 96093
Attn: Frank Lynch, Principal Planner

Ventura County
Planning Department
800 South Victoria Avenue
Ventura, CA 93009
Attn: Kim L. Prillhart, Director

San Bernardino County
Community Development Department
385 North Arrowhead Ave 1st Floor
San Bernardino, CA 92415
Attn: Kelly Reenders, Director

San Joaquin County
Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
Attn: Kerry Sullivan, Director

Santa Barbara County
Planning and Development
30 East Figueroa Street, 2nd Floor
Santa Barbara, CA 93101
Attn: Glenn Russell, Director

Shasta County
Planning Division
1855 Placer Street
Redding, CA 96001
Attn: Richard W. Simon, AICP Director

Solano County
Resource Mgt Planning Servies
675 Texas Street, Suite 550
Fairfield, CA 94533
Attn: Mike Yankovich, Manager

Sutter County
Planning Commission
1130 Civic Center Blvd
Yuba City, CA 95993
Attn: Doug Libby, Pricipal

Tulare County
Planning Branch
5961 South Mooney Blvd
Visalia, CA 93277
Attn: Ted Smalley, Director

Yolo County
Planning and Public Works
292 West Beamer Street
Woodland, CA 95695
Attn: John Bencomo, Director

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San Diego County
Planning and Development Department
5510 Overland Avenue, Suite 310
San Diego, CA 92123
Attn: Mark Wardlaw, Director

San Luis Obispo County
Planning and Building Dept
1035 Palm Street, Room 310
San Luis Obispo, CA 93401
Attn: Kami Griffin, Asst. Director

Santa Clara County
Dept of Planning & Development
70 West Hedding Street
San Jose, CA 95110
Attn: Nash Gonzalez, Director

Sierra County
Planning Department
101 Courthouse Square
Downieville, CA 95936
Attn: Tim Beals, Director

Sonoma County
Permit and Resource Management Dept
2550 Ventura Avenue
Santa Rosa, CA 95403
Attn: Pete Parkinson, Director

Tehama County
Planning Department
444 Oak Street
Red Bluff, CA 96080
Attn: Sean M. Moore, Director

Tuolumne County
Planning Division
2 South Green Street
Sonora, CA 95370
Attn: Bev Shane, Director

Yuba County
Planning Department
915 8th Street, Suite 123
Marysville, CA 95901
Attn: Wendy Hartman, Director

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Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # _____

Project Title: Amendment to Title 19 – Kern County Zoning Ordinance, focused on Chapter 19.98 (Oil & Gas Production) for Oil and Gas Local Permitting

Lead Agency: Kern County Planning and Community Development Department Contact Person: Christopher B. Mynk
Mailing Address: 2700 "M" Street Suite 100 Phone: (661) 862-8607
City: Bakersfield Zip: 93301-2323 County: Kern

Project Location: County: Kern City/Nearest Community: Multiple
Cross Streets: n/a Zip Code: 93560
Lat. / Long.: _____ Total Acres: 3,700 square miles
Assessor's Parcel No.: Multiple Section: Multiple Twp.: Multiple Range: Multiple Base: _____
Within 2 Miles: State Hwy #: 99, 58, 43, 46, 119, 223, 204, 33 Waterways: Kern River
Airports: Multiple Railways: Multiple Schools: multiple

Document Type:

CEQA: NOP Draft EIR NEPA: NOI Other: Joint Document
 Early Cons Supplement/Subsequent EIR EA Final Document
 Neg Dec (Prior SCH No.) Draft EIS Other _____
 Mit Neg Dec Other _____ FONSI

Local Action Type:

General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Amendment to Zone Ord.

Development Type:

Residential: Units _____ Acres _____ Water Facilities: Type _____ MGD _____
 Office: Sq.ft. _____ Acres _____ Employees _____ Transportation: Type _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____ Mining: Mineral _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____ Power: Type Wind _____ MW _____
 Educational _____ Waste Treatment: Type _____ MGD _____
 Recreational _____ Hazardous Waste: Type _____
 Other: Oil and Gas Exploration and Production

Project Issues Discussed in Document:

Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Wildlife
 Coastal Zone Noise Solid Waste Growth Inducing
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Land Use
 Economic/Jobs Public Services/Facilities Traffic/Circulation Cumulative Effects
 Other _____

Present Land Use/Zoning/General Plan Designation: Developed and Undeveloped land in Kern County. Current Zoning Classifications and General Plan Map Code Designations to remain the same

Project Description: The proposed project consists of an amendment to Title 19 Kern County Zoning Ordinance focused on Chapter 19.98 (Oil and Gas Production) include updated development standards and conditions for oil and gas exploration, extraction, operations, and production activities in unincorporated Kern County.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
 If you have already sent your document to the agency please denote that with an "S".

- | | |
|--|--|
| <u>S</u> Air Resources Board | <u> </u> Office of Emergency Services |
| <u> </u> Boating & Waterways, Department of | <u>S</u> Office of Historic Preservation |
| <u>S</u> California Highway Patrol | <u> </u> Office of Public School Construction |
| <u> </u> CalFire | <u>S</u> Parks & Recreation |
| <u>S</u> Caltrans District # <u>6 & 9</u> | <u> </u> Pesticide Regulation, Department of |
| <u>S</u> Caltrans Division of Aeronautics | <u>x</u> Public Utilities Commission |
| <u>S</u> Caltrans Planning (Headquarters) | <u>S</u> Regional WQCB # <u>Lahontan & Central Valley</u> |
| <u> </u> Central Valley Flood Protection Board | <u> </u> Resources Agency |
| <u> </u> Coachella Valley Mountains Conservancy | <u> </u> S.F. Bay Conservation & Development Commission |
| <u> </u> Coastal Commission | <u> </u> San Gabriel & Lower L.A. Rivers and Mtns Conservancy |
| <u> </u> Colorado River Board | <u> </u> San Joaquin River Conservancy |
| <u> </u> Conservation, Department of | <u> </u> Santa Monica Mountains Conservancy |
| <u> </u> Corrections, Department of | <u> </u> State Lands Commission |
| <u> </u> Delta Protection Commission | <u> </u> SWRCB: Clean Water Grants |
| <u> </u> Education, Department of | <u> </u> SWRCB: Water Quality |
| <u>S</u> Energy Commission | <u> </u> SWRCB: Water Rights |
| <u>S</u> Fish & Game Region # <u>Fresno</u> | <u> </u> Tahoe Regional Planning Agency |
| <u>S</u> Food & Agriculture, Department of | <u>S</u> Toxic Substances Control, Department of |
| <u> </u> General Services, Department of | <u>S</u> Water Resources, Department of |
| <u> </u> Health Services, Department of | <u> </u> Other _____ |
| <u> </u> Housing & Community Development | <u> </u> Other _____ |
| <u>S</u> Integrated Waste Management Board | |
| <u>S</u> Native American Heritage Commission | |

Local Public Review Period (to be filled in by lead agency)

Starting Date August 30, 2013 Ending Date September 30, 2013

Lead Agency (Complete if applicable):

Consulting Firm: _____	Applicant: _____
Address: _____	Address: _____
City/State/Zip: _____	City/State/Zip: _____
Contact: _____	Phone: _____
Phone: _____	

Signature of Lead Agency Representative:  Date: August 30, 2013

INITIAL STUDY/NOTICE OF PREPARATION

Amendment to Title 19 – Kern County Zoning Ordinance,
focused on Chapter 19.98 (Oil and Gas Production)
of the Kern County Zoning Ordinance for Oil and Gas Local Permitting

Requested by

California Independent Petroleum Association
Independent Oil Producers Association
Western States Petroleum Association

LEAD AGENCY:



Kern County Planning and Community Development Department
2700 M Street, Suite 100
Bakersfield, CA 93301-2370

Contact:

*Mr. Christopher B. Mynk, AICP, Supervising Planner,
(661) 862-8607 or mynkc@co.kern.ca.us*

TECHNICAL ASSISTANCE

Ecology and Environment, Inc.
401 West A Street, Suite 775
San Diego, CA 92101

August 2013



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1.0 PROJECT DESCRIPTION

1.1. INTRODUCTION

Kern County, California (County) is one of the richest oil-producing counties in the United States. The valley floor area of the County and the lower elevations of the surrounding mountain ranges contain numerous deposits of oil and gas resources, a major economic resource for the County.

Oil and natural gas exploration and extraction is experiencing resurgence in California and specifically in Kern County. Kern County currently produces 80% of the oil and gas in California. California is among the nation's top oil producer, particularly with the development of the Monterey Shale formation, a geologic formation that stretches from east of San Francisco more than 200 miles south to San Luis Obispo County. According to the Federal Energy Information Administration, the Monterey Shale could hold 15.4 billion barrels of oil which is double the combined reserves of North Dakota's Bakken Shale and Texas Eagle Ford Shale.

Representatives of the oil and gas industry associations; specifically the California Independent Petroleum Association (CIPA), the Independent Oil Producers Association (IOPA), and the Western States Petroleum Association (WSPA), (collectively, "project proponents" or "applicants", have requested an amendment to Chapter 19.98 (Oil and Gas Production) of the Kern County Zoning Ordinance to include provisions for local permitting of oil and gas production. Chapter 19.112 – Amendments to Zoning Title of the Kern County Zoning Ordinance specifically states in Section 19.112.020 that amendment of any portion of this title, meaning the text and maps, can only be initiated by the Kern County Board of Supervisors. The request was considered in a public hearing before the Board of Supervisors on January 22, 2013 and the Board directed staff to proceed with processing the requested amendments. This revision of the zoning ordinance for local permitting will also require that other relevant references in the zoning ordinance be reviewed and possibly revised for consistency.

This amendment of Chapter 19.98 (Oil and Gas Production) of the Kern County Zoning Ordinance will require a project level Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA), with Kern County as the Lead Agency, to cover future Kern County oil and gas exploration and production activities, to be specified, and result in development standards, conditions and mitigation measures for oil and gas activities. The EIR will also be utilized by the Division of Oil, Gas and Geothermal Resources (DOGGR), as a Responsible Agency under CEQA, in its jurisdiction to oversee subsurface operations of oil, gas and injection wells; well exploration, drilling and construction; well testing; well completion, stimulation, and workovers; oil and gas operations and maintenance; along with well removal, plugging and abandonment. Thus, in addition to potential impacts that could result from the development and use of oil and gas related facilities at or above the ground surface, the EIR will also evaluate potential impacts to subsurface resources, including but not necessarily limited to groundwater contamination, water supply and water use, geologic faulting, induced seismicity and subsidence, as well as soil contamination and associated water quality.



1.2. PROJECT LOCATION AND ENVIRONMENTAL SETTING

Kern County is California's third-largest county in land area, encompassing 8,202 square miles. Located at the southern end of the Central Valley, Kern County serves as the gateway to southern California, the San Joaquin Valley, and California's high desert. The geography of Kern County is diverse, containing mountainous areas, agricultural lands, and desert areas.

Kern County is bounded by Kings, Tulare, and Inyo Counties on the north, San Bernardino County on the east, Los Angeles and Ventura Counties on the south, and Santa Barbara and San Luis Obispo Counties on the west. Kern County includes 11 incorporated cities with the San Joaquin Valley portion, including Arvin, Bakersfield, Delano, Maricopa, McFarland, Shafter, Taft, and Wasco. Oil and gas exploration and development activities have historically occurred in the San Joaquin Valley Floor portion of the County and are likely to occur within this area in the coming decades. For this reason, the EIR will evaluate potential impacts of future oil and gas exploration and production activities, to be specified, in a defined boundary as specified in **Figure 1 (Project Boundary)** below. For purposes of this project, this area will be referred to as the Project Boundary Area.

This Project Boundary Area encompasses 3,700 square miles and generally includes most of the San Joaquin Valley Floor portion of Kern County up to an elevation of 2,000 feet. The boundary includes: west side - the San Luis Obispo County line; north side - the Kings and Tulare county lines; east side - the 2,000-foot elevation contours, squared off to the nearest section line; and south side – the northern boundary of the Los Padres National Forest.

The Project Boundary Area includes all unincorporated lands within the 409-square-mile Metropolitan Bakersfield General Plan. However, the Project Boundary Area excludes portions of Metropolitan Bakersfield that are within the jurisdiction of the City of Bakersfield, and excludes all other city jurisdictions, including: Taft, Delano, Shafter, Arvin, McFarland, Maricopa, and Wasco. The Project Boundary is based on generally available information regarding areas with potential or confirmed oil and gas resources within the County's jurisdiction.

The Kern County General Plan Update describes the San Joaquin Valley region as “the southern San Joaquin Valley below an elevation of 1,000 feet mean sea level (MSL)” within Kern County. The San Joaquin Valley portion is characterized by relatively low rainfall, averaging less than 10 inches per year. Average temperatures are relatively high, and total evaporation exceeds total precipitation. Summers are relatively cloudless, hot, and dry. Winter is generally mild, but an occasional freeze does occur and may cause substantial agricultural damage. Average length of the growing season is 265 days. The San Joaquin Valley region is within the southern end of the San Joaquin Valley Air Basin (SJVAB) managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD). This district encompasses Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare Counties, as well as the San Joaquin Valley portion of Kern County. Further, the San Joaquin Valley region is within the Tulare Lake Groundwater Basin, which includes the Kern River Hydrographic Unit and the Poso Hydrographic Unit.



Figure 1
Regional Location



A total of 100 active or abandoned Oil Fields currently delineated by DOGGR are located within the Project Boundary Area (**Figure 2 – Project Vicinity**). As shown on **Table 1**, these DOGGR delineated Oil Fields vary widely in size; from the smallest the Kernsumner and Temblor East Well Fields at 0.2 square miles, to the largest, Midway Sunset Well Field at 99.7 square miles. Oil and gas production also occurs outside of DOGGR delineated oilfield boundaries.

TABLE 1 – Oil Fields Currently Delineated by DOGGR within the Project Boundary Area

Count	Administrative Oil Field [Alpha Order]	Square Miles *	Acres *
1	Ant Hill	1.7	1,098.0
2	Antelope Hills	4.4	2,823.7
3	Antelope Plains Gas (Abd)	0.3	160.5
4	Asphalto	4.6	2,975.5
5	Beer Nose	1.0	644.8
6	Belgian Anticline	15.4	9,864.9
7	Bellevue	3.6	2,326.4
8	Blackwells Corner	3.6	2,308.1
9	Bowerbank	16.2	10,352.4
10	Buena Vista	46.9	29,993.3
11	Buttonwillow Gas (Abd)	10.0	6,378.7
12	Cal Canal Gas	5.5	3,515.2
13	Calders Corner	1.5	970.0
14	Canal	3.9	2,476.7
15	Canfield Ranch	13.3	8,536.4
16	Capitola Park	1.0	651.5
17	Carneros Creek	1.5	967.3
18	Chico Martinez	2.6	1,634.8
19	Cienaga Canyon	0.6	402.4
20	Comanche Point	1.9	1,202.7
21	Cymric	21.5	13,757.8
22	Devils Den	12.8	8,175.4
23	Dyer Creek	0.4	239.9
24	Eagle Rest	0.5	309.3
25	Temblor, East (Abd)	0.2	154.6
26	Edison	34.0	21,742.3
27	Elk Hills	72.9	46,630.7
28	English Colony	1.1	681.5
29	Fruitvale	18.3	11,714.2
30	Garrison City Gas (Abd)	4.7	3,017.4
31	Gonyer Anticline (Abd)	0.5	344.9
32	Goosloo	3.0	1,935.4
33	Greeley	9.4	6,022.4
34	Jasmin	10.3	6,607.4
35	Jerry Slough (Abd)	0.5	318.0
36	Kern River	25.8	16,532.6
37	Kern Bluff	4.2	2,668.6



TABLE 1 – Oil Fields Currently Delineated by DOGGR within the Project Boundary Area

Count	Administrative Oil Field [Alpha Order]	Square Miles *	Acres *
38	Kern Front	19.0	12,136.1
39	Kernsumner (Abd)	0.2	159.7
40	Lakeside	1.3	804.0
41	Landslide	2.1	1,373.9
42	Los Lobos	6.1	3,892.3
43	Lost Hills	33.2	21,273.1
44	McClung (Abd)	0.5	319.6
45	McDonald Anticline	3.7	2,372.4
46	McKittrick	10.6	6,776.8
47	Midway – Sunset **	99.7	63,832.8
48	Monument Junction	3.3	2,085.6
49	Mountain View	28.5	18,251.2
50	Mount Poso	45.9	29,360.5
51	Antelope Hills, North	3.9	2,466.8
52	Belridge, North	9.1	5,800.9
53	Coles Levee, North	15.1	9,671.0
54	Shafter, North	7.5	4,768.3
55	Tejon, North	9.2	5,914.3
56	Edison, Northeast	0.6	408.8
57	Lost Hills, Northwest	8.6	5,507.7
58	Semitropic Gas, Northwest (Abd)	0.5	322.5
59	Paloma	29.7	18,985.0
60	Pioneer	1.0	642.8
61	Pleito	3.0	1,927.3
62	Poso Creek	30.9	19,806.9
63	Railroad Gap	1.7	1,101.2
64	Rio Bravo	6.1	3,925.0
65	Rio Viejo	4.1	2,641.7
66	Rose	5.5	3,522.1
67	Rosedale	3.6	2,321.0
68	Rosedale Ranch	5.0	3,213.3
69	Round Mountain	19.2	12,265.9
70	Round Mountain South	0.4	276.7
71	San Emidio Nose	7.6	4,880.5
72	San Emigdio (Abd)	0.5	306.1
73	San Emigdio Creek (Abd)	0.5	340.7
74	Semitropic	25.1	16,077.3
75	Seventh Standard	0.5	320.3
76	Shafter (Abd)	0.5	321.2
77	Shafter Southeast Gas (Abd)	1.0	641.5
78	Shale Flats Gas (Abd)	1.0	647.1
79	Shale Point Gas	0.6	387.2
80	Bellridge, South	25.3	16,218.0
81	Coles Levee, South	17.7	11,328.4



TABLE 1 – Oil Fields Currently Delineated by DOGGR within the Project Boundary Area

Count	Administrative Oil Field [Alpha Order]	Square Miles *	Acres *
82	Lakeside, South (Abd)	0.3	160.4
83	Stockdale	2.4	1,567.5
84	Strand	7.9	5,068.5
85	Tejon	11.3	7,227.8
86	Tejon Flats (Abd)	0.3	161.0
87	Tejon Hills	6.7	4,283.2
88	Temblor Hills	1.0	643.9
89	Temblor Ranch	0.5	318.4
90	Ten Section	7.4	4,725.9
91	Trico Gas **	6.8	4,359.4
92	Union Ave.	1.0	655.3
93	Valpredo	0.3	163.1
94	Wasco	4.0	2,575.6
95	Welcome Valley	0.8	490.4
96	Bellevue, West	2.0	1,248.3
97	Jasmin, West (Abd)	0.5	321.6
98	Wheeler Ridge	8.1	5,203.7
99	White Wolf	1.3	846.3
100	Yowlumne	10.1	6,446.8
TOTAL		931.4	596,198.3

* Numbers are approximate.

** Oil field is located on the border of Kern County and an adjacent county; acreages within Kern County are approximate.

Abd = Abandoned.

Source: California Division of Oil, Gas and Geothermal Resources, Field Boundaries, March 6, 2013.

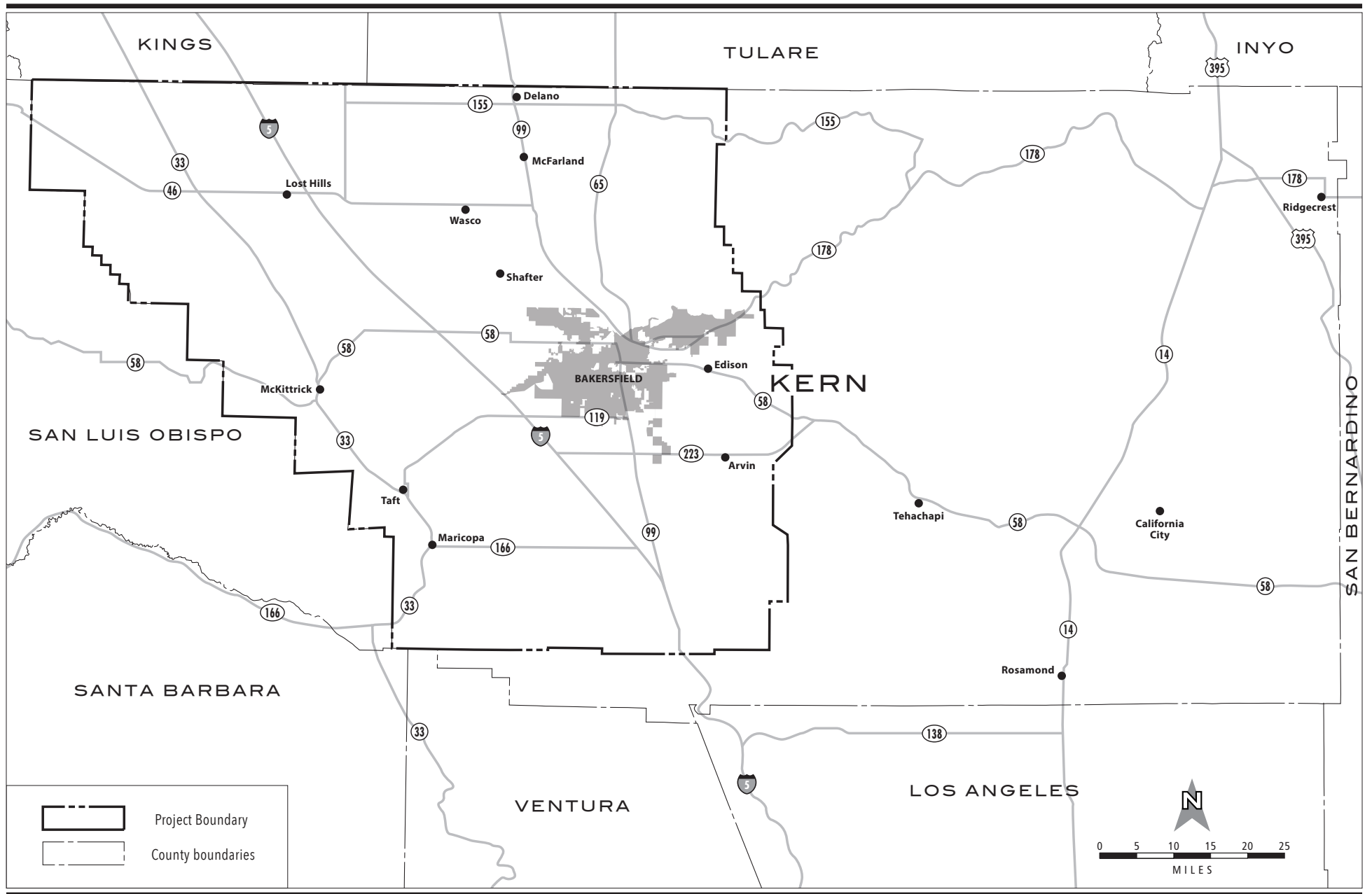


Figure 2
Project Vicinity



1.3. PROJECT DESCRIPTION

The proposed project consists of an amendment to Title 19 Kern County Zoning Ordinance focused on Chapter 19.98 (Oil and Gas Production) of the Kern County Zoning Ordinance to include updated development standards and conditions for oil and gas exploration, extraction, operations, and production activities, to be specified, in unincorporated Kern County. For CEQA purposes, the proposed project includes future oil and gas development activities expected to be undertaken pursuant to the amended ordinance.

1.3.1 Current Zoning

Chapter 19.98 (Oil and Gas Production) of the Kern County Zoning Ordinance contains the procedures and standards that apply to all exploration drilling and production activities related to oil, gas, and other hydrocarbon substances carried out in unincorporated Kern County. The purpose of this chapter is to promote the economic recovery of oil, gas, and other hydrocarbon substances in a manner compatible with surrounding land uses and protection of the public health and safety.

Section 19.98.020 currently authorizes “unrestricted drilling”, having no review or permit required in the Exclusive Agriculture (A), Limited Agriculture (A-1), Medium Industrial (M-2), Heavy Industrial (M-3) and Natural Resource (NR) zones, subject to compliance with specified conditions and standards which augment DOGGR, SJVAPCD, and other agency regulations. In these zoning districts, no review or permit is required for the drilling of any steam injection well, steam drive well, service well, or any well intended for the exploration for or development or production of oil, gas, and other hydrocarbon substances, or for any related accessory equipment, structure, or facility.

In addition, Section 19.98.030 provides for drilling by “ministerial permit” in the Light Industrial (M-1) and Recreation Forestry (RF) zones, subject to specified development standards, which also apply in Drilling Island (DI) and Petroleum Extraction (PE) Combining Districts. Under this provision, no well for use as an injection well and no well for the exploration for or development or production of oil or gas or other hydrocarbon substances may be drilled, and no related accessory equipment, structure, or facility may be installed in the above referenced zone categories until an application for plot plan review has been submitted to and approved by the Kern County Planning Director as consistent with the development standards set out in Section 19.98.050.

At present, the development standards generally require:

- Specific well setback distances from structures;
- Project signage limitations;
- Timing for the removal of drilling equipment;
- Timing for restoring drilling site and filling earthen sumps;
- Landscaping and fencing requirements for oil tanks;
- Limitations on equipment delivery hours;
- Height restrictions and paint requirements for pumping units;



- Dust abatement requirements for parking areas;
- Pump site fencing and screening requirements; and
- Compliance with all required federal, State, and County rules and regulations.

In addition to the County's Zoning Ordinance, oil and gas activities are generally regulated by a multitude of other agencies. The Division of Oil, Gas, and Geothermal Resources (DOGGR) regulates the construction, operation, and abandonment of all oil and gas wells in the state, DOGGR also enforces regulations related to facilities management. In addition to the DOGGR facilities regulations, operators which have facilities in designated areas must have Spill Prevention, Control and Countermeasure Plans per US EPA requirements. The San Joaquin Valley Air Pollution Control District (SJVAPCD) regulates all stationary sources from an air quality perspective and governs the industry under arguably the most robust air quality standards in the nation. In addition to the SJVAPCD, portable equipment is regulated and permitted by the California Air Resources Board. Greenhouse gas emissions are regulated under the California Air Resources Board's Cap & Trade Program and the US EPA's Title V program. The Central Valley Regional Water Quality Control Board regulates all activities that involve the discharge of waste or waters into the basin. The US Fish and Wildlife Service and the California Department of Fish and Wildlife regulate and permit the protection of endangered species and other biological resources. Other County Departments including the Fire Department, Engineering, Surveying & Permit Services and the Environmental Health Department regulate and inspect industry facilities.

1.3.2 Proposed Amendment

The proposed project consists of an amendment to Title 19 Kern County Zoning Ordinance focused on Chapter 19.98 (Oil and Gas Production) and related sections of the Kern County Zoning Ordinance to include updated development standards and conditions for future oil and gas exploration, extraction, operations, and production activities, to be specified, in unincorporated Kern County. In addition, the proposed project includes future oil and gas development activities expected to be undertaken pursuant to the amended ordinance.

The proposed project would amend sections of the Kern County Zoning Ordinance relating to oil and gas drilling, including Chapter 19.98 (Oil and Gas Production), to address oil and gas exploration and operation activities in greater detail, by:

- a. Establishing updated development standards and conditions to address environmental impacts of pre-drilling exploration, well drilling and the operation of wells, including the exploration, production, completion, stimulation, reworking, injection, monitoring and plugging and abandonment; and,
- b. Establishing a new "Oil and Gas Conformity Review" ministerial permit procedure for County approval of future well drilling and operations to ensure compliance with the updated development standards and conditions and provide for ongoing tracking and compliance monitoring.



The proposed amendment would also include updated development standards and conditions that would apply in the portion for the Kern County Zoning Ordinance relating to the A (Exclusive Agriculture District), A-1 (Limited Agriculture District), M-1 (Light Industrial District), M-2 (Medium Industrial District), M-3 (Heavy Industrial District), NR (Natural Resource District) and RF (Recreation-Forestry District) zones and in DI (Drilling Island District) and PE (Petroleum Extract) Combining Districts. The standards will also be incorporated as conditions of approval in zone districts requiring a conditional use permit, such as the E (Estate District), R-1 (Low-density Residential District) and R-2 (Medium-density Residential District):

Development standards and conditions will be identified and assessed in the EIR. It is anticipated that the development standards and conditions will address, at a minimum, the following activities and issues:

- Pre-drilling exploration operations;
- Well drilling, completion, production, stimulation and monitoring operations;
- Footprint minimization;
- Set back requirements from sensitive land uses, such as residences;
- Light glare minimization measures;
- Dust control practices and air quality;
- Wildlife and biological resource management practices;
- Hazardous materials management practices;
- Wastewater and process water control/management practices;
- Stormwater control practices;
- Noise control practices;
- Solid waste management practices;
- Maintenance activities;
- Injection well operations;
- Cultural resource protection;
- Well plugging and abandonment operations; and
- Oilfield decommissioning and restoration

Additional topics that may be addressed by development standards and conditions will be identified in the EIR through the comprehensive assessment of all topical impact areas identified in the Initial Study attached to this NOP.

Applicability of Development Standards: It is anticipated that the EIR will also address variations of development standards and conditions that address different factual, operational, geographical, or regulatory circumstances. For example, different standards may be applied inside and outside the delineated administrative field boundaries identified by DOGGR, or in environmentally sensitive areas.

Geographic Scope: The updated development standards and conditions would apply to new oil and gas activities in oil and gas production areas throughout unincorporated Kern County. However, the proposed geographic scope for environmental evaluation to be considered in the



EIR, shown on **Figure 1**, represents the portion of the County in which oil and gas development has historically occurred and is reasonably foreseeable to occur in the coming decades (Project Boundary Area). Additional development standards may be established in unincorporated County areas outside the Project Boundary Area, including supplemental environmental review.

Temporal Scope: The EIR will analyze impacts for a projected County-wide rate of oil and gas activity, derived from current data with a margin to accommodate reasonably foreseeable anticipated growth in oil and gas production activities within the County.

Oil and Gas Conformity Review Process

The following Oil and Gas Conformity Review process would become a mandatory process for new oil and gas production activities in Kern County:

- a. The operator would submit a site plan application to the County, including plans for compliance with the development standards and conditions. Concurrently, the operator would submit a Notice of Intention (NOI) to the Division of Oil, Gas and Geothermal Resources, together with a copy of the Notice of Determination for the EIR as documentation of CEQA compliance.
- b. County Staff would review the Oil and Gas Conformity documentation to evaluate compliance with development standards and conditions. At the conclusion of a ten (10) day period County Staff would issue either an approval letter or an incompleteness letter to the applicant. If the applicant submits one or more supplements to correct any deficiencies, County Staff would review the supplements within 10 days of submittal and issue either approval or incompleteness letters.
- c. Prior to engaging in new wellbore re-entry activities, that require a NOI to be filed with DOGGR and approval of a Permit to Conduct Well Operations (e.g., deepening, re-drilling, workovers, reworking etc.), a new Oil and Gas Conformity Review and approval by Kern County would also be required based on the process described above in steps (a) through (b).
- d. Prior to conducting any drilling activity the operator must have received and have on file both the approved Permit to Conduct Well Operations, from DOGGR and an approved site plan review unless the activity involves facility placement not subject to DOGGR permit approval.

1.3.3 Activities to be Assessed in the EIR for the Proposed Zoning Ordinance Amendment

The following is a description of typical activities that would be assessed in the EIR prepared for the proposed amendment to Chapter 19.98 (Oil and Gas Production) of the Kern County Zoning Ordinance:



Geophysical Surveys

Geophysical surveys may be conducted to determine the extent of natural gas and oil reserves present, and whether such resources warrant development of additional production. Geophysical surveys generate low-frequency sound waves by various means, and the data is recorded by small geophones that have been strategically placed within the survey area. The energy source is applied by using specialized trucks to vibrate the ground (vibroseis), or detonating charges underground (shothole). Both of these methods include the deployment and recovery of geophone receivers that are connected by cables to a recording station (seismograph) mounted on a specialized truck. The vibroseis technique utilizes truck-mounted vibroseis units to generate vibrations. The shothole technique utilizes holes drilled in a variable spacing pattern, usually less than 60-feet deep with a diameter of 3 to 5 inches. Explosive charges are placed in the holes and detonated to generate seismic waves that are recorded by the seismograph. Explosive charges are required in areas of steep terrain where a vibroseis source cannot safely operate or where farmers indicate a preference (i.e., orchards where low branches cannot accommodate vibroseis units or tilled fields where vibration will damage crops). Electronic encoded detonation caps and biodegradable charges are used to ensure the safety of shothole operations.

Construction, Operation and Maintenance

Construction activities are conducted, including well pad preparation, drilling, completion and testing of new wells, work on existing wells, and construction of necessary infrastructure such as access roads and extended power transmission lines; geophysical monitoring; installation and operation of enhanced oil recovery (EOR) facilities, production facilities (i.e., tanks, compressors, generators, heater treaters, free water knockout facilities, etc.), water, combustion, steam, carbon dioxide and polymer flood projects; well remedial work; pipeline installations, excavation, replacement or repair; installation, operation, maintenance, demolition and removal of equipment, buildings, warehouses, storage yards, offices and other structures, berms, percolation ponds, fences, transmission lines and other facilities; production activities; responses to and remediation of spills or emergencies; hydrotesting and other non-destructive testing of pipelines, tanks and vessels; expansion of active well locations to provide safe well-workover activity; brush and weed removal around production equipment; maintenance of pipeline rights-of-way (ROWs); access road installation, paving and maintenance and use.

Drilling Operations

Well drilling is the process of drilling a hole in the ground for the purpose of extracting crude oil or natural gas resources or for the injection of a fluid from surface to a subsurface reservoir. Drilling may be “in field”, “exploratory” or “development”. “In field” drilling is intended to maximize recovery of oil and natural gas within the defined and known subsurface reserves. “Exploratory drilling” is intended to determine whether the resource exists in a specific area and whether extraction is economically viable. Exploration can also be characterized as defining the lateral limits of hydrocarbons outside of a known producing area (i.e., step-out zone). “Development drilling” consists of drilling wells to extract known hydrocarbon resources to efficiently maximize the development of the reservoir or field. Most current drilling projects are classified as development within existing administrative field boundaries or “in field”.



Typically, drilling operations are conducted 24 hours a day because of their complexity and associated hazards with leaving a well in the process of being drilled unattended. All drilling activities occur on a well pad that has been constructed to support drilling the well. Site preparation activities include clearing and grading. In addition, containments (temporary pits, operations sumps and/or portable tanks) are used to store drilling fluids, wellbore cuttings, and waste which are a result of the drilling process. Portable tanks may also be used to mix and store other needed liquids or slurries, such as drilling fluids, resin-coated sand, and completion fluids.

After the well pads are developed, the drilling rig would be moved onto the well site and set up. Temporary facilities, equipment and materials necessary for the drilling operation may be set up and stored on the well site (i.e., drilling mud supplies, water, drilling materials and casing, crew support trailers, pumps and piping, portable generators, field flares, fuels and lubricants, etc.). Surface casing would be set, cemented, and blowout prevention equipment would be installed at the wellhead and tested. Additional casing is required to be set for the protection of oil, gas, and freshwater zones, to seal off anomalous pressure zones, and to isolate production from the intended zone(s). Drilling would continue until the target depth is reached.

Completion Operations

The next step would be well completion which could involve a variety of activities, generally classified as slotted liner, perforated casing, and open hole. Well completions may occur with the drilling rig on site, or the drilling rig may be removed. A workover rig could replace the drilling rig for the completion or the completion design may be rigless. Depending on the type of formation and the current state of the wellbore, well stimulations may be required such as acid fracturing or hydraulic fracturing. Hydraulic fracturing is the injection of water, a proppant (usually sand or ceramic beads) and carrier fluids (typically proprietary chemicals designed to enhance recovery yields) into a well bore to increase near well bore permeability, in order to improve and increase the flow of hydrocarbons into the well bore. DOGGR is in the process of developing regulations relating to hydraulic fracturing. In the event that DOGGR completes the rule adoption process prior to the certification of the Kern County EIR, the new regulations will be considered part of the regulatory setting for this proposed process. Other well stimulation techniques place various chemicals in the well to react with well bore scale or the productive formation to allow increased well production. Well stimulation can be repetitive during the well's productive life.

Following the well completion, the testing phase occurs. The testing phase involves onsite separation of oil, gas and water via gravity or centrifugal separation and measurement of their respective percentages of total production. For an exploratory well, oil and water are typically produced into temporary tanks and any associated gas is burned off using a permitted temporary flare at the well site. For an "in-field" or "development well", these hydrocarbons and associated water are piped into an existing production system during the testing phase.



Well Mechanical Integrity and Standard Annular Pressure Testing

These methods are utilized to determine if the well's casing retains integrity and effectively isolates the well from the surrounding formations. A pressure test is conducted using a fluid to fill the annular space between the casing, tubing and packer. Pressure is maintained for a specified period of time at a specified pressure. If the closed system retains pressure after the pressure source is removed, the well is determined to have mechanical integrity. Loss of test pressure during the procedure indicates a lack of mechanical integrity. In this case downhole components are leaking and require corrective action prior to returning the well to service. The tests are conducted by well servicing equipment that is restricted to the existing well pad.

Well Remedial Operations

Well remedial work is implemented on existing well pads. A well remedial operation generally consists of a rig, support trucks, portable tanks, pumps, and various other equipment (depending on the complexity of the planned work). Remedial work typically lasts for a period of a few days; however, some large-scale jobs can take weeks. In an effort to reduce habitat disturbances, existing well pads are used, or sometimes extended, to perform remedial well work. Extensions are only performed if it is necessary to provide a safe well-workover environment. Downhole remedial work typically involves activities such as: re-perforating, plugging, redrilling, liner replacement, casing repairs, pump replacement, well stimulation, well clean-out (the removal of sand, sediment, or debris build-up or equipment).

Enhanced Oil Recovery (EOR)

Enhanced oil recovery is used to reduce the viscosity of the hydrocarbons and allow produced fluids to flow. There are four major types of EOR operations: waterflood; thermal (i.e., steamflood, cyclic steam and in-situ combustion); CO₂ or other gas (miscible and immiscible); and chemical/polymer flooding (i.e., alkaline flooding or micellar-polymer flooding). While waterflood operations have been used in California since the 1950s, other types of EOR have been used since the early 1980s as a result of a 1979 Presidential Order that exempted most heavy crude oil from federal price controls in order to stimulate the nation's declining oil production. EOR facilities typically include the same infrastructure as required for oil and gas production: including pipeline distribution, pumps, and compression systems to supply and deliver the material being utilized for EOR to the reservoir, injection wells and observation wells, and production wells, as well as the associated oil, gas and water separation and processing equipment and facilities.

With thermal enhanced oil recovery, steam is injected on either a continuous ("steam-flood") or an intermittent ("cyclic steam") basis. The injected steam may also include proprietary chemical additives to enhance the thermal recovery of heavy oil. Thermally enhanced oil recovery facilities contain steam generators, i.e., large heaters or cogeneration units that generate steam from fresh water. These generators and cogeneration units are typically powered by electricity and natural gas, and may be installed at individual graded sites or installed at multi-generator sites located on a single graded pad. For production zones using a continuous steam-flood EOR method, injection and observation wells may be placed into the intended reservoir in a specific



pattern to sweep the reservoir so as to displace oil and gas to an adjacent ring of producing wells for recovery. These wells can be an existing wellbore converted to an injector or observation well or new wells can be installed for these purposes. Once established, the EOR pattern is typically developed outwards in a concentric fashion to sweep a larger portion of the reservoir. Pipeline and infrastructure expansions are conducted to support the EOR from the new portion of the reservoir.

Another steam production technique is known as cyclic steaming. In this method steam is not continuously injected but, instead, a pre-determined volume of steam is injected into an oil producing well on an intermittent basis. After steaming, the well is shut-in for a period of time to allow the steam to condense and transfer heat to the reservoir (referred to as the soak period). After the soak period, which varies per well and/or formation, the well is opened up to the production system and the well is produced. Cyclic steaming is typically used in areas where the reservoir is cold or in specific types of reservoir rocks.

Cogeneration facilities are used to produce heat for thermal process use, thermal EOR and the generation of electric power for use by the oilfield operator, or for sales to other operators. Installation and substantial expansion of cogeneration facilities accessory to oilfield operations, not using coal-based fuel sources, are permitted in the A (Exclusive Agriculture), A-1 (Limited Agriculture), M-2 (Medium Industrial), M-3 (Heavy Industrial) and NR (Natural Resource) Districts. Coal-based cogeneration facilities require a conditional use permit. Cogeneration facilities require other agency permits including a permit from the San Joaquin Valley Air Pollution Control District. New cogeneration facilities and substantial expansions that are accessory to oilfield operations will be authorized under the proposed Oil and Gas Conformity review process.

Shallow Cyclic Thermal Production

Low Permeability Shallow Cyclic Thermal Production is defined as production operations in shallow, low permeability reservoirs that are produced primarily or exclusively through intermittent steam injection to create permeability channels and or dilate the reservoir. The production operations are classified as enhanced oil recovery (EOR) operations and are subject to DOGGR's underground injection control (UIC) regulations. The operations differ from cyclic thermal operations in reservoirs with moderate to high permeability where permeability enhancement is not required. The wells tend to be shallow and do not utilize well stimulation completion techniques such as hydraulic fracturing.

Process Water for Steam Generation and Extraction Activities

Water required for oil and gas extraction activities, including the production of steam, can come from a variety of sources. Common sources include non-potable water from groundwater wells, existing surface water entitlements, or produced water that has been treated as described below. Depending upon the well's proximity to the water source, water can be transported to the wells via truck and/or pipeline.



Process water for extraction (EOR) activities is typically comprised of treated produced water. The same is true for the steam generated by cogeneration facilities (see Water Treatment Section below). Cogeneration facilities may also use de-mineralized fresh water for evaporative cooling to increase power output when ambient temperatures are elevated and untreated fresh water for steam condensation, pump seal flushing and other process uses requiring fresh water. The ability to produce oil in the San Joaquin Valley is directly related to the ability to effectively manage water. Typically, oil producers in the southern San Joaquin Valley extract 8 to 9 barrels of water for every barrel of oil produced. Most of this water is treated at a separation facility in tanks and then put to good use and recycled beneficially as steam or for water flood (>85%). Because of this recycling effort, comparatively little purchased fresh water is used in the production of oil and gas in the Valley.

Treatment, Equipment and Facilities

A variety of surface facilities are constructed and operated to support oil and natural gas processing and storage, including production facilities, transmission systems, EOR facilities, water treatment and disposal facilities, storage tanks and vessels, and maintenance and removal of the same.

The fluid produced from the well dictates the type of production facility required. For wells that produce oil, gas and water, separation and treatment of these fluids allows the oil and gas to be sold and the water to be disposed of, reused, or re-injected. The extracted oil, gas, and water mixture is sent via pipes to a production header. After it reaches the production header, the fluids from all wells would be commingled in a gross line before entering a separator. In some cases a test header allows the diversion of fluids from a single well through a well test station. The well test station allows the testing of the well quality and flow characteristics. Once the fluids pass through the well test station, they are typically directed back to the gross line where they are commingled with the other fluids. Separators are then used to perform an initial separation of the oil, gas and water. The gas exits the top of the separator, the oil exits the middle, and the water exits the bottom of the separator.

Oil Treatment

When the oil leaves the separator it is directed to a tank or goes through further separation. Separation may include additional separation time in a knock out vessel or tank, or utilizing a heat treater for addition of heat, which allows excess water to drop from the oil. Once the oil meets sale specifications, it is sold and transported by truck, rail or pipeline.

Gas Treatment

Some gas treatment systems can be extremely simple, such as gas sent from a separation vessel straight to permitted combustion sources, such as flares, generators or gas disposal wells. The more complex systems utilize equipment to treat the gas to a desired specification for use or sale to a pipeline system. Separation and compression are typically required. Once the gas leaves the separator, it may be compressed to increase the pressure of the gas for treatment. If hydrogen sulfide (H₂S) or other impurities are present, they are removed by scrubbers utilizing a non-



hazardous amine system. The gas is processed at gas plants to remove water and natural gas liquids such as propane, butane and natural gasoline. These natural gas liquids are stored and sold via an adjacent natural gas liquids tanker truck loading facility or sales pipelines. A natural gas liquids loading facility typically consists of tank storage and tanker truck loading racks for delivery to off-site purchasers. Gas is delivered to these facilities via pipelines from the gas processing facilities. Processed gas is then either transported through sales pipelines to sales metering stations to natural gas purchasers, or may be combusted as fuel for gas-fired equipment, or re-injected in oilfield operations for reservoir pressure maintenance.

Gas gathering, gas sales and gas reinjection systems utilize field compressors and pipelines to transport the natural gas to its intended use. Field gas compression facilities typically consist of an electric or natural gas-fired compressor engines. To the extent practicable, existing systems are used. Staging and installation activities would occur on adjacent existing disturbed areas when possible. As gas operations vary over time in the field, relocation of these units is sometimes necessary to optimize gas operations. Natural gas pipelines would be extended along existing rights of way (ROWs) when possible to minimize new disturbances.

Water Treatment

When the water leaves the separator it is sent to a series of vessels, tanks and filters for further treatment. The extent of treatment depends on the water's final disposition. In general produced water would enter a clarifying vessel for further separation of solids or oils, then enter an induced gas flotation unit and pass through a filter unit, to clean the water of oil and solids such as sand. Filtered water may be sent to injection wells for reinjection or disposal, or cleaned and used as a source of water in steam generation. In some areas, treated water can be reused for crop irrigation or groundwater recharge.

Water treatment and disposal facilities consist of pipeline gathering systems to collect and transport produced water removed from oil. Produced water may be treated for subsequent reuse. Different types of facilities are required depending on the final destination of the water. Produced water may be treated and transported to waterflooding or steamflooding plants which supply injection water or steam for EOR operations. Disposal facilities handle produced water not otherwise utilized and transport water via pipeline to wastewater disposal ponds, or to disposal injection wells where the produced water is reinjected into permissive zones, permitted and regulated by the Division of Oil, Gas and Geothermal Resources' (DOGGR) underground injection control program. Some of the water sent to disposal wells is also wastewater generated by other oilfield processes, such as brine regeneration in the water softening system. Produced water may also be transported, via truck, to existing wastewater treatment facilities permitted to receive production water for disposal.

Water treatment facilities may require additional capacity to treat produced water prior for reuse or disposal. This could involve expansion of the existing facilities, and could involve modifications to increase the pumping capacity, pipeline and distribution systems, as well as



converting existing wells from production to injection, or drilling new wells for either EOR purposes or disposal.

Excess produced water that is not injected into disposal wells or used for reinjection may be disposed of in wastewater disposal ponds (also known as percolation or evaporation ponds). These are regulated under Waste Discharge Requirements (WDRs) issued by the Regional Water Quality Control Board (RWQCB). The ponds must be maintained in good condition and in accordance with the conditions and monitoring program established in the WDR. The ponds may require periodic renovation to restore their percolation capabilities, by dredging out the ponds bottoms and restoring the original grade of the ponds.

Pipelines

Pipeline installation activities include new construction and maintenance of pipelines, access roads, related support facilities (e.g., aerial and ground markers, spans, meter sites, etc.), storage tanks, valve stations, regulators, and compressor stations. The majority of new pipelines (water, oil, natural gas, natural gas liquids, steam, etc.) are installed above ground. Existing dirt roads and utility corridors are utilized, where possible, for construction staging and layout, to minimize additional disturbance. Permanent disturbance will occur from sleepers, pipe racks and any new access roads that may need to be constructed.

Whether above or below ground, the construction process generally involves clearing with a motor grader, trenching with excavators or trenchers, shoring (as appropriate), delivery of pipe, unloading, pipe laying with excavators or cranes, pipe zone backfill with a front-end loader, trench backfill with a rubber-tired loader or bulldozer and final grading with motor grader. Appropriate exclusionary measures are installed to exclude animals from the construction area. Below ground pipelines will generally leave no permanent disturbance other than new access roads that may need to be constructed. However, below ground pipelines create more temporary disturbance than above ground installations. Cathodic devices typically are installed and maintained to protect pipelines from corrosion as a result of low pipe to soil electrical potential.

For excavation, repair or replacement of transmission lines, a width of 100 feet or less is typically required for pipelines. Equipment may include a crane, backhoe, flatbed trucks, welding equipment, pickup trucks, and a number of personnel. The project duration varies with the length and size of the transmission line being replaced or repaired.

Storage Facilities

Various sizes of tanks typically are utilized to store oil prior to off-site transport. Such storage facilities can range in size from small to large tank arrangements with supportive piping and conveyance facilities.

Construction/installation of new tank settings may be required to handle oil, gas and water separation in areas where it is not practical to utilize existing infrastructure. Discovery of untapped reservoirs, in relatively undeveloped areas, could require the installation of new



facilities or the relocation of an existing facility. A typical field tank setting results in temporary and permanent disturbances of varying extent, depending on facility needs and site circumstances. Site preparation activities would include clearing and grading, construction of the tanks, piping, containment system, monitoring and pollution control equipment, extension of utilities to the facility, and extension of pipeline distribution systems to the facility. Modifications, repairs, or replacement of existing tank settings may also be required from time to time to improve separation efficiency.

Pipeline, Tank and Vessel Testing

Pipelines, tanks, and vessels are hydrostatically tested with fresh water to meet regulatory pressure requirements. Pigging is usually done to clean and maintain pipelines. Fluid disposal complies with the requirements of the RWQCB. The hydrotest water can be stored in tanks, released in sumps or collected for transport to existing wastewater disposal facilities. Other types of non-destructive testing include radiography, ultrasonic testing, and electromagnetic testing. These methods are used to monitor thickness of pipe walls or coatings, identify cracks in joints, welds or pipeline components, or detect other defects and anomalies. These methods identify areas of potential weakness in the distribution system that has been created by corrosion, erosion or stress. Corrective action is taken to repair areas identified that have compromised integrity.

Spill Prevention, Response and Remediation

In compliance with U.S. Environmental Protection Agency (EPA) Spill Prevention Control and Countermeasures (SPCC) requirements and DOGGR facilities regulations, secondary containment structures would be constructed around tanks, chemical containers, etc. to ensure that oil or chemicals are not discharged into natural drainage ditches and the environment. Corrugated pipe filled with concrete, concrete berms, and earthen berms are typically used and are designed and constructed to contain a minimum of 110% of the volume of the largest tank that is located within the facility. Periodic inspections of secondary containment berms would be conducted to ensure that the integrity has not been compromised, and maintenance work is conducted as necessary.

Oil spill prevention and cleanup measures are required at bulk storage tanks, facility transfer operations, loading and unloading racks, production facilities, and oil drilling facilities. Mechanical containment, chemical and biological methods, and physical methods are used. Some spills can require minimal efforts to remediate (i.e., managed with shovels), however, larger spills may require mobilization of heavy equipment, construction of berms, and excavation of contaminated soils. All of the related oil spills prevention measures and the cleanup plans must be in accordance with EPA and DOGGR regulations.

Releases from unplanned events, such as power outages, wildfires, extreme weather, etc., equipment failures and emergencies have the potential for impacting the environment during and after the response to the release. In addition, unknown contaminated sites, either related or not related to oil and gas activities, could be discovered that would require investigation, characterization and remedial action. Remedial activities normally involve site sampling to



characterize the magnitude and extent of the contamination. Risk-based corrective measures are then developed, and contaminants such as hydrocarbons or other chemicals above action levels would be excavated, removed from the site and properly disposed of. Environmental restoration could also be required at some locations that were heavily impacted.

Waste Management

Non-hazardous wastes such as wood, metal equipment parts, damaged tools, construction debris, and other refuse associated with field operations may be collected at specially permitted in-field solid-waste-transfer stations or disposed of in on-site permitted facilities. These stations consist of containers where waste is collected for transfer to the Kern County landfills or other approved sites.

Land farms accept non-hazardous materials. Daily operations at these land farms include, but are not limited to, the discharge and spreading of the above biodegradable non-hazardous wastes. Other activities within or adjacent to the pre-disturbed land farms area might include (1) vacuum truck washouts and sumps; (2) portable tank staging; and (3) drainage control grading maintenance.

Septic Tank and Leach Field Systems

Existing septic systems are maintained by pumping on a regular schedule by approved septic pumper subcontractors. The wastes are hauled off site to an approved disposal site. Repairs to existing septic systems or installation of new systems require a building permit from the Kern County Building Department. Septic systems must comply with the Uniform Plumbing Code unless the system size/soil conditions require an engineered septic system. Engineered septic systems are designed by a civil engineer and plans are submitted to Kern County Building Department for approval.

Access Roads

If an existing road cannot be used, a new road would be extended from adjacent existing roads. With the exception of exploratory wells, most wells do not require the construction of a new road. The extension of an existing road up to several hundred feet would be typical. Both the roadbed and shoulder areas may be maintained to provide a smooth surface and adequate drainage. Repairs will occur as needed to correct normal wear and tear or storm damage such as culvert repairs and replacements.

Transmission Lines

Activities associated with transmission lines (i.e., communication, electricity, oil, natural gas, natural gas liquids, steam, and water lines) include the installation, use, maintenance, modification, repair, replacement and removal of subsurface, surface and above-ground transmission lines. Switching and transformer facilities are also typical oilfield infrastructure to manage electrical distribution facilities.



Extending existing electric transmission lines to provide a permanent supply of electricity to a new well pad or facility is sometimes required. Since a new power line ties into an existing transmission line, these activities generally occur in previously disturbed areas and along existing ROWs or roads. Electric transmission line extensions consist of the installation of new power poles, and may include cross-country vehicular travel for power pole installation.

Fencing

Installation, maintenance and repair of fencing will be needed from time to time to provide for security, health and safety, as well as for environmental protection to prevent unauthorized access that could cause habitat disturbance, such as illicit off-highway vehicle activity. Various types of fences are utilized. Use of existing roads and some off-road travel is required to access the perimeter fence or for the installation of a new one.

Vegetation Control

Vegetation along roadsides and critical facilities such as tank settings and compressor stations is controlled as needed through the use of mowing, grading, weed-whacking, and spot treatments of herbicides approved by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW). This activity typically occurs in previously disturbed sites. Application of herbicides to prevent re-growth of vegetation in and around facilities is limited and only certified applicators and licensed firms are used.

Plugging and Abandonment, and Decommissioning

Wells undergo plugging and abandonment once they can no longer perform their intended purpose and are no longer otherwise needed. Idle wells that are not yet plugged and abandoned must also be maintained in compliance with DOGGR regulations.

In decommissioning a formerly producing oil well, equipment such as pumping units, well cellars, pipelines, and other associated infrastructure will be disassembled and salvaged or appropriately disposed of. Plugs of cement are placed across specified intervals in the well casing to isolate oil and gas zones and to prevent degradation of useable waters. The well casing is cut off below the surface, sealed with a cement plug and a steel plate is welded across the top of the casing. The well pad location is then restored to grade and allowed to revegetate. Typical construction equipment such as bulldozers, motor graders, front end loaders, cement and dump trucks, and well workover rigs are utilized to accomplish this work. Work is typically restricted to the pre-disturbed areas of the well pad, but some well plugging and abandonments require expansion of the existing well pads to accommodate equipment. Re-abandonment of a well may be required when there is evidence that the original plugging abandonment no longer retains its integrity.

Facilities such as tank farms, valve stations, or pipelines that are no longer needed for operations are dismantled and removed. The length of time necessary to decommission a facility depends on the size.



Two types of sumps are used in typical oil field operations, drilling and operational. Their respective uses are described below. In both cases, they are closed when they are no longer required:

- 1) Drilling sumps are utilized to store drilling fluids and cuttings, collectively known as “drilling muds”, which are produced during drilling operations and subsurface investigations. Drilling sumps are typically located near the well pad and can vary in size, depending on the depth of the well. The disposal of drilling muds to land is covered under the SWQCB State General Order 2003-0003-DWQ for low threat discharges to land and requires sumps covered under this order to be constructed in uncontaminated soils. The drilling muds are non-hazardous and do not contain halogenated solvents. Drilling muds must first be dried prior to back-filling, and the bottom of the sump must be at least 5 feet about groundwater levels. Drilling sumps must be restored to pre-construction state within 60 days of completion or abandonment of a well.
- 2) Operations sumps are utilized to store fluids and cuttings, which are produced during operational well workover activities. Operations sumps can range from small pits located next to the well, to centralized sumps which collect workover fluids at the well site and for transfer to centralized sumps for processing. In accordance with DOGGR AB 1960 regulations, fluids from operational sumps must be removed from the sump within 14 days of completion of workover activities.

Cathodic protections systems such as sacrificial anode beds or deep cathodic protection wells are located throughout Kern County oil fields. Eventually these systems become depleted over time and no longer function. When these systems are no longer functional, the cathodic protection wells must be properly abandoned to protect the environment. Kern County Ordinance G-5006 regulates abandonment of deep cathodic protection wells (>50 feet) and permits to abandon these wells are obtained from the Kern County Environmental Health Services Division. Abandonment activities include those actions typically associated with plugging and abandonment of an oil well and site restoration.

1.4 Relationship to California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR)

All California oil and gas wells (development and prospect wells), enhanced-recovery wells, water-disposal wells, service wells (i.e. structure, observation, temperature observation wells), core-holes, and gas-storage wells, onshore and offshore (within three nautical miles of the coastline), located on state and private lands, are permitted, drilled, operated, maintained, plugged and abandoned under requirements and procedures administered by the Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR). Prior to drilling, reworking, deepening, permanently altering the well casing, or plugging and abandoning an oil, gas, or service well in California, a Notice of Intention for the proposed activity must be filed with the appropriate DOGGR district office and approval received from the district deputy. A



notice is required for development wells, prospect wells, core holes or structure wells, enhanced-recovery or water-disposal wells, and gas-storage wells.

Under the proposed amendment, DOGGR would still retain its permitting authority over oil and gas wells; however for purposes of CEQA, DOGGR will be a responsible agency for oil and gas development activities carried out in Kern County pursuant to the amended ordinance and the new Oil and Gas Conformity Review process. As such, following certification by Kern County, DOGGR will rely on the EIR in processing Notices of Intention for wells proposed for Kern County, except in those specific circumstances when CEQA requires otherwise.

1.5 Project Objectives

The County has defined the following objectives for the project:

- Revise the County's Zoning Ordinance to reflect ongoing activities within its boundaries, changes in laws and regulations by outside agencies, and technological advancements within the Oil and Gas Industry for the purpose of reducing or eliminating potential significant environmental impacts, to the extent feasible, by ensuring that current County regulation reflects the County's interest in protecting the health, safety and general welfare of residents and visitors.
- Encourage economic development that creates quality, high paying jobs and promotes capital investment in Kern County which enables the County to invest in capital improvement projects and social programs, which benefit County residents, retail businesses, and capital industries which ensures the County's fiscal stability.
- Continue Kern County's ongoing commitment to consult and cooperate with Federal, State, regional and local agencies by periodically reviewing adopted regulations to ensure the long-term viability of Kern County's resources.
- Continue to improve and streamline current energy regulations and increase county monitoring and involvement in State and Federal energy legislation.
- Protect areas of important mineral, petroleum, and agricultural resource potential for future use by promoting sustainability and encouraging best management practices, which are mutually beneficial, through strategic short and long range planning.
- Ensure the protection of environmental resources by emphasizing the conservation of productive agricultural lands, the encouragement of planned urban growth, the promotion of clean air strategies to address existing air quality issues, and the promotion of long-term water conservation strategies which will ensure the quality and adequacy of surface and groundwater supplies for future growth of all of Kern County's industries.
- Contain new development within an area large enough to meet generous projections of foreseeable need but in locations that will not impair the economic strength derived from residential developments, agriculture, rangeland, mineral resources, or diminish the other amenities that exist in Kern County.



The project proponents have defined the following objectives for the project:

- Create an effective regulatory and permitting process for gas and oil exploration and production that can be relied on by the County of Kern, as well as the California Department of Oil, Gas and Geothermal Resources and other responsible agencies.
- Achieve an efficient and streamlined environmental review and permitting process for all oil and gas operations covered by the proposed project and the accompanying environmental impact report.
- Provide for economically feasible and environmentally responsible growth of the Kern County oil and gas industry.
- Develop industry-wide best practices, performance standards and mitigation measures that ensure adequate protection of public health and safety and the environment.
- Increase gas and oil exploration and production in Kern County as a means of reducing California's dependence upon foreign sources of energy.
- Increase gas and oil exploration and production in Kern County as a means of increasing employment opportunities and economic prosperity to Kern County's residents, businesses, and local government.

1.6 Proposed Discretionary Actions/Required Approvals

Consideration and implementation of the proposed amendment to Title 19 Kern County Zoning Ordinance focused on Chapter 19.98 (Oil and Gas Production) of the Kern County Zoning Ordinance will require certain discretionary actions and approvals including, but not limited to, the following:

- Consideration and certification of a Final Environmental Impact Report with appropriate findings and Mitigation Measures Monitoring Program at a hearing by Planning Commission with recommendations forwarded to the Kern County Board of Supervisors for action.
- Consideration and approval at a duly noticed public hearing by the Kern County Board of Supervisors of the proposed project, including Amendments of text and exhibits for Title 19 of the Kern County Zoning Ordinance and the reasonably foreseeable development pursuant to the amended ordinance.

Future oil and gas development activities will require approvals from a variety of agencies, who will be CEQA responsible or trustee agencies in this environmental review process. The specific responsible agencies may vary, depending upon the nature of the planned activity, location and the resources implicated by the well or other facility or activity. A preliminary list of potentially responsible and trustee agencies are listed below. The list will be refined through the scoping process.



Agency	Permits and Other Approvals
Division of Oil, Gas and Geothermal Resources (DOGGR)	<ul style="list-style-type: none">• NOI for all types of well permits
San Joaquin Valley Air Pollution Control District (SJVAPCD)	<ul style="list-style-type: none">• Air quality permits to construct and operate
California Regional Water Quality Control Board (RWQCB)	<ul style="list-style-type: none">• Construction General Permit• Clean Water Act 401 Water Quality Certification
California Department of Fish and Wildlife (CDFW)	<ul style="list-style-type: none">• Section 1600 Lake or Streambed Alteration Agreement(s)• Section 2081 State Incidental Take Permit

Finally, in some locations, federal agencies such as the Bureau of Land Management (BLM) and the US Fish and Wildlife Service (USFWS) may have permitting or other approval authority.



2.0 KERN COUNTY ENVIRONMENTAL CHECKLIST FORM

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

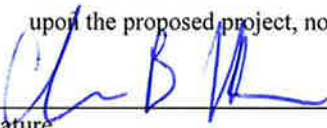
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “potentially significant impact” as indicated by the Kern County Environmental Checklist in Chapter 3.

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology and Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology and Water Quality |
| <input checked="" type="checkbox"/> Land Use and Planning | <input checked="" type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Population and Housing | <input checked="" type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation and Traffic | <input checked="" type="checkbox"/> Utilities and Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

2.2 DETERMINATION

On the basis of this initial evaluation:

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



 Signature

August 30, 2013

 Date

Christopher Mynk, AICP, Supervising Planner

 Printed Name

 For



3.0 EVALUATION OF ENVIRONMENTAL IMPACTS

The Initial Study Checklist provided below notes the County's preliminary assessment regarding the potential for a significant or potentially significant adverse impact to occur from implementation of proposed amendments to Title 19 of the Kern County Zoning Ordinance, and are intended to help inform comments on the proposed scope of the EIR. All topics identified in Appendix G of the *State CEQA Guidelines* and further refined by the adopted *Kern County CEQA Guidelines* are anticipated to be addressed in the EIR, including those determined to result in no significant adverse impacts.

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. Negative Declaration: “Less than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less-than-Significant Impact.” The lead agency must describe the mitigation measure and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration, Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Incorporated,” describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.



8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to a less-than-significant level.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
3.1 AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

- a. A variety of land uses occur within the Project Boundary Area, including agricultural production, exploration and decommissioning activities, active oil fields, roads, renewable energy and transmission projects residential industrial and commercial uses. Similarly, the aesthetic features of the existing visual environment in the area are varied with agricultural and oil production/extraction equipment or urban development dominating the landscape. As such, there are no unique aesthetic features, identified scenic vistas, or designated scenic highways in the project vicinity (see also Item [b], below). Portions of Project Boundary Area contain extensive petroleum-related facilities, while other areas have relatively few. In the portions of the Project Boundary Area that do not currently contain many petroleum-related facilities, the proposed project could substantially change the visual landscape. In views from local roads and dispersed rural residences, the massing and scale would appear large enough that the facilities would attract viewer attention and contrast with its surroundings. Of additional concern are oil and gas developments located within the viewshed of local communities. While no scenic vistas have been identified, impacts on scenic vistas will be discussed in the EIR.

- b. Construction of the new oil and gas exploration and production facilities could alter views from public roads. However, according to the California Department of Transportation's (Caltrans') California Scenic Highway Mapping System, there are no State Scenic Highways or scenic resources in the Project Boundary Area. The closest section of highway that would be eligible for State Scenic Highway designation are portions of State Routes 14 and 58 which are located many



miles to the east. Nonetheless, impacts on scenic resources or a State scenic vista will be discussed further in the EIR.

- c. Portions of the area within the boundary of the Project Boundary Area contain extensive petroleum-related facilities, while other areas have relatively few. In the portions of the Project Boundary Area that do not currently contain many petroleum-related facilities, the proposed project could substantially change the visual landscape. In views from local roads and dispersed rural residences, the massing and scale would appear large enough that the facilities would attract viewer attention and contrast with its surroundings. Of additional concern are oil and gas developments located within the viewshed of local communities. This impact would be potentially significant and will be addressed in the EIR.
- d. Drilling operations are conducted 24 hours a day because of their complexity and associated hazards with leaving a well in the process of being drilled unattended. For drilling operations, night-time lighting impacts would be short-term at any one location. Nighttime lighting of existing facilities, for security purposes, would also be required. Impacts associated with the alteration of project night-lighting and glare in areas of existing petroleum production activities, or in new areas within the oilfields could be potentially significant and will be addressed in the EIR.



Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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3.2 AGRICULTURE AND FOREST RESOURCES.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:

- | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act Contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15205(b)(3) Public Resources Code)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Discussion:

- a. According to the California Department of Conservation's Farmland Mapping and Monitoring Program, existing oil and gas activities within the Project Boundary Area are located within areas that have been classified as Prime Farmland, Unique Farmland, and/or Farmland of Statewide Importance. Oil and gas exploration and production activities, and associated facilities could result in the conversion of important farmlands to non-agricultural use. These impacts are considered potentially significant and will be analyzed in the EIR.
- b. As currently allowed in Zoning Ordinance, Oil and gas exploration and development activities are permitted uses in both the A (Exclusive Agriculture District) and A-1 (Limited Agriculture District) zones. Therefore, impacts related to agricultural zoning are not anticipated. Within Kern County, 1,459,996.5 acres are currently under a Williamson Act contract and 143,695 acres are under a Farmland Security Zone contract. Portions of the Project Boundary Area are being farmed or are under Williamson Act land use contracts. Oil and gas operations are allowed within an Agricultural Preserve, as specified under the uniform rules adopted by the Board of Supervisors. Impacts are not likely to occur, however, this issue will be analyzed in the EIR.
- c-d. No forestlands exist on within the project area. Accordingly, the project would not conflict with existing zoning for or cause the rezoning of forestland, timberland, or timberland that has been zoned for timberland production. While no impacts on forestland or the conversion of forestland to non-forest use are expected, this issue will be addressed in the EIR.
- e. It is not anticipated that the project will involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use; however, future well pad foot prints and non-uniform pipe and utility infrastructure layout within existing farmland will be evaluated in the EIR.
- f. Numerous parcels within the Project Boundary Area are presently under Williamson Act land use contracts. Future oil and gas exploration and production activities could result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or a Farmland Security Zone Contract for any parcel of 100 or more acres (Public Resources Code Section 15206(b)(3)). Impacts to lands that are under Williamson Act land use contracts are considered potentially significant and will be analyzed in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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3.3 AIR QUALITY.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- | | | | | | |
|----|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. | Conflict with or obstruct implementation of the applicable air quality plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. | Violate any air quality standard as adopted in (c) i or (c) ii, or as established by EPA or air district or contribute substantially to an existing or projected air quality violation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? Specifically, would implementation of the project exceed any of the following adopted thresholds: | | | | |
| i. | San Joaquin Valley Unified Air Pollution Control District: | | | | |

Operational and Area Sources

- | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Reactive organic gases (ROG)
10 tons per year. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Oxides of nitrogen (NO _x)
10 tons per year. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Particulate matter (PM ₁₀)
15 tons per year. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Stationary Sources - as Determined by District Rules

- | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Severe nonattainment
25 tons per year. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Extreme nonattainment
10 tons per year. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
ii. Eastern Kern Air Pollution Control District.				
<u>Operational and Area Sources</u>				
Reactive organic gases (ROG) 25 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Oxides of nitrogen (NO _x) 25 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Particulate matter (PM10) 15 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Stationary Sources – as Determined by District Rules</u>				
25 tons per year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

a. The project would be located within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD), in the San Joaquin Valley Air Basin (SJVAB). The SJVAB is classified by the State as a severe nonattainment area with respect to the 1-hour ozone standard as well as a nonattainment area for the State standards pertaining to particulate matter less than 10 microns (PM₁₀) and particulate matter less than 2 ½ microns (PM_{2.5}). In addition, the SJVAB is classified as an extreme nonattainment area for the Federal 8-hour ozone standard, a nonattainment area for the Federal PM_{2.5} standard, and an attainment/maintenance area for the Federal carbon monoxide (CO) and PM₁₀ standards.

Project construction activities would generate ozone precursor (i.e., oxides of nitrogen [NO_x] and reactive organic compounds [ROC]) emissions as well as CO, PM_{2.5}, and PM₁₀ emissions that could result in significant impacts on regional air quality. Emissions sources would include heavy equipment used for excavation and grading, cranes, drilling rigs and on-road motor vehicles for equipment and material deliveries as well as construction workers' vehicles. Long-term maintenance and operational activities are other emissions sources. Grading and activities on unpaved roads would contribute to fugitive PM₁₀ and PM_{2.5} emissions. This impact is potentially significant. Further analysis of air quality impacts is warranted to determine whether the project would conflict with or obstruct implementation of the applicable plans for attainment and, if so, the reasonable and feasible mitigation measures that could be adopted to reduce such impacts. These issues will be evaluated in the EIR.



- b. Short-term construction emissions could contribute significantly to an existing or projected SJVAPCD air quality violation of CO, PM₁₀, PM_{2.5}, or ozone standards, requiring the consideration of mitigation measures. This impact is potentially significant and will be evaluated further in the EIR.
- c. The project is located within the jurisdictional boundaries of SJVAPCD. The SJVAB is classified by the State as a severe nonattainment area with respect to the 1-hour ozone standard as well as a nonattainment area for the State standards pertaining to PM₁₀ and PM_{2.5}. In addition, the SJVAB is classified as an extreme nonattainment area for the Federal 8-hour ozone standard, a nonattainment area for the Federal PM_{2.5} standard, and an attainment/maintenance area for the Federal CO and PM₁₀ standards.

SJVAPCD rules and regulations would apply to all project activities within the SJVAPCD. Construction and operational emissions will be analyzed in the EIR as well as long-term operational emissions. Some construction personnel may commute from outside the SJVAB. Cumulative contributions of emissions to the SJVAB are considered potentially significant and will be evaluated further in the EIR.

- d. Sensitive receptors, including, but not limited to numerous schools and residences are located throughout the Project Boundary Area. Construction-related activities would result in diesel exhaust and fugitive dust emissions that could adversely affect air quality for sensitive receptors. Mitigation measures recommended by SJVAPCD for diesel equipment and dust control will be evaluated as part of the EIR to avoid or reduce impacts; however, this impact is considered potentially significant and will be evaluated in the EIR.
- e. Several compounds associated with the oil and gas industry can produce nuisance odors. Sulfur compounds, found in oil and gas, have very low threshold levels and many volatile compounds found in oil and gas typically have petroleum or gasoline odor. In addition, vehicle/equipment exhaust and fueling can also produce odors. Therefore, the potential to create objectionable odors is considered potentially significant and will be evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.4 BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Discussion:

a-f. The Project Boundary Area is located in the San Joaquin Valley and hosts a variety of sensitive resources including several listed as threatened or endangered at the state or federal level. Fourteen plant and 11 special-status animal species are currently listed as Covered Species in the Draft Valley Floor HCP. Several conservation programs or mitigation requirements have been approved or proposed to comply with State and federal Endangered Species laws including the issuance of incidental take coverage through habitat conservation plans, federal Section 7 Consultations, Biological Opinions and mitigation measures that are a part of CEQA and NEPA environmental documents.

Under the proposed amendment to the Zoning Ordinance, oil and gas exploration and production activities could take place in areas within the boundaries of an approved HCP. The following HCPs have been approved for portions of the Project Boundary Area:

- Arco Western Energy HCP;
- Kern Water Bank HCP developed by the Kern Water Bank Authority;
- Kern County Waste Management Department HCP;
- Metropolitan Bakersfield HCP;
- Occidental of Elk Hills HCP;
- San Joaquin Field Division Aqueduct HCP; and,
- Torch Operating/Nuevo Energy HCP (now operated by Freeport-McMoRan Oil & Gas [FM O&G])

In addition, the Valley Floor HCP is under development, and may be finalized prior to certification of the EIR for the proposed project.

Under the proposed amendment to the Zoning Ordinance, oil and gas exploration and production activities could take place in designated zoned areas within the boundaries of the Project Boundary Area. The Draft Valley Floor HCP, which boundaries are closely aligned with the proposed project, includes three habitat zones, with the two most important classifications for conservation designated as Red and Green Zones, and areas of lowest value designated as White Zones. White Zones are areas with limited habitat value, either because they are currently used for intensive land uses, such as agriculture or are scattered and isolated in distribution. The Draft Valley Floor HCP also includes an Oil Zone. The Oil Zone currently comprises areas of high intensity oil and gas use, and occurs within all three habitat zones (Red, Green and White) and therefore includes a variety of land uses, vegetation types, and thus habitat.

Impacts could result from activities related to oil and gas exploration and extraction, as well as potential impacts associated with typical hydraulic fracturing activities could occur anywhere within the HCP boundaries based on location of biological resources. Future development could also conflict with the land conserved for or protected by the proposed Valley Floor Habitat Conservation Plan (HCP), Metropolitan Bakersfield HCP, and other HCPs in the area. These



impacts are considered potentially significant and will be discussed in the EIR. The EIR will assess impacts on known resources including protected wetlands, riparian areas and streams; impacts on resources that may occur in the HCP area in the future (e.g., foraging or nesting raptors); and impacts on landscape-level resources, such as wildlife corridors that could provide interconnectivity between existing higher value Red Zone habitats. The EIR will also evaluate potential conflicts with regulatory policies or procedures for protection of biological resources.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.5 CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

a-d The potential for impacts on historical, prehistoric and paleontological resources is considered potentially significant. Therefore, the EIR will more thoroughly address this issue. The EIR will set forth research criteria and report content needed to enable a project-level evaluation of resource occurrence and possible significant impacts on sensitive historic and prehistoric cultural resources.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.6 GEOLOGY AND SOILS.				
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Discussion:

- a. i. Primary ground rupture is ground deformation that occurs along the surface trace of the causative fault during an earthquake. According to the geotechnical data available, the San Andreas fault is located within the Project Boundary area and is the major tectonic boundary between the Pacific and North American plates. Other major faults within the San Joaquin Valley include the Pond Poso fault and the White Wolf fault. There are no Alquist-Priolo Earthquake Fault Zones within the project area or at the offsite substation site. Adverse impacts from fault rupture are considered potentially significant and will be evaluated in the EIR.
- ii., iv The San Joaquin Valley is in a seismically active region that could be subject to future seismic shaking during earthquakes generated by any of several surrounding active faults. Major faults within the San Joaquin Valley include the San Andreas fault, the Pond Poso fault and the White Wolf fault. There are no Alquist-Priolo Earthquake Fault Zones within the project area. The entire County is located in Seismic Zone 4, which is a designation previously used in the Uniform Building Code (UBC) to denote areas with the highest risks from earthquake ground motion. As a result, the project could be subject to future seismic shaking and strong ground motion resulting from seismic activity, and could expose people to potential adverse effects. Impacts related to exposing people or structures to potential substantial adverse effects from strong seismic ground shaking are considered potentially significant and will be addressed in the EIR.
- iii. Liquefaction is a phenomenon whereby, during periods of oscillatory ground motion caused by an event such as an earthquake, the pore water pressure in a loose, saturated granular soil and some fine-grained soils increases to the point where the effective stress in the soil is zero and the soil loses a portion of its shear strength (initial liquefaction). Structures built on or above potentially liquefiable soils may experience bearing-capacity failures, vertical settlement (both total and differential), and lateral displacement (due to lateral spreading of the ground). The factors known to influence liquefaction potential include soil characteristics (particle-size distribution, plasticity, water content), relative density, presence or absence of groundwater, stress tensor (effective confining stresses, shear stress), and the intensity and duration of the seismic ground shaking. The granular soils most susceptible to liquefaction are loose, saturated sands and nonplastic silty soils located below the water table. Seismically induced settlement may occur as a result of liquefaction and when relatively soft or loose soils are made dense during earthquake shaking. Subsurface conditions that are susceptible to this hazard occur where loose or porous poorly cemented soils or soft bedrock occur near the ground surface. Impacts related to seismically related ground failure and landslides are considered potentially significant and will be addressed in the EIR.
- b. Stormwater runoff from future oil and gas exploration and production activities has the potential to result in soil erosion and discharge of eroded soil and construction-related fluids and materials from the site. For example, vegetation clearing and grading could result in exposed or stockpiled soils that would be susceptible to stormwater runoff and wind forces. In addition, the presence of construction and equipment maintenance related fluids and materials may lead to stormwater runoff contamination. The State Water Resources Control Board regulates certain construction activities (high erosivity areas with greater than 1 acre of disturbance) with the potential to impact



waterways by requiring the Operator to obtain a National Pollutant Discharge Elimination System (NPDES) General Construction Permit and implementation of a stormwater pollution prevention plan (SWPPP). The SWPPP would specify BMPs to minimize stormwater runoff of sediments and construction/equipment maintenance fluids and materials

Implementation of permit and BMP requirements would mitigate impacts related to soil erosion during construction. Larger vegetation, such as bushes and shrubs, would be removed during initial site preparation and maintained at a minimal size during project operation. In addition, the well operators may be required to prepare a drainage plan for each well to ensure that existing drainage patterns are maintained during operation and that substantial erosion or a loss of topsoil does not occur. Depending on certain factors (soil type, rainfall, erosivity), impacts associated with soil erosion and loss of topsoil could be considered potentially significant and will be addressed in the EIR.

- c. Collapsible soils are those that undergo settlement upon wetting, even without the application of additional load. The process of collapse with the addition of water is known as hydrocompaction. Hydrocompaction occurs when water weakens or destroys the bonds between soil particles and severely reduces the bearing capacity of the soil. Typical collapsible soils are lightly colored and low in plasticity. They also have relatively low densities. Collapsible soils are typically associated with alluvial fans, windblown materials, or colluvium. Impacts related to collapsible soils are considered significant and will be addressed in the EIR.

The extraction of water or petroleum from sedimentary source rocks can cause the pore space to collapse. The compaction of subsurface sediments as a result of fluid withdrawal could cause subsidence on the surface. If the volume of removed water or petroleum is large enough, the resulting subsidence could damage nearby structures. Significant quantities of petroleum are being extracted within the project boundaries through directional drilling. Therefore, impacts related to subsidence may occur or pose a significant hazard for the site or surrounding area. This issue will be further discussed in the EIR.

- d. Many of the soils found on the project area have high clay content; clay-based soils are known for their propensity to expand and contract drastically with changes in moisture level. A more detailed study of these soils is required to make a final determination of their expandability. This impact is potentially significant and will be addressed in the EIR.
- e. Future oil and gas exploration and production activities could result in a need for temporary housing for workers. This increase in residential structures could have an impact on soils incapable of adequately supporting the use of septic tanks. Wastewater disposal from temporary housing and from oil and gas production activities could also potentially cause adverse impacts to soils and soil stability. All new septic system installations require permitting from the County and such impacts are restricted; nonetheless, this impact will be discussed further in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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3.7 GREENHOUSE GAS EMISSIONS.

Would the project:

- | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a. Greenhouse gases (GHGs) emitted by human activity are implicated in global climate change or global warming. The principal GHGs are CO₂, methane, NO_x, ozone, water vapor, and fluorinated gases. The transportation sector (e.g., on-road motor vehicles, off-highway vehicles, aircraft) is the single largest source of GHG emissions and accounts for one-half of GHG emissions globally. Short-term greenhouse gas emissions from construction could come from construction equipment, construction support vehicles, material truck trips, and worker vehicle trips. With respect to the proposed potential future development’s operations, due to the drilling and new equipment and the increase in operations of the existing equipment, direct emissions of greenhouse gases would likely increase. The direct greenhouse gases emissions would come from combustion of natural gas and diesel fuel (producing greenhouse gas emissions of CO₂ and CH₄), as well as from fugitive emissions (a component of fugitive emissions is methane, CH₄). Indirect emissions associated with electrical generation and with worker and truck transportation offsite would also likely increase over current levels. Potentially significant impacts related to GHG emissions will be evaluated further in the EIR.
- b. California has passed several bills and at least three executive orders have been signed regarding GHGs. Assembly Bill 32 (the Global Warming Solutions Act) was passed by the California legislature on August 31, 2006. It requires the State’s global warming emissions to be reduced to 1990 levels by 2020. The reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in.

In 2002, California established its RPS program, with the goal of increasing the percentage of renewable energy in the State’s electricity mix to 20% by 2017. In 2006, under Senate Bill 107, the RPS program codified the 20% goal. The RPS program requires electric utilities and providers to increase procurements from eligible renewable energy resources by at least 1% of their retail sales annually until they reach 20%. On November 17, 2008, then-governor Schwarzenegger signed Executive Order S 14-08, requiring California utilities to reach a



renewable goal of 33% by 2020. GHG emissions and the project's consistency with applicable plans, policies, and regulations adopted to reduce GHGs will be evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.8 HAZARDS AND HAZARDOUS MATERIALS.				
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within the adopted Kern County Airport Land Use Compatibility Plan, would the project result in a safety hazard for people residing or working in the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



intermixed with wildlands?

- i. Would implementation of the project generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste?

Specifically, would the project exceed the following qualitative threshold:

The presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the project is significant when the applicable enforcement agency determines that any of the vectors:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ii. Are associated with design, layout, and management of project operations; and	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Disseminate widely from the property; and	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Cause detrimental effects on the public health or well being of the majority of the surrounding population.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

- a.-c. Future oil and gas exploration and production activities could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; and emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. These impacts are considered potentially significant and will be addressed further in the EIR.
- e.-f. There are several small private airstrips and local airports within the Project Boundary Area. In addition, the Project Boundary Area is located within the Kern County Airport Land Use Compatibility Planning Area. Proximity to private air strips and potentially significant safety hazards will be addressed in the EIR.



- g. The project would generate construction trips and the potential for roadway lane closures exists, which could temporarily affect an emergency an emergency response or evacuation plan. This impact is considered potentially significant and will be addressed in the EIR.
- h. Future oil and gas exploration and production activities are not expected to expose people or structures to significant risks involving wildland fires because the area within which the activities would occur is not adjacent to wildlands, and would not cause residences to be intermixed with wildlands. There would be no impact. However, issue will be addressed in the EIR.
- i. Future oil and gas exploration and production activities are not expected to result in the generation of vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste. However, this issue will be addressed in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.9 HYDROLOGY AND WATER QUALITY.				
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a federal flood hazard boundary or flood insurance rate map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Contribute to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- a. The construction of future oil and gas exploration and production facilities could potentially fail to comply with water quality standards or waste discharge requirements. The potential to create substantial erosion and siltation or violate any water quality standards or waste discharge requirements is considered significant and will be discussed in the EIR.
- b. The construction of future oil and gas exploration and production facilities could potentially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Some current operations utilize a technique of making available excess produced water to use in agricultural operations, which may minimize impacts to local groundwater tables; however, this impact is considered potentially significant and will be addressed in the EIR.
- c. The construction of future oil and gas exploration and production facilities could potentially result in alteration of drainage patterns and lead to substantial erosion and siltation. The potential to create substantial erosion and siltation is considered significant and will be discussed in the EIR.
- d. The construction of future oil and gas exploration and production facilities could potentially result in alteration of drainage patterns and lead to flooding. The potential to create flooding is considered significant and will be discussed in the EIR.
- e. There are no stormwater drainage systems in the agricultural areas under consideration. It is not considered likely that future oil and gas exploration and production activities would create or contribute sufficient runoff water such that the capacity of existing stormwater drainage systems would be exceeded. Nonetheless, this impact is considered potentially significant and will be addressed in the EIR.



It is possible that the development of the future oil and gas exploration and production activities would be likely to contribute substantial amounts of additional pollutants to runoff. Therefore, this issue will be addressed from a cumulative perspective, and the possible effects to both surface and groundwater quality will be addressed in the EIR.

- f. It is possible that the future oil and gas exploration and production activities could substantially degrade water quality. Therefore, this issue will be addressed from a cumulative perspective, and the possible effects to both surface and groundwater quality will be addressed in the EIR.
- g. The proposed project does not anticipate the placement of housing within a 100-year floodplain (Title 17.48 [Floodplain Management] of the Kern County Ordinance Code). The future oil and gas exploration and production activities are not housing projects and would not result in significant residentially related flood impacts. This impact is considered no impact; however it will be discussed further in the EIR.
- h. Future oil and gas exploration and production activities could be located in areas mapped by the Federal Emergency Management Agency (FEMA) and could be subject to siting restrictions and mitigation. This issue is considered potentially significant and will be discussed in the EIR.
- i. The San Joaquin Valley region is susceptible to flooding from the failure of the dam at Lake Isabella. In addition, site-specific levees have been created by water districts in the valley. This impact is potentially significant and will be discussed in the EIR.
- j. None of the oil and gas exploration and production activities occurs or would occur in locations where tsunamis, mudflows or seiche-related inundation would occur. This impact is considered no impact; however it will be discussed further in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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3.10 LAND USE AND PLANNING.

Would the project:

a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- Future oil and gas exploration and production activities are not expected to result in the division of established communities. There would be no impact.
- As discussed in the project description, the project includes an amendment to Chapter 19.98 (Oil and Gas) of the Kern County Zoning Ordinance. The impacts of the proposed amendment and potential conflicts with County ordinances and policies are not expected to be significant; however they will be addressed in the EIR.
- Future oil and gas exploration and production activities are not expected to conflict with the adopted Metropolitan Bakersfield Habitat Conservation Plan (HCP) or any other of the approved HCPs in the region; however, this impact will be discussed further in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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3.11 MINERAL RESOURCES.

Would the project:

- | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a., b. Many types of mineral production occur within the Valley region. Impacts on these mineral production areas are potentially significant and will be addressed in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
3.12 NOISE.				
Would the project result in:				
a. Exposure of persons to, or generate, noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generate excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

a - c. Construction activities, including well pad preparation, drilling, completion and testing of new wells, construction of necessary infrastructure, work on existing wells, general maintenance activities and geophysical surveys using the shothole technique could result in temporary or periodic increases in noise and groundborne vibration. The Kern County General Plan Noise Element sets a 65-decibel limit on exterior noise levels from stationary sources (i.e., non-transportation sources) at sensitive receptors. The Noise Control Ordinance in the Kern County Code (Section 8.36.020 et seq.) prohibits a variety of nuisance noises. Construction-related noise is regulated by means of a limitation on the hours of construction activity for projects located within 1,000 feet of an occupied residential dwelling. In such cases, construction is prohibited



between the hours of 9 p.m. and 6 a.m. on weekdays and 9 p.m. and 8 a.m. on weekends. The project proponent would adhere to the provisions of Kern County Ordinance Section 8.36.020. Nonetheless, the project could expose persons to or generate noise levels in excess of established standards. This impact is considered potentially significant and will be discussed further in the EIR.

- d. Heavy equipment used during construction would cause a temporary or periodic increase in ambient noise levels. However, such noise could be reduced with the incorporation of mitigation measures. Oil and gas production activities could also result in temporary or periodic increases in ambient noise levels during operations. These would result from the use of vehicles for general maintenance and the transport of large pieces of equipment when repair or replacement is necessary. This impact is considered potentially significant and will be analyzed further in the EIR.
- e. - f. There are several small private airstrips and local airports within the Project Boundary Area. In addition, the Project Boundary Area is located within the Kern County Airport Land Use Compatibility Planning Area. Although the project is not expected to be exposed to excessive noise levels, further analysis is warranted in the EIR. This impact is considered potentially significant.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less- than Significant Impact	No Impact
3.13 POPULATION AND HOUSING.				
Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

a - c Future oil and gas exploration and production activities could provide new employment opportunities consistent with adopted Kern County General Plan goals, plans, and policies. If temporary housing should be necessary, it is expected that accommodations would be available in the nearby communities. While the proposed project is not expected to induce substantial population growth in Kern County, displace a substantial number of existing homes or people, or necessitate the construction of replacement housing elsewhere, these issues will be evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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3.14 PUBLIC SERVICES.

Would the project:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services:

i.	Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii.	Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii.	Schools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv.	Parks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v.	Other public facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

a.i - v. The demand for fire protection, police protection, schools, parks and other public facilities could be affected by future oil and gas exploration and production activities. Impacts on public services are considered potentially significant and will be addressed in the EIR.



Issues (and Supporting Information Sources):	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.15 RECREATION.				
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

a - b. The project would not include new recreational facilities. However, an increase in population that might result from an influx of workers and the associated increase in the use of parks or recreational facilities could require the expansion of recreational facilities. This impact is considered potentially significant and will be evaluated in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.16 TRANSPORTATION AND TRAFFIC.				
Would the project:				
a. Conflict with an applicable plan, ordinance,, or policy establishing measures of effectiveness for the performance of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
i. Metropolitan Bakersfield General Plan LOS "C"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Kern County General Plan LOS "D"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Discussion:

- a. – c. The project would be located in the San Joaquin Valley Floor portion of the County, within the Project Boundary Area. Regional access to well fields in the area could be obtained via the numerous highways that traverse the area including, Interstate 5, State Route 33, State Route 46, State Route 58, State Route 65, State Route 99, State Route 119, State Route 155 and State Route 166. A network of existing roadways and new earthen or gravel roadways would provide access to the individual wells. Future oil and gas drilling and exploration activities would add vehicle trips to the area roadway system during all phases of well field development and may require a number of trips by oversized vehicles. These vehicles may travel at slower speeds than other traffic and, because of their size, intrude into adjacent travel lanes. These trips may decrease the existing level of service on area roadways and at intersections and could conflict with an applicable congestion management program. Impacts on the local roadway system are considered potentially significant and will be evaluated in the EIR. Impacts considered will include physical deterioration of public roads, road capacity, safety, and risk.
- d. Regional access to well fields in the area could be obtained via the numerous highways that traverse the area and a network of existing roadways and new earthen or gravel roadways would provide access to the individual wells. Design features that would result in transportation-related hazards or safety concerns are not anticipated. However, impacts related to increased hazards could be potentially significant and will be addressed in the EIR.
- e. The project would generate construction trips and the potential for roadway lane closures exists, which could temporarily increase the daily traffic volumes on local roadways and at intersections. It is anticipated that emergency access would be maintained at all times, and appropriate detours would be provided, as necessary. Nonetheless, impacts related to emergency access are considered potentially significant and will be addressed in the EIR.
- f. As described above, project-related activities would generate construction trips and potential roadway lane closures, which could temporarily disrupt any bicycle traffic on local roadways and may also impact bus stops or designated bicycle lanes. Therefore, the project's potential to conflict with any applicable policies, plans, or programs supporting alternative transportation is considered potentially significant and will be addressed in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
3.17 UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Exceed wastewater treatment requirements of the applicable regional water quality control board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

a – b. The products of drilling are oil, gas and water, the separation and treatment of which allows the oil and gas to be sold and the water to be disposed of or re-injected. Future oil and gas exploration and drilling activities would include water treatment and disposal facilities, which



generally consist of pipeline gathering systems to collect and transport produced water removed from oil. Produced water may also be treated for subsequent reuse.

Different types of facilities are required depending on the final destination of the water. Produced water may be treated and transported to waterflooding or steamflooding plants which supply injection water or steam for EOR operations. Disposal facilities handle produced water not otherwise utilized and transport water via pipeline to wastewater disposal ponds, or to disposal injection wells for reinjection into permissive zones, permitted and regulated by DOGGR's underground injection control (UIC) program. Some of the water sent to disposal wells is also wastewater generated by other oilfield processes, such as brine regeneration in the water softening system. Excess produced water that is not injected into disposal wells or used for reinjection may be disposed of in wastewater disposal ponds (also known as percolation or evaporation ponds). These are regulated under Waste Discharge Requirements issued by the Regional Water Quality Control Board.

Future oil and gas exploration and drilling activities may require water treatment facilities with additional capacity which could involve construction of new facilities, expansion of the existing facilities, modifications to increase the pumping capacity, pipeline and distribution systems, as well as converting existing wells from production to injection, or drilling new wells for disposal. The construction of new wastewater treatment facilities, or the expansion of existing facilities could result in potentially significant environmental effects. This issue will be evaluated in the EIR.

- c. Future oil and gas exploration and production activities could require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. This impact is considered potentially significant and will be addressed in the EIR.
- d. See Hydrology and Water Quality Item (b). A water demand report will be prepared and discussed in the EIR. Impacts are considered potentially significant and will be analyzed further in the EIR.
- e. Future oil and gas exploration and production activities are not expected to result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments; however, these impacts will be discussed further in the EIR.
- f. Future oil and gas exploration and production activities are not expected to generate a significant amount of non-hazardous wastes such as wood, metal equipment parts, damaged tools, construction debris, and other refuse associated with field operations. These wastes may be collected at specially permitted in-field solid-waste-transfer stations. These stations consist of containers where waste is collected for transfer to the Kern County landfills or other approved sites. The amount of non-hazardous solid waste that would be generated is not expected to exceed the capacity of local landfills. Materials brought to the project site would be used to construct facilities, and few residual materials are expected. Nonhazardous construction refuse and solid



waste would either be collected and recycled or disposed of at a local landfill, while any hazardous waste generated during construction would be disposed of at an approved location. It is not anticipated that the amount of solid waste generated by the project would exceed the capacity of the local landfills needed to accommodate the waste. Nonetheless, this impact is considered potentially significant and will be addressed in the EIR.

- g. Future oil and gas exploration and production activities would generate solid waste thus requiring the consideration of waste reduction and recycling measures. Construction and operational activities are not expected to generate a significant amount of waste or exceed the capacity of local landfills. Nonhazardous construction refuse and solid waste would either be collected and recycled or disposed of at a local landfill, while any hazardous waste generated during construction would be disposed of at an approved location. It is not anticipated that the amount of solid waste generated would exceed the capacity of the local landfills needed to accommodate the waste. The 1989 California Integrated Waste Management Act (AB 939) requires Kern County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the project design. The project would comply with the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991, as amended. Impacts are considered to be potentially significant and will be addressed in the EIR.



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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3.18. MANDATORY FINDINGS OF SIGNIFICANCE.

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|----|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. | Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. | Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- a. The EIR’s biological resources section will discuss specific project impacts on plants and wildlife, including avian species. The EIR will also evaluate the project’s potential impacts on important examples of major periods in California history and prehistory. Finally, the EIR will evaluate the project’s contribution to cumulative biological and cultural resources impacts and propose feasible mitigation, as appropriate, that would reduce the impacts to less-than-significant levels.
- b. The project has the potential to contribute to cumulative impacts related to aesthetics, agriculture, air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, transportation and traffic, and utilities and service systems. The EIR will evaluate the project’s contribution to cumulative impacts in these areas as well as other areas as further impacts are identified.



- c. The Project could potentially result in environmental effects that have adverse impacts on human beings, either directly or indirectly. These impacts will be fully addressed in the EIR.