

OEHI Response to CEC Workshop Request No. A38 (Response to CEC Supplemental Questions Regarding Data Request A28)

Amended Application for Certification
for
HYDROGEN ENERGY CALIFORNIA
(08-AFC-8A)
Kern County, California

February 2013

URS 11-8-12 Workshop Data Request A38

Regarding Data Request A28, Still looking for assumptions, if any, for emissions control for operation (or long-term construction) equipment that will not have stationary source permits. Specifically, does Oxy have an emissions reduction policy/plan/goals for the reduction of emissions from drill rig engines, including work over rigs, over time? If not, does Oxy just plan to have their drilling contractors abide by the CARB Portable Equipment Registration Program (PERP)?

Responses:

Construction, well workover, and well drilling are ongoing daily activities at Elk Hills and the same basic processes will continue with the development of the CO2 EOR Project. The emissions from the equipment used for conducting these activities were calculated using emission factors generated from the CARB Off-road model for the San Joaquin Valley Off-Road Fleet. The fleet emission factors vary by year and are based on fleet characteristics for a given year. The emission factors take into account changes in emissions from the use of cleaner (higher Tier) engines in each project year resulting from California and USEPA requirements for off road construction equipment and off road mobile sources.

OEHI awards work to contractors by issuing Purchase Service Orders or Master Service Agreements. The documents serve as contracts and contain contract language requiring each company to comply with all governmental requirements and to secure all licenses and permits necessary for complete and proper performance of the work to be performed. Each new contract or renewal evaluation allows OEHI an opportunity to review the age, condition, and the tier requirements specified for the equipment. OEHI has no overriding emission reduction policy, plan or goal for emission reductions to the equipment beyond those required by regulation.

Owners or operators of portable engines and certain other types of equipment can register their units under the Air Resources Board's (ARB) Statewide Portable Equipment Registration Program (PERP) in order to operate their equipment throughout California without having to obtain individual permits from local air districts.

OEHI supports ARB's statewide program for the registration and regulation of portable engines and engine-associated equipment. ARB's program implements diesel engine Tiers that are date specific emission reductions for new engine registration as well as recordkeeping and reporting requirements. The local air districts have the primary responsibility to determine whether or not a registered engine or equipment unit is in compliance with any applicable requirement as specific in the PERP Regulation.

Assumptions for exhaust emissions from Well Maintenance, Well Site Preparation, Well Drilling and Completion are shown in the tables below.

	Well Maintenance
1.	CARB off road fleet average factors for San Joaquin Valley.
2.	Off road factors for mobile rig engine (250 < HP <= 500).
3.	Off road factors for work over pump (250 < HP <= 500).
4.	Maintenance requires one (1) 425 HP rig engine and one (1) 375 HP pump.
5.	Rig engine operated 12 hours per day. Pump engine operated 6 hours per day.
6.	Work takes one day to complete (12 hours).
7.	On road emissions calculated from VMT for a well work-over using emission factors from CARB EMFAC 2007 model.

	Well Drilling
1.	CARB off road fleet average factors for San Joaquin Valley.
2.	Two rig engines (1,020 BHP).
3.	Rig engines operated 24 hours per day.
4.	Well drilling is 14 days per well.

	Well Completion
1.	CARB off road fleet average factors for San Joaquin Valley.
2.	One mobile rig (425 BHP) and one pump (375 BHP).
3.	Rig engine operated 14 hours per day, pump 6 hours per day.
4.	Well completion is 4 days per well.

	Well Site Preparation
1.	CARB off road fleet average factors for San Joaquin Valley.
2.	One motor grader (150 BHP), one tracked tractor (285 BHP), one backhoe (70 BHP), and one compactor (200 BHP).
3.	Motor grader, tracked tractor, and backhoe operate 8 hours per day. Compactor operates 4 hours per day.
4.	Site preparation is 2 days per site.



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV**

**AMENDED APPLICATION FOR CERTIFICATION
FOR THE HYDROGEN ENERGY
CALIFORNIA PROJECT**

**Docket No. 08-AFC-08A
PROOF OF SERVICE
(Revised 2/11/13)**

SERVICE LIST:

APPLICANT

SCS Energy, LLC
Marisa Mascaro
30 Monument Square, Suite 235
Concord, MA 01742
mmascaro@scsenergyllc.com

Tiffany Rau
2629 Manhattan Avenue, PMB# 187
Hermosa Beach, CA 90254
trau@heca.com

Hydrogen Energy California, LLC
George Landman
Director of Finance and
Regulatory Affairs
500 Sansome Street, Suite 750
San Francisco, CA 94111
glandman@heca.com

CONSULTANT FOR APPLICANT

URS Corporation
Dale Shileikis, Vice President
Energy Services Manager
Major Environmental Programs
One Montgomery Street, Suite 900
San Francisco, CA 94104-4538
dale_shileikis@urscorp.com

COUNSEL FOR APPLICANT

Michael J. Carroll
Marc T. Campopiano
Latham & Watkins, LLP
650 Town Center Drive, 20th Fl.
Costa Mesa, CA 92626-1925
michael.carroll@lw.com
marc.campopiano@lw.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

Department of Conservation
Office of Governmental and
Environmental Relations
(Department of Oil, Gas &
Geothermal Resources)
Marni Weber
801 K Street, MS 2402
Sacramento, CA 95814-3530
marni.weber@conservation.ca.gov

INTERVENORS

California Unions for Reliable Energy
Thomas A. Enslow
Marc D. Joseph
Adams Broadwell Joseph & Cardozo
520 Capitol Mall, Suite 350
Sacramento, CA 95814
tenslow@adamsbroadwell.com

Association of Irrigated Residents
Tom Frantz
30100 Orange Street
Shafter, CA 93263
tfrantz@bak.rr.com

Kern-Kaweah Chapter
of the Sierra Club
Andrea Issod
Matthew Vespa
85 Second Street, 2nd Floor
San Francisco, CA 94105
andrea.issod@sierraclub.org
matt.vespa@sierraclub.org

INTERVENORS (Cont'd)

Environmental Defense Fund (EDF)
Timothy O'Connor, Esq.
123 Mission Street, 28th Floor
San Francisco, CA 94105
toconnor@edf.org

Natural Resources Defense Council
George Peridas
111 Sutter Street, 20th Fl.
San Francisco, CA 94104
gperidas@nrdc.org

Kern County Farm Bureau, Inc.
Benjamin McFarland
801 South Mt. Vernon Avenue
Bakersfield, CA 93307
bmcfarland@kerncfb.com

HECA Neighbors
c/o Chris Romanini
P.O. Box 786
Buttonwillow, CA 93206
roman93311@aol.com

ENERGY COMMISSION STAFF

*Robert Worl
Project Manager
robert.worl.energy.ca.gov

*John Heiser
Associate Project Manager
john.heiser@energy.ca.gov

*Lisa DeCarlo
Staff Counsel
lisa.decarlo@energy.ca.gov

*Indicates Change

**ENERGY COMMISSION –
PUBLIC ADVISER**

Blake Roberts
Assistant Public Adviser
publicadviser@energy.ca.gov

COMMISSION DOCKET UNIT

CALIFORNIA ENERGY
COMMISSION – DOCKET UNIT
Attn: Docket No. 08-AFC-08A
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.ca.gov

**OTHER ENERGY COMMISSION
PARTICIPANTS (LISTED FOR
CONVENIENCE ONLY):**

*After docketing, the Docket Unit
will provide a copy to the persons
listed below. Do not send copies of
documents to these persons
unless specifically directed to do
so.*

KAREN DOUGLAS
Commissioner and Presiding Member

ANDREW McALLISTER
Commissioner and Associate Member

Raoul Renaud
Hearing Adviser

Galen Lemei
Adviser to Presiding Member

Jennifer Nelson
Adviser to Presiding Member

David Hungerford
Adviser to Associate Member

Patrick Saxton
Adviser to Associate Member

Eileen Allen
Commissioners' Technical
Adviser for Facility Siting

DECLARATION OF SERVICE

I, Dale Shileikis, declare that on February 26, 2013, I served and filed copies of the attached OEHI Response to CEC Workshop Request No. A38 (Response to CEC Supplemental Questions Regarding Data Request A28), dated February, 2013. This document is accompanied by the most recent Proof of Service, which I copied from the web page for this project at: http://www.energy.ca.gov/sitingcases/hydrogen_energy/.

The document has been sent to the other persons on the Service List above in the following manner:

(Check one)

For service to all other parties and filing with the Docket Unit at the Energy Commission:

 X I e-mailed the document to all e-mail addresses on the Service List above and personally delivered it or deposited it in the US mail with first class postage to those persons noted above as "hard copy required";
OR

 Instead of e-mailing the document, I personally delivered it or deposited it in the US mail with first class postage to all of the persons on the Service List for whom a mailing address is given.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am over the age of 18 years.

Dated: 2/26/13


