

HYDROGEN ENERGY CALIFORNIA (08-AFC-8A)

Data Response Workshop

**Participation Information, Agenda and Figures
to be used during the workshop**

September 27, 2012

9:30 A.M.

**California Energy Commission
2nd Floor Fishbowl
1516 9th Street
Sacramento, CA 95814**

WebEx call in toll free number: 1-866-469-3239

Access Code: 924 062 111

Meeting Password: meeting@930

California Energy Commission

**DOCKETED
08-AFC-8A**

TN # 67318

SEP 26 2012

REMOTE ATTENDANCE FOR THE
HECA Staff Workshop on September 27, 2012

You may participate in this workshop through WebEx, the Energy Commission's online meeting service. Presentations will appear on your computer screen, and you may listen to audio via your computer or telephone. Please be aware that the meeting may be recorded.

1. COMPUTER LOG-ON WITH A DIRECT PHONE NUMBER:

- Please go to <https://energy.webex.com> and enter: **924 062 111**
- When prompted, enter your information and **meeting@930**

After you login, a prompt will appear on-screen for you to provide **your** phone number. In the **Number box**, type your area code and phone number and click OK.

You will receive a call back on your phone for the audio portion of the meeting.

2. COMPUTER LOG-ON FOR CALLERS WITH AN EXTENSION PHONE NUMBER, ETC:

- Please go to <https://energy.webex.com> and enter: **924 062 111** and **meeting@930**
- After you login, a prompt will ask for your phone number. Click "**CANCEL**."
- Instead call **1-866-469-3239**. When prompted, enter: **924 062 111** and your unique Attendee ID number which is listed in the top left area of your computer screen after you login.

3. TELEPHONE ONLY (NO COMPUTER ACCESS):

- Call **1-866-469-3239** and when prompted enter: **924 062 111**

If you have difficulty joining the meeting, please call the WebEx Technical Support number at **1-866-229-3239**. To see if your computer is compatible, visit [<http://support.webex.com/support/systemrequirements.html>]. Please be aware that the meeting's WebEx audio and on-screen activity may be recorded.

Agenda
HECA 08-AFC-8A Data Response Workshop
September 27, 2012

9:30 a.m.

Lunch Break: 12:00 p.m. to 12:30 p.m.

Call in from the CA Department of Fish and Game 1:00 p.m. (Biological Resources)

Call in from Occidental Petroleum of Elk Hills, 3:00 p.m. (AQ/GHG/EOR/Sequestration)

- **Introductions, Webex and workshop procedures**
- **Project Description:** Brief Summary
- **Air Quality, Greenhouse Gas, Enhanced Oil Recovery (GHG/EOR)**
- **Community Resources: Land Use, Traffic and Transportation, Noise, Visual, Socioeconomics, Cultural Resources, Alternatives**
- **Soils and Water (w/o GHG)**
- **Power Plant Efficiency/Reliability**
- **Transmission System Engineering**
- **Biology, Soils and Water (not GHG/EOR), Waste Management, Traffic & Transportation (pertaining to Biological resource analysis)**
- **Continuation of Air Quality, Greenhouse Gas and Enhanced Oil Recovery (GHG/EOR)**
- **Public Health, Hazardous Materials Management, Worker Safety & Fire Protection**
- **Other Technical Issue Discussions**
- **Public Comments / Questions**
- **Note: Many of the topics are of interest to several technical disciplines. This cross-over in questions and responses is expected.**

Data Response Workshop:

PURPOSE

- The purpose of the workshop is to allow staff, the applicant, intervenors, interested agencies, and the public to discuss several technical disciplines related to the HECA Amended Application for Certification, filed on May 2, 2012, including but not limited to: Air Quality, Greenhouse Gas, Carbon Capture and Storage, Land Use, Biology, Cultural Resources, Noise, Socioeconomics, Traffic & Transportation, Health and Safety, Hazardous Materials, Visual Resources and other topics as needed.
- The data response workshop is to provide CEC staff, intervenors and others to request data information, questions, inquire to the status of requested information and to provide clarification in regards to the applicants responses to the data requests received to date.
- Note that the applicant has filled extensions and objections to the data requests in which, CEC staff, Intervenor and others will be requested to focus on the data responses received to date, request clarification and indicate additional data information needs.

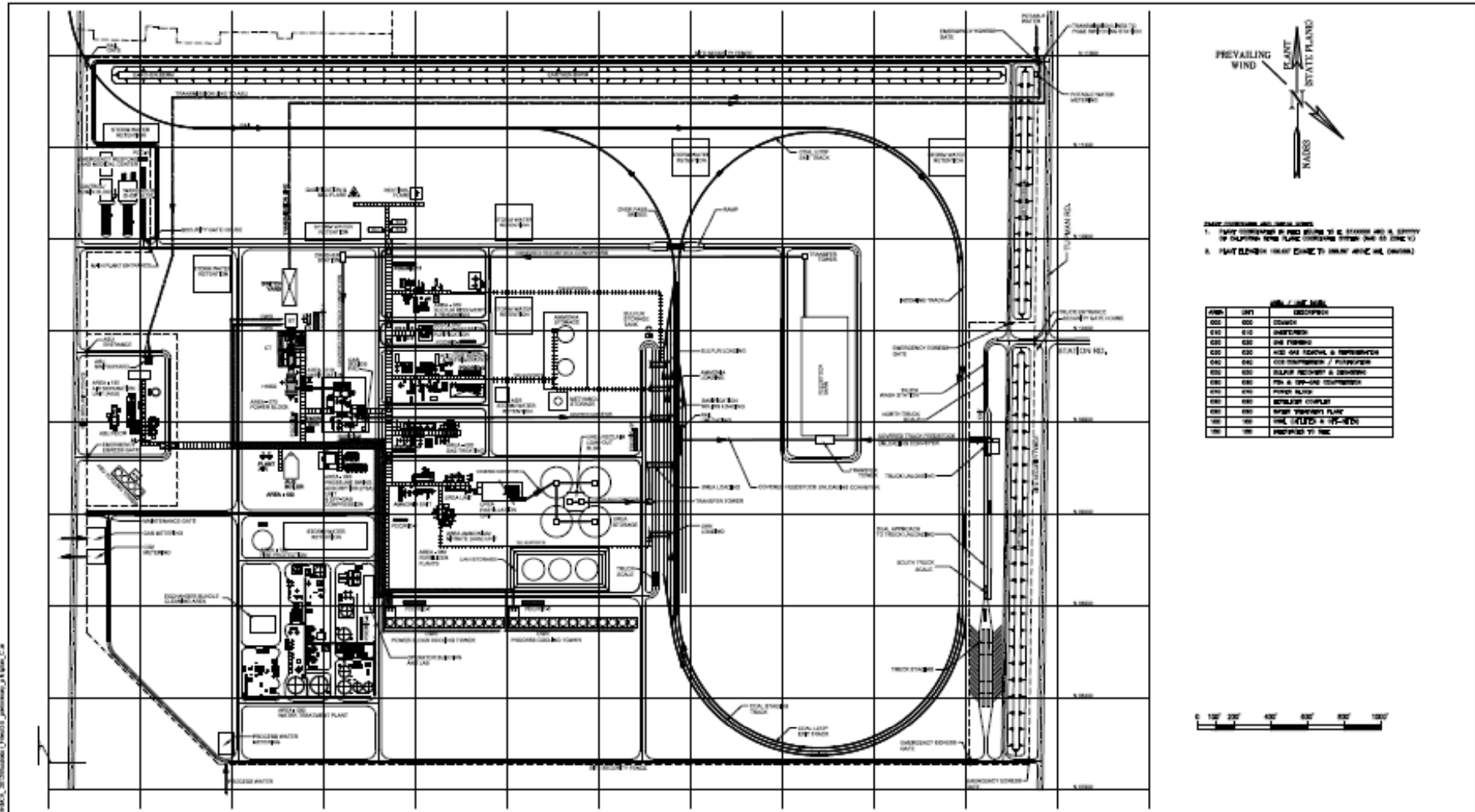
Data Requests and Responses Received to Date

- [Department of Conservation, Division of Oil, Gas, and Geothermal Resources \(DOGGR\) Data Requests #1 - 4.](#) Dated: March 16, 2012.
- [Responses to CEC Comments on the Modeling Protocol Supplement.](#) Dated March 20, 2012.
- [Association of Irrigated Residents \(AIR\) Data Request.](#) Dated: March 23, 2012.
- [Association of Irrigated Residents Questions Re Modeling Protocol Supplement.](#) Dated March 23, 2012.
- [Applicant's Objections to March 16, 2012 Data Requests.](#) Dated April 6, 2012.
- [Applicant's Notice regarding Staff's March 16, 2012 Data Requests.](#) Dated May 29, 2012.
- [Applicant's Response to California Energy Commission Staff's Data Requests #51-55.](#) Dated June 6, 2012.
- [Staff's Data Requests, A1 through A123.](#) Dated July 20, 2012.
- [Sierra Club's Data Requests Set No 1.](#) Posted August 3, 2012.
- [Staff's Data Requests, A124 Through A180.](#) Dated September 6, 2012.
- [Applicant's Objections and Requests for Additional Time to Respond to Sierra Clubs Data Requests Set #1.](#) Posted: September 18, 2012.
- [Applicants Responses to Sierra Club Data Requests #1.](#) Posted: September 18, 2012.
- [Transmittal Letter regarding Applicants Responses to CEC Data Requests Set 1.](#) Posted: September 18, 2012.
- [Applicants Responses to CEC Data Requests Set One \(30 -Day Extension\).](#) Posted: September 24, 2012.



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PROJECT SITE: PROJECT RENDERING
April 2012
28068052
URS
Hydrogen Energy California (HECA)
Kern County, California
FIGURE 2-2



DATE: 04/20/12
 1. THIS CONTRACT IS MADE BEING BY & BETWEEN AND A CERTAIN OF CALIFORNIA AND SAID CONTRACTING FIRM (AS IS INC'D)
 A. FORTLEIGH (NAME) (INC'D TO: NAME AND NO. (NONE))

NO.	REV.	DESCRIPTION
001	001	ISSUED
002	001	ISSUED
003	001	ISSUED
004	001	ISSUED
005	001	ISSUED
006	001	ISSUED
007	001	ISSUED
008	001	ISSUED
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011	001	ISSUED
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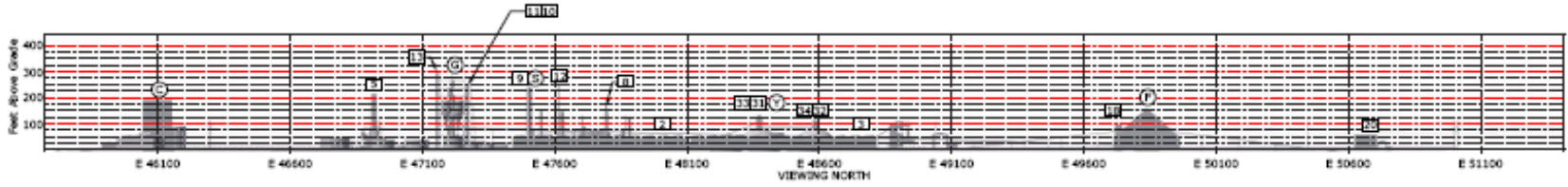
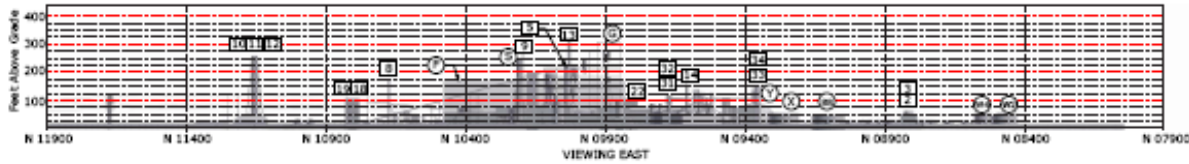
Source: HECA-SCG, 2012 AFC Update, Preliminary Plot Plan;
 Drawing No: AAUV-000-50-SK-0001, Rev. C (4/28/12)

Notes:
1) Identifiers are same as shown in Figure 2-36, Preliminary Emissions Sources Plot Plan

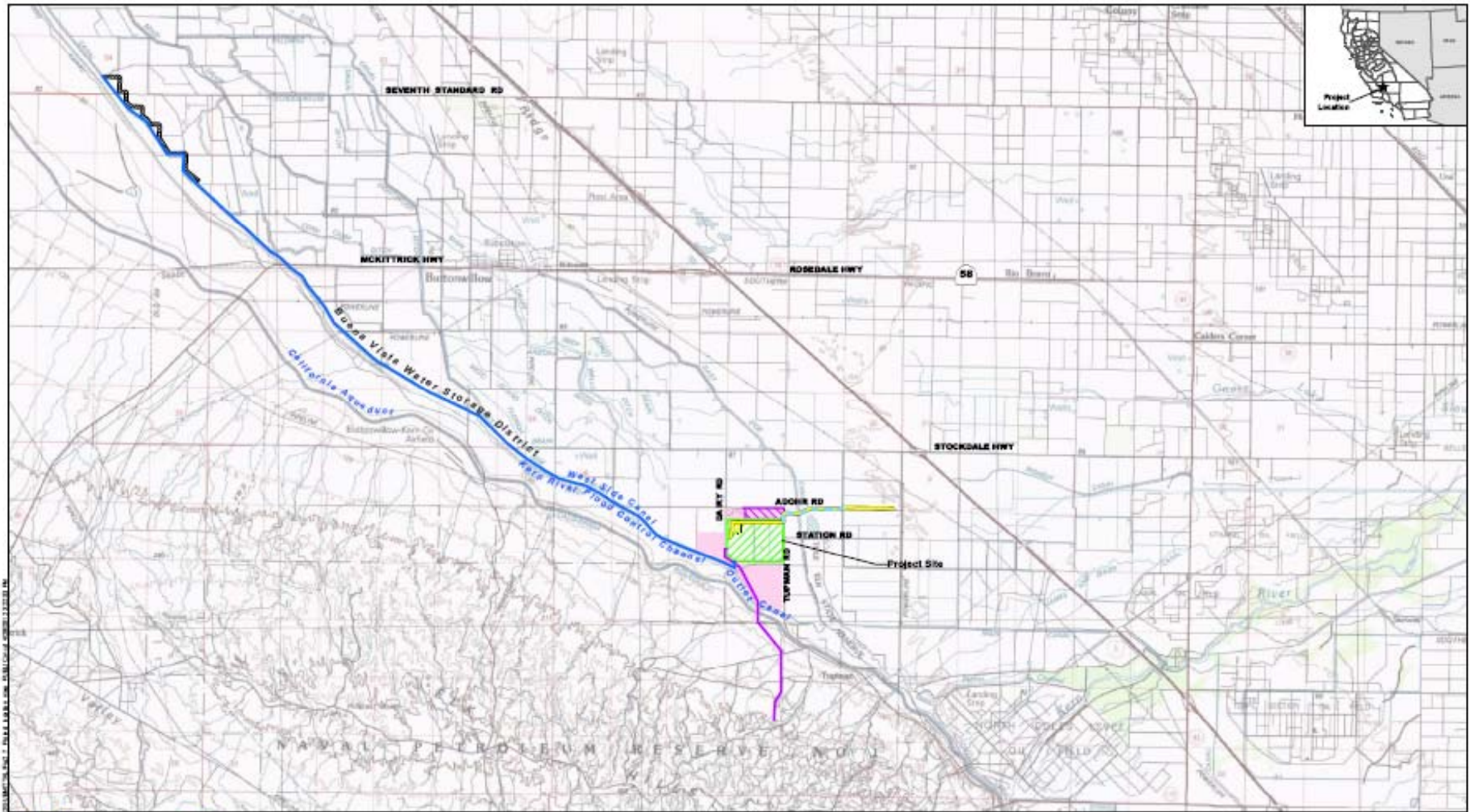
COORDINATE AND DATUM NOTE:

1. COORDINATES IN FEET EQUATE TO PLANT COORDINATES SHOWN ON FIGURE 2-36 PRELIMINARY EMISSIONS SOURCES PLOT PLAN PLANT ELEVATION 100.00' EQUATE TO 289.50' ABOVE MSL (NAVD83.)
2. ACCURACY/TOLERANCE OF EMISSION POINT(S) COORDINATES ARE WITHIN A 30 FOOT RADIUS OF SOURCE POINT NOTED.
3. LOCATION OF EMISSION POINTS ARE SUBJECT TO COMPLETION OF DETAILED DESIGN BY LICENSORS AND EQUIPMENT SUPPLIERS. SEE SHEETS 2 THROUGH 9 FOR INFORMATION ON COMPOSITION AND FLOW RATE FROM EACH SOURCE. EMISSION POINT IS SHOWN FOR INFORMATION ONLY. ZERO EMISSIONS ARE EXPECTED DURING STEADY STATE OPERATION.

E EMISSION POINTS					WATER PUMPING / RECIRCULATION SYSTEMS				
ID	DESCRIPTION	Easting	Northing	Height	ID	DESCRIPTION	Easting	Northing	Height
E01	COOLING PUMP	00967	01097	20	W01	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E02	COOLING WATER TOWER	01000	01037	30	W02	LEACH CONDENSER WATER PUMP	00000	00000	30
E03	FRESH WATER TOWER	00967	01037	30	W03	AIR SEPARATOR TOWER 01B	00000	00000	30
E04	SUBSTRATE BIODIESEL (SUBSTRATE)	01000	01097	30	W04	WATER TOWER	00000	00000	30
E05	LEACH TOWER	00967	01037	21.0	W05	CONDENSER EFFLUENT TOWER	00000	00000	30
E06	SUBSTRATE BIODIESEL (LEACH WATER)	00967	01037	30	W06	CONDENSER COOLANT RECIRCULATION	00000	00000	30
E07	SUBSTRATE TOWER 01B	00967	01097	30	W07	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E08	SEALED AIR CONDENSER	01000	01037	30	W08	CONDENSER COOLANT TOWER	00000	00000	30
E09	SEALED AIR CONDENSER	01000	01037	30	W09	PUMP OPERATOR CONTROL	00000	00000	30
E10	SEALED AIR CONDENSER	01000	01037	30	W10	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E11	SEALED AIR CONDENSER	01000	01037	30	W11	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E12	SEALED AIR CONDENSER	01000	01037	30	W12	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E13	SEALED AIR CONDENSER	01000	01037	30	W13	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E14	SEALED AIR CONDENSER	01000	01037	30	W14	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E15	SEALED AIR CONDENSER	01000	01037	30	W15	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E16	SEALED AIR CONDENSER	01000	01037	30	W16	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E17	SEALED AIR CONDENSER	01000	01037	30	W17	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E18	SEALED AIR CONDENSER	01000	01037	30	W18	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E19	SEALED AIR CONDENSER	01000	01037	30	W19	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E20	SEALED AIR CONDENSER	01000	01037	30	W20	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E21	SEALED AIR CONDENSER	01000	01037	30	W21	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E22	SEALED AIR CONDENSER	01000	01037	30	W22	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E23	SEALED AIR CONDENSER	01000	01037	30	W23	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E24	SEALED AIR CONDENSER	01000	01037	30	W24	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E25	SEALED AIR CONDENSER	01000	01037	30	W25	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E26	SEALED AIR CONDENSER	01000	01037	30	W26	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E27	SEALED AIR CONDENSER	01000	01037	30	W27	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E28	SEALED AIR CONDENSER	01000	01037	30	W28	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E29	SEALED AIR CONDENSER	01000	01037	30	W29	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E30	SEALED AIR CONDENSER	01000	01037	30	W30	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E31	SEALED AIR CONDENSER	01000	01037	30	W31	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E32	SEALED AIR CONDENSER	01000	01037	30	W32	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E33	SEALED AIR CONDENSER	01000	01037	30	W33	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E34	SEALED AIR CONDENSER	01000	01037	30	W34	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E35	SEALED AIR CONDENSER	01000	01037	30	W35	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E36	SEALED AIR CONDENSER	01000	01037	30	W36	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E37	SEALED AIR CONDENSER	01000	01037	30	W37	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E38	SEALED AIR CONDENSER	01000	01037	30	W38	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E39	SEALED AIR CONDENSER	01000	01037	30	W39	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E40	SEALED AIR CONDENSER	01000	01037	30	W40	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E41	SEALED AIR CONDENSER	01000	01037	30	W41	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E42	SEALED AIR CONDENSER	01000	01037	30	W42	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E43	SEALED AIR CONDENSER	01000	01037	30	W43	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E44	SEALED AIR CONDENSER	01000	01037	30	W44	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E45	SEALED AIR CONDENSER	01000	01037	30	W45	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E46	SEALED AIR CONDENSER	01000	01037	30	W46	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E47	SEALED AIR CONDENSER	01000	01037	30	W47	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E48	SEALED AIR CONDENSER	01000	01037	30	W48	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E49	SEALED AIR CONDENSER	01000	01037	30	W49	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E50	SEALED AIR CONDENSER	01000	01037	30	W50	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E51	SEALED AIR CONDENSER	01000	01037	30	W51	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E52	SEALED AIR CONDENSER	01000	01037	30	W52	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E53	SEALED AIR CONDENSER	01000	01037	30	W53	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E54	SEALED AIR CONDENSER	01000	01037	30	W54	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E55	SEALED AIR CONDENSER	01000	01037	30	W55	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E56	SEALED AIR CONDENSER	01000	01037	30	W56	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E57	SEALED AIR CONDENSER	01000	01037	30	W57	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E58	SEALED AIR CONDENSER	01000	01037	30	W58	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E59	SEALED AIR CONDENSER	01000	01037	30	W59	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30
E60	SEALED AIR CONDENSER	01000	01037	30	W60	SEALED AIR CONDENSER RECIRCULATION	00000	00000	30



Notes:
1) Identifiers are same as shown in Figure 2-36, Preliminary Emissions Sources Plot Plan



SOURCE: URS CORP. (2012) QUADS: T4B 18E2, D6100 18E2. CREATED USING TOPOI, ©2012 NATIONAL GEOGRAPHIC MAPS. ALL RIGHTS RESERVED. KERN COUNTY AND STATE OF CALIFORNIA (PROPOSED AND APPROVED PROJECT).

PROJECT LOCATION MAP

April 2012
 28068062
 Hydrogen Energy California (HECA)
 Kern County, California


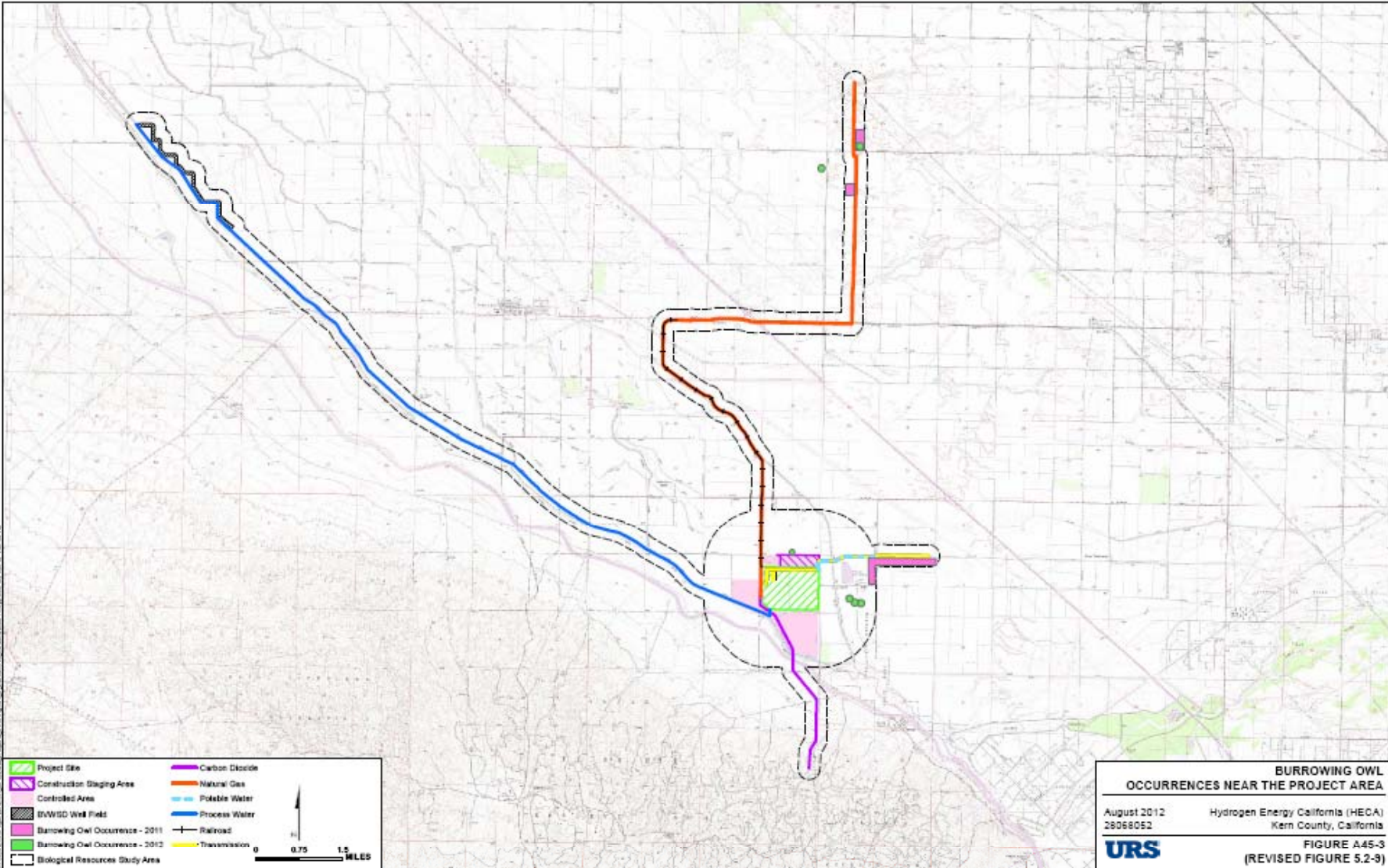


FIGURE 2-7

- Project Site
- Construction Staging Area
- Controlled Area
- BVWSD Well Field
- Carbon Dioxide
- Natural Gas
- Potable Water
- Process Water
- Railroad
- Transmission

Note: 1. Feature temporarily degraded as confidential

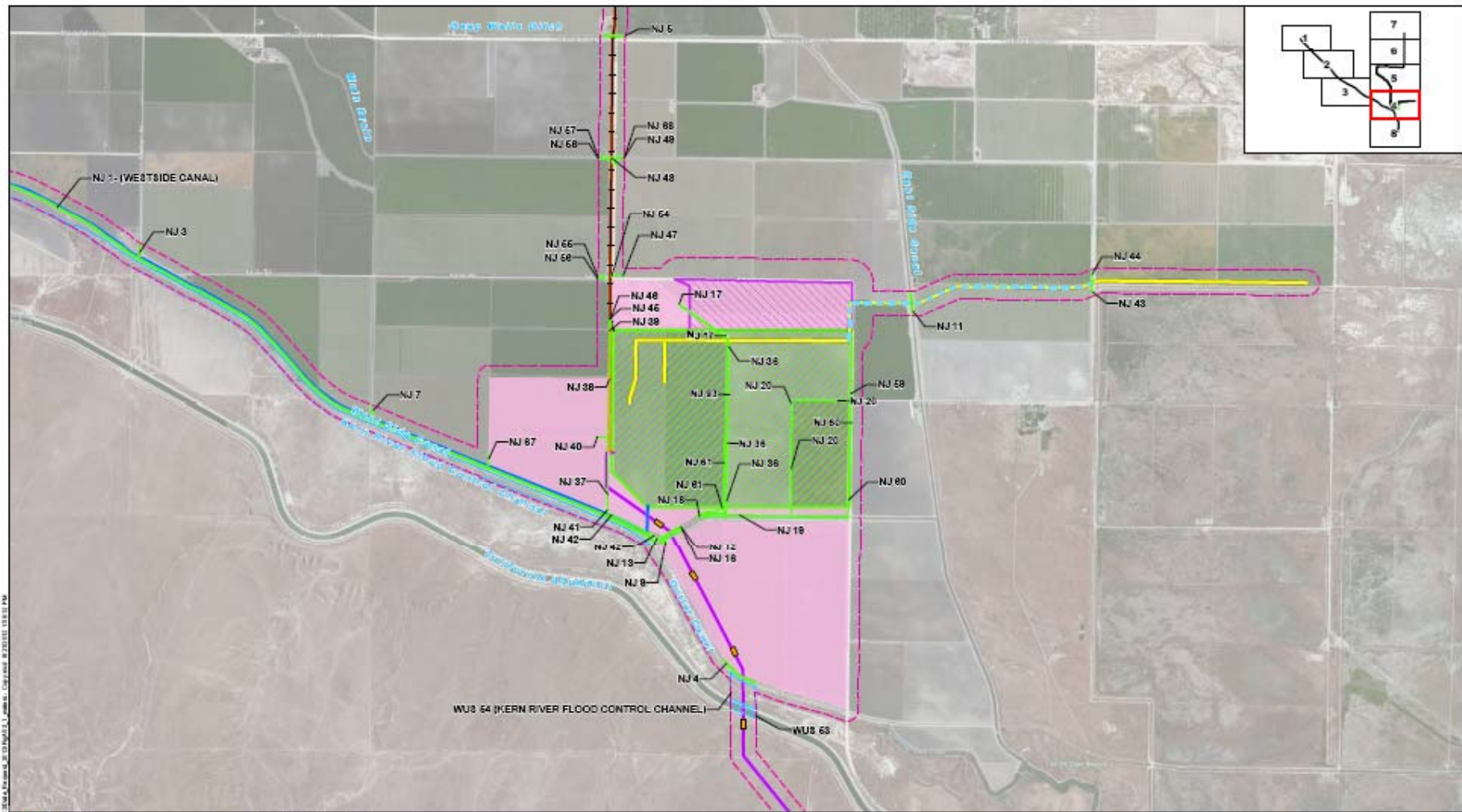




**BURROWING OWL
OCCURRENCES NEAR THE PROJECT AREA**

August 2012	Hydrogen Energy California (HECA)
28068052	Kern County, California
URS	
FIGURE A45-3 (REVISED FIGURE 5.2-9)	


Source: 2011 U.S. Census Bureau, "Redistricting", published 10/12/11; 2011 U.S. Census Bureau, "Population", published 10/12/11; U.S. Census Bureau, "Population", published 10/12/11; U.S. Census Bureau, "Population", published 10/12/11; U.S. Census Bureau, "Population", published 10/12/11; U.S. Census Bureau, "Population", published 10/12/11.

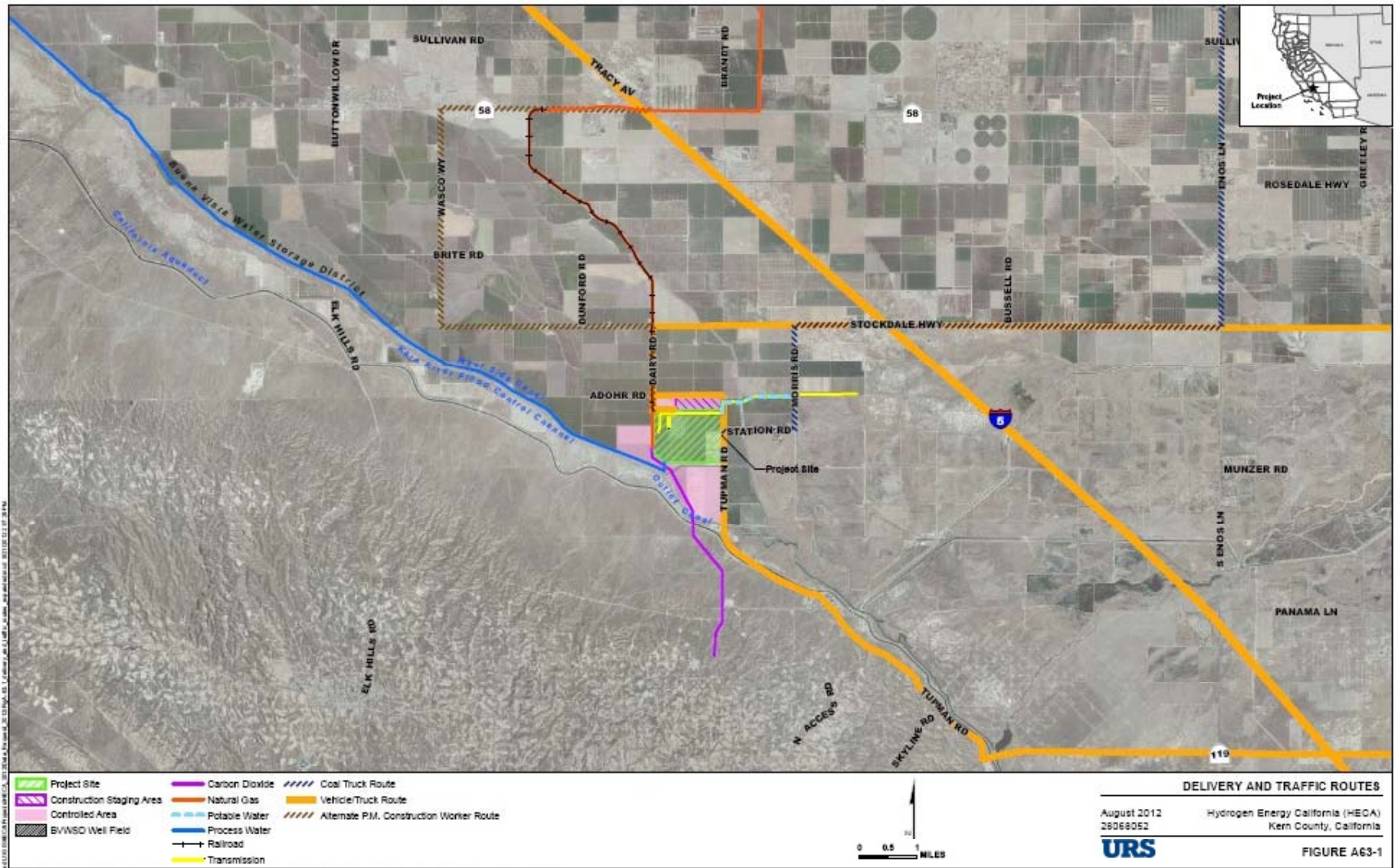


10/10/2012 10:00:00 AM, 10/10/2012 10:00:00 AM, 10/10/2012 10:00:00 AM, 10/10/2012 10:00:00 AM

WATERS OF THE U.S.

August 2012 Hydrogen Energy California (HECA)
 28068052 Kern County, California

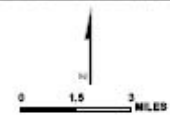

FIGURE A53-1 (4)
 (REVISED FIGURE 5.2-2)



SOURCE: 1999 (2008) QUAD: T4E 1812, DEANE 1812. CREATED USING TOPOI. ©2008 NATIONAL GEOGRAPHIC MAPS. ALL RIGHTS RESERVED. KERN COUNTY AND STATE OF CALIFORNIA (PROPOSED AND APPROVED PROJECTS).



- Project Site
- Coal Truck Route



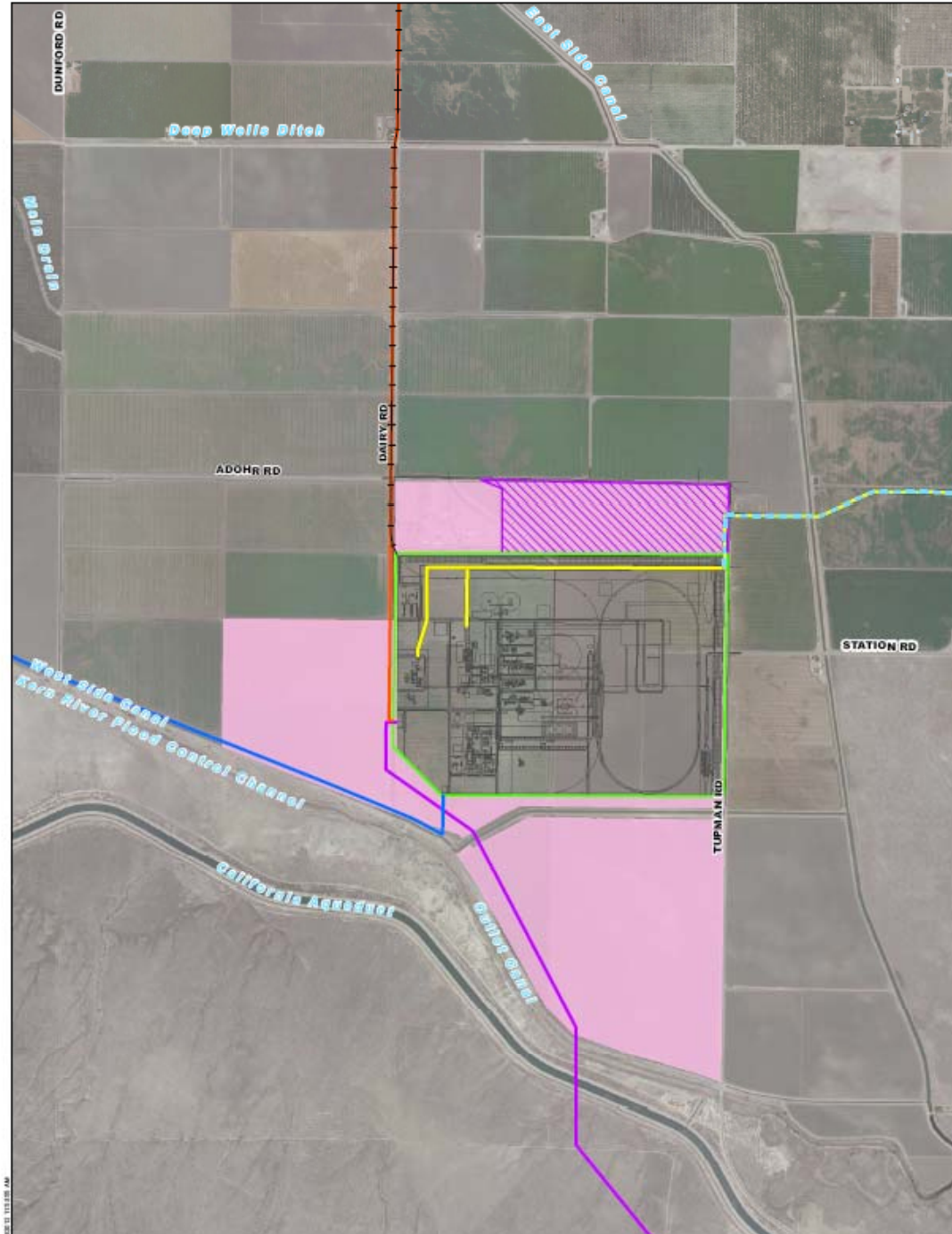
TRUCK ROUTE FOR COAL DELIVERY

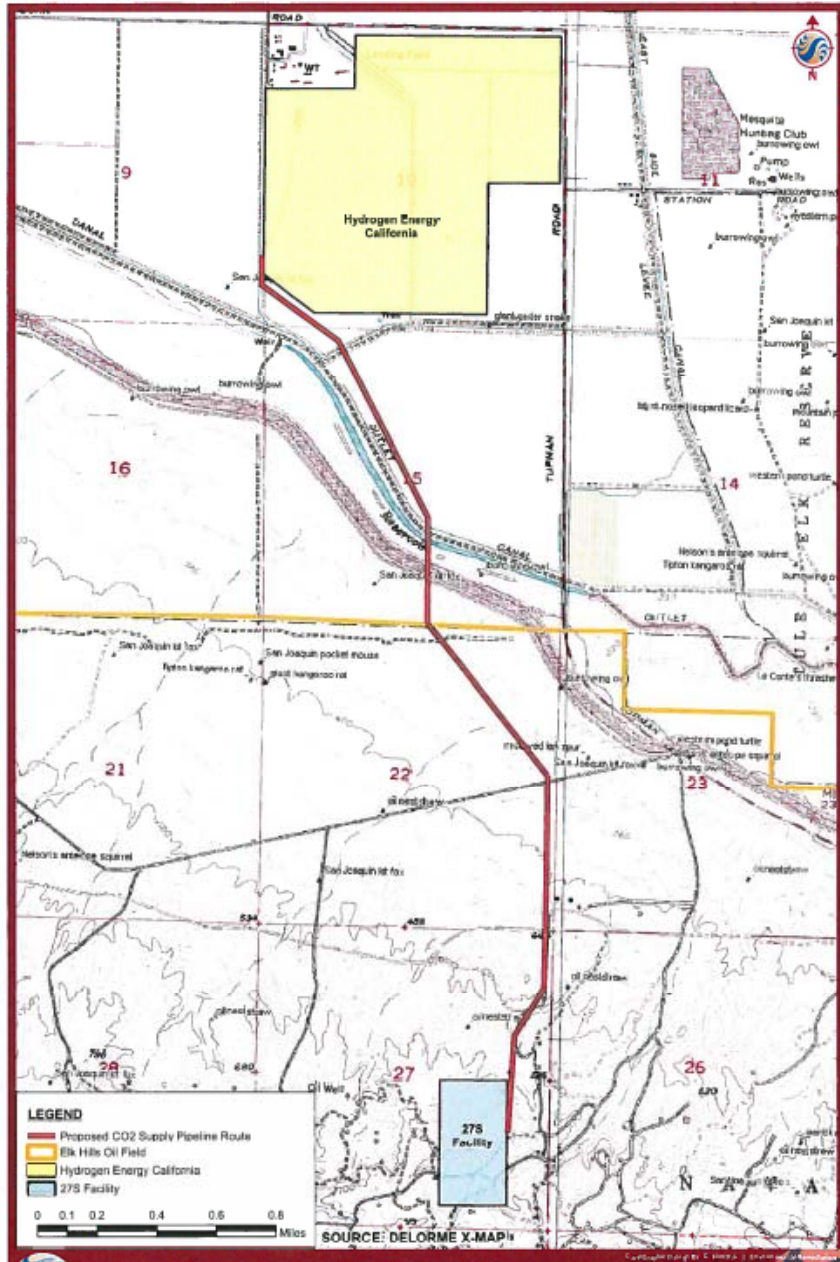
August 2012 Hydrogen Energy California (HECA)
 28068052 Kern County, California



FIGURE A63-2

Source: URS 2012 (2012) quad. T4E 1801, (2012) 1801. Created using TOPPO. ©2012 National Geographic Maps. All Rights Reserved. Kern County and State of California (proposed and approved project).





Stantec
 300 West 7th Street, Suite 2000
 San Francisco, CA 94103
 Phone: 415.774.2000
 Fax: 415.774.2001
 www.stantec.com

Figure 2
**California Natural Diversity
 Database Map**

DEHI CO2 EOR Project - Supplemental Environmental Assessment

FLOW DIAGRAM HECA PROJECT KERN COUNTY, CA

