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Sent: Wednesday, March 06, 2013 7:24 AM

To: Heiser, John@Energy; Worl, Robert@Energy

Cc: Marshall, Brian (KRN); Brian Pitts; Greg Fenton; Lorelei H. Oviatt; Warren Maxwell; Craig Murphy; Nancy EWERT; Steve Hansen

Subject: HECA: Kern County Official Comments

Good Morning California Energy Commission Staff,

Please find attached Kern County's comments on the proposed HECA Project. The attached letter conveys comments and recommended mitigation measures from the Kern County Board of Supervisors; Planning and Community Development Department; Fire Department; Environmental Health Division; Engineering, Survey and Permit Services Department; Waste Management Department; and the Sheriff's Department. Comments from the Roads Department are forthcoming and are dependant on the applicant's cooperation.

Hard copies of this letter will be mailed out today. Should you have any questions regarding the content of this letter, please do not hesitate to contact us.

Thank you,
Jacqui Kitchen

Jacquelyn R.Kitchen

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**PLANNING AND COMMUNITY
DEVELOPMENT DEPARTMENT**

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DEVELOPMENT SERVICES AGENCY

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

March 6, 2013

File: Hydrogen Energy, California (HECA)
Zone Map No. 120

California Energy Commission
Attn: Robert Worl, Project Manager
1516 9th Street, MS-15
Sacramento, CA 95814-5512

RE: Hydrogen Energy California – Amended Application for Certification (08-AFC-8A)
Presentation of specific Kern County Comments and recommended Mitigation Measures to address potential impacts of the proposed HECA Project located within Kern County.

California Energy Commission Representatives:

Kern County is in receipt of the notice from the California Energy Commission, dated May 15, 2012, requesting Agency participation in the review of the amended application submitted to the California Energy Commission (CEC) on May 2, 2012 for the Hydrogen Energy California (HECA) Project. The County appreciates this opportunity to participate in the review of this project. As noted in our July 12, 2012 letter, Kern County staff has worked with the CEC in the past to coordinate information on a variety of renewable energy projects, including large power plants, and will continue participate in review of this project. As such, we have developed a procedure for the effective management of this coordination role.

Throughout the review coordination process for the HECA Project, the Kern County Planning and Community Development Department (PCDD) has acted as the clearinghouse for all County communications with the CEC. In order to facilitate this County coordination effort, the PCDD has coordinated internally with other County Departments to compile the County's comments and recommended mitigation measures related to this project. During that process, the PCDD facilitated numerous meetings among County staff, the applicant, affected stake-holders, and local decision-makers to discuss the types of mitigation measures that would be needed to address the potential impacts of the HECA Project, should the CEC ultimately approve construction of HECA within Kern County. As a result of that process, the PCDD received numerous written comments and recommended mitigation measures from County Departments, as well as specific inquiries from local stakeholders and decision-makers.

The comments received from Kern County Departments and stakeholders were presented to the Kern County Board of Supervisors on February 26, 2013. The purpose of the presentation was to seek direction and authorization from the Board to forward the comments and recommended mitigation measures to the CEC. The Board took action to authorize the Director of the PCDD to prepare and mail formal written comments to the CEC. Therefore, this letter includes requests for additional information on the HECA project, a listing of the specific mitigation measures requested by the Kern County Departments to address potential impacts of the HECA Project in Kern County (see Attachment 1), and reiterates that Kern County does not support the use of eminent domain for acquisition of any rail lines or other infrastructure related to the HECA Project. **The full video transcript of the Board hearing is incorporated into this letter by reference and can be found at the following web-link: <http://www.co.kern.ca.us/bos/AgendaMinutesVideo.aspx>.**

Kern County's specific comments related to the HECA Project are listed below. Data Request and Mitigation Measures are listed within the text with supporting information; and are also listed comprehensively in one table at the end of this letter (Attachment 1).

KERN COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCDD)

(As of February 26, 2013)

1. Land Use Compatibility. This Department has several concerns related to the land use compatibility of the revised project application, as it was submitted to the CEC in May 2012.

Specifically, the “manufacturing complex” component of the HECA Project, as described in the official May 2012 application package, is a chemical-plant type facility that is not compatible with the existing agricultural general plan designation and zoning that is at the HECA site. The May 2012 application describes the “manufacturing complex” as a facility that will produce products (including urea, urea ammonium nitrate [UAN], anhydrous ammonia, etc.) that will be used for transportation and industrial applications. These types of industrial uses are not permitted in the agriculturally designated areas within Kern County.

While the Kern County Zoning Ordinance (section 19.12.030.A) lists “fertilizer manufacture and storage for agricultural use only” as a conditionally permitted use in the A District, the project described in the May 2012 application is a “chemical plant” that would require industrial general plan designations and zoning.

To address this concern, the PCDD sent letters to the applicant and to the CEC in June and July of 2012 indicating that the chemical plant component of the project would require a General Plan Amendment and Zone Changes.

In response to the concerns raised by the PCDD, the applicant submitted a letter to the PCDD dated December 20, 2012 which indicated that HECA would revise the project to restrict production of “nitrogen-based products” (including urea, urea ammonium nitrate (UAN) and anhydrous ammonia) to manufactured products for the purpose of “fertilizer manufacture and storage for agricultural use only.” It appears that the applicant also referred to this letter in their response to CEC Data Request #A103 related to this topic.

While this change addresses the concerns raised by the PCDD, Staff notes that this restriction should also be made a mitigation measure and/or condition of any project approval by the CEC.

Therefore, the PCDD recommends that the project, if approved by the CEC, include Mitigation Measure(s) to restrict the items produced on site and in the Manufacturing Complex to “fertilizer manufacture and storage for agricultural use only” per Section 19.12.030.A of the Kern County Zoning Ordinance.

The PCDD also notes the following information that may be relevant:

Applicable Kern County Zoning Ordinance Information

Specific Listed Use	Zone District	Ordinance Section
“Electrical power generating plant”	A (CUP)	19.12.030.G
“Fertilizer manufacture and storage for agricultural use only”	A (CUP)	19.12.030.A.2
“Transmission lines and supporting towers, poles, and underground facilities for gas, water, electricity, telephone, or telegraph service owned and operated by a public utility company or other company under the jurisdiction of the California Public Utilities Commission pursuant to Section 19.08.090 of this title”	A	19.12.020.D
“Liquid fuel storage tanks, above ground, for dispensing purposes”	A	19.12.020.F
“Chemical blending or Manufacture”	M-2 (CUP)	19.38.030.D.1
“Chemical blending or Manufacture”	M-3	19.40.020.E
“Chemical storage when accessory to a permitted use”	M-2	19.38.020.E.2
“Chemical storage”	M-3	19.40.020.E.2

2. Mitigation for Loss of Agricultural Lands. The PCDD notes that the project will result in the loss of more than 400-acres of Prime agricultural land. The applicant's presentation that the loss of more than 400-acres of Prime farmland is "not significant" and therefore requires no mitigation is incorrect. All Kern County projects, for which an EIR is prepared, requires that the loss of prime, unique or farmland of statewide importance be mitigated at a ratio of 1:1, as required by CEQA. Such mitigation involves the acquisition of agricultural easements on similar quality land and Staff is recommending that the replacement easements be located in Kern County. Even with this mitigation, Staff notes the determination regarding the significance of the loss of prime farmland is based on the findings of the Kern County General Plan EIR and other County-prepared EIRs in the valley; and that the loss of 400+ acres of Prime farmland is both project and cumulatively significant.

a. Therefore, the PCDD recommends that the project, if approved by the CEC, include appropriate Mitigation Measures for loss of prime agricultural land at a 1 to 1 ratio as required by CEQA, and with mitigation lands to occur within Kern County.

b. The Kern County Board of Supervisors also notes that the CEC's CEQA Evaluation should review alternative sites for the project that do not contain Prime Agricultural Farmland.

Additionally, the PCDD notes that, in response to the Kern County Farm Bureau's presentation at the February 26, 2013 Board hearing, the Board of Supervisors directed inclusion of the Farm Bureau's concerns within this comment letter. Therefore, a letter dated February 26, 2013 from the Kern County Farm Bureau representative is attached for your consideration.

3. Impacts to County Services (Sales Tax). If approved by the CEC, the HECA Project would be sited and will operate within Kern County. The impacts of the project will affect Kern County property owners, residents, and County services. To address such impacts, the Kern County Board of Supervisors requires that renewable energy projects, specifically wind and solar PV, identify their place of origin as an address within an unincorporated area Kern County and register that address with the State Board of Equalization; such that the purchase of project equipment and other materials which generate sales tax payments will benefit Kern County residents. Staff notes that the HECA applicant has an office located in Buttonwillow (an unincorporated area of Kern) and that this sales-tax mitigation measure has been implemented for over 15 other projects with no objection from those applicants; including international and out-of-state companies. Therefore, there should be no objection from the applicant to inclusion of this measure on the HECA Project, and the applicant expressed no objection at the hearing before the Board of Supervisors.

Therefore, the recommended mitigation measure is as follows:

Prior to the issuance of building permits for the HECA project, the Project Proponent/Operator shall comply with the following: The Project Proponent shall work with the appropriate Kern County Staff to determine how the receipt of sales and use taxes related to the construction of the project will be maximized. This process shall include, but is not necessarily limited to: the Project Proponent/Operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, registering this address with the State Board of Equalization, using this address for acquisition, purchasing and billing purposes associated with the proposed project. The Project Proponent/Operator shall allow the County to use this sales tax information publicly for reporting purposes.

4. Transparency of CEQA Analysis (Air Quality Emissions Data). According to a CEC letter dated January 23, 2013 (TN #69231), HECA filed an application to the CEC in January, 2013 requesting confidentiality for the calculations and formulas used to calculate HECA's potential air emissions of criteria pollutants, greenhouse gases and toxic air contaminants. The application states that the formulas and calculations are confidential as a "trade secret" that provides a business advantage

because the data is technical in nature and required time and resources to develop. HECA also stated that the information is proprietary in nature and exempt from disclosure under Government Code section 6254.15.

The CEC approved the request for confidentiality and, in doing so, made note that the application “does not seek to have the emissions data designated as confidential but only the underlying formulas and calculations.” The PCDD concludes that a “blanket” restriction of data is not in the spirit of CEQA, which requires full public disclosure of a project’s environmental impacts and the assumptions used to determine those impacts. In order for public agencies (such as Kern County) and the general public to be able to conduct a meaningful and adequate review of the HECA Project, all of the materials used to calculate the project’s emissions must be made readily available.

Subsequent to the CEC’s approval of the request for confidentiality, the applicant verbally explained to PCDD Staff that the confidentiality request only applied to specific details of the mechanical-configuration of the gasification machine; and that only those details would be redacted from the emissions report. The applicant indicated that they would revise their request to the CEC to reflect this more focused confidentiality request. PCDD Staff concluded that a narrow and focused redaction of the scope described by the applicant may be appropriate and consistent with standard industry practices.

On February 25, 2013, HECA submitted a revised letter to the CEC (Attn: Director Ogelsby) to clarify the purpose of the confidentiality request.

Therefore, the PCDD recommends that the CEC review the applicant’s clarification and issue a revised letter to clarify that the confidentiality approval is for focused confidentiality of air quality emissions data in lieu of providing “blanket” confidentiality approval.

5. Alternatives used in CEQA Analysis. Chapter 6 of the applicant’s HECA application to the CEC lists 4 “Alternative Sites” for the HECA Project. The applicant appears to have provided this information to comply with Section 15126.6 of the CEQA requirements, which state that an environmental analysis must describe a range of reasonable alternatives or locations for the project that could feasibly avoid or lessen any significant environmental impacts of the project while attaining most of the project’s basic objectives.

Staff notes that Alternative Site 1, as identified by HECA, is located on property that is owned by the Romanini Family Trust. The Romaninis are opposed to the HECA project and have been officially designated by the CEC as interveners against the project. The Romaninis have expressed to Staff that they have not had discussions with SCS Energy regarding acquisition of their property. Therefore, PCDD Staff does not believe that it is appropriate for the applicant to have included the Romanini parcels as a potential alternative because use of this site is not feasible.

Therefore, the PCDD recommends that the CEC not include this site as an Alternative in the CEQA document. Staff also notes that the CEC should inquire as to whether the applicant has contacted all property owners listed in Alternative 4 prior to including that as a viable alternative option.

6. Project Water Usage. Page 2-18 of the Project Description portion of the May 2012 application to the CEC states that the HECA project will use between 4,600 – 5,150 gallons per minute (gpm) of brackish local groundwater, which equals 7,425 – 8,312 acre feet per year (afy). The range in use is due to temperature changes during summer months. The water will be provided by the Buena Vista Water Storage District (BVWSD) and will be used to cool critical components of the power plant as follows. In light of the water usage rates that would be generated by this project, Staff has concerns that need to be further addressed by the CEC in the CEQA document.

Therefore, the PCDD requests that the CEC's CEQA document include information on the following: (a) Will the brackish water source be available for the life of the project? Please include substantial data to support conclusions; (b) What is the alternative water source if the BWVSD supply becomes unavailable? Section 6.7 of the application lists several alternatives; including municipal effluent, State Water Project and fresh groundwater supplies; however, Staff notes that none of these listed alternatives are feasible because the site is not near a municipal effluent supplier, State Water Project waters have not been allocated, and State law does not allow power plants to use fresh groundwater sources; (c) Could the proposed brackish water be used for agricultural irrigation purposes?

7. Use of 75% Coal with 25% Petcoke and Future source of Petcoke. The Project Description of the May 2012 application (Section 2) states that the HECA Project would operate on a fuel blend consisting of 75% coal and 25% California petcoke; thereby using 1.6 million short tons of coal and 400,000 tons of petcoke per year.

Staff notes the use of 75% coal is notably different than the initial application submitted to the CEC in 2008. Specifically, the 2008 application stated that petcoke would be the primary feedstock for the HECA Project and that coal would be a secondary feedstock not to exceed 60%. This new change in ratios of coal vs. petcoke is of concern to Kern County because petcoke is a by-product of existing refinery processes, while coal is produce that would be specifically mined and transported into Kern County for use as a feedstock at the HECA plant.

Additionally, the application states that the coal would be primarily obtained from sources in New Mexico and that the coal would be transported to the site via trucking from a facility in Wasco or via a new railroad spur that would deliver the coal directly to the site. Both of these transport options would impact County infrastructure systems, as noted in the comments submitted by the Roads Department. Additionally, gas and vehicles coming from other States are subject to different environmental regulations that could be less stringent than California regulations.

Staff also notes that the application states that the petcoke component of the HECA feedstock will be "readily available" to the project and that the petcoke will be trucked in from refineries. Staff has concerns regarding the variable sources of this petcoke and notes that the material may not be readily available for the life of the project if any of the source-refineries cease or change their operations.

Therefore, the PCDD recommends that the CEQA document include a discussion of the environmental regulations that the trucks and fuel will be subject to, for those vehicles coming to Kern County from other States; as well as a discussion on the long-term availability of coal and petcoke fuel sources for the HECA project.

8. **Use of Eminent Domain.** Several Kern County residents have expressed concerns that the HECA Project will use eminent domain to obtain right-of-way for transmission lines and/or railroad spurs to serve the project. Several property owners have indicated that they do not want to lose portions of their land to the project because such development would make remaining portions of their farms unusable. Staff notes that the CEC has the power of eminent domain.

Therefore, the PCDD notes that the Kern County Board of Supervisors would like to go on record to not support the use of eminent domain in association with this project; including for the acquisition of transportation and/or transmission infrastructure.

KERN COUNTY FIRE DEPARTMENT (KCFD)

(February 13, 2013)

The Kern County Fire Department has performed an exhaustive review of the proposed HECA Project and has concluded that the HECA project will have significant impacts on Kern County Fire facilities, if left unmitigated. The KCFD has identified the specific impacts in detail, as outlined in the attached comment letter dated February 13, 2013.

To address the impacts of the proposed HECA Project on County Fire facilities, the KCFD has identified the following *mitigation measures* that, at minimum, should be included in any project approval:

1. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall fund the purchase and delivery to the Fire Department of a fully equipped Industrial Foam pumper/tender, which will be housed and maintained by the Kern County Fire Department, and an additional 2,500 gallon cache of Class B foam to be provided to the Department to be stored at an off-site location. The Industrial Foam pumper/tender, with its onboard foam capabilities, and the 2,500 gallon cache of Class B foam will allow the Department to have the specialized capabilities and equipment necessary to control and contain a fire or product leak emergency that occurs at the HECA plant.

Therefore, in order to mitigate the significant impact that this project creates, HECA is required to purchase and deliver to the County a fully equipped Industrial Foam pumper/tender with its onboard foam storage capabilities, and an additional 2,500 gallon cache of foam, which adheres to the following minimum standards.

- a. The Industrial Foam pumper/tender shall be manufactured to the Department's standards with no substitutions.
- b. The Industrial Foam pumper/tender must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Department 30 days prior to the start-up of the project. Additional time may be required in order to place the Industrial Foam pumper/tender in service and to allow for training personnel assigned to operate the pumper.
- c. The Industrial Foam pumper/tender shall be fully equipped to Department specifications.
- d. The final authority on the specifications for the Industrial Foam Pumper/Tender shall rest with the Department.
- e. The Title for the Industrial Foam Pumper/Tender shall be transferred to the County upon delivery.
- f. The cache of foam shall meet the Department's standards.
- g. If the Department responds to an emergency at HECA and uses the cache of foam to control or contain the emergency, HECA will be required to replace the amount used within 30 days of the incident.

The estimated cost for the Industrial Foam Pumper/Tender is \$800,000 and the 2,500 gallon cache is \$50,000. Please note: Foam storage data derived from calculations based on satisfactorily extinguishing a two-dimensional tank fire involving the largest tank containing HECA's most volatile/dangerous commodity.

2. Prior to the application for the first grading or building permit for the HECA Project, the Project Proponent shall provide a Fire Protection Specialist to the Kern County Fire Department for use during the plan review process. HECA will be allowed to select the Specialist from a list of qualified individuals provided by the Department. Furthermore, HECA and the Fire Protection Specialist shall develop a comprehensive *Fire and Life Safety* plan that describes the methods to reduce the potential of an uncontrolled fire thus reducing the threat to life and property. These plans must be submitted and approved by the Department prior to building permit approval.

3. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide, or reimburse Kern County for the purchase of, a 3 ½ to 5 acre plot of land in which to relocate Kern County Fire Station 53. The Fire Department intends to relocate Fire Station 53 in the vicinity of Interstate 5 and Highway 119 in order to better serve HECA and the surrounding communities. The new Fire Station site would include a standard fire station capable of housing three to six on-duty firefighters, a three-bay engine house, and a helipad capable of handling emergency helicopters. The Fire Department shall have final authority on the exact location for the fire station.
4. During the active construction phase of the project, the Project Proponent shall provide 50% of the operating cost of a Kern County Fire Department fire prevention inspector, estimated to be \$88,600 who will be actively involved with fire prevention measures on a daily basis.
5. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide training to Kern County Fire Department Staff, as identified by the Fire Department, in the areas needed to mitigate Hydrogen and other related hazardous material emergencies that might arise at the plant for the crews that are stationed at Buttonwillow (25), Taft (21), Old River (53), Maricopa (22) and Fellows (23). This will also be an annual requirement to train at least three (3) Kern County Fire Department personnel in these station areas.
6. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide full funding to purchase a fire rescue truck, to be housed and maintained by the Kern County Fire Department, and capable of lifting heavy loads in order to extricate trapped passengers in the event of a semi-truck vehicle accident. Fire Rescue Truck specifications/capabilities, and purchasing details, are as follows:
 - a. A fire rescue truck with a 50-ton rotator crane, manufactured to the Fire Department's specifications with no substitutions.
 - b. The fire rescue truck must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Fire Department 30 days prior to the start-up of the project. Additional time may be required in order to place the fire rescue truck in service and to allow for training personnel assigned to operate the vehicle.
 - c. The fire rescue truck shall be fully equipped to Department specifications.
 - d. The final authority on the specifications for the fire rescue truck shall rest with the Fire Department.
 - e. The vehicle title for the fire rescue truck shall be transferred to the County upon delivery.
7. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide the Kern County Fire Department with air monitoring equipment that provides first responders with the capability to monitor for multiple toxic gases during an emergency at the facility.
8. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually funds to the Kern County Fire Department for the full salaries of six Fire Engineer positions to drive and operate the Industrial Foam Pumper/Tender and the Fire Rescue Truck.
9. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually to the Kern County Fire Department for the reverse 9-1-1 system, based upon the number of addresses that would be directly affected by a major emergency at the facility requiring surrounding residences to shelter-in-place or evacuate.

**KERN COUNTY PUBLIC HEALTH SERVICES DEPARTMENT, ENVIRONMENTAL
HEALTH DIVISION (EHS)**
(As of 12/20/12)

The Environmental Health Division has reviewed the project and has the local regulatory authority to enforce state regulations and local codes as they relate to hazardous materials management, waste management and discharge, water supply requirements, and other items that may affect the health and safety of the public or that may be detrimental to the environment.

The Division requests the following *mitigation measures* be satisfied prior to project operation:

1. The applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.
2. The applicant shall provide sensors and/or detectors, as approved by the Environmental Health Division, at the site that will provide early notification of an accidental release of large quantities of toxic and flammable gasses/vapors from hazardous materials stored or generated on site. Chemicals of concern proposed for storage include anhydrous ammonia (toxic), hydrogen sulfide (toxic and flammable) and alcohol (flammable) and are to be monitored by an appropriate sensor array sufficient in scope to reasonably detect the materials before going offsite.
3. The applicant shall apply for a permit and comply with all regulations pertaining to the Certified Unified Program Agency (CUPA). Program elements consolidated under the CUPA are: Hazardous Materials Release Response Plan, Chemical Inventory, Hazardous Waste Generator, Onsite Hazardous Waste Treatment Programs, California Accidental Release Prevention Program (CalARP), Underground Storage Tanks, and Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC). The Hazardous Materials Business Plan must be completed prior to operations of the facility into the California Environmental Reporting System (CERS).
4. The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:
 - Hazardous materials business plan
 - MSDS sheets for all chemicals stored at the site
 - Emergency contact numbers
5. The applicant shall provide a video monitoring system around the containment areas which can be used by first responders.
6. The applicant shall provide a means of secondary ingress/egress to the site for emergency use.
7. The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.

8. The applicant must complete a Process Hazard Analysis (PHA) for all applicable hazardous materials and incorporate mitigation measures into the project design prior to commencement of operations. All PHA recommendations must be addressed prior to beginning facility operations. The Environmental Health Division must be notified of any scheduled PHA and given the opportunity to attend any session. The PHA must address issues of concern which include an uninterrupted power supply, safety system redundancies established to ensure the safe handling of the chemical at all times, and remote monitoring and surveillance. All PHAs and corrective actions must also be reviewed by this Division prior to implementation.
9. The applicant must provide documentation of an Emergency Response Plan for the accidental release of all applicable hazardous materials. The plan must address an intentional release or one caused by a natural disaster. A continuous training program for employees must be established to ensure a proper response to a release will occur and public health will be protected. Issues of site security, off-site monitoring, and public notification in the event of a release must be included. The Emergency Response Plan must be developed in conjunction with the Environmental Health Division and the Kern County Fire Department.
10. The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.

KERN COUNTY ENGINEERING, SURVEYING AND PERMIT SERVICES DEPARTMENT

ESPS has reviewed the project and stated that if the CEC requests the Building Inspection Division to provide CBO services related to plan reviews and/or inspections of this project, the following conditions shall be required:

1. The applicant shall be responsible to pay the County all plan review, inspection, and other related fees in accordance with the Department's adopted fee resolution.
2. The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials.
3. The applicant shall provide a California registered civil engineer to act as the Resident Engineer (RE) during the construction of the project. The RE shall be approved by the Department and paid for by the applicant. Duties and responsibilities of the RE shall be identified prior to construction.
4. The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project.

KERN COUNTY ROADS DEPARTMENT

The Kern County Roads Department has reviewed the traffic information included in HECA's application to the CEC and has found that there is not sufficient information available to make specific, detailed recommendations. Specifically, Kern County has not approved a Traffic Impact Study for the project.

The Roads Department reviewed Section 5, *Traffic* of the May 2012 application submitted to the CEC and concluded that the proposed mitigation measures appear to address construction only, as the operational impacts appear to have been deemed less than significant. Without an approved Traffic Impact Study, the Roads Department cannot confirm the assertions made in the application. The Roads Departments also found that the application does not address the impacts to the roadway segments as far as the capacity of the road to accommodate the number of heavy vehicles. The Roads Department has preliminarily concluded that Dairy Road, Adohr Road, Station Road, and Morris Road will not be able to withstand the impacts without mitigation; requiring reconstruction of those roadways.

To date, the project applicant is continuing to work with the Roads Department but has not yet submitted a Traffic Impact Study to the Kern County Roads Department.

Therefore, the Roads Department recommends that the CEC require the HECA applicant to work with the Kern County Roads Department to provide a technical memo to the County Roads Department to supplement the information and analysis provided in the Application for Certification (AFC) Amendment. The technical memo will incorporate clarification and confirmation of mitigation measures required to address the construction and operational impacts of the HECA Project. The technical memo shall be reviewed and approved by the County Roads Department.

KERN COUNTY WASTE MANAGEMENT DEPARTMENT

The Kern County Waste Management Department (KCWMD) operates the County-owned public solid waste facilities and is the Responsible Agency for maintaining the unincorporated Kern County jurisdiction's compliance with the Integrated Waste Management Plan (IWMP). The IWMP includes elements dealing with source reduction and recycling of waste, disposal facility siting criteria, and non-disposal facility identification.

The KCWMD has reviewed the proposed HECA project and has concluded that the project would have significant impacts on Kern County facilities. Those impacts are laid out in detail in the attached comment letter, dated January 22, 2013.

Most notably, the HECA Project would generate an extremely high-volume of waste, mainly from the gasification process. If these wastes (coarse solids) are credited to Kern County as disposal, Kern County would be forced into extreme non-compliance with current State-mandated Diversion Rates which would result in substantial increased costs to the County. These costs could include fines from the State (CalRecycle) for not meeting diversion goals, increased costs associated with improvements made to local landfills to accommodate HECA waste, etc.

The KCWMD reserves the right to continue to review the HECA Project as the applicant and the CEC continue to have on-going conversations with CalRecycle and other State agencies regarding concerns on this project; including but not limited to the project's effect on Kern County Diversion Rates. However, in the interim, the WMD recommends that the following additional information be obtained from the applicant and that the following mitigation measures be added to the project:

CEQA Analysis Recommendation: Quantify the volume of waste to be generated during construction of the HECA Project and describe how these waste materials will be handled to meet State requirements.

CEQA Analysis Recommendation: The HECA Project Proponent shall evaluate the characteristics of the gasification solids, based on a similar representative facility and then conduct a market analysis of potential uses based on the gasification solid characterization; with data to be included in the CEC's CEQA Analysis.

Mitigation Measures:

1. Prior to the acceptance of residual material from the HECA Project at a Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with our landfill operations and fee schedules.
2. Based on the characteristics of the gasification solid, HECA shall conduct a market analysis of potential beneficial uses of the waste.
3. If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County via payment based on the following schedule: \$30 a ton (0-100 tons per day); \$50 a ton (101 – 200 tons per day); \$75 a ton (greater than 200 tons per day); or other amount as approved by the Board of Supervisors, to mitigate impacts to diversion programs. The County shall deposit the money in a Diversion Mitigation Reserve Account that will be used to fund diversion programs in Kern County. This is in addition to any gate/tipping fees for disposal.
4. HECA waste stream shall be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF.

With the inclusion of the above mitigation measures, the Kern County Waste Management System may be able to accept the residual gasification solids and other waste materials generated by the HECA Project. However, the Project will still result in a significant impact to the unincorporated area of Kern County to comply with SB 1016 and AB 939 by resulting in a significant increase in per capita disposal, and reducing the diversion and recycling rate below the 50 percent mandate achieved by the County. The KCWMD reserves the right to refuse to accept any load that it deems to be unacceptable based on its potential impact to the health or safety of the customers, employees and/or environment. The KCWMD may provide additional comments if necessary.

KERN COUNTY SHERIFF'S OFFICE

The Kern County Sheriff's Office has reviewed the proposed project and has completed the Law Enforcement Needs Assessment Form. The Sheriff's Offices recommends the following mitigation measures:

1. Recommends increased private security during the initial construction phase of the project to prevent theft and states that preventing theft could also be accomplished with proper fencing, lighting, and video surveillance.
2. After the project is completed, building security and alarms would help minimize potential thefts.

CLOSING COMMENTS

On behalf of the Kern County Board of Supervisors and Kern County Departments listed in this letter, the Planning and Community Development Department would like to thank the CEC for your consideration of the comments listed in this letter and requests the following:

1. Please include the comments, mitigation measures, and requests for additional information, as listed in this letter and attachments, in the Preliminary and Final “Staff Assessment/Draft Environmental Impacts Statement” that is being prepared by CEC Staff;
2. Please ensure that this letter and all attachments are provided to the Commissioners for consideration in preparation of the “Presiding Member’s Proposed Decision” and also to the full California Energy Commission for consideration in issuing the “Final Decision” on the project;
3. Please note that additional comments are forthcoming from the Kern County Roads Department;
4. Please note that the Kern County Board of Supervisors has directed PCDD Staff to bring this project back before the Board for review and preparation of additional Kern County comments on the CEC’s “Final Staff Assessment/ Draft Environmental Impacts Statement.”

Should you have any questions, please contact me at the contact information listed above. You may also contact the Supervising Planner coordinating Kern County’s review of this project, Jacquelyn R. Kitchen, at (661) 862-8619 or via email at kitchenj@co.kern.ca.us.

Sincerely,



Lorelei H. Oviatt, AICP, Director
Kern County Planning & Community Development Department

By: Jacquelyn R. Kitchen, Supervising Planner
Advanced Planning Division

cc: SCS Energy California, LLC.
Attn: Marisa Mascaro
30 Monument Square, Suite 235
Concord, MA 01742

Hydrogen Energy California
Attn: Tom Daniels, Managing Director, Commercial Business
PO Box 100, PMB 271
Mammoth Lakes, CA 93546

Occidental of Elk Hills, Inc.
Attn: William H. Barrett, EOR Business Manager
10800 Stockdale Highway
Bakersfield, CA 93311

cc: (cont.)

Kern County Administrative Office

Kern County Clerk of the Board

Kern County Fire Department

Kern County Environmental Health Services

Kern County Engineering Services

Kern County Roads

Kern County Waste Management

Kern County Sheriff's Department

Kern County Farm Bureau, Inc.
Attn: Benjamin McFarland
801 South Mt. Vernon Avenue
Bakersfield, CA 93307-2048

Kern-Kaweah Chapter of the Sierra Club
Andrea Issod; Matthew Vespa
85 Second Street, 2nd Floor
San Francisco, CA 94105

HECA Neighbors
c/o Chris Romanini
P.O. Box 786
Buttontwillow, CA 93206

Association of Irrigated Residents
Tom Frantz
30100 Orange Street
Shafter, CA 93263



KERN COUNTY FARM BUREAU, inc.

801 South Mt. Vernon Avenue
Bakersfield, CA 93307-2048
Phone: (661) 397-9635 - Fax: (661) 397-3403
Web: kerncfb.com - Email: kcfb@kerncfb.com

Steve Maniaci
President

Greg Wegis
1st Vice President

Jeff Rasmussen
2nd Vice President

Benjamin McFarland
Executive Director

February 26, 2013

Kern County Board of Supervisors Meeting
1115 Truxtun Avenue
Bakersfield, CA 93301

Good Afternoon Supervisors:

My name is Ben McFarland, I am the Executive Director of the Kern County Farm Bureau. As way of background, the Kern County Farm Bureau is a formal intervenor in the California Energy Commission's siting process for the Hydrogen Energy California Power Plant.

As you consider proposed mitigation measures, conditions and payments I am here to share with you our concerns as it relates to the impacts to Kern County agriculture. Specifically, the following five issues that were brought to the attention of the California Energy Commission at the July 2012 Scoping Meeting in Tupman;

- Potential bifurcation of farming operations as a result of new rail lines,
- Loss of state-designated important farmland,
- Disruption of neighboring farming activities, and
- Contribution of emissions negatively impacting local air quality, in which farming operations in the area are already significantly regulated.

In addition, after meeting again with our impacted members within the vicinity of the project, we support a plan in place for a financial commitment as mitigation to protect neighboring agricultural production in the event unforeseen negative events impact surrounding crop production.

Thank you for your consideration and continued support of agriculture in Kern County.

Sincerely,

Benjamin McFarland
Executive Director
Kern County Farm Bureau, inc.

Attachment 1

**Kern County
Requested Mitigation Measures &
Requests for Additional Information
Regarding Proposed HECA Project**

– Attachment 1 –

Kern County's Requested Mitigation Measures & Requests for Additional Information Regarding Proposed HECA Project

KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT (PCDD)

As of February 26, 2013

1. **Mitigation Measure Recommendation:** Include MM to restrict the items produced on site and in the Manufacturing Complex to “fertilizer manufacture and storage for agricultural use only” per Section 19.12.030.A of the Kern County Zoning Ordinance.
2. Comments on Agriculture and Site Selection:
 - a. **Mitigation Measure Recommendation:** Include MM to mitigate for the loss of Prime Farmland at a 1:1 ratio, with mitigation lands to occur within Kern County.
 - b. **CEQA Analysis Recommendation:** Request that the CEC’s CEQA evaluation include meaningful review alternative sites for the project that do not contain Prime Agricultural Farmland.
3. **Mitigation Measure Recommendation:** Include the following mitigation measures to address impacts to public services: Prior to the issuance of building permits for the HECA project, the Project Proponent/Operator shall comply with the following: The Project Proponent shall work with the appropriate Kern County Staff to determine how the receipt of sales and use taxes related to the construction of the project will be maximized. This process shall include, but is not necessarily limited to: the Project Proponent/Operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, registering this address with the State Board of Equalization, using this address for acquisition, purchasing and billing purposes associated with the proposed project. The Project Proponent/Operator shall allow the County to use this sales tax information publicly for reporting purposes.
4. **Information Request:** PCDD requests that the CEC review the applicant’s 2/25/13 clarification letter and issue a revised letter to clarify that the confidentiality approval is for focused confidentiality of air quality emissions data in lieu of providing “blanket” confidentiality approval.
5. **CEQA Analysis Recommendation:** PCDD recommends that the CEC not include this site listed as Alternative 1 (owned by Romanini) as an Alternative in the CEQA document. PCDD also recommends that CEC inquire as to whether the applicant has contacted all property owners listed in Alternative 4 prior to including that as a viable alternative option.
6. **CEQA Analysis Recommendation:** PCDD recommends that the CEC’s CEQA document include information on the following hydrology and water issues:
 - a. Will the brackish water source be available for the life of the project? Please include substantial data to support conclusions.
 - b. What is the alternative water source if the BWVSD supply becomes unavailable? Section 6.7 of the application lists several alternatives; including municipal effluent, State Water Project and fresh groundwater supplies; however, Staff notes that none of these listed alternatives are feasible because the site is not near a municipal effluent supplier, State Water Project waters have not been allocated, and State law does not allow power plants to use fresh groundwater sources.
 - c. Could the proposed brackish water be used for agricultural irrigation purposes?

7. **CEQA Analysis Recommendation:** PCDD recommends that the CEQA document include a discussion of the environmental regulations that the trucks and fuel will be subject to, for those vehicles coming to Kern County from other States; as well as a discussion on the long-term availability of coal and petcoke fuel sources for the HECA project.
8. **CEQA Analysis Recommendation:** Therefore, the PCDD notes that the Kern County Board of Supervisors is on record to not support the use of eminent domain in association with this project; including for the acquisition of transportation and/or transmission infrastructure.

KERN COUNTY FIRE DEPARTMENT

(As of February 13, 2013)

Recommended Mitigation Measures:

1. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall fund the purchase and delivery to the Fire Department of a fully equipped Industrial Foam pumper/tender, which will be housed and maintained by the Kern County Fire Department, and an additional 2,500 gallon cache of Class B foam to be provided to the Department to be stored at an off-site location. The Industrial Foam pumper/tender, with its onboard foam capabilities, and the 2,500 gallon cache of Class B foam will allow the Department to have the specialized capabilities and equipment necessary to control and contain a fire or product leak emergency that occurs at the HECA plant.

Therefore, in order to mitigate the significant impact that this project creates, HECA is required to purchase and deliver to the County a fully equipped Industrial Foam pumper/tender with its onboard foam storage capabilities, and an additional 2,500 gallon cache of foam, which adheres to the following minimum standards.

- a. The Industrial Foam pumper/tender shall be manufactured to the Department's standards with no substitutions.
- b. The Industrial Foam pumper/tender must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Department 30 days prior to the start-up of the project. Additional time may be required in order to place the Industrial Foam pumper/tender in service and to allow for training personnel assigned to operate the pumper.
- c. The Industrial Foam pumper/tender shall be fully equipped to Department specifications.
- d. The final authority on the specifications for the Industrial Foam Pumper/Tender shall rest with the Department.
- e. The Title for the Industrial Foam Pumper/Tender shall be transferred to the County upon delivery.
- f. The cache of foam shall meet the Department's standards.
- g. If the Department responds to an emergency at HECA and uses the cache of foam to control or contain the emergency, HECA will be required to replace the amount used within 30 days of the incident.

The estimated cost for the Industrial Foam Pumper/Tender is \$800,000 and the 2,500 gallon cache is \$50,000. Please note: Foam storage data derived from calculations based on satisfactorily extinguishing a two-dimensional tank fire involving the largest tank containing HECA's most volatile/dangerous commodity.

2. Prior to the application for the first grading or building permit for the HECA Project, the Project Proponent shall provide a Fire Protection Specialist to the Kern County Fire Department for use during the plan review process. HECA will be allowed to select the Specialist from a list of qualified individuals provided by the Department. Furthermore, HECA and the Fire Protection Specialist shall develop a comprehensive *Fire and Life Safety* plan that describes the methods to reduce the potential of an uncontrolled fire thus reducing the threat to life and property. These plans must be submitted and approved by the Department prior to building permit approval.

3. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide, or reimburse Kern County for the purchase of, a 3 ½ to 5 acre plot of land in which to relocate Kern County Fire Station 53. The Fire Department intends to relocate Fire Station 53 in the vicinity of Interstate 5 and Highway 119 in order to better serve HECA and the surrounding communities. The new Fire Station site would include a standard fire station capable of housing three to six on-duty firefighters, a three-bay engine house, and a helipad capable of handling emergency helicopters. The Fire Department shall have final authority on the exact location for the fire station.
4. During the active construction phase of the project, the Project Proponent shall provide 50% of the operating cost of a Kern County Fire Department fire prevention inspector, estimated to be \$88,600 who will be actively involved with fire prevention measures on a daily basis.
5. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide training to Kern County Fire Department Staff, as identified by the Fire Department, in the areas needed to mitigate Hydrogen and other related hazardous material emergencies that might arise at the plant for the crews that are stationed at Buttonwillow (25), Taft (21), Old River (53), Maricopa (22) and Fellows (23). This will also be an annual requirement to train at least three (3) Kern County Fire Department personnel in these station areas.
6. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide full funding to purchase a fire rescue truck, to be housed and maintained by the Kern County Fire Department, and capable of lifting heavy loads in order to extricate trapped passengers in the event of a semi-truck vehicle accident. Fire Rescue Truck specifications/capabilities, and purchasing details, are as follows:
 - a. A fire rescue truck with a 50-ton rotator crane, manufactured to the Fire Department's specifications with no substitutions.
 - b. The fire rescue truck must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Fire Department 30 days prior to the start-up of the project. Additional time may be required in order to place the fire rescue truck in service and to allow for training personnel assigned to operate the vehicle.
 - c. The fire rescue truck shall be fully equipped to Department specifications.
 - d. The final authority on the specifications for the fire rescue truck shall rest with the Fire Department.
 - e. The vehicle title for the fire rescue truck shall be transferred to the County upon delivery.
7. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide the Kern County Fire Department with air monitoring equipment that provides first responders with the capability to monitor for multiple toxic gases during an emergency at the facility.
8. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually funds to the Kern County Fire Department for the full salaries of six Fire Engineer positions to drive and operate the Industrial Foam Pumper/Tender and the Fire Rescue Truck.
9. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually to the Kern County Fire Department for the reverse 9-1-1 system, based upon the number of addresses that would be directly affected by a major emergency at the facility requiring surrounding residences to shelter-in-place or evacuate.

**KERN COUNTY PUBLIC HEALTH SERVICES DEPARTMENT, ENVIRONMENTAL HEALTH
DIVISION**

(As of 12/20/12)

Recommended Mitigation Measures:

Prior to the commencement of project operations, the Project Proponent shall comply with the following:

1. The applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.
2. The applicant shall provide sensors and/or detectors, as approved by the Environmental Health Division, at the site that will provide early notification of an accidental release of large quantities of toxic and flammable gasses/vapors from hazardous materials stored or generated on site. Chemicals of concern proposed for storage include anhydrous ammonia (toxic), hydrogen sulfide (toxic and flammable) and alcohol (flammable) and are to be monitored by an appropriate sensor array sufficient in scope to reasonably detect the materials before going offsite.
3. The applicant shall apply for a permit and comply with all regulations pertaining to the Certified Unified Program Agency (CUPA). Program elements consolidated under the CUPA are: Hazardous Materials Release Response Plan, Chemical Inventory, Hazardous Waste Generator, Onsite Hazardous Waste Treatment Programs, California Accidental Release Prevention Program (CalARP), Underground Storage Tanks, and Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC). The Hazardous Materials Business Plan must be completed prior to operations of the facility into the California Environmental Reporting System (CERS).
4. The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:
 - Hazardous materials business plan
 - MSDS sheets for all chemicals stored at the site
 - Emergency contact numbers
5. The applicant shall provide a video monitoring system around the containment areas which can be used by first responders.
6. The applicant shall provide a means of secondary ingress/egress to the site for emergency use.
7. The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.
8. The applicant must complete a Process Hazard Analysis (PHA) for all applicable hazardous materials and incorporate mitigation measures into the project design prior to commencement of operations. All PHA recommendations must be addressed prior to beginning facility operations. The Environmental Health Division must be notified of any scheduled PHA and given the opportunity to attend any session. The PHA must address issues of concern which include an uninterrupted power supply, safety system redundancies established to ensure the safe handling of the chemical at all times, and remote monitoring and surveillance. All PHAs and corrective actions must also be reviewed by this Division prior to implementation.

9. The applicant must provide documentation of an Emergency Response Plan for the accidental release of all applicable hazardous materials. The plan must address an intentional release or one caused by a natural disaster. A continuous training program for employees must be established to ensure a proper response to a release will occur and public health will be protected. Issues of site security, off-site monitoring, and public notification in the event of a release must be included. The Emergency Response Plan must be developed in conjunction with the Environmental Health Division and the Kern County Fire Department.
10. The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.

KERN COUNTY ENGINEERING, SURVEYING AND PERMIT SERVICES DEPARTMENT

(As of 12/18/12)

If the CEC requests the Building Inspection Division to provide CBO services related to plan reviews and/or inspections of this project, the following conditions shall be required:

1. The applicant shall be responsible to pay the County all plan review, inspection, and other related fees in accordance with the Department's adopted fee resolution.
2. The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials.
3. The applicant shall provide a California registered civil engineer to act as the Resident Engineer (RE) during the construction of the project. The RE shall be approved by the Department and paid for by the applicant. Duties and responsibilities of the RE shall be identified prior to construction.
4. The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project.

KERN COUNTY ROADS DEPARTMENT

(As of 2/26/13)

– Placeholder –

Comments Pending Further Conversations with HECA Applicant and Applicant Preparation of an Adequate Traffic Impact Study

The Roads Department recommends that the CEC require the HECA applicant to work with the Kern County Roads Department to provide a technical memo to the County Roads Department to supplement the information and analysis provided in the Application for Certification (AFC) Amendment. The technical memo will incorporate clarification and confirmation of mitigation measures required to address the construction and operational impacts of the HECA Project. The technical memo shall be reviewed and approved by the County Roads Department.

KERN COUNTY WASTE MANAGEMENT DEPARTMENT

(As of 1/22/13)

CEQA Analysis Recommendation: Quantify the volume of waste to be generated during construction of the HECA Project and describe how these waste materials will be handled to meet State requirements.

CEQA Analysis Recommendation: The HECA Project Proponent shall evaluate the characteristics of the gasification solids, based on a similar representative facility and then conduct a market analysis of potential uses based on the gasification solid characterization; with data to be included in the CEC's CEQA Analysis.

Mitigation Measures:

1. Prior to the acceptance of residual material from the HECA Project at a Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with our landfill operations and fee schedules.
2. Based on the characteristics of the gasification solid, HECA shall conduct a market analysis of potential beneficial uses of the waste.
3. If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County via payment based on the following schedule: \$30 a ton (0-100 tons per day); \$50 a ton (101 – 200 tons per day); \$75 a ton (greater than 200 tons per day); or other amount as approved by the Board of Supervisors, to mitigate impacts to diversion programs. The County shall deposit the money in a Diversion Mitigation Reserve Account that will be used to fund diversion programs in Kern County. This is in addition to any gate/tipping fees for disposal.
4. HECA waste stream shall be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF.

KERN COUNTY SHERIFF'S OFFICE

(As of 10/10/12)

The Sheriff's Offices recommends the following mitigation measures:

1. Recommends increased private security during the initial construction phase of the project to prevent theft and states that preventing theft could also be accomplished with proper fencing, lighting, and video surveillance.
2. After the project is completed, building security and alarms would help minimize potential thefts.

Attachment 2

Comments from Kern County Departments

Kern County Fire Department

(As of February 13, 2013)

Kern County Public Health Services Department, Environmental Health Division

(As of 12/20/12)

Kern County Engineering, Surveying and Permit Services Department

(As of 12/18/12)

Kern County Roads Department

(Placeholder - As of 2/26/13)

Kern County Waste Management Department

(As of 1/22/13)

Kern County Sheriff's Office

(As of 10/10/12)

Brian S. Marshall
Fire Chief & Director of Emergency Services

Fire Department Headquarters
5642 Victor Street • Bakersfield, CA 93308 • www.kerncountyfire.org
Telephone 661-391-7000 • FAX 661-399-2915 • TTY Relay 800-735-2929



February 13, 2013

Lorelei H. Oviatt, Director
Kern County Planning and Community Development
2700 "M" Street
Suite 100
Bakersfield, California, 93301

RE: Hydrogen Energy California Plant

Lorelei,

The Kern County Fire Department (Department) has performed an exhaustive review of the proposed 473 acre Hydrogen Energy California (HECA) plant that is to be constructed 1.5 miles northwest of the unincorporated community of Tupman. The HECA plant will gasify petroleum coke (petcoke) (or blends of petcoke and coal) to produce hydrogen to fuel a combustion turbine operating in a combined cycle mode. The Gasification Block feeds a 390-megawatt combined cycle plant generating approximately 250 MW of low-carbon baseload power to the electrical grid.

HECA will be served by fire stations located in Taft, Fellows, McKittrick, and Buttonwillow. Specialized firefighting and rescue resources are located in Metropolitan Bakersfield, approximately 30 miles away.

Using information provided by HECA and commonly available information including MSDS sheets, the Department has determined that Petcoke (15,000 tons of active storage and at least 30 days inactive emergency storage), Molten Sulfur (150,000 gallons), and Methanol (550,000 gallons) provide the greatest hazards due to their hazard characteristics and flammability.

Petcoke is a hydrocarbon based by-product from refineries primary fuel source for HECA. The active petcoke is stored in three 5,000-ton silos and the inactive storage will be stored in a storage pile, covered with a stabilizer. Petcoke is subject to spontaneous heating and combustion. The suitable extinguishing media is large volumes of water or foam. Firefighting may expose firefighters to high heat, smoke, or toxic by-products. A petcoke fire will produce large quantities of dense black smoke containing toxic and hazardous products that will spread out over large areas.

Molten Sulfur is a flammable solid that that has a flash point of 404.6⁰ F and a wide flammable limit of 4% to 44%. The molten sulfur is a by-product of the gasification process and will be trucked off site. Approximately five trucks per day will be used to remove the molten sulfur. Molten sulfur is highly toxic to the respiratory tract and direct contact will cause severe thermal burns. If large trucks or tank cars become involved in fire, the recommended course of action is to let the fire burn and evacuate ½ mile in all directions.

Methanol is used in the cold startup process. Methanol is a Poison-Class B that has a flash point of 520^o F and a flammable range of 6.0% to 36%. Ingestion of as little as one ounce can cause irreversible injury to the nervous system, blindness, or death. Methanol is extremely flammable and may explode in confined space conditions. Water is ineffective in extinguishing this type of fire. The suitable extinguishing media is large volumes of alcohol resistant foam. If large trucks or tank cars become involved in fire, the recommended course of actions is to let the fire burn and evacuate ½ mile in all directions.

HECA presents significant challenges to the Department due to confined space hazards, hazardous material use and storage, large population of workers, tall structures, and large machinery. Additionally, increased truck and train traffic to deliver the required amount of feedstock presents increased emergency activity throughout the County particularly on Highway 33, Interstate 5, and the major railroads.

It is the professional opinion of the Department that HECA will adversely impact the Department's ability to continue to provide a high level of service to not only this project, but also the surrounding communities and property owners. Furthermore, the mitigation measures provided to the Department by HECA are not adequate to mitigate the risk of an uncontrolled fire.

In the expert experience of the Department, the appropriate mitigation measures are as follows:

- Purchase, and delivery to the Department, a fully equipped Industrial Foam pumper/tender, which will be housed and maintained by the Kern County Fire Department, and an additional 2,500 gallon cache of Class B foam to be provided to the Department to be stored at an off-site location. The Industrial Foam pumper/tender, with its onboard foam capabilities, and the 2,500 gallon cache of Class B foam will allow the Department to have the specialized capabilities and equipment necessary to control and contain a fire or product leak emergency that occurs at the HECA plant. Therefore, in order to mitigate the significant impact that this project creates, HECA is required to purchase and deliver to the County a fully equipped Industrial Foam pumper/tender with its onboard foam storage capabilities, and an additional 2,500 gallon cache of foam.
 - 1) The Industrial Foam pumper/tender shall be manufactured to the Department's standards with no substitutions.
 - 2) The Industrial Foam pumper/tender must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Department 30 days prior to the start-up of the project. Additional time may be required in order to place the Industrial Foam pumper/tender in service and to allow for training personnel assigned to operate the pumper.
 - 3) The Industrial Foam pumper/tender shall be fully equipped to Department specifications.
 - 4) The final authority on the specifications for the Industrial Foam Pumper/Tender shall rest with the Department.
 - 5) The Title for the Industrial Foam Pumper/Tender shall be transferred to the County upon delivery.
 - 6) The cache of foam shall meet the Department's standards.
 - 7) If the Department responds to an emergency at HECA and uses the cache of foam to control or contain the emergency, HECA will be required to replace the amount used within 30 days of the incident.

The estimated cost for the Industrial Foam Pumper/Tender is \$800,000 and the 2,500 gallon cache is \$50,000. Please note: Foam storage data derived from calculations based on satisfactorily extinguishing a two-dimensional tank fire involving the largest tank containing HECA's most volatile/dangerous commodity.

- HECA shall provide a Fire Protection Specialist to the Department during the plan review process. HECA will be allowed to select the Specialist from a list of qualified individuals provided by the Department. Furthermore, HECA and the Fire Protection Specialist shall develop a comprehensive *Fire and Life Safety* plan that describes the methods to reduce the potential of an uncontrolled fire thus reducing the threat to life and property. These plans must be submitted and approved by the Department prior to building permit approval.
- HECA shall provide a 3 ½ to 5 acre plot of land in which to relocate Kern County Fire Station 53. The Department intends to relocate Fire Station 53 in the vicinity of Interstate 5 and Highway 119 in order to better serve HECA and the surrounding communities. The new Fire Station site would include a standard fire station capable of housing three to six on-duty firefighters, a three-bay engine house, and a helipad capable of handling emergency helicopters.
 - 1) The Department shall have final authority on the exact location for the fire station.
- During the active construction phase of the project, HECA, shall provide 50% of the operating cost of a Kern County Fire Department fire prevention inspector, estimated to be \$88,600 who will be actively involved with fire prevention measures on a daily basis.
- Before certificate of occupancy is issued, HECA will provide training in the areas needed to mitigate Hydrogen and other related hazardous material emergencies that might arise at the plant for the crews that are stationed at Buttonwillow (25), Taft (21), Old River (53), Maricopa (22) and Fellows (23). This will also be an annual requirement to train at least three (3) Kern County Fire Department personnel in these station areas.
- A fire rescue truck, housed and maintained by the Kern County Fire Department, capable of lifting heavy loads in order to extricate trapped passengers in the event of a semi-truck vehicle accident. Fire Rescue Truck specifications/capabilities, and purchasing details, are as follows:
 - 1) A fire rescue truck with a 50-ton rotator crane, manufactured to the Fire Department's specifications with no substitutions.
 - 2) The fire rescue truck must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Fire Department 30 days prior to the start-up of the project. Additional time may be required in order to place the fire rescue truck in service and to allow for training personnel assigned to operate the vehicle.
 - 3) The fire rescue truck shall be fully equipped to Department specifications.
 - 4) The final authority on the specifications for the fire rescue truck shall rest with the Fire Department.
 - 5) The vehicle title for the fire rescue truck shall be transferred to the County upon delivery.
- HECA shall provide the Kern County Fire Department with air monitoring equipment that provides first responders with the capability to monitor for multiple toxic gases during an emergency at the facility.
- HECA shall be responsible to contribute annually to the Kern County Fire Department for six Fire Engineer positions to drive and operate the Industrial Foam Pumper/Tender and the Fire Rescue Truck.
- HECA shall be responsible to contribute annually to the Kern County Fire Department for the reverse 9-1-1 system, based upon the number of addresses that would be directly affected by a major emergency at the facility requiring surrounding residences to shelter-in-place or evacuate.

The Department has determined that the risk of an uncontrolled fire at the HECA plant is a significant environmental impact and must be mitigated. This letter outlines the minimum mitigation requested by the Department.

The Department looks forward to working with the management and sub-contractors of HECA during the construction phase of the project. In addition, the Department recognizes the need for HECA and the Department to have a good working relationship during the day-to-day activities at the plant and during any future expansion projects that may occur at the plant.

If additional information is required, please contact Fire Chief Brian Marshall by phone at (661) 391-7011, by fax at (661) 391-7013, or send an e-mail to bmarshall@co.kern.ca.us.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "B. S. Marshall". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Brian S. Marshall,
Fire Chief & Director of Emergency Services

Cc: John Silliman, Acting Deputy Fire Chief
Benny Wofford, Fire Marshal
John Nilon, County Administrative Officer
Sandra Quigly, Administrative Analyst



MATTHEW CONSTANTINE, DIRECTOR
PUBLIC HEALTH SERVICES

ENVIRONMENTAL HEALTH DIVISION

2700 M STREET, SUITE 300, BAKERSFIELD, CA 93301-2370
VOICE: (661) 862-8740 FAX: (661) 862-8701
Web: www.co.kern.ca.us/eh E-mail: eh@co.kern.ca.us

"ONE VOICE"



CLAUDIA JONAH, MD
PUBLIC HEALTH OFFICER

INTEROFFICE MEMORANDUM

To:	Jacqui Kitchen	Date:	December 20, 2012
From:	Environmental Health Division		
Subject:	HECA Project		

The Kern County Environmental Health Division has reviewed the above referenced project. This Division has the local regulatory authority to enforce state regulations and local codes as they relate to hazardous materials management, waste management and discharge, water supply requirements, and other items that may affect the health and safety of the public or that may be detrimental to the environment.

The Environmental Health Division requests that the following conditions be placed on the subject project and be satisfied prior to operation:

- 1) The applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.
- 2) The applicant shall provide sensors and/or detectors, as approved by the Environmental Health Division, at the site that will provide early notification of an accidental release of large quantities of toxic and flammable gasses/vapors from hazardous materials stored or generated on site. Chemicals of concern proposed for storage include anhydrous ammonia (toxic), hydrogen sulfide (toxic and flammable) and alcohol (flammable) and are to be monitored by an appropriate sensor array sufficient in scope to reasonably detect the materials before going offsite.
- 3) The applicant shall apply for a permit and comply with all regulations pertaining to the Certified Unified Program Agency (CUPA). Program elements consolidated under the CUPA are: Hazardous Materials Release Response Plan, Chemical Inventory, Hazardous Waste Generator, Onsite Hazardous Waste Treatment Programs, California Accidental Release Prevention Program (CalARP), Underground Storage Tanks, and Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC). The Hazardous Materials Business Plan must be completed prior to operations of the facility into the California Environmental Reporting System (CERS).
- 4) The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:



Printed on Recycled Paper

- Hazardous materials business plan
 - MSDS sheets for all chemicals stored at the site
 - Emergency contact numbers
- 5) The applicant shall provide a video monitoring system around the containment areas which can be used by first responders.
 - 6) The applicant shall provide a means of secondary ingress/egress to the site for emergency use.
 - 7) The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/ businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.
 - 8) The applicant must complete a Process Hazard Analysis (PHA) for all applicable hazardous materials and incorporate mitigation measures into the project design prior to commencement of operations. All PHA recommendations must be addressed prior to beginning facility operations. The Environmental Health Division must be notified of any scheduled PHA and given the opportunity to attend any session. The PHA must address issues of concern which include an uninterrupted power supply, safety system redundancies established to ensure the safe handling of the chemical at all times, and remote monitoring and surveillance. All PHAs and corrective actions must also be reviewed by this Division prior to implementation.
 - 9) The applicant must provide documentation of an Emergency Response Plan for the accidental release of all applicable hazardous materials. The plan must address an intentional release or one caused by a natural disaster. A continuous training program for employees must be established to ensure a proper response to a release will occur and *public health will be protected*. Issues of site security, off-site monitoring, and public notification in the event of a release must be included. The Emergency Response Plan must be developed in conjunction with the Environmental Health Division and the Kern County Fire Department.
 - 10) The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.



KERN COUNTY

Engineering, Surveying and Permit Services Department

Memorandum

Charles Lackey, P.E., Director

To: Jacquelyn Kitchen
Supervising Planner

Date: December 18, 2012

From: Greg Fenton, PE, CBO
Senior Engineering Manager

Phone: 862-5061
Fax: 862-5101

Subject: Hydrogen Energy of California Project (HECA)

The California Energy Commission (CEC) has authority over this project regarding building permits and related plan reviews and inspections. However, on other energy projects constructed in Kern County, the CEC has previously requested the Kern County Building Inspection Division to provide the services of a Chief Building Official (CBO) on their behalf. It is likely the CEC will again request the County to provide CBO services on this project.

If the CEC requests the Building Inspection Division to provide CBO services related to plan reviews and/or inspections of this project, the following conditions shall be required:

1. The applicant shall be responsible to pay the County all plan review, inspection, and other related fees in accordance with the Department's adopted fee resolution.
2. The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials.
3. The applicant shall provide a California registered civil engineer to act as the Resident Engineer (RE) during the construction of the project. The RE shall be approved by the Department and paid for by the applicant. Duties and responsibilities of the RE shall be identified prior to construction.
4. The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project.

KERN COUNTY ROADS DEPARTMENT

(As of 2/26/13)

– Placeholder –

Comments Pending Further Conversations with HECA Applicant and Applicant Preparation of an Adequate Traffic Impact Study

The Roads Department recommends that the CEC require the HECA applicant to work with the Kern County Roads Department to provide a technical memo to the County Roads Department to supplement the information and analysis provided in the Application for Certification (AFC) Amendment. The technical memo will incorporate clarification and confirmation of mitigation measures required to address the construction and operational impacts of the HECA Project. The technical memo shall be reviewed and approved by the County Roads Department.



KERN COUNTY WASTE MANAGEMENT DEPARTMENT

Douglas E. Landon, Director
2700 "M" Street, Suite 500
Bakersfield, CA 93301-2372
(661) 862-8900
(800) 552-KERN (option 6)
Fax: (661) 862-8905
<http://www.kerncountywaste.com>

January 22, 2013

Ms. Jacquelyn Kitchen, Supervising Planner
Planning and Community Development Department
2700 "M" Street, Suite 100
Bakersfield, CA 93301

Dear Ms. Kitchen:

SUBJECT: Hydrogen Energy California – 2012 Revised Application for Certification

Thank you for the opportunity to comment on the 2012 Revised Application for Certification of the Hydrogen Energy California plant. The Project will gasify a fuel blend of 75 percent coal and 25 percent petroleum coke (petcoke) to produce synthesis gas (syngas). Syngas produced via gasification will be purified to hydrogen rich fuel, and used to generate a nominal 300 megawatts (MW) of low-carbon baseload electricity in a Combined Cycle Power Block, low-carbon nitrogen-based products in an integrated Manufacturing Complex, and carbon dioxide (CO₂) for use in enhanced oil recovery (EOR).

The Project is located on a 473-acre site approximately seven miles west of the City of Bakersfield in the unincorporated area of Kern County.

The Kern County Waste Management Department (KCWMD) operates the County owned public solid waste facilities, and is the Responsible Agency for maintaining the unincorporated Kern County jurisdiction's compliance with the Integrated Waste Management Plan (IWMP). The IWMP includes elements dealing with source reduction and recycling of waste, disposal facility siting criteria and non-disposal facility identification.

The KCWMD has reviewed the proposed Project. The KCWMD focuses on, but is not limited to, two questions identified in the CEQA checklist related to solid waste for which every project is to be evaluated. These questions include:

1. Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?
2. Would the Project 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 performance objectives for public facilities?

This comment letter will address each question in order.

Would the Project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Sufficient permitted capacity involves three components: (1) daily tonnage, (2) daily traffic, and (3) permitted volume. The KCWMD must also evaluate operational concerns primarily

due to the physical characteristics of the waste. The closest public solid waste facility in the vicinity of the HECA Project is the Taft Recycling and Sanitary Landfill.

The HECA Project will consist of three phases: construction, start-up and ongoing operation. The existing Project Description does not describe the construction phase or the quantity of waste generated during the construction phase. The 2008 California Green Building Standards Code requires all construction projects to develop a recycling plan to divert and/or recycle at least 50 percent of waste generated during construction. Please refer to the 2008 California Green Building Standards Code Section 708 Construction Waste Reduction, Disposal and Recycling for specific details. **The KCWMD requests that HECA Project quantify the volume of waste to be generated during construction and briefly describe how these waste materials will be handled to meet State requirements.**

The third phase of the HECA Project is the ongoing operation in which the facility will be fueled by a combination of petroleum coke (petcoke) and coal. The Project will gasify a fuel blend of 75 percent coal and 25 percent petcoke to produce synthesis gas (syngas). This phase of the Project is projected to generate approximately 770 tpd of gasification solids. The Project is anticipated to produce an additional 57 tpd of waste that could be classified as either hazardous or non-hazardous and could be disposed in a Class III solid waste facility depending on characterization.

**Taft Recycling and Sanitary Landfill
Permit/Operational Conditions**

	Permit	Current Operation	HECA Project
Daily Tonnage (tpd)	800	112	57 - 827
Daily Traffic (vpd)	350	54	

During the 2012 year, the Taft Recycling and Sanitary Landfill (RSLF) accepted an average of 112 tons per day. A 57 tpd to 827 tpd increase at the facility would significantly impact the permitted capacity and the operational conditions at the facility. As stated above however, the KCWMD operates the County-owned public solid waste facilities. **The KCWMD requests that the HECA waste stream be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF.** The HECA Project may also consider several private facilities, including but not limited to, Clean Harbors, H. M. Holloway or McKittrick Disposal.

Additionally, prior to the acceptance of residual material from the proposed Project at any Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with landfill operations and fee schedules. A special handling fee may be assessed pending results of the characterization and impacts on landfill operations.

Would the Project 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 performance objectives for public facilities?

The HECA Project is described as a gasification process. The Project Description projects that the facility will generate between 57 tpd and 827 tpd of non-hazardous industrial waste that could be disposed in a Class III solid waste facility. The California Integrated Waste Management Act (AB 939) required all California cities, counties and approved regional solid waste management agencies responsible for enacting plans and implementing programs to divert 25 percent of their solid waste by 1995 and 50 percent by year 2000.

In 2008, the California State Senate passed Senate Bill 1016 (SB 1016) to make the process of goal measurement (obtaining and maintaining a 50 percent diversion rate) established by AB 939 simpler, more timely, and more accurate. SB 1016 accomplishes this by changing to a disposal-based indicator, the per capita disposal rate, which uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities. The Kern County unincorporated jurisdiction's per capita disposal equivalent to a 50 percent diversion rate was set at 7.6 lbs/person/day.

The proposed Project is located within the unincorporated area of Kern County; the disposal rate for this area is currently 5.7 lbs/person/day. In order to remain in compliance with SB 1016 and AB 939, the unincorporated area cannot exceed a disposal rate of 7.6 lbs/person/day. The HECA Project is projected to dispose of 292,118 tons/year (tpy) during operation, which equates to 5.36 lbs/person/day from the project alone. The HECA project would raise the County per capita disposal to 11.06 lbs/person/day, a 48.5% increase, exceeding the County's disposal cap of 7.6 lbs/person/day. The HECA Project is a significant impact and will place Kern County in jeopardy of non-compliance with mandated recycling goals. The following strategies may be used to negate this impact:

1. Recycle or reuse residual waste as a beneficial use.
2. Dispose of the material and receive confirmation from CalRecycle that the waste material cannot be recycled and have CalRecycle concurrence that the waste can be adjusted out of the jurisdictional reporting as disposal.
3. Seek/receive legislative or regulatory exemption.

The HECA Project Description indicates that the gasification solids, slag, may be recycled. The KCWMD acknowledges that there are limited local markets for slag; however, existing markets appear to be saturated as significant volumes of slag are disposed locally. Additionally, the chemical and physical characteristics of slag are variable and highly dependant on the feedstock and method of processing. Suitability of the HECA slag for beneficial use or disposal cannot be accurately evaluated until the material has been characterized. **Therefore, the KCWMD requests that HECA evaluate the characteristics of the gasification solids, based on a similar representative facility and then conduct a market analysis of potential uses based on the gasification solid characterization.**

If the Project cannot negate the impact of disposal on Kern County's diversion/recycling mandates, the KCWMD requests the following mitigation. If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County \$75/ton for

implementation of additional recycling facilities and programs to maintain compliance with State diversion mandates. This is in addition to any gate/tipping fees for disposal.

Recommended Mitigation Measures:

The Waste Management Department recommends the following mitigation measure to decrease the Project's potential impacts to the Taft RSLF or other Department facilities and programs to less than significant:

1. Prior to the acceptance of residual material from the proposed Project at a Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with our landfill operations and fee schedules.
2. Based on the characteristics of the gasification solid, HECA shall conduct a market analysis of potential beneficial uses of the waste.
3. If residual gasification solids or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County \$75/ton for implementation of additional recycling facilities and programs to maintain compliance with State diversion mandates. This is in addition to any gate/tipping fees for disposal.

With the inclusion of the above mitigation measures, the Kern County Waste Management System may be able to accept the residual gasification solids and other waste materials generated by the HECA Project. However, the Project will still result in a significant impact to the unincorporated area of Kern County to comply with SB 1016 and AB 939 by resulting in a significant increase in per capita disposal, and reducing the diversion and recycling rate below the 50 percent mandate achieved by the County.

The KCWMD reserves the right to refuse to accept any load that it deems to be unacceptable based on its potential impact to the health or safety of the customers, employees and/or environment. The KCWMD may provide additional comments if necessary.

If you have any further questions, please contact Katrina Slayton at (661) 862-8810.

Sincerely,



Nancy L. Ewert, P.E.
Senior Engineering Manager

Revised February 28, 2013

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cc: Tony Bonanno; Brian Klatt
Bill O'Rullian; Amy Rutledge (KCEHD)
Lorelei Oviatt (KCPD)
WMD-PADS
WMD-IWMP (COR)



1350 Norris Road
Bakersfield, California 93308-2231

October 10, 2012

Aaron Nousaine
California Energy Commission
Sitting, Transmission, and Environmental Protection Division
1516 Ninth Street, MS 40
Sacramento, CA 95814

RE: Law Enforcement Needs Assessment Form relating to the proposed Hydrogen Energy California Power Plant Project (08-AFC-8)

Mr. Nousaine,

The Kern County Sheriff's Office has reviewed the project characteristics, as proposed by the project applicant, reviewed the map for the proposed project, and completed the Law Enforcement Needs Assessment Form. Please refer to the attached document.

Oil Field and rural crime is prevalent in this area. There is always a possibility of vandalism and/or theft related crimes during the initial stages of this type of construction project. Once construction is completed on a project such as this, there are potential impacts on law enforcement services. Those types of service impacts are burglary alarm calls, burglary reports, and miscellaneous theft investigations.

The impact of this project on the Sheriff's Office resources will result in an increase in the number of calls for service. This increase should be negligible and could be mitigated by increased private security during the initial construction phase of the project to prevent thefts. Preventing thefts could also be accomplished with proper fencing, lighting, and video surveillance. After the project is completed, proper building security and alarms would help to minimize potential thefts.

In conclusion, there is a potential for an increase in calls for service during the construction of the project. Once construction is complete; however, the impact on the Sheriff's Office services should be minimal.

PLEASE ADDRESS ALL COMMUNICATIONS TO THE SHERIFF

October 10, 2012

Law Enforcement Needs Assessment Form relating to the proposed Hydrogen Energy California
Power Plant Project (08-AFC-8)

Page 2

Thank you for the opportunity to respond to the law enforcement needs for this project.
Please feel free to contact Sergeant Haiungs at (661) 764-6954 if you have any further
questions or inquiries.

Sincerely,

DONNY YOUNGBLOOD, Sheriff-Coroner



By: Lieutenant Steve Hansen
South Area Substations Section

Attachment

Hydrogen Energy California Power Plant Project (08-AFC-8)
Law Enforcement Needs Assessment Form Responses

EXISTING LAW ENFORCEMENT RESOURCES AND SERVICES IN THE PROJECT AREA:

Names and addresses of the facilities (e.g., sheriff substations) serving the project area, and distance of closest dispatch facility to the project site:

Taft Substation 315 N. Lincoln Street Taft, CA 93268	North County Substation 181 E. 1 st Street Buttonwillow, CA 93206	KSCO Communication Center 2601 Panorama Drive Bakersfield, CA 93306
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Adopted or desired service standard (e.g., one sworn officer per 1,000 population) applicable to the project site:

N/A; the project will not significantly impact permanent population to the area.

Existing staffing levels for facilities serving the project area (including sworn officers and civilians, totals and per shift):

Taft Substation Fourteen (14) Sworn Deputies One (1) Civilian Clerk	North County Substation – Buttonwillow Thirteen (13) Sworn Deputies Two (2) Civilian Clerks
---	---

*Most shifts have at least two (2) patrol deputies on duty per shift

Estimated response times to the project site:

Taft Substation	North County Substation - Buttonwillow
Priority Calls: 15 to 25 minutes	Priority Calls: 10 to 40 minutes
Non-Priority Calls: 25 to 35 minutes	Non-Priority Calls: 15 to 60 minutes

* Response times fluctuate due to where the deputies are responding from.

Current projected needs (e.g., facilities and staff) to maintain or meet existing service levels:

The North County Substation does not foresee any additional facilities or staffing needs as a direct result of this project.

Additional needs beyond those identified above to maintain or meet existing service levels with the project:

N/A

Hydrogen Energy California Power Plant Project (08-AFC-8)

Law Enforcement Needs Assessment Form Responses

Exchange of general law enforcement responsibilities (e.g., formal and/or informal agreements with local municipalities for provision of services) in the project area:

N/A

Current inventory of specialized equipment (e.g., helicopters or other aircraft):

The Kern County Sheriff's Office has helicopters and fixed wing aircraft in its inventory. These resources are based at Meadow Field in Bakersfield, California, which is 27 miles from the proposed project.

ESTIMATED NEED FOR LAW ENFORCEMENT SERVICES, EQUIPMENT, AND FACILITIES:

Is there a process or formula used by your department to determine the need for additional law enforcement services to serve a new large-scale power plant? Please explain.

I am not aware of any specific process or formula used to evaluate any additional needs resulting from a project such as this.

Could the project trigger a need for additional law enforcement services for on-site crimes against persons, theft of materials, and/or vandalism? Please explain.

During project construction:

Oil field and rural crime is prevalent in this area. There is always the possibility of theft of materials during construction. Therefore, additional law enforcement services might be needed for extra patrol by on duty deputies to discourage criminal activity. Additional time would be required to take theft reports and to conduct investigations.

During project operation:

The likelihood of theft during this project would be significantly reduced with the proposed 24/7 on-site security.

Could increased project-related traffic affect circulation and access on roads near the project site to the extent that an impact to emergency response times might occur? Please explain.

During project construction:

There are only two lane roads in the area around this site. There will be possible road delays during construction; however, the project is far enough away from major highways (CA HWY 58 and Interstate 5) that no significant traffic problems should be expected.

During project operation:

There would be increased traffic during shift change, but I do not expect any significant traffic issues.

Hydrogen Energy California Power Plant Project (08-AFC-8) Law Enforcement Needs Assessment Form Responses

Do law enforcement personnel review development site plans for projects to assess potential law enforcement issues (e.g., lighting and other safety factors)? Please explain.

We review site plans and planning documents to ascertain the impact of law enforcement services. With this project being located in the unincorporated area of Kern County, all lighting, traffic, and roads needs and/or assessments requests should be forwarded to the California Highway Patrol.

Are specific measures recommended to reduce the potential for crimes to occur at or near the project site (e.g., specific types of security fencing)? Please explain.

Chain link fence around perimeter
24 hour private security patrols
Large motion sensor lights
Alarm systems
Recorded video monitoring system

Please explain any other law enforcement concerns that have not been addressed by this needs assessment form.

This site is at the most Northern boundary for the Taft Substation response area and the most Southern boundary for the North County Substation. The distance from our normal patrol areas to this site could be impacted during our response to the project/plant.

Person(s) Completing This Needs Assessment Form

Name: Marc Haiungs
Title/Position: Sergeant
Telephone No: (661) 599-0157
E-mail Address: haiungsm@kernsheriff.com