

## SETTLEMENT AGREEMENT

This Settlement Agreement ("Agreement") is entered into by and between Great Valley Ethanol, LLC ("GVE") and Edmund G. Brown Jr., Attorney General of California, on behalf of the People of the State of California ("AG"), and is dated and effective as of March 17, 2008 (the "Effective Date"). GVE and the Attorney General are referred to herein collectively as the "Parties."

### RECITALS

On or about January 31, 2007, GVE submitted an application to the City of Hanford ("City") for a project known as the Great Valley Ethanol Project ("Project"). The Project is an ethanol production plant in the City of Hanford which GVE estimates will produce 63 million gallons of denatured ethanol per year.

On or about May 15, 2007, in accordance with the requirements of the California Environmental Quality Act ("CEQA"), the City prepared and circulated a Notice of Preparation of an Environmental Impact Report ("EIR") for the Project. A Draft Environmental Impact Report was circulated for public comment on or about September 27, 2007. Public comments were received on the EIR in writing and at a public meeting held on October 17, 2007. The City prepared responses to those comments and completed the Final Environmental Impact Report ("FEIR") for the Project in December 2007. The FEIR was certified and the Project permit approved by the County Planning Commission on December 11, 2007.

Approval of the Project was appealed to the City Council on December 21, 2007. While the appeal to the City Council was pending, the AG filed a comment letter raising concerns about the FEIR's adequacy under CEQA, including but not limited to its failure to adequately address mitigation measures for the Project's greenhouse gas related impacts.

A true and correct copy of the AG's comment letter is attached to this Settlement Agreement as Exhibit A to this Agreement. The City and GVE dispute the AG's contention that the FEIR is inadequate.

Given that, on this record and as of this date, there exists a genuine dispute about the life cycle benefits of ethanol as a low carbon fuel; and

Given that the City of Hanford, at the time it prepared its EIR for the Project, relied on technical analyses completed under the direction of the California Air Resources Board and the California Energy Commission that discussed the life cycle benefits of ethanol, including California-produced ethanol in comparison to ethanol produced in the Midwest;

Given the uncertainties in the outcome of the Parties' dispute, and taking into account the

procedural posture of this dispute as well as public interest; the Parties have decided to resolve the issues presented by the AG's comment letter without the need for judicial proceedings.

Therefore, the Parties agree as follows:

### **AGREEMENT**

. Without admitting any liability, or that the City of Hanford's analysis of the significance of the Project's greenhouse gas emissions was inadequate, that the mitigation measures imposed on the Project were inadequate, or that additional mitigation for the Project was feasible, and solely as a compromise of the issues raised by the AG, GVE agrees to enhance the structure for implementing mitigation measures for Project greenhouse gas emissions described in the EIR by taking the following actions:

1. Unless reduced by operation of Paragraph 3, below, GVE will pay \$1,000,000 as a mitigation fee for the Project's greenhouse gas emissions to a fund established and administered by the San Joaquin Valley Air Pollution Control District ("SJVAPCD") pursuant to a memorandum of understanding ("MOU") in Paragraph 4, below. This payment shall be made as follows: GVE shall pay 33% of the outstanding mitigation fee at the end of GVE's first full year of operations; 33% of the outstanding mitigation fee at the end of the second full year of operation; and any remaining outstanding mitigation fee end of the third full year of operation. Payments made under this Paragraph shall be made within thirty days of the end of each year of operation. A full year of operation means the 12 months following satisfaction of all performance guarantees.

2. Prior to the end of the third full year of Project operations GVE will implement feasible onsite and local mitigation measures to reduce the Project's greenhouse gas emissions using one or more of the following options:

- a. Carbon dioxide capture and marketing;
- b. Alternative product transportation options;
- c. Alternative onsite fuels measures, such as use of dairy digester gas;
- d. Onsite renewable energy projects, such as installation of solar or thermal onsite;
- e. Onsite ethanol production using cellulosic technology;
- f. Mitigation measures aimed at reducing greenhouse gas emissions, as set forth at Addendum to the Project EIR;
- g. Additional measures to be determined with oversight by SJVAPCD.

3. GVE's payment under Paragraph 1 shall be reduced by \$25 for each real, permanent, and verifiable metric ton of greenhouse gas emissions reductions that GVE achieves by

implementing the measures set forth in Paragraph 2. All greenhouse gas reductions proposed for credit under this Paragraph must be reviewed, verified and confirmed by the SJVAPCD and the AG prior to and in order for GVE to receive the \$25 per metric ton credit.

4. The MOU set forth in Paragraph 1 will be entered into between GVE, the AG and SJVAPCD. The MOU, which will identify and prioritize mitigation measures, will be designed to ensure that GVE's mitigation fees achieve reductions in greenhouse gas emissions in the San Joaquin Valley that are real, permanent, verifiable and additional. In the event that the MOU has not been signed by July 1, 2008, GVE and the AG will meet to agree upon an alternative recipient for the funding and oversight mechanism to serve the purposes of this Paragraph and of this Agreement.

5. Consistent with the CEQA Guidelines, Section 15097, at the end of each year of operations, GVE will submit a mitigation and monitoring report to the SJVAPCD, the City and the AG describing and reporting on its mitigation measures made under this Agreement. The required contents of the mitigation and monitoring report will be set forth in the MOU, described in Paragraph 4.

6. Nothing in this Agreement relieves GVE of its obligation to fully comply with any requirements of the California Health and Safety Code Division 25.5, sections 38500, et seq., the California Global Warming Solutions Act ("AB32"), that may be applicable to the Project. Nothing in this Settlement Agreement is intended to prevent another State agency from recognizing appropriate credit for GVE's early voluntary reduction of greenhouse gas emissions.

7. The AG agrees to not file a legal challenge or otherwise intervene against GVE in any lawsuit challenging the adequacy of the EIR for the Project.

8. This agreement represents the entire agreement of the Parties with respect to the subject matter herein, and merges and supercedes any prior written or oral representations, discussion, understandings or agreements by or between the Parties relating to the subject matter of this Agreement.

9. No addition or modification of any term or provision of this Agreement will be effective unless set forth in writing and signed by an authorized representative of each of the Parties.

10. In agreeing to make the payments identified herein, GVE does not admit to the necessity of implementing any additional offset or mitigation measures for the Project under CEQA, and GVE agrees to make these payments solely as a voluntary compromise and settlement of the AG's contentions.

11. Each Party represents and warrant that it has the right, power, and authority to

execute this Agreement. Each Party represents and warrants that it has given any and all notices, and obtained any and all consents, powers and authorities, necessary to permit it, and the persons executing this Agreement for it, to enter into this Agreement.

12. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

13. This Agreement may be executed in counterparts, each of which shall be deemed an original. This Agreement shall be binding upon the receipt of facsimile signatures.

14. This Agreement shall be deemed to have been jointly drafted, so that the general rule of construction that it be construed against the drafter shall not apply.

15. Any notice required or permitted to be given under this Agreement shall be in writing and shall be deemed to be given when served personally or on the third day after mailing if mailed in the United States, postage prepaid, addressed to the address for each Party set forth below:

Attorney General:

Jamie Jefferson  
Office of the Attorney General  
1515 Clay Street, PO Box 70550  
Oakland, CA 94612-0550

GVE:

D.Edward Settle  
Great Valley Energy  
5330 Office Center Court  
Suite 50  
Bakersfield, CA 93309

16. GVE's obligation to make the payments described in this Agreement is contingent upon GVE obtaining a valid permit for the Project from the City, containing the terms of this Agreement incorporated as permit conditions.

17. The Parties will execute all further and additional documents as shall be convenient, necessary or desirable to carry out the intents and provisions of this Agreement.

In witness whereof, this Agreement is executed by the following:

PEOPLE OF THE STATE OF CALIFORNIA  
BY AND THROUGH ATTORNEY GENERAL  
EDMUND G. BROWN

GREAT VALLEY ETHANOL  
COMPANY

  
Dated: 3/17/08

  
Dated: 3/17/08

# EXHIBIT A

EDMUND G. BROWN JR.  
Attorney General

State of California  
DEPARTMENT OF JUSTICE



1515 CLAY STREET, 20<sup>TH</sup> FLOOR  
P.O. BOX 70550  
OAKLAND, CA 94612-0550

Public: (510) 622-2100  
Telephone: (510) 622-2254  
Facsimile: (510) 622-2270  
E-Mail: jamie.jefferson@doj.ca.gov

February 19, 2008

Barbara McMurdy Marty  
City of Hanford  
317 North Douty Street  
Hanford, California 93230

RE: Great Valley Ethanol Final Environmental Impact Report, Hanford, Kings County

**TRANSMITTED VIA FACSIMILE (589) 583-1633 AND U.S. MAIL**

Dear Ms. McMurdy Marty:

The Attorney General submits these comments regarding the Hanford City Council's certification of a final environmental impact report ("FEIR") for the proposed Great Valley ethanol plant project ("Project") in Hanford.<sup>1</sup> We understand that the Center on Race, Poverty and the Environment has appealed the certification of the FEIR. Although we typically comment on projects in an earlier stage in their planning process, this project was only recently brought to our attention, and because of the significant global warming related impacts, we request that you consider these comments on appeal.

The Project will produce 63 million gallons of ethanol per year from corn imported from the Midwest. (DEIR, p. ES-1) Ethanol is a renewable fuel that, when blended with gasoline, reduces tailpipe emissions of carbon monoxide, particulate matter, oxides of nitrogen, and other ozone-forming pollutants. Currently, ethanol is blended into gasoline to create E10, a 10 percent blend approved for use in standard automobiles.<sup>2</sup> As part of its production process, the plant will need to use 1,000,000 gallons/per day of the City's fresh drinking water. The production process will produce a wet distillers' grain co-product, thus avoiding the energy-intensive process to produce dry grain, and minimizing transportation impacts. (DEIR, p. ES-1) It is estimated that the production process will emit approximately 313,000 metric tons of CO<sub>2</sub>e

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<sup>1</sup> These comments are not made on behalf of any other California agency or office.

<sup>2</sup> This percentage may rise in the future, as studies underway aim at showing that standard automobiles can run efficiently on blends greater than 10 percent.

(carbon dioxide equivalent) per year into the atmosphere. Additional greenhouse gases will be emitted in construction of the facility. The Project will also produce significant and unavoidable increase in criteria pollutants, specifically NOx in a non-attainment area. (DEIR, p. 3-18)

Global warming presents profoundly serious challenges to California and the nation. While construction of corn-ethanol plants in the State will provide a source of alternative fuel as well as oxygenate for blending a more climate-friendly fuel than unblended gasoline, the greenhouse gas (GHG) emissions associated with ethanol's production cannot be overlooked. New research suggests that the carbon savings from biofuels depend heavily on which production methods are employed to make the fuels.<sup>3</sup> The City should be commended for accounting for the GHG emissions associated with all aspects of the production process, including emissions involved in importing corn from the Midwest to serve the plant, and emissions involved in transporting wet distillers grain to local dairies. However, despite correctly concluding that the Project's greenhouse gas emissions are cumulatively significant, the City proposed no measures to mitigate its emissions. We urge the City Council to consider and adopt all feasible mitigation measures to avoid, minimize or offset the anticipated global warming impacts of the proposed project, as required by CEQA.

#### Ethanol Production

Corn ethanol is the only commercially viable ethanol manufacturing process available right now. Corn ethanol production involves conversion of starch to sugar and fermentation of sugar into ethanol. About 70% of the kernel is used; remaining nutrients are concentrated into distillers grain, a valuable co-product sold as animal feed. A bushel of corn weighs 56 pounds and produces about 2.8 gallons of ethanol and 17 pounds of distillers grain. The production process uses large amounts of water (about 17 gallons per gallon of ethanol produced) and involves direct and indirect use of fossil fuels. It also produces a sizeable stream of CO<sub>2</sub> that is either released or captured and sold, typically to nearby food and beverage plants. Studies show that the ratio of renewable energy produced to nonrenewable energy invested in the production of corn ethanol ("energy return on investment") is positive, ranging from about 0.84 to 1.69. It is, however, a relatively high-carbon renewable fuel – due to fertilizer inputs, acreage needs, and mechanization of the corn industry – especially in California, where the transportation impacts of importing the corn must be factored in.<sup>4</sup>

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<sup>3</sup>Jason Hill, David Tillman, et al., *Land Clearing and Biofuel Carbon Debt*, Science Express Report, February 7, 2008; Timothy Searchinger, Ralph Heimlich, *Use of U.S. Croplands for Biofuels Increases Greenhouse Gases through Emissions from Land Use Change*, Science Express Report, February 7, 2008.

<sup>4</sup> Taking a comprehensive look at the energy required to produce corn ethanol, one leading research team concludes that corn ethanol provides just 25% more energy than that required for its production. Almost all of this is attributable to the energy credit for its animal feed coproduct, however, rather than to the ethanol itself containing more energy than used in its production. Jason Hill, David Tillman, et al., *Environmental, Economic and Energetic Costs and Benefits of Biodeisel and Ethanol Biofuels*, PNAS, v. 103, no. 30 (July 2006).

## CEQA Requirements

As the Legislature recognized, global warming is an "effect on the environment" under the California Environmental Quality Act ("CEQA"), and an individual project's contribution to global warming can be significant.<sup>5</sup> CEQA was enacted to ensure that public agencies do not approve projects unless feasible measures are included that mitigate the project's significant environmental effects.<sup>6</sup> CEQA requires that "[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so."<sup>7</sup> This requirement is recognized as "[t]he core of an EIR."<sup>8</sup>

## Evaluation of GHGs and Significance

The DEIR states that there are currently no guidelines for completing a proper CEQA analysis for greenhouse gas impacts. (DEIR, p. 3-13) However, the lack of official thresholds and guidelines does not absolve the City from its obligation under CEQA to determine the significance of GHG emissions from the project and adopt feasible measures to mitigate any significant impacts.

The City should be commended for accounting for the GHG emissions of operating a corn ethanol plant at the proposed location, taking into account energy and transportation requirements to produce and market both the ethanol and the distillers grain co-product. (DEIR, p. 3-21-24) The DEIR states that the Project will emit carbon dioxide, methane, and nitrous oxides. (DEIR, p. 3-13) The Project analyzes the GHG emissions associated with all aspects of the Project's operations assuming that either 100% of the corn is received by train or that 80% is received by train and 20% by truck (worse case scenario). (DEIR, p. 3-21-24) Under either scenario, the GHG emissions are estimated to be approximately 313,000 metric tons per year of CO<sub>2</sub>e. (*Id.*) The DEIR also points out that most of the carbon dioxide associated with the fermentation process can be recovered and sold for commercial use, should a CO<sub>2</sub> market chose to co-locate at the plant site. (DEIR, p. 3-21) If this capture were to take place, the DEIR estimates that it would reduce the GHG emissions of the Project by approximately 185,000 metric tons per year. (DEIR, p. 3-22) . The Project concludes that "considering the volume of greenhouse gases that would be emitted by this facility annually, this project is considered to have an incremental impact on global climate change that is cumulatively considerable." (DEIR, p 3-26 (emphasis added))

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<sup>5</sup> See Pub. Res. Code section 21083.05, subd. (a); see also Sen. Rules Com., Off. of Sen. Floor Analyses, Analysis of Sen. Bill No. 97 (2007-2008 Reg. Sess.) Aug. 22, 2007.

<sup>6</sup> Public Resources Code § 21002.

<sup>7</sup> Public Resources Code §§ 21002.1(b) and 21081; see also, *Mountain Lion Foundation v. Fish and Game Commission*, 16 Cal.4th 105, 134 (1997).

<sup>8</sup> *Citizens of Goleta Valley v. Board of Supervisors of Santa Barbara County* (1990) 52 Cal.3d 553, 564-65.

Nonetheless, the Project states that “[n]o mitigation is available to reduce the magnitude of this impact.” (DEIR, p. 3-26)

Mitigation Measures and Alternatives Analysis

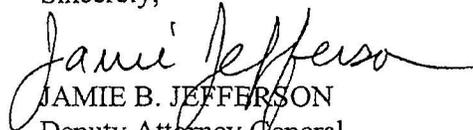
The requirement that a public agency mitigate environment impacts of projects that it approves is at the heart of the EIR process. Because, by the City’s own acknowledgment, the global warming-related impacts of this Project are cumulatively “considerable[,]” the City must “examine reasonable, feasible options for mitigating or avoiding the project’s contribution” to the problem. Cal. Code Regs., tit. 14, § 15130, subd.(b)(5). The DEIR fails to analyze *any* mitigation measures to reduce greenhouse gas emissions associated with any aspect of the Project, stating such measures are not available. Even after receiving comments from the San Joaquin Valley Air District (“SJVAD”) urging the Project to incorporate mitigation measures for greenhouse gases, no measures were adopted. (FEIR, p. 77-78 (Letter from SJVAD to City, November 14, 2007; and via email November 19, 2007)) The City’s failure to analyze mitigation measures violates CEQA and marginalizes the environmental benefit of ethanol by ignoring the emissions required to product ethanol in the first place.

As SJVAD points out, there are a number of measures the City could consider to reduce the Project’s GHG emissions. Such measures include, but are not limited to, assessing the feasibility of incorporating into the project measures such as co-generation; requiring in a conditional use permit that a carbon dioxide capture company locate adjacent to the facility; and measures that could reduce the amount of fuel used to transport corn to the site (such as train-engine re-manufacture and train idling restrictions) and the amount of fuel used to transport ethanol from the site to blending facilities (such as the use of 2007 and newer model trucks). The Project could also analyze using reclaimed water from the sanitation district rather than fresh drinking water.

In lieu of on-site mitigation measures, the applicant also could be required to purchase offsets to achieve offsite reductions of GHG emissions. There are numerous opportunities to lower emissions of greenhouse gases in the Central Valley that could be funded through the purchase of offsets. For an example of an offset program established and managed through a local air district, see the Attorney General’s settlement with ConocoPhillips, available for downloading at: [http://ag.ca/gov/globalwarming/pdf/ConocoPhillips\\_Agreement.pdf](http://ag.ca/gov/globalwarming/pdf/ConocoPhillips_Agreement.pdf).

We urge the City to consider all feasible mitigation measures to address the greenhouse gas impacts of this Project. Please feel free to contact me if you would like to discuss this Project. Thank you.

Sincerely,



JAMIE B. JEFFERSON  
Deputy Attorney General

For EDMUND G. BROWN JR.  
Attorney General