DOCKET
06-BAP-1
DATE MAR 17 2006
RECD. MAR 17 2006

ARKENOL

March 17, 2006

California Energy Commission
Dockets Unit
Attn: Docket No. 06-BAP-1
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

Re: **Bioenergy Action Plan – Docket No. 06-BAP-1**

Ladies and Gentlemen of the Bioenergy Interagency Working Group:

Arkenol, Inc. is a California based company with patented technology for the conversion of cellulose in plant-based waste materials to sugars for the production of ethanol. Over the last 10 years, the initial testing on a vast array of potential feedstock in the U.S. and various locations throughout the world has been completed. And, particularly noteworthy, for the last three years, the Arkenol Technology has been successfully used by an unrelated, independent, and internationally recognized corporation, JGC Corporation, to produce ethanol at a facility in Izumi, Japan. Arkenol and its partners are embarking on development plans to construct its first commercial biorefinery in California.

We commend you and your consultants on your work to develop a Bioenergy Action Plan for California. California cannot afford to wait decades for solutions by maintaining the status quo of importing fuel supplies, progressing greenhouse gas emission concerns, and declining economic health. California must accelerate the dissemination of knowledge from the scientific community to the general public and it must act to bridge the gap between scientific research and practical applications.

We have tremendous appreciation for the time it takes to put findings into practice and the fact that the mechanism to put our work into commercial applications must rely on private financing seeking low risk and high returns. Arkenol, has invested several million dollars to develop its technology to a point where it is ready for commercialization. Arkenol constructed and operated a pilot plant in California for 5 years during the 1990's, and designed and permitted an ethanol plant through the California Energy Commission in the late 1990's. More recently, JGC has operated the Izumi facility for about 3 years.

While we are progressing towards the development and construction of our first commercial plant in the U.S., public assistance in various forms could assist and perhaps accelerate the time when California can claim a cellulose ethanol plant in its backyard. The Draft Bioenergy Plan provides good recommendations for California to pursue. We would like to expand upon a few of these as discussed below.

31 Musick Irvine, CA 92618 Tel 949-588-3767 Fax 949-588-3972 Website: www.arkenol.com

1) Reduce the risks of the first plant to private sector investors.

   Private equity may be more available for the initial cellulose to ethanol plants if the potential economic risks were reduced by public support. Public participation through loan guarantees, debt payment reserves, or premium payments for technology risk insurance products (if made available) could assist in overcoming this hurdle. The State could also offer long-term purchase contract support to guarantee debt coverage to establish the industry. The benefits of bioenergy are numerous and accrue to all Californians as described in the draft report justifying public participation in its successful development.

2) Establish a reliable long-term ethanol marketplace to encourage investments.

   Commitment to in-state production of ethanol in addition to standards established for in-state use would signal public support. California's demand is already at 1 billion gallons per year with ethanol blended at 5.7% in reformulated gasoline. A mandate for 2 billion gallons in 2020 is conservative. If the flexibility to blend larger volumes of ethanol (E10 as done in most other States) is available, demand could approach 2 billion gallons in just a few years.

   We agree in directing the California Air Resources Board to develop regulations that maximize the flexibility of using biofuels while preserving the benefits of their use. Flexibility to allow for higher ethanol blends in reformulated gasoline should be pursued as part of increasing use of biofuels.

3) Provide mechanisms for E85 growth that dovetails the State's aggressive plans for the Hydrogen Highway.

   While we wait for the new refineries, new pipelines, new storage systems, and affordable cars required to take advantage of the hydrogen highway, investments in growing the E85 market could provide more immediate national security and environmental benefits at a fraction of the cost. More aggressive actions by the State to expand the use of E85 in available and affordable flex-fuel vehicles should be pursued through public education and investments in an E85 refueling infrastructure. Ethanol contains hydrogen, and the means to extract the hydrogen from ethanol economically are under development. Ethanol provides a transition to hydrogen. Unlike natural gas, petroleum and coal, it is renewable.

Thank you for the opportunity to provide comments. We look forward to the implementation of the Bioenergy Plan to place California at the forefront of sustainable biomass utilization for increased energy independence while contributing to solutions for environmental and climate change concerns and economic development.

Sincerely,

Necy Sumait

Necy Sumait
Vice-President – Project Development