
From: Jim Carlberg <jcarlberg@kentbioenergy.com>
Sent: Thursday, July 12, 2012 1:19 PM
To: 75%recycling.comments
Subject: Re: Review Comments Due on CalRecycle?s 75% Recycling Plan July 2, 2012
Attachments: 2340_001.pdf; Comments to CalRecycle Meeting May 30th.docx

Bill,

Here are the PDFs of my comments regarding the two recent meetings of CalRecycle to discuss AB 341 (attached below):

Jim

Jim Carlberg | Executive V.P.

Kent BioEnergy Corporation

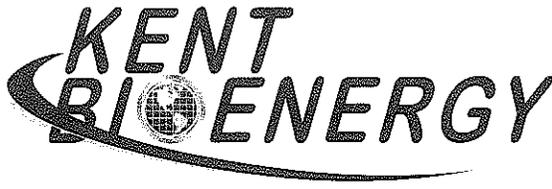
Energy, Water Treatment, and Co-Products from Microalgae

11125 Flintkote Avenue, San Diego, CA 92121

tel 858.452.5765, fax 858.452.0075

jcarlberg@kentbioenergy.com www.kentbioenergy.com

Notice: This e-mail message, together with any attachments, may contain information from Kent BioEnergy that is confidential and proprietary trade secret information. It is intended solely for the use of the individual or entity named on this message. If you are not the intended recipient, and have received this message in error, please notify us immediately by reply e-mail and then delete it from your system.



KENT BIOENERGY CORPORATION
11125 FLINTKOTE AVE., SAN DIEGO, CA 92121
TELEPHONE: 858.452.5765 FAX: 858.452.0075

WWW.KENTBIOENERGY.COM

May 23, 2012

Caroll Mortensen
Director of CalRecycle
1001 I Street
Sacramento, CA 95812

RE: California's New Goal: 75% Recycling

Dear Director Mortensen:

I am responding to the discussions of the proposed plan (CA New Goal: 75% Recycling) to implement AB 341 presented at the meeting in the SCAQMD office in Diamond Bar on Monday, May 21, 2012:

Expand the objective (page 24 & 25) to not only produce biomethane for fuel and energy, but to completely recycle all of the "waste" nutrients. This includes the nitrogen in the AD supernatant and CO₂ in the biogas and growing algae biomass for the production of high-value co-products, i.e. fertilizer, animal feeds (aquaculture fish feed), nutraceuticals, industrial enzymes, bio-based chemicals, biofuels, etc. This process will help to achieve the production of sustainable and renewable alternative energy, thereby completing the full recovery of all the elements, lowering the GHG emissions, mitigating climate change, and improving the LCA.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jim Carlberg", is written over a light blue circular stamp.

Jim Carlberg
Executive V.P.

Jim Carlberg | Executive V.P.

Kent BioEnergy Corporation

Energy, Water Treatment, and Co-Products from Microalgae

11125 Flintkote Avenue, San Diego, CA 92121

tel 858.452.5765, fax 858.452.0075

jcarlberg@kentbioenergy.com www.kentbioenergy.com

It is important to utilize all of the "waste" nutrients, both CO₂ and nitrogen, in efforts to completely recycle food waste (OFMSW) in source separated organics (SSO). Wet Anaerobic digestion is more ecologically beneficial than either aerobic composting (as identified as a preferred alternative in CalRecycle's PEIR for AD of OFMSW) or dry fermentation. In addition to the recovery of the carbon as biomethane, the remaining CO₂ off-gas and liquid permeate (nitrogen) can be further utilized to provide low-cost nutrients to grow microalgae to produce high-value co-products. The algae-based co-products can include: fertilizer, animal feeds, soil amendments, biodiesel (liquid transportation fuels, consistent with the Low-Carbon Fuel Standard AB 118), and other industrial chemicals. The integration of AD with algae culture can further reduce carbon emissions and associated GHG issues, by utilizing the CO₂ in the biogas to "avoid" using fossil carbon for biomass production of energy crops (consistent with AB32). To accomplish these developments, there is a need to streamline the regulatory process and to provide financial incentives to construct and operate these facilities, i.e. RMDZ loans, tax credits, grants, loans, tipping fees, electrical feed-in-tariffs (RPS), REC, carbon emission credits, etc.