

DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

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March 9, 2010

Commissioner Jim Boyd California Energy Commission 1516 Ninth Street Sacramento, CA 95814

RE: Draft 2010/2011 AB118 Investment Plan

Dear Commissioner Boyd:

DOCKET

09-ALT-1

DATE MAR 09 2010

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Thank you for the opportunity to participate in the Advisory Committee for the Alternative and Renewable Fuel and Vehicle Technology Program (AB118) Investment Plan. As follow up to the February 11, 2010 advisory committee meeting, I am writing to provide my comments and recommended changes to the Draft Investment Plan. These are offered to explicitly emphasize the potential for the organic fraction of solid waste to help meet the goals of AB 118 and to lay the foundation for developing solicitations and scoring criteria that allow for the inclusion of projects that utilize this feedstock.

The fundamental notion behind these suggestions is that the organic fraction of municipal solid waste (MSW) is a vast resource; roughly 25 million tons of carbon-based organics are landfilled annually. According to studies from the California Biomass Collaborative, MSW feedstock has the potential to produce 300,000,000 gallons of gasoline equivalents per year. Much of this material is already available through an existing infrastructure of landfills, transfer stations, and material recovery facilities. Co-location of new processing facilities at these existing sites to fulfill the objectives of AB 118 seems imminently possible.

Anaerobic digestion, in particular, is a promising technology for converting landfilled organics into biogas for use as a transportation fuel. Anaerobic digestion-created fuel could have much lower carbon intensity than gasoline and, with a reasonable level of implementation around the state, has the potential to reduce greenhouse gas emissions by 2 MMTCO₂e by 2020.

CalRecycle is currently working with the Air Resources Board to establish carbon intensities for the anaerobic digestion of the organic fraction of municipal solid waste and we are the lead for the Anaerobic Digestion measure in the AB 32 Scoping Plan. Further, CalRecycle is developing a Programmatic Environmental Impact Report (PEIR) which will streamline the permitting process for anaerobic digestion facilities. The PEIR will contain CEQA impact checklists and programmatic best management practices that project developers can use in their site specific EIRs.

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CalRecycle lauds the efforts of the Commission and the Advisory Committee in developing the first Investment Plan and this draft plan. I am pleased to offer CalRecycle's staff expertise to assist in the implementation of the new plan and in the development of transportation fuels derived from the organic fraction of MSW. We hope you find our suggestions helpful and concur with our premise that the Investment Plan needs to be explicit about allowing for the inclusion of projects that generate fuel from MSW.

Thank you again for the opportunity to participate in the AB 118 Investment Plan Advisory Committee. If you have any questions, please do not hesitate to contact me.

Sincerely,

Mark Lear

Member of the Alternative and

Renewable Fuel and Vehicle Technology Program (AB118)

Investment Plan Advisory Committee

Deputy Director

Department of Resources Recycling and Recovery (CalRecycle)

cc: Commissioner Anthony Eggert

Sarah Michaels, Special Advisor to Vice Chair Boyd

Docket #08-ALT-1

Enclosure

Attachment:

CalRecycle proposes the following language modifications (<u>underlined text</u>) to the Draft 2010-2011 Investment Plan:

- 1) Pg. 36, paragraph 2, line 11 "....derived from the <u>organic fraction of municipal solid</u> waste streams and sustainably produced low carbon bioenergy crops."
- 2) Pg. 45, paragraph 4, line 1 "......Biomass Fischer-Tropsch diesel can be made from agricultural waste, green waste, <u>food waste</u>, or forest residue;
- 3) Pg. 46, paragraph 2, line 5 "....Additional progress will be needed to produce fuels from renewable feedstocks and purpose grown crops, including the organic fraction of municipal waste sources and algae....."
- 4) Pg. 53, paragraph 2, line 10 ".....The capture of fugitive biomethane, dairy waste and municipal waste streams in the form of anaerobic digesters and landfill gas capture systems not only displaces petroleum..."
- 5) Pg. 60, paragraph 4, line 1 "Biomethane in California will most likely be sourced from dairies, landfills, waste water treatment facilities, local or regional stand-alone anaerobic digester plants, agricultural residues, woody biomass from forest fuels management activities and diverted organic materials from municipal solid waste streams.
- 6) Pg. 60, paragraph 4, line 5 "CNG and LNG derived from dairy waste landfill gas <u>and</u> <u>biogas produced from anaerobic digesters processing the organic fraction of municipal solid waste can have anywhere from a 70 percent to 88 percent GHG emission reduction....."</u>
- 7) Pg. 62, paragraph 5, line 1 "Biomethane has the potential to tap the state's large forest woody biomass waste streams that will be generated as forest fuels management projects are implemented. In addition, the organic fraction of municipal solid waste, currently comprising up to 40 percent of all waste being landfilled in California, could be diverted for biomethane production.
- 8) Pg. 62, paragraph 6, line 8 "The allocation will focus on projects that use a variety of waste streams, including but not limited to dairy, landfill, wastewater, agricultural and forest residues, the organic fraction of municipal solid waste streams, as well as a variety of process technologies."