



GAIL FARBER, Director

# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

*"To Enrich Lives Through Effective and Caring Service"*

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September 9, 2010

IN REPLY PLEASE  
REFER TO FILE: EP-4

Ms Sarah Michael  
C/O California Energy Commission  
Dockets Office, MS-4  
RPS Proceeding  
1516 Ninth Street  
Sacramento, CA 95814-5512

**DOCKET**

**03-RPS-1078**

DATE SEP 09 2010

RECD. SEP 09 2010

Dear Ms Michael:

**PROPOSED CHANGES TO RENEWABLES PORTFOLIO STANDARD GUIDEBOOK  
ELIGIBILITY OF MUNICIPAL SOLID WASTE AS A BIOMASS FEEDSTOCK  
RPS PROCEEDING; DOCKET NOS. 03-RPS-1078 AND 02-REN-1038**

We appreciate the opportunity to comment on the proposed changes to the Renewables Portfolio Standard (RPS) Eligibility Guidebook and the Overall Program Guidebook for the Renewable Energy Program developed by the California Energy Commission (CEC). On August 30, 2010, CEC staff conducted a workshop regarding the proposed changes, and identified a number of relevant questions relating to the proposed changes. **We are in full support of Staff's proposal to clarify municipal solid waste (MSW) as an eligible biomass fuel within the RPS program.**

The County of Los Angeles has been at the forefront of evaluating and promoting the development of conversion technologies, which are processes that recover energy, fuel, and other marketable products from MSW that would otherwise be disposed in landfills. The enclosed fact sheet provides additional information regarding the County's efforts. We appreciate your consideration of our comments regarding questions a-d on page 7 of *Attachment B. Questions Concerning Possible Changes to the Renewable Portfolio Standard Eligibility Guidebook* developed by staff in conjunction with the workshop.

**a) Question posed by CEC Staff: Should MSW be considered an eligible biomass fuel for the RPS?**

We agree that if MSW is processed and handled such that California Department of Resources Recovery and Recycling (CalRecycle) makes a determination that it is not solid waste, the CEC should consider MSW as eligible biomass fuel for the RPS. Clarifying these regulations and

definitions will promote investment in California's renewable energy sector

**b) *Should the material be limited to the organic fraction that remains after recyclables and compostable have been removed?***

We believe that the State of California should continue to encourage the recovery of materials for recycling and composting to the greatest extent feasible prior to recovery of energy or, as a last resort, environmentally safe disposal of the residual solid waste. In fact, many of the conversion technology processes we have evaluated remove additional recyclables from the wastestream prior to the conversion process. Therefore, it would be consistent with existing statutes to limit RPS eligibility to the fraction of MSW that remains after materials have been recovered for recycling or composting to the greatest extent feasible.

**c) *Is there a reasonable amount of fossil fuel fraction that can remain after recyclables and compostables have been removed from MSW such that 100 percent of the material can be considered for purposes of the RPS?***

According to CalRecycle, Californians disposes of almost 40 million tons of MSW each year, which is primarily sent to landfills. Over 3/4 of the waste stream is made up of organics (the remainder is inert), and of this organic fraction approximately 70 percent is biogenic, such as yard waste, food scraps, and crop residues. This represents a plentiful resource that can be utilized to significantly diversify transportation fuels, enabling California to meet our renewable energy goals.

Therefore, the County supports considering the material recovered from MSW eligible for the RPS. The Los Angeles County Board of Supervisors unanimously adopted a legislative policy that advocates for "legislation which promotes the development of alternatives to landfills such as conversion technologies that protect public health and safety and the environment; establish a viable permitting process for these alternatives based on performance standards rather than prescriptive definitions; provide full diversion and greenhouse gas emission reduction credits for these alternatives under applicable State law; and provide that **all energy produced by these conversion technology facilities be designated as renewable energy**" (emphasis added)

**d) *Is the fossil fuel fraction remaining after processing measurable? What is a reasonable amount of remaining material from fossil fuel that could render 100 percent of the material as an eligible biomass feedstock?***

Although the County supports designating all energy produced from MSW as RPS eligible, a small fraction of MSW that is currently disposed does include plastics and other materials originating from fossil fuel sources. We would also note that the County has taken a pragmatic approach to this position in supporting Assembly Bill 222, as introduced in 2009, that would have limited renewable energy credit for “biorefineries” to only the biogenic fraction of the solid waste stream. Conversion technologies have made significant strides in development over the last decade and have been proven to compliment recycling and composting activities.

Limiting eligible feedstock to the biogenic fraction of the waste stream may be technically feasible, however; it would diminish the incentive for projects to be developed since (1) it would reduce the eligible fraction of energy that is RPS eligible and, (2) it would create additional burdens on such facilities to measure and verify the fraction of the waste that is biogenic, which would require periodic waste characterization studies and a verification of the content of the materials processed by the facility

As an alternative, a “de minimis” standard, as applied to multi-fuel facilities and discussed on page 1 of Attachment B, could be applied to renewable energy facilities utilizing solid waste feedstock. For instance, this standard may be two to five percent by weight of the total incoming MSW feedstock to the conversion facility

We appreciate the Energy Commission’s leadership on the important issue of clarifying whether or not one of California’s most abundant resources – solid waste – may be utilized for renewable energy generation rather than be deposited in landfills. For over a decade, Los Angeles County has evaluated and promoted the development of non-combustion conversion technologies as a way of diversifying our solid waste management strategies. We are joined in this effort by numerous cities and counties throughout California including the cities of Calabasas, Lancaster, Long Beach, Los Angeles, San Diego, San Jose, and Tulare and Counties of Sacramento, San Bernardino, and Santa Barbara and the Salinas Valley Solid Waste Authority (joint powers agency comprised of the cities of Gonzales, Greenfield, King City, Salinas, and Soledad, and eastern Monterey County). While these jurisdictions are attempting to move forward with successful projects, streamlined regulations and consistent definitions will further incentivize the development of these innovative technologies

Ms Sarah Michael  
September 9, 2010  
Page 4

We are in full support of Staff's proposal to clarify MSW as an eligible biomass fuel within the RPS program. We look forward to working with you on this important issue. If you have any questions, please contact Mr Coby Skye of this office at (626) 458-5163, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

GAIL FARBER  
Director of Public Works



*ft* PAT PROANO  
Assistant Deputy Director  
Environmental Programs Division

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Enc.

cc: Each Member of the California Energy Commission  
Margo Reid Brown, Cal Recycle



## **CONVERSION TECHNOLOGY FACT SHEET** **Los Angeles County Department of Public Works**

### **What are Conversion Technologies?**

- Conversion technologies are thermal, chemical, mechanical, and biological processes capable of converting post-recycled residual solid waste into useful products and chemicals, green fuels like ethanol and biodiesel, and clean, renewable energy
- Conversion technologies are not incinerators - there is no combustion of waste.

### **What is the Southern California Conversion Technology Demonstration Project?**

- The project, spearheaded by the County of Los Angeles in coordination with the multi-stakeholder Alternative Technology Advisory Subcommittee, works to promote the development of fully operational demonstration conversion technology facilities. The goal of the project is to demonstrate the technical, environmental and economic benefits of conversion technologies, and to forge permitting and legislative pathways for future projects

### **Long Term Benefits of Conversion Technologies to Los Angeles County Residents**

- Diversion of solid waste from landfill disposal (87-100 percent diversion of post-recycled residual solid waste processed, depending on technology employed)
- Co-locating materials recovery facilities and transfer stations with conversion technology facilities have numerous benefits, including:
  - Land for development
  - Readily available feedstock
  - Pre-processing capacity
  - Appropriate zoning
  - Environmental benefits
  - Feedstock is material that would otherwise have been disposed
  - Transportation avoidance
- Potential to recover additional recyclables after conversion
- Reducing greenhouse gas emissions and other air pollutants, from disposal and transportation avoidance as well as fuel/electricity offsets.
- Ability to locally produce renewable fuels or energy
- Promotes energy independence from imported fossil fuels.
- Creates local high quality "green collar" jobs
- Provides local control over waste disposal and a hedge against rising transportation and landfill disposal costs.

### **Why is it Imperative for Los Angeles County to Develop Conversion Technologies?**

- Each year, Los Angeles County residents and businesses generate 24 millions tons of waste. After reducing, reusing and recycling over half of what we generate, that still leaves nearly 12 million tons per year for disposal, or approximately 36,000 tons per day
- Currently, 18 percent of the County's waste is exported out of County, primarily by trucks. With the closure of the Puente Hills landfill in 2013 (which handles 1/3 of the County's waste stream), that number is expected to increase significantly

- In 2020, under the best case scenario (assuming all in-County landfill expansions are approved and 9,000 tons of trash is processed each day through conversion technologies) 38 percent of our waste will continue to be exported
- In 2020, under the worst case scenario (with no landfill expansions approved and no conversion technologies developed), up to 80 percent of our waste would be exported
- The increase in exports will be at considerable cost to County residents and businesses, and will increase traffic congestion and pollution.
- Waste-by-Rail will not alleviate this issue, since:
  - The system is only permitted to handle up to 8,000 tons per day, only half of which can come from the Puente Hills Materials Recovery Facility
  - The projected cost for waste-by-rail has steadily increased due to competition for limited rail capacity and other factors.

**Conversion Technology Demonstration Projects**

- On April 20, 2010, the Los Angeles County Board of Supervisors gave the green light to three conversion technology projects to demonstrate how municipal solid waste can be converted into electricity, biofuels, and other beneficial products.

Technology Partner	MRF/TS Partner	Project Location	Proposed Feedstock Capacity
Arrow Ecology and Engineering (anaerobic digestion)	CR&R Incorporated— <b>Lead Project Developer</b>	City of Perris (Riverside County)	150 – 1,000 tons per day
International Environmental Solutions— <b>Lead Project Developer</b> (pyrolysis)	Burrtec Waste Industries, Inc	Unincorporated Riverside (Riverside County)	184 – 1,000 tons per day
Entech Renewable Energy Solutions (gasification)	Rainbow Disposal Company, Inc.— <b>Lead Project Developer</b>	City of Huntington Beach (Orange County)	360 – 1,000 tons per day

- The projects are structured as public-private partnership between a materials recovery facility (MRF), a conversion technology supplier, and the County of Los Angeles.
- Each project will be developed as follows.
  - MRF Operator - provide the trash necessary for conversion and a site location for the conversion technology facility
  - Technology Supplier - provide the technology; finance, design, build, own and/or operate the facility, as negotiated with the MRF operator
  - County of Los Angeles - facilitate project development by sponsoring a competition and providing potential incentives, obtain operating data from the facility to promote development of future facilities

**Commercial Conversion Technology Projects**

- The County has recently initiated Phase IV activities, which focus on establishing larger, commercial-scale conversion technology facilities in Los Angeles County for the purpose of providing alternatives to landfill disposal of post-recycled municipal solid waste. The County envisions one or more commercial conversion technology facilities being developed in Los Angeles County as a means to provide long-term solid waste management capacity for post-recycled municipal solid waste residuals destined to landfills, to reduce our dependence on exporting waste to remote landfill sites outside of the County, and to stabilize waste disposal rates. To date, the cities of Calabasas, Glendale, Lancaster, and Long Beach have all adopted resolutions of support, while many other cities have expressed interest.