COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
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GAIL FARBER, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

August 5, 2013

IN REPLY PLEASE REFER TO FILE: EP-4

Mr. Mike Tollstrup
California Air Resources Board (CARB)
1001 I Street
Sacramento, CA 95814-2828

Dear Mr. Tollstrup:

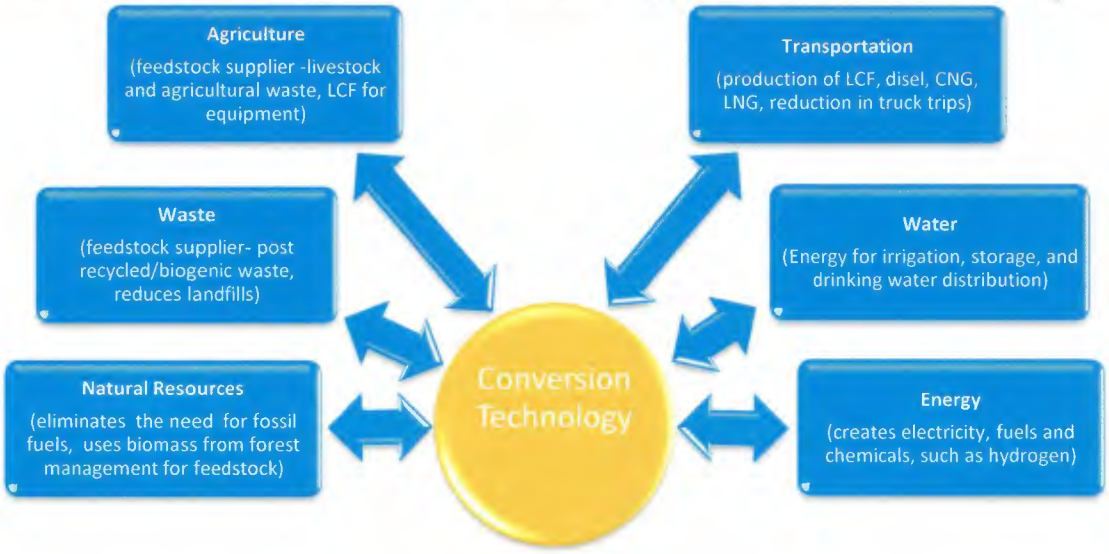
2013 UPDATE TO AB 32 SCOPING PLAN

On behalf of the Los Angeles County Department of Public Works, Environmental Programs Division, thank you for the opportunity to comment on the proposed 2013 Update to the AB 32 Scoping Plan. We look forward to participating in the stakeholder process as the Update moves toward adoption by your Board in November.

Our Department is the lead County agency responsible for advising the County of Los Angeles Board of Supervisors on waste management issues, and a regional leader in environmental resource conservation and protection. In addition to administering many award-winning waste diversion programs for businesses and residents, Public Works leads a nationally recognized research and development program for advanced conversion technologies. As you may know, conversion technologies refer to thermal, chemical, mechanical, and/or 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.

State laws such as AB 32, the Global Warming Solutions Act of 2006, create an impetus for the development and use of innovative technologies and sustainable infrastructure that reduce GHG emissions; however, local governments and industry play a critical role in implementation given our role in providing essential services to businesses and residents and operating critical infrastructure. The direct and indirect GHG emission reduction benefits from diverting waste materials to conversion technology facilities, rather than disposing of them in landfills, are substantial and multi-disciplinary, as described in detail below. **For this reason, we strongly encourage the 2013 Update to the AB 32 Scoping Plan to clearly delineate the incentives and pathways necessary for project proponents to successfully establish conversion technology facilities in California.**

Although they are primarily related to the Waste Sector, these technologies can provide environmental benefits to all sectors of the scoping plan, as illustrated in the diagram below.



For the Waste, Agricultural, and Natural Resources Sectors, conversion technologies provide a cleaner and more energy-efficient way to process residuals. These three sectors all create residuals that are difficult to manage and often end up in landfills; however, these residuals also make excellent feedstock for conversion technologies. Keeping these organic residuals out of landfills would reduce the GHG emissions that would be created by those landfills. Instead, the residuals are turned into clean fuels, chemicals, and electricity that can be used by other sectors to offset the use of fossil fuels which in turn further reduces GHG emissions from those sectors. Unfortunately, well-intended policies and statewide goals, such as Assembly Bill 341 (Chapter 476, 2011 Statutes), are currently cutting off sources of sustainable feedstock from bioenergy generators, which in turn are not able to supply clean power and fuels to the other sectors.

Without additional sources of low carbon fuels and electricity the Transportation, Water, and Energy Sectors will have a difficult time meeting their GHG reduction targets. Conversion technologies can be one such source and provide the energy for irrigation, storage, and drinking water distribution as well as the fuels to power new clean transportation vehicles. Another benefit of these technologies is that they provide a regional solution that reduces the need for long distance shipping of waste and the GHG emissions associated with it.

It is important to remember that every region in California is different and that local and regional constraints for processing residual materials must be taken into consideration. If local circumstances are not taken into account it could lead to a majority of materials generated in Los Angeles County being exported to remote processing facilities, leading to

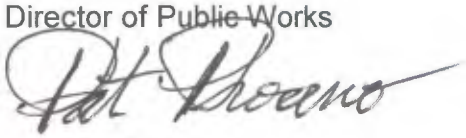
much higher GHG emissions and no energy generation benefit. Creating a very rigid structure that limits residual processing to either composting or recycling means the only residual pathway for materials that cannot be recycled or composted is to send those materials to landfill disposal.

We support the "highest and best use" of waste materials, based on material type and quality of that material; not every material is suitable for composting or recycling and those that are not should be converted into useful products. We believe it is vital for the Scoping Plan to provide adequate consideration to the role that fuels and energy from post-recycled waste materials can play to help achieve greenhouse gas (GHG) emission reductions across all sectors of California's economy.

Enclosed for your consideration is a copy of our letter to CalRecycle regarding the Draft Waste Management Sector Plan that will be the basis for the waste sector element of the 2013 Update to the AB 32 Scoping Plan. We hope that these issues will be addressed in the Update and that the various agencies responsible for the Update work collaboratively to merge and integrate the various Sector plans into a cohesive document. We look forward to further participation in ARB's stakeholder process. Please let me know if you have any questions on our comments at (626) 458-3500, or by e-mail at pproano@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works



PAT PROANO
Assistant Deputy Director
Environmental Programs Division

Enc.

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cc: California Air Resources Board (Mary Nichols and Jack Kitowski)

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P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

July 11, 2013

IN REPLY PLEASE
REFER TO FILE EP-4

Dr. Howard Levenson, Deputy Director
Department of Resources
Recycling and Recovery
1001 I Street
Sacramento, CA 95812-4025

Ms. Edie Chang, Deputy Executive Officer
Air Resources Board
1001 I Street
Sacramento, CA 95812-4025

Dear Dr. Levenson and Ms. Chang:

2013 AB 32 SCOPING PLAN UPDATE:
DRAFT WASTE MANAGEMENT SECTOR PLAN COMMENTS

We appreciate the opportunity to submit comments on behalf of the County of Los Angeles Department of Public Works (Public Works) regarding the draft Waste Management Sector Plan (WMSP), as prepared by the Department of Resources Recycling and Recovery (CalRecycle) and the California Air Resources Board (CARB). The WMSP is a key element of the 2013 update to the AB 32 Scoping Plan and provide guidance in meeting the State's AB 341 75 percent waste reduction, recycling, and composting goal.

We reviewed each of the technical documents that were released on June 14, 2013. The documents cover a lot of ground, incorporating sweeping proposals that impact every aspect of solid waste management and raise significant concerns regarding the practicality, viability, and cost of the proposals. Therefore, we would strongly encourage collaboration between CalRecycle, CARB, and local government representatives to develop a consensus around the most effective ways to meet AB 32's ambitions greenhouse gas (GHG) emissions reduction goals.

Our initial general comments regarding the WMSP are summarized below, and detailed comments regarding the technical papers are provided in the enclosure.

- **Life-Cycle Analysis:** Given that the proposals in the draft WMSP would impact every sector of the State's economy and the way we manage solid waste into the future, the State must conduct a thorough, scientific, peer-reviewed life-cycle analysis of all waste management options, including recycling, composting,

conversion, combustion and landfilling, so that they can be properly placed within a hierarchy of highest and best use. This will facilitate directing limited resources towards policies, programs and facilities that provide the most meaningful environmental benefits at reasonable costs, and as rightly noted in the WMSP, avoid "misplaced investments that contribute to single or arbitrary milestones, conflict with other priorities, or otherwise divert resources from achieving long-term objectives."

A comprehensive life-cycle analysis is the only way to accurately quantify the Greenhouse Gas reduction benefits of not shipping our recyclables overseas, or converting post recycled residuals into fuels and energy instead of landfilling them.

- **Hierarchy of Highest and Best Use:** Based on scientifically documented studies reviewed by local agencies, we strongly recommend a hierarchy of best management practices that puts the highest emphasis on waste prevention, product redesign, and producer responsibility, followed in order of preference by reuse, recycling, composting, conversion technologies, transformation, and lastly, landfill disposal if no other management option is reasonably feasible. We are confident that a life-cycle analysis of all options will validate this approach.

- **Infrastructure Development:** CalRecycle and CARB should thoroughly evaluate and estimate the time required to finance, plan, design, permit, and construct the substantial in-State recycling, composting, anaerobic digestion, conversion, and manufacturing infrastructure needed to process the large volume of materials proposed to be collected and turn them into marketable products. We strongly believe that, even under the best of scenarios, the needed infrastructure to process the materials in-State will take a decade or longer to develop.

  A streamlined permitting process is essential to creating a business-friendly environment for infrastructure development. The technical papers accurately point out that the length of time for approvals, California Environmental Quality Act (CEQA) issues, and local planning and acceptance slow the process of financing and constructing facilities. Such complex and lengthly permitting activities discourage project development. We agree with the suggestions of model permits, programmatic EIRs, and increased agency interaction to make the process less arduous and expensive, while maintaining the highest standards for community and environmental protection.

- **Definitions and Terms:** We recommend establishing a glossary to provide clear definitions for terms used throughout the document.

- **Conversion Technologies:** There needs to be a balanced and complete analysis of (non-combustion) conversion technologies in these technical papers. As you may know, the term "conversion technologies" refers to an array of technologies that process residual solid waste through a non-combustion thermal, chemical, or biological process to produce green fuels, renewable energy and other marketable products. Unfortunately the current analysis makes no distinction between combustion and non-combustion technologies. The analysis focuses almost entirely on combustion as a waste management alternative to landfilling of waste that cannot be recycled or composted. With the volumes of research and data available regarding the environmental benefits of conversion technologies as well as their ability to increase diversion from landfilling and to produce renewable energy, fuels and chemicals, including studies conducted by CalRecycle and CARB, there is no reason for the WMSP to not include a meaningful discussion of these technologies.

  With nearly a billion tons of waste placed in landfills in California since the passage of AB 939 in 1989, we continue to miss a significant opportunity for recovering energy, fuels and additional recyclables from significant quantities of waste that continue to be disposed in landfills in California.

We look forward to working with you and your staff in refining the draft WMSP. Please let me know if you have any questions on our comments at (626) 458-3500, or by e-mail at pproano@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works

Pat Proano

PAT PROANO
Assistant Deputy Director
Environmental Programs Division

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Enc.

2013 AB 32 SCOPING PLAN UPDATE
DRAFT WASTE MANAGEMENT SECTOR PLAN
Specific Comments Regarding Technical Papers
County of Los Angeles Department of Public Works – July 11, 2013

1. Recycling, Reuse, and Remanufacturing Technical Paper

    a. The Recycling Market Development Zone Loan Program routinely runs out of funding each year. We recommend identifying additional funding sources to support remanufacturing infrastructure. Increasing the funding from $5 million to $20 million would go a long way toward supporting local remanufacturing and processing capacity.

    b. The Waste Management Sector Plan (WMSP) should incorporate an expanded discussion of Extended Producer Responsibility (EPR) and product stewardship. It is also unclear how necessary laws and regulations to make such programs possible will be enacted. There have been a number of EPR related bills proposed in the legislature this year, but due to strong industry opposition they have stalled. Does CalRecycle or California Air Resources Board (CARB) have any plans to pursue legislation or rule-making to establish additional EPR programs?

    c. Jurisdictions in the County of Los Angeles have had moderate success adopting ordinances to phase out single-use packaging that has a disproportionate impact on the environment, such as plastic bags and expanded polystyrene food packaging, but such policies are far more effective on a Statewide level. This technical paper should discuss ways to encourage producers to move away from single use disposable products.

    d. More programs like the Plastic Market Development Program are needed to create incentives for remanufacturing to stay in California. Providing incentives for products such as carpet and paper is one possible way to help overcome the cheap cost of shipping to the Pacific Rim and meet the goal of taking responsibility for California's recyclables.

    e. There needs to be a discussion of what to do with the nearly 6 million tons of residuals left over from recycling processes. Even with improved processes and cleaner materials there will still be residuals that are not marketable. These residuals should be diverted from landfills to a better use, such as conversion into energy, fuels, or chemicals.

2. Composting and Anaerobic Digestion

    a. We would like to see more discussion on the environmental benefits as well as Greenhouse Gas (GHG) emission reduction potential of small-scale facilities. Public Works plans to promote a network of

micro-composters within large institutions and venues in the County. The micro-composter system will utilize in-vessel digesters or other methods to compost green and food waste at the source. The resulting compost produced will be deposited on site to the extent feasible or nearby, such as for cultivating community gardens, enhancing landscape, or amending farm fields. This system eliminates the pollution, truck traffic, and GHG emissions that would have been produced to export solid waste off site to distant destinations and also diverting it from landfills for beneficial applications. These systems will highlight the benefits of anaerobic digestion on a small scale.

b. Odor is a major issue when it comes to compost waste handling operations. Public Works recognizes that CalRecycle is currently revising its regulations pertaining to odor that is generated by compost facilities. Odor regulation is itself a subjective process and will be extremely difficult to implement due to the ambiguities associated with measuring odors because individuals have varying thresholds and experiences with tolerating odors. As such, it is strongly recommended that CalRecycle and the ARB conduct multiple pilot programs to verify the adequacy of odor management for a minimum period of 12 months. In addition, the proposed regulations regarding composting waste handling operations must be applied uniformly to all technologies. This would help create a level playing field for all landfill diversion technologies to be successful.

c. Anaerobic Digestion needs to be clearly defined in statute or regulation to provide clarity for permitting and incentives, since these facilities are different than traditional transfer processing facilities and composting operations.

3. Biomass Conversion

a. Biomass conversion is statutorily limited to the combustion of certain limited types of biomass. Since biomass is renewable and recovering energy from biomass that would otherwise be disposed can significantly reduce GHG emissions in California, this section should evaluate and encourage a revision to the current statutory definition that would provide additional mechanisms for recovering energy, in addition to combustion, from a broader array of biomass materials. California's bioenergy Action Plan identifies a host of available biomass resources in the State that are underutilized and could be productively contributing to the State's AB 32 goals and "integrated energy, waste, and environmental policy objectives."

4. Municipal Solid Waste Thermal Technologies

   a. Goals for Reducing GHG from Municipal Solid Waste (MSW) Thermal Facilities (pg.7) list several options for including the three waste-to-energy facilities in California under the Cap-and-Trade Program. We do not support the inclusion of waste-to-energy or non-combustion conversion technology facilities in the Cap-and-Trade program. As the technical paper points out, net GHG emissions from these facilities are lower than landfills even when equipped with landfill gas recovery systems; however, landfills are not subject to Cap-and-Trade. Subjecting these facilities to the cap would only drive disposal rates higher making them less competitive with landfills, and further perpetuate the landfilling of waste in the County. Cleaner and more sustainable conversion technologies need to be incentivized.

   b. Potential Solution IV-B (pg.12) indicates that the State could coordinate resources to conduct more research on emerging state-of-the-art thermal technologies including a survey of existing technologies. We encourage CalRecycle Staff to view the County's online database of technology vendors and financial firms available at www.SoCalConversion.org. Companies listed in the database have responded to one of two "Request for Expressions of Interest" released by the County in 2011 and 2013 respectively, and met the minimum standards and criteria set forth by the County. This database will continue to be updated and is a publically available resource to all interested stakeholders.

      As you rightly pointed out in your presentation on June 26, 2013, technology development is not the barrier in California. Conversion technologies are in operation around the world, including recent operation in the United States and Canada, and there are numerous studies and reports to verify this. The key barrier is technology *deployment* in California. Rather than spending any more time and funding on additional research and studies, the State should direct their resources towards critical next steps such as establishing a permitting pathway and finding creative funding opportunities to incentivize new projects.

5. Landfilling of Waste

   a. Figure 1, page 3, displays solid waste disposal trends from 1990 to 2011 and projected towards 2020; however the scale of the graph is non-linear and is missing key data points. In fact, disposal of solid waste slowly decreased between 1990 to 1995, and steadily increased from 1996 to 2005. With a recovering economy, we should expect waste disposal to level out or potentially increase, since disposal trends often coincide with population and economic growth.

   b. The WMSP quantifies a number of waste diversion activities, including all beneficial use activities at landfills, as disposal. This is not only contradictory to existing State law but also disregards the impact on GHG emissions between true disposal of waste at landfills in comparison to beneficial activities such as replacing soil with green waste for landfill daily cover or producing electricity from waste via waste-to-energy facilities. This approach requires, at a minimum, additional discussion and an evaluation of the GHG emissions impact.

   c. The WMSP references the American Society of Civil Engineers in stating that California has sufficient disposal capacity through 2037, however since AB 939 requires each County in California to provide a detailed report to CalRecycle identifying available disposal capacity, these records should provide a more accurate evaluation of the disposal needs and capacity throughout the State. An evaluation of these reports would provide a better understanding of the true availability of disposal capacity and whether there are regional shortages, including shortages not only of total available capacity but daily capacity which may be more limited.