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February 22, 2008

Mary D. Nichols, Chairman
California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

Dear Ms. Nichols:

Recommendations of the Economic and Technology Advancement Advisory Committee (ETAAC)
Final report dated February 11, 2008

Members of the Solid Waste Association of North America (SWANA) Legislative Task Force (LTF) for the California Chapters of SWANA have reviewed the above referenced report and, while we appreciate the considerable effort put into the report, we are opposed regarding a number of issues. Many statements made in the report relative to waste management appear to be without scientific basis and without a balanced and objective look at potential greenhouse gas (GHG) increases and reductions. Without a comprehensive technical analysis of the proposed measures, the true contribution to climate control cannot be assessed and implementation of measures absent such an assessment could have serious adverse impacts to local government and the solid waste management industry.

SWANA is composed of approximately 8,000 public and private sector solid waste management professionals throughout North America dedicated to the development and enhancement of environmentally and economically sound practices and policies for the integrated management of municipal solid waste. The LTF represents the three California Chapters, comprised of approximately 900 members, on legislative and regulatory issues. In general, there seems to be little scientific basis for a number of the claims or proposals made in Chapter 4, Section IV, Waste Reduction, Recycling, and Resource Management and, accordingly, we have strong concerns with the report as outlined below.

The report prematurely proposes protocols for recycling prior to preparation of life-cycle analyses.

The report calls for "appropriate protocols" for reducing green house gas (GHG) emissions for recycling activities. We strongly support recycling and value the contributions it may make to GHG emission reductions. However the report does not present any basis for the "moderate" ease with which reductions could be achieved. To the contrary, as the report does appropriately point out, the recycling industry is very complex spanning across multiple sectors of manufacturing, businesses, various public agencies and local jurisdictions, together with a number of Pacific Rim countries that provide a majority of the markets for the recycling industry operating in California. A full life-cycle economic and environmental analysis is needed prior to establishing protocols or further mandates on local

government. This analysis, or references to such studies, was noticeably absent in the ETAAC. While we have not reviewed the technical basis of allegations from recent news stories that ethanol production creates greater emissions than gasoline production, it is a reminder of the importance of sound science.

The report erroneously reports that there has been limited success in minimizing fugitive emissions from landfills.

The landfill industry can be viewed as one of the success stories in reducing GHG emissions. In CARB's inventory, recently approved by your Board, landfills have reduced GHG emissions by 11% since 1990. Nationwide, as established in EPA's inventory, landfills across the country have reduced GHG emissions by 18% in the same time period. These reductions are the direct result of successful landfill gas control regulations that have been implemented, such as the Federal New Source Performance Standard (NSPS) that provides a high degree of landfill gas capture and management. Landfills in California are operated under the strictest regulatory requirements in the nation especially as related to air and groundwater quality protection. The California Integrated Waste Management Board estimates that 94% of the waste in place in the state is provided with a landfill gas collection system, and the majority of these sites operate under the Federal NSPS, or under other more stringent local regulations. Highly efficient landfill gas capture, up to 99.2%, has been documented both theoretically and in field studies (Huitric and Kong, 2006, Huitric et al, 2007). This is in contrast with the 75% default incorrectly used by many regulatory agencies. Anecdotal statements that paint a poor picture of how efficiently landfill gas is captured at the majority of the state's landfills are not accurate and serve only to mislead decision makers faced with the monumental task of considering the greatest need for and return from emission reductions, especially given the current dire state budget situation.

The report inappropriately singles out commercial recycling above all waste management options.

We are wholly supportive of commercial recycling and many of our members have developed, implemented and are operating those programs. Nevertheless, unsupported statements such as "it has a proven economic track record of spurring more economic growth than any other option for the management of waste and other recyclable materials" indicates a true lack of understanding of what "integrated waste management" means. A range of approaches for managing waste is not simply convenient for local jurisdictions, but absolutely a necessity for complying with state law. They must have discretion to implement the programs that are most appropriate for their wastestreams and communities including source reduction, reuse, emerging technologies for recovery of energy from wastes, composting, single family recycling programs and safe management of waste that cannot be feasibly diverted through these other techniques.

The report correctly acknowledges the importance of producer responsibility.

We appreciate the fact that the report acknowledges the importance of producer responsibility; however, the ETAAC did not evaluate this critical aspect of commercial waste management in the report. Producer responsibility warrants greater consideration over all waste management sectors given the potential lifecycle reduction in GHG emissions and energy benefits involved.

The report makes unfounded statements regarding composting.

GHG emissions from composting are not estimated in the report and the report wrongly claims that composting "avoids" methane emissions. It is well documented that composting can produce methane (e.g., Stredwick, W. (2001)). Furthermore the report states that composting offers greater carbon sequestration than occurs in a landfill. We do not believe this to be the case as landfills offer excellent sequestration of carbon, whereas composting only offers sequestration as humus and indirect sequestration as a soil amendment (USEPA, 1998, 2002). Furthermore, the ease of removing barriers to composting, barriers which are real and substantial and are associated with land use, economics, air quality and regulatory constraints, is stated to be "easy to moderate" which grossly understates the challenge. Landfill costs are not "artificially low" in comparison to composting; rather, operators, landfill and compost operators alike, charge actual operating costs, and in the case of private operators, a profit margin above costs. Furthermore, landfill tip fees, in a majority of cases, contain surcharges for other waste management and diversion programs, as well as existing state and local fees and taxes, that are not related to the cost of landfilling. We do agree that the state should take a proactive role in developing markets for composted product and streamline permitting for these facilities. We believe that composting is an important part of waste management and can complement other approaches.

The report makes false statements about green waste used as alternative daily cover (ADC) at landfills.

The report states that green waste is not an effective cover because of its porous nature. Green waste use as ADC was approved only after field testing and demonstration that the material meets regulatory requirements including limitation of infiltration and generation of odors. In addition, state regulations restrict the exposure of green waste cover to a 21-day period which is not enough time for waste to begin to generate any significant amount of landfill gas. While this material does decompose in the landfill, the carbon is strongly sequestered, much more so than from composting (USEPA (1998), USEPA (2002)). With the use of a gas control system, GHG emissions are controlled and if energy recovery is implemented from the landfill gas collection, this offsets power production and the associated climate impacts elsewhere.

Finally, the green waste ADC program does not "divert" material away from composting. The California Integrated Waste Management Board reports that approximately 2.5 million tons of green waste are used for ADC whereas another 12 million tons of compostable organics remain in the wastestream (see page 4017 and CIWMB (2008), CIWMB (2004)). In many parts of the state, composting facilities either are not of sufficient capacity to manage the amounts of available organic material or are much further away from the point of generation than local landfills. The distant location of the facilities relative to the source is important since the ETAAC report states that transportation-related emission of GHG is the largest fraction of the state's GHG inventory and decreasing "Vehicle Miles Traveled" (VMT's) is "critical". It should be noted that, compared with ADC usage, composting green waste is more labor and equipment intensive adding to the cost of handling the material and the amount of fossil fuel consumed. Green waste as ADC remains a reliable strategy and a local market for jurisdictions that avoids greater VMT's to distant composting facilities.

The report correctly recognizes the importance of conversion technologies for the future.

We applaud your recognition that the existing barriers to implementing conversion technologies are significant and need to be addressed. However, we do not agree that conversion technologies using solid waste as feedstock should be treated significantly differently as compared to those that use "agricultural waste" as their feedstock as indicated in Chapter 6 of the report. The state's role in facilitating the development of these technologies, regardless of the feedstock type, will be critical, including the provision of waste diversion credit.

The report proposes a per-ton tax on landfills, which should only be considered in the context of taxing ALL sources equitably based upon actual emissions, and the use of the funds should be clearly established beforehand.

The proposal to charging a per-ton fee on landfills related to GHG emissions is made as a method to reduce agricultural GHG emissions through composting. First, as noted above, it should be recognized that the report states that the largest percentage of the state's GHG inventory is from the transportation sector. Landfills are among the smallest percentage contributors to the inventory. Such a landfill surcharge should only be considered after adequate scientific data is evaluated, with peer and stakeholder review, to determine accurate GHG emissions factors for all waste management strategies. The surcharges should consider the full lifecycle emissions taking into account but not limited to: benefits of recycling compared to manufacture from virgin material, emission offsets from energy recovery by conversion technology or landfill gas energy recovery, and the benefits of agricultural composting already included in the report.

Summary

In 1989, Assembly Bill 939 was chartered. The bill, for the first time in California history, mandated that local governments implement programs to achieve specified diversion levels. Since that time it is safe to say that hundreds of millions of dollars have been invested by local governments and industry partners to comply with this mandate. The report stresses the importance of fostering collaboration at all levels, including local government. We strongly feel that many of the recommendations of the report, as noted above, may have serious economic impacts to jurisdictions with potentially, on balance, little gain for the environment. There should not be an increase in state-mandated diversion, or an arbitrary GHG "tax" on landfills alone, until a full economic and environmental life-cycle analysis is done of these and other actions recommended by the report. We welcome a continuing dialogue on these issues in order to ensure that actions taken, and resources expended, to improve our environment are not wasted without the basis of sound science.

Sincerely,

Paul Yoder
Legislative Advocate

ORIGINAL: Board Clerk
Copies: Executive Officer
Chair

CC: Members, California Air Resources Board
James Goldstene, Executive Officer, California Air Resources Board
Members, California Integrated Waste Management Board
Mark Leary, Executive Director, California Integrated Waste Management Board

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