Solid Waste Industry for Climate Solutions

County Sanitation Districts of Los Angeles County
Rural Counties' Environmental Services JPA
Kern County Waste Management Department
OC Waste & Recycling
Recology
Republic Services
Waste Connections
Waste Management

June 22, 2009

Ms. Mary Nichols
Chair, California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812

Dear Chairwoman Nichols:

Comments on the Staff Report: Initial Statement of Reasons for the Proposed Regulation To Reduce Methane Emissions from Municipal Solid Waste Landfills

Thank you for the opportunity to comment on the Staff Report: "Initial Statement of Reasons for the Proposed Regulation to Reduce Methane Emissions from Municipal Solid Waste Landfills". We have provided comments to you on past drafts and greatly appreciate the efforts of staff to address our concerns.

The undersigned are representatives of an informal organization of solid waste management and recycling organizations known as the Solid Waste Industry for Climate Solutions (SWICS). The entities represented by this organization provide comprehensive waste management, biomass energy and recycling services throughout California. The purpose of this organization is to provide Climate Change policy makers with the most accurate information about our industry and our potential contributions to climate change solutions.

The landfill industry stands ready to work with CARB to promulgate a regulation that will provide real methane reduction in landfills throughout the state. SWICS appreciates the efforts of staff to work with the industry to develop a workable regulation, however there are many aspects of the proposal that remain a concern. Our past correspondence detail many of these concerns, however, at this point in the process, SWICS believes it important to focus on a few remaining issues. These issues are detailed below.

Implementation Workgroup

In the past SWICS has commented on the aggressive requirements of the proposed regulation that can have many unintended negative impacts, such as significant air intrusion in landfill gas collection systems resulting from the enhanced landfill gas capture needed to meet the new integrated surface standard, that could both impact the operations of existing energy facilities and expose areas of the landfill to underground fires.

An additional on-going concern has been the lack of interaction from the local air districts in the working group process and how this will impact vital decisions that must be made in the implementation and enforcement of the rule. This lack of constructive involvement coupled with provisions of the proposed regulation that may be "up to interpretation", will leave industry with much uncertainty as they begin to implement the provisions of the proposed regulation. SWICS believes it is not good public policy to place industry in a position of uncertainty, especially considering the significant penalties for noncompliance that have just been included in the proposed regulation.

Finally, as will be detailed further below, SWICS is concerned that CARB has underestimated both the significant cost our industry will have to bear in implementing the proposed regulation, and the ability for landfill operators to fund, pass or "absorb" these cost.

SWICS recognizes that the proposal is an early action measure, the delay of which would create concern in moving forward with the AB32 process, however, the issues detailed above are real and of great concern to the industry. A simple solution, short of delaying the proposed regulation to more fully address our concerns, is to move forward with the proposal but establish an *Implementation Workgroup*, through a Board Resolution, that can work through issues, and if necessary, bring rule revisions to the Board. This Workgroup would be composed of representatives of the landfill industry, CAPCOA, CARB, CIWMB and NGOs. The following is suggested language for a Board Resolution:

> *BE IT FURTHER RESOLVED that the Board directs the Executive Officer to convene a Regulation Implementation Workgroup (Workgroup) that will be comprised of representatives of solid waste landfill operators, air pollution control districts and air quality management districts (Districts), CAPCOA, the California Integrated Waste Management Board (CIWMB), environmental organizations and other interested stakeholders. The purpose of the Workgroup will be to review issues that arise concerning the interpretation and implementation of this regulation including coordination with existing and future regulations adopted by districts affecting the monitoring, collection, and management of landfill gas. The Workgroup will evaluate ways to minimize regulatory duplication and overlap and maximize the overall cost-effectiveness of regulations to minimize and control methane emissions from landfills. The Workgroup shall also determine if any rule amendments shall be recommended to the Board. The Workgroup shall meet quarterly with the first meeting not to occur later than 6 months after the effective date of this regulations. The first meeting shall review progress in the development of the Implementation Guidance Document and plans of the local Districts to coordinate their regulations with this regulation.*

Design Plans

SWICS has expressed concerns that the timelines for design plans did not coincide with the compliance deadlines. CARB attempted to address this issue with new language contained in Section 95465 (a). While this language gets us part of the way to resolution, not all situations are covered by this language, only *newly installed systems*. A more common situation is upgrades to existing gas collection systems as the landfills grow, vertically, for example. Here, the design plan is required to be updated (Section 95466 (b)) and go through the lengthy process for approval. However, the facility needs to proceed with the gas system, which is often coordinated with placement of disposal areas, in order to maintain compliance with the surface standards. A simple solution to resolve this is the addition of some amended language in this section as follows:

> *Except as provided in Sections 95464(d), 95464(e), and 95466, beginning January 1, 2011, or upon commencing operation of a newly installed* ***or upgraded*** *gas collection system,* ***whichever is later****, no location on the MSW landfill surface my exceed either of the following methane concentration limits …*

C&D Waste

Under Section 95462 (b) *construction and demolition waste* and *non-decomposable wastes* are essentially exempt from provisions of the proposed regulation. However, even for C&D sites, minor decomposable waste may be introduced to the site by contamination of the waste load. This situation would disqualify a site for this exemption. Title 27 anticipates this type of situation by having a category of sites that take "inert waste." The definition of "inert waste" in Title 27 allows for minor levels of decomposable waste, therefore, SWICS recommends that Section 95462 (b) be modified as follows:

> *This sub-article does not apply to landfills that receive only construction and demolition,* ***inert****, or non-decomposable wastes.*

and, a definition of "inert waste" be added to be consistent with Title 27, as follows:

> *"Inert Waste" means that subset of solid waste that does not contain hazardous waste or soluble pollutant pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste.*

Cost Analysis

In preparing a cost estimate in the Staff Report, CARB makes sweeping general assumptions that have led to a significant underestimate of cost industry will face as a result of the proposed regulation. CARB wrongly assumes that the only costs that will be borne by controlled landfills are from on-going monitoring activities. This assumption completely ignores the significant cost from remediation of areas that have exceeded either the 500 ppm instantaneous or 25 ppm integrated standards. In fact, in many instances, especially when an exceedance of the 25 ppm standard occurs, the only solution to correct the problem is installation of a gas well.

Remediation cost of these problems can be significant. Cost estimates from a large landfill operating within the SCAQMD show that the cost could be double or triple that of CARB's estimate; landfills operating outside the SCAQMD will likely have greater cost to achieve compliance in the short-term. Another estimate of cost provided by SCS Engineers for small closed landfills previously not required to collect landfill gas, but now subject to this regulation shows that installation of a new landfill gas collection system can result in a 10-year cost of $2.3 million, or a cost effectiveness of $203 per MTCO2e, not CARB's estimate of $9 per MTCO2e.

Provided here are examples of cost that greatly exceed CARB's estimates. Other examples may be in line with CARB's estimate, however, the important point is that to represent cost appropriately, CARB should provide a range of cost effectiveness. This is especially important given the uncertainty that exists in CARB's estimates, the biggest uncertainty is CARB's complete lack of supporting data and the highly speculative estimates for actual methane reductions. Lacking is the percentage of instantaneous readings that will be out of compliance with the 500 ppm standard given the new spacing requirements for monitoring. Also lacking is the percentage of integrated readings that will be out of compliance with the integrated standard as a result of lowering the thresholds from 50 ppm to 25 ppm. Appropriate cost estimates cannot be made without this information, and the vast majority of landfills simply do not collect this information.

It is stated in the Staff Report that "… *using the costs for a single landfill in decision-making process can be misleading.*" SWICS believes to the contrary that presenting a single number to reflect every landfill in the state given the differences in sites and level of effort to bring those sites into compliance with the proposed regulation is extremely misleading. SWICS recommends that in the presentation to the Board, a range of cost effectiveness values be presented. This is consistent with AB32 language that states, "*The state board shall adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions from* ***sources or categories of sources*** …". SWICS believes that the intent of AB32 was to look at the cost effectiveness from individual sources and the entire source category. Presenting a range that represented individual facilities would be consistent with this approach.

<u>Staff Report Background – Page ES-2</u>

CARB indicates here that GHG emissions from landfills are projected to increase to 7.7 MMTCO2e by 2020. SWICS disagrees with this conclusion and recommends that the following proposed language be discussed in the staff presentation to Board to clarify this language:

- *The solid waste industry has demonstrated a commitment to reduce CH4 emissions from landfills over the past 20 years in cooperation with regulatory initiatives. There are few other GHG sources that have demonstrated such a clear commitment and a proven track record demonstrating GHG emission reductions. The solid waste industry has continued to work cooperatively in the development of these proposed regulations.*
- *If nothing else changes, the staff report indicates that landfill methane emissions could begin to increase from 6.3 MMTCO2e in 2006 to 7.7 MMTCO2e by 2020.*
- *However, this assumption does not recognize the following factors that will continue to lead to lower rather than higher emissions:*
    - *Landfill disposal has significantly been reduced due to the severe recession.*

- *Social and economic pressure on landfill owners and operators to reduce GHG emissions from residential, commercial and industrial customers.*
- *Improved technology and Best Management Practices for the control and capture of landfill methane.*
- *Increased evidence that landfill cover materials can be used to further reduce and minimize landfill methane emissions.*
- *Incentives to maximize landfill gas capture and conversion to renewable energy or low carbon fuels.*
- *Adopted policy of CIWMB regarding "zero waste" and development of future programs to encourage diversion of waste from landfills – including several strategies that are currently under consideration to encourage diversion of organic waste from landfill disposal.*

Staff Report Page II-4 - Composting

The last sentence of this section should be removed since it conflicts with a statement a few sentences earlier that CIWMB is conducting a life cycle assessment of organic diversion alternatives. One purpose of a life cycle assessment is to determine if the diversion alternatives, such as composting, will result in more or less GHG emissions when compared to landfilling. Data from industry representatives and recent statements from EPA indicate that one conclusion of this type of assessment is that landfilling of organic material may be a superior alternative to diversion of organics, from a GHG emissions perspective. Realizing that this type of assessment is site-specific, and there are so many other factors to consider for any analysis or situation, blanket statements indicating either alternative provide "*significant reductions of GHG*" when compared to the other, should be avoided.

Thank you for the opportunity to provide these comments for your consideration. Please contact any one of the undersigned if you have questions.

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