



**SWANA**<sup>®</sup>

SOLID WASTE ASSOCIATION  
of North America

June 7, 2010

To whom it may concern:

SWANA appreciates the opportunity to comment on the Climate Action Reserve (CAR) draft Organics Composting Protocol (draft Protocol). The comments provided reflect the opinion of our national organization and many active committees that contain representatives, both public and private, from all over the country.

SWANA's philosophy of solid waste management has always been utilization of the integrated approach, following the hierarchy of waste management, beginning with recycling. An important aspect of this approach is recognizing regional choices that must often be made in waste management reflective of real-world conditions that have to balance many competing factors. These choices have become even more complicated in recent years as the need to consider global warming issues have come to the forefront. Recognizing all these factors, as a guiding principal, SWANA believes that consideration of any waste management choice should not only be based upon such factors as economics and local/regional needs, but sound science. It is with this background and statement of principles that we offer the following comments.

General Comments:

A significant number of SWANA members undertake composting as part of their waste management programs, and as such, SWANA is very supportive of protocols that can result in greenhouse gas (GHG) credits. However, the draft Protocol so narrowly defines the eligible feed-stocks allowed, that a substantial amount of the on-going composting in this country has gone unrecognized. In addition, the "top down" approach used by CAR in calculation methods and choice of default factors impacts what we believe should be the correct science in the Protocol. Each of these issues is discussed in further detail below.

Composting Feed-Stocks Used in the Draft Protocol:

The draft Protocol only recognizes food contaminated materials from very specific sources. SWANA believes that the draft Protocol should address as many organic sources as possible, such as yard waste. Although yard waste generates methane at a different rate than food waste, diverting yard waste (brush, grass, leaves, wood, and similar vegetative material) from landfills to properly operated composting operations can result in a net decrease of greenhouse gas emissions. Composting yard waste in the approximately 23 states that currently ban landfill disposal of this material does not meet the "additionality" standard of the draft Protocol. However, diversion of yard waste from landfills in the remaining 27 states to properly operated composting facilities will meet the additionality standard except in limited circumstances and should be considered along with food waste as a potentially eligible feed stock.



Reference has been made to a US EPA estimate that approximately 65% of all yard waste, nationwide is already composted. While this is a significant diversion rate, it is apparent that the diversion rate in the 23 states with yard waste landfill bans must be significantly higher than the nationwide average, and the diversion rate in the 27 states without such bans must be significantly lower. Data from representative landfills in “non-ban” states such as Texas illustrate that substantial amounts of yard waste are, in fact, landfilled in many instances. These data will be provided to the CAR in the near future for consideration.

SWANA urges CAR to address this omission by including yard waste in the definition of eligible feed stocks in states where landfill disposal of these organics is not already prohibited.

With regard to post-consumer food waste, the draft Protocol defines only post-consumer food waste as eligible, not industrial food waste. Food processing waste, and off-spec or out of date food products are often landfilled when diversion to animal feed or direct land application in agricultural areas is impractical or not cost effective. Such industrial food waste is often packaged and then disposed in landfills rather than separated from its packaging and composted or otherwise diverted. Liquids are also solidified and landfilled. Therefore, this protocol should not automatically designate industrial food waste as ineligible. It should deem industrial food waste as eligible if it can be demonstrated that the material was previously landfilled. This approach would be consistent with the protocol’s consideration of grocery waste.

Another issue of concern to SWANA is treatment adjustments made to eligible feedstocks in states which contain waste-to-energy facilities. Applying a factor to reduce total eligible feedstocks by the percentage that waste is sent to a waste-to-energy facility *on a statewide basis* is inappropriate. There are some 85 waste-to-energy facilities in the United States – some in large-area states and some in small-area states. To penalize a composter because there is a waste-to-energy facility many hundreds of miles away in the same state is inappropriate. For example, in a situation specific to our Texas Chapter, the Cities of Killeen and Waco are now considering waste-to-energy facilities in central Texas. A composter in Amarillo in the northern panhandle of the state, for example, should not be penalized by waste-to-energy facilities that are clearly hundreds of miles beyond any economic haul distance from the composting facility. Composters should only be disqualified if there is a waste-to-energy facility within a reasonable haul distance, and there should be an opportunity for the composter to demonstrate that the otherwise eligible waste was in-fact diverted from a landfill within that radius, if possible.

#### Methane Avoidance Approach and Calculations:

SWANA believes that CAR’s approach to determining methane avoidance is too narrow. Most of the carbon world is using life cycle analysis as a tool to provide more accurate emissions estimates. To the contrary, CAR has drawn its boundaries so tightly that many important aspects of the composting process and methane avoidance approach have been neglected. For example, carbon sequestration in landfills, and in soils as a result of the use of compost as a fertilizer should be considered. Also, potential emissions from curing piles at composting facilities, as well as transport emissions, have been ignored. CAR has made some internal decisions that these emission sources/sinks are irrelevant. SWANA believes that these determinations, which can be important to the ultimate outcome, should be vetted through a more public and thorough process.

The type of process that is used in compost operations can strongly influence GHG emissions. There are variable processes that can be used, such as in-vessel, ASP and windrow. CAR should recognize the GHG emission potential of each of these and rank them accordingly.

In the actual methane avoidance calculations, CAR utilizes defaults, such as 75% landfill gas collection efficiency and 10% methane oxidation in soil covers, and zero collection efficiency for a couple of years for freshly landfilled food waste. SWANA is very concerned that using this “top down” approach could in many instances significantly overestimate the actual methane avoidance. Any GHG offset protocol should provide a rigorous support of its claim of additionality. There is a growing body of evidence to support that well operated landfills operate at collection efficiencies well above 75%. There is also significant research to indicate that even in the absence of a gas collection system, methane soil oxidation can significantly reduce methane emissions, negating the assumption of zero reduction of methane from freshly landfilled food waste. Much of this evidence has been provided to you in the workgroup process. However, SWANA could provide this information if needed. This body of evidence is slowly begin accepted in the regulatory world. The State of California (CARB) has recently accepted a 83% landfill collection efficiency in its regulatory action on the AB32 Landfill Methane Reduction regulation, and EPA is allowing a range of collection efficiencies up to 95%, in its GHG Mandatory Reporting Program. SWANA recommends that the Protocol utilizes an approach to allow for site specific information to determine the factor that go into determining methane avoidance.

Miscellaneous Comments:

1. SWANA believes that monitoring temperature between 12 and 24 inches below the surface of a windrow may or may not be appropriate. We believe the temperature should be monitored close to the core of the windrow, regardless of size.
2. Eight sampling events per year for characterization of residential source separated organics is excessive. This method of sampling and characterization is difficult and costly, especially for organic wastes. SWANA recommends CAR explore a lower number of sampling events.
3. Monitoring the temperature of an aerated static pile below the interface of the cover may not be an appropriate standard if there is no cover.
4. Maintaining all gate records for a period of ten years is burdensome and of questionable value. SWANA recommends that the document retention period should be shorter, such as no more than five years.

We appreciate the opportunity to comment. If you have any additional questions please do not hesitate to contact me directly at [jskinner@swana.org](mailto:jskinner@swana.org) or at 301.585.2898.

Sincerely,

A handwritten signature in black ink that reads "John H. Skinner". The signature is written in a cursive style with a large, stylized initial "J".

John H. Skinner, PhD  
Executive Director and CEO  
SWANA