Solid Waste Industry for Climate Solutions

California Biomass Energy Alliance
County Sanitation Districts of Los Angeles County
National Solid Wastes Management Association
OC Waste & Recycling
Republic Services
Waste Connections
Waste Management

February 20, 2009

John Nickerson
California Climate Action Registry
523 W. Sixth Street, Suite 428
Los Angeles, CA 90014

Via Email: john@climateregistry.org

Subject: CCAR Draft Updated Forest Protocol -- Focus: Harvested Carbon Accounting

Dear Mr. Nickerson:

Thank you for the opportunity to comment on the California Climate Action Registry (CCAR) Draft Updated Forest Protocol, particularly on those portions related to carbon accounting and credits for harvested wood products, wastes and materials. The Solid Waste Industry for Climate Solutions (SWICS) is an informal organization of public and private entities and organizations that provide solid waste and recycling services in California and throughout North America. Many of our members listed above are active members of the CCAR. Of particular interest to SWICS is the issue of carbon accounting the generation of GHG reduction credits relative to forest products (and agricultural, food, and urban biomass wastes) that may be managed in facilities that we operate or delivered as recycled or recovered commodities to the customers we serve. This includes:

- Forest product and urban biomass recycling;
- Compost and composting facilities;
- Biomass to energy plants; and
- Solid waste landfills that receive forest products for disposal and continued management.

Waste Forest Biomass Recycling and Composting

With respect to forest product recycling and composting, our *recycling* facilities are not typically the end point in the maintenance of the recycled or recovered forest product, including the carbon sequestered therein. Rather, these recycling and composting facilities process recyclable and compostable forest products and then typically further transmit the recycled commodity or compost to an end user. While these recycling and composting facilities are critical in ensuring that recyclable materials successfully reach their end use point and contribute to reduced GHG emissions, these facilities, under CCAR established protocols, are only accountable for the GHG emissions and sinks that occur within the boundaries of those facilities or operations. The end user of the recycled biomass waste, such as a recycled paper mill, would likely be the place where direct GHG reductions occur – or indirect GHG reductions that are generated due to reduced energy demand from using the recycled commodity instead of virgin materials.

With respect to reduced energy demand, the actual GHG reduction will take place at the power generating facility that provides power to the recycled commodity end user due to reduced power demand to process and recycle the recycled material. Any GHG reductions associated with the recycling and composting of forest biomass materials are likely attributable to either the end user of that recycled material or to the power generating facility that generated less GHG emissions as a result of reduce power demand from the recycled or composted biomass end user. *The Forest Protocol should **not** assume credit for any GHG benefits or reductions that are under the operational control of Waste Biomass Recycling nor Composting Facilities or end users of these materials.*

For more information on the complexities of assigning GHG emission reductions to recycled and composted materials we have attached a report that was recently prepared for Waste Management by ICF International, entitled: *White Paper: Greenhouse Gas Offsets from Recycling, April 18, 2008.*

Waste Forest Biomass to Energy or Fuel

With respect to biomass to energy/fuel facilities, these facilities *are* typically the endpoint in the management of these forest products. Our view is that that owners and or operators of these facilities have "operational control" and ownership of the biomass forest product materials that flow into these facilities – and pursuant to established CCAR protocols any greenhouse emissions or sinks are the responsibility of, and attributable to, the owner and operator of these facilities.

Biomass to energy/fuel facilities generate renewable low carbon energy from the combustion of waste forest products – that effectively displaces high carbon fossil fuel energy production. Biomass to energy facilities are very interested in being recognized for the greenhouse gas benefits that are derived from displacing fossil fuel combustion with the production of energy and fuel from low-carbon forest product materials. This is already true with respect to renewable energy credits (RECs) that may be generated by such facilities. *The Forest Protocol should **not** assume credit for any GHG benefits that are under the operational control of Waste Biomass Energy or Fuel Facilities.*

Forest Product Waste Disposal Facilities (Landfills)

Solid waste disposal facilities are the final repository for many biomass materials – including waste forest products. Disposal facility owners and operators are appropriately being held accountable for the GHG emissions that may emanate from the decomposition of biomass materials that occurs within the "operational control" of these facilities – including those GHG emissions from decomposing waste forest products. For example, extensive new regulations are being developed by CARB for the control and minimization of such emissions from biomass decomposition within landfills. These new regulations will be imposed on the owners and operators of those disposal facilities in which the waste biomass and forest products are placed.

Similarly, owners and operators of solid waste disposal facilities believe that the maintenance of GHG reductions or "sinks" associated with these facilities are also within their "operational control". This includes the maintenance of sequestered carbon in the forest products that are disposed or "stored" in solid waste disposal facilities. *We recognize that the original carbon sequestration in forest products occurred when the photosynthesis took place in the forest.* However, the responsibility of maintaining sequestration of carbon in the solid waste disposal facility lies with the owner and/or operator of the solid waste disposal facility. In order for the forest sector to gain a carbon storage credit, the Forest Project would need to be operated to preserve the storage of the original carbon sequestration onsite, or otherwise offsite under the direct operational control of the Forest Project owner/operator. Any recognition or "credit' for the maintenance of stored sequestered carbon in landfills should be attributed to the landfill owner and/or operator – *not the forest project owner*. Likewise, if the solid waste disposal facility owner and/or operator removes or lessens that stored carbon sequestration through some subsequent action, then that landfill owner/operator should be held accountable and the stored sequestration recognition or credit should be reduced. *The Forest Protocol should **not** assume credit for any GHG reduction benefits that are under the operational control of Solid Waste Disposal Facilities.*

SWICS recognizes that the recognition of marketable credits for the storage of sequestered carbon in landfills is extremely unlikely. However, SWICS members believe that as landfill owners and operators are being held accountable for GHG emissions (e.g., methane) from facilities over which they have operational control, they should also be recognized for the beneficial aspects of sequestered carbon *storage* that also occurs within their operational control. SWICS believes that evaluation of solid waste disposal facilities will involve a net carbon balance and life-cycle assessment of all activities that occur within the boundaries of these facilities – including the storage of sequestered carbon – to determine a net GHG impact.

SWICS Review of Updated Forest Protocol

In general, SWICS is very supportive of the Updated Forest Protocol as currently proposed. SWICS believes the protocol is appropriate for estimating the GHG benefits and credits that may be attributable to the forest sector and minimizes the possibility of overlap with other sectors and avoids double counting. However, there may be a few

instances that were overlap and double counting may be a possibility, and SWICS requests further clarifications as discussed below.

SWICS Review of Forest Protocol Landfill Component

SWICS is very supportive of the manner in which the proposed revised protocol deals with the carbon sequestration in forest products in solid waste disposal facilities (landfills). The protocol:

- Recognizes the beneficial GHG aspects of sequestered carbon storage in landfills, but
- Does not seek to generate marketable GHG reduction credits for the forest sector for this activity.

SWICS concurs that the maintenance of sequestered carbon from forest products in solid waste disposal facilities is beneficial to reducing overall GHG emissions and is a benefit that should be attributable to the owner/operator of the landfill – not the forest sector from which the forest product was derived for the following reasons:

- ***Operational Control.*** Only the owner/operator of the solid waste disposal facility have ownership of, and operational control over, the forest products that are placed into the landfill.
- ***Enforceability.*** Only the owner and/or operator of the landfill can be held accountable for maintaining the landfill environment so as to maintain the continued storage of sequestered carbon in forest products in the landfill. The Forest Project owner has no control over how sequestered carbon forest products are maintained in the landfill – except at landfill facilities owned, operated or specifically contracted by the Forest Project owner.
- ***Double-Counting.*** This approach avoids the possibility of double-counting the benefits attributable to the storage of sequestered carbon forest products in landfills that are not owned by the Forest Project owner but will likely be claimed by the landfill owner/operator.

SWICS requests that CCAR clearly recognize the above points in the final language of the Revised Forest Protocol.

SWICS Review of Forest Protocol for In-Use Forest Products

SWICS is concerned that there may be duplication and overlap between the Proposed Revised Forest Protocol and the GHG reduction benefits associated with the recycling and/or reuse of Forest Products that may be collected and managed by the solid waste and recycling industry. The protocol must provide very clear language that it is not the intent of the Forest Protocol to assume any GHG reduction credits associated with the off-site collection and recycling of pre-consumer and post-consumer forest products that do not occur within the direct operational control of the Forest Project. Our concerns are for the following activities:

- ***Pre-consumer mill wastage.*** This material may be collected and sent off-site to facilities that are not under the direct operational control of the Forest Project for biomass energy recovery, recycling or compost/mulch production. We believe the draft protocol satisfactorily addresses this concern with the current language under "Process 2: Accounting for mill efficiencies". It appears that mill wastage is assumed to account for 32.5% of the raw logs and no credit is assigned to the Forest Project for the subsequent use or recycling of this percentage. *SWICS supports the retention of this provision and requests that the Forest Protocol be further clarified in the final text to state that no GHG reduction credits are sought in the Forest Protocol that are attributable to the subsequent use of pre-consumer mill wastage.*

- ***Post-consumer Forest Product Wastes and Forest Project Wastes.*** It is less clear how the proposed Forest Protocol does, or does not, assume credit for recycling or reuse of waste forest products (including wastes and materials generated by the Forest Project that are managed offsite).

  As stated in the draft protocol:

  > "The carbon in wood products is estimated herein as the average carbon that persists over a 100-year period of wood products estimated to be in use. The processes described here were adapted from the U.S. Department of Energy (DOE) 1605(b) methodology."

  While the Forest Protocol relies on curves derived from the DOE is not clear how the 1605(b) methodology deals with in-use forest products that are recycled through recycling facilities or used for energy recovery in biomass facilities. If the 1605(b) methodology and the Forest Protocol treats forest products that are recycled or used for energy recovery as *exiting* from the forest products protocol, SWICS does not have any concerns.

  However, if the recycling and energy recovery GHG benefits or credits are embedded in the 1605(b) methodology then there will be conflict between the Forest Protocol and those who recycle or recover energy using forest products and who are outside of the Forest Sector. This includes the recycling of waste forest products into new recycled materials that results in lowered GHG emission through the use of recycled forest products rather than use of virgin forest products. This also includes the use of waste forest products or waste and materials generated by a Forest Project to provide a fuel for biomass to energy/fuel facilities than produce a low carbon energy/fuel that results in lowered GHG emissions due to reduced dependence on fossil fuel energy or fuels.

  The fundamental reason that the Forest Protocol should not assume benefits or credits from the recycling or energy recovery from waste forest products is exactly the same as is true for the benefits associated with landfills or composting: *the forest sector does not necessarily have any operational control over the recycling operations or biomass to energy/fuel facilities that use waste forest products.* The

only exception would be those recycling operations or biomass facilities that are owned and operated by the Forest Project owner.

SWICS strongly requests that clarifying language be added to the Forest Protocol to clarify that benefits or credits from the recycling or energy recovery from forest products or Forest Project wastes and materials (that are managed offsite from the Forest Project or outside of the operational control of the Forest Project) are not incorporated or otherwise embedded into the protocol.

Summary

SWICS requests the following:

- *The Forest Protocol should **not** assume credit for any GHG benefits or reductions that are under the operational control of Waste Biomass Recycling, Composting Facilities or end users of these materials.*
- *The Forest Protocol should **not** assume credit for any GHG benefits that are under the operational control of Waste Biomass Energy or Fuel Facilities.*
- *The Forest Protocol should **not** assume credit for any GHG reduction benefits that are under the operational control of Solid Waste Disposal Facilities.*
- *SWICS requests that CCAR clearly recognize the following key points in the final language of the Revised Forest Protocol:*
    - **Operational Control.** The Forest Protocol does not have any operational control over the management of waste forest products in solid waste disposal facilities, recycling facilities, composting facilities or biomass to energy facilities – except those that may be owned by the Forest Project operator.
    - **Enforceability.** The Forest Sector is not in a position to ensure that waste forest products are managed in such a way so as to produce GHG reduction credits. Only the owner and/or operator of the waste forest product disposal or recycling or biomass facility can be held accountable for generating or maintaining any credits associated with the operation of those facilities.
    - **Double-Counting.** The Forest Protocol cannot assume any GHG reduction credits associated with the disposal or recycling of forest products. Those benefits or credits are most appropriately within the purview of the owner or operator of those disposal or recycling activities.
- *SWICS requests that the Forest Protocol be further clarified to state that no GHG reduction credits are sought in the Forest Protocol that are attributable to the subsequent use by a third party of pre-consumer mill wastage.*
- *SWICS strongly requests that clarifying language be added to the Forest Protocol to indicate that benefits or credits from the disposal, recycling, composting or energy recovery from forest products are not incorporated or otherwise embedded into the protocol.*

- *SWICS strongly requests that clarifying language be added to the Forest Protocol to indicate that benefits or credits from the disposal, recycling, composting or energy recovery from waste and materials generated by the Forest Project but managed offsite from the Forest Project and outside of the operational control of the Forest Project are not incorporated or otherwise embedded into the protocol.*

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

Sincerely,

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Attachment: White Paper:Greenhouse Gas Offsets from Recycling, April 18, 2008, prepared for Waste Management by ICF International.