Comment 1 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Scott
Last Name: Miller
Email Address: millercs@roadrunner.com
Affiliation: BioEnergy BlogRing

Subject: Permit Conversion Technologies to achieve substantial GHG benefits
Comment:

According to CARB's own estimates, there is an estimated 40 million tons of unrecycled waste pouring into California's landfills each year. This is roughly equal to the amount that was accumulating before California's very successful recycling policies were enacted.

The CIWMB needs to pursue a more aggressive approach than merely extending its rather mature methane capture and composting solutions. Composting is not a solution for two reasons: 1) the resulting compost does not meet a consistent purity standard to make it marketable and 2) the demand for compost is so low that these programs are not economically sustainable. California's landfills already lead the nation in their design for capturing methane.

Most unrecyclable trash can be used for generating renewable electricity or converting into carbon-neutral biofuels. Some of our biggest landfills in our largest cities are scheduled to close within the next decade necessitating trans-shipment to other sites - sometimes hundreds of miles away. This is a perverse waste of GHG emitting trucking and rail fuel when conversion technologies sited at waste sorting
facilities can instead cleanly reduce the volume going to landfills by approximately
85% (see independent 2005 UC/Riverside analysis (see http://bioconversion.blogspot.com/2005/12/ca-ab-1090-111605-results-of.html).

"Zero waste" is an unattainable idealistic vision unless it embraces conversion technologies as an extension of recycling.

Without question municipalities should receive diversion credit for redirecting unrecycleable biomass from landfills to conversion technologies that can cleanly produce bioenergy and bioproducts from the refuse.

There should also be a recycling integrity clause in the Scoping Plan that insures that all recycled waste is turned into products within the U.S. to reduce and control global GHG emissions of our recycling waste stream. Currently most recyclables are shipped (at great GHG expense) to China for conversion because of that country's poor wages, lack of workers rights, and unacceptably low pollution standards (see http://biowaste.blogspot.com/2007/01/recyclings-china-syndrome.html).

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-02 17:20:58

No Duplicates.

Comment 2 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Sandra
Last Name: Peterson
Email Address: srsandy@sonic.net
Affiliation:

Subject: Recycling
Comment:

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Step up recycling requirements including the elimination of plastic
bags at grocery stores and other stores, and encouragement of the
use of reusable cloth bags.  Also, public education, especially
for children, about disposable of trash near waterways and how it
ends up in our imperiled oceans.
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Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-03 06:41:59

No Duplicates.

Comment 3 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Charlotte
Last Name: Pirch
Email Address: dpirch@socal.rr.com
Affiliation: LWV of Orange Coast

Subject: AB 32 Workshop: Waste Management
Comment:

RECOGNIZE AND ENCOURAGE COMMUNITY CHOICE AGGREGATION (CCA), WHICH ALLOWS LOCAL GOVERNMENTS TO COMBINE BUYING POWER OF ALL CUSTOMERS IN THEIR JURISDICTION FOR PURCHASING ELECTRICITY.
WE NEED “LIFECYCLE TRACKING” OF MANUFACTURED PRODUCTS, PRIORITIZING REUSABLES AND LOCALLY-MANUFACTURED ITEMS.
UTILIZE THE POWERFUL CARBON REDUCTION POTENTIAL OF ZERO WASTE: REDUCING WASTE BY DESIGN IN MANUFACTURING PROCESS, THEN REUSING, RECYCLING OR COMPOSTING PRODUCTS.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-07 16:42:11

No Duplicates.

Comment 4 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Stacy
Last Name: Katz
Email Address: stacy.katz@yahoo.com
Affiliation:

Subject: Increase Zero Waste and Recycling Initiatives
Comment:

First of all, I would like to thank the Air Resources Board for putting together the Draft Scoping Plan and for being a leading force in global warming emission reductions.

After reading through the scoping plan, I was impressed with its thoroughness. However, the plan only barely touches on Zero Waste and recycling. Instead, the plan should reflect more accurately the powerful carbon reduction potential of zero waste. Materials consumption contributes indirectly to climate change because it requires energy to mine, extract, harvest, process, and transport raw materials, and more energy to manufacture, transport and, after use, dispose of products.

Waste reduction is a powerful tool in lowering greenhouse gas emissions and waste prevention and recycling are critical to stopping climate change. The U.S. Environmental Protection Agency estimates that by cutting the amount of waste we generate back to 1990 levels, we could reduce greenhouse gas emissions by 11.6 million metric tons of carbon equivalent. Increasing our national recycling rate from its current level of 28 percent to 35 percent would reduce greenhouse gas emissions by 9.8 million Metric Tons Carbon Equivalent, compared to landfilling the same material. Together, these levels of waste prevention and recycling would slash emissions by more than 21.4 million MTCE – an amount equal to the average annual emissions from the electricity consumption of roughly 11 million households. Doing something similar in California would have comparable results.

The plan should address how manufactures should work to reduce waste in product design, in the manufacturing process and ultimately encourage them to reuse, recycle or compost their products.

CARB should implement “lifecycle tracking” of manufactured products, giving priority to reusables and locally manufactured items.

Furthermore, CARB should outline how we can encourage recycling in residential and business communities.

Landfills and incinerators also contribute to global climate change by burying resources, and resulting in even more virgin resource extraction. Furthermore, Methane gas is a potent greenhouse gas, 21 times more effective at trapping heat in the atmosphere than carbon dioxide. Landfills are the top human-caused source of methane: 36 percent of human caused methane releases come from our municipal solid waste landfills, A ton of municipal solid waste landfilled produces 123 pounds of methane.

CARB should specify that landfill waste disposal should be phased out by requiring recycling and making manufacturers responsible for the lifecycle of their products and CARB should explicitly ban

carbon credits for landfill carbon sequestration. Over 62 percent of what gets buried in municipal landfills is readily recyclable or compostable organics, including paper, wood, yard trimmings and food scraps. Organic material is needed to replenish our depleted, eroding and artificially-fertilized soils.

Yet when paper, wood, yard trimmings and food scraps are mixed with the myriad toxic products in household and industrial waste, they become too contaminated to apply to soils. Instead, we should separate clean organics at the source and compost them into soil amendments.

When done properly, composting generally results in no net greenhouse emissions. The CARB plan should specify that wastes be separated particularly for organic wastes, for effective composting. CARB should work with the California Integrated Waste Management Board to end the practice of dumping green waste into landfills.

Finally, CARB should promote the installation of “Resource Recovery Parks” Statewide, that will include facilities for reusing, recycling, composting, and discarding materials. These parks can also incorporate facilities for repair services, retail sales of reclaimed products and landscaping supplies, organically composted gardens, educational tours, and public amenities. Such a model park currently operates in the city of Marina in Monterey County.

There are many more tons of reductions possible from aggressive zero-waste and recycling programs. The CARB plan should include specific measures to increase recycling of organics and other materials, and those measures should have emission reduction numbers and deadlines attached to them.

I would like to see the CARB plan: (a) encourage producer responsibility for waste; (b) create incentives for reducing trash; (c) encourage full-cost accounting and life-cycle analysis; (d) encourage maximum recycled content; (e) embrace ending subsidies for extracting virgin resources; and (f) encourage shifting taxes from those activities that have a positive effect on the environment to those activities that have a negative effect.

Finally, successful Zero Waste initiatives require effective outreach and educational programs so that others are advised of and can come to appreciate the benefits. CARB should utilize the legions of young people who are not only enthusiastic and care about waste reduction, recycling and global warming but are also willing to go out and do something about it. CARB should have these individuals help us educate our communities about the issue. Recycling ambassador programs throughout state and local government agencies should be instituted so that students and other volunteers can go door to door educating residents about the need for and the benefits of recycling. In addition, new home owners, apartment dwellers and other residents should receive information after moving to a new residence that explains to them the recycling policies in their neighborhood and encourages them to do so. People are willing to do what it takes to pitch in but if they have no idea how to do it, they won’t even begin. This type of outreach should be a critical aspect of the CARB plan.

Thank you very much for your time and consideration to these matters.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-09 11:57:11

No Duplicates.

Comment 5 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: David
Last Name: Berll
Email Address: seqnkc_mtwhitney@sbcglobal.net
Affiliation:

Subject: Deposit on cans, bottles, etc
Comment:

In CA. we have the CRV on "some items". Shouldn't all the stuff get recylced.

Put the deposit (in CA the CRV) on ALL glass bottles & even jars, ALL plastic bottles, etc. You get my point.

The side effect is that for the people that trash their environment, they is somebody looking to get the money by picking up the litter.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-13 12:26:45

No Duplicates.

Comment 6 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Julie
Last Name: Muir
Email Address: julie@crra.com
Affiliation: California Resource Recovery Association

Subject: Zero Waste (i.e., reduce-reuse-recycle-compost)
Comment:

The California Resource Recovery Association (CRRA) is a statewide non-profit trade group. CRRA's more than 550 members represent all aspects of California's reduce-reuse-recycle-compost economy.

CRRA is disappointed that missing from CARB's draft Scoping Plan (http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf) are any of the following Zero Waste recommendations from Section 4. IV. (Waste Reduction, Recycling and Resource Management) of the CARB Economic and Technology Advancement Advisory Committee (ETAAC) report (http://www.arb.ca.gov/cc/etaac/ETAACFinalReport2-11-08.pdf):

J. Develop Suite of Emission Reduction Protocols for Recycling
K. Increase Commercial-Sector Recycling
L. Remove Barriers to Composting
M. Phase Out Diversion Credit for Greenwaste Alternative Daily Cover Credit
N. Reduce Agricultural Emissions through Composting

In fact, the only draft Scoping Plan preliminary recommendation related to Recycling and Waste is "RW-1 Landfill Methane Control" which is presented in Table 19 on pg. 35 of the draft Plan (http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf). This lone recommendation represents a narrow-minded strategy to mitigate the worst climate impacts of wasting AFTER failing to reduce, reuse, recycle, and compost.

IF California's commonly recyclable and compostable materials that are currently disposed as mixed waste were INSTEAD recycled and composted, THEN the GHG emission reduction would be over 25 million tons CO_2 equivalence. This has been determined using US EPA's Waste Reduction Model (WARM) model and waste characterization data published by the California Integrated Waste Management Board (CIWMB), and has been verified by US EPA Region 9 staff.

The prioritized ordering of the waste reduction hierarchy to optimize resource conservation by reusing materials and repairing, refurbishing, and rehabilitating existing products and buildings to retain their form and function (and thus embodied energy) holds the potential for:

· substantially greater GHG reductions than recycling and composting alone; and
· creating 'green collar' jobs producing value-added contributions to the state's economy

This above bullet-points are explained and documented further in the recently-released report Stop Trashing the Climate: http://www.stoptrashingtheclimate.org

Zero Waste (i.e., reduce-reuse-recycle-compost) is a significant climate protection strategy which offers tens of millions of tons of CO_2 equivalence GHG emissions reductions annually for California at low cost (compared to other options) using existing, proven, environmentally sound methods.

CIWMB's Strategic Directives were adopted as "the most effective and efficient means to create a zero waste California." The Directives (http://www.ciwmb.ca.gov/BoardInfo/StrategicPlan/) include specific steps to minimize waste (SD 3), move toward producer responsibility (SD 5) and support market development (SD 6). Inexplicably, none of CIWMB's Strategic Directives are part of the draft Scoping Plan.
Thus, it is difficult to understand why CARB failed to include in the draft Scoping Plan any of the ETAAC report's Waste Reduction, Recycling and Resource Management recommendations. It is particularly difficult to understand this given that the governor's Climate Action Team has already identified as a "high-confidence" strategy with significant GHG reduction potential of 10 million tons CO2 equivalent by 2020 (see: http://climatechange.ca.gov/publications/factsheets/2005-06_GHG_STRATEGIES_FS.PDF). CRRA believes this 10 million tons CO2 equivalent by 2020 represents a conservative estimate of the emission reduction potential of Zero Waste in California.

California is off to a good start toward climate protection via Zero Waste, thanks to the California Integrated Waste Management Act of 1990 (AB 939) which mandated 50% waste diversion by 2000. It is critical that the Scoping Plan recognize and include Zero Waste California (i.e., reduce-reuse-recycle-compost) as the significant climate protection strategy that it is.

Finally, CRRA is holding its annual conference and tradeshow next month, August 3-6, 2008 in Burlingame. The conference theme and focus is "Carbonopoly: Climate Change is Not a Game We Can Lose''. We will be discussing the Scoping Plan, the ETAAC report, and more. This would be a great opportunity to educate and engage CARB Board members and staff on the significant GHG emissions potential of Zero Waste in California.

The conference program can been viewed at:
http://www.crra.com/2008conf/sessions.html

General information on the conference and registration is at:
http://www.crra.com/2008conf/

Thank you for your consideration.

Sincerely,

Julie Muir
President
California Resource Recovery Association
PO Box 1228
San Luis Obispo, CA 93406-1228
916.441.2772
crra@crra.com
http://crra.com

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/6-ab_32_scoping_plan_comments_7-08.pdf

Original File Name: AB 32 Scoping Plan comments 7-08.pdf

Date and Time Comment Was Submitted: 2008-07-15 19:35:53

No Duplicates.

Comment 7 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Amy
Last Name: Garden
Email Address: agarden@co.napa.ca.us
Affiliation: Napa County

Subject: Draft Scoping Plan
Comment:

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Please see attached letter.
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Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/7-carb_letter.pdf

Original File Name: CARB letter.pdf

Date and Time Comment Was Submitted: 2008-07-17 16:55:05

No Duplicates.

Comment 8 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Jeffrey
Last Name: Smedberg
Email Address: recycle@co.santa-cruz.ca.us
Affiliation: County of Santa Cruz

Subject: Carbon Benefit of Zero Waste
Comment:

Sirs:
The CARB Scoping Plan addresses the capture of methane that is released from decomposition in landfills. This is appropriate, as methane is a potent greenhouse gas. However, a more effective approach is to reduce the quantity of material deposited in landfills.

It is particularly organic materials in anerobic conditions in a landfill that produce methane. Facilitating compost operations and banning the use of yardwaste as landfill alternative daily cover are quick and cheap steps to reduce the methane problem.

Waste reduction efforts which focus on reducing the overconsumption of single use, disposable, and non-durable products and packaging not only reduce the quantity of discards headed to landfill, but also reduce the environmental and carbon footprint of the entire production chain from resource extraction through manufacturing and retail and all the related transportation.

If your Scoping Plan is intended to be comprehensive, I urge you to make reference to the California Integrated Waste Management Board's Strategic Directives on minimizing waste (SD 3), producer responsibility (SD 5), and market development (SD 6).

I also urge you to include the specific recommendations of your own CARB Economic and Technology Advancement Advisory Committee (ETAAC) report which proposes the following:
J. Develop Suite of Emission Reduction Protocols for Recycling

K. Increase Commercial-Sector Recycling
L. Remove Barriers to Composting
M. Phase Out Diversion Credit for Greenwaste Alternative Daily Cover Credit
N. Reduce Agricultural Emissions through Composting

Thank you for your consideration.
-Jeffrey Smedberg

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-17 18:10:14

No Duplicates.

Comment 9 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Gary
Last Name: Liss
Email Address: gary@garyliss.com
Affiliation: Gary Liss & Associates

Subject: Zero Waste for AB32 Scoping Plan
Comment:

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Zero Waste for AB32 Scoping Plan (see attached letter)
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Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/9-gary_liss_comments_on_draft_scoping_plan__7-17-08_.doc

Original File Name: Gary_Liss_comments_on_Draft_Scoping_Plan_(7-17-08).doc

Date and Time Comment Was Submitted: 2008-07-18 08:54:53

No Duplicates.

Comment 10 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Michael
Last Name: Wonsidler
Email Address: mwonsidler@hotmail.com
Affiliation:

Subject: 3 R's & Composting to reduce GHG's
Comment:

July 18, 2008

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

RE: California Air Resources Board's DRAFT Scoping Plan as it pertains to the recycling and waste management sector.

The California Resource Recovery Association (CRRA) is a statewide non-profit trade group. CRRA's more than 550 members represent all aspects of California's reduce-reuse-recycle-compost economy.

CRRA is disappointed that missing from CARB's draft Scoping Plan (http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf) are any of the following Zero Waste recommendations from Section 4. IV. (Waste Reduction, Recycling and Resource Management) of the CARB Economic and Technology Advancement Advisory Committee (ETAAC) report (http://www.arb.ca.gov/cc/etaac/ETAACFinalReport2-11-08.pdf):

J. Develop Suite of Emission Reduction Protocols for Recycling
K. Increase Commercial-Sector Recycling
L. Remove Barriers to Composting
M. Phase Out Diversion Credit for Greenwaste Alternative Daily Cover Credit
N. Reduce Agricultural Emissions through Composting

In fact, the only draft Scoping Plan preliminary recommendation related to Recycling and Waste is "RW-1 Landfill Methane Control" which is presented in Table 19 on pg. 35 of the draft Plan (http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf). This lone recommendation represents a narrow-minded strategy to mitigate the worst climate impacts of wasting AFTER failing to reduce, reuse, recycle, and compost.

IF California's commonly recyclable and compostable materials that are currently disposed as mixed waste were INSTEAD recycled and composted, THEN the GHG emission reduction would be over 25 million tons CO_2 equivalence. This has been determined using US EPA's Waste Reduction Model (WARM) model and waste characterization data published by the California Integrated Waste Management Board (CIWMB), and has been verified by US EPA Region 9 staff.

The prioritized ordering of the waste reduction hierarchy to optimize resource conservation by reusing materials and repairing, refurbishing, and rehabilitating existing products and buildings to retain their form and function (and thus embodied energy) holds the potential for:

• substantially greater GHG reductions than recycling and composting alone; and
• creating ‘green collar’ jobs producing value-added contributions to the state’s economy.

This above bullet-points are explained and documented further in the recently-released report Stop Trashing the Climate: http://www.stoptrashingtheclimate.org

Zero Waste (i.e., reduce-reuse-recycle-compost) is a significant climate protection strategy which offers tens of millions of tons of CO2 equivalence GHG emissions reductions annually for California at low cost (compared to other options) using existing, proven, environmentally sound methods.
CIWMB’s Strategic Directives were adopted as “the most effective and efficient means to create a zero waste California.” The Directives (http://www.ciwmb.ca.gov/BoardInfo/StrategicPlan/) include specific steps to minimize waste (SD 3), move toward producer responsibility (SD 5) and support market development (SD 6). Inexplicably, none of CIWMB’s Strategic Directives are part of the draft Scoping Plan.

Thus, it is difficult to understand why CARB failed to include in the draft Scoping Plan any of the ETAAC report's Waste Reduction, Recycling and Resource Management recommendations. It is particularly difficult to understand this given that the governor’s Climate Action Team has already identified Zero Waste/High Recycling Programs as a "high-confidence" strategy with significant GHG reduction potential of 10 million tons CO2 equivalent by 2020 (see: http://climatechange.ca.gov/publications/factsheets/2005-06_GHG_STRATEGIES_FS.PDF). CRRA believes this 10 million tons CO2 equivalent by 2020 represents a conservative estimate of the emission reduction potential of Zero Waste in California.

California is off to a good start toward climate protection via Zero Waste, thanks to the California Integrated Waste Management Act of 1990 (AB 939) which mandated 50% waste diversion by 2000. It is critical that the Scoping Plan recognize and include Zero Waste California (i.e., reduce-reuse-recycle-compost) as the significant climate protection strategy that it is.

Finally, CRRA is holding its annual conference and tradeshow next month, August 3-6, 2008 in Burlingame, CA. The conference theme and focus is "Carbonopoly: Climate Change is Not a Game We Can Lose''. We will be discussing the Scoping Plan, the ETAAC report, and more. This would be a great opportunity to educate and engage CARB Board members and staff on the significant GHG emissions potential of Zero Waste in California.

The conference program can been viewed at: http://www.crra.com/2008conf/sessions.html

Thank you for your consideration.

Sincerely,

Michael Wonsidler

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-18 09:12:54

No Duplicates.

Comment 11 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Tim
Last Name: Dewey-Mattia
Email Address: tim@naparecycling.com
Affiliation: Napa Recycling & Waste Services

Subject: California Air Resources Board's DRAFT Scoping Plan as it pertains to the recycling and wa
Comment:

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Please see attached.
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Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/11-response_-_carb_ab32_scoping_document.doc

Original File Name: Response - CARB AB32 Scoping Document.doc

Date and Time Comment Was Submitted: 2008-07-18 13:50:40

No Duplicates.

Comment 12 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Gary
Last Name: Liss
Email Address: gary@garyliss.com
Affiliation: Gary Liss & Associates

Subject: AB32 Scoping Plan Comments
Comment:

Please see attached.

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/12-gary_liss_comments_on_draft_scoping_plan__7-17-08___revised.doc

Original File Name: Gary Liss comments on Draft Scoping Plan (7-17-08), Revised.doc

Date and Time Comment Was Submitted: 2008-07-20 11:28:31

No Duplicates.

Comment 13 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Gary
Last Name: Liss
Email Address: gary@garyliss.com
Affiliation: Gary Liss & Associates

Subject: AB32 Scoping Plan Comments
Comment:

I'd also like to address the issue of land uses and global warming on a more personal note. I chair the Town of Loomis Park and Open Space Commission. We are being besieged with major development proposals on our border by the City of Rocklin, which is in the process of developing the following projects simultaneously: Wal-Mart (24-hour), Home Depot, Target, Kohl's, Lowe's (which recently "pulled out" but the project developer still wants to proceed with someone else there)and many other retail and residential projects.

The size, scale, and design of these projects will have a major growth inducing impact out the Interstate 80 corridor well beyond Auburn. This is exactly the type of problem that Attorney General Brown sued San Bernardino about with regard to their General Plan.

These types of developments need to be subject to AB32 considerations. How to do that should be something addressed in the Scoping Plan.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-20 11:34:45

No Duplicates.

Comment 14 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Gary
Last Name: Liss
Email Address: gary@garyliss.com
Affiliation: Gary Liss & Associates

Subject: AB32 Scoping Plan Comment
Comment:

I'd also like to address the issue of land uses and global warming on a more personal note. I chair the Town of Loomis Park and Open Space Commission. We are being besieged with major development proposals on our border by the City of Rocklin, which is in the process of developing the following projects simultaneously: Wal-Mart (24-hour), Home Depot, Target, Kohl's, Lowe's (which recently "pulled out" but the project developer still wants to proceed with someone else there)and many other retail and residential projects.

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Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-20 18:44:14

No Duplicates.

Comment 15 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Danielle
Last Name: Lee
Email Address: danielle_malawi@yahoo.com
Affiliation:

Subject: California Air Resources Board's DRAFT Scoping Plan as it pertains to the recycling and wa
Comment:

I am disappointed that missing from CARB's draft Scoping Plan (http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf) are any of the following Zero Waste recommendations from Section 4. IV. (Waste Reduction, Recycling and Resource Management) of the CARB Economic and Technology Advancement Advisory Committee (ETAAC) report (http://www.arb.ca.gov/cc/etaac/ETAACFinalReport2-11-08.pdf):

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N. Reduce Agricultural Emissions through Composting

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· creating ‘green collar’ jobs producing value-added contributions to the state’s economy.

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and efficient means to create a zero waste California.” The Directives (http://www.ciwmb.ca.gov/BoardInfo/StrategicPlan/) include specific steps to minimize waste (SD 3), move toward producer responsibility (SD 5) and support market development (SD 6). Inexplicably, none of CIWMB’s Strategic Directives are part of the draft Scoping Plan.

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California is off to a good start toward climate protection via Zero Waste, thanks to the California Integrated Waste Management Act of 1990 (AB 939) which mandated 50% waste diversion by 2000. It is critical that the Scoping Plan recognize and include Zero Waste California (i.e., reduce-reuse-recycle-compost) as the significant climate protection strategy that it is.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-21 12:57:44

No Duplicates.

Comment 16 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Darby
Last Name: Hoover
Email Address: dhoover@nrdc.org
Affiliation: NRDC

Subject: NRDC Comments on Recycling and Waste
Comment:

NRDC respectfully submits these comments on recycling and waste in the Draft Scoping Plan.

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/16-nrdc_comments_on_recycling_and_waste_in_draft_scoping_plan.pdf

Original File Name: NRDC Comments on Recycling and Waste in Draft Scoping Plan.pdf

Date and Time Comment Was Submitted: 2008-07-21 17:19:45

No Duplicates.

Comment 17 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: David
Last Name: Roberti
Email Address: droberti@robjenlaw.com
Affiliation: President, BioEnergy Producers Assoc.

Subject: Conversion Technologies an Essential Element in GHG Reduction
Comment:

The BioEnergy Producers Association (BPA) is a coalition of private companies and public agencies dedicated to the development and commercialization of environmentally preferable industries that produce renewable sources of power, fuels, and chemicals from agricultural, forestry and urban biomass wastes and other carbonaceous materials. Our membership includes bioenergy firms, electric utilities, and waste management companies.

The BPA has reviewed the “Recycling and Waste” section of the Climate Change Draft Scoping Plan, and requests CARB’s consideration of additional measures for Landfill Methane Control. Landfill Methane can be controlled by disposing of carbon-based materials that would otherwise be landfilled in the process of producing liquid and electric energy using clean thermochemcial conversion technologies.

Specifically, the Recycling and Waste Sector Preliminary Recommendation should mirror and complement strategies outlined for the agricultural sector by encouraging the use of urban biomass wastes for sustainable energy production. Deployment of bioenergy strategies is consistent with the Bioenergy Action Plan, the Low Carbon Fuel Standard (LCFS), and AB 32 GHG reduction goals for the following reasons:

Landfill Abatement Potential

The Draft Scoping Plan recognizes fugitive landfill methane gas emissions as a major GHG precursor, and calls for measures to reduce the volume of materials flowing to land disposal. Existing source reduction, recycling, and composting programs are credited with attainment of the state’s 54% diversion rate, and the Plan places principal reliance upon the expansion of these programs to reduce disposal tonnages in the future, virtually ignoring the potential to use these waste resources in the clean production of liquid and electric energy.

Despite the success of its recycling and composting efforts, California’s high disposal rate has remained virtually unchanged for the past 20 years. 40 million tons of municipal waste were landfilled in California in 1989, the year AB 939 was passed. This year, despite the progress of recycling, 42 million tons of waste will be placed in the state’s landfills. As the state’s population is expected to grow by some 10 million people over the next 25 years, this trend is expected to continue.

It is folly to adopt the position that the volume of material that is being placed in California’s landfills can be significantly reduced through source reduction, traditional means of recycling and composting alone. All methods of disposal must be incorporated in any effective plan, and this includes the complete disposal (i.e., destruction) of carbon-based wastes in the process of producing the liquid and electric energy so desperately needed

by the state.

Approximately 70% of the residual materials placed in landfills consist of various types of biomass, only a portion of which may be feasibly composted or recycled. In short, new tools are needed. For example, compostable organics (i.e. food and vegetative wastes), comprise only about 25% of this stream. Similarly, there is no estimate of additional biomass materials, such as paper, which may be recovered through intensified commercial recycling efforts, although markets for the major portion of this stream may have already been optimized, with residuals having limited commodity market value.

In contrast, new biomass conversion technologies, such as in-vessel hydrolysis/fermentation and thermal/fermentation processes, have the potential to convert the full spectrum of landfill-bound carbonaceous waste materials into renewable energy products, including power, fuels, and chemicals. Because of their unprecedented potential to divert waste materials to beneficial use, the development of clean technology bioenergy facilities is an essential and necessary component of future landfill abatement strategies.

GHG Reduction Potential

The Draft Scoping Plan notes that commercial recycling and composting programs “could have substantial greenhouse gas benefits but their in-state reductions have not been quantified at this time.” Indeed, data on the effectiveness of current waste management practices as climate change strategies are both inconclusive and incomplete.

Composting operations, for example, have their own set of air quality concerns, including VOCs and GHG precursors. In fact, an independent study recently completed by the Los Angeles County Sanitation Districts1 concluded that placement of urban green waste in landfills as alternative daily cover was superior to composting these materials in terms of net GHG emissions.

The climate change benefits of recycling are generally assumed to derive from the avoidance of virgin material extraction and reintroduction of recovered materials with “intrinsic energy value” back into the remanufacturing process, although the Draft Scoping Plan admits that such benefits may not occur in California. Indeed, the majority of California’s recyclables leave the state for distant domestic or foreign markets, with the largest volume of these commodities, namely paper and plastics, being shipped to China.

The life cycle analyses on which recycling climate change benefits are based seldom calculate the global GHG impacts of trans-Pacific shipping, or of transferring the remanufacturing burden to developing nations where environmental controls are minimal or nonexistent. These atmospheric industrial pollutants drift eastward and find their way back to California in a matter of days, contributing further to the state’s GHG reduction challenge.

The CIWMB’s own studies point out the critical need to both reevaluate and expand the range of technologies employed to meet future landfill abatement and climate change objectives. For example, a comprehensive life cycle analysis of waste management practices completed in 2004 by the Research Triangle Institute2 concluded that new waste conversion technologies (acid hydrolysis, gasification, and catalytic cracking) were superior to recycling and composting with regard to energy balance, NOx emissions, and carbon emissions. Similarly, a 2006 study of thermal waste conversion technologies prepared for the CIWMB by UC Riverside3 stated:

“If conversion technologies were able to process a significant portion of California’s waste that is currently landfilled, benefits could be realized in a number of areas. These include reductions in overall greenhouse gas emissions, fugitive landfill gas emissions, and diesel truck emissions. On the energy production side, the avoided costs and impacts in exploration, production, and transportation of traditional fuels could be substantial.”

This same study concluded:

“Thermochemical technologies can process a wider variety of feedstocks and can have a greater effect on landfill reduction. Thermochemical technologies can also produce a larger variety of products, which can displace the need for non-renewable sources of energy and fuels. Other indirect effects include eliminating diesel truck trips and reducing landfill gas emissions.”

Thermochemical conversion technologies are clean technologies because nothing enters the atmosphere as a result of the gasification (waste disposal) step. The resulting synthesis gases and waste heat from the processes can be converted to liquid and electric energy. The opposition to conversion technologies that is influencing legislative and administrative policy in California stems from those who refuse to accept that 21st century technology can achieve environmentally superior waste-to-energy technologies; from the traditional recycling industry which wants to suppress competition for the state’s waste streams and from waste management firms that view conversion technologies as threats to landfills.

It is time for the state to look past these short-sighted positions and embrace these emerging technologies with the same commitment as the federal government, other states and nations. More than 100 of these plants are now operating or will be constructed in Europe and Asia during the next decade.

California should be a leader in encouraging such technologies. However, private enterprise will continue to take these projects elsewhere until the state adopts a practical, efficient and supportive statutory and regulatory environment for their implementation and operation.

Recommendation

The BioEnergy Producers Association supports the expansion of California’s source reduction, recycling, and composting programs. At the same time, we urge that new clean-technology bioenergy strategies be applied to the state’s growing post-recycled waste stream in order to meet urgent landfill abatement and climate change goals. Timely deployment of waste-based biorefineries can provide a vehicle for integrating California’s renewable energy, AB 118, and AB32 policy objectives.

References:
1 Evaluation of Green Waste Management Impacts on GHG Emissions, Alternative Daily Cover Compared with Composting. Los Angeles County Sanitation Districts, April 2008.
2 Life Cycle and Market Impact Assessment of Noncombustion Waste Conversion Technologies. Prepared for the CIWMB by the Research Triangle Institute International, 2004.
3 Evaluation of Environmental Impacts of Thermochemical Conversion Technologies Using Municipal Solid Waste Feedstocks. Prepared for the CIWMB by the University of California , Riverside, April 2006.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-28 10:51:52

No Duplicates.

Comment 18 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: John
Last Name: Holtzclaw
Email Address: john.holtzclaw@sierraclub.org
Affiliation:

Subject: recycling
Comment:

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.         Put Zero Waste front and center:  increase recycling by
businesses, mandate building facilities to compost all green
waste, and require producers to take responsibility for the
end-of-life disposition of their products.
```

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-28 17:52:34

6 Duplicates.

Comment 19 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Serena
Last Name: Pancoast
Email Address: serenacattiva@yahoo.com
Affiliation:

Subject: recycling
Comment:

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Include composting removal as an expansion of waste removal.
Active support for LEED certifcation and businesses with enhanced
recycling plans. Apply a CRV for all plastic.
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Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-29 08:33:23

No Duplicates.

Comment 20 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Kim
Last Name: Floyd
Email Address: kimffloyd@fastmail.fm
Affiliation:

Subject: Put Zero Waste Front and Center
Comment:

```
• Put Zero Waste front and center:  increase recycling by
businesses, mandate building facilities to compost all green
waste, and require producers to take responsibility for the
end-of-life disposition of their products
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Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-29 11:44:29

No Duplicates.

Comment 21 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: L.
Last Name: Johns
Email Address: ljohns@metacosmos.org
Affiliation:

Subject: recycling mandates
Comment:

```
Zero Waste everybody, starting now:  increase recycling by
businesses, mandate building facilities to compost all green
waste, and require producers to take responsibility for the
end-of-life disposition of their products. Mandate hospitals
recycle; they don't. A lot they can't but much they can.
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Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-29 12:34:34

No Duplicates.

Comment 22 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Joe
Last Name: Yahner
Email Address: cseghers@arb.ca.gov
Affiliation: City of Ventura

Subject: Draft Scoping Plan
Comment:

please see attached letter

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/25-7_21_08_joeyahner.pdf

Original File Name: 7_21_08_joeyahner.pdf

Date and Time Comment Was Submitted: 2008-07-29 14:13:31

No Duplicates.

Comment 23 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Carol
Last Name: Singleton
Email Address: quetzal4@charter.net
Affiliation:

Subject: Put Zero Waste front and center
Comment:

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Increase recycling by businesses, mandate building facilities to
compost all green waste and require producers to take
responsibility for the end-of-life disposition of their products
as soon as possible.
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Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-29 19:27:37

No Duplicates.

Comment 24 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Barbara
Last Name: Fukumoto
Email Address: barbf53@aol.com
Affiliation:

Subject: GHG reduction potential of waste recovery substantial underestimated
Comment:

First, I urge the Board to advocate the use of a greenhouse gas estimation tool which truly reflects the greenhouse gas emissions of waste materials. When used by itself, the ICLEI greenhouse gas inventory tool underestimates the greenhouse gas reduction potential of reducing, reusing, recycling and composting because it does not account for upstream emissions of materials. Since for most products, the upstream ghg emissions are dramatic, this is a serious flaw. I urge the Board to advocate that cities and counties use the EPA's WARM tool, together with the ICLEI tool, to more accurately reflect the greenhouse gas emissions of materials.

Second, I urge the Board prioriitze preventing organics, especially food waste, from entering the landfill. According the the US EPA (2000) "There are no plausible scenarios in which landfilling minimizes GHG emissions from waste management; for food wastes, composting yields significantly lower emissions than landfilling. For paper wastes, landfilling causes higher GHG emissions than either recycling or incineration with energy recovery."

Third, I urge the Board to adopt the zero waste goal.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 00:43:49

No Duplicates.

Comment 25 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Miriam
Last Name: Reiter
Email Address: mreiter1@mindspring.com
Affiliation:

Subject: waste diversion and composting
Comment:

Dear Members of the California Air Resources Board,
Thanks for the opportunity to comment on the Scoping Plan.
It would be worthwhile to take into account the results of promoting waste diversion and composting into the plan.
Recycling:

Paper
Comparison of Emissions:
- Virgin paper + landfilling yields 15,515.3 pounds of CO2 equivalent per ton of paper. This includes transportation and energy used to make the paper.
-Using recycled paper + recycling, results in much less: 3,461 pounds of CO2 equivalent per ton of paper. This also includes transportation and energy used to make the paper.
Paper is presently about 1/3 of all landfilled municipal garbage. There is need for encouragement to recycle.

Aluminum
The greenhouse gas produced when manufacturing aluminum is thousands of times more potent than CO2. For each ton of aluminum produced, recycled content could be used at the point when 97% of the greenhouse gases produced in making the aluminum would otherwise take place.
At the present time in the U.S., only 21% of 3.66 million tons of aluminum discarded each year is recycled.

Composting
Once landfilled, organics produce potent methane. Getting organics out of the landfill is one of the easiest, fastest, and most cost-effective ways to reduce methane emissions. Organics are 1/4 of all landfilled municipal garbage. The solution is to promote composting.

For these reasons, please consider promoting recycling and composting as part of the Scoping Plan.
Sincerely,
Miriam Reiter
Pacifica, CA

Statistics are from 2008 Stop Trashing the Climate Report, www.StopTrashingtheClimate.org
Parting thought: Recycling a ton of paper allows absorbtion of 600-1200 pounds of CO2 per year by the uncut trees- free of charge.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 09:29:03

No Duplicates.

Comment 26 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Brent
Last Name: Eidson
Email Address: beidson@sandiego.gov
Affiliation: City of San Diego

Subject: Producer Responsibility/Organic Materials/Conversion Technologies
Comment:

p. 34-35 draft Scoping Plan
Although landfill methane control is an important measure to reduce fugitive greenhouse gas emissions, more emphasis should be placed on preventing the generation of these gases by reducing upstream emissions associated with extracting, transporting, and processing raw materials and diverting more materials from disposal at the end of their useful life. The plan should also include measures to quantify the GHG reductions associated with waste reduction and recycling activities. If emission credits can be earned for these activities, it must be determined who receives credit at which point in the process.

The plan should include more specific measures for producer responsibility. The burden on local government to responsibly manage the disposal of non-recyclable and hazardous products is considerable and subsidizes the continued production of these products. Shifting this burden back to the manufacturers will create the incentives for producers to redesign their products and recycle more of them at the end of their lifecycle.

Organic material generates methane when buried in a landfill. There should be more incentives to compost this material and apply it to the land and more disincentives to disposing it in a landfill or using it as alternative daily cover. This would reduce the need for fertilizer and the emissions associated with its production and application, and increase carbon sequestration in the soil. In addition, compost amended soil has the added benefit of reducing the need for irrigation.

ETAAC Final Report comments – Waste Reduction, Recycling and Resource Management
p. 4-14 to 4-21. ESD generally supports the measures outlined for Waste Reduction, Recycling, and Resource Management. These measures would have the added benefit of preserving existing landfill capacity, avoiding the need to transport waste longer distances for disposal as local disposal facilities reach capacity.

p. 4-15. Local governments are not in the position to develop protocols for life-cycle assessments related to solid-waste decisions. This should be developed at the state level for utilization by local government and costs should be considered.

p. 4-16. A flat, across the board increase in diversion rates would be costly for local governments. However, mandatory recycling requirements for commercial sectors and multi-family residences should be considered. A threshold of 4 cubic yards might be difficult to measure since standard dumpster sizes are in multiples of three (3 cy, 6 cy, 9 cy, etc.)

p. 4-20 – 4-21. Conversion technologies should be examined for full life-cycle impacts when compared to source reduction, reuse, recycling, and composting.

There is insufficient information on landfill methane control measures. List all control measures being proposed, feasibility of implementation, potential GHG reduction for each measure, and economic modeling of each measure.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 11:28:24

No Duplicates.

Comment 27 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Karen
Last Name: Smith
Email Address: ksmith@stopwaste.org
Affiliation: StopWaste.Org

Subject: recycling and waste management
Comment:

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See letter attached
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Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/32-ab_32_scoping_plan_comments2.doc

Original File Name: ab 32 scoping plan comments2.doc

Date and Time Comment Was Submitted: 2008-07-30 16:55:01

No Duplicates.

Comment 28 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: David
Last Name: Assmann
Email Address: David.Assmann@sfgov.org
Affiliation: City and County of San Francisco

Subject: City of San Francisco Comments on Recycling and Waste
Comment:

The current draft of the Scoping Plan does not attribute any greenhouse gas savings to waste reduction, recycling, and composting even though local governments recognize that recycling and composting cost-effectively and significantly reduce greenhouse gas emissions. San Francisco's Climate Action Plan, for example, gets 14% of its projected greenhouse gas emission reductions from the waste sector. On a statewide level, a 25% reduction in disposal would result in a reduction of at least 5 million tons of CO2 emissions. Zero waste could result in a reduction of at least 10 million tons of CO2 emissions. Waste reduction and recycling reduces emissions across sectors, including mining, forestry, agriculture, transportation, manufacturing, electricity, and disposal.

The appendices acknowledge the contribution from commercial recycling alone can be as high as 6.5 MMT, which is significantly higher than the potential reductions from landfill methane capture. The appendices also acknowledge a potential reduction of 3.1 MMT from increased composting. Anaerobic digestion also has a potential of 2.2 MMT. While anaerobic digestion is an important and effective way to reduce emissions, we do not believe it should be lumped in with waste-to-energy, since many waste-to-energy programs do not make the best, most efficient use of waste materials. While not quantified, extended producer responsibility and environmentally preferable purchasing are also valuable mechanisms for increased reductions.

ARB should, as a minimum, adopt the recommendations of the ETAAC committee (Economic and Technology Advancement Advisory Committee). These recommendations include:

• Mandatory commercial recycling
• Mandatory multi-family recycling
• Disposal limits for readily-recyclable materials like cardboard
• Emission reduction / offset protocols for manufacturing with secondary materials, avoiding methane at landfills, reducing GHG emissions from agriculture, and upstream GHG reductions of recycling.
• Remove barriers to composting by addressing regulatory hurdles, providing financial incentives for composting and use of compost, and increase market demand through local and statewide procurement efforts.
• Eliminate diversion credit for greenwaste used as alternative daily cover.
• Reduce emissions from synthetic fertilizers/pesticides and energy-intensive irrigation by increasing agricultural application of compost, including through financial incentives and demonstration projects.

The ARB also needs to:
o Ensure the effective and comprehensive implementation of already-adopted Early Action Measures on landfill gas collection.

o Improve GHG inventory and other landfill emissions models through mandatory reporting and better quantification of fugitive emissions.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 18:27:00

No Duplicates.

Comment 29 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Edward
Last Name: Mainland
Email Address: emainland@comcast.net
Affiliation: Sierra Club California

Subject: Highlight Zero Waste's Powerful Carbon Reduction Potential
Comment:

• The Plan's section on Recycling and Waste (p. 34) should highlight more aggressively the powerful carbon reduction potential of zero waste -- first, reducing waste by design in manufacturing process, then reusing, recycling or composting products.
• ETAAC submitted to CARB an excellent set of recommendations for the waste sector but only several were included in the Plan. We strongly urge CARB to include ALL the ETAAC recommendations.
• The Plan should also include Extended Producer Responsibility (EPR) as a potentially powerful carbon reduction measure that is already set as state police by California Integrated Waste Management Board (CIWMB). Extended Producer Takeback (EPT) needs explicit CARB backing as a potent means of cutting greenhouse gas emissions.
• There are many more tons of carbon reductions possible from aggressive Zero-Waste and recycling programs than the Plan admits. For example, the plan should include specific measures to increase recycling of organics and other materials, and those measures should have emission reduction numbers and deadlines attached to them.
• CARB should take note of findings in the recent report "Stop Trashing the Climate", released June 5, 2008 to mark World Environment Day. See http://www.stoptrashingtheclimate.org/ The report, by GAIA with the Institute for Self Reliance and Eco-Cycle, brings together information about recycling plus source reduction, reuse and composting -- and describes how scaling up recycling, reusing materials and products, and shrinking the size of the waste stream can greatly reduce greenhouse gas generation and related climate damage.
• Carl Pope, Executive Director, Sierra Club: "Incinerators and landfills are relics of an unsustainable past that have no place in our green economy. The report "Stop Trashing the Climate" shows that zero waste -- that is, preventing waste and strengthening recycling and composting -- is one of the fastest, cheapest and most effective strategies for confronting global warming."
• CARB should implement “lifecycle tracking” of manufactured products, giving priority to reusables and locally manufactured items.
• Landfill waste disposal should be phased out by requiring recycling and making manufacturers be responsible for the lifecycle of their products. Wastes should be separated, particularly organic wastes, for effective composting. CARB should work with the California Integrated Waste Management Board to end the practice of dumping green waste into landfills.
• Alternate Daily Cover (ADC) using greenwaste or woodwaste should not be given recycling credits or counted as recycling. This actually de-incentivizes diversion of greenwaste into composting and contained methane energy capture.
• CARB’s suggestion to capture and utilize landfill methane gas should not be construed as support for continued dumping of green waste into landfills. Landfill capture of methane is far less efficient than what is possible with green waste separation. This

is especially crucial given that methane is 25 times more potent a greenhouse gas than carbon dioxide.
• Burning garbage arguably uses more energy than recycling, and carbon reduction requires better options.
• CARB should propose statewide installation of “Resource Recovery Parks” to include facilities for reusing, recycling, composting, and minimizing the discarding of materials. They can also incorporate facilities for repair services, retail sales of reclaimed products and landscaping supplies, organically composted gardens, educational tours, and public amenities. Such a model park currently operates in the city of Marina in Monterey County.
• CARB should explicitly reject carbon credits for landfill carbon sequestration.
• Successful Zero Waste initiatives require effective outreach and educational programs so that others are advised of and can come to appreciate the benefits. CARB should utilize the legions of young people who are not only enthusiastic and care about waste reduction, recycling and global warming but are also willing to go out and do something about it. CARB should have these individuals help us educate our communities about the issue. Recycling ambassador programs throughout state and local government agencies should be instituted so that students and other volunteers can go door to door educating residents about the need for and the benefits of recycling. In addition, new home owners, apartment dwellers and other residents should receive information after moving to a new residence that explains to them the recycling policies in their neighborhood and encourages them to do so. People are willing to do what it takes to pitch in but if they have no idea how to do it, they won't even begin. This type of outreach should be an explicit part of the CARB plan.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-31 06:42:44

No Duplicates.

Comment 30 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Cory
Last Name: Brennan
Email Address: cory8570@yahoo.com
Affiliation: Green Leadership Consortium

Subject: Waste
Comment:

Increase incentives and regulations regarding businesses recycling waste. Make it easier for them to do so and increase requirements for them to do so. A very successful action in other areas has been to charge more for waste going to landfill than for recycled waste.

Make producers responsible for end of life cycle disposal of products, particularly toxic products.
Provide incentives for recycled products, like paper, and remove subsidies that encourage waste, like subsidies to oil and logging companies.
Compost green waste, do not use it for fuel. It is much more valuable from a sustainability viewpoint as compost. Require that businesses and individuals compost green waste or put it in bins where it will be composted by the city.
Zero waste marketing campaigns should be done state wide - that needs to be the target, with no compromises.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-31 08:28:27

No Duplicates.

Comment 31 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Ann
Last Name: Schneider
Email Address: Ann.Schneider@sierraclub.org
Affiliation: Sierra Club

Subject: Maximize Recycling as Early Action
Comment:

Dear CARB:

Thank you for your work and for your comments that you have heard that you need to expand recyclings place in the list of actions California needs to do to reduce our impact on Global Warming.

1. Your report talks about a 54% diversion in Calif. Sadly while we might be at 54% diversion, we are today, landfilling almost the same tonnage statewide as we did in 1990, the year AB393 set as base year. We can not use population growth and a growing economy as an excuse to basically bury as much today as we did 18 years ago. That is why we advocate for zero waste as all materials landfilled are "wasted" and none belong in a landfill. All materials should be cycled back as nature does.

So please change your report to reflect diversion and disposal and don't just pass it off as ok because our population has grown.

2. ETAAC Recommendations include a terrific range of additions that were not reflected in the draft Scoping plan. Please add all the ETAAC recommendations. I would prefer to see mandatory recycling of specific materials from all commercial and industrial sources, like all metals, all paper, all glass, most plastics and all biodegradable organics like food waste and greenwaste. We are 18 years into AB9393 that mandates behaviors on local governments. It is now time to get all businesses and residents to be held to the same law.

3. Extremely critical is to eliminate the credit local governments and landfill operators receive for using greenwaste, volume reducing it and then using it as "Alternate Daily Cover (ADC)" and getting recycling credit under AB939. The law needs to be changed immediately to eliminate ADC as recycling. This is shame recycling.

In my capacity as Chair of the Sierra Club Zero Waste Committee I hear from angry residents, who upon hearing that their clean greenwaste is being buried in the landfill. They feel that their government and their hauler are lying to them and that all recycling is a lie. Then they stop participating in programs that local governments have worked so hard to create. It takes years of retraining to turn an angry former recycler back into a true "green" or "blue-green" recycler. So shame recycling is very, very bad for all recycling, not just greenwaste.

4. All greenwaste, foodwaste and food contaminated paper should be banned from disposal in landfills. And we need a "WWII-like Marshall Plan" to construct composting facilities to handle all of California's biodegradable organic materials and return the valuable compost to our denuded soils. This will benefit our farmers, our residents; reduce our need for fertilizers, pesticides, water consumption etc. AND it will get these materials

out of landfills so they stop turning into methane that even with collection systems releases into the atmosphere along with hitchhiking VOCs and HAPs. This is critical.

We need CARB and CIWMB to convene and quickly resolve the best management practices for composting so VOCs and HAPs are not released during the composting process. Don't make this a huge we must study ad nauseum action. Just get it done and get these facilities sited throughout the state.

5. Identify technologies that can generate energy during the composting process. But ensure that the final product is a viable soil amendment and not slag.

6. Use carbon funds to fund the composting market develop needed to site new composting facilities or expand existing facilities.

7. Do not advocate for "Landfill Gas-to-Energy (LFGTE) until all the science is in. Since methane is 25 to 120 times worse (given timeframe used) than carbon dioxide, the risk of turning landfills into biodigesting landfills in order to maximize methane generation for fuel is too great. We are too close to the climate tipping point to risk biodigesting landfills with out 100% proof that the can stop all fugitive gas releases of methane from the landfill. My Committee does not believe that full recovery is possible, contrary to the US EPA belief that 70% can be captured. We believe that it will be closer to 20% over the life of the landfill. And worse, rather than taking decades for fugitive gas releases, we believe it will speed up methane releases while increasing the gas concentrations of methane and piggybacking VOCs and HAPs. Please rethink CARB Scoping Plan assumptions. Please use the precautionary principle and do no harm.

Work to ensure that data is available to all parties from independent sources, not from the landfill operators who have a vested interest in keeping organics in landfills, and making methane to sell to energy producers.

8. The Draft Scoping Plan did not include a list of what California considers acceptable alternative energy. I do know that California does not EXCLUDE waste-to-energy (WtE) from the Renewable Energy Standards/Portfolio. We ask that you exclude WtE from the RES and state portfolios. We ask that you exclude LFGTE from the RES/portfolio.

WtE should be excluded as it competes with recycling and only gets one more "life" from a material. And it loses all the embodied energy that created that material from virgin materials extraction, to processing, to manufacturing/assembly, to market and all the related transportation energy inputs. Reuse and recycling retains the embodied energy over and over again.

LFGTE should be excluded at the very least until it can be proven that it doesn't create more fugitive gases. And it should be excluded because biodegradable materials should not be placed in landfills. They should go to composting and if a process can also recover energy then that process should be part of the RES/portfolio.

9. Landuse - Reuse, recycling and composting operations are low margin businesses. And they require a lot of space. This makes them at a disadvantage to other forms of landuse like high tech offices or retail. As recycling businesses get pushed out away from population centers, transportation costs and energy consumption/GHG gases goes up, (just like affordable housing). Local government General Plans and SMART Growth legislation should recognize the need for reuse operations, recycling and composting as critical infrastructure (like water treatment and sewage treatment plants) and set aside land to keep these businesses close to population centers and points where the

reuse/recycling/green & food wastes are generated. Landbanking for reuse/recycling and composting operations should be set aside for future use or identified as required infill.

I look forward to seeing the appendices and to see the next version. At least I hope there will be one more version before the Scoping plan goes to the Air Resources Board in November. That would give "us" recyclers a chance to see if our concepts made sense to CARB staff.

10. Source reduction efforts should be expaned with CAL EPR being the leader. No plastic water bottles should be provided at public meetings, instead glasses with tap water should be used. This is what San Francisco now requires and the Sierra Club followed suit for all our meetings. This helps in reducing water transportation costs; supports the local water district, very important during droughts and reduced water consumption; reduces exploitation of water in communities where bottled water plants are sited; and reduces plastic waste. Small steps, big impact.

Thanks for all your work.

Sincerely,

Ann Schneider
Chair, National Zero Waste Committee
Sierra Club
Millbrae, CA

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-31 22:03:20

No Duplicates.

Comment 32 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Karen
Last Name: McDonough
Email Address: karen.mcdonough@sanjoseca.gov
Affiliation:

Subject: City of San Jose Comment
Comment:

The Draft Scoping Plan does not adequately allocate green house gas emission reductions from waste reduction, recycling, composting and energy production. Although a local government may not own or operate the landfill, it does control operational aspects of waste collection, recycling and disposal. The City would like the Draft Scoping Plant to allow for the accounting of such, often dramatic, green house gas emission reductions from the activites mentioned above.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-01 01:21:54

No Duplicates.

Comment 33 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Heidi
Last Name: Sanborn
Email Address: hksanborn@comcast.net
Affiliation: California Product Stewardship Council

Subject: Comments on the ARB Scoping Plan
Comment:

Comments attached

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/39-cpsc_letter_to_carb_scoping_plan_7_31_08.pdf

Original File Name: CPSC letter to CARB Scoping Plan 7_31_08.pdf

Date and Time Comment Was Submitted: 2008-08-01 08:31:03

No Duplicates.

Comment 34 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Chuck
Last Name: White
Email Address: cwhite1@wm.com
Affiliation: Solid Waste Industry for Climate Solutio

Subject: SWICS Comments on Draft Scoping Plan
Comment:

Solid Waste Industry for Climate Solutions
Allied Waste Services
County Sanitation Districts of Los Angeles County
National Solid Waste Management Association
Norcal Waste Systems
OC Waste & Recycling
 Republic Services
Riverside County Waste Management Department
 Waste Connections
Waste Management

August 1, 2008

To CARB via on-line submittal at:
http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=sp-recyc-waste-ws&comm_period=1

Subject: Climate Change Scoping Plan – June 2008 Discussion Draft

Dear California Air Resources Board:

The Solid Waste Industry for Climate Solutions (SWICS) is an informal coalition of both public and private solid waste and recycling service providers. Our goal is to ensure that climate change policy makers are provided with the most accurate and comprehensive information regarding our industry and our operations that may generate or reduce greenhouse gas emissions. On behalf of SWICS, we are pleased to take this opportunity to comment on the Climate Change Scoping Plan – June 2008 Discussion Draft. We understand that CARB will be accepting additional comments on the Appendices to the Draft Scoping Plan until August 11, 2008. SWICS may make additional comments on these appendices, but requests additional time until August 18, 2008 due to their belated release.

SWICS members do not object to reasonable and responsible reporting of greenhouse gas (GHG) emissions. Our following comments discuss the significant issues surrounding solid waste management that must be resolved prior to inclusion of this sector in a regulatory framework for the control and reduction of greenhouse gas emissions. These issues include:

1) A preoccupation with landfill emissions to the exclusion of negative and positive GHG impacts of other solid waste management activities;

2) A failure to incorporate a life-cycle assessment of the GHG impacts of solid waste management and recycling services;

3) Little recognition that solid waste management and recycling are essential public services, and that associated GHG emissions

are already very low and have decreased steadily over the past 30 years.

4) No inclusion of carbon mass balance and life cycle impacts in the solid waste operations reporting protocol;

5) No inclusion of carbon storage in the estimation of GHG emissions from individual landfills and no recognition of the GHG impacts from changes in stored carbon associated with other solid waste and recycling activities (e.g., paper recycling, composting); and

6) Little differentiation between biogenic and anthropogenic CO2 emissions in proposed reporting, accounting and regulatory programs.

Draft Scoping Plan Focuses on Landfill Emissions

SWICS is pleased that the projected GHG reductions to be achieved by the Solid Waste and Recycling Sector under the draft plan have been reduced to 1 MMTCO2e from earlier estimates of as much as 2-4 MMTCO2e. Nonetheless, SWICS believes these projections are too high as they are based on conservatively modeled landfill GHG emissions with high levels of uncertainty, that reflect neither the net reduction of GHG emissions from landfill carbon sequestration, nor the indirect reductions associated with beneficial use of landfill methane and recycling activities. When considering the total life-cycle analysis of solid waste and recycling services, SWICS believes that the total GHG emissions from our industry are neutral or even negative.

The Draft Scoping Plan focuses exclusively on landfills and assumes landfills are only able to capture 75% of the methane they generate in their gas collection systems. As SWICS has repeatedly pointed out, this assumption is based on a highly uncertain US Environmental Protection Agency (EPA) estimate of the average collection efficiency of landfill gas systems nationwide. Furthermore, this assumption does not reflect the more aggressive regulatory system that exists in California, nor does it reflect our drier climatic conditions, both of which affect landfill gas generation and collection efficiencies. As we have previously commented, most California landfills with gas collection systems operating in compliance with Air District requirements are capable of achieving 90%+ landfill gas collection efficiencies. The projected reductions in the Draft Plan associated with increased landfill regulation are based on a 75 % gas collection efficiency when a much higher efficiency likely already exists. Thus, the projected benefits of increased landfill regulation are likely to be significantly overstated. We recommend that if CARB wants to promote even deeper reductions than are already occurring, then CARB should allow methane destruction offsets to be generated at any landfill that can demonstrate greater than 75% collection and destruction.

We support reporting of greenhouse gas emissions when a source is capable of providing accurate and specific accounting of its emissions and those emissions can be placed within the context of the operations as a whole. We are working to develop an accurate and transparent protocol that may be used in California and nationwide. The recently revised and updated SWICS landfill methane and sequestration protocols that are attached to this letter are the first attempt to do this. We believe the SWICS protocols improve and refine EPA and UN Intergovernmental Panel on Climate Change (IPCC) modeling, and should be considered by CARB as a first step to the development of better protocols for estimating GHG emissions from landfills. Once completed, CARB should consider the model developed by Bogner and Spokas from the landfill research supported by the California Energy Commission:

http://www.energy.ca.gov/2007publications/CEC-999-2007-039/CEC-999-2007-039.PDF

CARB has recently completed a comprehensive revised inventory of greenhouse gas emissions. The roughly 350 landfills in that state were found to emit approximately 5.62 MMTCO2e of the total statewide emissions of 484.40 MMTCO2e in 2004 – or about 1.16 percent of total statewide emissions. But, as noted above, these emission estimates are overstated due to the reliance on the assumption that California regulated landfill gas collections systems are only 75% efficient – and by ignoring the carbon storage benefits of landfills.

Using the SWICS protocol for estimating GHG emissions from California landfills, would result in total estimated landfill emission at less than 3.0 MMTCO2e – or less than 1% of California emissions. But, even that would be an overstatement if the estimate failed to recognize landfills as carbon storage sinks that effectively reduce CO2 emissions, as is done by both U.S. EPA and the IPCC. The recent CARB inventory of GHG emissions acknowledges that landfill carbon storage is equivalent to about 5 million tons of carbon per year. If converted to CO2 equivalents this would be equivalent to approximately 19 MMTCO2e – meaning that total landfill carbon storage vastly exceeds the emissions estimate of carbon released by either CARB or SWICS for California landfills. Focusing exclusively on the overstatement of GHG emissions from landfills is bad public policy, and not supportable by either good science or international GHG protocols.

The Scoping Plan lacks a comprehensive view of Solid Waste and Recycling Activities

SWICS believes that the GHG reduction benefits associated with recycling and renewable energy production are well known and understood. Life cycle assessments by U.S. EPA and its contractors, referenced in this comment letter, document the benefits of recycling and energy Recovery from waste. We urge CARB to recognize these sources of information and incorporate them into the Final Scoping plan.

In addition, Waste Management (WM) commissioned a report by ICF International that both documents the benefits of recycling – and explores the difficulty of assigning “credit” to any one party associated with recycling activities (Attached). However, the difficulty in translating recycling benefits into tradable “offset credits,” should not limit CARB from promoting increased recycling in the Scoping Plan as an important tool for achieving GHG reductions.

Currently there is no widely accepted protocol that accurately accounts for greenhouse gas emissions from solid waste management operations on a site-specific basis. This includes fugitive emissions from landfills, emissions from compost facilities, emissions/sinks associated with recycling and materials recovery programs, and offsets from waste to energy operations. Development and acceptance of such reporting protocols is the first priority, and must be accomplished prior to inclusion of solid waste management and recycling activities into any reporting or regulatory framework.

SWICS supports the reasonable and responsible development of a unified GHG regulatory system for solid waste and recycling. While we are one of many voices calling for consistency in approaches to regulating GHG emissions and sinks in our industry, our plea for unification of programs and approaches has been less than successful to date. More than half the states in the United States and most Canadian provinces have contemplated some type of Climate Change initiative.
Unfortunately, none of these initiatives are truly coordinated. In fact, every reporting platform we have seen developed or that is in development at present is different from every other in some important respect including the initiatives under the California

Climate Action Registry (CCAR), The Climate Registry (TCR), the California Air Resource Board (CARB) the State of New Mexico, the State of Washington, the State of Oregon, and the U.S. Environmental Protection Agency (US/EPA) – just to name a few.

Currently, the CARB has mandatory reporting requirements that only require the reporting of GHG emissions from landfill flares, landfill gas to energy emissions, biomass conversion technologies, and waste-to-energy facilities – despite the fact that the vast majority of these emissions are biogenic in nature.

Recognition that solid waste management and recycling are essential public services and that GHG emissions are very low and have decreased steadily over the past 30 years.

With respect to decisions regarding solid waste management and its potential inclusion in any GHG regulatory framework, policy makers must be cognizant of the essential public service provided by the management, recycling and disposal of solid waste. Numerous policy and regulatory programs promote best practices in solid waste management. This has led to substantial reductions in greenhouse gas emissions over the past 30 years because of improved landfill design, increased recycling, waste-to-energy, and improved waste collection and transportation efficiencies.

In fact, if other sectors of our economy had reduced greenhouse gas emissions to the extent accomplished by the solid waste industry, America would have exceeded the requirements of the Kyoto Treaty. For example, Weitz et al. (attached) estimate that the actual level of greenhouse gas emissions produced by the solid waste management and recycling sector is about 25 percent of the levels emitted 30 years ago, and less than 20 percent of what would have been emitted if waste management practices had continued along the 1974 technology path.
Reductions are not achieved without cost, and the costs associated with solid waste management are directly passed on to the general public. Additionally, costs associated with GHG regulation impacting the solid waste and recycling sector will impact all cities and municipalities whose job it is to collect and dispose of waste. As such, we urge CARB to work closely with municipal governments and their service providers in fashioning a greenhouse gas program that reasonably and responsibly impacts the provision of these essential services.

The solid waste industry as a whole represents a small fraction, and in some cases a de minimis amount of greenhouse gas emissions. If GHG sinks associated with solid waste and recycling services are fully incorporated into a life-cycle assessment of our industry, we believe that net emissions will be substantially less than zero. Few other industries can make such an assertion.

The Complexity of Solid Waste Operations Must be Reflected in the proposed GHG Regulatory Framework Taking into Account Lifecycle Impacts

The regulation of GHG emissions from a single source (landfills) without taking into account the totality of the management system is counterproductive and could result in an increase rather than a decrease in emissions.

Reporting requirements must incorporate the complexities of all sources within a sector from a life cycle perspective. Failure to accurately quantify GHG emissions and sinks from all solid waste management technologies and operations will lead to an undue burden and an improper result. If reporting is left to a simplistic approach, CARB risks misstating the sector’s true impact on climate change and losing the opportunity to identify real reduction strategies.

Recycling, effective long-term carbon storage practices, and reduced well-to-wheels transportation fuel carbon intensity should be recognized in emissions reporting and reduction strategies.

Attached to this letter is a pdf chart titled “Solid Waste and Recycling Life-Cycle.” The chart is from US EPA’s “Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment.” As highlighted in the large green-dashed box, the solid waste and recycling industry encompasses far more than just landfills. The solid waste industry processes millions of tons of residential and commercial recyclables in our recycling facilities. The solid waste and recycling industry offers communities and businesses more effective and affordable recycling options as well as providing manufacturers and end users with the secure, consistent stream of high-quality raw materials they need to maintain operational efficiency -- taking the reduce-reuse-recycle concept into virtually every venue we serve. In residential areas, we are creating sustainable recycling programs through working partnerships with local communities and municipalities. As marketers of post-consumer and post-industrial commodities, we are providing fiber, non-fiber, scrap metal, textiles, electronic scrap and plastics to end-users of recycled materials worldwide.

The significant impact of recycling and other greenhouse-gas saving activities such as waste-based energy, carbon storage are not recognized by the CARB Scoping Plan.

The development of a Scoping Plan that incorporates a more comprehensive view of solid waste and recycling activities will lead to greater insight and better policy decisions. We therefore propose that any GHG regulatory framework incorporate the following:

· Recyclable materials including estimates of greenhouse gas emissions avoided resulting from the diversion of recycled waste;

· Carbon sequestered by the landfills and other solid waste and recycling activities, expressed as CO2 equivalents, and,

· Renewable energy or fuel generated by waste operations, either at the landfill, at biomass facilities, or at waste-to-energy facilities.

The Scoping Plan should not rely solely on unsubstantiated generalized estimates of fugitive emissions from landfills or emissions from our solid waste and recyclable material collection vehicles without consideration of the emission and reductions associated with the multitude of activities we conduct and services we provide. Rather than focus solely on landfills, SWICS strongly recommends that CARB develop a comprehensive approach to solid waste and recycling in the Scoping Plan.

For example, by following the procedures outlined in the U.S. EPA’s “Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks” (http://www.epa.gov/climatechange/wycd/waste/SWMGHGreport.html), it is possible to show that most modern waste management practices result in virtually zero (or better) net greenhouse gas emissions. Thorneloe et al. have written a paper (attached) that describes how EPA’s Decision Support Tool can be applied to communities to determine emissions. This paper shows that the solid waste management activities of a community of average size (population: 750,000) with 30 percent recycling and residual disposal to a landfill with landfill gas to energy has virtually a zero carbon footprint. That is, if all of the emissions sources and sinks are taken into account, the solid waste management and recycling activities of an average size community with these attributes are essentially carbon neutral. These attributes are very similar to that of the solid waste management and recycling systems in many

states today.
We are aware that there may be a desire to focus on only a particular waste management method (e.g., landfills). However, closing the door to a comprehensive evaluation of the net carbon footprint of an entire industry is not appropriate. For example, composting is considered by some to be the most preferable method of handling organic wastes – despite that there are no understood or accepted protocols for estimating GHG emissions from composting and other organic waste management and recycling activities.

CARB must recognize and encourage the comprehensive assessment of all of the emission sources and sinks associated with the solid waste and recycling industry due to its particular complexity. If CARB fails to encourage assessment of all greenhouse gas emissions sources and sinks in its regulatory scheme, we never will find better ways to achieve the underlying goal of lessening the impact of greenhouse gas emissions entering our environment.

A number of our SWICS members have completed (or are completing) entity-wide reporting of GHG emissions to the California Climate Action Registry. For example one SWICS member, Waste Management (WM), has recently completed its 2006 inventory of greenhouse gas emissions from its California facilities. Many SWICS members are in the process of identifying the information sources, data collection methods and data systems required to conduct a company-wide greenhouse gas emissions inventory – with a goal to collect 2009 data for completing an inventory by 2010. The 2006 report of SWICS member's California CO2 emissions are available on-line at (and is summarized in the attached table):

http://www.climateregistry.org/CARROT/public/reports.aspx
(enter name of reporting entity)

In addition to reporting direct and indirect CO2 emissions in California as required by CCAR, WM also provided voluntary supplemental reports including:

· WM processed recyclable material and associated GHG reductions based on US EPA's WARM model

· SWICS-based estimates of landfill emissions and sinks

· Estimates of avoided fossil fuel emissions from renewable energy generation at landfills and biomass power plants

As an example and as summarized in the attached table, WM's largest source of California greenhouse gas emissions is from its 4000-vehicle fleet in that state. WM's landfills, using the SWICS protocols, are a distant second. WM's other direct and indirect emissions are very small. However, the potential greenhouse gas reduction from the recyclable materials collected and processed in California and the amount of carbon sequestered in WM's California landfills during 2006 greatly exceeded WM's total emissions. The results of other reporting entities (e.g., Republic Services, etc.) are similar in nature and consistent with that of WM's. If consideration and recognition is given to the GHG reduction benefits of recyclable materials, energy recovery and landfill carbon sequestration, the solid waste industry's operations could be considered a significant net carbon sink.

Carbon sequestration should be reflected in the estimation of GHG emissions of individual landfill sites and other activities that store carbon

The U.S. Environmental Protection Agency recognizes that landfills act as greenhouse gas sinks in sequestering anthropogenic CO2e. Similarly, in preparing the recent inventory of emissions, CARB has determined that annual carbon storage in California landfills is equivalent to about 5 million tons of carbon per year. If converted to CO2 equivalents this would be equivalent to

approximately 19 MMTCO2e – vastly exceeding the estimate by either CARB or SWICS for GHG emissions released by California landfills. This carbon stored in landfills would have been released as CO2 to the atmosphere were it not for placement in an anaerobic landfill environment. We urge CARB to recognize carbon sequestration from a variety of sources, including landfills, forest and agricultural soils, and through composting.

A well-designed and operated landfill achieving 92 percent methane capture and oxidation could be considered virtually a "carbon neutral" landfill the basis of an overall life-cycle assessment over the lifetime of the landfill – from initial operations through the end of post-closure care. That is, with a 92 percent collection efficiency, the amount of lifetime fugitive landfill emissions would be roughly offset by the amount of lifetime landfill carbon storage. SWICS members are committed to ensuring that the landfills we operate achieve the maximum amount of methane collection and destruction (including maximum energy recovery) that is economically feasible. In many cases we believe we are already achieving overall 92 percent methane collection and destruction efficiency at many of our landfills in California.

CARB should recognize the important role of landfills in storing carbon and preventing CO2 emissions that would have otherwise occurred. This carbon storage, or "sequestration," is important because it removes carbon from the natural carbon cycle indefinitely, reducing net emissions of GHGs. The effect of this process on overall U.S. GHG emissions is very significant as it offsets more than 50 percent of landfill methane emissions (as estimated by US EPA), and exceeds, in absolute magnitude, the emissions from 47 of the 54 source categories in the US EPA's nationwide GHG inventory.

Both the IPCC and US EPA recognize and account for carbon sequestration of un-decomposed wood products, food scraps and yard trimmings disposed of in landfills for purposes of preparing national inventories. SWICS recommends that CARB, should it decide to apply reporting requirements to MSW landfills, to likewise incorporate carbon sequestration into the landfill GHG emissions calculation methodology it adopts for use. Just as methane oxidation in cover and methane collection and combustion are included in the estimation of landfill emissions, so too should carbon sequestration be an integral component of the landfill mass balance calculations. This will ensure completeness, transparency and consistency with the national inventory guidelines of both IPCC and the US EPA. It will also ensure a complete characterization of all human-related GHG emissions and sinks for landfills.

We have attached the following report to this letter prepared by ICF International ("Landfill Gas Storage and Greenhouse Gas Inventories, ICF International, 2007") that further documents the reality of carbon storage or sequestration in landfills.

Accounting for Biogenic and Anthropogenic Emissions

Any GHG reporting and regulatory scheme must take into account the difference between biogenic and anthropogenic greenhouse gas emissions and sinks. Emissions produced from biomass sources are distinctly different than anthropogenic fossil fuel sources of emissions and should be reported and counted accordingly. At the least, biogenic sources of emissions should be treated as carbon neutral and anthropogenic sinks of carbon should be encouraged. CARB's Draft Scoping Plan should clearly provide that emissions and sinks of CO2 equivalents should be bifurcated into anthropogenic and biogenic CO2 to understand the true impact of human activities on Climate Change.

The Western Climate Initiative (WCI) is currently in the process of proposing a GHG reporting and regulatory framework for its members – including California. While the reporting framework may require the reporting of biogenic emissions, it appears that WCI

will not be subjecting biogenic emission to the proposed Cap and Trade Framework. CARB should follow suit and clearly articulate in the Scoping Plan that biogenic emission of GHG (principally CO2) will not be subject to regulation or Cap and Trade.

Thank you for consideration of our comments. Many SWICS members are currently working towards defining their carbon footprints through the California Climate Action Registry or other reporting platforms. Calculating and reporting greenhouse gas emissions from the solid waste and recycling industry will be a time-consuming and complex process, but SWICS members are committed to establishing protocols that provide accurate and comprehensive accounting of our industry's activities. We are equally committed to working with CARB and its WCI partners to establish an accurate and meaningful GHG regulatory program.

We look forward to working with you.

Sincerely,

Anthony M Pelletier, P.E.Regional Engineer, West RegionAllied Waste Industries925-201-5807Tony.Pelletier@awin.com Frank Caponi, P.E.Supervising EngineerCounty Sanitation Districts of Los Angeles County(562) 699-7411 x2460fcaponi@lacsd.org
Edward W. Repa, Ph.D.Vice President Environmental ProgramsNational Solid Waste Management Association(703) 299-5139 ext. 11erepa@erefdn.org Rachel OsterLegislative and Regulatory SpecialistNorcal Waste Systems, Inc.(415) 875-1223roster@norcalwaste.com
Kevin H. Kondru, P.E.Manager, Environmental ServicesOC Waste & RecyclingOffice: (714) 834-4056Kevin.Kondru@iwmd.ocgov.com David ZeigerArea Compliance ManagerRepublic Services, Inc.(510) 262-1669Zeigerd@repsrv.com
Hans KernkampGeneral Manager - Chief EngineerRiverside County Waste Management Department(951) 486-3200Kernkamp, Hans HKERNKAM@co.riverside.ca.us Tom Reilly, P.E.Regional Engineering ManagerWaste Connections, Inc.(925) 672-3800TomR@WasteConnections.com
Charles White, P.E.Director of Regulatory AffairsWaste Management/West916-552-5859cwhite1@wm.com

Attachments:
1. WM Recycling Offset paper by ICF
2. Current MSW Industry Position and State-of-the-Practice on LFG Collection Efficiency, Methane Oxidation, and Carbon Sequestration in Landfills, Prepared For: Solid Waste Industry for Climate Solutions (SWICS)
3. The Impact of Municipal Solid Waste Management on Greenhouse Gas Emissions in the United States, Weitz et al., JAWMA, September 2002
4. Moving from Solid Waste Disposal to Materials Management in the United States, Thorneloe et al., October, 2005
5. Waste Management Greenhouse Gas Emission and Sinks For California -- 2006
6. Landfill Carbon Storage and Greenhouse Gas Inventories, prepared by Randall Freed, Sarah Shapiro, Brad Hurley, ICF International
7. Solid Waste and Recycling GHG Life-Cycle

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/40-swics_scoping_plan_comment_attachments.zip

Original File Name: SWICS Scoping Plan Comment Attachments.zip

Date and Time Comment Was Submitted: 2008-08-01 09:20:38

No Duplicates.

Comment 35 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Mark
Last Name: Gagliardi
Email Address: mgagliardi@oaklandnet.com
Affiliation: City of Oakland

Subject: Need to add Zero Waste Recommendations to Reduction Measure #15 in Section II. B. 15. (Rec
Comment:

The governor’s Climate Action Team (CAT) has identified Zero Waste/High Recycling Programs as a "high-confidence" strategy with significant GHG reduction potential of 10 million tons CO2 equivalent by 2020: http://climatechange.ca.gov/publications/factsheets/2005-06_GHG_STRATEGIES_FS.PDF

The Draft Scoping Plan's Emission Reduction Measure #15 in Section II. B. 15. (Recycling and Waste) states: "Increase waste diversion, composting, and commercial recycling, and move toward zero-waste". However, there are no preliminary recommendations related to increasing waste diversion, composting, and commercial recycling, and moving toward zero-waste.

In fact, the only draft Scoping Plan preliminary recommendation related to Recycling and Waste is "RW-1 Landfill Methane Control" which is presented in Table 19 on pg. 35 of the draft Plan with a CO2 equivalent emissions reduction potential of 1 million tons (1/10 of the 10 million tons reduction potential of Zero Waste/High Recycling Programs previously identified by the CAT). The draft Plan’s lone preliminary recommendation, "RW-1 Landfill Methane Control", represents a narrow, back-end strategy to mitigate the worst climate impacts of wasting AFTER failing to reduce, reuse, recycle, and compost.

It appears to be a significant omission oversight that missing from the draft Scoping Plan are any of the following recommendations from Section 4. IV. (Waste Reduction, Recycling and Resource Management) of the CARB Economic and Technology Advancement Advisory Committee (ETAAC) report (http://www.arb.ca.gov/cc/etaac/ETAACFinalReport2-11-08.pdf):

J. Develop Suite of Emission Reduction Protocols for Recycling
K. Increase Commercial-Sector Recycling
L. Remove Barriers to Composting
M. Phase Out Diversion Credit for Greenwaste Alternative Daily Cover Credit
N. Reduce Agricultural Emissions through Composting

If California's commonly recyclable and compostable materials that are currently disposed as mixed waste were instead recycled and composted, then the GHG emission reduction would be over 25 million tons CO2 equivalence. This has been determined by the California Resource Recovery Assn. (CRRA) using US EPA's Waste Reduction Model (WARM) model and waste characterization data published by the California Integrated Waste Management Board (CIWMB), and has been verified by US EPA Region 9 staff.

The prioritized ordering of the waste reduction hierarchy to optimize resource conservation by reusing materials and repairing, refurbishing, and rehabilitating existing products and buildings to retain their form and function (and thus embodied energy) holds the potential for:

• Substantially greater GHG reductions than recycling and composting alone; and
• Creating ‘green collar’ jobs producing value-added contributions to the state’s economy.

According to research conducted by the Institute for Local Self-Reliance for every 10,000 tons per year of discarded materials: composting creates 4 jobs, recycling creates 10-25 jobs and reuse creates 25-300 jobs, compared to only 1 job created by landfill disposal or incineration:
http://www.ilsr.org/recycling/recyclingmeansbusiness.html

Additionally, we urge that any “biomass” waste conversion technologies under consideration be addressed on an individual basis and in a full life-cycle comparison to source reduction, reuse, recycling and composting alternatives. Many of these waste conversion technologies have highly questionable net energy balances, especially high temperature material destruction processes applied to non source-separated, mixed feedstocks.

Furthermore, the California Integrated Waste Management Board (CIWMB) which is a full-fledged member of the CAT has adopted Strategic Directives as “the most effective and efficient means to create a zero waste California”:
http://www.ciwmb.ca.gov/BoardInfo/StrategicPlan/

The Directives include specific steps to minimize waste (SD 3), move toward producer responsibility (SD 5), and support market development (SD 6) - including reducing methane-producing organics sent to landfills by 50% from current levels by 2020. It appears to be a significant omission oversight that none of CIWMB’s Strategic Directives are included as recommendations in the draft Scoping Plan.

In conclusion, the draft Scoping Plan needs to be corrected to include recommendations that support the Plan’s Emission Reduction Measure #15 in Section II. B. 15. (Recycling and Waste) which states: "Increase waste diversion, composting, and commercial recycling, and move toward zero-waste".

Additions to the Plan which will provide such corrections are readily available to CARB from existing resources:

• The Climate Action Team’s Zero Waste/High Recycling Programs recommendation referenced above, which has been identified by the CAT as a "high-confidence" strategy with significant GHG reduction potential of 10 million tons CO2 equivalent by 2020
• The five ETAAC report Waste Reduction, Recycling and Resource Management recommendations listed above
• The CIWMB’s Strategic Directives referenced above

California leads the nation in climate protection via Zero Waste, thanks to the California Integrated Waste Management Act of 1990 (AB 939) which mandated 50% waste diversion by 2000. Zero Waste (i.e., reduce-reuse-recycle-compost) is a significant climate protection strategy which offers tens of millions of tons of CO2 equivalence GHG emissions reductions annually for California at low cost using existing, proven, environmentally sound methods.

It is critical that the Scoping Plan recognize and include Zero Waste strategies as the significant climate protection strategies that they are by including specific recommendations that advance reduce-reuse-recycle-compost in California.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-01 11:19:49

No Duplicates.

Comment 36 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Yvette
Last Name: Rincon
Email Address: yrincon@cityofsacramento.org
Affiliation: City of Sacramento

Subject: City of Sacramento
Comment:

Comments on Waste and Recycling

2. The term “Increase diversion and move disposal to zero” need definition and an implementation plan. Currently, the City is on track for a 64-66 percent diversion rate by 2012.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-01 12:00:38

No Duplicates.

Comment 37 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Carol
Last Name: Misseldine
Email Address: cmisseldine@comcast.net
Affiliation: Green Cities California

Subject: Comments on Recycling and Waste Management Sector
Comment:

```
Green Cities California (GCC) comments on Recycling and Waste
Management sector of the AB 32 Draft Scoping Plan, attached.

Carol Misseldine
Coordinator
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/43-gcc_recycling_and_waste_sector_comments.ab_32_draft_scoping_plan.doc

Original File Name: GCC Recycling and Waste Sector Comments.AB 32 Draft Scoping Plan.doc

Date and Time Comment Was Submitted: 2008-08-01 15:25:58

No Duplicates.

Comment 38 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: David
Last Name: Ciplet
Email Address: dave@no-burn.org
Affiliation: GAIA organization

Subject: Comments on Draft Scoping Plan
Comment:

```
Please accept my comments and recommendations on the AB 32 Draft
Scoping Plan.  Thank you for your efforts and leadership in the
development of this important plan.

Sincerely,

David Ciplet
Global Alliance for Incinerator Alternatives (GAIA)
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/44-comments_on_ab_32_scoping_plan.doc

Original File Name: Comments on AB 32 Scoping Plan.doc

Date and Time Comment Was Submitted: 2008-08-01 17:11:18

No Duplicates.

Comment 39 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Tom
Last Name: Frantz
Email Address: ini@lightspeed.net
Affiliation:

Subject: waste and goods movement
Comment:

```
This document concerns waste transportation so it may belong here
and also under transportation.
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/45-goods_movement_ab_32_scoping_plan_comments_tom_frantz.doc

Original File Name: Goods Movement AB 32 Scoping Plan comments Tom Frantz.doc

Date and Time Comment Was Submitted: 2008-08-01 19:45:48

No Duplicates.

Comment 40 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Will
Last Name: Bakx
Email Address: willbakx@sonomacompost.com
Affiliation: Sonoma Compost Co

Subject: Organics Management
Comment:

```
Please consider the following comments.  Thank you.
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/46-scoping_plan_comments-organics.doc

Original File Name: Scoping Plan Comments-Organics.doc

Date and Time Comment Was Submitted: 2008-08-01 20:01:23

No Duplicates.

Comment 41 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Heidi
Last Name: Sanborn
Email Address: hksanborn@comcast.net
Affiliation: California Product Stewardship Council

Subject: Recommended Measure # 15 (see attachment)
Comment:

See attached letter

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/47-cpsc_letter_to_carb_scoping_plan_7_31_08.pdf

Original File Name: CPSC letter to CARB Scoping Plan 7_31_08.pdf

Date and Time Comment Was Submitted: 2008-08-08 08:28:51

No Duplicates.

Comment 42 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Michele
Last Name: Young
Email Address: michele.young@sanjoseca.gov
Affiliation: CAlifornia Organics Recycling Council

Subject: Return ETAAC Recommendations to Scoping Plan
Comment:

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/49-scoping_letter_8-08.doc

Original File Name: Scoping Letter 8-08.doc

Date and Time Comment Was Submitted: 2008-08-08 17:10:52

No Duplicates.

Comment 43 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Paul
Last Name: Yoder
Email Address: cseghers@arb.ca.gov
Affiliation: Solid Waste Association

Subject: Draft Scoping Plan
Comment:

```
Please see attached letter
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/50-7_30_08_swana.pdf

Original File Name: 7_30_08_swana.pdf

Date and Time Comment Was Submitted: 2008-08-11 14:27:09

No Duplicates.

Comment 44 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Patrick
Last Name: Griffith
Email Address: pgriffith@lacsd.org
Affiliation: Los Angeles County Sanitation Districts

Subject: LACSD Comments - ARB Draft Scoping Plan: Recycling and Waste Management Strategies
Comment:

LACSD offers the following comments on the discussion concerning Recycling and Waste Management Strategies in the Draft Scoping Plan:

1. Page C-123: Section RW-1 calls for a reduction of 1 MMTCO2 eq. from the Solid Waste and Recycling Sector. As we and other industry representatives have continually stated to CARB in the past, the assumptions underlying this value are incorrect causing the projected reductions from this sector to be too high. The draft Scoping Plan assumes that landfills are only able to capture 75% of the methane they generate in gas collection systems. This is based upon a highly uncertain US Environmental Protection Agency estimate of landfill gas systems nationwide. Furthermore, this assumption does not reflect the more aggressive regulatory system that exists in California, nor does it reflect our drier climatic conditions, both of which affect landfill gas generation and collection efficiencies. In fact, we believe that most California landfills with gas collection systems operating in compliance with air district regulations are capable of achieving 90%+ landfill gas collection efficiencies. Here at Sanitation Districts landfills, we have determined collection efficiencies up to 99%.

In addition to faulty assumptions in determining fugitive methane emissions from landfills, the Draft Scoping Plan fails to provide a complete accounting of overall emissions from solid waste management activities, but chooses only to focus on landfill emissions. The simplistic approach taken by CARB will lead to an undue burden on landfill operators, misstate the true impact of this sector on climate change and lose opportunities to identify real reduction strategies. CARB needs to take a comprehensive approach examining the complexity of all the sources within a sector from a life cycle perspective, carefully examining all GHG emissions and sinks.

A comprehensive evaluation should look at factors such as carbon sequestration at landfills, recycling, composting, transportation, and use of renewable energy. When considering the total life-cycle analysis of the solid waste management industry, we believe that the net GHG emissions from our industry are neutral or even negative. The assessment should be performed on the industry as a whole, but even looking at individual components of the sector more completely paints a different picture. For example, landfills are targeted solely for emission reductions because they are viewed as a significant source of GHG emissions; however, if more appropriate assumptions are made for collection efficiencies, and credits are allowed for carbon sequestration that occurs at all landfills, GHG emissions from this source would be considered carbon neutral or negative. Carbon sequestration in landfills is a well-established fact, recognized by the IPCC, EPA, and CARB. In preparing the most recent inventory of emissions, CARB has determined that annual carbon storage in California landfills is equivalent to about 5 million tons of carbon per year. If converted to CO2 equivalents,

this would be equivalent to approximately 19 MMTCO2 eq. – vastly exceeding the estimate by CARB for GHG emissions released by California landfills.

This comprehensive life cycle approach is especially important in the Draft Scoping Plan recommendation that local and regional governments "change the carbon footprint of their jurisdiction's waste and recycling operations … as well as through the promotion of waste reduction and recycling to community businesses and residents." It makes sense for communities to tackle various components of their waste management decisions, while working with the State, but it is very important from an accounting standpoint in the Draft Scoping Plan that no double counting occur between the Local Government Sector, and the Recycling and Waste Sector. Local governments and communities in performing their waste management evaluations should rely on a comprehensive life cycle approach to develop an accurate picture of how waste reduction and recycling should be promoted in the community. An example was provided above of accounting for carbon sequestration when determining landfill GHG emissions. Another example would be the management of green waste within a community. From a GHG perspective only, the Sanitation Districts have determined that both composting and using green waste as an alternative daily cover (ADC) at landfills provide GHG benefits, but using green waste as an ADC provides more than a four fold reduction in GHG emissions relative to greenwaste composting. Both are important waste diversion techniques, but only a comprehensive life cycle analysis can provide accurate GHG emission data to be considered by decision-makers.

In conclusion, the Draft Scoping Plan provides a limited and incorrect view of the Recycling and Waste Sector. Although the solid waste industry as a whole represents a small fraction, and in some cases a de minimis amount of GHG emissions in the State's inventory, a comprehensive life-cycle assessment would likely reveal the industry's net emissions to be zero, or substantially less.

2. Page C-126: Composting of greenwaste and biosolids have the benefits as stated but also have specific rules in several air districts to comply with. In the South Coast, for example, the requirement to cover biosolids composting facilities caused this rulemaking (Rule 1133.2) to be the most expensive VOC control measure in SCAQMD's history at that time. ARB cannot realistically expect significantly more composting projects to develop in these areas given the already burdensome and costly control measures in place.

3. Page C-127: Anaerobic digestion generally requires transporting a pumpable, mixable fluid to the digester. Tank-type digesters, in many cases, will require that a municipal or industrial sewage treatment plant be located nearby to treat the high-strength liquid waste that accompanies the digestion process unless it can be lagooned and evaporated.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 14:39:47

No Duplicates.

Comment 45 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Lisa
Last Name: Skumatz, Ph.D.
Email Address: skumatz@serainc.com
Affiliation: Skumatz Economic Research Assoc (SERA)

Subject: Include emphasis on solid waste programs in the mix - cheaper, faster, coverage, authority
Comment:

Summary - Include emphasis on solid waste programs in the mix.

Research we have conducted (presented at several conferences, EPA webinars, and upcoming articles) indicates that, although energy and transportation initiatives seem the most promising for achieving GHG / carbon reductions (because of the EPA pie chart showing waste a 3% contributor, etc.), research we have done and several comunities we have tracked indicates that a number of recycling and SOLID WASTE programs should be in the mix (and the early mix) of programs. They 1) are CHEAPER to implement per MTCE than many of the residential and commercial energy efficiency and other programs, 2) they are FASTER to implement than many of the energy and especially transportation programs (and are a great “bridge” while you wait for others to kick in – plus they are long-lasting/retained!), 3) they have greater COVERAGE - with recycling, with a ban or a program or etc. you hit all residential or commercial folks at once (for example) rather than piecemeal audits / retrofits with energy programs; and 4) the city has AUTHORITY over the service in most cases, UNLIKE energy or many mass transit issues. One town we worked with found that 5 years after adopting their GHG goals, they had achieved 40% of the progress to date from the solid waste initiatives. Note that EPA's revised emissions chart shows contributions from solid waste activities (production / disposal of "goods") is more than 1/3 of the contribution to GHG - exceeding transportion or building energy. This is an inkling of our results, and I would be happy to talk at length with the proper folks, or participate in the dialog. Citation / These conclusions come from Skumatz, Lisa A., Ph.D., "Recycling, Energy, and Climate Change: Finding the "Biggest Bang" Community Strategy for Reducing Greenhouse Gas Emissions", Skumatz Economic Research Associates, Inc. Superior, CO, July 2008. My email is skumatz@serainc.com if you have questions.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-12 14:24:43

No Duplicates.

Comment 46 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Kevin
Last Name: Drew
Email Address: sfdrew1977@yahoo.com
Affiliation:

Subject: Diversion of food scraps and green waste for maximum GHG impact
Comment:

Every municipality in California can achieve maximum energy recovery and GHG reduction by properly diverting organic materials. This means not landfilling, rather source separated collection(already happening w/ green waste, many programs are now adding food scraps, delivery to existing sewage treatment facilities for digestion.
Digestion of organic waste harvests energy, saves transportation costs, conserves landfill and compost facility capacity by reducing solid waste, and creates a carbon-rich residual well-suited to conmposting. Organics digestion should be separate from sewage solids.
The infrastracture for this digestion diversion is substantially built, or can be included in re-builds.
This concept is sound, tremendously cost-effective and has huge potential for beneficial GHG impact.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-12 14:52:43

No Duplicates.

Comment 47 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Lisa
Last Name: Skumatz, Ph.D.
Email Address: skumatz@serainc.com
Affiliation: Skumatz Economic Research Assoc (SERA)

Subject: Context for earlier comment - Research shows Solid Waste programs key in GHG reduction
Comment:

I neglected to provide an intro on my previous comment. Find intro paragraphs / qualifications below and "marry" to previous comment.

My name is Lisa Skumatz with SERA, and I am a Ph.D. economist with extensive experience in the US and internationally in energy efficiency and in solid waste. My expertise includes extensive evaluation/measurement work in CA for all 4 IOUS and the CPUC on the energy side; as well as recycling/plan/policy work for CAIWMB and more than 25 cities / counties in CA. I have more than 75 publications in each of the 2 fields.

Research we have recently completed (presented at several conferences, EPA webinars, and upcoming articles) indicates that a variety of solid waste programs and policies (recycling, composting, PAYT, etc.) have advantages over energy and other programs (transportation, etc.) because they are 1) cheaper per MTCE to implement, 2) faster to implement and can be "first strike" (and they last long too!); 3) have immediate coverage (all households, all businesses, unlike energy programs) and 4) the communities have the implemenation authority (unlike private utilities delivering energy programs, different entities responsible for transportation, etc.). Please review comment 52 I made earlier (which had my academic / work background omitted).
skumatz@serainc.com

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-12 15:04:31

No Duplicates.

Comment 48 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Derek
Last Name: Walker
Email Address: dbwalker@edf.org
Affiliation: Environmental Defense Fund

Subject: EDF - Recycling & WM comments
Comment:

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Please accept the attached recycling and waste management comments
from Environmental Defense Fund on the AB 32 draft Scoping Plan.
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Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/55-edf_-_recycling___wm_comments.pdf

Original File Name: EDF - Recycling & WM comments.pdf

Date and Time Comment Was Submitted: 2008-08-12 15:25:03

No Duplicates.

Comment 49 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Walter
Last Name: Vernon
Email Address: olgab@mazzetti.com
Affiliation: Mazzetti & Associates

Subject: Potential Healthcare Offsets
Comment:

```
Please see the attached comments.
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/56-public_comment-ab_32.pdf

Original File Name: Public Comment-AB 32.pdf

Date and Time Comment Was Submitted: 2008-08-12 15:45:37

No Duplicates.

Comment 50 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Jim
Last Name: Antone
Email Address: jantone@ysaqmd.org
Affiliation: Yolo-Solano Air Quality Mgmt. District

Subject: Phase out of free disposable shopping bags
Comment:

A priority measure under this category should be the phase out of free disposable plastic and paper shopping bags provided by grocery and other retail stores. This could be done with incentive programs or by charging for the bags with the ultimate goal of consumers bringing their own reusable bags for shopping.

Thank you,

Jim Antone

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-12 16:37:38

No Duplicates.

Comment 51 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Brennen
Last Name: Jensen
Email Address: bjensen@ecoact.org
Affiliation:

Subject: California Air Resources Board's DRAFT Scoping Plan as it pertains to the recycling and wa
Comment:

RE: California Air Resources Board's DRAFT Scoping Plan as it pertains to the recycling and waste management sector.

The California Resource Recovery Association (CRRA) is a statewide non-profit trade group. CRRA's more than 550 members represent all aspects of California's reduce-reuse-recycle-compost economy.

As a recycling professional and member of CRRA, I am disappointed that missing from CARB's draft Scoping Plan (http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf) are any of the following Zero Waste recommendations from Section 4. IV. (Waste Reduction, Recycling and Resource Management) of the CARB Economic and Technology Advancement Advisory Committee (ETAAC) report (http://www.arb.ca.gov/cc/etaac/ETAACFinalReport2-11-08.pdf):

J. Develop Suite of Emission Reduction Protocols for Recycling
K. Increase Commercial-Sector Recycling
L. Remove Barriers to Composting
M. Phase Out Diversion Credit for Greenwaste Alternative Daily Cover Credit
N. Reduce Agricultural Emissions through Composting

In fact, the only draft Scoping Plan preliminary recommendation related to Recycling and Waste is "RW-1 Landfill Methane Control" which is presented in Table 19 on pg. 35 of the draft Plan (http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf). This lone recommendation represents a narrow-minded strategy to mitigate the worst climate impacts of wasting AFTER failing to reduce, reuse, recycle, and compost.

IF California's commonly recyclable and compostable materials that are currently disposed as mixed waste were INSTEAD recycled and composted, THEN the GHG emission reduction would be over 25 million tons CO2 equivalence. This has been determined using US EPA's Waste Reduction Model (WARM) model and waste characterization data published by the California Integrated Waste Management Board (CIWMB), and has been verified by US EPA Region 9 staff.

The prioritized ordering of the waste reduction hierarchy to optimize resource conservation by reusing materials and repairing, refurbishing, and rehabilitating existing products and buildings to retain their form and function (and thus embodied energy) holds the potential for:
• substantially greater GHG reductions than recycling and composting alone; and
• creating 'green collar' jobs producing value-added contributions to the state's economy.

This above bullet-points are explained and documented further in the recently-released report Stop Trashing the Climate:

http://www.stoptrashingtheclimate.org

Zero Waste (i.e., reduce-reuse-recycle-compost) is a significant climate protection strategy which offers tens of millions of tons of CO2 equivalence GHG emissions reductions annually for California at low cost (compared to other options) using existing, proven, environmentally sound methods.
CIWMB's Strategic Directives were adopted as "the most effective and efficient means to create a zero waste California." The Directives (http://www.ciwmb.ca.gov/BoardInfo/StrategicPlan/) include specific steps to minimize waste (SD 3), move toward producer responsibility (SD 5) and support market development (SD 6). Inexplicably, none of CIWMB's Strategic Directives are part of the draft Scoping Plan.

Thus, it is difficult to understand why CARB failed to include in the draft Scoping Plan any of the ETAAC report's Waste Reduction, Recycling and Resource Management recommendations. It is particularly difficult to understand this given that the governor's Climate Action Team has already identified Zero Waste/High Recycling Programs as a "high-confidence" strategy with significant GHG reduction potential of 10 million tons CO2 equivalent by 2020 (see: http://climatechange.ca.gov/publications/factsheets/2005-06_GHG_STRATEGIES_FS.PDF). CRRA believes this 10 million tons CO2 equivalent by 2020 represents a conservative estimate of the emission reduction potential of Zero Waste in California.

California is off to a good start toward climate protection via Zero Waste, thanks to the California Integrated Waste Management Act of 1990 (AB 939) which mandated 50% waste diversion by 2000. It is critical that the Scoping Plan recognize and include Zero Waste California (i.e., reduce-reuse-recycle-compost) as the significant climate protection strategy that it is.

Thank you for your consideration.

Sincerely,
Brennen Jensen
Zero Waste & Pollution Prevention Program Specialist

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-12 16:42:16

No Duplicates.

Comment 52 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Robert
Last Name: Figoni
Email Address: bfigoni@ci.ontario.ca.us
Affiliation: City of Ontario

Subject: AB 32 Scoping Plan
Comment:

Waste diversion offers a significant opportunity to reduce greenhouse gas emmisions in California. I urge the ARB to include recycling, composting and waste reduction measures in the scope being developed to impliment AB 32. Reducing our consumption of natural resources, developing markets for recycled products, reusing materials and products, and educating the public on the benefits from all of these should be important components of the AB 32 scope. Not only would there be an exponential impact on GHG emmision reduction due to upstream factors such as mining, production and transportaton, but additionally methane from landfills produces many times the greenhouse gas emmisions as C02. Ulimately, reducing landfilling is an important factor.

Bob Figoni
Assistant Solid Waste Director
City of Ontario

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 08:27:58

No Duplicates.

Comment 53 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Suzanne
Last Name: Barzee
Email Address: sbarzee@gmail.com
Affiliation:

Subject: CARB's DRAFT Scoping Plan
Comment:

August 13th, 2008

Suzanne Barzee
San Diego Resident
3852 Eagle Street
San Diego, CA 92103

I am a San Diego resident. I support the California Resource Recovery Association's opinion that zero waste recommendations should be included in the CARB's DRAFT Scoping Plan.

"We buy a wastebasket and take it home in a plastic bag. Then we take the wastebasket out of the bag and put the bag in the wastebasket." -Lily Tomlin

Thank you.

Suzanne Barzee

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 11:15:42

No Duplicates.

Comment 54 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Bob
Last Name: Besso
Email Address: bobbesso@hotmail.com
Affiliation: CRRA

Subject: AB 32 scoping
Comment:

Dear ARB,

As a lifetime Sierra Club member, 30 year member of CRRA and a Recycling/Waste reduction professional, I am writing to express my concern for the inadequate weighing of recycling, composting and waste reduction benefits for reducing air emission.

Virtually everything we do in my industry is aimed at resources conservation and pollution reduction. Landfilling, represents a failure of our society to address our waste issues, and is clearly incapable of addressing air emissions especially in the short term!

Please give our waste reduction efforts a fair evaluation and assessment for air emission reductions, as outlined in the CRRA position letter.

Sincerely,

Bob Besso

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-13 16:14:26

No Duplicates.

Comment 55 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: David
Last Name: Krueger
Email Address: cseghers@arb.ca.gov
Affiliation:

Subject: Draft Scoping Plan
Comment:

```
please see attached letter
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/62-7_18_08_krueger.pdf

Original File Name: 7_18_08_krueger.pdf

Date and Time Comment Was Submitted: 2008-08-14 10:47:37

No Duplicates.

Comment 56 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Evan
Last Name: Edgar
Email Address: cseghers@arb.ca.gov
Affiliation: California Refuse Removal Council

Subject: Draft Scoping Plan
Comment:

```
please see attached comments
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/63-8_11_08_crrc.pdf

Original File Name: 8_11_08_crrc.pdf

Date and Time Comment Was Submitted: 2008-08-14 11:09:05

No Duplicates.

Comment 57 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Charles (Chuck)
Last Name: White
Email Address: cwhite1@wm.com
Affiliation: Waste Management

Subject: Comments on Scoping Plan Appendices
Comment:

```
Please accept the belated attached comments from WM on the Draft
Scoping Plan Appendices.  We had hoped to fully coordinate these
comments with the rest of the Solid Waste Industry for Climate
Solutions (SWICS) who previously submitted comments on the Draft
Plan itself.  Unfortunately time contraints prevented that
coordination.

The comments and referenced attachments are in the zip file
transmitted with this brief note.
```

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/64-wm_draft_scoping_plan_appendices_comments.zip

Original File Name: WM Draft Scoping Plan Appendices Comments.zip

Date and Time Comment Was Submitted: 2008-08-14 15:47:08

No Duplicates.

Comment 58 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Dan
Last Name: Noble
Email Address: dan@resourcetrends.com
Affiliation: Association of Compost Producers

Subject: Comment & Recommendation Letter from ACP
Comment:

Dear Board,
Attached is a detailed (4 page) comment letter that we submitted today at the public hearing on the aRB Draft Scoping Plan... content is both attached as well as in this email.
Thanks for your serious consideration of our recommendations!
Sincerely,
Dan Noble
Executive Director

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

RE: Comments on California Air Resources Board's Climate Change DRAFT Scoping Plan

The Association of Compost Producers (ACP), is a non-profit association of public and private organizations dedicated to building healthy soil, by increasing the quality, value and amount of compost being used in California. ACP applauds the leadership of the State of California and the Climate Action Team, lead by the California Air Resources Board (CARB) in developing a very comprehensive Draft Scoping Plan for Climate Change in the State of California. ACP appreciates the opportunity to submit the following comments on the California Air Resources Board's DRAFT Scoping Plan.

1. ACP is particularly pleased to support Scoping Plan Emissions Reduction "Recommendation 15: Recycling and Waste: Increase waste diversion, composting, and commercial recycling, and move toward zero-waste." (page 34). This is because we agree with CARB that composting and recycling is a critical link in creating a new economy that manages carbon sustainably, in all its many chemical compounds and solid, liquid and gaseous states. However, we feel the Draft Scoping Plan should give more consideration to larger impact measures than solely land fill gas capture (1 MMTCO2E in 2020; page 35). As stated in the Scoping Plan Appendix C, there is a 10 times greater potential for GHG emissions reductions by recycling, composting and anaerobic digestion, , It appears that Draft Recommendation No. 15 does not consider these significantly greater GHG reduction potentials.

Appendix C: Recycling and Waste Management-Other Measures Under Evaluation
Table 34*
Reduction Measure Potential 2020 Reductions MMTCO2E

Commercial Recycling up to 6.5
Increase Production and Markets for Compost
(studies underway for data development) 3.1
Anaerobic Digestion 2.2
Total by landfill gas avoidance potential Up to 11.8
* from: Climate Change Draft Scoping Plan Appendices, page C-127-128

2. Include these measures in Recommendation 15 of this Draft and not just in the "Other Methods for Evaluation" in Appendix C. Currently, these are actions and activities that California municipalities, utilities and companies have already developed and are currently doing, and with increased focus, can expand quickly with marginal additional investment. This is especially true if carbon trading moneys can be brought to bear, as they already exist in other methane avoidance protocols.

3. Ensure that the Scoping Plan does not explicitly or implicitly exclude current compost operations from obtaining carbon credits for additional landfill methane avoidance in the immediate future. The capping and methane capture of landfills may have at least three unintended negative consequences to the above measures if not properly written and implemented: 1) eliminating methane avoidance credits for composting, 2) encouraging landfills to accept more organic carbon to feed methane production and capture system investments, and 3) creating an inefficient biogas production industry in landfills vs. more GHG efficient management technologies outside of landfills. Emissions of CHG from landfills is of great concern because it has been identified to be one of the largest by volume to address. However, the recommendation should support recycling options and processes that avoid placing organic wastes in landfills, especially if greater GHG emission reductions can be achieved with recycling, composting and anerobic digestion.
This includes adopting carbon trading protocols for landfill methane production avoidance via aerobic composting (or anaerobic digestion):
a. Already exist under the UN Clean Development Mechanism (CDM, Kyoto) Protocols,
b. Are under development by CCX (Chicago Climate Exchange), and
c. Can be developed quickly by the California Climate Action Registry (CCAR) for continued use by California composters.

4. Work with CCAR to quickly develop a Landfill Methane Avoidance Protocol (like the UN CDM/Kyoto, and CCX protocols). Thus using existing cap & trade methods to continue methane reductions in addition to enhance land fill gas collection, but limit it to existing carbon in landfills, not causing a draw of recyclable carbon into landfills. This protocol is especially useful for landfills where it is not economic or technically feasible to install landfill gas capturing systems. [While improved land fill gas capture is important, enhancing landfill gas production over other methods (i.e. dedicated energy recovery and/or compost facilities) would likely enhance the need for landfills to continue to attract and need "new" compostable and energy rich organic material in them for years to come, to "feed" the new capture and conversion system investments. Landfills are known to be very inefficient and not easy to control as functioning bioreactors. Transitioning to fully controllable bioreactors, by way of wet anaerobic or dry combustion, will help direct investment dollars toward a sustainable residuals bioenergy and organic soil amendment economy, rather than toward relatively inefficient landfill gas recovery investments.

5. Include Soil Carbon Sequestration Management in the Draft Scoping Plan: The compost industry helps build an economically and environmentally sustainable carbon cycle by returning natural organics to the soil. As extensively researched and published by the USDA Soil Quality Institute, (http://soils.usda.gov/sqi) soil organic carbon plays a key role in managing sequestered organic

carbon to benefit overall watershed health by building and maintaining soil quality and soil health. Unfortunately, CARB's Draft Scoping Plan did not adequately address the central role that sustainable organic carbon plays in resources management for GHG management, i.e. sequestering and managing carbon in plant materials and residuals. Soils are mentioned only once in the Draft Scoping Plan, stating that "…sound quantification protocols are not yet developed" (page 36). However, using the "Soil Conditioning Index" work of USDA, http://soils.usda.gov/sqi/concepts/soil_organic_matter/som_sci.html, where it is stated that "Soil organic matter is a primary indicator of soil quality and carbon sequestration," this deficiency could be quickly remedied with some short term work using existing knowledge. This should be remedied immediately so that policies flowing from the first Scoping Plan don't run counter to improving the health of California's soils, upon which all our biological carbon sequestrating agricultural, forest urban forest and landscape biological resources critically depend.

In addition, we would like to see the following elements included in the final Scoping Plan:

• By Including Composting in Recommendation 15 Californians also Support Additional Environmental Benefits Beyond GHG mitigation: By returning carbon to soils and/or air (via composting and bioenergy recovery), not only do we get over to 5 times the GHG avoidance delivered by only landfill gas capture alone (by CARBs own estimates), there are many additional and GHG complimentary environmental benefits of compost that are not provided by landfill gas capture, including:

o Water conservation from compost building high organic content soils on landscape and agriculture lands

o Integrated organic materials movement and reuse infrastructure investments and economic sustainability (by local users)

o Organics fertilizers (compost) energy reduction, vs. solely chemical nitrogen to soils, which have been shown by ARB Studies to reduce GHG production ("ARB has begun a research program to better understand the variables affecting emissions (Phase 1) and based on the findings will explore opportunities for emission reductions (Phase 2).")

• Implement in all of CARB's Climate Change "rule making" for GHG reduction regulations and rules that are performance based, not best available technology (BAT) based. The BAT method has proven over the years (at both the national and local levels) to limit technology innovation by causing environmental improvement implementation to get "stuck" with, or blocked by, old technologies. This limits rather than enhances ongoing new methods of development and implementation. Continuous innovation is a hallmark of market and performance based approaches, but not BAT rules based approaches.

• Include recommendations outlined in the CARB Economic and Technology Advancement Advisory Committee (ETAAC) report (http://www.arb.ca.gov/cc/etaac/ETAACFinalReport2-11-08.pdf) directly in the current Scoping Plan, i.e.

J. Develop Suite of Emission Reduction Protocols for Recycling

K. Increase Commercial-Sector Recycling

L. Remove Barriers to Composting

M. Phase Out Diversion Credit for Greenwaste Alternative Daily Cover Credit

N. Reduce Agricultural Emissions through Composting

These are consistent with CIWMB's Strategic Directives (http://www.ciwmb.ca.gov/BoardInfo/StrategicPlan/) which include specific steps to minimize waste (SD 3), move toward producer responsibility (SD 5) and support market development (SD 6). Subdirective 6.1 addresses removal of 50% of organics in the waste stream by 2020, addressing the largest category of disposed materials, and contributing, with the other measures to 10X the GHG reduction of simple landfill gas capture. We would like to see this incorporated into the plan.

In Conclusion:
The governor's Climate Action Team itself has identified Zero Waste/High Recycling Programs as a "high-confidence" strategy with significant GHG reduction potential of up to 11.8 million tons CO2 equivalent by 2020 (see: http://climatechange.ca.gov/publications/factsheets/2005-06_GHG_STRATEGIES_FS.PDF, and cited above in the Draft Plan Appendix C). ACP believes this >10 million tons CO2 equivalent by 2020 represents a conservative estimate of the emission reduction potential of composting and reuse/recycling to help contribute to our GHG reductions. Therefore, composting, along with other reduce, reuse and recycling systems have been identified as valuable climate protection factors by the Governor, as well as ETAAC and the composting industry. We strongly support the elevation of these strategies into the body of the Scoping Plan for immediate implementation by our industry in support of GHG reduction for our State.

Thank you for your serious consideration of our recommendations.

Sincerely,

Dan Noble
Executive Director
and
ACP Board of Directors:
Bob Engel, Engel & Gray Inc.
Kathy Kellogg-Johnson, Kellogg Garden Products
John Gundlach, Garick Corporation
Lorrie Loder, Synagro
Mike Moore, Orange Co. Sanitation District
Mike Sullivan, Sanitation Districts of Los Angeles County
Jeff Ziegenbein, Inland Empire Utility Agency

CC: Climate Action Team

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/65-acp_letter_to_carb_081508.doc

Original File Name: ACP Letter to CARB 081508.doc

Date and Time Comment Was Submitted: 2008-08-15 19:57:20

No Duplicates.

Comment 59 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Nick
Last Name: Lapis
Email Address: nicklapis@cawrecycles.org
Affiliation:

Subject: Group Letter on Recycling in AB 32 Scoping Plan
Comment:

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Attached is a letter on behalf of several environmental
organizations regarding strengthening the recycling
recommendations in the AB 32 Scoping Plan.
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Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/66-recycling_in_draft_scoping_plan_-_group_letter.doc

Original File Name: Recycling in Draft Scoping Plan - Group Letter.doc

Date and Time Comment Was Submitted: 2008-08-22 09:54:08

No Duplicates.

Comment 60 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Tayseer
Last Name: Mahmoud
Email Address: tmahmoud@dtsc.ca.gov
Affiliation: Department of Toxic Substances Control

Subject: Comments on Section 7 (Recycling and Waste Management)
Comment:

Comments on California's Climate Change Draft Scoping Plan
June 2008 Discussion Draft

These comments pertain to Section 7 (Recycling and Waste Management)

Other Measures Under Evaluation

Another aspect of California's waste management sector that should be included in the Climate Change Scoping Plan is the clean-up of waste management facilities. These are facilities at which wastes have been mismanaged in the past, often resulting in soil and/or ground water contamination. Clean-up efforts can last decades and often require high usage of fossil fuels and electricity, which generates greenhouse gases. It is DTSC's interest to improve clean-ups at waste management facilities so that their use of fossil fuels and electricity is reduced, while at the same time the effectiveness of the clean-ups is assured.

Opportunities for reducing greenhouse gas emissions during clean-ups include:

• Using biodiesel fuel in construction and excavation equipment any time during the remedial process, which starts with investigation and cleanup of sites
• Running pumps and other equipment on solar or wind power rather than grid electricity
• Treating contamination with biologic processes rather than energy-intensive mechanical or thermal processes

DTSC has begun exploring methodologies for evaluating existing clean-ups to reduce their greenhouse gas emissions. We are also exploring ways to include a review of expected greenhouse gas emissions as a factor in decision-making when we are selecting new clean-up remedies or improving existing clean-up remedies. In addition, DTSC is currently testing proto-type methodologies at a pilot site in California. Federal EPA is also involved in similar efforts.

Recommendations for actions are:

• Develop a methodology for estimating green house gas emissions from clean-up sites
• Identify opportunities for reducing green house gas emissions from these existing clean-ups
• Apply the methodology to new clean-up decisions
• Apply the methodology for evaluation of the remediation once the remedy is in place (often referred to as "remediation process optimization")

Clean-ups in California are conducted under a variety of State programs, including Brownfields and Environmental Restoration

Program and Hazardous Waste Management Permitting Programs. Federal EPA also conducts clean-ups in California under federal Superfund, RCRA* Corrective Action, and Underground Tank programs. At present there are no state or federal regulatory requirements for including greenhouse gas emissions as a factor in decision-making for clean-ups. However, DTSC is exploring ways in which to encourage facility owners or responsible parties to participate in reviews of their clean-ups.

DTSC is still at an early stage in understanding the levels of emissions of greenhouse gases that occur as a result of clean-ups of waste management facilities, and therefore do not have estimates for potential 2020 reductions to be realized as a result of the recommended actions noted above. However, it is important to include these clean-ups of waste management facilities in the Climate Change Scoping Plan in order to create awareness of this additional source of greenhouse gases that could potentially be reduced.

We include as references the following documents and web links, which we believe will be useful as descriptions of potential climate impacts from hazardous waste sites remediation:

DTSC's Emerging Issues – Green Remediation:
http://www.dtsc.ca.gov/emerging_issues.cfm
EPA's Green Remediation Website:
http://cluin.org/greenremediation/
EPA's Green Remediation Primer:
http://cluin.org/download/remed/Green-Remediation-Primer.pdf
Fact Sheet on Green Remediation: forwarded as pdf

* Resource Conservation and Recovery Act

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/68-gr_quick_ref_fs_2-26-08.pdf

Original File Name: GR quick ref FS 2-26-08.pdf

Date and Time Comment Was Submitted: 2008-09-29 09:04:43

No Duplicates.

Comment 61 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Virginia
Last Name: Johnson
Email Address: cseghers@arb.ca.gov
Affiliation: Ecology Action

Subject: Draft Scoping Plan
Comment:

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Please see attached comment
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Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/69-9_23_08_ecologyaction.pdf

Original File Name: 9_23_08_ecologyAction.pdf

Date and Time Comment Was Submitted: 2008-09-30 16:28:59

No Duplicates.

Comment 62 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Virginia
Last Name: Johnson
Email Address: gjohnson@ecoact.org
Affiliation: Ecology Action

Subject: Request to Incorporate Zero Waste Recommendations to Draft Scoping Plan
Comment:

RE: California Air Resources Board's DRAFT Scoping Plan: (7) Recycling and Waste Management Sector

Ecology Action of Santa Cruz is a nonprofit environmental consultancy that delivers effective resource conservation education services, technical assistance and program implementation. Since Earth Day 1970 EA and agency partners have created cutting-edge conservation programs, proven their effectiveness, and established each program as a sustainable community resource.

Ecology Action is pleased by the adoption of California's AB 32 climate protection legislation. However, our review of the draft Scoping Plan reveals that the current document falls short in the crucial area of Zero Waste.
http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf

In addition to our many conservation programs, Ecology Action has recently launched the CLIMATE SOLUTIONS PROGRAM, a bold leadership initiative to mobilize the entire Monterey Bay Area to radically reduce our carbon footprint. Waste reduction and recycling will play a vital role in achieving the goals of the program to reduce greenhouse gas emissions.

In order to achieve these vital protections, Ecology Action strongly urges the California Air Resources Board to incorporate the following integral Zero Waste recommendations from Section 4. IV. (Waste Reduction, Recycling and Resource Management) of the CARB Economic and Technology Advancement Advisory Committee (ETAAC) report:
http://www.arb.ca.gov/cc/etaac/ETAACFinalReport2-11-08.pdf

J. Develop Suite of Emission Reduction Protocols for Recycling
K. Increase Commercial-Sector Recycling
L. Remove Barriers to Composting
M. Phase Out Diversion Credit for Greenwaste Alternative Daily Cover Credit
N. Reduce Agricultural Emissions through Composting

Our review indicates that the only preliminary recommendation related to Recycling and Waste in the current draft Scoping Plan is "RW-1 Landfill Methane Control" which is presented in Table 19 on pg. 35 of the draft Plan.
http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf

Although our organization recognizes the importance of Landfill Methane Control, this lone recommendation represents an inadequate and shortsighted strategy to mitigate the worst climate impacts of wasting AFTER failing to reduce, reuse, recycle, and compost. By choosing instead to incorporate a comprehensive Zero Waste strategy (reduce-reuse-recycle-compost) before waste is generated, we believe a greater overall impact can be achieved.

Zero waste effectively preempts substantial greenhouse gas (GHG) emissions before they are emitted, rather than controlling them after they are generated. These avoided emissions through Zero Waste represent a significant source of immediate, permanent and systemic GHG reductions and a far superior economic and environmental approach to accomplishing AB 32 goals.

Our organization is concerned that CARB has not chosen to include any of the ETAAC report's Waste Reduction, Recycling & Resource Management recommendations in the draft Scoping Plan.

Using the US Environmental Protection Agency (EPA) Waste Reduction Model (WARM) and waste characterization data published by the California Integrated Waste Management Board (CIWMB), and verified by US EPA Region 9 staff, IF California's commonly recyclable and compostable materials that are currently disposed as mixed waste, were INSTEAD recycled or composted, THEN the resulting GHG emission reduction would be over 25 million tons CO2e.

The prioritized ordering of the zero waste reduction hierarchy (to reduce, then reuse, then recycle or compost) further optimizes resource conservation by reusing materials and repairing, refurbishing, and rehabilitating existing products and buildings to retain their form and function (and thus embodied energy), representing additional potential for:
• substantially greater GHG reductions achieved through reduction and reuse than recycling and composting alone; and
• considerable GHG reductions through recycling or composting of items at the end of their life rather than trashing waste; and
• the creation of ‘green collar’ jobs producing value-added contributions to the state’s economy.

CIWMB’s Strategic Directives were adopted as “the most effective and efficient means to create a zero waste California,” all of these directives are noticeably absent from the draft Scoping Plan. These Directives http://www.ciwmb.ca.gov/BoardInfo/StrategicPlan/ include specific steps to minimize waste (SD3), move toward producer responsibility (SD5) and support market development (SD6).

Moreover, the governor’s Climate Action Team has already identified Zero Waste/High Recycling Programs as a "high-confidence" strategy with significant GHG reduction potential of 10 million tons CO2e by 2020 (see: http://climatechange.ca.gov/publications/factsheets/2005-06_GHG_STRATEGIES_FS.PDF).

Zero Waste is thus a significant climate protection strategy which offers tens of millions of tons of CO2e GHG emissions reductions annually for California at low cost (compared to other options) using existing, proven, environmentally sound methods. These important findings are documented further in the recently-released report Stop Trashing the Climate: http://www.stoptrashingtheclimate.org

Based on these data, Ecology Action believes that 10 million tons CO2e by 2020 represents a conservative estimate of the emission reduction potential of Zero Waste in California.

California is off to a good start toward climate protection via Zero Waste, thanks to the California Integrated Waste Management Act of 1990 (AB 939) which mandated 50% waste diversion by 2000. It is critical that the Scoping Plan recognize and include Zero Waste California (i.e., reduce-reuse-recycle-compost) as the significant climate protection strategy that it is.

Thank you for your consideration.

Sincerely,

Virginia Johnson
Excecutive Director

Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/70-ecologyaction_draftab32_scopingplan_comments.pdf

Original File Name: EcologyAction_DraftAB32_ScopingPlan_Comments.pdf

Date and Time Comment Was Submitted: 2008-10-01 10:34:34

No Duplicates.

Comment 63 for Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) - 1st Workshop.

First Name: Daniel
Last Name: Domonoske
Email Address: cseghers@arb.ca.gov
Affiliation: Potetnial Industries, Inc.

Subject: Lack of Strong Recycling in Draft AB 32 Scoping Plan
Comment:

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Please see attached comment
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Attachment: www.arb.ca.gov/lists/sp-recyc-waste-ws/71-9_20_08_potentialindustries.pdf

Original File Name: 9_20_08_potentialindustries.pdf

Date and Time Comment Was Submitted: 2008-10-03 13:07:22

No Duplicates.

There are no comments posted to Recycling Comments for the GHG Scoping Plan (sp-recyc-waste-ws) that were presented during the Workshop at this time.