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MEETING SUMMARY
MINNESOTA CLIMATE CHANGE ADVISORY GROUP
Agriculture, Forestry, and Waste Management Technical Work Group
(AFW TWG)

Meeting/Call #9, November 20, 2007, 9am – 11am

Attendance:

1. Technical Working Group members: Andy Hart, Greg Miller, Dave Zumeta, Julie Ketchum, Cheryl Miller, Kyle McClaury, Don Arnosti, Will Anthony, Tim Gieseke, Stacy Bohlen.
2. Minnesota Department of Commerce (DOC) and Pollution Control Agency (PCA) Liaisons and Attendees: Liaison - David Richfield (MPCA), Anne Claflin, Jim Chiles and Al Dotson from MPCA. Linda Limbach (DOC).
3. Other State Agency Staff: Clarence Turner (DNR)
4. Public attendees: Tim Brownell
5. Center for Climate Strategies (CCS) staff: Stephen Roe, Glora Flora and Joe Pryor

Background documents:

(all posted at http://www.mnclimatechange.us/Agriculture_Forestry.cfm)

1. Summary of Call #8
2. Meeting Notice and Agenda
3. PowerPoint for Teleconference
4. Policy Options Document

Discussion items and key issues:

1. CCS provided an update of the planning process.
2. Call #8 summary was reviewed and accepted.
3. Review of Policy Options Document
 - a. Need to adjust values for overlap with other options.
 - b. Need additional text from TWG members. Particularly on areas highlighted in green.
 - c. Version for posting is required one week from today. Comments due by midday Friday November 23.

AFW-1

- Cost of education programs are not included but CCS would welcome information.

- All costs are a net “societal costs”.
- Difference in yield as a consequence of these policies
 - University of Minnesota has information. Southern Research and Outreach Center.
 - Will Anthony to send links to Joe Pryor.
- TWG unsure if 2 full time equivalent staff will be enough for this program.
 - most farmers test once every four years as part of business as usual practices.
 - \$10 soil testing is approximately right.

AFW-2

- Given that text notes that 37% of carbon is in peatlands need to emphasize the importance of peatlands.
 - Text changes to Joe Pryor. Final paragraph could emphasize importance peatlands protections.
 - Fourth paragraph under policy description could incorporate text from page 13. Cross reference to page 13.
- While development reduces peatlands, another issue is the impact of climate change (e.g. dryer climate) on peatlands. Need to recognize this in the POD.
- TWG expressed a desire to quantify avoided emissions but recognized the lack of time to develop such an analysis.
 - The TWG decided a few months ago that there was insufficient information available to quantify.
 - Key uncertainties could address the potential for loss of peatlands to dwarf all actions elsewhere in the state.
 - TWG members to provide text for Key Uncertainties.
- New section on page 16 “peatland protection costs”.
 - Cross reference with AFW-6.
 - CCS noted that this is slightly different from other sections because GHG benefits and costs were not quantified for peatlands.
 - This section could estimate per acre protection of peatlands, indicating that this is relatively cheap.
 - TWG to provide Text.
- In relation to the RIM-CE program, Don Arnosti suggested:
 - a more accurate method to estimate the benefits and costs is through the associated year costs and benefits in the first year projected over next 17 years of the policy period.
 - that the assumed sequestration period of 10 years (Page 16) is too short and 100 years is more appropriate.
 - Emissions avoided calculation associated with soil erosion. Perennial cover has much less erosion and associated sequestration benefits. Parallel to AFW-1.
- Don Arnosti to provide information on more appropriate assumptions and data inputs for RIM-CE.
 - CCS noted that new data can only be incorporated into the quantification process if we receive it from TWG members otherwise it will be incorporated into key assumptions and other benefits.

AFW -3

- Need to be consistent with AFW-4 option in relation to price of biomass.

AFW-4

- Table 7-14 needs to be clearer and perhaps additional explanation (Page 37), particularly in relation to how the cost/savings column is calculated.
- There needs to be a better explanation of the interaction and linkage between AFW-4 and AFW-2.
- Key assumptions need identify that there are costs associated with reduced biomass production due to reduced nutrient input.

AFW-5

- Agreed that wildfire goal proceed as non-quantified goal.
- All numbers need to be in consistent units i.e. in acres.
- The benefits from below ground sequestration rates (i.e. in soils) are excluded due to uncertainty.
- Cheryl Miller to forward alternative biomass sequestration rates.
- Clarence and David to provide Jennifer with information on whether re-planting occurs on cleared land.

AFW-6

- Implementation mechanisms need to incorporate the ongoing losses which are not replaced.
 - Cheryl and David to provide info to Jennifer regarding existing costs.
- Policy Design Goals: Other policy options exist and there are current studies developing information on this but won't be available for this report.

AFW-7

- Additional information on implementation mechanisms is required.
- Agreed to keep waste to energy in AFW-7. The sub-group didn't want to limit the end-use of waste.
 - However, there is a need to be clearer that this option is not limited to composting.
- Policy may need to specifically reference anaerobic digestion. Steve and Don to discuss offline.
- Waste-to-energy capacity available to meet BAU growth was not incorporated into analysis. Steve will review to see if there is scope to include.
- This option only reflects the incremental costs of recycling (compared to BAU).
- Need to include incremental cost of collection for organics.
- Forecasting historical information into the future is not applicable to (e.g. 75% mass burning)
- Tim Brownell to provide input to Steve directly.

AFW-8

- Need to define organics as “compost” and not include non-compostable waste.
 - Currently organic is defined as chemically organic as apposed to organic fraction (e.g. food and garden waste).
 - Composition of waste was not discussed by sub group.
- This option currently includes remainder of waste (i.e. after AFW-7).
- Julie to provide info to Steve on the number of landfills including energy utilization.
- Steve and Don to Discuss AFW-7 and 8 offline.

Other issues

Member of the public, Brenda Platt (Institute for Local Self-Reliance), submitted a number of comments for the record, summarized below:

- Highlighted the importance of composting and the need to reduce barriers to uptake.
- Indicated that composting is one of the easiest and most cost-effective methods for managing a significant part of the municipal waste stream.
- Suggested that the composting goal be increased from 15% to 50% and waste incineration capacity should be reduced and not increased.
- Indicated that one of the obstacles to expansion of composting is lack of institutional policies to promote infrastructure development and help capitalize composting facilities.
- Indicated that policies and investment favoring waste incinerators are an obstacle to waste reduction, recycling and composting.
- Suggested that waste incinerators are a financial competitor to composting and recycling investments.
- Indicated that composting would likely sustain more jobs than incineration.

Member of the public, Tim Brownell (Eureka Recycling), also submitted comments, summarized below:

- Expressed concern about the speed of the process and the lack of time available to comment on documents.
- Expressed concerns about the quality of the analysis and review of the information contained in the document.
- The document focuses on disposal capacity rather than recycling, composting and reduction activities.
- The stated policy objective of the MPCA of increasing WTE capacity by 60% by 2011 is dated and does not reflect the current level of knowledge.
- If implemented, this policy will compete with the capital needs required to develop the recycling and composting infrastructure.
- Eureka Recycling believes that AFW-7 has changed dramatically since the beginning of November and now includes Waste-to-Energy (WTE) as part of the policy description.
- Eureka Recycling requested the following changes to AFW-7:
 - WTE should be removed because it addressed in AFW-8.
 - Organic waste should be redirected from landfills and WTE facilities.
 - Eureka Recycling believes that the composting goal should be increased to 15% by 2012, 25% by 2020.
 - Remove the first sentence under Organics Waste Recovery on page 50 of Implementation Mechanisms.
 - Remove MPCA Waste-to-Energy Program under related polices/programs in place.
 - Tables 7-17, 7-B and 7-C do not reflect the policy goals.
- Eureka Recycling requested the following changes to AFW-8:
 - Estimate the capital costs of additional WTE facilities.
 - Under the Policy Design section on page 61, remove the section Organics Recover ad Waste-to-Energy.

- On page 64, under Section B – “Organics Recovery” should be removed. In addition, the reference made to Organics wastes in the second line of this paragraph must remove “Plastics” as part of the definition of “Organics.
- All of the tables need to reflect the policy of the recovery rates stated in AFW-7 (e.g. land-fill and burned tonnages equate to approximately 40% of the total MSW waste stream, not 25%).

Next steps and agreements:

1. The next TWG meeting will be held on **December 20 from 1:00 p.m. to 3:00 p.m.**
2. Comments, additional text and questions due to CCS by noon Friday.
3. Next MCCAG meeting is on December 5.

Next Steps for the AFW TWG

- Comments, additional text and data due to CCS by noon Friday
- Review comments from MCCAG meeting (December 5)
- Update on progress of option quantification
- Finalize policy option document.