To: Watershed Technical Workgroup (WTWG) members

From: Jeremy Hanson, Coordinator, Manure Treatment Technologies Expert Panel Douglas Hamilton, Chair, Manure Treatment Technologies Expert Panel

Re: Manure Treatment Technologies (MTT) expert panel materials for WTWG consideration and approval

at 9/1/16 conference call

There were no comments or questions received on the MTT expert panel's report or technical appendix for Scenario Builder (Appendix A) following the 8/4/16 WTWG conference call. One question (Q13) was added to the technical appendix to clarify the MTT BMPs can be reported in combination with other barnyard BMPs – in response to Bill Keeling's question from the June WTWG.

The Modeling Workgroup discussed the issue of volatilization and redeposition of reactive forms of nitrogen (e.g., NH3, NOx) associated with agriculture BMPs at its latest quarterly meeting on 8/9/16. This issue includes manure treatment technologies, lagoon covers, manure incorporation/injection, and other existing and new BMPs in the Phase 6 modeling tools. The Modeling Workgroup agreed to work with CBPO Staff to define a small reduction in the overall nitrogen reduction efficiencies for processes which produce more reactive N than untreated manure. This slight reduction in the efficiencies would incorporate N air deposition science that suggests some reactive N is coming back down within the watershed, reducing the overall benefit of the practices. The refined numbers will be presented to the AgWG on 8/24/16 and can be summarized for the WTWG the following week. The panel's technical recommendations and conclusions will remain unchanged as far as their assessment of the nutrients that remain in the primary manure stream post-treatment for field application or transport; these recommendations are described in the respective chapter for each type of technology. However, the efficiencies used to simulate the net effect of the BMPs in the Phase 6 Watershed Model (Tables ES. I and A.2) will be updated to reflect the final methods and numbers consistent with the Modeling Workgroup's forthcoming decision.

The Management Board's policy group that will address issues outside the panel's scope pertaining to manure treatment and manure transport in the context of water quality trading is still getting underway. As with the Modeling Workgroup's decision for atmospheric deposition of reactive nitrogen, the outcomes of the policy group are not expected to affect the panel's technical evaluation and recommendations for manure treatment in any substantive way.

If there are any new or lingering comments or questions that could impact your ability to approve the panel's technical recommendations for submission to the WQGIT, please email them to me, Ted Tesler, Matt Johnston and David Wood one business day or more in advance of the 9/1/16 conference call (i.e. by COB 8/29/16). This will help us prepare for and manage the workgroup's discussion more effectively.

As always, thank you very much for your time and consideration of all the BMP expert panels' recommendations and documents.

Sincerely,

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