

Attachment A

Letters of Collaboration

From six proposed panel members to

Doug Hamilton, proposed Panel Chair



May 30, 2018

Douglas W. Hamilton, Ph.D., P.E.
 Associate Professor
 Extension Waste Management Specialist
 Biosystems and Agricultural Engineering
 Oklahoma State University
 226 Agriculture Hall
 Stillwater, OK 74078

Dear Doug:

It is with pleasure that I accept the invitation to join this proposed expert panel, examining animal mortality management issues in the context of greater nutrient management in the Chesapeake Bay Watershed. This letter should also serve to communicate my commitment to other/all concerned parties. I will take appropriate steps to ensure my best availability to project activities and meetings over the next 18-24 months.

I am pleased to bring my experience in applied research, Extension education, and disaster and emergency consulting around animal mortality management best practices to the Chesapeake Bay Watershed. The geographic scope of my past experience in nutrient and animal mortality management includes the poultry regions of the Southeast, the Upper Midwest, and the Northern Rockies. I look forward to this potential collaboration, particularly in assessing the watershed specific appropriateness and feasibility of various best practices, and their nutrient implications.

With sincerest regards,

Thomas "Tommy" Bass

Department
 of
 Animal
 and
 Range
 Sciences

Thomas M Bass
 Livestock Environment
 Associate Specialist

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Encls: brief budget summary



University of Kentucky
**College of Agriculture, Food
& Environment**
*Agriculture and Natural Resources
Extension*

May 23, 2018

Dr. Doug Hamilton
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Dear Dr. Hamilton,

I am pleased to serve on the proposed Livestock and Poultry Mortality Management BMP Expert Panel for the Chesapeake Bay Program (CBP). I have extensive experience in agricultural water quality policy development as well as an appreciation for practical approaches for farmers. My experience with the Kentucky Agriculture Water Quality Act and its associated best management practices will assist the group in determining nutrient loading from animal mortalities. Further, my experience as co-chair of another multi-state land grant university task force (SERA-46) will help facilitate task groups and move us efficiently toward the completion of our goals.

Sincerely,

A handwritten signature in blue ink that reads "Amanda A. Gumbert".

Amanda A. Gumbert



5/22/2018

Douglas W. Hamilton, Ph.D., P.E.
Associate Professor
Extension Waste Management Specialist
Biosystems and Agricultural Engineering
Oklahoma State University
226 Agriculture Hall
Stillwater, OK 74078

Dear Dr. Hamilton,

Thank you for the opportunity to participate in the Livestock and Poultry Mortality Management BMP Expert Panel. I look forward to working with you and the other panelists!

I have been a food animal veterinarian in private practice, extension and academia for 28 years. During that time I have dealt with animal disease control and biosecurity, as well as issues of public health and zoonotic pathogens, such as *Salmonella*, *Listeria*, *Campylobacter* and *E. coli* in farm animals and their environments. I have also been involved with animal disease outbreak preparedness, including mortality management planning. With my background and experience I believe I will be able to contribute effectively to this panel.

Thanks again for the invitation. I look forward to hearing from you!

Sincerely,

Ernest Hovingh DVM, PhD
Extension Veterinarian and Associate Research Professor
Penn State University

Dr. Douglas Hamilton
Associate Professor
Oklahoma State University
226 Agriculture Hall
Stillwater, OK 74078

Dear Dr. Hamilton,

I'm pleased and willing to serve on the Livestock and Poultry Mortality Management BMP Expert Panel for the Chesapeake Bay Program. I have over 20 years of experience with animal mortality disposal and nutrient management planning issues.

I'm considered to be a compost Subject Matter Expert (SME) by USDA. I have been involved in multiple USDA emergency disposal events including the 2015 and 2016 Avian Influenza outbreaks in the USA. I have developed and taught mortality management trainings for new SMEs. These trainings include discussion of all different methods of mortality disposal methods and the environmental impacts.

As a member of the Maine Compost Team, I have lead research in the fate of nutrients from carcass composting. Research has included nutrient movement within the compost pile and movement of nutrients in soil under compost piles. This work includes calculating potential TN and TP loads from different compost feedstock options.

As a Certified Nutrient Management Planner, I have experience in the development of whole farm nutrient management plans. I will work with the panel to recommend how carcass nutrients are included in a whole farm nutrient plan and CB Model.

This work fits into my professional work plan and personal interest.

I look forward to working with this extremely talented panel.

Mark Hutchinson
Extension Professor
University of Maine
mhutch@maine.edu

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May 23, 2018

Re: Chesapeake Bay Expert Panel

To whom it may concern,

I am writing this letter to confirm my commitment to be a part of panel, to review and recommend loadings of TN and TP to the CB Model from disposal of routine poultry and livestock mortalities.

I have gotten my Ph.D. degree in Agricultural and Biological Engineering, from Purdue University (2001), professional engineer licensure (2005), and I am now an Extension Associate Professor at University of Missouri. My current research and extension programs focus on developing and assessing practical livestock waste management and air quality control. I am an active member of the University of Missouri Extension Focus Teams, who develop extension materials, interact with producers, cooperate with businesses, and conduct various research programs appropriate to agricultural industry needs. Together with Drs. Schmidt and Mukhtar, we have published an American Society of Agricultural and Biological Engineer standard: 2015. ASABE EP585, Standards for Animal Mortality Composting.

I agree to fully participate in the panel work. The panel plans to define and describe disposal practices, including burial, composting, landfilling, incineration or gasification, and rendering. I expect the panel will evaluate the environmental fate of TN and TP in the defined disposal processes relative to standard disposal method, and determine the relative contribution of carcass nutrients to a total farmstead Nutrient Management Plan (NMP).

I appreciate Dr. Hamilton's dedication to improving the water quality and proper mortality management. I look forward to working with a productive team that Dr. Hamilton has organized for us. I expect this experience be valuable to water quality protection, and that this group will be productive.

Please contact me if you have question regarding this letter. Thank you.

Sincerely,

Teng Lim

Teng Teeh Lim, Ph.D., P.E.
Associate Extension Professor, Professional Engineer
University of Missouri
limt@missouri.edu



May 23, 2018

Doug Hamilton
Oklahoma State University
226 Agriculture Hall
Stillwater, OK 74078

Doug,

I would be glad to participate on the Chesapeake Bay Mortality Panel.

As a panelist I could provide expert knowledge of USDA-NRCS standards, programs and policy.

As environmental engineer on the National Animal Manure Nutrient Management team at the East National Technical Support Center my responsibilities include development of policy, review of standards, providing technical assistance, and training nationally on all aspects of manure and nutrient management. I have been involved in multiple water quality projects and have 30 years' experience in implementing conservation practices on the ground.

Let me know if there is anything else you need,

Regards,

A handwritten signature in blue ink, appearing to read "Sandra L. Means".

Sandra L. Means

Environmental Engineer
National Animal Manure Nutrient Management Team