Chesapeake Bay Program
Science. Restoration. Partnership.

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Dr. Kirk Havens, Chair
Scientific and Technical Advisory Committee
Chesapeake Bay Program
645 Contees Warf Road
P.O. Box 28
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Kirk

Dear Dr. Havens:

Thank you for the opportunity to respond to STAC's May 2012 workshop report entitled, "Real World Wastewater Technologies Workshop: Advancing the World We Live In – Exploring Cutting Edge Wastewater Treatment Technologies". The Chesapeake Bay Program (CBP) partnership has reviewed these recommendations and appreciates the time and effort that went into both the workshop and final report and recommendations.

Overall, the CBP partnership supports these recommendations as a step forward in promoting innovation for wastewater technologies and encouraging flexibility in design and implementation. It also recognizes the need for ongoing research and testing to account for uncertainty as new technologies are developed. Specific responses to the report's recommendations are as follows.

Workshop Recommendation A: Technologies are promising, but there is a need to:

1. ***Identify additional and dedicated/long term funding for research***
2. ***Make multiple benefits (e.g. GHG emission reductions, removal of emerging contaminants) part of design and operating considerations, as well as permit/regulatory considerations.***

The CBP has obtained funding for several demonstration and research projects in the past, including the first pilot test of Biological Nutrient Removal processes in the United States. We recognize that such funding would be beneficial to the wastewater community in promoting further understanding of new wastewater technologies. Therefore, we will work with the CBP partnership's Wastewater Treatment Workgroup to explore what organizations and funding opportunities may exist to support research, development and demonstration of new technologies.

The CBP supports the consideration of multiple benefits when designing, installing, and operating wastewater treatment technologies. However, it should be noted that permit development evaluates the need for permit limits based on individual parameter reasonable potential analyses. Ancillary treatment

efficiencies for effluent parameters that are not determined to have reasonable potential are not investigated or developed.

Workshop Recommendation B: Operational challenges – Successful application of these advanced technologies is still highly variable, dependent on many factors, and requires advanced tools/skills to be successfully implemented, so there is a need to:

1. ***Quantify Greater Permit/Compliance Risks, Benefits, and Costs***
2. ***Design Instrumentation and Train Support Staff to Meet New Demands***

Continued education and understanding of new technologies is essential for their adoption into the design, installation, and overarching permitting process. Regulatory agencies responsible for permitting approve what they determine to be reasonable permit limits, which includes the associated compliance requirements. The partnership would welcome further insights from STAC on how quantification of greater permit/compliance risks, benefits, and costs could be improved.

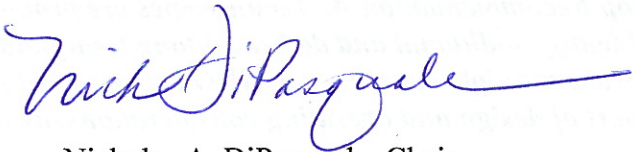
Workshop Recommendation C: Regulations – The realities of operating these cutting edge technologies require that state/federal regulators need to:

1. ***Write Appropriate Permit Conditions***
2. ***Allow for Outliers***
3. ***Utilize Regulatory Flexibility***

Permit conditions, such as annual load limits, currently satisfy what is reflected in the Chesapeake Bay Total Maximum Daily Load (TMDL). The Bay jurisdictions do not perform statistical analyses to exclude outliers, unless to account for any mistakes in calculating the average. We have not disallowed or discouraged the development or use of any new technologies; in fact, the partnership encourages such innovation. We encourage further dialogue with STAC to better understand where there might be concerns in the testing and evaluation of new wastewater technologies.

Please extend my thanks to the workshop participants for the time and effort involved in the thoughtful production of this report. We appreciate the role of STAC in serving as an independent review body in improving our overall management of the Chesapeake Bay restoration effort.

Sincerely,



Nicholas A. DiPasquale, Chair
Management Board

ec: Management Board
Goal Implementation Team Chairs