

# **BAY RESTORATION FUND ADVISORY COMMITTEE**

Maryland Department of the Environment  
Aqua & Terra Conference Room  
1800 Washington Blvd.  
Baltimore, Maryland 21230

Meeting Minutes  
December 16, 2004  
1:00 p.m. to 4:30 p.m.  
*Mr. Robert Warfield, Chair*

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## **Welcome**

- Secretary Philbrick welcomed the committee and other attendees and thanked the committee for their work in this important program.
- Dr. Summers shifted the agenda to allow Secretary Philbrick to hear the onsite sewage disposal subcommittee report.

## **Discussion**

### **Presentation #1: Report from the Onsite Sewage Disposal System (OSDS) Subcommittee and Presentation of the Draft January 15 Report– Jay Prager, MDE.**

**The full report can be found on the following website:**

[http://www.mde.state.md.us/Water/CBWRF/advcom\\_meetings.asp](http://www.mde.state.md.us/Water/CBWRF/advcom_meetings.asp)

- Mr. Prager explained four possible methods counties could use to collect fees from OSDS users.
- Mr. Prager also listed 4 sources of information available at the State Department of Assessment and Taxation, Maryland Department of Planning, local billing authorities and Environmental Health OSDS databases.
- Mr. Prager described the cooperative efforts and the great input provided by the State Department of Assessment and Taxation (SDAT) and Maryland Department of Planning (MDP), and he introduced Ms. Laura Foussekis of SDAT and Mr. Richard Hall of MDP.
- The committee members expressed concerns regarding whether or not the 5% administrative cost would be adequate to cover the counties cost for collecting the OSDS fees.
- Dr. Summers indicated that the legislation calls for this committee to report to the legislature in December 2006 regarding whether or not this percentage is sufficient or if it is too much.
- **Action Item: Committee members were asked to send their comments on the report by email to Jay Prager at [jprager@mde.state.md.us](mailto:jprager@mde.state.md.us). Some committee members commented that the report sounds too optimistic and needs to more adequately describe some of the difficulties in implementing these methods.**

- **Action Item: 10 counties have not responded to Mr. Warfield’s letter requesting comments on OSDS billing methods. MDE will draft a follow up letter to be sent to these counties.**

**Presentation #2: The State Department of Assessment and Taxation (SDAT) Database - Ms. Laura Foussekis, SDAT:**

- Ms. Foussekis described the available information in this database and how it can be used for the purpose of identifying the OSDS users.
- Based on the SDAT database, there are 2.1 million properties in the state of Maryland. The SDAT database probably has the most complete information about which properties are improved and which are vacant.
- Working with MDP, SDAT would probably be able to identify septic system users to be billed by the counties.
- Ms. Foussekis later added that this approach would probably capture between 80% and 90% of the properties.
- Ms. Foussekis used Anne Arundel County and towns in Carroll County as examples of how the SDAT system can be used.

**Presentation #3: County’s Sewer Plan – Mr. Richard Hall, MDP:**

- Every county has sewer service plan maps.
- Mr. Hall described how we can overlay parcel information from SDAT on the county sewer service plan map and identify the improved property (from SDAT) that are located in areas designated S1 (designation S1 in the sewer service plan maps means that the area is served by public sewer). Hence, we would be able to identify improved properties served by public sewer. The remaining improved properties can be assumed to be served by OSDS.
- Mr. Hall warned that the accuracy of this method is dependent on the counties keeping their sewer plans up-to-date.

**Presentation #4: Refinement of Nitrogen Removal from Municipal Wastewater Treatment Plants – Mr. Stephen Gerlach and Ms. Carrie DeSimon of Gannett Fleming, Inc. and Mr. Dane Bauer of George Miles & Buhr, LLC:**

- Mr. Bauer provided a brief history about the study, which was commissioned by MDE using federal grants.
- Mr. Gerlach provided an over view of the Biological Nutrient Removal (BNR) Program and the new Enhanced Nutrient Removal Program (ENR).
- Mr. Gerlach indicated that study evaluated only how to achieve ENR goal in nitrogen and did not cover phosphorus.
- Ms. DeSimon, a process engineer, described the main BNR processes currently used in Maryland. Modified Ludzack-Ettinger (MLE) is the most widely used (25% of the plants use MLE). MLE is a two-stage biological nitrogen removal process with one oxidic (aeration) tank that converts ammonia to nitrate and nitrite and one anoxic tank (with low oxygen concentration), which converts nitrate and

nitrite to nitrogen gas emitted to the air (nitrogen gas is one of the most available in the natural air).

- Ms. DeSimon also described the A2O process, which is the same as MLE except the A2O process includes an anaerobic tank (with no oxygen) to achieve phosphorus removal.
- Both MLE and A2O processes can be converted to a Bardenpho process by adding two additional tanks (one oxic and one anoxic) to achieve more nitrogen removal and achieve ENR goal in nitrogen.
- In some cases as in Sod Run WWTP, Harford County, conversion to Bardenpho is not possible due to the space limitation. In these cases, a denitrification filter would be needed to achieve nitrogen goal of ENR.
- Mr. Gerlach presented cost estimates to upgrade the 20 studied facilities with ENR. These cost estimates can be used by the MDE to extrapolate the cost of upgrades for all 66-targeted facilities.
- Dr. Summers concluded the discussion by stating the reason for this technical presentation was to give the committee a flavor of challenges that we're up against in estimating the cost of upgrades for the 66-targeted facilities with ENR. For example Patapsco was mentioned as a very important plant for us to do. There are many other site-specific constraints in addition to the space that make Patapsco a challenging plant to upgrade.

**Presentation #5: Brief Updates/Follow Ups to Previous Meeting – Walid Saffouri and Jag Khuman, MDE:**

- Mr. Saffouri provided the committee with copies of a Model ENR Agreement and the ENR Implementation Strategy as revised per committee comments, including the Priority System (the priority list and rating method) previously recommended by the committee.
- Mr. Saffouri provided a cost estimate for the ENR operation and maintenance (O&M) cost for the 66-targeted facilities. Mr. Saffouri advised that the cost estimates were derived from a cost curve, which may not be very accurate for each individual facility but is good for pre-planning estimates and may provide a good prediction for the overall cost.
- O&M cost has an inverse relationship with the cost of capital improvement. High cost capital improvement may lead to a lower O&M cost. Engineers use Present Worth Analysis, which takes into consideration both capital and O&M costs, to evaluate the cost-effectiveness of a project.
- Mr. Saffouri also described MDE and MDP efforts to expedite the clearinghouse review process for ENR projects.
- **Action Item: A committee member expressed a concern regarding having more balance between readiness to proceed versus nutrient loading/environmental benefits. MDE will present in the next meeting a proposed procedure similar to SRF loan current bypass policy in order to achieve this balance.**
- Mr. Khuman provided a brief update on the BRF billing and efforts by MDE and the Comptroller's Office. Also, Mr. Khuman provided a brief description of the

type of fee exemption requests that are being submitted to MDE and how they are being handled.

### **Review of Minutes**

- Dr. Summers gave an overview of the draft minutes of the November 10, 2004. The committee was unable to approve the minutes because the minutes were not mailed and they did not have a chance to review them. Dr. Summers apologized for the delay in the distribution and suggested that minutes be approved during the next committee meeting.

### **Future Meetings**

The fourth meeting will be held on January 6, 2005 @ 1:00 in the Aqua & Aeris Conference Rooms – Lunch for members @ 12:00

### **Adjournment**

Chairman Warfield wished everyone Happy Holidays and thanked the members of the Advisory Committee and all guests, for their participation.

### **Materials Distributed at the Meeting**

- Minutes of the November 10, 2004 Meeting.
- Methods Evaluated and Recommended for Collecting the Bay Restoration Fund from Users of Onsite Sewage Disposal Systems.
- Summary of comments from the counties on the OSDS billing methods.
- Comments from the counties on the OSDS billing methods.
- Model ENR Agreement.
- Revised ENR Implementation Strategy.
- ENR O&M Cost Estimates for the 66-targeted facilities.
- Priority System for ENR Upgrades.
- The SDAT Database Presentation.
- Refinement of Nitrogen Removal from Municipal Wastewater Treatment Plants Presentation.

### **Attendance**

#### **Advisory Committee Members Attending:**

Robert E. Warfield	Chairman
Robert M. Summers, Ph.D.	Maryland Dept. of the Environment
James T. Noonan	Maryland Dept. of Planning
Mayor Kevin Dayhoff	Mayor of Westminster
William P. Ball, Ph.D.	Johns Hopkins University
Mark Bundy, Ph.D.	Dept. of Natural Resources
Delegate Barbara Frush	Maryland House of Delegates

Veronica L. Chenowith	Harford County Council
Ron Crites	Dept. of Budget & Management
James L. Hearn	Washington Suburban Sanitary Commission
Gregory B. Murray	Director, Washington Co. Dept. of Water Quality
Leland D. Spencer, M.D.	Maryland Assoc. of Co Health Officers Health Officer for Kent & Caroline County
Karen Harris Oertel	W.H. Harris Seafood
William Bryan Icenhower, M.D.	St. Mary's Co. Health Dept.

**Committee Members Absent:**

Senator Paula C. Hollinger	Maryland Senate
Thomas H. Stoner	Trustee of the Chesapeake Bay Foundation
David Bancroft	Executive Director, Alliance for Chesapeake Bay
E. Keith Menchey	Maryland Dept. of Agriculture

**Others in Attendance:**

Ryane Necessary	Senate Education, Health, Env. Affairs
Bernie Marczyk	Policy Advisor to Governor Ehrlich
Larry Fogelson	Dept. of Planning
Candice Donoho	Maryland Municipal League
Donna Zane	Cecil County
Peter Thomson	Maryland Environmental Committee
Gail Bartkovich	Wicomico County Council
Pat Peterson	Wicomico County Finance
Mike Coveyou	Montgomery County Finance
Helen Shombere	Anne Arundel Co. Finance
Ron Hartman	Anne Arundel County
Ali Shirazie	Howard County
Krista McKim	RK&K
Linda Barrett	Howard County
Laura Foussekis	SDAT
Wayne Skinner	SDAT
Steve McHenry	Rural Maryland Council
Jay Beatty	Montgomery County DPW
Deborah Willer	Bayland Consultant and Design
John Martin	Balto. City DPW
Julie Pippel	Washington County

**Maryland Dept. of the Environment (MDE) Attendees:**

Jag Khuman  
Walid Saffouri  
George Keller  
Jay Prager

Stella Hajimihalis Jenkins

Renee Matthews

Marya Levelev

Mehdi Majedi

Julie Obey

Andrew Sawyers

Vickie Shade