

PO Box 539
Ophelia VA 22530
December 12, 2008

Margaret Smigo, Regional TMDL Coordinator
DEQ Piedmont Regional Office
4969-A Cox Road
Glen Allen, Virginia 23060

Dear Ms. Smigo:

Several points were raised at the final Indian, Dymer, Tabbs, and Antipoison Creeks Shellfish TMDL meetings held November 14, 2008. It is clear that the only significant source of bacterial contamination that is actionable is of human origin. Wildlife contamination is not actionable, as DEQ has repeatedly stated. Contamination from dogs cannot be significantly reduced, even if the discharge from the few kennels that exist was regulated. There are few livestock in the area, and even if they were fenced out of the RPA, as should be required, fecal coliform bacterial levels would not be reduced significantly. Poultry litter is a massive source of fecal coliform bacteria and should be banned from the watershed. Given the existing VDH "Shoreline Sanitary Surveys" and inspection/pumpout of septic systems mandated by the Bay Act that is finally being implemented by Lancaster and Northumberland counties, it is unlikely that any additional measures can be taken to identify problematic septic systems. Four actions can be taken by the State to reduce human fecal coliform bacterial contamination.

- 1) Ensure that septic systems that have been identified as being problematic are fixed. Rectifying problems can be extremely expensive, especially in low-lying parts of the Northern Neck where conventional drainfields were not, and are not appropriate. There are many old systems, and disadvantaged citizens can be involved, who have no resources for repairs. The State must resolve this issue within the legal framework of citizens' property rights.
- 2) Ban the land application of Class B municipal sewage sludge in the watersheds of creeks formally impaired because of high fecal coliform bacterial levels. Each truck imports over a trillion CFU from outside the watershed.
- 3) Change Virginia's antiquated "grey water" laws so that only toilets need be discharged into septic tanks. Septic systems operate best under low-flow conditions, resulting in more time to oxidize the effluent and destroy the fecal coliform bacteria. Water from showers/washing machines/sinks etc. should not be discharged into septic tanks, but rather into infiltration trenches, the drainfield or a cistern, where it can be stored and used for irrigation.
- 4) Strengthen Virginia's overboard discharge laws for boats to conform to Maryland's laws, resulting in uniformity throughout Chesapeake Bay.

Sincerely yours,

Dr. Lynton S. Land
Emeritus Prof. Geological Sciences
Univ. Texas Austin

Cc: Sen. Stuart; Del. Pollard; May Sligh, DCR