

COMMUNITY & ENVIRONMENTAL DEFENSE SERVICES

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August 30, 2009

Virginia Kearney, Deputy Director
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

RE: Drip-Irrigation Compliance Issues

Dear Ms. Kearney:

During our meeting last Thursday with Senator Miller we briefly discussed the fact that the Marley Run drip-irrigation fields were failing for more than a year before the Department was notified and the Dunkirk Gateway drip-irrigation fields had failed twice in twelve months for an unknown period before being brought to the Department's attention. In all three instances the Department was notified of the violations not by the permittee but by someone who happened to stumble across the failures.

In the Department's August 19th letter, Secretary Wilson said...

The Department does not, though, warrant that a treatment system's design plans and operating procedures will comply with permit conditions or prevent water pollution. That burden falls to the owner and/or operator of the system. As I know you are aware, a basic component of these programs is reliance on the permit holder for compliance. Applicable fines for violations and general enforcement activity is a strong incentive for compliance.

Clearly, reliance upon the permit holder for compliance is not working in the case of the two existing drip-irrigation facilities in Calvert County. Of course I cannot speak to the only other system in Maryland; the one which has served Eagle Nest near Ocean City for the past year.

I did not hear anything in our meeting with Senator Miller setting forth a strategy for quickly detecting future drip-irrigation failures. Instead, you described how the Department reviews monitoring reports submitted by permit holders. Of course these reports did not reveal

the drip-irrigation field failures at Dunkirk Gateway and Marley Run. I believe only visual inspection would reliably detect this form of treatment system failure.

Apparently the permittees either do not conduct inspections or are not reporting failures to the Department. The failure of the Dunkirk Gateway drip-irrigation field was first reported to the Department after I took a tour of the facility with the plant operator in June, 2008. I reported the second failure to the Department in June, 2009 when I noticed wastewater flowing into Ward Road from the drip-irrigation field. I could then see from nearby public areas that the grass had been killed in a portion of the field where wastewater saturated the ground and was flowing down into a tributary to Hall Creek which flows past Apple Greene homes. It would have taken a period of weeks for the saturated conditions to kill the grass. If this is correct then the permittee was inspecting the drip-irrigation field rather infrequently or failed to make a report to the Department. In either case, it would appear that reliance upon the permittee is not an effective mechanism for protecting water quality and public health with respect to drip-irrigation facilities.

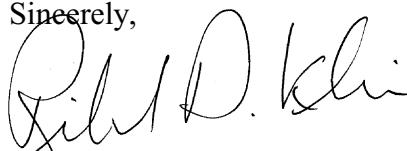
Since this technology appears so prone to failure it would seem prudent to develop a more reliable strategy for quickly detecting and correcting problems, particularly before the Shoppes at Apple Green drip-irrigation fields are approved for construction. For example, why not increase the frequency of physical inspection of the fields by the Department's Compliance Program to, say, once every three months as opposed to the current frequency of once every two- or three-years? If this is not possible and some equally reliable compliance mechanism cannot be established then perhaps the Department should consider another course of action.

The State Discharge Permits issued by the Department for Dunkirk Gateway and the Shoppes at Apple Green contain the following cautionary statement:

*Discharge via a large subsurface drip irrigation system to ground water is considered to be an **experimental technology** which will require **monitoring** to determine its **adequacy**.*

If a mechanism cannot be put in place that prevents the release of partially treated wastewater to nearby waterways (and near homes) then perhaps the experiment should be considered a failure with further use of drip-irrigation discontinued in Maryland. Personally I would hate to see this. I believe land application technologies, like drip-irrigation, are critical to the goals of protecting Maryland waters while accommodating well-managed growth. However, if a technology is prone to failure then neither goal is served.

Sincerely,



Richard D. Klein

cc: Ms. Lisa Yankanich, Apple Greene Citizens Association
Honorable Mike Miller, Maryland Senate
Honorable Wilson H. Parran, President - Board of Calvert County Commissioners
Honorable Gerald W. Clark , Vice President - Board of Calvert County Commissioners
Honorable Linda L. Kelley, Board of Calvert County Commissioners
Honorable Susan Shaw, Board of Calvert County Commissioners
Honorable Barbara A. Stinnett, Board of Calvert County Commissioners
Honorable Susan Kullen, Maryland House of Delegates
Honorable James Proctor, Maryland House of Delegates
Honorable Joseph Vallario, Maryland House of Delegates
Mr. Rick Bailey, Marrick Properties
Mr. Gregory A. Bowen, Department of Planning & Zoning
Mr. Robert Cohn, Calvert County Planning Commission Administrator
Mr. Paul McFaden, Calvert County Office of Environmental Health
Ms. Dru Schmidt-Perkins, 1000 Friends of Maryland
Ms. Kim Coble, Chesapeake Bay Foundation
Mr. Bob Arscott, Dunkirk Area Concerned Citizens Association
Mr. Brad Heavner, Environment Maryland
Mr. Fred Tutman, Patuxent RiverKeeper
Mr. J. Carroll Holzer, Holzer & Lee
Ms. Christy Goodman, Washington Post
Mr. Jeff Newman, Calvert Recorder