

APPLE GREENE CIVIC ASSOCIATION

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July 27, 2010

Honorable Gerald W. Clark
Board of County Commissioners
175 Main Street
Prince Frederick, Maryland 20678

Honorable Susan Shaw
Board of County Commissioners
175 Main Street
Prince Frederick, Maryland 20678

Honorable Linda L. Kelley
Board of County Commissioners
175 Main Street
Prince Frederick, Maryland 20678

Honorable Barbara A. Stinnett
Board of County Commissioners
175 Main Street
Prince Frederick, Maryland 20678

Honorable Wilson H. Parran
Board of County Commissioners
175 Main Street
Prince Frederick, Maryland 20678

RE: Community Protection Zone

Dear Commissioners Clark, Kelly, Parran, Shaw, and Stinnett:

Since August of 2008 the Apple Greene Civic Association has been negotiating with Marrick Properties to resolve concerns about the Shoppes @ Apple Green wastewater facilities. In a letter dated September 26, 2008, we requested a substantial buffer between our homes and the proposed drip-irrigation fields as well as the above-ground wastewater holding pond. We also expressed our willingness to consider alternative, equally effective community protection measures. Regrettably we have never been presented with a reasonable alternative.

Given the repeated failures of the similar wastewater treatment facilities serving Calvert Gateway and Marley Run, we ask you to amend the County Code by requiring a minimum 500-foot separation between homes and a drip-irrigation field or an above-ground wastewater holding pond. We ask that this requirement apply to any project which has not received a building or grading permit, such as the Shoppes @ Apple Green. Further background regarding this request is provided in the remainder of this letter.

Drip-Irrigation Reliability

In theory, drip-irrigation is a good system. Treated wastewater is released into the root zone of grass via a series of perforated pipes placed a foot or two below the land surface. The grass is

then periodically harvested along with the nutrients absorbed from the wastewater. The grass is then utilized in ways that minimizes the release of stored nutrients back into the environment.

Unfortunately, the reality of the two Maryland facilities with longest operational history negates the potential benefits. Of course these two facilities are the drip-irrigation fields at Calvert Gateway and Marley Run.

Every June since 2008 our consultant, Richard Klein of Community & Environmental Defense Services (CEDS), has examined both drip-irrigation fields annually. He has found that one or both has been releasing partially treated wastewater to the surface where it then flowed onto adjoining properties and into nearby waterways. These findings have been consistently confirmed by Maryland Department of the Environment (MDE) inspectors responding to complaints filed by Mr. Klein¹. The State NPDES Discharge Permit for both facilities clearly prohibit the release of wastewater into the fields when failures are causing the treated sewage to surface. The Calvert Gateway owner/operator was fined \$50,000 for continuing to discharge wastewater to failing drip-irrigation fields after being directed not to by MDE².

Of course the County Commissioners are very familiar with the Marley Run facility. In Mr. Carlson's July 6, 2010 memo to you he questioned our use of the word "failure" when describing the Marley Run drip-irrigation fields. Actually, the MDE report contains the word "failed" at two points. The phrase "Out-of-Compliance" appears at three points and the inspector noted several points in the drip-irrigation field where wastewater was surfacing. Given this the distinction between the terms "failed" and "failure" is unclear. More importantly, it seems from the Discussion section of the memo that the County agrees that there are problems with the Marley Run drip-irrigation fields.

It is our understanding that the principal upgrade at the Marley Run plant will be the installation of a Sequencing Batch Reactor, which is the same treatment system in use at the Calvert Gateway plant. We also understand that none of the recently approved funding will go to upgrading the existing drip-irrigation fields, just to the addition of more fields to handle wastewater from more homes.

We are deeply troubled by the fact that the 2008 MDE inspection reports concluded that the Marley Run drip-irrigation fields had been failing for more than a year. We are also troubled by the fact that the owner-operator of the Calvert Gateway facility was fined by MDE for continuing to discharge wastewater to failing drip-irrigation fields after directed not to. These facts cause our 161 families to be very uncomfortable with the Shoppes @ Apple Green drip-irrigation fields and holding pond next to our community.

¹ MDE inspection reports verifying the surfacing of wastewater within the drip-irrigation fields is posted at: <http://ceds.org/applegreene/MDEInspectionReports.pdf>.

² The Administrative Complaint, Order & Penalty issued by MDE is posted at: <http://ceds.org/applegreene/AdministrativeComplaintOrderPenalty.pdf>.

Drip-Irrigation & Residential Incompatibility

From the preceding it is clear that a high probability exists that the Shoppes @ Apple Green drip-irrigation fields will also fail in the same manner as the two longest operating facilities in Maryland. At times, partially treated wastewater will rise to the surface of the fields then flow onto adjacent areas and into nearby waters.

At both Calvert Gateway and Marley Run the nearest homes are more than 700 feet from the drip-irrigation fields. The Shoppes @ Apple Green drip-irrigation fields will be within 85- to 200-feet of the nearest homes. Having drip-irrigation fields so close raises concerns regarding:

- neighborhood children wandering into fields near their homes and coming into contact with wastewater saturated soils;
- mosquitos and other vectors transmitting disease-causing organisms to a number of the 161 Apple Greene families who live relatively near the proposed drip-irrigation fields;
- high winds transporting disease-causing organisms in a mist blown from the surface of wastewater-saturated fields into the yards and homes of area residents;
- while a proposal has been made to reduce the disease threat via disinfection, we are concerned that this process will fail repeatedly as have the drip-irrigation fields; and
- odors, loss of property value, loss of full use of yards and decks, and other negative effects associated with having drip-irrigation fields near homes.

500-Foot Community Protection Zone

Our consultant spoke with a number of scientists and reviewed various studies and other reports. He advised us that a 750-foot separation between the proposed drip-irrigation fields and our homes would probably be sufficient to prevent the negative impacts listed above. However, our consultant also cautioned that he is not an expert in this field and we should consider engaging professionals with the requisite expertise. Unfortunately, these professionals cost more than our Association can afford. Nevertheless, we believe you will find the following a compelling rationale for the proposed 500-foot Community Protection Zone between drip-irrigation fields and the nearest home:

- In *Guidelines for Land Treatment of Municipal Wastewaters*³, the Maryland Department of the Environment requires a 500-foot buffer between homes and areas where partially-treated wastewater is applied via irrigation. MDE applies a 50-foot buffer to drip-irrigation based on the assumption that area residents will never be

³ *Guidelines for Land Treatment of Municipal Wastewaters* can be viewed online at: [http://www.mde.state.md.us/assets/document/MDE-WMA-001%20\(Land-Treatment%20Guidelines\).pdf](http://www.mde.state.md.us/assets/document/MDE-WMA-001%20(Land-Treatment%20Guidelines).pdf)

exposed to wastewater by it rising to the land surface. The experience at the two longest operating drip-irrigation facilities in Maryland shows this to be a flawed assumption. Therefore we believe the 500-foot buffer is reasonable based on MDE policy.

- We contacted all of those who live in the vicinity of the two existing drip-irrigation fields in Calvert County. None reported ever experiencing any problems. Since all of these homes are more than 500-feet (with most being at least 750-feet away) this indicates such a buffer should prevent the more obvious impacts.
- A 750-foot buffer would eliminate all of the proposed drip-irrigation fields at the Shoppes @ Apple Green. Again, our community is not opposed to the project per se and does not wish to prevent construction. Instead, we want to find alternatives which provide reasonable protection for our 161 families while allowing the applicants to achieve their goals. This was a critical factor in our decision to call for a 500-foot Community Protection Zone rather than 750-feet.

I would also like to point out that other Maryland counties require up to a 500-foot separation between the edge of wastewater land application areas and homes.

Wastewater Holding Pond & Community Protection Zone

Our 161 families are also concerned about the applicant's proposal to construct a wastewater holding pond within 80- to 200-feet of our community. The pond would store wastewater at those times when frozen ground or other factors prevent release into the soil via drip-irrigation. The pond volume would equal the wastewater generated at the proposed shopping center over a period of 30- to 60-days. The proposed wastewater pond would be above-ground pond and open to the atmosphere.

Our concerns about this above-ground wastewater pond mirror those associated with the drip-irrigation fields:

- mosquitos and other vectors breeding in the wastewater pond could transmit disease-causing organisms to a number of the 161 Apple Greene families who live nearby;
- high winds could transport disease-causing organisms in a mist blown from the surface of wastewater pond into the yards and homes of area residents; and
- odors, loss of property value, loss of full use of yards and decks, and other negative effects associated with having the wastewater pond near homes.

The applicant had proposed moving the wastewater pond next to the road proposed to connect Apple Way (the only access into our community) and Dunkirk Way. Many Apple Greene residents find this proposal troubling because they, their visitors, and potential home-

buyers would pass by the wastewater pond while entering and exiting the community. Given the unsightly appearance of other wastewater holding ponds this prospect is very troubling indeed⁴. This wastewater pond concern and the three listed above could be resolved by either:

- A. Placing the wastewater pond underground with appropriate measures to control disease vectors; or
- B. Move the wastewater pond to a point 500-feet from the nearest home, preferably to an area where it is not visible to area residents.

Why Negotiations Have Failed To Resolve Concerns

As stated earlier, our efforts to find an equitable solution to our concerns began in mid-2008. Our principle request has always been to move the drip-irrigation fields a reasonable distance from homes and to do the same for the wastewater holding pond or place it underground. As you will see in the following chronology, for a time we did express a willingness to accept a smaller separation distance, but this was based on the assumption that past enforcement actions had resolved the surfacing of wastewater in the Calvert Gateway and Marley Run drip-irrigation fields. Unfortunately this was shown not to be case in June of this year when wastewater was again found to be surfacing in the Marley Run drip-irrigation fields.

Chronology of Negotiations

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| August 8, 2008 | We met with Mr. Rick Bailey, of Marrick Properties, and presented our concerns about the proposed drip-irrigation fields, the wastewater holding pond, and stormwater management. |
| September 15, 2008 | <p>Mr. Bailey and his consultant presented three revisions at a community meeting well attended by Apple Greene residents. The three revisions were:</p> <ul style="list-style-type: none"> • The separation distance between the yards where Apple Greene children play and one drip-irrigation field (Zone C) would go from 30-feet to 50-feet; • The separation distance between Apple Greene yards and the wastewater holding pond was increased from 80 feet to 100 feet; and • Earth berms would be constructed downslope of drip-irrigation fields, though it was unclear how the berms would protect our homes and the |

⁴ A photo showing the unsightly appearance of a wastewater holding pond similar to that proposed for the Shoppes is posted at: <http://ccds.org/applegreene/GatewayHoldingPond.pdf>.

streams in which our children play when wastewater surfaced in the fields.

September 26, 2008 We sent a letter⁵ to Marrick Properties expressing thanks for the three changes, but explaining why they were not sufficient to protect the health and quality of life of Apple Greene residents. The letter then contained a number of recommendations for achieving reasonable protection that would also permit the Shoppes to be constructed much as proposed. The two most critical recommendations were to move the drip-irrigation fields a minimum of 750 feet from the nearest home and either place the wastewater holding pond underground or move it 750 feet from our homes. A response to this letter was never received.

December 30, 2009 We met with Mr. Bailey who presented revised plans for the Shoppes showing that the drip-irrigation field closest to our community (Zone C) would be eliminated and that the separation distance between the wastewater holding pond and the nearest Apple Greene property line was increased from 80 feet to 198 feet. However, this also moved the pond next to the proposed road connecting Apple Way to Dunkirk Way.

We made it clear that should the community find these changes satisfactory we would want a contract binding the applicant to the changes and for the applicant to ask the Board of Appeals to make the points of agreement conditions of the Special Exception.

February 16, 2010 Apple Greene residents met at the Fairview library to discuss the changes Marrick Properties proposed on December 30, 2009.

February 18, 2010 We sent an e-mail to Marrick Properties expressing thanks for the December 30th changes and describing additional measures critical to protecting the health and quality of life of Apple Greene residents⁶. We reiterated the need to place the wastewater pond underground. However, we also expressed a willingness to consider drip-irrigation fields within 350 feet of Apple Greene homes provided measures were used to direct surfacing wastewater away from our community, the fields were fenced, **and** Marrick Properties asked the Calvert County Board of Appeals to make all of the changes conditions of the Special Exception.

⁵ See <http://ceds.org/applegreene/MarrickPropertiesLetter-SewageOptions.pdf>

⁶ The e-mail containing the additional measures the community sought has been posted at: <http://ceds.org/applegreene/AppleGreene-RevisedPlans&TheLastInch2-18-10.pdf>

- May 19, 2010 We met with Mr. Bailey to discuss the additional changes requested in our February 18th message.
- May 20, 2010 The Association sent Mr. Bailey an example of a contract that would bind the applicant and the Association to the points of agreement discussed on May 19th.⁷ At this point the Association hoped that the applicant would agree to not only enter into a contract but also ask the Board of Appeals to make the points of agreement conditions of the Special Exception. The Association was uncomfortable with the verbal agreement we had at this point with the applicant.
- May 27, 2010 Additional changes proposed by Mr. Bailey on May 19th were presented at a meeting of Apple Greene residents. Those present were reluctant to enter into a binding contract before the applicant agreed to ask the Board of Appeals to make the points of agreement Special Exception conditions.
- June 1, 2010 Our consultant notified MDE that wastewater had again surfaced within the Marley Run drip-irrigation field, which MDE confirmed during a June 8, 2010 inspection⁸.
- June 17, 2010 Apple Greene residents met to discuss the draft verbal agreement with Marrick Properties and Howlin Properties. Those present felt that given the most recent and persistent failure of the drip-irrigation facilities they simply could not agree to have such a system near their homes. We agreed to reiterate the minimum safeguards set forth in our August 2008 letter to Marrick Properties: 1) a 500-foot separation between drip-fields and homes, and 2) place the sewage pond underground or move it 500 feet away.
- June 28, 2010 The Association sent a letter informing Marrick Properties that the Apple Greene Civic Association cannot agree to a settlement as long as drip-irrigation fields or an above-ground sewage holding pond is within 500 feet of our homes.⁹

For further detail on our efforts to find an equitable solution see the chronology posted at: ceds.org/ag.

⁷ See <http://ceds.org/applegreene/AppleGreene-RevisedPointsOfAgreement5-20-10.pdf>.

⁸ See <http://ceds.org/applegreene/MDEInspectionReport-June2010.pdf>.

⁹ Our letter is posted at: <http://ceds.org/applegreene/MarrickProperties-Drip-FieldFailures6-28-10.pdf>.

The preceding chronology shows that we have made a tremendous effort over the past two years to resolve the community's concerns in a way that has the least impact upon the Shoppes @ Apple Green. While progress has been made in some areas, it is insufficient to protect our 161 families from the most serious impacts posed by the Shoppes @ Apple Greene. It is for this reason that we ask the Board of County Commissioners to amend the County Code by requiring a minimum 500-foot Community Protection Zone between homes and a drip-irrigation field or an above-ground wastewater holding pond. We ask that this requirement apply to any project which has not received a building or grading permit, such as the Shoppes @ Apple Green.

Sincerely,



Marshall R. Coffman,
President

cc: Honorable Roy P. Dyson, Maryland Senate
 Honorable Susan Kullen, Maryland House of Delegates
 Honorable Mike Miller, Maryland Senate
 Honorable Anthony J. O'Donnell, Maryland House of Delegates
 Honorable James Proctor, Maryland House of Delegates
 Honorable Joseph Vallario, Maryland House of Delegates
 Honorable Shari T. Wilson, Maryland Department of the Environment
 Karen Edgecombe, American Chestnut Land Trust, Inc.
 Tommy Zinn, Calvert County Waterman's Association
 C. Douglass Alves, Jr., Calvert Marine Museum Society
 J. P. Sherkus, Dunkirk Area Concerned Citizens Associations
 Dr. Anne Mychalus, League of Women Voters of Calvert County
 Fred Tutman, Patuxent Riverkeeper
 Susan Charkes, Patuxent Tidewater Land Trust
 Bob Boxwell, Sierra Club - Southern Maryland Group
 Kathy Phillips, Assateague Coastal Trust
 Diane Cameron, Audubon Naturalist Society
 Kim Coble, Chesapeake Bay Foundation
 Ned Gerber, Chesapeake Wildlife Heritage
 Andy Galli, Clean Water Action
 Ron Henry, Maryland Chapter Sierra Club
 Jen Brock-Cancellieri, Maryland League of Conservation Voters
 Jim Long, Mattawoman Watershed Society, Inc.
 Nancy Shaper, Prettyboy Watershed Alliance

Jamie Garner, Talbot Preservation Alliance
Christine Sweeney, Talbot River Protection Association
Rick Bailey, Marrick Properties
Jeff Newman, Calvert Recorder