22 January 2021

To: Members of the Shelby County Groundwater Quality Control Board

Re: Two items:
- Approval of a new well at Chickasaw Country Club
- Conservation efforts at Richardson/Wesson Oil

Protect Our Aquifer (POA) wants to register our concern at the lack of questions and coverage of issues in following existing Regulations in regard to granting a new well permit to the Chickasaw Country Club (13 January 2021). We have also added comments and questions on the “conditional approval” granted Wesson Oil for their replacement well (26 August 2020).

Approval of a New Well at Chickasaw Country Club
Did the Board follow current Well Regulations by approving a new well at this facility when MLGW water is available? According to current regulations, Section 11, C. 1-3 states:

“3. The Board may approve a Class A well permit on appeal only if it finds:
   a. The public water supplier for that area has notified the Department in writing that it is unable or unwilling to supply the amount of water required by the Applicant; and
   b. An evaluation of the available alternative supplies, signed by a Tennessee licensed professional engineer or geologist, determining that any alternative water supply is not suitable due to its chemical characteristics, insufficient quantity or that their use would be detrimental to an existing remediation site’s groundwater remediation study or clean-up; and
   c. The proposed wells will not accelerate or enhance the migration of a known source of contamination into the aquifer.”

On all three counts, the Board did not provide reasons—or ask questions—for this approval.

   a. The Application for this request included a document from MLGW Water Engineering that a public water supply was available at this site. This document, as well as the relevant regulation, was not discussed at this meeting.
   b. While the Board did grant the Applicant a new well (an “alternative” supply), there was no “evaluation…signed by a…professional engineer or geologist…” determining its suitability in regard to proximity to an existing remediation site or clean-up. (At least none that we are aware of in the Meeting materials.)

According to contaminated sites listed on the Tennessee Department of
Environment and Conservation’s Data Viewer, there are several sites surrounding this area that are designated as such. These sites and their proximity to this new well were not discussed—nor even mentioned at this meeting.

c. Known breaches, as mapped by CAESER at the University of Memphis, include a very large designated area just to the west and north of MLGW’s Sheehan Pumping Station (less than three miles away). Heavy pumping from areas near known breaches may “accelerate or enhance the migration of a known source of contamination” (the upper aquifer) into the deeper, drinking water Aquifer. This breach and this potential were not discussed—nor even mentioned—at this meeting.

**Conservation Efforts at Richardson/Wesson Oil**

In our notes from the Wesson Oil meeting, we have as the motion on the conditional permit: "Approve the well with the condition that Applicant will work with the Shelby County Health Department on improving the one time pass through use of water."

We are confused about the specific expectations and charge to those who would improve conservation conditions at the Wesson Oil facility. The SCHD does describe a generalized conservation plan for Wesson Oil in an attachment to the Application. In addition:

- Who will do this conservation work, and who is qualified at the Department to comment on conserving water in an industrial system using over a million gallons a day?
- If conservation is to be left up to Wesson, who removes the conditional approval and by what standards is this conditional approval made final?

Section 11, B. 1. of the current Regulations require that “commercial or industrial processes” take “conservation steps established by the Department.”

- Where can POA or the public find the “conservation steps” mentioned in the Regulations?
- Who judges these steps to approve a conservation plan or Wesson Oil’s proposed plan?
- What are the criteria and/or standards that an industrial facility must achieve in order to receive a final approval for their replacement well?

Section 11, B. 2. of the Regulations require that “any person having an existing well whereby a continual groundwater discharge occurs” shall “take whatever conservation steps the Department may deem necessary to prevent such discharges.”

- Has the Department adopted any standards or processes to resolve situations of this type?
- Where would POA find any Board or Department document outlining these steps?
Final Note on Future Dilemmas of this Nature

In regard to the Chickasaw Country Club decision, we understand the difference between the quality of MLGW pumped water and water pumped directly from the deep Aquifer. We at POA have even discussed the need for an agricultural/industrial exemption for large users who require untreated water and do not need MLGW pumped and treated water for their irrigation needs.

In the same way, we at POA understand the need for conservation and holding heavy users accountable for single pass-through use and lack of viable conservation solutions. But there are no Regulations in our existing laws to allow exceptions or enforce solutions.

Rather than just complain about Board adherence to existing Regulations, we at POA think that the real message of these skips and misses is a firm basis for instituting additional clauses in the ongoing new draft of the Regulations—that was left incomplete in March 2020 because of Pandemic concerns:

1. Provide an exception for heavy users who can make the case for the use of untreated water when MLGW water is not appropriate for their situation.
2. Require a simple metering system so that the Board and Department can track use, monitor quantity, and assess conservation techniques.
3. Set standards for industry and heavy users that can be used as reference points and models for those attempting conservation in the future.
4. Institute a conservation fee so that the Department can hire expert staff in crafting, assessing, and working with heavy users of the Memphis Sand Aquifer.

These suggested changes will go a long way to allowing heavy users who do not need treated public water to operate. In addition, they will assure the public that the Board and Department are doing their best to manage our water resources and protect our aquifer.

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cc: SCGQCB Members
Mayors, Shelby County Municipalities
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