

Mahomet Aquifer Protection Task Force
c/o Barb Lieberoff
Office of Community Relations
Illinois Environmental Protection Agency
1021 Grand Avenue East
Springfield, IL 627012

December 11, 2019

Dear Mahomet Aquifer Protection Task Force:

The Task Force report **Mahomet Aquifer Protection Task Force Report: Findings and Recommendations** presents a comprehensive synopsis of the issues about the quality of groundwater in the Mahomet aquifer. I have several concerns after reading the report that I would like to share. Line numbers are included where appropriate:

- a brief description of the hydrogeologic setting of the Mahomet aquifer region would provide a essential context to the report
- the terms Mahomet aquifer and Mahomet aquifer system are used throughout the report. Are these terms synonymous? It should be kept in mind that in the Sole Source Designation, Mahomet aquifer system refers to the Mahomet aquifer plus all shallower aquifers above it that occur within the boundary of the Mahomet aquifer as projected to land surface.
- line 130 states **On March 11, 2015, USEPA designated a portion of the Mahomet Aquifer as a sole source aquifer.** The Sole Source Aquifer designation includes all of the Mahomet aquifer; not just a portion of it. Because this statement differs from the Sole Source Aquifer designation, what is meant by **a portion of the Mahomet aquifer** should be explained so that it is clear to the reader. It should also be explained here that the Sole Source Aquifer designation applies not just to the Mahomet aquifer itself, but also to the Mahomet Aquifer System. The designation defined the Mahomet aquifer system as including the Mahomet aquifer and all aquifers overlying it as they occur within the boundary of the Mahomet aquifer as projected to land surface.
- lines 154 and 155: **qualify** should by quality
- lines 489-505 in the section Aquifer Characterization, the text refers to a wide range of new technologies that are available, but then only describes HTEM. What are the others? Why was HTEM selected from among all of the new technologies? The description of HTEM in this section suggests that the data collected are used to “characterize the aquifer”, “aid in identifying the connections with other aquifers and surface waters, and “better define surface and groundwater conditions”. It should be stated that HTEM measures the electrical properties of the subsurface geologic materials, and that these data are subsequently

interpreted in order to map and characterize the subsurface geology. Because the results of HTEM are interpretations of the subsurface geology, assessing the accuracy of the interpretations is integral to reliably utilizing the results of HTEM surveys. Assessing the accuracy is accomplished by controlled test drilling at locations where interpretation of the HTEM data is problematic. Test drilling should be incorporated into the text.

- line 576 refers to **Mahomet Groundwater Systems** – because it's not certain what this term means or refers to, a brief explanation would be helpful.

Thank you for the opportunity to provide my comments.

Sincerely,

A handwritten signature in cursive script that reads "Dave Larson".

David R. Larson

Hydrogeologist, Retired