## MIDWEST ENVIRONMENTAL JUSTICE ORGANIZATION

February 6, 2012

Tom Heikkinen, General Manager Madison Water Utility Board 119 E. Olin Ave. Madison, WI 53713

Dear Mr. Heikkinen:

We commend the Madison Water Utility on its comprehensive Wellhead Protection Plans, which will help protect our drinking water quality and quantity into the future.

We are writing to let you know about a potential contaminant source that should be listed in the Wellhead Protection Plan for Well 13 and possibly also for Well 7, and to raise some questions about past and future issues that could affect these wells.

Dane County Parks staff and contractors regularly apply significant amounts of pesticides in the Lake View Hill County Park, on the north side of Madison, to control invasive plant species. From winter 2009 through spring 2011, over 127 gallons of several kinds of glyphosate and/or triclopyr-based herbicides were applied on approximately 20 acres of the park (see attached tables). According to experts we have consulted, on a gallon per acre basis, this is significantly more than amounts typically used in agriculture. In summer 2011, park contractors switched to a more potent triclopyr-based herbicide and have applied unknown amounts of this and other herbicides since that time. Additionally, there have been unauthorized pesticide applications of an unknown quantity within the park by nearby residents, which may well continue into the future.

According to the Well 13 plan, the northern half of the park falls within the 50 and/or 100 year TOT zone of capture for Well 13 (depending on the pumping rate scenario). The southern half of the park likely falls within the Well 7 zone of capture, though that's not clear because the Well 7 plan is not completed yet.

We have a suggestion and several questions (in bold below) related to the potential for pesticides used in Lake View hill to impact Wells 7 and 13:

- 1. The Well 13 area has very few contaminant sources at this point, and we would like to see it remain that way into the future. Reliance on pesticides in this and other public parks should be greatly reduced and/or eliminated, and in the meantime, all pesticide applications should be monitored and evaluated through a comprehensive Integrated Pest Management (IPM) plan. County (Lake View Hill), as well as City Parks (Cherokee Marsh) should be encouraged to provide the Water Utility with an annual record of pesticide applications and their IPM evaluations related to these applications.
- 2. The Wisconsin Speleological Society has documented a seam cave in Lake View Hill, and there are numerous oral reports of larger cave structures in the hill. The presence of caves in Lake View Hill has also been noted in the recent Lake View Hill Park cultural report commissioned for the County (see attached document). Former workers at the Lake View TB Sanitorium report that the construction of the Sanitorium in 1930 breached the cave structure, and several people who built homes along Esch lane on the east side of the hill in the 1950s have also reported encountering caves during their home's construction.

Could the Water Utility do a mapping study of the caves' extent and features, and, if possible, an infiltration study to explore whether these caves could serve as a pathway for contaminants to travel more quickly into Well 13, Well 7, and/or other drinking water wells?

- 3. There is a mothballed well on the top of Lake View Hill near the water tower that should be listed on the Wellhead Protection Plan as an abandoned well. Can the Water Utility assess whether this well could be a potential artificial pathway for accelerated movement of pesticides used in the park (and/or their breakdown products) and/or other contaminants into public water wells?
- 4. Could the Water Utility address how the forthcoming reconstruction of the Lake View Hill water tower might impact the cave structure (e.g., due to the weight of the water), change rates of underground water flow, and/or impact the movement of pesticides and/or other contaminants into water wells?

Thanks in advance for addressing our request and questions. Please verify that you received this, and we look forward to your response at your earliest convenience.

Sincerely,

Maria Powell, PhD Community Based Participatory Researcher & Organizer

Jim Powell Community Organizer

Cc: Madeline Gotkowitz

Al Larson Anita Weier