



October 14, 2011

Mr. Michael Schmoller  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711

RE: Madison-Kipp Corporation's -- Response to Comments  
Lorne G. Everett

Dear Mr. Schmoller:

As you requested and on behalf of Madison-Kipp Corporation, I have prepared these responses to comments made by Mr. Everett, with respect to the sampling practices on the Madison-Kipp project. I address each of Mr. Everett's the comments separately below.

*Groundwater Results from MW-7 and MW-8:* Mr. Everett asserts that the groundwater sample results are invalid because the samples were received by the laboratory warmer than they should be, and with air bubbles present greater than 6 mm. His conclusions on both points are incorrect and unsustainable. Temperature requirements for groundwater samples are intended to avoid volatilization due to extended durations between collection and analysis. Here, a review of the sample times reveals that the samples were delivered to the laboratory less than two hours after collection. The cited sample log also indicates that the samples were received by the laboratory on ice. The samples are collected in vials, which are then placed in a bubble-wrap envelope to protect them from breakage. With the insulation provided by the bubble-wrap envelopes, the samples simply did not have time to cool because they were delivered so promptly to the laboratory. This is not a scenario where the samples were cooled and then allowed to warm up at the laboratory given the duration between collection and analysis, which appears to be what Mr. Everett is rather deceptively suggesting. Rather, these samples were appropriately handled and promptly analyzed by the laboratory.

With respect to the allegation of the presence of headspace bubbles, I have been collecting groundwater samples for nearly 25 years and I do not recall the presence of any bubbles in the samples. To avoid such concerns, the laboratory requires that three vials be filled, when only one is necessary for analyses. This allows the laboratory to choose among sample vials when headspace bubbles are present. To investigate Mr. Everett's critique, I spoke with Mr. Dan

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Milewsky, the laboratory manager for Test America's Watertown, Wisconsin lab. His response to this issue was to indicate that: "If the data is not flagged with a P-HS (improperly preserved due to head space), then your data is fine. We always use the best vial available, and unflagged data is either from a good vial, or a vial with bubbles under 6 mm." The results from the analyses were not flagged, therefore rendering Mr. Everett's argument baseless.

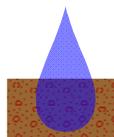
*Bailers for sampling:* Bailers are used routinely for monitoring well sampling. Although pumps and low-flow sampling are also used, in my experience, using bailers is the most common approach. It is also an approach that is accepted by the Wisconsin Department of Natural Resources, the environmental regulatory authority in Wisconsin. Consequently, I have confidence in the approach. Additionally, because the use of bailers is so prevalent, to disqualify the results at this site would essentially disqualify the results at the vast majority of sites in Wisconsin. Simply put, the use of bailers is widely and readily accepted by WDNR as an appropriate method of sample collection.

*Variable groundwater flow directions:* Contrary to Mr. Everett's comments, the groundwater remediation system is not related to the variable groundwater flow directions. As the historic data reveals, these variations in groundwater flow were observed long before the system was installed. A review of the water table maps by an experienced hydrogeologist makes the variation clear. The water table in this area is very flat, as demonstrated by the very small contour intervals. Consequently, a very slight variation in one or two wells can slightly tilt the gradient from one sampling event to the next.

Another consequence of the shallow groundwater gradient is that the movement of shallow groundwater is very slow. This, along with the variable gradient directions, results in very little contaminant migration in the shallow groundwater. Mr. Everett's comments on this point are similarly without technical support.

*Dense non-aqueous phase liquids (DNAPLs):* Mr. Everett cites a "rule of thumb" for the potential presence of DNAPLs. The problem with "rules of thumb" is that they are by their very nature general and do not consider other very important site-specific factors. For example, there is no strata present at the Madison-Kipp site that would capture a DNAPL. The shallow sand aquifer directly overlies the very permeable sandstone aquifer. It, in turn, extends to pre-Cambrian rock, some 1,000 feet below.

Additionally, when investigating the presence of DNAPLs, concentrations tend to be fairly consistent with depth. At the Madison-Kipp site, however, concentrations are reduced at depth, again indicating aqueous solution.



With respect to Mr. Everett's assertions (made entirely without site-specific factual or scientific basis or support) concerning an alleged source beneath the floor of the building, we have discussed this issue with the Department on many occasions. The historic use of tetrachloroethene, in terms of volumes, storage, usage and locations, is very well known, previously investigated and documented at the Madison-Kipp site. Investigation was performed based on historic operational knowledge, and the source areas were discovered and documented as a result.

Finally, I disagree with the contention that the contaminants would follow a path that is "preferentially independent of the groundwater flow direction." While some clay is present above the water table, the aquifer itself, whether unconsolidated or sandstone, is very homogeneous and isotropic. As a result, contaminant migration follows a very classical pattern of downgradient dispersion. The exception, as stated above, is with the very shallow groundwater, which likely has very limited migration.

Should you have any questions about Madison-Kipp's response to Mr. Everett's comments, please call.

Sincerely,  
RJN ENVIRONMENTAL SERVICES, LLC



Robert J. Nauta, P.G.  
Hydrogeologist

