My responses are in italics.

In the future, please send all written correspondence, including Emails, to my attention directly as this will allow me to provide you with the USEPA's response more promptly. Despite the fact that Theo is a USEPA contractor and frequently provides information at community meetings, he is unable to provide the Agency's response.

I apologize for not following the proper protocol. Please let me know if responses should go to you or to Becky Frey or both.

You mention that you found some problems with the data. USEPA, MDEQ and their respective contractors have reviewed the report, and the data have been validated by using USEPA Contract Laboratory Program National Functional Guidelines and project-specific data quality objectives. Therefore, while we recognize that there is always the possibility for an error to go unnoticed, we are sufficiently confident that the data are suitable for the planned inclusion in the Remedial Investigation (RI) Report.

I certainly do not question the fact that you have taken every effort to provide reliable data and an error-free report. I appreciate the fact that you are "sufficiently confident that the data are suitable"…however, I think you will agree, having worked with us for several years, that it is our job as a CAG and TAG not to be "sufficiently confident" about any data. Therefore, our comments are not personal attacks on your ability to provide an error-free report, they are merely our attempt at making sense of information that has recently come to us (only about 2 weeks ago in my case). I believe you have had a year or so to work with all of this.

Comment #1 – The tables and figures in the report were generated to illustrate data in support of specific data gaps. For example, Table 3-7 lists all the wells (including the ones you list) sampled for monitored natural attenuation (MNA) parameters. Since p-CBSA, the analyte mapped on Figure 3-13, is not an MNA parameter it was not called out by the database query that generated the table. p-CBSA was mapped on Figure 3-13 because that figure was generated to illustrate the distribution of p-CBSA in Lower Unit groundwater which is an important data gap that was addressed by the SMI. This is not a problem with the data or the database that has been sent to MDEQ for inclusion in the RI.

Thanks for the clarification. I was mistakenly thinking that all data on the figures were somewhere on a table. These comments will be stricken from the subsequent letter.

Comment #2 – WMW-30(D) does not have contradicting data. The data on page 1 of Table 3-6 are for the sample obtained in July 2005. The data on Figure 3-13 are for the sample obtained in May 2005. Comment #3 – You note that 1,2-dibromo-3-chloropropane (DBCP) is listed on Table 3-6 at 175 ppb, and on Figure 3-8 at 136 ppb. The only 175 value we could find for DBCP on Table 3-6 is a value of less than 175 micrograms per liter for WMW-19(I). This is shown on the table by denoting with a "U" data qualifier. The "U" data qualifier means that the compound was under (or less than)

the reporting limit which in this case was 175 micrograms per liter. DBCP is not shown on Figure 3-8. We think you may have confused DBCP with 1,2-dichloropropane which is shown on Figure 3-8 at a concentration of 136 micrograms per liter in WMW-19(I).

I think you are correct. Sorry for the confusion. I think there are a couple of things, however. First, since the detection limit was so high (relative to the known toxicity of the contaminant), I believe that fact should be mentioned on the figure. Second, I do want to mention that at times, it was very difficult to review the well information and try to cross-reference it with other data as there are a number of ways they have been identified and referenced. I do recognize that correlating all of these data between MDEQ and EPA is not easy.

Finally, you ask about the Passive Soil Gas (PSG) survey. The use of PSG as a screening level tool was conceived based on the relatively high frequency of VOC detections in both NAPL samples and environmental medial (i.e. soil and groundwater) samples from the site. While it is recognized that other constituents exist at the site (such as metals and DDT, for example) the PSG investigation was used to take advantage of the strong VOC soil gas signal to screen for locations where NAPL may be present. The PSG survey was reinforced by confirmatory soil borings and other corroborating data (such as previously existing sample data) to obtain samples and make more direct observations of NAPL presence or absence. In addition, a pilot study consisting of two PSG grids in different areas of the site was conducted to examine for site-specific application. The use of PSG has been well documented for this sort of application (USEPA, 1998). A recent expert panel report commissioned by USEPA includes soil gas surveying as a screening level tool for DNAPL investigations (USEPA, 2003). In addition, other federal agencies (notably the Air Force Center for Environmental Excellence) have employed PSG on numerous sites with affirmative results for screening-level purposes, some of which include DNAPL sites.

Any cursory look at the literature (including the reference you give) supports your contention about the success of PSG in denoting the existence of NAPL and VOC sources in certain subsurface conditions. However, we were able to find studies and literature that discuss the limitations of PSG for inhomogeneous subsurface conditions such as what exists at the former Velsicol Site. If PSG surveying is going to be the fundamental method by which the RI is prepared, the TAG would like to bring in an expert on the use and limitations of PSG for these kinds of cases.

The pilot study you mention is scientifically unsound given the fact that there are only two data points for a 50+ acre site with varied and disordered subsurface as is known to exist at the former plant site. Further, the corroboration that you speak of with known subsurface conditions/concentrations does not explain the fact that 5 distinct hot spots appear from the PSG data, yet the SMI report ignores three of those hot spots because the PSG data were not corroborated with subsequent sampling.

You also ask: could it be possible that there are high concentrations of contaminants in the subsurface that are not recording commensurately high hits using PSG? As with any

screening level tool there is a possibility for false negatives. However, we have adequately controlled the potential false negative error rate through the use of site-specific pilot testing and corroborating soil and groundwater data and direct visual observations.

I really believe that you have made a serious attempt at controlling the potentially false negative error rate on the site given the constraints of your budget and time. I do not believe, however, that it is possible to say that you have 'adequately' controlled the potential for false negatives. This type of wording is incredibly important to the community. It may make the difference between a "remedial action" and a "cleanup."

The report is not based on the PSG survey being entirely accurate or precise. Rather, the report details multiple lines of investigation of which the PSG survey is one component. The PSG survey was used as a screening level tool to help guide the location of the other lines of investigation which included soil borings and groundwater samples at multiple depths, monitoring wells, test pits at various locations around the site, residential and municipal well samples. The report is a presentation of the results from all these multiple lines of investigation.

The report is, indeed based on the PSG survey being entirely accurate and precise. Otherwise, how do you explain defining the hot spots in the manner that appears in the report? This actually gets to one of the main issues that will be discussed in the subsequent letter - that is, the definition of "source." It is important, from a community perspective to make sure we are all speaking the same language and making the same, fundamental interpretations. Once we agree, we can discuss, argue and deliberate on a level that should prove more constructive.

Please remember, that when this project is completed, you get to walk away from this site forever. Unfortunately, that is not the case for the people who live in this community and drink the water.