



November 15, 2013

Kathleen McDaniel, Assistant City Attorney
City of Manitowoc
900 Quay Street
Manitowoc, WI 54220

BRRS # 02-36-000268

SUBJECT: Additional Requirements, City of Manitowoc - Town of Newton Gravel Pit
3130 Hecker Road, Manitowoc, WI

Dear Ms. McDaniel:

Thank you for meeting with staff from the Department of Natural Resources (DNR), Health Services (DHS), and Manitowoc County Health Department on November 13, 2013. The purpose was to discuss emergency response actions required to address the Volatile Organic Compound (VOC) contamination recently measured in several homes along Hecker Road. The City has sampled 14 potable wells in the Hecker Road area as required by the DNR in an April 8, 2013 letter. The DNR's letter was a response to a review of the 2012 Groundwater Monitoring Letter Report of the former Town of Newton Gravel Pit prepared by your consultant David Henderson of AECOM, Milwaukee.

Following is a list of actions and activities the DNR and DHS is requiring of the City of Manitowoc to address the public health issues recently discovered on Hecker Road.

City of Manitowoc (and/or their consultant AECOM) Priority Tasks:

- 1) DNR's Drinking Water and Groundwater Program (DG) is recommending potable well replacement for the three homes impacted by vinyl chloride contamination above drinking water standards. Use of air stripping and carbon adsorption technologies are not viable options at this time. The city should begin with immediate construction of a replacement well at 3518 Hecker Road.

Here is a brief summary of well construction specifications* provided by Liz Heinen (DG):

- The upper enlarged drillhole and cement grouted casing shall extend to a depth of at least 250 foot below ground grade.
- The upper enlarged drillhole shall be drilled to a diameter of no less than 10-inches for a 6-inch diameter steel well casing pipe.
- The cement grout shall be ordered from a concrete company and shall be of at least 15.2 lbs./gallon, but preferably 15.6 lbs./gal. The quantity ordered shall be no less than 20% greater than the amount calculated to fill the annulus.
- The cement grout shall be pumped into the annular space using the Braden Head Method.
- The grout shall be allowed to set for at least 48 hours before construction of the lower bedrock drillhole is commenced.

- An approved liquid chlorine product (sodium hypochlorite) shall be used to prepare the solution to disinfect the well upon completion, with a concentration no greater than 100 ppm. After 30 minutes the solution shall be thoroughly flushed from the well.

*The well driller will estimate total open borehole depth (expected to be ± 350 ft)

- 2) Sample and record VOC and indicator parameters before installation of wells at 3609 and 3515 Hecker Road (in that order). Advise homeowners with basic information on well construction information and new impacts (e.g., yard damage during well construction, higher iron content, increased hardness, etc.). Until a well is drilled at each of the addresses referenced above, the City should continue to provide bottled water to that home and bulk water to 3518 Hecker Road until a new well has been drilled.
- 3) Collect and analyze potable well water samples at 3609 and 3515 Hecker Road for RCRA Metals and PCB Aroclors. These samples must be collected as soon as possible or no later than November 22, 2013.
- 4) Develop and complete a representative potable well VOC sampling and analysis plan for the area surrounding the gravel pits, as well as specifically to the east and southeast of Hecker Road and Silver Lake Road and also extending east of I43. Liz Heinen (WDNR-DG) will work with City's Consultant AECOM on suggested plan. This plan must be started no later than November 25, 2013.
- 5) Complete a vapor intrusion investigation at 3320, 3518, 3609, and 3515 Hecker Road. This must be started as soon as possible or no later than November 22, 2013. If vapors are present and are above indoor vapor action levels, install vapor mitigations systems at impacted homes no later than 2 days after analytical results are received by the City and/or the consultant. Based on the results at these four homes, if warranted, expand and complete further vapor intrusion investigation and install vapor mitigations on same schedule as listed above.
- 6) Keep community and residents informed of continued progress.

City of Manitowoc (and/or their consultant AECOM) Secondary Tasks:

- 1) Provide DNR with a timeline of events starting on November 6, 2013.
- 2) Tabulate all October and November 2013 potable well sampling results and provide to the DNR. It is understood that lab data from four potable well VOC results have not yet been received by the City.
- 3) Tabulate the Oct 2013 monitoring well results and provide to the DNR as soon as possible.
- 4) Consultant will expand existing map to include monitoring wells, and known and sampled potable well locations.
- 5) Consider use of the City of Manitowoc police shooting range facility at the 3130 Hecker Road as a potential location for future "open house" locations to help inform the public.
- 6) Provide to DNR any Silver Creek surface water sampling results and past Department determinations, if not already provided.
- 7) Provide to DNR any available information which may be useful to other potential responsible party search and investigation.

DNR Tasks:

- 1) Modify speaking points and distribute to City of Manitowoc, DHS, and Manitowoc County Health Department. Comments from City will be provided to Roxanne Chronert, Team Supervisor, Northeast Region Remediation and Redevelopment Program by 4:00 pm 11/15/13. Speaking points will continue to be updated as the situation changes.
- 2) Liz Heinen, DNR DG, has sent letters to the owners of all potable wells that were sampled by the City of Manitowoc in October and November 2013. Four categories of letters were issued:
 - a. Drinking water advisory and flush only advisory;
 - b. Drinking water advisory;
 - c. Low level detections;
 - d. No detection.

The following contacts were added to the letters as contacts: Tauren Beggs and Annette Weissbach – DNR R&R for site investigation, Liz Evans – DHS for health related questions, Liz Heinen – DNR Drinking Water and Groundwater for well construction.

- 3) Evaluate, request, and secure funding for area-wide vapor screening groundwater investigation.
- 4) Begin development of outreach web page.
- 5) Provide Silver Creek surface water sampling results to DNR water program for review.

DHS Tasks:

- 1) Provide the DNR will Flush Only Advisory Language.

Thank you for your pro-active attitude in this important matter. We look forward to continued cooperation from the City of Manitowoc. Please feel free to contact me if you have any questions in regard to this letter. I can be reached at 920-662-5165.

Sincerely,



Annette Weissbach, Hydrogeologist
Northeast Region Remediation and Redevelopment Program

Cc: Dave Henderson – AECOM
James Blaha – Manitowoc County Health Department
Liz Evans – DHS
Liz Heinen – DNR
Steve Ales – DNR
Tauren Beggs – DNR
Roxanne N. Chronert – DNR