NEWTON GRAVEL PIT MINUTES CITY OF MANITOWOC/DNR November 2, 2015

Attendees: Dave Henderson – AECOM

Dan Koski, Kathleen McDaniel, Greg Minikel, Karen Dorow - City of Manitowoc

Tauren Beggs and Liz Heinen – WDNR Absent - Dave Johnson – WDNR via phone

1. Potable Well Testing Results

- Three new detects
 - o 4002 Thunder Ridge Cis to Cis & VC. Home has an RO system. Matthew McFarlane purchased the house in June, 2015. It is a 200 foot well so we may want to revisit the new well depth at this property. There are enough properties around this one that we do not want to keep this well for monitoring purposes.
 - o 2917 CTH CR Home is for sale/sold. Planning on putting water main lateral in.
 - 3303 Hecker Road no one is living there. Jordan was in there house was broken into in the past and copper stolen. Michael Rogers owner. Trying to get in contact with him. Hold off on doing anything at this property until it is habitable again. L. Heinen advised it is best to get rid of the well so it does not push contamination into the limestone. D. Henderson reported that Cis has come and gone there and it is considered right at edge of the plume.
- All other testing was consistent with past results.
- Approval for leaving wells along new water main area. City proposed keeping the following
 wells along Viebahn for monitoring and property owners to use as non-potable wells for garden
 watering.
 - 3617 Viebahn Trembley, keep well for monitoring and gardening purposes. Request to Trembley to use as a monitoring well.
 - 3701 Viebahn Phillip, keep for well for monitoring and gardening purposes.
 - 4141 Viebahn/2717 CTH CR Haupt, keep well for monitoring and landscape business watering
 - L. Heinen does not have a problem with them staying open for now. She will check with her Madison office. Trembly, Haupt and Phillip are middle and end points so it would work. Three will be enough.
 - Pumps will be left in the wells and a freeze proof hydrant or hose bib should be added.
 Plumber installing should make sure there is no cross connection. The property owner would be responsible for the well abandonment in the future if they chose not to have it any longer. L. Heinen would favor a yard hydrant rather than have a hose bib.
- 2734 CTH CR Affordable Auto Agreements for all property owners are being worked on. K. McDaniel will send certified mail a letter explaining what is going on and will send along an agreement for him to sign. D. Koski advised that M. Harmon was the person leasing the business and was trying to get more information about the owner. City is moving forward with the water main either way.
- Safe drinking water grant submittal has been done. Submitted a few days early. Scoring parts are in, ITA and PERF. D. Henderson sent in a lot of background information. Habitat - clear on environmental restrictions because of the construction date. Archeological review is done and report is being drafted. UW Milwaukee is doing the work.

- 2. Water main update
 - Covered under #1
- 3. Update on communications with current impacted well owners
 - Covered under #1
- 4. Groundwater Monitoring Results
 - D. Henderson has all the results. Groundwater flow is the same, southeast. Test results are pretty consistent with the last round of testing. Well nest on Robert's property got a Toluene hit. Everything else is the same in terms of the plume. Toluene hit by the Gravel Pit driveway last time is gone. Mancheski's is the same as original results. When you look at the data for WT-16 it still seems to point to another source. No new parent compounds were found to fingerprint it. This was the second round for new well nests. AECOM would like to start saving City money on monitoring well testing. Suggesting to the DNR to cut the number for annual testing from 44 to 22. We can see how it coincides with construction. If we leave the three wells on Viebahn for non-potable use and monitoring that would make 47 monitoring wells.
- 5. 3504 CTH CR Priority IAC Well Installation Update

Exchanged some more emails with Priority IAC. DNR suggested a letter to them that we have been working with you to get this well replaced. A well down gradient from you has a VC hit. Your well could be acting as a conduit moving contamination along. The DNR is requiring us to get this well abandoned as soon as possible. If you do not comply this could open you up to liability.

6. Technical Memo Updates

There are four tech memos.

- SVE pilot
- Proposed pond
 - O Pond delineation At the middle we are looking for bottom of plume. Area is flowable sands. Confirmation samples were the same. Well is clean in the middle, still have a hit on the bottom. Discussing putting in two more temporary piezometers to try and get to the bottom of the plume. Pond north end to south end is approximately 550 feet. Still working to figure out vertical delineation.
- Potable well plume delineation
 - First goal was the historic background search. Found one additional well log. D.
 Henderson is working to finish the memo for phase one. Phase 2 is pulling the pumps on five wells in between the two plumes. This will delineate depending on where they are screened.
 D. Henderson will pull of all of the information into this memo.
 - o Groundsource and ROE Agreements Groundsource would like to come and look at the locations. There is a concern about code with wiring and cap. If it is not to code, would we be liable to bring up to code when pumps are pulled. L. Heinen will need to think on whether DNR will require bringing them up to code.
 - D. Henderson talked about an interesting Fractured Bedrock Paper. D. Henderson will forward to everyone. Look at in terms of the life of the project.
- Contaminant characterization
 - Working on a waste characterization memo.

 Contaminant samples came back pretty much the same as in the past. 1994 PCS 77 this time around 394. Both over 50 no change. Density still less than one.

7. Remediation Design Updates

• D. Henderson is looking at the pond delineation considering a 50 - 100 year design life. Even though the plume is deep at the pond site, the pond still makes most sense. He is investigating a design to include a cut off wall. Since we don't want to dig a 40 foot deep pond, we would look to catch the bottom of the plume using a slurry wall to intercept the groundwater flow. Design would have slurry wall and a pump pulling the groundwater into the pond and to aerate. Pond would be narrow and long. AECOM is working on the best possible options. Width design calculation would need to be wide enough to capture water flow when iced over and hold water long enough for the volatilization factor. D. Henderson requested that K. McDaniel supply him with the known zoning requirements for wind towers. A slurry wall would be less expensive that a pump and treat option. T. Beggs would like us to stay away from pump and treat.

8. Well house update – 3403 CTH CR (Schnuelle) & 3023 CTH CR (Eberhardt)

- D. Koski and Mr. Eberhardt traded voice mails for a while. Mr. Eberhardt built one on his own.
- D. Koski sent Mr. Schnuelle an email of the drawing. Mr. Schnuelle advised that he could work with a plumber to do his own.

9. Special Well Casing Area – WDNR Update

• L. Heinen just finished writing up a position paper for her administration on who intended audience would be. She is waiting for that approval. She is also working on letter to homeowners. L. Heinen will send letter to K. McDaniel for edits. Hopefully this will be done before open house so we can talk about it at the open house and address any questions.

10. WDNR Warden interviews

• The warden met with the Voelkers (her sister was there). They live north of the site on Viebahn. The main take away from the visit was they saw Mirro trucks out there but did not see dumping. They had called T. Beggs in 2014 and revisited after the wardens Trembley visit. They did see raw sewage across from the gravel pit site. In the bus area garbage was dumped and burned. They accurately marked a couple of areas. They also said there are two children alive belonging to the caretaker who lived on the gravel pit site until 1972 or 1973. The caretaker was a city employee. These would be two other potential people to contact. K. McDaniel said yes would like to have them tracked down. T. Beggs will talk with B. Stroess about doing interviews with these new names.

11. Soil Drum Status

 Drum test results have been received and D. Henderson provided them to T. Beggs. T. Beggs will go back and discuss with the DNR waste program. Hopefully we will be ok to dispose of on-site. T. Beggs will advise.

12. Webpage Update

 K. McDaniel will tie in information on the open house to the website. The open house is for impacted property owners who will be notified with a postcard. Information will be consistent with what we have done in the past.

13. Open House

- K. McDaniel contacted K. Behnke from the Town of Newton about using Town Hall. She will advise when she gets the approval.
- K. McDaniel also met with the Town of Newton's legal counsel and updated her on the activities in the area.
- Timeline used at the open house last year will be updated to include the activities over the last year. K. Dorow will update.
- Team feels it is helpful to have L. Evans and A. Wergin there from the public health area. K. McDaniel will reach out to them.
- K. McDaniel will talk to T. Caulum about the water main map. We would like to have a visual map showing existing water main and how we are connecting to it for the extension. Suggestion to print out R. Michaelson's map.
- D. Henderson will provide a summary of remediation actions being worked on. It will include the pilot study and groundwater evaluation.
- It was decided that we do not want to advertise that there may be a pond on the property.
- D. Henderson will bring a map with current testing updates.
- D. Henderson will bring a map with cross sections.
- E. Culhane will do the press release and media advisory indicating that impacted and affected property owners were mailed an invitation.
- K. Dorow will take care of coffee, juice and water.
- K. McDaniel, L. Heinen and D. Henderson will bring cookies/muffins.

14. Other topics

15. Schedule next meeting

- Meeting Conference Call December 1st at 10 am. Use D. Henderson's Conference number.
- Next scheduled meeting will be January 14, 2016, 10:00 am at City Hall.