NEWTON GRAVEL PIT MINUTES
CITY OF MANITOWOC/DNR
September 27, 2017 1:00 pm
2nd Floor Conference Room

Attendees: D. Henderson – AECOM
D. Koski, K. McDaniel, G. Minikel, K. Dorow – City
T. Beggs, J. Merry, J. Kasdorf – WDNR

1. May 2017 Potable Well Sampling Report Update

- D. Henderson gave an update. DNR should have copies of the May 2017 sampling event. Everything was status quo with the sampling.

2. Construction Update

- D. Henderson had a slide show on progress at the site. J. Kasdorf coming into this only recently asked for a quick summary of activities related to the Gravel Pit. D. Henderson reviewed the map and gave him a summary and went into the slideshow on construction. He went through the phases of construction with a photo log as construction commenced. J. Merry asked when the trees were going to be planted. D. Henderson stated trees will be planted next year. R. Zalesny started out with about 100 species of trees. He came and got a load of soil and took it back and has narrowed it down from 100 to 50 to 25 and now is down to about 3 – 5. They will study those through the winter and make a final selection in the spring. They are also going to put willows right around the bank of the pond. D. Henderson offered at the end of the meeting if they would like to go to the site and walk it or drive it. The general contractor will have to come back when the rest of the parts are received and install them at a later date. The contractor has demobilized the majority of their equipment. In the middle of the pond is the pond mixer. It is about 16 feet in diameter and has three pontoon floats and three solar panels. It has a big impeller in the middle of it with a tube that drops down to the bottom of the pond. It just moves the water up the column and spills it out over the top of the mixer. We circulate about 1-pond volume with the solar mixer about every five days. The pond treatment is supposed to be volatilization and solar oxidation. J. Kasdorf asked if we were adding any enzymes to prevent weed growth and bacteria in the pond. D. Henderson said not at this point. He expects that some cattails will grow and the willows will be planted along the edges so it should not be an issue to begin with. J. Kasdorf asked if the pond intersected the entire plume. T. Beggs explained that it is at the edge of the plume due to property boundaries, that is why it is kidney bean shaped. D. Henderson added that is why we are pumping the pond to get a capture zone to it. T. Beggs asked if any residents had inquired about it. D. Koski said no, but we have had some issues with trespassing by ATV's. The city has placed additional signage and put up trail cams to address the issue. The neighbors all seem fine with what is going on.

3. Pond Operation & Maintenance Plan Update & Groundwater Monitoring

- J. Maletzke talked to D. Johnson about placement of the new monitoring wells and he was very general in the discussion. 20 monitoring wells were taken out to accommodate construction. Not counting our source area work scheduled for next year, we are replacing 18 wells. T. Beggs and D. Henderson discussed in general how to monitor the pond elevation in its operation as well as

continually monitoring the ground water. J. Merry asked how are the new monitoring wells located compared to the old wells. D. Henderson went over locations. They are at water table, 35 and 50 feet bgs. There will be a staff gauge in the pond and a staff gauge on the outlet. We will also gauge the over flow at the weir structure for the flow rate. Monitoring wells are scheduled to go in in three weeks. Annual monitoring takes place sometime the end of October, beginning of November. We are using the wells three different ways, ground water flow, capture zone for the pond both vertical and horizontal, and contaminant. Three wells we are calling water table up gradient wells. We want to operate the pond approximately six inches lower than the water table to facilitate capture zone. He is writing the manual so that we monitor these three wells, average them then go to the staff gauge and check the staff gauge elevation and adjust the stop logs at the weir outflow structure to keep the pond below groundwater elevation grade. D. Koski asked if we will be doing a grab sample from the pond when we do the groundwater monitoring. D. Henderson states yes, as soon as they stop digging, hopefully within three weeks, our WPDS permit will kick in. We said we would do weekly samples from the pond, from about the staff gauge location, until we have two or maybe three consecutive tests below the discharge limit before we can open the valve to the pond to the creek. The last two weeks of October, they will do on-site ground water monitoring, new wells are going to be in, and we will sample everything which is between 50 and 60 wells now. We will survey in the new wells, sample the pond, and the same two weeks we will do all of the semi-annual potable well sampling. J. Kasdorf asked what the flash flood backflow safety from the creek is. D. Henderson said 15 feet of elevation in general. T. Beggs said it would have to over top the road and we have never seen that happen. D. Henderson said we calculated the drainage basin for the pond based on the 100 year average and it is just the gravel pit itself.

4. Groundwater Monitoring Schedule

- D. Henderson said the October sampling event is coming up. It will be the first look at ground water mapping data with the pond.

5. Cost Recovery Update

- K. McDaniel reported that this is an undertaking over the last 18 months we have taken very seriously. We have an offer to settle out to PRP's now through the formal DNR cost recovery process. Waiting for admissions of service back from all of them. Several attorneys have been in contact with our counsel, N. Witte, of Godfrey and Kahn. We are about 6.5 million dollars into this project with what we have spent so far and what we are projected to spend next year so we are very hopeful that we will see some money flowing back towards the city. Our city has had to delay a lot of other capital projects we would like to do for our citizens in order to accommodate this project. While we understand that this is a life safety issue, if is very frustrating that we have had to move money to this project instead of other infrastructure projects like roads and aging vehicles. At J. Kasdorf's request, K. McDaniel gave him the short version of the RP situation. Most of the big contributors are still in business. Mirro was absorbed by Newell Rubbermaid, Heresite, Invicible, and Manitowoc Company, both their crane building division as well as their food service and ice divisions. The City is excited about this because the City and its taxpayers should not be bearing the full brunt of this issue. J. Kasdorf asked if there were any other places that the City could get help from. K. McDaniel said that T. Beggs had done a pretty thorough job of researching what was available from the state and there was nothing and A. Weisbach had it before T. Beggs. K. McDaniel asked if they had any ideas for funding we would be open. T. Beggs added that they did do a preliminary assessment for EPA funding and the EPA was not really interested in this site.

6. Phytoremediation Update

- D. Henderson gave update. We have not gotten a contract yet from the US Forest Service yet. He said that was not unusual for a no cost project. We had a tour a couple months ago with all parties of the study. Nothing will be done now until next year. We have not seen VOC results on trees that they tested. Everyone was curious as to what the results are. After trees are planted, they will be using a gauge that will tell them how much water is being taken up daily into the tree. This is really a win-win project for the City and the DNR. Thanks to T. Beggs for putting us in touch with them.

7. New VOC detection at 2918 S. 26th Street

- D. Henderson gave an overview of the current map of the target zone, three year sentinel zone and five year sentinel zone. He pointed out where the plume hits bedrock and travels east toward the lake. He reviewed what each of the colored circles on the map means. He described the three types of zones, target zone which is around the impacted wells. Within the target zone we have wells with no impacts. Outside the target zone is the yellow zone, which is our three year sentinel zone, every three years in a rotation wells in this zone get sampled. Outside the yellow zone is a five year sentinel zone, which wells are sampled in a rotation every five years. Notes on the map give an address, well depth, and what layer it is in. All the information we have about wells is on the map. D. Henderson pointed out that we feel we have two target zones. One that makes sense for our source. There is another target zone that doesn't make as much sense and we have argued historically that the junk yard on CTH CR is of interest to us as another potential source. There was one outlying hit of benzene in this area. We went to USGS down in Monroe and met with their regional geologist. The geology of the area was discussed. Their opinion was a flow like this could be a possibility. We are not convinced yet and are still trying to figure it out. We have not accepted that the upper target zone is due to us. The open circles to the north are wells that were replaced with city water last year. Nine locations along Viebahn and CTH CR. A couple of those properties along Viebahn were actually in the city limits. In the recent area, the east side of S 26th Street is the Town of Manitowoc, on the west side it is the Town of Newton. The lot to the north of the recent detect is owned by the Manitowoc Company. He asked about records for spills on the Manitowoc Crane property and there were no records of any spills there. K. McDaniel also pointed out the well that was near the entrance to Silver Creek Park that had a VOC detect that the DNR had the public utility abandon in the early 90's and was never investigated. We would like to see the DNR do a little more investigation with the junk yard property on CTH CR and the Manitowoc Crane site to see if there is anything else that could be a contributing party. Geology changes as you move east of I43. Up to I43 is sand and gravel, at I43 is till will a little sand and gravel. It is mapped at a till. The reef they discussed with geologists is deeper into the bedrock.

- K. McDaniel stated that we don't have the ability to go on other people's property and investigate and is concerned that we have a known manufacturing industrial operation directly to the north of this and directly to the south west of this. J. Merry is in agreement that there may be another culprit in the area. What would be the next step. T. Beggs gave a heads up to his supervisor. K. McDaniel feels we have a legitimate reason to ask the DNR do additional investigation here. The City has stepped up and done everything that the DNR has asked of us to date or had a legitimate reason not to and suggested alternatives. T. Beggs said that they have a lot of discussion on what to do within the DNR. J. Kasdorf asked about free product removal at the site. T. Beggs said that due to City budget constraints we approved a phased construction and that free product removal and SVE will be done in 2018. J. Merry asked T. Beggs if he needed something from the City in writing regarding investigation they are asking for because she feels it is a legitimate concern that there may be other sources that are impacting this well. T. Beggs asked for a letter from the City to request they do additional investigation in the area for other possible sources. J. Merry suggested getting the CD with well logs on them to try and assist us in locating well construction logs. K. McDaniel also mentioned that if municipal water was the

chosen option, Mrs. Novy would like to keep her well for garden watering and it would be a good sampling well for the future. J. Kasdorf said that it would need to be discussed by the DNR.

- J. Kasdorf asked who collected the sample and how they did it. K. McDaniel said that Mrs. Novy collected the sample following the labs instructions and sent it to the Lab of Hygiene. D. Koski noted that AECOM did a confirmation sample for the property and results were pretty much identical. J. Merry stated that our initial response to Mrs. Novy wanting us to sample was spot on (she is an outlier and outside of our area of concern), and there is a potential source to the north so we just don't know what is going on at that site. She also said she was glad that Mrs. Novy did the sample and we know what is going on but also thinks it's a stretch to point the finger in one direction. J. Kasdorf asked about the Heresite property. T. Beggs said that the Heresite Property has been pretty well investigated and K. McDaniel stated that we had Stantech do the work and the closure when we took the site over so we don't think it is that.

- K. McDaniel asked if we need to do two letters, one for additional site investigation and one for Novy's keeping existing well for watering should municipal water be the chosen option. T. Beggs said all on one letter would be ok and that he, J. Merry and J. Kasdorf would work together on it. K. McDaniel said she told Mrs. Novy that there would not be an immediate resolution to the water issue. Mrs. Novy's biggest concern with either well drilling or city water was her keeping her landscaping intact and the concrete slab behind her house. K. Dorow spoke with her last week and told her it could be several months before any decisions were made. If municipal water was the choice it would not happen until next summer. J. Kasdorf asked about point of entry treatment systems. D. Koski said that we had looked at that in the past and we were told by L. Heinen at the time in no uncertain terms that it was not an acceptable long term solution. J. Merry said that DNR 738 was designed for manure run off but may be able to be applied in this situation.

- J. Kasdorf asked about the topography of the Manitowoc Crane site. G. Minikel said that there was a lot of paved parking area, however, the crane staging and storage area was primarily gravel.

8. Other Topics

- D. Henderson mentioned that the tables on the reports are getting very large and he needs to find a better way to start managing them. He is spending a lot of time updating these tables. T. Beggs will see what they do for his superfund site. D. Henderson will keep the current tables for his October report and then will be looking for suggestions.

9. Next Meeting - November 8, 2017

- T. Beggs said from a remediation construction standpoint everything was going as planned. Schedule a conference call for November 1, 2017 at 9:00 am, unless something comes up before. K. McDaniel will send out the invitation and D. Henderson will provide the number for calling in. J. Merry will be off of this project then, but can be called in by DNR as needed.