RAC COMMUNITY MEMBER COMMENTS

2020 LONG TERM MONITORING REPORT

From Bill Fetter – Science Committee

SECTION 1.2

URP Site 2 - Has there been or will there be an effort to delineate and quantify pesticide product? Can the pit (source) be excavated & removed?

Were the tanks removed at the time of remediation?

The report implies the tanks were in a specific known area. Perhaps all the containers were not retrieved. Perhaps additional geophysical work and further excavation is warranted. The landfill cover can always be repaired/replaced in that area.

Set a well in the landfill footprint immediately down gradient of pesticide dump?

SECTION 1.3

Has there been any thought to performing a few transects of shallow gas monitoring over the middle of the landfill for potential leaks in the cap?

SECTION 1.4

At the end of this section there is discussion of deeper wells into competent bedrock. As the local shales can be brittle and fractured, where fractures characteristic if the rock in these wells? Was the rock cored to aid in the segment of well to be screened? Has any fracture trace analysis been performed to date? Might it be recommended?

This brings into question the integrity of MW-17 which is reported to be a bedrock well.

First, the well was reported to be partially submerged/buried prior to sampling. Could you explain why?

Strangely, there was no trouble purging this well while maintaining the required minimal draw down. This is typically a difficult task in tight rock. I was unable to review the older reports to find the well log. Is the bedrock section of this well fractured allowing for continued recharge or perhaps, is the seal above the screened section of the well compromised so as to allow surface waters to enter the annular space around the screened area? Why is there no riser pipe above grade?

SECTION 2.2

It is mentioned that ORP was measured. What does this parameter indicate? What would make the oxidation/reduction potential vary in the groundwater, leachate or surface runoff?

Why is the value significantly different in MW-17 compared to all other readings? Is this evidence of the presence of the metals in the water at this location?

If this well is indeed impacting bedrock hydrology with metals, an additional downgradient bedrock well appears warranted. Not a well in till or at the till/rock interface.

SECTION 2.3

At the end of this section, there is a reference to a preceding section (2.3) that I believe is intended to be 2.2

SECTION 2.5

Why was a hammer drill needed to advance a probe hole? Is/was the soil dense enough to require that much energy? Would it be beneficial to lean toward softer more permeable areas that may be preferential migratory pathways?

Is the hammer drill possibly circulating air into the probe hole during drilling so as to displace any vadose sample with fresh air?

Recording ambient and probe hole temps made aid in the assessment of decomposition gas mobility and quantities.

SECTION 3.6

Reviewing the long term monitoring graphs, it was evident that the MDL for certain parameters was elevated by significant amounts. Why would one choose (if that is the case) to employ a less sensitive analysis when the data is being used to forecast and plan future actions?

Is/was cost a factor?

SECTION 4.0

Conclusion #2 closes by saying release of particular compounds has "affected" downgradient water quality. A more appropriate description such as "negatively impacted" is warranted.

Conclusion #8 alludes to continued monitoring for assessment of additional action. How long, how many testing cycles are projected to be needed for recommended additional actions?

GENERAL

Has there been any attempt to normalize some of the highly variable results over time with an overlay of preceding rainfall. A 30 or 60 day trailing cumulative rainfall may shed some light on product mobility and quantity.

I tighter spaced downgradient well pattern or at least soil probes would help better define soil/rock migratory pathways

Given today's myriad of geophysical (seismic, ground penetrating radar, geothermal and other methods), perhaps a continuous subsurface cross section could be developed from north to south at the base of the landfill to better locate east/west troughs along the soil/rock horizon. This may provide some insight into potential leachate migratory pathways.

Baseball field? Vent integrity/

Up gradient slurry wall? Diversion

Low side barrier wall and leachate collection system?

What does the "X" mean in the recovery/lithology portion of your logs? Not shown in key that I saw.

From Victoria Leung/ Ellen Ivens, Riverkeeper

The report summarizes long term monitoring associated with the closure/post closure of the old onsite landfill which received residential waste under NYS regs. Based on the data, there clearly was a source of PCE and TCE onsite within the landfill. The upgradient well did not have VOCs. DCE and VC are breakdown products of PCE and TCE so the data indicates that PCE and TCE are breaking down (dechlorination – when one of the chlorine atoms is knocked off so PCE (4 chlorine) becomes TCE (three chlorine) then one of the DCE's (two chlorine) and finally Vinyl chloride (one chlorine). The detection of cis 1,2 DCE in mw 19 is interesting. It is not above standards just a detect but it appears to be the first time it is detected in a downgradient well and Wood does say they will keep an eye on it. Vinyl chloride jumped in another downgradient well MW 16. It is difficult to say too much about one sampling point but it is a change in the pattern that they will keep an eye on. It is always disconcerting when you see a contaminant in a downgradient well that is supposed to be

“clean” because it shows the contamination may be moving. One data point is not enough to draw any conclusions but if the pattern continues next year they will need to spend more time understanding it.

Several of the monitoring wells are also sampled for PFAS as part of the site investigation and the results are not discussed in this report. The wells can be monitored for both VOCs and PFAS without creating problems.

Our questions for Wood are related to the appearance of contaminants in the downgradient wells and how they will respond, clarifying what they mean when they say they will pay attention to the wells.

- Will they increase monitoring frequency?
- How will they determine if additional monitoring is required?
- Which are the sentinel wells for this plume? (sentinel = guard. You put in wells outside of the extent of the plume. If the wells become impacted the plume is migrating)