From: <u>DiMaggio, Janet H - DNR</u>

To: "Jason Bartley"; tkiindra@aol.cm

**Subject:** Block Cleaners - 11/18/19 Meeting Notes and Next Steps

 Date:
 Monday, November 25, 2019 8:43:00 AM

 Attachments:
 Block system Cleaners Madison.msg

Block Cleaners Madison.msg

#### Todd and Jason,

This email is documentation of our discussion on 11/18/19 of the Block Cleaners site located at 2017 Winnebago St., Madison.

# Background:

In September 2015, the closure committee responded to a closure request with an "additional actions needed" letter. These actions were:

- 1. A better definition of the contaminant plume at depth,
- 2. More exploration of the source of contamination, and
- 3. The possible need for groundwater and soil remediation.

A technical assistance meeting was held on June 27, 2017 to discuss additional site investigation (SI) and possible groundwater and soil remedial measures. A July 25, 2017 email was sent by the Department in response to the meeting and five follow-up questions from Ready Earth. That email is attached. The additional SI work included installation of additional piezometers, groundwater monitoring, shallow soil sampling, paired subslab and indoor vapor sampling, and a report. Four of the additional questions related to the additional site investigation. The fifth question related to active remediation. Note: The Department recommended active remediation and suggested soil vapor extraction and a pilot test.

On September 23, 2019, the Department received the Site Investigation Addendum dated September 17, 2019. The results of the SI Addendum were brought to our Peer Review on October 17, 2019. An email was sent to you on October 18, 2019 indicating the committees response (attached).

## Summary of November 18, 2019 Meeting

You requested a phone conference to discuss the October 18, 2019 email. The phone conference was held on November 18, 2019. Jason Bartley & Todd Jindra were on the phone with Wendell Wojner and me. A brief summary follows.

- You are not exactly sure where the source is, it appears to be proximal to MW-4. You stated that if there is soil/vadose zone contamination it is not extensive and not a significant source of continuing contamination.
- The soil samples analyzed for both MW-4 and GP-1 were from the saturated zone.
- Perc was delivered by a mobile unit that parked in the rear driveway in the vicinity of MW-2 and a hose connected directly to the dry cleaning machine. The machine was accessed by an overhead door in the MW-2 area. This occurred in the early 1990's. Spot cleaning was performed at the site. The location of which was not entirely clear on the phone. It was inferred the spot cleaning utilized perc, please clarify if this or other solvent(s) were used.
  - There was a sump used to collect wash water. Discharge of the wash water was in a

poured concrete trench in the basement of the oldest portion of the building.

- The back door was by MW-4.
- A floor drain was in the room that held the former Stoddard tanks.
- Maps showing the utility corridors will be sent.
- You are not sure how to address the finding of the source of the perc discharge. You mention that the plume is attenuating.
- The recent piezometers (PZ-2 & PZ-3) installed in 2019 were both screened in the fine silty clay unit. A sandy unit was above the silty unit and it was in the sandy unit that groundwater impacts above the ES were observed in upgradient PZ-1. Screen setting decisions in the field are difficult but it would have been better to set one screen in the sandy unit to see if the contamination was migrating through that layer above the finer grained silty unit.
  - Jason said the blow counts in both units were similar and that both units were "hard".
  - Jason said PZ-1 was trending down in 2019.
  - There was one groundwater sampling event in 2019. (Janet believes the overall trend is stable.)
- Jason stated the current contamination is 30 years old.
- Todd had questions on timeline, how long it would take to get closure. An estimate (<u>if all site investigation requirements are met and future submittals are complete</u>) of Spring 2020 was given.

## Direction given to move site forward:

Use the two attachments above, address each item, and provide a succinct explanation for outstanding questions.

- This includes but is not limited to providing a better explanation for source areas. This should incorporate information on buried utility corridors, the quick connect and parking area for perc truck, doors, etc.
- Provide a reason why additional borings and wells are not needed. Consider the degree and extent of contamination. Discuss soils (including the direct contact interval), groundwater pathway, groundwater flow direction, lithology, and plume migration.
- Provide a map including the utility corridors, floor drain(s) and overhead piping to sanitary on Winnebago Street, trench, wells, & boring locations.
- Provide reasons why active remediation is not being proposed.

This information will be submitted in a report and used to present to the Department's Peer Review Committee to provide any input on actions needed for a possible closure submittal.

Jason said a report could be submitted in early January. If you have any questions, please contact me.

#### We are committed to service excellence.

Visit our survey at <a href="http://dnr.wi.gov/customersurvey">http://dnr.wi.gov/customersurvey</a> to evaluate how I did.

Janet DiMaggio, P.G.

Hydrogeologist, Bureau for Remediation and Redevelopment/Environmental Management Division Wisconsin Department of Natural Resources 3911 Fish Hatchery Road, Fitchburg, WI 53711

Phone: (608) 275-3295

 From:
 DiMaggio, Janet H - DNR

 To:
 "Jason Bartley"

 Cc:
 "blockcleaners@att.net"

 Subject:
 Block Cleaners Madison

**Date:** Friday, October 18, 2019 8:17:00 AM

Hi Jason,

I brought Block Cleaners to Peer Review this week. The Department's September 11, 2015 letter in response to the earlier closure request asked for:

- 1. A better definition of the contaminant plume at depth,
- 2. More exploration of the source of contamination, and
- 3. The possible need for groundwater and soil remediation.

Additional work is still needed to address these concerns.

You submitted a SI Addendum dated September 17, 1019. We do not believe the SI is complete. The SI Addendum discussed the installation of one well and three piezometers in April 2018, and six soil probe borings in April 2019 to evaluate potential vadose zone source areas. No boring logs were attached; you will need to submit those.

- Three soil probe borings were located near the former Stoddard USTs and one boring each was located near wells MW-2, MW-3, and MW-4. Samples were collected from the 2-4' and 6-8' intervals. Except for P-3 (which had a GW pathway exceedance for perc, J flagged) located near the Stoddard USTs, no exceedances were observed. We don't think the Stoddard tanks were the source of the perc. The source of the perc is still unknown.
- The cross-section showed PZ-1 screened in well-graded sand. This piezometer had groundwater ES exceedences. The new piezometers, PZ-2, PZ-3, and PZ-4 were deeper and all screened in hard fine sandy silt. It is possible that the contaminant plume core is in the sand layer and not diving as depicted in the cross-section.

We have questions on the location of the source area(s). We are asking you to provide a better explanation of the potential sources and include a map that indicates buried utility corridors, location of any sump in the buildings, location of the quick connect for the perc, and locations of any doors on the Block buildings. Additional soil borings and/or wells may be needed based on your additional evaluation.

You should submit a budget for a workplan and additional site investigation.

If you have any questions, please contact me to discuss.

#### We are committed to service excellence.

Visit our survey at <a href="http://dnr.wi.gov/customersurvey">http://dnr.wi.gov/customersurvey</a> to evaluate how I did.

Janet DiMaggio, P.G.

Hydrogeologist, Bureau for Remediation and Redevelopment/Environmental Management Division

From: DiMaggio, Janet H - DNR
To: jbartley@ReadyEarth.net
Subject: Block system Cleaners, Madison
Date: Tuesday, July 25, 2017 11:03:00 AM

Attachments: image013.png image015.png

### Good Morning Jason,

Thank you for your phone call this morning. The committee met last week, considered the submitted work plan and suggestions I made, and offered the following direction.

- 1. The site investigation needs to be completed.
  - a. The proposal included a nested deeper PZ near the current PZ-1 and a set of nested PZs across Atwood Ave. The committee would like a WT well added to the two proposed PZs offsite.
  - b. Four rounds of GWM.
  - c. Shallow soil sampling around and in the presumed source area is needed.
  - d. Paired subslab and indoor air vapor samples are needed for the 2000 Atwood property.
  - e. A report of the completed SI is needed.
- 2. In answer to the five questions you asked:
  - a. Is further shallow, lateral delineation required down-gradient of MW-6? Yes. One new proposed well should nest with existing PZ-1, and two proposed PZs should be installed nested with a WT well down-gradient and across Atwood Ave. New wells need to be geologically logged (not blind drilled) with representative soil samples taken for analyses. All site wells need to be surveyed to the national geodetic survey datum.
  - b. If the results from the initial two sampling results from the down-gradient piezometers are below enforcement standards, can the groundwater sampling be terminated?
     You need to request this in writing and DNR would respond after evaluating the data.
    - c. Is further source evaluation required?
      - Yes. See number 1, above. The source needs to be identified. Direct contact soil samples (preferably 2-4' bgs) are needed in suspected source area and outside of the building (by GP-1, MW-3, GP-2) to define the source and extent. These direct contact zone samples should be paired with samples in the 4-8' bgs interval.
    - d. Can the vapor mitigation systems (VMSs) operating in the west portion of the dry cleaning building and neighboring property (see figure B.4.a. SSDS-4 through 8) be discontinued?
      - Yes, it is not required by existing data. It might be a good idea to let it operate or to offer this option to existing tenants or owners or those properties.
      - Please note that paired subslab and indoor air vapor samples are needed for the 2000 Atwood property.
  - e. What are the factors that DNR would consider relevant to show that active remediation is not required in order to achieve closure?
    - There is potential for DNAPL at the WT in the vicinity of the source. An active remedial measure is needed as the data show high concentrations. The committee

suggested consideration of SVE and a pilot test. A question arose to the nature of the subsurface materials. Please verify if there is fill or if the subsurface material are native soils.

Please let me know if you have any questions.

#### We are committed to service excellence.

Visit our survey at <a href="http://dnr.wi.gov/customersurvey">http://dnr.wi.gov/customersurvey</a> to evaluate how I did.

# Janet DiMaggio

Hydrogeologist, Bureau for Remediation and Redevelopment/Environmental Management Division Wisconsin Department of Natural Resources 3911 Fish Hatchery Road, Fitchburg, WI 53711

Phone: (608) 275-3295 janet.dimaggio@wisconsin.gov

