

Jorgensen, Theadora O - DNR

From: Ryan, Nancy D - DNR
Sent: Thursday, May 31, 2018 2:12 PM
To: 'Adam Roder, P.E.'
Subject: RE: 0241581016_MSOE Diercks Computational Science Hall

Hi, Adam,

Yes, based on the results of the additional sampling, I concur that no additional groundwater monitoring will be required at the MSOE Diercks Computational Science Hall site and since the wells will no longer be needed, you may abandon them.

Let me know if you need anything further.

Thanks,

We are committed to service excellence.

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

Nancy D. Ryan

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From: Adam Roder, P.E. [mailto:aroder@thesigmagroup.com]
Sent: Thursday, May 31, 2018 1:43 PM
To: Ryan, Nancy D - DNR <Nancy.Ryan@wisconsin.gov>
Subject: RE: 0241581016_MSOE Diercks Computational Science Hall

Hi Nancy,

Just checking in to see if you can look at this...recommending that we abandon monitoring wells MW-1 through MW-5 be in accordance with NR 141 regulations before construction begins at the site. Excavation is still being delayed due to City permits, but now looking like next week.

Thank you,

Adam

From: Adam Roder, P.E.
Sent: Friday, May 25, 2018 10:17 AM

To: Ryan, Nancy D - DNR <Nancy.Ryan@wisconsin.gov>

Subject: RE: 0241581016_MSOE Diercks Computational Science Hall

Good morning Nancy,

We conducted the 2nd groundwater sampling event on May 14th in anticipation of the construction beginning on Wed. May 16th. The start date got pushed back to Wed. May 23rd, and now the start date is still delayed as the construction manager is waiting on a couple City of Milwaukee permits...so no NR 718 soil hauling this week, but hopefully next week. In the meantime, this has allowed us to receive and review the latest groundwater lab data.

In short, the groundwater results were similar to the 1st sampling event:

- Water elevations indicate groundwater flows southeast across the southeastern portion of the site, and possibly to the west (with a very shallow gradient) across the northwestern portion of the site. A current groundwater flow map is attached.
- Groundwater data are summarized in the attached data table and groundwater quality map (lab report also attached for reference):
 - o VOCs reported below detection limits in wells MW-1 (PCE PAL exceedance from 1st sampling event was not duplicated), MW-2, and MW-3. VOCs reported below detection limits in well MW-4, except for an estimated concentration of chloroform. VOCs reported below detection limits in well MW-5, except for an estimated concentration of bromodichloromethane (not a ES exceedance per NR 140.1(3)(c)), chloroform (confirmed to be above its PAL, but below its ES), and an estimated concentration of dibromochloromethane (only in the duplicate sample). So no ES exceedances, and only the chloroform above its PAL in well MW-5.
 - o PAHs – nearly all reported below the laboratory detection limits. Each well had 1 to 2 compounds with estimated concentrations. No PAL exceedances.
 - o Dissolved RCRA metals – nearly all reported below the laboratory detection limits, a few background-level type detections. No PAL exceedances.

Based on the results, we recommend that monitoring wells MW-1 through MW-5 be abandoned in accordance with NR 141 regulations before construction begins at the site. We request a brief email concurrence that no further groundwater monitoring is needed and that the wells may be abandoned. Let me know if you have any questions or want to talk more.

Thank you, and have a great Memorial Day weekend,

Adam

From: Adam Roder, P.E.

Sent: Thursday, April 12, 2018 10:49 AM

To: Ryan, Nancy D - DNR <Nancy.Ryan@wisconsin.gov>

Subject: 0241581016_MSOE Diercks Computational Science Hall

Hi Nancy,

Thanks for the conversations yesterday and this morning – it's always nice to talk through questions and comments on report submittals.

To clarify a bit more on the groundwater monitoring, we are planning for a 2nd sampling event in late May / early June (as close to 3 months after the 1st sampling event [3/5/18] as possible, but before construction commences). All five wells will be sampled for VOCs, PAHs, and dissolved RCRA metals. The hope is that this 2nd event will confirm the initial results of very limited VOC impacts (all non-detect, except for the PAL exceedance for PCE in MW-1 and PAL exceedance for chloroform in MW-5), non-detect / less than PALs for PAHs, and non-detect / less than PALs for RCRA metals. Assuming the results are consistent, we'd recommend that the monitoring wells be abandoned.

If some results come back higher for the 2nd event, we'll make decisions based on which wells show these impacts. Wells MW-3 and MW-1 will likely need to be abandoned as construction starts due to their locations within the building footprint. Wells MW-2, MW-4, and MW-5 outside the building perimeter would hopefully be able to be saved, at least for maybe another few additional months to get in a 3rd event if needed. The goal of any additional sampling beyond the 2nd event (hopefully nothing beyond 4 quarters of monitoring would be needed), would be to prove stable or decreasing concentration trends over time. The need for any replacement wells will be evaluated on a case-by-case basis after the 2nd sampling event.

Based on the results of the 1st round of data, and the lack of apparent point source contamination areas, we are hopeful that the 2nd sampling event will be sufficient. We will share the 2nd round of groundwater data with you via email as soon as it is available and provide recommendations.

Please let me know if you need more information about the sampling plan.

Thanks,

Adam

Adam Roder, P.E.

Senior Engineer

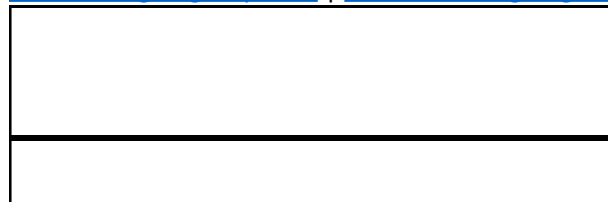
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