From: Beggs, Tauren R - DNR To: "David De Courcy Bower"

Cc: Podlaski, Rick

RE: Off-Site Investigation Work Plan - Notice to Proceed Subject:

Date: Monday, November 13, 2017 11:20:00 AM

Sounds good, thanks for the information David!

We are committed to service excellence.

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

Tauren R. Beggs

Phone: (920) 662-5178 Tauren.Beggs@wisconsin.gov

From: David De Courcy Bower [mailto:david.decourcybower@erm.com]

Sent: Monday, November 13, 2017 11:09 AM

To: Beggs, Tauren R - DNR

Cc: Podlaski, Rick

Subject: RE: Off-Site Investigation Work Plan - Notice to Proceed

Morning Tauren,

Much appreciate the prompt review and approval.

We are still in the process of data collection for the permanent wells installed.

For the first bullet - We did install 3 deeper wells in an attempt to vertically delineate the extent of the TCE impacts. It was noted during advancement of the wells that there is a very tight brown clay/silty clay that extends at least 20-30 ft below the shallow sands and perched water. Our initial finding was that all three deep wells were dry – which would confirm that there is a shallow perched aquifer and that the clay has prevented vertical migration of water and impacts.

Once we have the groundwater sampling data we will be able to dig into the second bullet a little more.

David

David de Courcy-Bower, P.E. **Principal Consultant**

ERM

700 W. Virginia Street | Ste. 601 | Milwaukee, WI 53204 **T** 414-977-4705 | **M** 414-335-0877

E <u>david.decourcybower@erm.com</u> | **W** <u>www.erm.com</u>

From: Beggs, Tauren R - DNR [mailto:Tauren.Beggs@wisconsin.gov]

Sent: Monday, November 13, 2017 10:51 AM

To: David De Courcy Bower

Cc: Podlaski, Rick

Subject: RE: Off-Site Investigation Work Plan - Notice to Proceed

Good morning David,

The additional locations in this work plan look appropriate, so you have my notice to proceed for this workplan.

How did everything go for the soil sampling and the installation of permanent wells and groundwater sampling for the previous site investigation workplan? I know we had talked a little bit on the phone about what was found on the portion of property north of Seventeenth St. There are some questions I have below for the investigation. I haven't seen the documentation for the additional site investigation yet, so these questions may be answered as part of that but thought I would bring them up:

- For the VAS-1 to VAS-3 locations, it appears the TCE contamination is most evident in groundwater just above the clay layer in the fine sand and/or silt. Did the installation of permanent wells define the vertical delineation?
- For horizontal delineation, do you think the groundwater contamination at depth is being completely influenced by/discharged to the East Twin River or do you think their could be a component of that that is migrating eastward under the river?

Please let me know what you think when you have a chance.

Thanks.

We are committed to service excellence.

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

Tauren R. Beggs
Phone: (920) 662-5178
Tauren.Beggs@wisconsin.gov

From: David De Courcy Bower [mailto:david.decourcybower@erm.com]

Sent: Friday, November 03, 2017 1:07 PM

To: Beggs, Tauren R - DNR

Cc: Podlaski, Rick

Subject: Off-Site Investigation Work Plan

Tauren,

Please see attached the Off-Site Investigation Work Plan for installation of 3 additional groundwater monitoring wells on property owned by the City of Two Rivers. Access is pending approval at the City Board meeting on Monday, and ideally it would be good to get these wells installed before winter kicks into full gear. The proposed sampling protocols and analysis are

consistent with the on-Site wells installed.

Please let me know if you have any questions,

David

David de Courcy-Bower, P.E. Principal Consultant

ERM

700 W. Virginia Street | Ste. 601 | Milwaukee, WI 53204 T 414-977-4705 | M 414-335-0877 E david.decourcybower@erm.com | W www.erm.com

"The Business of Sustainability"

This message contains information which may be confidential, proprietary, privileged, or otherwise protected by law from disclosure or use by a third party. If you have received this message in error, please contact us immediately and take the steps necessary to delete the message completely from your computer system. Thank you.

Please visit ERM's web site: http://www.erm.com

This message contains information which may be confidential, proprietary, privileged, or otherwise protected by law from disclosure or use by a third party. If you have received this message in error, please contact us immediately and take the steps necessary to delete the message completely from your computer system. Thank you.

Please visit ERM's web site: http://www.erm.com