

Willkom, Mae - DNR

From: Willkom, Mae - DNR
Sent: Friday, October 12, 2018 10:47 AM
To: Hager, Jim; 'awmiller@gfnet.com'
Cc: Bob Fuller (bfuller@wrres.com); Becky Anderson (andersrl@wrres.com); Myers, Will M - DNR; Carey, Angela J - DNR
Subject: WRR - Notice to Proceed with Full-scale Injection
Attachments: BRRTS 02-18-000274_Pilot Test Injection Report and Work Plan for Full-Scale Injections.pdf

The purpose of this email is to acknowledge modifications to an existing temporary exemption for the injection of remedial materials into groundwater, and to serve as a notice to proceed with full-scale injection as proposed in the email below.

Your request for a temporary exemption to inject certain compounds into groundwater at the WRR Environmental Services site was dated February 15, 2018, was received on February 16, 2018 together with the appropriate fee, and was subsequently granted approval on April 25, 2018. The temporary exemption included coverage under WPDES Wastewater Discharge Permit WI-0046566-06 for Contaminated Groundwater from Remedial Action Operations. Please be advised that general Permit WI-0046566-06 was recently redrafted and has now been superseded by WPDES Wastewater Discharge Permit WI-0046566-07 (<https://dnr.wi.gov/topic/wastewater/documents/46566permit.pdf>).

Pilot testing was conducted in June, 2018, as described in the attached report. The report recommends the use of up to 4,800 pounds of Neutral Zone, a calcium carbonate amendment, in addition to the reagents approved in the existing temporary exemption, for the purpose of further increasing the alkalinity and pH of the groundwater. I have contacted Brian Austin, Injection Coordinator for the DNR Drinking Water and Groundwater program, and received his verbal concurrence with this modification.

Please continue to adhere to all provisions of the existing April 25, 2018 temporary exemption and of WPDES Permit WI-0046566-07. Failure to do so may result in the DNR requiring revisions to the remedial action design, operation or monitoring procedures, or the revocation of the exemption and the implementation of an alternative remedial action to restore soil or groundwater quality, or both.

Thank you for your continued efforts to restore the environment at this site.

We are committed to service excellence.

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

Mae E. Willkom

Phone: 715-839-3748

mae.willkom@wi.gov

From: Miller, Anthony W. <awmiller@GFNET.com>
Sent: Wednesday, October 3, 2018 1:42 PM
To: Willkom, Mae - DNR <Mae.Willkom@wisconsin.gov>; Myers, Will M - DNR <Will.Myers@wisconsin.gov>
Cc: Hager, Jim <hagerjl@wrres.com>; 'Bob Fuller' <bfuller@WRRES.com>; 'Becky Anderson' <andersrl@WRRES.com>
Subject: BRRTS#02-18-000274_WRR Environmental Srvcs - 55929.005

Mae and Woody –

Attached is a report summarizing the pilot test injections that were performed in June at the WRR Environmental site in Eau Claire. Generally speaking, the pilot test injections went really well; we were able to inject a 5,020-gallon mixture of reagents into the groundwater at a flow rate above 3.5 gallons per minute. Note that the report does not include the Discharge Monitoring Report Form table that was included in the WDNR's April 25, 2018, letter approving the pilot test injections. That information is provided in the tables included with the report.

The report also includes a work plan for the first phase of full-scale injections. The work plan for the first phase includes the injection of a 15,000-gallon mixture of the following reagents into 30 borings in the northern portion of the site where the highest concentrations of chlorinated volatile organic compounds (CVOCs) are present in the groundwater.

- Micro Zero Valent Iron (μ ZVI) – 1,200 lbs
- Newman Zone 55 EVO - 9,000 lbs
- Newman Zone OS – 200 lbs
- SDC-9 DHC microbes – 15 liters
- Neutral Zone – 4,800 lbs
- Sodium bicarbonate – up to 100 lbs, as needed, to raise the pH of the mixture to 7.5

With the exception of Neutral Zone, all of the reagents listed above were approved by you in your April 25th letter to WRR. Neutral Zone is a calcium carbonate amendment that will increase the alkalinity and pH of the groundwater, both of which are important factors in the growth and activity of the microbes that facilitate reductive dechlorination. Copies of the product information and safety data sheet for Neutral Zone are included with the work plan as Appendix C. A signed copy of the Notice of Intent form is included with the work plan as Appendix D.

We are scheduled to conduct the first phase of investigation during the weeks of October 15th and 22nd. We will also be collecting the fall round of semi-annual groundwater samples from the on- and off-site wells during that time period. Please review the proposed work plan for injections and let me know if you have any questions. I will be traveling with limited phone and internet connections next week and then at a conference during the week of October 15th; however, I will respond to messages as time allows. If necessary, the best way to reach me is to call my cell phone (608-354-7730).

Let me know if you have any questions or need additional information to approve the work plan.

Thanks,

Anthony W. Miller, P.S.S. | Project Manager | Senior Environmental Scientist
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