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Our ref: 048038-LTR-15

April 12, 2023

Ms. Candace Sykora
Remedial Project Manager
Wisconsin Department of Natural Resources
890 Spruce Street
Baldwin, Wisconsin 54002

Request for Operating and Monitoring Plan Amendment
New Richmond Closed Landfill
New Richmond, Wisconsin

Dear Ms. Sykora:

GHD Services Inc. (GHD), on behalf New Richmond Landfill Settling Potential Responsible Parties (PRPs), submits this Request for an Operating and Monitoring Plan Amendment for the New Richmond Closed Landfill (Site). The current Groundwater Monitoring Plan, along with the proposed Groundwater Monitoring Plan is attached as Table 1. Figure 1 presents the Site Plan and the groundwater monitoring well network.

The proposed modifications include:

1. Remove MW4, MW5, MW6, MW8, and MW8A from the groundwater level monitoring and groundwater sampling schedule. These five wells are located upgradient of the Site and of which only MW6 is currently on the groundwater sampling schedule. However, due a broken casing, MW6 has not been sampled since 2017. Landfill associated VOCs have not been detected in any of these wells in the last 15 years. Once removed from the Monitoring Plan, GHD recommends that these five wells are plugged and abandoned using materials and methods as prescribed in NR 812.26, Wis. Adm. Code. All five wells are located on the City of New Richmond property. The City is currently developing this area into a recreational park.
2. Remove MW11A, MW13, MW13A, MW14, MW14A, MW15, and MW15 from the groundwater level monitoring and groundwater sampling schedule. These seven wells are located side-gradient of the groundwater plume and of which only MW11A, MW13, MW14, and MW15A are currently on the groundwater sampling schedule. Landfill associated VOCs have not been detected in these wells in the last 10 years. Once removed from the Monitoring Plan, GHD recommends that these seven wells are plugged and abandoned using materials and methods as prescribed in NR 812.26, Wis. Adm. Code. All seven wells are located on private property.
3. Remove MW12 and MW12A from the groundwater level monitoring schedule. Currently, neither one of these two wells are on the sampling schedule. These wells are located directly downgradient of the landfill, but landfill associated VOCs have never been detected in these wells. Both wells are installed too shallow to monitor the groundwater plume downgradient of the landfill. Once removed from the Monitoring Plan, GHD recommends that these two wells are plugged and abandoned using materials and methods as prescribed in NR 812.26, Wis. Adm. Code. Both wells are located on private property.
4. Remove 1070 192nd Avenue from the residential monitoring well sampling list. The residential well is located side gradient of the groundwater plume and landfill associated VOCs have never been detected in this well. GHD has only sampled this well once in the last 5 years due to the current residents not allowing access to their property.

5. Change the monitoring frequency of MW1, MW10, MW10A, MW16, MW16A, MW17, MW17A, MW18 from semi-annual to annual. These eight wells are currently located in the footprint of the groundwater plume and are sampled on a semi-annual basis. There has not been a Wisconsin Enforcement Standard (ES) exceedance in any of these wells since 2016, with the exception of an anomalous concentration of 1,2 Dichloroethane in MW-18 in 2021.
6. Currently, GHD collects groundwater level readings and collects groundwater samples on a semi-annual basis (May and November). GHD recommends monitoring all wells on an annual basis in October. Table 1 presents a summary of the proposed monitoring schedule.
7. Currently, GHD monitors landfill gas wells and select SVE wells (4, 6, 7, 12, 13, and 14) on a monthly basis. GHD recommends monitoring landfill gas wells and select SVE wells on a quarterly basis. All other SVE wells will be monitored semi-annually (April and October) and will be included in the operational schedule of the system if concentrations become elevated.
8. Currently, GHD measures VOCs using a flame ionization detector (FID). GHD recommends modifying the routine monitoring to utilize a photoionization detector (PID) with a 11.7 eV lamp in place of the FID. Chemicals of primary concern include 1,1-dichloroethane, 1,1-dichloroethene, 1,1,1-trichloroethane, and tetrachloroethene. Ionization potentials for these compounds are 11.12 eV, 9.66 eV, 11.00 eV, and 9.32 eV, respectively, which allows for all to be monitored using a 11.7 eV PID. Using a PID has the additional advantage of being unable to measure methane due to its ionization potential of 12.98 eV. This will allow measurement of VOCs at well locations unbiased by methane (landfill gas). An FID will detect methane, which results in high biased VOC measurements when landfill gas is present. Additionally, landfill gas (methane) levels are already collected via use of a landfill gas monitor.

If you have any questions or require additional information, please contact me at (612) 524-6855.

Regards,

Ryan Aamot
Scientist

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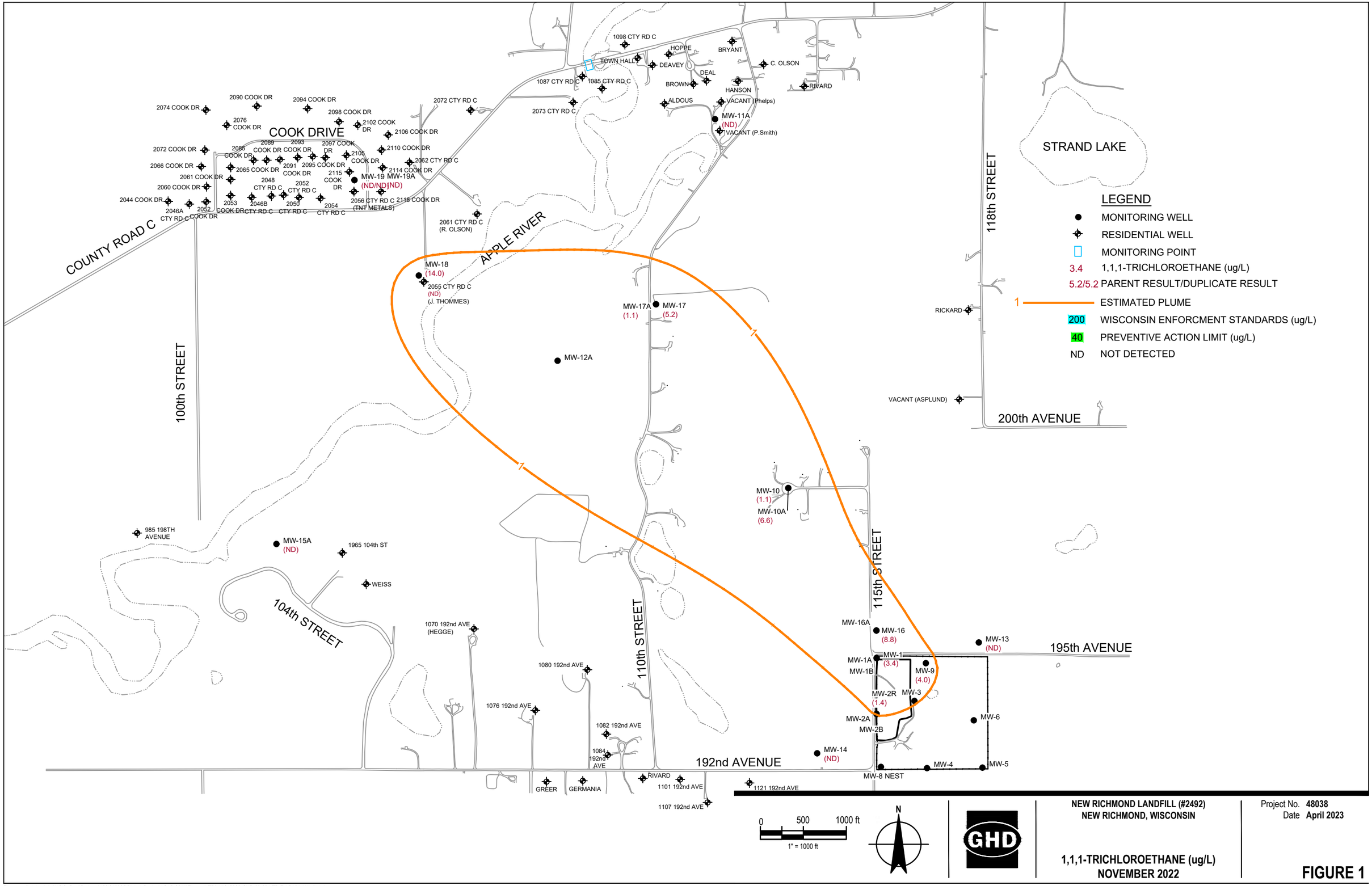
Encl.



NEW RICHMOND LANDFILL (#2492)
NEW RICHMOND, WISCONSIN

1,1,1-TRICHLOROETHANE (ug/L)
NOVEMBER 2022

Project No. 48038
Date April 2023

FIGURE 1

Filename: \\ghdnet\ghd\US\St Paul\Projects\563\048038\Digital_Design\ACAD 2017\Figures\LTR015\048038-GHD-00-00-LTR-EN-D101_WA-015.dwg
Plot Date: 05 April 2023 12:56 PM

Data Source: SEH.

Table 1

Groundwater Monitoring Summary
New Richmond Landfill (#2492)
New Richmond, Wisconsin

	Current Plan		Proposed Plan
Monitoring Well	**May**	**November**	**October**
MW1	L, V	L, V	L, V
MW1A	-	L	L
MW1B	-	L	L
MW2R	-	L, V	L, V
MW2A	-	L	L
MW2B	-	L	L
MW3	-	L	L
MW4	-	L	-
MW5	-	L	-
MW6	-	L, V	-
MW8	-	L	-
MW8A	-	L	-
MW9	-	L, V	L, V
MW9A	-	L	L
MW10	L, V	L, V	L, V
MW10A	L, V	L, V	L, V
MW10B	-	L	L
MW11A	-	L, V	-
MW12	-	L	-
MW12A	-	L	-
MW13	-	L, V	-
MW13A	-	L	-
MW14	-	L, V	-
MW14A	-	L	-
MW15	-	L	-
MW15A	-	L, V	-
MW16	L, V	L, V	L, V
MW16A	L, V	L, V	L, V
MW17	L, V	L, V	L, V
MW17A	L, V	L, V	L, V
MW18	L, V	L, V	L, V
MW19	-	L, V	L, V
MW19A	-	L, V	L, V
Apple River Bridge	-	L	L
Residential Well			
1070 192nd Ave	V	-	-
2055 County Rd. C	V	-	V
2056 County Rd. C	V	-	V

Notes:
V - Sample collected for VOCs
L - Elevation Monitoring
Proposed Abandonment