

August 7, 2018

Mr. Dong Sin
8731 West North Avenue
Wauwatosa, WI 53226

Subject: Approval of Site Investigation Work Plan and
Wis. Adm. Code § NR 141.19, Variance
Westwood Dry Cleaners Facility
8731 West North Avenue, Wauwatosa, WI 53226
WDNR BRRTS #: 02-41-552537, FID #: 241836100

Dear Mr. Sin:

On July 31, 2018, the Wisconsin Department of Natural Resources (Department) received your request to approve the Site Investigation Work Plan (SIWP) and Wis. Adm. Code § NR 141.19 variance submittals to install small diameter monitoring wells at the Westwood Dry Cleaners site. The submittals were prepared on your behalf by Hydrodynamic Consultants, Inc. (HDC) your environmental consultants. After careful review of the revised submittal dated July 21, 2018, and amended on July 26, 2018 (after Department review), the Department is approving your SIWP plan and variance to install small diameter monitoring wells at this site. The SIWP outlined the following activities (pages 11 and 12).

- Contact the diggers hotline to request the public utility companies to mark all their utility lines at and around the property, including the property to the east and the surrounding public right of ways.
- Mobilize crews for drilling, sampling, and testing to the project site to conduct the field work.
- Complete 12 soil borings to a depth of 16 - 20 feet (each) below the ground surface. Each boring will be logged in accordance with the Unified Soil Classification System ("USCS") to document the subsurface strata, variation of soil color, compositions and visual evidence of dry cleaning solvent contamination.
- Continuously retrieving soil samples from each of the above soil borings and collected soil samples at 2'-intervals for screening with a photo-ionization detector (PID) for VOC concentrations.
- Select 36 representative soil samples, three from each soil boring, for laboratory analysis of VOCs. Each soil sample will be collected in accordance with SW-846 Method 5035 using a purge-and-trap soil sampler. A bulk soil sample will also be packed into a 4-ounce glass jar for the determination of the sample's dry weight. All soil samples submitted will be analyzed for volatile organic compounds (VOCs) utilizing SW-846 Method 8260B.
- Additional 2 soil samples will be collected from outside the potential contamination plume at depths below the water table. These soil samples will be analyzed for fractional organic carbon contents (foc) in accordance with ASTM D 2974-87, entitled "Standard Test Methods for Moisture, Ash and Organic Matter of Peat and Other Organic Soils". The foc content will help to determine the attenuation capacity of local soil to the VOCs at this site.
- Convert 6 soil borings to 6 groundwater monitoring wells to a depth of 15 feet or to a depth of at least five feet below the water table. These wells will be with 10'-long 1"-diameter PVC screen in the bottom and 5'-long case above installed inside 2"-diameter borings drilled with GeoProbe. The well annular space is to be packed with coarse silica sand from the bottom to about 1' above the screen section. Fine sand pack filter (about 2' thick) will be added above the coarse sand pack, and then the annular space will be sealed with bentonite to near the surface. The monitoring wells will be flush-

mounted with steel manhole cemented on the ground surface. Upon completion, all wells will be developed.

- Perform 4 rounds of groundwater monitoring and sampling on a quarterly basis for a period of one year. Each quarterly sampling will include collection and submittal of 8 representative groundwater samples for laboratory analysis (6 samples from the 6 monitoring wells, 1 for duplicate, and 1 for trip bank). The groundwater samples will be collected using a PVC bailer designated to each well and immediately preserved in 4-ml glass vials containing HCl. The groundwater samples submitted will be analyzed for VOCs utilizing SW-846 Method 8260B. Proper well purging will be completed before the sampling.
- Complete 4 rounds of water table depth measurements from the monitoring wells and survey the ground surface to determine the groundwater table slope or flow directions.
- Perform 1 Slug test in one 2”-diameter well to determine the hydraulic conductivities for water-saturated subsurface soil formations.
- Conduct a water-supply well survey by contacting the local municipalities and related parties to determine if there is any private or community well in the vicinity of the subject drycleaner facility and to determine if the released CVOCs could impact any water supply wells.
- Collect 6 representative soil vapor samples (5 from the proposed soil vapor sampling ports and one duplicate from SV3) inside the subject building and the adjoining building to the east to determine if soil vapor intrusion is a risk concern at this site. Summa canisters will be used for the soil vapor collection. RR-800, “Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin” procedures will be followed.
- Prepare a Site Investigation Report. Remedial goals will be established and options for remedial actions will be evaluated in accordance with Wis. Adm. Code § NR 722.

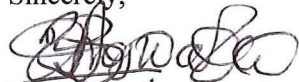
Cost approved for this SIWP is \$ 42,951.00 (forty-two thousand, nine hundred and fifty-one dollars). The total cost approved to date for this site is \$ 42,951.00 (forty-two thousand, nine hundred and fifty-one dollars).

Please be aware that you are required to comply with all applicable statutes and administrative rules including the Wis. Adm. Codes’ series § NR 700, § NR 600, § NR 500, § NR 300, § NR 200 and § NR 100.

This approval does not guarantee the reimbursement of costs under the Dry Cleaner Environmental Response Program. Final determination Regarding the eligibility of costs for reimbursement will be made at the time of claim review.

If you have any questions or concerns regarding the content of this letter, please contact me at 414-263-8607 or e-mail me at Binyoti.Amungwafor@wisconsin.gov

Sincerely,



Binyoti F. Amungwafor
Hydrogeologist
Southeast Region, Milwaukee Service Center

cc: Mike Wan (Minghua), Maple Testing Services, Inc. D/B/A HDC, Inc., Lisle, Illinois 60532
Sandra Chancellor - CF/2, Madison
Case File #: 241836100