

December 18, 2018



Ms. Jennifer Borski  
Wisconsin Department of Natural Resources  
Remediation and Redevelopment Program  
Oshkosh Service Center  
625 E. CTY Y, Suite 700  
Oshkosh, Wisconsin 54901-9731

Phone: (920) 424-7887  
Email: Jennifer.Borski@wisconsin.gov

Re: Quality Assurance/Quality Control Plan  
Sandies Dry Cleaners and Laundry (Former)  
513 Grand Street  
Little Chute, Wisconsin  
BRRTS #02-45-552222  
Terracon Project No. 58187198

Dear Ms. Borski:

Terracon Consultants, Inc. (Terracon) is submitting this Quality Assurance/Quality Control (QA/QC) Plan as required by the August 2018 Scope of Work for Operation, Maintenance and Monitoring at the Sandies Dry Cleaners and Laundry (Former). The plan is outlined in the following sections.

## **1.0 QUALITY ASSURANCE/QUALITY CONTROL PLAN**

### **1.1 Groundwater Monitoring**

#### **1.1.1 Field Sampling Techniques**

During each groundwater sampling event, each of the wells designated for water level measurements for that event per the October 2018 Scope of Work will be opened and allowed to equilibrate for at least 15 minutes prior to measuring water levels. To avoid issues with changes in barometric pressure, water levels are measured as quickly as possible. For flush-mount wells and other wells with air-tight caps, several water level measurements are taken several minutes apart to verify that the water table has equilibrated with the atmosphere and is stable. Water levels are measured to the nearest 0.01 foot using a decontaminated electronic water level indicator.

Prior to sampling, each monitoring well to be sampled will be purged using techniques in general conformance with WDNR guidance document PUBL-DG-038 96 Groundwater Sampling Field Manual. A water quality meter with flow-through cell will be used to measure field parameters including pH, temperature, specific conductance, dissolved oxygen, and oxidation-reduction



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potential during purging. Purging may continue at less than 300 milliliters per minute until the parameters are stable to within 10% for three consecutive readings taken at least 2-minutes apart or until groundwater has been drawn down to the pump intake for wells that purge dry.

The final field parameter readings including pH, temperature, specific conductivity, dissolved oxygen, and oxidation-reduction potential will be recorded for each well in accordance with the December 2018 Scope of Work. Groundwater sampling information sheets will be completed for each well sampled. The condition of the well and any repairs that may be needed will be noted on the groundwater sampling information sheet.

Samples will be collected into new, clean bottles provided by the laboratory for the analyses required in the October 2018 Scope of Work. Samples will be collected while pumping at the same rate as during purging. VOC samples will be collected first. Samples will be placed on ice in a cooler and transported to the laboratory under Chain-of-Custody protocols.

## **1.2 Purge Water Handling**

Terracon will dispose of purge water by hauling the purge water in 5-gallon buckets and dumping the water into the sanitary sewer via the eastern-most manhole on Lincoln Ave as authorized by the DNR.

## **1.3 Decontamination Procedures**

During groundwater sampling activities the electronic water level indicator is decontaminated after the water level in each well is measured by washing with analconox-water solution and rinsing with distilled water. Dedicated tubing is used at each well during sampling to eliminate the need for decontamination procedures and minimize the potential for cross-contamination.

## **1.4 Chain-of-Custody Procedures**

The chain-of-custody (COC) record will be completed by the sampler and will remain with the samples. The sampler will retain responsibility for the integrity of the samples until samples are relinquished to another person or the laboratory as indicated on the COC. The COC will include the record of persons responsible for the samples from the time of sampling until receipt at the laboratory in conformance with standard COC protocols. A copy of the complete COC will be included as part of the laboratory report.

## 1.5 Laboratory Analyses

Samples from monitoring wells will be analyzed for VOC using EPA Method SW846 8260B according to the schedule indicated in the October 2018 Scope of Work. One blind duplicate sample will be collected for analysis of VOCs during each sampling event.

If you have questions or require additional information, please contact our office at (414) 423-0255, Scott directly at (414) 209-7640, or email to [Scott.Hodgson@terracon.com](mailto:Scott.Hodgson@terracon.com).

Sincerely,



Scott A. Hodgson, P.G.  
Senior Project Manager

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Logs\Field\58187198.QA\_QC Plan.2018.docx

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