

JAN 11 2019

## DNR R&R SOUTH CENTRAL REGION

608-742-2169 (Office) 608-742-2592 (Fax) gec@generalengineering.net www.generalengineering.net





# Engineers • Consultants • Inspectors

January 6, 2016

Mr. Will Myers Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711

RE: SITE INVESTIGATION WORK PLAN

Wards Corner Garage E3309 State Highway 154 Hillpoint, Sauk County, Wisconsin GEC Project Number: 2-0813-273 WDNR BRRTS #03-57-001693

Dear Mr. Myers:

#### Introduction

General Engineering Company (GEC) is pleased to submit this work plan for the performance of site investigation at the above-referenced location. The work is being performed as a result of a tank site assessment performed during September of 1992 by others. The assessment indicated elevated levels of gasoline range organics (GRO). The WDNR was subsequently notified of a release on October 5, 1992. A site location map is provided as Appendix A, Figure 1

This Work Plan has been prepared in general accordance with Wisconsin Administrative Code (WAC) NR 716.09.

#### Responsible Party and Consultant

Site Name and Location: Wards Corner Garage

E3309 State Highway 154 Hillpoint, Wisconsin 53937

Northwest ¼ of the Northwest ¼ of Section 28, Township 11

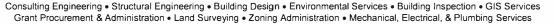
North, Range 3 East Sauk County, Wisconsin

**Portage** 

**Black River Falls** 

La Crosse







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The property is currently occupied by uninhabitable structures, a Site Operations:

residential homes (former grocery store), a former service garage,

a mobile home and a dilapidated shed.

Sauk County Highway Department Responsible Party:

Mr. Steven Muchow-Sauk County Highway Commissioner

P.O. Box 26, 620 State Highway 136

Baraboo, Wisconsin 53913

General Engineering Company Consultant:

> 916 Silver Lake Drive Portage, WI 53901 Phone: (608) 742-2169

Project Manager: Lynn M. Bradley

General Engineering Company

916 Silver Lake Drive Portage, WI 53901 Phone: (608) 742-2169

#### **Authorization**

Authorization to prepare this Site Investigation Work Plan was provided by Mr. Steven Muchow, the Sauk County Highway Commissioner.

#### Site Features

**Portage** 

The subject site consists of two adjoining parcels of land (Parcel Numbers 038-0620 and 038-0619) totaling approximately 2 acres. The subject site is occupied by a dilapidated shed, a former grocery store, a service garage and a mobile home. What appears to be a concrete slab from a former dispenser island is located just south of the service garage. The ground surface surrounding the structures is primarily overgrown grass, with a gravel driveway on the southern portion of the property. There is a private well, utilized for irrigation and livestock water, approximately 90 feet south of the former tank pit.

The subject parcel is currently surrounded to the north by State Highway 154 followed by agricultural land; to the south by agricultural land followed by a farmstead; to the east by agricultural land; and to the west by State Highway 130 followed by agricultural land. A Site Plan is shown on Figure 2, located in Appendix A.



#### Background

It is understood that Mr. Claude Box (now deceased) had owned the property since approximately 1947. It is understood that the service garage on the property was already in operation when Mr. Box purchased the property in 1947. The two gasoline underground storage tanks were installed between 1950 and 1960. These two tanks were reportedly removed in 1972, when the present garage was constructed. Between 1972 and 1977, four gasoline underground storage tanks (two 564-gallon and two 1,000-gallon) were installed on the southern portion of the subject site.

On September 21, 1992, the four underground storage tanks were removed from the site by Carl Oman, a representative of Site Engineering & Development, of Richland Center, Wisconsin. It is understood that one 564-gallon tank and one 1,000-gallon tank showed no signs of leakage, and no holes were observed when cleaning the tank. However, the other 564-gallon tank and the other 1,000-gallon tank, both on the east side of the tank excavation, were reportedly in poor shape with holes observed within the tank during cleaning.

It was indicated in an underground storage tank removal report, prepared by Site Engineering & Development that strong petroleum odors and visual observations of soil discoloration were observed beneath the two western tanks. Soil discoloration was observed from approximately 1.5 feet below ground surface (bgs) near the pump islands to 12 feet bgs beneath the western tanks.

Soil samples were collected in September 1992 as part of an underground storage tank site assessment, from the tank excavation and beneath the pump island and submitted for laboratory analysis for the presence of GRO. The description of the samples indicated on the laboratory report, and corresponding analytical results are shown below:

E-1000 Tank- Center No Detect (ND)

Pump Island – Center 8,560 milligrams per kilogram (mg/kg)

Center of Tank – West 1000 4,560 mg/kg

NW Corner 575 Tank ND

SE Corner 575 Tank 2,300 mg/kg

East Tank 575 Center ND

On September 23, 1992, the excavator contacted Mr. Wendel Wojner, a representative of the WDNR, regarding the petroleum release. The release was subsequently reported to the WDNR on October 5, 1992.

The project remained idle until 2013 when Mr. Steven Muchow, Sauk County Highway Commissioner contacted General Engineering regarding the petroleum contamination at the "Ward Corner Garage" Site. Mr. Muchow indicated that the former owner of the property, Mr. Claude Box is deceased, and the family of the former owner has "walked away" from the





property, leaving it vacant for several years. Taxes on the property had reportedly not been paid since at least 2006.

Since the structures on the property were uninhabitable, Sauk County proposed taking ownership of the property due to the tax delinquency, demolishing the blighted structures on the property, and constructing a salt shed on the property to service area roads during the winter months. Due to the planned project, General Engineering requested a reduction of the PECFA deductible in a letter date September 11, 2013. The WDNR authorized reduction of the deductible in a letter dated November 27, 2013. General Engineering was authorized by Sauk County to proceed with the investigative activities in October of 2015 and the site investigation work plan is discussed further herein.

#### Regional Geology

A review of the United States Geological Survey (USGS) topographic map indicated that the site is surrounded by rolling topography with an elevation of approximately 1178 feet above mean sea level. In review of the Soil Survey Map, printed from the USDA Natural Resources Conservation Service website, the *subject property* contains the following soil type: Reedsburg silt loam (RbB). Based on other investigations performed within the area, it appears that the depth to bedrock may be less than 30 feet within the area of the subject property.

## Regional Hydrogeology

The local groundwater in the area of the subject site appears that flow direction may be variable depending on whether groundwater is encountered within unconsolidated soils or bedrock. Intermittent Creeks (Hill Point Creek and Bear Creek) are located approximately 1000 feet to the north and 1800 feet to the southwest, respectively. The depth to groundwater is estimated to be greater than 30 feet.

#### Work Plan

The purpose of the proposed site investigation will be to further evaluate the vertical and horizontal extent of petroleum affected soils and groundwater, if encountered. Dependent upon the findings of this study, it may be possible to develop a remedial alternative or request case closure. However, if this initial phase is not sufficient in determining the extent of the affected zones, it may be necessary to perform additional exploratory work in order to fully evaluate site conditions or formulate remedial alternatives.

The field exploration for this initial phase will include the advancement of approximately five (5) soil borings to the groundwater depth or refusal. Four (4) to five (5) of the borings may be converted to monitoring wells, if groundwater is encountered. The approximate locations of the planned soil borings/monitoring wells are shown on Appendix A, Figure 3.

The soil borings will be advanced with a truck mounted drill rig, and samples will be secured at 2 foot intervals throughout the depth of the borings. The soil samples obtained will be subjected





La Crosse





to testing in the field with a Mini Rae Photo Ionization Detector (PID), to test for the presence of volatile vapors. Selected companion samples from the estimated soil boring locations will be submitted for analytical testing to determine the levels of petroleum volatile organic compounds (PVOC), naphthalene, and lead. Typically the companion sample with the highest PID level or strongest odor, and an underlying companion sample, either from the bottom of the borehole or near the capillary fringe will be selected for testing. However, this will be adjusted as appropriate, to best aid in evaluating the vertical extent of the affected zone.

The monitoring well construction, if performed, will consist of a 10-foot section of 2-inch diameter, machine slotted PVC screen placed at or near the bottom of the borehole. This will be surrounded by a properly graded granular filter medium in the annular space, with unslotted riser pipe extending from the screened section to about 6 inches below the ground surface. A bentonite seal of approximately 2 feet will be placed above the granular filter medium. The remaining annular space will be filled to the ground surface with a mixture of bentonite and Portland cement, or bentonite chips. Flush mounted protective covers will be used to protect the wells.

GEC will develop the monitoring wells by alternately surging and purging with a bailer. The wells will be bailed until the wells are dry, or until they produce relatively sediment-free water. The development water will be placed into drums until after receipt of the testing results of the wells. Well development tools will be cleaned with a detergent solution and potable water followed with multiple rinses of distilled water prior to development of each well. Water samples for laboratory analysis will be obtained from each well utilizing a single use disposable polyethylene bailer. The initial groundwater samples obtained from each of the monitoring wells will be submitted for analytical testing for the presence volatile organic compounds (VOCs) and lead. Subsequent monitoring events will be sampled for PVOC, naphthalene, and lead pending the results of the initial sampling. Groundwater elevations and the top of casing elevation at each monitoring well will be established using conventional surveying techniques. For this initial phase, the elevations will be referenced to a temporary benchmark, which will be established on site. Static groundwater levels within the wells will be measured to the nearest 0.01 feet, prior to obtaining the samples for analysis.

The installation of the monitoring wells, and the sample collection and analysis will be performed in general accordance with the guidelines and codes utilized by the WDNR. The samples for chemical analysis will be properly collected and preserved in containers provided by the laboratory. The samples will be placed on ice and standard chain-of-custody procedures will be utilized. The sampling tools will be properly cleaned during the course of the field-testing. Following the completion of the field activities and receipt of the analytical results, a report will be prepared in general accordance with standards set forth by the WDNR.

#### General

**Portage** 

It is anticipated that the soil borings will be performed in January or early February 2016.





If you have any questions, please contact GEC at (608) 742-2169.

Sincerely,

**GENERAL ENGINEERING COMPANY** 

Yan M. Budley Lynn M. Bradley

**Environmental Project Manager** 

Kory D. Anderson, P.E.

Fory D. Anderson

Vice President

Appendix A: Figures

**Portage** 

Mr. Steven Muchow, Sauk County Highway Commisioner, 620 State Highway 136, CC:

Baraboo, Wisconsin 53913

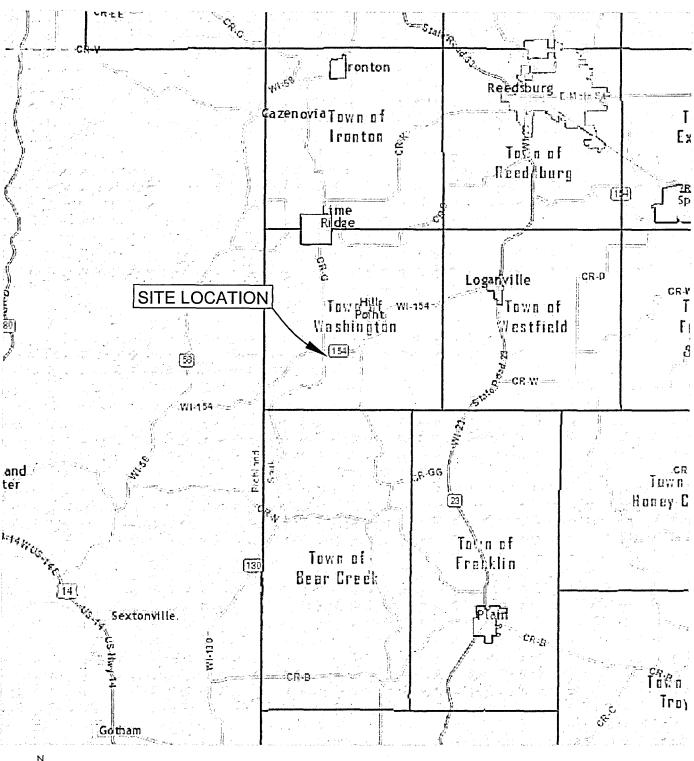








# APPENDIX A FIGURES





### **General Engineering Company**

P.O. Box 340 • 916 Silver Lake Dr. • Portage, WI 53901 608-742-2169 (Office) • 608-742-2592 (Fax)

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# **REGIONAL SITE LOCATION MAP**

Work Plan Wards Corner Garage E3309STH "154"

Town of Hillpoint Sauk County, Wi



