SITE-SPECIFIC HEALTH AND SAFETY PLAN

Prepared for:

Susie's Restaurant 1020 South 26th Street Manitowoc, Wisconsin

Prepared by:

GENERAL ENGINEERING COMPANY

916 Silver Lake Drive Portage, Wisconsin 53901 608-742-2169

June 10, 2019

TABLE OF CONTENTS SITE-SPECIFIC HEALTH AND SAFETY PLAN SUSIE'S RESTAURANT June 10, 2019

1.0 EMERGENCY INFORMATION

- **1.1.EMERGENCY CONTACTS**
- **1.2.HOSPITAL INFORMATION**

2.0 GENERAL SITE INFORMATION

- 2.1.SITE LOCATION
- 2.2.PROJECT PERSONNEL
- 2.3.SITE ACTIVITY
 - 2.3.1 PURPOSE OF ACTIVITY
 - 2.3.2. BRIEF DESCRIPTION OF PROPOSED ACTIVITIES
 - 2.3.3. SITE INVESTIGATION ACTIVITIES

3.0 SPECIFIC SITE INFORMATION

- 3.1. TANK SYSTEM INFORMATION
- 3.2.TYPE OF SITE
- 3.3.RELEASE HISTORY
- 3.4.SITE BACKGROUND

4.0 POTENTIAL HEALTH AND SAFETY HAZARDS

- 4.1 .ANTICIPATED PHYSICAL HAZARDS OF CONCERN
- 4.2.SITE FEATURES OR HAZARDS
- 4.3 . ANTICIPATED CHEMICAL HAZARDS

5.0 METHODS TO CONTROL POTENTIAL HEALTH AND SAFETY HAZARDS

- 5.1. PERSONAL PROTECTIVE EQUIPMENT
- 5.2. MONITORING INSTRUMENTATION
 - 5.2.1 Action Levels
- 5.3.FIELD COMMUNICATIONS
- 5.4. DECONTAMINATION PROCEDURES
 - 5.4.1 PERSONNEL DECONTAMINATION
 - 5.4.2 EQUIPMENT DECONTAMINATION
- 5.5.DISPOSAL PROCEDURES

6.0 PLAN REVIEW

TABLE OF CONTENTS SITE-SPECIFIC HEALTH AND SAFETY PLAN SUSIE'S RESTAURANT June 10, 2019

FIGURES

1. MAP TO HOSPITAL

APPENDICES

- A. ACRONYMS
- **B. HEAT STRESS**
- C. COLD EXPOSURE
- D. TYPICAL RESPONSE PROCEDURES FOR OVERT CHEMICAL EXPOSURE
- E. TYPICAL RESPONSE PROCEDURES FOR OVERT CHEMICAL EXPOSURE
- F. ASSIGNMENT OF HASP RESPONSIBILITY E.1 SITE HEALTH AND SAFETY OFFICER (SS0 E.2 SUBCONTRACTORS

1.0 EMERGENCY INFORMATION

1.1 EMERGENCY CONTACTS

General Engineering: (608)742-2169Fire/Rescue:911Ambulance:911Police:911Police:911Poison Control Centrol Centrol:1-800-815-8855On-Site Safety Coortinator:Brian Youngwirth (608-697-8010)

1.2 HOSPITAL INFORMATION

Name and Address:	Holy Family Memorial Hospital 2300 Western Avenue
	Manitowoc, Wisconsin 54220

Telephone Number:

(920) 320-2011

Directions to Hospital:

Head north on South 26th Street (23 feet) Turn Right (Northeast) on Custer Street, continue for 348 feet Turn Right (East) onto Washington Street (U.S. 151) for 0.2 Miles Turn Left (North) on South 21st Street for 0.4 Miles Turn Left (West) at Hospital (184 feet) Turn Right (Northeast) toward parking with hospital on the left

Arrive at Holy Family Memorial Hospital 2300 Western Avenue, Manitowoc, Wisconsin 54220

Map to Hospital



2.0 GENERAL SITE INFORMATION

2.1 SITE LOCATION

1020 South 26th Street Manitowoc, Wisconsin NE ¼ of the SE ¼ of Section 25, T19N, R23E, Manitowoc County

2.2 PROJECT PERSONNEL

Name/Firm	Title	Work Phone
Brian Youngwirth GEC	Site Safety Officer (SSO)	(608) 697-8010
Tony Kapugi On-Site Environme	Soil Probing Foreman ntal Services	(608) 837-8992

2.3 SITE ACTIVITY

2.3.1 Purpose of Activity

Above ground Tank Removal ____ Site Assessment ____

Under ground Tank Removal _____ Site Investigation _X___

Site Remediation ____

2.3.2. Brief Description of Proposed Activities

Installation of six sub-slab vapor ports; collection of six sub-slab vapor samples and two ambient air samples; installation of two soil probes converted to groundwater monitoring wells; and collection of one round of groundwater samples.

2.3.3. Site Investigation Activities

The soil probes will be advanced with a truck or track mounted soil probing unit. Soil samples will be collected by advancing a five foot disposable plastic tube within a metal sampler into undisturbed soils. The monitoring wells will be advanced by advancing 4.25 inch inside diameter augers. All soil cuttings will be immediately placed into 55-gallon drums until proper disposal can be coordinated. The sub-slab vapor samples will be performed by drilling an approximate 1.25-inch and a 5/8-inch drill bit through the concrete slab of six locations and installing a sealed vapor testing port.

SPECIFIC SITE INFORMATION 3.0

TANK SYSTEM INFORMATION 3.1

TANK REGISTRATION #	TANK TYPE	TANK CAPACITY	TANK CONTENTS
Not Applicable	Not Applicable	Not Applicable	Not Applicable

TYPE OF SITE: FORMER DRY CLEANER 3.2

Check all that are appropriate.

	Active	 Industrial Facility
Χ	Inactive	 Commercial/Retail
	Gas Station	Government
	Residential	

RELEASE HISTORY 3.3

Check all that are appropriate.

- No evidence of leaks or soil contamination.
- Suspected or known release(s) and soil contamination.
- Known groundwater contamination.
- X X X Identified ERP site.

3.4 SITE BACKGROUND

The site is a former drycleaner and is currently overlain by U.S. Highway 151. The work has been requested by the Wisconsin Department of Natural Resources (WDNR) and is being performed to determine if significant groundwater contamination extends east of the site and to investigate the vapor intrusion pathway.

4.0 POTENTIAL HEALTH AND SAFETY HAZARDS

4.1 ANTICIPATED PHYSICAL HAZARDS OF CONCERN

(check all that apply)

<u>X</u>	Heat (refer to Appendix A)	X Handling and transfer of chlorinated products
_	Cold (refer to Appendix B)	<u>X</u> Physical injury and trauma resulting from moving
<u>X</u>	Noise	machinery Oxygen Depletion
<u>X</u>	Falls, Trips, Slipping	
_	Excavation	Asphyxiation
<u>x</u>	Heavy Equipment	Fire
	Explosions	Cave-ins
	Confined Space Entry	X Electrical Hazards
		X Dust

4.2 SITE FEATURES OR HAZARDS

Underground and aboveground utilities must be located prior to performance of the soil probing work. All soil and groundwater collected during the work must be handled utilizing the proper protective equipment, which is discussed in Section 5. All waste must be containerized and stored on the site until proper disposal can be arranged.

4.3 ANTICIPATED CHEMICAL HAZARDS

(Check all that apply, attach Material Safety Data Sheets and refer to Appendix C.)

X	Benzene		Toluene			Xylenes
<u>X</u>	_ Hydrochloric Acid (HC	i) <u>X</u>	Methanc	bl	<u>X</u>	1, 2 DCA
X	Tetrachloroethene	<u></u> X	_ Trichlo	roethene	X	Vinyl Chloride
	Trimethylbenzene	E	Ethyl Benz	ene		
Othe	r (explain <mark>)</mark>					
Wast	e Types:					
	d <u>X</u> je	Solid Semi-solid	<u>x</u>	Gas Other explain <mark>)</mark> _		

SOIL AND GROUNDWATER CONTAMINATED WITH CHLORINATED SOLVENTS FROM A FORMER DRY CLEANER

Characteristics:	Corrosive	Flammable	
	Explosive	Volatile	x
	Radioactive	Inert	
		Other (expla	ain)

5.0 METHODS TO CONTROL POTENTIAL HEALTH AND SAFETY HAZARDS

5.1 PERSONAL PROTECTIVE EQUIPMENT

LEVEL D - Personal protective clothing and equipment for chlorinated solvent contaminated soil and groundwater (check all that apply).

- () Tyvek coveralls required in sampling areas when splashing by contaminated soils or water is a possibility.
- (x) Hard hat (when overhead hazards exist).
- (x) Safety glasses or goggles.
- (x) Steel toe, steel shank boots.
- (x) Disposable Latex gloves required when handling and collecting soil and water samples.
- (x) Outer Nitrile gloves required when handling and collecting hazardous soil and water samples.
- () Disposable outer boots as required.
- (x) Noise protection as warranted.
- (x) Dust Cup as warranted.

LEVEL C - Personal protective clothing and equipment for chlorinated solvent products - includes all those in level D plus the following (check all that apply).

- () Full-face air-purifying respirator (NIOSH/MSHA approved) fitted with acid gas/organic vapor/HEPA cartridges.
- () Polycoated Tyvek coveralls.

LEVEL B - Personal protective clothing and equipment for chlorinated solvent products includes the above Level D and C clothing with the addition of a self-contained breathing apparatus (SCBA) or supplied air-lined respirator in place of an air-purifying respirator. If action levels D and C are exceeded, and based on evaluation of the conditions, Level B respiratory protection is deemed necessary, work activities will be halted.

NOTE: The level of protection to be worn by field personnel will be defined and controlled by the SSO. Modification to basic protective equipment ensembles may be necessary for specific operations. Protection may be upgraded or downgraded, as deemed appropriate by the SSO and verified by the Project Manager.

5.2 MONITORING INSTRUMENTATION

- X Photoionization Detector (PID)
- Oxygen Meter
- Combustible Gas Indicator (CGI)
- Flame Ionization Detector (FID)
- Other (specify i.e., organic vapor analyzer, hydrogen sulfide meter, air sampling pumps, etc.)

5.2.1 Action Levels

Level of Respiratory Action Levels

Protection/Action

UTILIZE A PHOTOIONIZATION DETECTOR (PID)

A minimum of Level D protection is expected to be utilized during performance of the work with items required checked in Section 5.1.

Continuous readings above background 100 Instrument Units	Level C (based on identification of contaminant)
Continuous readings of above background 2500 Instrument Units	Level B

In the event any action levels are exceeded, work activities shall be halted. Air respirator protection will be upgraded to Level C as needed. Level B and C respiratory protection is **not** currently anticipated to be needed at the site.

5.3 FIELD COMMUNICATIONS

<u>Telephones</u> - A telephone will be located immediately on-site for communication with emergency support services/facilities.

<u>Hand Signals</u> - Hand signals will be used by downrange field teams in conjunction with the buddy system. These signals are very important when working with heavy equipment. They shall be known by the entire field team before operations commence.

Signal	Meaning
* Hand gripping throat	Out of air; can't breathe
* Grip partner's wrist	Leave area immediately; no debate
* Hands on top of head	Need assistance
* Thumbs up	OK; I'm all right; I understand
* Thumbs down	No; negative

5.4 DECONTAMINATION PROCEDURES

The SSO shall determine the level of decontamination necessary based on the evaluation of specific work activities and the potential degree of contamination.

5.4.1 Personnel Decontamination

A fixed personnel decontamination area will be established adjacent to the fixed equipment decontamination pad where, after equipment decontamination, personnel can remove and dispose of protective clothing and equipment before exiting the site.

Decontamination of personnel in **LEVEL D** will consist of removal and disposal of (when worn) disposable coveralls, boots, and gloves.

Decontamination of personnel using **LEVEL C** protective equipment will consist of:

- Removal and disposal of outer gloves.
- Removal, cleaning, and storage of respiratory equipment.
- Washing boots or other non-disposal protective equipment suspected of being contaminated using soap solution followed by clean water rinse.
- Removal and disposal of coveralls.
- Removal and disposal of boot covers.
- Removal and disposal of inner gloves.

5.4.2 Equipment Decontamination

Equipment and vehicles will be decontaminated on-site, if necessary. Non-disposable sampling equipment will be decontaminated before use, between samples, and before leaving the sampling location. Equipment that cannot be immersed in soap solution and water will be wiped clean and rinsed with distilled/deionized water.

To prevent off-site transport of contamination, associated equipment and (augers, rods, etc.) will be steamed-cleaned at the fixed decontamination pad as necessary. Decontamination liquids will be collected and drummed. Drummed liquids shall be tested and disposed.

5.5 DISPOSAL PROCEDURES

All discarded materials, waste materials, or other field equipment and supplies shall be handled in such a way as to preclude the potential for spreading contamination, creating a sanitary hazard, or causing litter to be left on-site. All potentially contaminated materials, e.g., clothing, gloves, etc., will be bagged or drummed as necessary, and segregated for disposal. All decontamination wash and rinse water, drill cuttings, and monitoring well development water shall be drummed. Drummed decontamination water and cuttings shall be tested and disposed of in accordance with the Site Investigation Work Plan. All non-contaminated materials shall be collected, bagged, and placed in an on-site dumpster for appropriate disposal as municipal waste.

6.0 PLAN REVIEW

This Site Health and Safety Plan (HASP) have been prepared in accordance with the regulatory requirements of 29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response." In addition, all work performed on the site will comply with, and reflect, the following applicable regulations and appropriate guidance publications, as a minimum:

- (1) Federal Acquisition Regulations, F.A.R. Clause 52.236-13: Accident Prevention.
- (2) Occupational Safety and Health Administration (OSHA), Construction Industry Standards, 29 CFR 1926, and General Industry Standards, 29 CFR 1910.4
- (3) NIOSH/OSHA/USCG/EPA, "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities", October 1985.
- (4) Other applicable Federal, State, and local safety and health requirements.

This site HASP addresses those activities associated with the site investigation activities to be conducted at the former **Susie's Restaurant, Manitowoc, Wisconsin**. It will be implemented by the Site Safety Officer (SSO) during work at the above mentioned site. Compliance with this HASP is required of all General Engineering and On-Site Environmental employees and subcontractors under the direct supervision of General Engineering. Assistance in implementing this plan can be obtained from the Site Safety Officer (SSO) (Appendix D - ASSIGNMENT OF HASP RESPONSIBILITY).

The content of this HASP may change or undergo revision based upon additional information made available to health and safety personnel, results of site monitoring, or changes in the technical scope of work. Any changes proposed must be approved by the SSO.

Plan Prepared By: Brian Youngwirth	June 10, 2019
Project Manager Gener	ral Engineering Company Date
Reviewed by:	
Name/Company	Date
Name/Company	Date

APPENDIX A

ACRONYMS

1,2 -DCA	1,2 Dichloroethane
AST	Aboveground Storage Tank
bgs	Below the Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
Cm/sec	Centimeter per second
COMM	Department of Commerce
DATCP	Department of Agriculture, Trade and Consumer Protection
DO	Dissolved Oxygen
DOT	Department of Transportation
DRO	Diesel Range Organics
ES	Enforcement Standards
EPA	Environmental Protection Agency
ERP	Environmental Repair Program
ft	Feet
GEC	General Engineering Company
GNHS	Geological and Natural History Survey
GRO	Gasoline Range Organics
LOQ	Limit of Quantitation
LSA	Limited Site Assessment
LUST	Leaking Underground Storage Tank
MDL	Method Detection Limit
mg/kg	Milligram per Kilogram (ppm)
mg/l	Milligram per Liter (ppm)
MŤBE	Methyl-Tert-Butyl-Ether
NA	Natural Attenuation
NAP	Naphthalene
ND	No Analyte Detected Above the Method Detection Limit
NE	No Established Compound Regulations
NS	Not Sampled for the Particular Parameter(s)
PAH	Polynuclear Aromatic Hydrocarbons/Poly Aromatic Hydrocarbons
PAL	Preventive Action Limit
PECFA	Petroleum Environmental Clean-up Fund Act
PID	Photoionization Detector
PVC	Poly-Vinyl Chloride
PVOC	Petroleum Volatile Organic Compounds
ppb	Parts per Billion
ppm	Parts per Million
RAP	Remedial Action Plan
RCL	Residual Contaminant Levels
RNA	Remediation by Natural Attenuation
SCHAPER	Schaper Excavating and Petroleum
SI	Site Investigation
SPT	Standard Penetration Test
TOC	Total Organic Carbon
TKN	Total Kjeldahl Nitrogen
µg/kg	Microgram per Kilogram (ppb)
µg/1	Microgram per Liter (ppb)
USGS	United States Geological Survey
UST	Underground Storage Tank

VOCVolatile Organic CompoundsWDNRWisconsin Department of Natural ResourcesWIWisconsinYds3Cubic yards

APPENDIX B

HEAT STRESS

One or more of the following control measures can be used to help control heat stress:

- * Provision of adequate liquids to replace lost body fluids. Employees must replace water and salt lost from sweating. Employees must be encouraged to drink more than the amount required to satisfy thirst. Thirst satisfaction is not an accurate indicator of adequate salt and fluid replacement.
- * Replacement fluids can be commercial mixes such as Gatorade.
- * Establishment of a work regime that will provide adequate rest periods for cooling down. This may require additional shifts of workers.
- * Cooling devices such as vortex tubes or cooling vests can be worn beneath protective garments.
- * All breaks are to be taken in a cool rest area (77^o F is best).
- * Employees shall remove impermeable protective garments during rest periods.
- * Employees shall not be assigned other tasks during rest periods.
- * All employees shall be informed of the importance of adequate rest, acclimation, and proper diet in the prevention of heat stress.

The heat stress of employees on-site may be monitored by the Wet Bulb Globe Temperature Index (WBGT) technique when workers are not wearing protective coveralls (i.e. Tyvek). This method will require the use of a heat stress-monitoring device.

APPENDIX C

COLD EXPOSURE

Local injury resulting from cold is included in the generic term frostbite. There are several degrees of damage. Frostbite of the extremities can be categorized into:

- * <u>Frost nip or incipient frostbite</u>: Characterized by suddenly blanching or whitening of skin.
- * <u>Superficial frostbite</u>: Skin has a waxy or white appearance and is firm to the touch, but tissue beneath is resilient.
- * <u>Deep frostbite</u>: Tissues are cold, pale, and solid; extremely serious injury.

<u>Prevention of frostbite is vital</u>. Keep the extremities warm. Wear insulated clothing during extremely cold conditions. Check for symptoms of frostbite at every break. The onset is painless and gradual--you may never know you have been injured until it is too late.

TO ADMINISTER FIRST AID FOR FROSTBITE, bring the victim indoors and re-warm the areas <u>quickly</u> in water between 39° C and 41° C (102° F to 105° F). Give a warm drink--<u>not</u> coffee, tea, or alcohol. The victim should not smoke. Keep the frozen parts in warm water or covered with warm clothes for 30 minutes, even though the tissue will be very painful as it thaws. Then elevate the injured area and protect it from injury. Do not allow blisters to be broken. Use sterile, soft, dry material to cover the injured areas. Keep victim warm and get **immediate** medical care. After thawing, the victim should try to move the injured areas a little, but no more than can be done alone (without help).

- * Do **NOT** rub the frostbitten part (this may cause gangrene)
- * Do **NOT** use ice, snow, gasoline, or anything cold on frostbite
- * Do **NOT** use heat lamps or hot water bottles to re-warm the part
- * Do **NOT** place the body part near a hot stove

Systemic hypothermia is caused by exposure to freezing or rapidly dropping temperature. Its symptoms are usually exhibited in five states:

- 1) uncontrollable shivering;
- 2) apathy, listlessness, sleepiness, and (sometimes) rapid cooling of the body to less than
- 3) 95°F;
- 3) unconsciousness, glassy stare, slow pulse, and slow respiratory rate;
- 4) freezing of the extremities; and, finally,
- 5) **DEATH**.

APPENDIX D

TOXICITY INFORMATION		
Contaminant	Route of Entry	NIOSH PEL or TLV
		Ppm or mg/m3 (Specify)
Gasoline	I, A, IG, CON	TLV-TWA=30 ppm
		IDLH= 80 ppm
		LEL= 1.4%
Toluene	I, A, IG, CON	TVL-TWA= 100 ppm
		IDLH= 500 ppm
Ethylbenzene	I, IG, CON	TLV-TWA=100 ppm
		IDLH= 800 ppm
Xylenes	I, A, IG, CON	TLV-TWA= 100 ppm
		IDLH= 900 ppm
Naphthalene	I, A, IG, CON	TLV-TWA= 10 ppm
-		IDLH= 250 ppm
Trimethylbenzenes	I, IG, CON	TLV-TWA= 25 ppm
-		IDLH= ND
Cisl, 2 Dichlorothene	I, IG, CON	TVL-TWA= 200 ppm
		IDLH= 1000 ppm
Trichloroethene	I,A, IG, CON	TVL-TWA= 100 ppm (OSHA)
		IDLH= ND
		Carcinogen
Vinyl chloride	I, CON	TVL-TWA= 1 ppm (OSHA)
-		IDLH= ND
		carinogen
Tetrachloroethene	I, A, IG, CON	TVL-TWA= 25 ppm (OSHA)
		IDLH 150 ppm
		Carcinogen
		¥

NIOSH = National Institute for Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TLV-TWA = Threshold Limit Values – Time Weighted Average. TLV refers to airborne concentrations of substances and represents conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse health effects. TWA is the time-weighted average concentrations from a normal 8 hour workday and a 40 hour workweek.

IDLH = Immediately Dangerous to Life or Health. Represents the maximum concentration from which, in the event of a respirator failure, one could escape within 30 minutes without a respirator and without experiencing any impairing or irreversible health effects.

LEL = Lower Explosive Limit in air; percent by volume at room temperature

ppm = parts per million

NE = not established

NA = not applicable

I = inhalation

A = skin absorption

IG = ingestion

C = skin and/or eye contact

TYPICAL RESPONSE PROCEDURES FOR OVERT CHEMICAL EXPOSURE

- SKIN CONTACT: Move to fresh air and/or, if necessary, decontaminate and transport to hospital.
- INHALATION: Use copious amounts of soap and water. Wash/rinse affected area thoroughly, then provide appropriate medical attention. Eyewash will be provided on-site. Eyes should be rinsed for 15 minutes upon chemical contamination.
- INGESTION: Transport to emergency medical facility.
- PUNCTURE WOUNDDecontaminate and transport to emergency medical facility.SSO willOR LACERATION:provide medical data sheets to Medical Personnel.

APPENDIX F

ASSIGNMENT OF HASP RESPONSIBILITY

The following describes the health and safety designations and general responsibilities, which will be implemented for the investigation.

F.1 SITE HEALTH AND SAFETY OFFICER (SSO)

The SSO has overall responsibility for development and implementation of this HASP. The SSO shall approve any changes to this plan due to modification of procedures or newly proposed site activities.

The SSO will be responsible for the development of safety protocols and procedures necessary for field operations, and will also be responsible for the resolution of any outstanding safety issues which arise during the site work. Health and safety-related duties and responsibilities will be assigned only to qualified individuals by the SSO.

The SSO has stop-work authorization which he/she will execute upon determination of an imminent safety hazard, emergency situation, or other potentially dangerous situations, such as detrimental weather conditions. Authorization to proceed with work will be issued by the SSO in conjunction with the Project Manager after such action.

F.2 SUBCONTRACTORS

Subcontracts will be issued for various tasks at the site. Subcontractors shall comply with the requirements outlined in this HASP and in accordance with OSHA 29 CFR 1910 and 29 CFR 1926, but, in all cases, subcontractors shall be responsible for site safety related to or affected by their own field operations (i.e. heavy equipment operations).