SITE HEALTH AND SAFETY PLAN

1. GENERAL INFORMATION

Client: Wisconsin Department of Natural Resources Site Owner: various

Site Name: Oakfield Properties – adjacent properties

Site Address: 201 N. Main Street, Oakfield, WI

Project Manager: Stephen Meer, P.E.

Required Signatures:

Plan Prepared by: [signature] Date: 4/19/23

Reviewed & Approved by: Adam Ecker Date: 4/19/2023

2. EMERGENCY CONTINGENCY PLAN

A. EMERGENCY ROUTES

Hospital name: Agnesian HealthCare Phone number: 911

Hospital address: 430 E. Division St., Fond du Lac, WI 54935

Directions to nearest hospital: See attached map at the end of this section.

Estimated driving distance & time: 10.1 miles, 19 minutes

B. MAP TO NEAREST HOSPITAL

B. PROJECT TEAM / SITE EMERGENCY CONTACTS

	PHONE NUMBER (provide area codes)	
	Primary	Secondary
1. Stephen Meer, P.E.	414-588-8910	
2. Chelsea Engnath	414-312-0071	
3. Rebecca Brown	262-384-1233	
4. Adam Roder, P.E., P.G.	414-588-0415	
5. Ryan Adamec	414 531-4001	
6.Nick Woehlert	414-333-3515	
7.		
8.		
9.		
10.		

C. UTILITIES

Has the utility service locator company (Diggers Hotline) been notified and have utilities been appropriately field marked? Yes [ ] No [x]

Confirmation #, if applicable: _____

D. SITE MAP

3. SITE CHARACTERIZATION

A. SUMMARY PREVIOUS SITE INVESTIGATION(S)

Soil, groundwater, and soil gas sampling have been previously completed at parcels associated with the site. Sub-slab and indoor air sampling has not been completed at the specific properties where work will be completed.

B. SOURCES OF PREVIOUS SITE INVESTIGATION INFORMATION

WDNR Site File, Information provided by the WDNR

C. GENERAL FACILITY DESCRIPTION

[X] Active [ ] Closed/Abandoned

Current site description/ activities (operations on-site, products, raw materials being used, etc.):
The properties where the work will be completed are occupied for residential use. In addition, sampling of sanitary sewer manholes located within active roadways is also anticipated.

Describe previous historical site conditions/ activities:
The parcels are located down-gradient (based on shallow groundwater flow) from a site historically used for metal fabricating and machining.

4. WASTE CHARACTERIZATION

A. WASTE / CONTAMINANT TYPE(S):

[x] Liquid [x] Soil [ ] Solid [ ] Sludge [x] Gas

Type	Date	Chemical	Quantity	Contaminated Media*
Subsurface release	Unknown	Chlorinated solvents	Unknown	Soil and groundwater

(* surface water, soil, ground water, debris, etc.)

Safety Data Sheets (SDSs) are required for site chemicals.
Please indicate where SDS's can be found for this site:

[ ] Separate Site SDS Log/binder [X] Included at end of this Plan

5. HAZARD EVALUATION

Potential Hazards (check boxes that apply to the site):

	corroded containers		visible leachate		underground tanks
	overhead electric lines		underground utilities		surface tanks
	visible soil contamination	x	odors		observed tanks
	observed free product	x	dust		confined spaces
	open lagoons		open pits	x	walking surfaces
	air stack emissions		surface water contamination	x	fall hazards
	visible on-site releases		interior building contamination		
	visible off-site releases	x	electrical hazards		
	lead paint/ surfaces	x	other vehicular traffic		
x	asbestos containing materials		no obvious hazards		

6. PERSONAL PROTECTION

A. PERSONAL PROTECTION

Level of Protection: B [ ] C [ ] D [x] (with modifications)

Modifications (check all that apply)

☒ Personnel working at site must wear hardhat, safety shoes, safety glasses and/or face shield.

☒ Appropriate gloves and chemical suits should be worn if contact with contaminated materials is likely.

☒ Hearing protection must be worn if noise levels prevent normal conversation at a distance of three feet.

☐ No smoking, eating, or drinking is allowed in the exclusion or contamination reduction zones.

☐ No personnel are to enter or approach any excavation area where there is a danger of excavation collapse.

☐ Respiratory protection is dependent on conditions listed in Section 7.B.3.

☒ Other traffic signs for work within the right-of-way

7. STANDARD OPERATING PROCEDURES

A. FIRST AID EQUIPMENT AND PROCEDURES

1. First Aid Equipment:

   Standard first aid kit (sized for number of individuals on-site).

   Portable eye wash (appropriate for number of individuals on-site).

2. First Aid Procedures:

   Ingestion: Follow instructions from Poison Control Center or the MSDS.

   Inhalation: Move victim to fresh air. Seek medical attention if needed.

   Dermal Exposure: Remove contaminated clothing. Wash thoroughly with water.

   A first aid kit will be provided on-site for use in case of minor injuries. A portable eye wash will also be provided. If a worker suffers a chemical splash in the eye, the field team will be instructed to flush the eye for 15 minutes and arrange for off-site medical treatment immediately. Workers will also be instructed to thoroughly wash with soap and water any unprotected skin which comes in direct contact with contaminated soil or water.

   Workers providing CPR or First Aid should use Universal Precautions to control possible exposure to bloodborne and infectious agents. Report all CPR or First Aid assistance to the Project Manager immediately.

3. Site Emergencies:

   In the event of a fire or explosion, evacuate the site immediately and call the appropriate emergency responder (phone numbers listed in Section 2.A.

   In case of a spill, try to contain or stop the spill if it can be done safely and call the local fire department or hazardous materials response (HAZMAT) unit. Phone numbers are listed in Section II.A.

B. CHEMICAL HAZARDS

1. General: Action limits for use of respiratory protective equipment are outlined in Section 7.B. Respiratory protection equipment shall be NIOSH/MSHA-approved and use shall conform to OSHA 29 CFR 1910.134. A written Respiratory Protection Program is maintained at the Sigma office.

   In addition to posing inhalation hazards, many hazardous contaminants can also be absorbed through the skin. Skin contact with any contaminated liquid or soil should be prevented. In situations where sampling would result in direct skin contact with contaminated liquids, saturated soil or contaminated equipment, appropriate gloves will be worn.

2. Organic Vapors: A photoionization detector (PID) or flame ionization detector (FID) will be used to measure the relative concentration of organic vapors. Monitoring for exposure to specific, known contaminants may be done using activated charcoal tubes and vacuum pumps, vapor badges, or colorimetric tubes in the breathing zone when working with heavily contaminated soil or water.

3. Hydrogen Sulfide: Drilling or digging may also liberate pockets of hydrogen sulfide (H2S). While the characteristic "rotten egg" odor of H2S is detectable at levels as low as 0.0005 ppm, prolonged detection is unreliable due to its olfactory fatigue properties. Should H2S be encountered, workers shall be instructed to stop drilling/digging and move to an upwind location until the vapors have dissipated, as measured by colorimetric H2S detector tubes. The borehole or excavation will be immediately backfilled.

4. Flammable Gasses: A combination explosion meter/oxygen (O2) meter will be available on-site to monitor the levels of flammable gases, such as petroleum vapors and methane.

5. Potential Lead-Bearing Surfaces: Samples of lead-based paint (LBP) may be obtained from painted surfaces where the coating is loose and chipping-away from the surface it had been adhered to. Gloves will be worn to protect dermal contact with the LBP sample, and hands will be immediately washed after each sample location.

6 Asbestos: Persons conducting inspections and sampling of suspect and/or ACMs, must hold a valid asbestos inspector certification card issued by the Wisconsin Department of Health and Family Services. In general, do not disturb ACM or suspect ACM unless you are an asbestos inspector collecting a sample.

   Project Team personnel shall be familiar with materials that could contain asbestos such as (but not limited to): floor tiles, mastics, ceiling tiles, roofing felts, asbestos-cement pipe and sheeting, fire-resistant drywall, laboratory counter tops, pipe and boiler insulation, sprayed-on building insulation, automotive or heavy equipment brake and clutch linings, fire-resistant clothing, and other materials.

   Materials suspected of containing asbestos will be treated as asbestos unless documentation and testing results indicate that the material is a non-ACM.

   If ACM is suspected to be present within the buildings at the Site, precautions will be implemented to minimize contact with that material during sample collection.

   Suspected asbestos or ACM shall be in a wet state whenever possible when handled, mixed, removed, cut, or scored.

   Samples of suspected asbestos or ACM such as cement, mortar, coating, grout, plaster, or similar materials shall be thoroughly wetted and placed into appropriate airtight sealable sample bags.

   Do not dry sweep or sand materials that contain or are suspected of containing asbestos.

   Do not remove materials that contain or are suspected of containing asbestos with compressed air.

   To prevent release and\ or contact with fibers during sample collection, the following may apply if deemed necessary:

   - Personnel collecting ACM wear assigned respirators fitted with high-efficiency particulate air (HEPA) filters, and other personal protective clothing.

   - Use of an exhaust ventilation and dust collection system, especially when using saws, drills, scores, abrasive wheels, or other destructive means of sample collection.

   - Use engineering controls, work practices, and respirators to reduce the risk when cutting, grinding, and sanding suspected asbestos or ACM.

C. PHYSICAL HAZARDS

1. Mechanical hazards/ Walking Surfaces/ Fall Protection: cuts, abrasions, contusions; slips, trips, falls; being struck or entrapped by moving parts of heavy equipment or falling objects. Such hazards will be minimized by keeping the work area free of equipment and debris that could cause slips, trips or falls and maintaining a safe distance from heavy equipment and moving machinery parts. Verify walking areas are structurally sound and free of slip and trip hazards prior to access.

   Comply with fall protection requirements per OSHA 29 CFR 1926 Subpart M when working within six feet of an unprotected edge. Sigma employees using fall protection equipment are required to be trained in the proper use of the equipment and associated potential fall hazards.

   Refer to 8.I regarding confined space entry.

2. Electrical Hazards: possible excavation of unanticipated electrical cables and potential contact by heavy equipment with overhead power lines during drilling and excavation. Maintain appropriate clearance from underground and overhead power lines.

   Possible electrical hazards when working in proximity to energized electrical systems. Maintain appropriate clearance from energized electrical equipment. Avoid standing in water when operating electrical tools or equipment.

3. Traffic Hazards: Site work may occasionally necessitate working in parking lots, streets or other areas with vehicular traffic. In such instances, the work team will use neon traffic safety vests and will use traffic cones and/or barricades as necessary to prevent collision between pedestrians and motor vehicles.

4. Open Excavations: When scheduling or work conditions necessitate leaving excavations open overnight, security fencing will be erected to restrict access to the site or work zones described in Section 2.G.

D. WORK LIMITATIONS (time of day, weather, heat/cold stress)

In high ambient temperatures (especially in conjunction with high humidity), follow heat-stress precautions. Drink plenty of cool water and/or electrolyte replacement beverages. Take frequent breaks in areas out of direct sunlight and remove protective clothing during breaks. Check the resting pulse rate and increase the number of breaks if the pulse rate does not return to normal during work breaks. If possible, alter work schedules so work may be conducted during cooler parts of the day (i.e., morning or evening). Work may only progress during daylight hours or under conditions of adequate lighting.

Symptoms of heat exhaustion and heat stress include:

- Profuse sweating or complete cessation of sweating;
- Changes in skin color;
- Increased respiration;
- Vision problems, confusion;
- Body temperatures in excess of 100°F; and
- Increased heart rate.

Any member of the work team who exhibits these symptoms should immediately be removed from the area and observed while resting in a shaded area after removal of impervious or restrictive clothing and after consumption of cool water or electrolyte fluid. If symptoms persist, immediate medical attention shall be sought.

In cold temperatures, especially when combined with high wind, follow hypothermia precautions:

- Take frequent work breaks in a wind-sheltered area.
- Dress in removable layers of insulated clothing to prevent sweating.
- Carry protective water-proof gear and use it before getting wet.
- Drink warm liquids.
- Monitor co-workers for signs of shivering, incoordination, or confusion. Workers exhibiting these signs should be removed from the work area and placed in a heated warming shelter.
- Frost-bite (superficial or deep tissue) can occur on any exposed skin at temperatures of 30.2°F or colder.
- If available clothing does not give adequate protection to prevent hypothermia or frostbite (which can occur on any exposed skin), work should be modified or suspended until adequate clothing is made available or until weather conditions improve.

E. FIRE AND EXPLOSION HAZARDS

During any drilling, excavation or other activities on sites with flammable contaminants, the potential for fire and explosion of flammable vapors exists. Extreme caution should be taken to monitor for the presence of flammable vapors or conditions which could create flammable conditions. Explosion meters are available for this monitoring and action levels are defined in Section 7.B.3. Fire extinguishers must be available on all sites with the potential for flammable vapors or electrical fires (i.e., systems, control panels). Use of fire extinguishers by employees trained in their use is limited to employee rescue, or extinguishing relatively small, controllable fires. Sigma does not expect or require its employees to fight fires.

In the event of a fire or explosion, the following action plan should be followed:

- Shut down equipment and shut off all supply lines immediately, if this can be done safely.

- Evacuate the immediate area.

- Notify the fire department. Sigma employees are not trained firefighters. Every fire should be treated as an emergency. Even if the fire is extinguished by site personnel, professional fire departments should evaluate the situation to ensure that the danger is over and that a fire will not reoccur.

- Evaluate the situation to identify the source of the flammable vapors and to assess the danger to employees, the public and property. From a safe distance, try to determine if the fire is a supply line fire, soil vapor, electrical, or methane fire. This information should be communicated to the fire department. Small fires from known sources (i.e., engine fires, electrical panel fires, etc.) may be extinguished if the employee can do it without high risk. Employees or subcontractors shall not enter an excavation or confined space to attempt to extinguish a fire.

F. NOISE/HEARING PROTECTION

Workers shall be instructed in the recognition of noise hazards and shall be provided, and trained in the use of, hearing protective devices. In general, hearing protective devices shall be worn when working around heavy or noisy equipment or when background noise is so high that a worker has to shout to be heard at a distance of 3 feet.

G. LEVELS OF PROTECTION

Conditions may allow work to be performed in Level D protection: hard hat, steel-toed shoes/boots, cotton coveralls or long-sleeved shirts and long pants, eye protection, hearing protection, and gloves if needed.

If monitoring equipment or site conditions indicate the need to upgrade the level of protection to Level C, air-purifying respirators with organic vapor canisters (or other appropriate cartridges), Tyvek or chemically resistant coveralls with hoods, chemical resistant inner and outer gloves, and disposable boot covers will be donned.

At no time will a Sigma employee conduct work on any site requiring Level A protection. On worksites requiring Level B protection, workers will be provided with additional training and equipment. A Health and Safety Specialist must be on-site at all times while work is being conducted.

H. DECONTAMINATION PROCEDURE

Contamination may result from walking through contaminated soils or liquids, splashing liquids during sampling, use of or contact with contaminated equipment, or contact with air contaminants. Field team workers will be instructed to observe the following precautions to assure contaminants will be effectively removed from tools, equipment, and protective clothing.

- Tools, equipment and personnel will be decontaminated using procedures appropriate for the level of personal protection worn.
- All contaminated, disposable clothing (e.g., Tyvek suits, gloves and disposable boot covers) will be properly bagged for disposal and left on site.
- All personnel with potential for exposure to contaminants are instructed to wash hands, face, neck and forearms at the end of the work shift and to shower at the end of the workday.
- No eating, drinking, or smoking will be permitted in the immediate vicinity of heavy equipment and/or drilling and excavating activities.

Special Decontamination Requirements

_____

_____

_____

I. CONFINED SPACES

If entry into a confined space is necessary, a Confined Space Entry Permit must be completed and authorized, and confined space entry procedures followed. Sigma maintains detailed information on Confined Space Entry classification, entry procedures and required permitting systems.

Does this site have any permit-required confined spaces? Yes [ ] No [x]

8. ACKNOWLEDGMENT AGREEMENT

SIGMA EMPLOYEE
SITE HEALTH AND SAFETY PLAN REVIEW RECORD

I acknowledge that I have read and understood the contents of this Site Health and Safety Plan and I agree to abide by all provisions as set forth.

Signature	Date
	4/19/23
Adam Roder	4/19/2023
	4/19/2023
	4-19-23
	4/19/23
	4/19/23

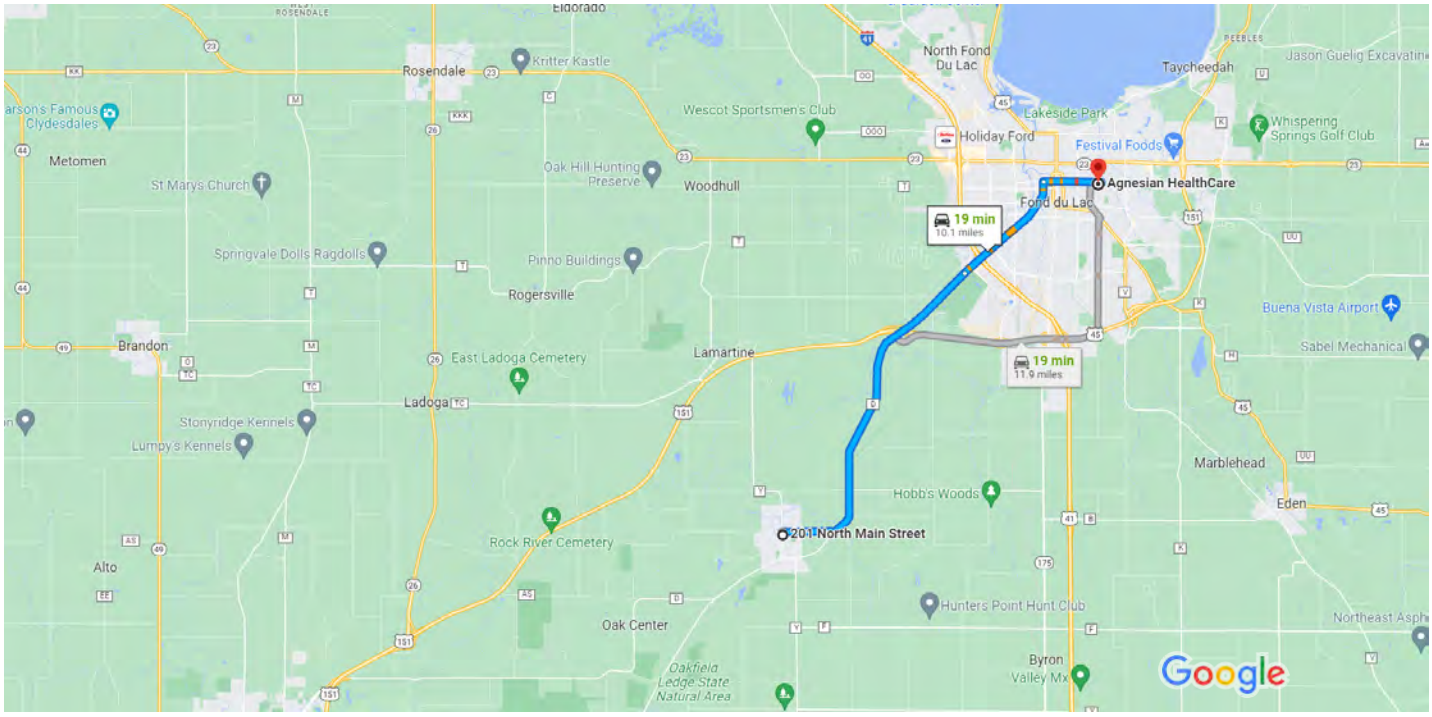
ATTACHMENT 1

HOSPITAL ROUTE

Google Maps

201 N Main St, Oakfield, WI 53065 to Agnesian HealthCare, 430 E Division St, Fond du Lac, WI 54935

Drive 10.1 miles, 19 min



Map data ©2023 Google 1 mi

201 N Main St
Oakfield, WI 53065

Drive from Co Rd D and S Military Rd to Fond du Lac

18 min (10.0 mi)

1. Head north on N Main St toward Wild Goose State Trail

253 ft

2. Turn right onto Co Rd D/E Church St
   Continue to follow Co Rd D

1.0 mi

3. Turn left to stay on Co Rd D

5.7 mi

4. Continue onto S Military Rd

0.7 mi

5. At the traffic circle, take the 2nd exit and stay on S Military Rd

1.6 mi

6. Turn right onto W Division St

1.1 mi

Drive to your destination

14 sec (210 ft)

7. Turn right

85 ft

8. Turn right

125 ft

Agnesian HealthCare
430 E Division St, Fond du Lac, WI 54935

ATTACHMENT 2

SITE MAP


Oakfield Properties
116 E. Church St.
206 E. Church St.
106 E. Church St.
213 N. Main St.
185 N. First St.
201 N. Main St.
Approximate property boundary
E Church St
Oakfield
Hubbard St
N 1st St
N 2nd St
D
Google Earth
© 2020 Google
400 ft
N

ATTACHMENT 3

SAFETY DATA SHEETS (SDS)

Synonyms & Trade Names

Perchlorethylene, Perchloroethylene, Perk, Tetrachlorethylene

CAS No.	RTECS No.	DOT ID & Guide
127-18-4	KX3850000	1897 160

Formula	Conversion	IDLH
$Cl_2C=CCl_2$	1 ppm = 6.78 mg/m^3	Ca [150 ppm] See: 127184

Exposure Limits

NIOSH REL
Ca Minimize workplace exposure concentrations. See Appendix A
OSHA PEL
TWA 100 ppm
C 200 ppm (for 5 minutes in any 3-hour period), with a maximum peak of 300 ppm
See Appendix G

Measurement Methods

NIOSH 1003;
OSHA 1001
See: NMAM or OSHA Methods

Physical Description

Colorless liquid with a mild, chloroform-like odor.

Molecular Weight	Boiling Point	Freezing Point	Solubility	Vapor Pressure	Ionization Potential
165.8	250°F	-2°F	0.02%	14 mmHg	9.32 eV

Specific Gravity	Flash Point	Upper Explosive Limit	Lower Explosive Limit		
1.62	NA	NA	NA		

Noncombustible Liquid, but decomposes in a fire to hydrogen chloride and phosgene.

Incompatibilities & Reactivities

Strong oxidizers; chemically-active metals such as lithium, beryllium & barium; caustic soda; sodium hydroxide; potash

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen]

Target Organs

Eyes, skin, respiratory system, liver, kidneys, central nervous system

Cancer Site

[in animals: liver tumors]

Personal Protection/Sanitation

(See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet or contaminated
Change: No recommendation
Provide: Eyewash, Quick drench

First Aid

(See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

NIOSH

At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection

See also

INTRODUCTION ICSC CARD: 0076 MEDICAL TESTS: 0179

Page last reviewed: October 30, 2019

Synonyms & Trade Names

Ethylene trichloride, TCE, Trichloroethene, Trilene

CAS No.	RTECS No.	DOT ID & Guide
79-01-6	KX4550000	1710 160

Formula	Conversion	IDLH
$ClCH=CCl_2$	1 ppm = 5.37 mg/m^3	Ca [1000 ppm] See: 79016

Exposure Limits

NIOSH REL
Ca See Appendix A See Appendix C
OSHA PEL
TWA 100 ppm C 200 ppm 300 ppm (5-minute maximum peak in any 2 hours) See Appendix G

Measurement Methods

NIOSH 1022 , 3800;
OSHA 1001
See: NMAM or OSHA Methods

Physical Description

Colorless liquid (unless dyed blue) with a chloroform-like odor.

Molecular Weight	Boiling Point	Freezing Point	Solubility	Vapor Pressure	Ionization Potential
131.4	189°F	-99°F	0.1%	58 mmHg	9.45 eV

Specific Gravity	Flash Point	Upper Explosive Limit	Lower Explosive Limit		
1.46	?	(77°F): 10.5%	(77°F): 8%		

Combustible Liquid, but burns with difficulty.

Incompatibilities & Reactivities

Strong caustics & alkalis; chemically-active metals (such as barium, lithium, sodium, magnesium, titanium & beryllium)

Exposure Routes

inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms

irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen]

Target Organs

Eyes, skin, respiratory system, heart, liver, kidneys, central nervous system

Cancer Site

[in animals: liver & kidney cancer]

Personal Protection/Sanitation

(See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet or contaminated
Change: No recommendation
Provide: Eyewash, Quick drench

First Aid

(See procedures)
Eye: Irrigate immediately
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Breathing: Respiratory support
Swallow: Medical attention immediately

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(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister
Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection

See also

INTRODUCTION ICSC CARD: 0081 MEDICAL TESTS: 0236

Page last reviewed: October 30, 2019

CEMENT & CONCRETE PRODUCTS™

C6: Portland Cement Based Concrete Products

SAFETY DATA SHEET
(Complies with OSHA 29 CFR 1910.1200)

SECTION I: PRODUCT IDENTIFICATION

The QUIKRETE® Companies
5 Concourse Parkway, Suite 1900
Atlanta, GA 30328

Emergency Telephone Number
INFOTRAC (800) 535-5053
Information Telephone Number
(800) 282-5828

Revision: Jun-20
SDS C6

QUIKRETE® Product Name	Item #(s)
Fast-Setting Concrete Mix	1004-50, -60
All-Star Fast Setting Concrete Mix	1004-50
Commercial Grade FastSet™ Concrete Mix	1004-51
Post Haste	1004-65
Q-MAX Pro Concrete Mix	1004-81
Commercial Grade Fast Setting Pro Concrete Mix	1004-84
All-Star 10 Minute Instant Post Mix	1005-51
Fence & Post Mix	1105-30
FastSet™ Water-Stop Cement –Zip & Mix	1121-15
Commercial Grade FastSet™ Cement	1124-92
Hydraulic Water Stop	1126-00
Concrete Resurfacer	1131-40
Recap Concrete Resurfacer	1131-47
Multipurpose Concrete Resurfacer	1131-45
Bonded Topping Mix	1133-04, -18
FastSet™ Stucco Patch	1139-92
Architectural Finish	1220-55
Quick Setting Cement	1240
Commercial Grade FastSet™ Repair Mortar – Zip And Mix	1241
ProFinish FastFinish™ Repair Mortar	1241-23, -24
Commercial Grade FastSet™ Repair Mortar	1241-60
Polymer Modified Structural Concrete – Extended Set	1242-85
Commercial Grade FastSetTM Polymer Modified DOT Mix	1244-54
Commercial Grade FastSet™ DOT Mix	1244-56
Commercial Grade FastSet™ DOT Deck Repair – Polymer Modified	1244-58
Commercial Grade FastSet™ DOT Mix – Extended	1244-81
Commercial Grade FastSet™ Non-Shrink Grout	1585-09, -20, -50
ProFinish FastFinish™ Non-Shrink Grout	1585-27, -28
Commercial Grade FastSet™ All-Crete	1585-59
Mix 801 FastSet™ DOT PM Overlay	NR801552/80801552

Rapid Road Repair – CA	1242-56
Rapid Road Repair – CA Extended	1242-83

Product Use: Portland cement-based, rapid-setting materials for general construction or repair.

See most current revision of this document at www.QUIKRETE.com.

SECTION II - HAZARD IDENTIFICATION

Hazard-determining components of labeling: Silica, Portland cement

2.1 Classification of the substance or mixture

Carcinogen – Category 1A
Skin Corrosion – Category 1B
Skin Sensitization – Category 1B
Specific Target Organ Toxicity Repeat Exposure – Category 1
Specific Target Organ Toxicity: Single Exposure – Category 3

2.2a Signal word DANGER!

2.2b Hazard Statements

May cause cancer through chronic inhalation
Causes severe skin burns and serious eye damage
May cause an allergic skin reaction
Causes damage to lungs through prolonged or repeated inhalation
May cause respiratory irritation

2.2c Pictograms

2.2d Precautionary statements

Do not handle until all safety precautions have been read and understood.
Wear impervious gloves, such as nitrile. Wear eye protection, protective clothing and rubber boots.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Use only in a well-ventilated area.
Do not breathe dust.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If on skin (or hair): Remove immediately all contaminated clothing and wash before re-use. Rinse skin or hair with water.
If significant skin irritation or rash occurs: get medical advice or attention.
Immediately seek medical advice if symptoms are significant or persist.

Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/containers in accordance with all regulations.

2.3 Additional Information
The Portland cement in this product can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns. Burns from Portland cement may not cause immediate pain or discomfort. You cannot rely on pain to alert you to cement burns. Therefore, precautions must be taken to prevent all contact with Portland cement. Cement burns can become worse even after contact has ended. If there is contact with this product, immediately remove all product from body and thoroughly rinse with water. If you experience or suspect a cement burn or inflammation you should immediately see a health care professional.

Skin burns and irritation may be caused by brief exposure, though often are caused by extended exposure of 15 minutes, an hour, or longer. Interaction of Portland cement with water or sweat releases a caustic solution which produces the burns or irritation. Any extended exposure should be treated as though a burn has occurred until determined otherwise.

Skin contact with Portland cement can also cause inflammation of the skin, referred to as dermatitis. Signs and symptoms of dermatitis can include itching, redness, swelling, blisters, scaling, and other changes in the normal condition of the skin. Signs and symptoms of burns include the above and whitening, yellowing, blackening, peeling or cracking of skin.

The Portland cement in this product may cause allergic contact dermatitis in sensitized individuals. This overreaction of the immune system can lead to severe inflammation. Sensitization may result from a single exposure to the low levels of Cr(VI) in Portland cement or repeated exposures over months or years. Sensitization is long lasting and, after sensitization, even very small quantities can trigger the dermatitis. Sensitization is uncommon. Individuals who experience skin problems, including seemingly minor ones, are advised to seek medical attention.

2.3a HNOC – Hazards not otherwise classified: Not applicable

2.3b Unknown Acute Toxicity: None

SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	% by Weight
Sand, Silica, Quartz	14808-60-7	40-70*
Portland Cement	65997 15 1	10-30*
Calcium Sulfoaluminate	65997-16-2	10-30*
Calcium Aluminate	12042-68-1	5-10*
Calcium Sulfate	10101-41-4	1-5*
Limestone Dust	01317-65-3	1-5*

*The concentrations ranges are provided due to batch-to-batch variability.
None of the constituents of this material are of unknown toxicity.

SECTION IV – FIRST AID MEASURES

4.1 Description of the first-aid measures

General information:

After inhalation: Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. In case of unconsciousness, place patient stably in side position for transportation.

After skin contact: Wash skin with cool water and pH-neutral soap or a mild detergent. If significant skin irritation or rash occurs: get medical advice or attention.

After eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

After swallowing: Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms/effects, acute and delayed

Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

Skin contact: The Portland cement in this product can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns.

Burns from Portland cement may not cause immediate pain or discomfort. You cannot rely on pain to alert you to cement burns. Therefore, precautions must be taken to prevent all contact with Portland cement. Cement burns can become worse even after contact has ended. If there is contact with this product, immediately remove all product from body and thoroughly rinse with water. If you experience or suspect a cement burn or inflammation you should immediately see a health care professional.

Skin burns and irritation may be caused by brief exposure, though often are caused by extended exposure of 15 minutes, an hour, or longer. Interaction of Portland cement with water or sweat releases a caustic solution which produces the burns or irritation. Any extended exposure should be treated as though a burn has occurred until determined otherwise.

Skin contact with Portland cement can also cause inflammation of the skin, referred to as dermatitis. Signs and symptoms of dermatitis can include itching, redness, swelling, blisters, scaling, and other changes in the normal condition of the skin. Signs and symptoms of burns include the above and whitening, yellowing, blackening, peeling or cracking of skin.

The Portland cement in this product may cause allergic contact dermatitis in sensitized individuals. This overreaction of the immune system can lead to severe inflammation. Sensitization may result from a single exposure to the low levels of Cr(VI) in Portland cement or repeated exposures over months or years. Sensitization is long lasting and, after sensitization, even very small quantities can trigger the dermatitis. Sensitization is uncommon. Individuals who experience skin problems, including seemingly minor ones, are advised to seek medical attention.

Eye Contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Ingestion: May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

4.3 Indication of immediate medical attention and special treatment needed:
Immediately seek medical advice if symptoms are significant or persist.

SECTION V - FIRE FIGHTING MEASURES

5.1 Flammability of the Product: Non-flammable and non-combustible
5.2 Suitable extinguishing agents: Treat for surrounding material
5.3 Special hazards arising from the substance or mixture: None
5.3a Products of Combustion: None
5.3b Explosion Hazards in Presence of Various Substances: Non-explosive in presence of shocks

SECTION VI – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment (See section VIII). Keep unprotected persons away.

6.2 Methods and material for containment and cleaning up:
Do not allow to enter sewers/ surface or ground water. Dispose of unwanted materials and containers properly in accordance with all regulations.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

7.1 Handling
Precautions for safe handling: Ensure good ventilation/exhaustion at the workplace. DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Wear appropriate PPE (See section 8).Do not mix with other chemical products, except as indicated by the manufacturer. Do not get in eyes, on skin or clothing. Good housekeeping is important to prevent accumulation of dust.

7.2 Storage
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep out of the reach of children. Keep container tightly closed and prevent exposure to humidity. Do not allow water to contact the product until time of use to preserve product utility.

SECTION VIII – EXPOSURE CONTROL MEASURES / PERSONAL PROTECTION

8.1 Components with limit values that require monitoring at the workplace:

Hazardous Components	CAS No.	PEL (OSHA) mg/M^3	TLV (ACGIH) mg/M^3
Silica Sand, crystalline	14808-60-7	0.05	0.025 (resp)
Portland Cement	65997-15-1	5 (resp) 15 (total)	10 (resp)
Calcium Sulfoaluminate	65997-16-2	15	10
Calcium Aluminate	12042-68-1	5 (resp) 15 (total)	1 (resp)
Calcium Sulfate	10101-41-4	5 (resp) 15 (total)	10 (resp)
Limestone Dust	01317-65-3	5 (resp) 15 (total)	10 (resp)

8.2 Exposure Controls
Use ventilation adequate to keep exposures below recommended exposure limits.

8.3 General protective and hygienic measures
Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

8.3a Personal protective equipment
Protection of hands and feet:

Wear gloves of adequate length to offer appropriate skin protection from splashes. Nitrile, Butyl and PVC gloves have been found to offer adequate protection for incidental contact. Wear rubber boots when stepping in concrete. You cannot rely on pain to alert you to cement burns. Portland cement can cause dermatitis or sensitization.

Eye protection:
Wear approved eye protection properly fitted dust- or splash-proof chemical safety glasses.

Respiratory protection:
A NIOSH-approved dust mask or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional, following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

General Information

Appearance	Form: Granular Solid Color: Gray to gray-brown colored Odor: None
pH-value at 20°C (68 °F):	13 (10%)
Boiling point/Boiling range:	Not applicable
Flash point:	Not applicable
Auto igniting:	Product is not self-igniting
Vapor pressure at 21°C (70°F)	Not available
Density at 25°C (77 °F):	2.6 to 3.15

Solubility in / Miscibility with Water:	Insoluble
VOC content:	0 g/L VOC

SECTION X – STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reaction known under conditions of normal use.
10.2 Chemical stability
Stable under normal storage conditions. Keep in dry storage.
10.3 Possibility of hazardous reaction
No dangerous reaction known under conditions of normal use.
10.4 Thermal decomposition / conditions to be avoided
No decomposition if used according to specifications.

10.5 Incompatible materials
Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fires
10.6 Hazardous Decomposition or By-products
Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas – silicon tetrafluoride.

SECTION XI – TOXICOLOGICAL INFORMATION

11.1 Exposure Routes: Skin contact, skin adsorption, eye contact, inhalation, or ingestion.

11.2 Symptoms related to physical/chemical/toxicological characteristics:

Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

Skin contact: Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact. Product becomes extremely alkaline when exposed to moisture, and can cause alkali burns and affect the mucous membranes.

Eye Contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Ingestion: Harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

11.3 Delayed, immediate and chronic effects of short-term and long-term exposure
Short Term
Skin Corrosion/Irritation: Causes severe skin burns.
Serious Eye Damage/Irritation: Causes severe eye damage.
Respiratory Sensitization: Not available
Skin Sensitization: May cause an allergic skin reaction.
Specific Target Organ Toxicity-Single Exposure: (Category 3) may cause respiratory irritation.
Aspiration Hazard: Not available
Long Term
Carcinogenicity: May cause cancer through chronic inhalation.
Germ Cell Mutagenicity: Not available
Reproductive Toxicity: Not available
Specific Target Organ Toxicity- Repeated Exposure: (Category 1) Causes damage to lungs through prolonged/repeated exposure
Synergistic/Antagonistic Effects: Not available.

SECTION XII – ECOLOGICAL INFORMATION

12.1 Ecotoxicity
May cause long-term adverse effects to the aquatic environment. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential:
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

12.5 Other Adverse Effects
No further relevant information available.

SECTION XIII – DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method
The packaging and material may be land filled; however, material should be covered to minimize generation of airborne dust. This product is not classified as a hazardous waste under the authority of the RCRA (40CFR 261) or CERCLA (40CFR 117&302). Disposal must be made in accordance with local, state and federal regulations.

13.2 Other disposal considerations
Uncleaned packaging
Recommendation: Disposal must be made in accordance with local, state and federal regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

SECTION XIV – TRANSPORT INFORMATION

	DOT (U.S.)	TDG (Canada)
UN-Number	Not Regulated	Not Regulated
UN proper shipping name	Not Regulated	Not Regulated
Transport Hazard Class(es)	Not Regulated	Not Regulated
Packing Group (if applicable)	Not Regulated	Not Regulated

14.1 Environmental hazards:

Not Available

14.2 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code
Not available

14.3 Special precautions for user
Do not handle until all safety precautions have been read and understood.

SECTION XV – OTHER REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislations specific for the chemical

Canada
WHMIS Classification: Considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

15.2 US Federal Information

SARA 302/311/312/313 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, 311, 312 or 313.
RCRA: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.
CERCLA: Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.
Emergency Planning and Community Right to Know Act (SARA Title III): Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.
FDA: Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).
NTP: Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.
OSHA Carcinogen: Crystalline silica (quartz) is not listed.

15.3 State Right to Know Laws
California Prop. 65 Components

WARNING: This product can expose you to chemicals including crystalline silica which is known to the State of California to cause cancer and Portland cement which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Inhalation Reference Exposure Level (REL): California established a chronic REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.

Massachusetts Toxic Use Reduction Act: Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.

15.4 Global Inventories

DSL All components of this product are on the Canadian DSL list.

TSCA No.: Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7. All constituents are listed in the TSCA inventory.

SECTION XVI – OTHER INFORMATION

Last Updated: June 26, 2020

NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.

Prepared by The QUIKRETE Companies, LLC

End of SDS