

April 19, 2013

City of Superior
Attn: Mr. Jason Serck
1316 N. 14th St, Ste 210
Superior, WI 54880

file copy

Subject: Reported Contamination: City of Superior Right-of-Way, Intersection of Belknap & Clough, Superior, WI
WDNR BRRTS Activity # 03-16-560358

Dear Mr. Serck:

As part of the planned reconstruction of Belknap Street in Superior, the Wisconsin Department of Transportation's (WDOT) consultant, TRC Environmental Corporation, conducted a Phase 2.5 Site Investigation of the area to be reconstructed. During the Phase 2.5 investigation, some geoprobe soil borings were installed in the right-of-way at the intersection of Belknap Street and Clough Avenue. Soil samples were collected from the borings (B22A and B22C) and were analyzed for various constituents. Laboratory results indicated that benzene was detected above applicable standards in the soil. Elevated concentrations of gasoline range organics (GRO) and diesel range organics (DRO) were also detected. A groundwater sample collected from boring B22A exhibited a detection of benzene greater than its NR 140 enforcement standard, as well as some detections of other petroleum volatile organic compounds (PVOCs) and metals above their respective preventive action limits. A map showing the soil boring locations, along with tables showing the laboratory results for soil and groundwater samples collected at the intersection, are attached.

Additional information provided to the Wisconsin Department of Natural Resources (WDNR) by WDOT's consultant indicates that a potential underground storage tank (UST) was encountered at boring B22A. A creamery was reportedly historically operated at this location, and the location of the potential UST corresponds to a gasoline UST shown on Sanborn maps.

Based on the information that has been submitted to the WDNR regarding this site, we believe you are responsible for investigating and restoring the environment at the above-described site under Section 292.11, Wisconsin Statutes, known as the hazardous substances spills law.

This letter describes the legal responsibilities of a person who is responsible under section 292.11, Wis. Stats., explains what you need to do to investigate and clean up the contamination, and provides you with information about cleanups, environmental consultants, possible financial assistance, and working cooperatively with the WDNR, Department of Safety and Professional Services (DSPS) or the Department of Agriculture, Trade and Consumer Protection (DATCP).

Legal Responsibilities:

Your legal responsibilities are defined both in statute and in administrative codes. The hazardous substances spill law, Section 292.11 (3) Wisconsin Statutes, states:

- **RESPONSIBILITY.** A person who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands, or waters of the state.

Wisconsin Administrative Code chapters NR 700 through NR 749 establish requirements for emergency and interim actions, public information, site investigations, design and operation of remedial action systems, and case closure. Wisconsin Administrative Code chapter NR 140 establishes groundwater standards for contaminants that reach groundwater.

Steps to Take:

The longer contamination is left in the environment, the farther it can spread and the more it may cost to clean up. Quick action may lessen damage to your property and neighboring properties and reduce your costs in investigating and cleaning up the contamination. To ensure that your cleanup complies with Wisconsin's laws and administrative codes, you should hire a professional environmental consultant who understands what needs to be done. These are the first steps to take:

1. Within the next **30 days**, by May 19, 2013, you should submit written verification (such as a letter from the consultant) that you have hired an environmental consultant. If you do not take action within this time frame, the WDNR may initiate enforcement action against you.
2. Within the next **60 days**, by June 19, 2013, your consultant should submit a work plan and schedule for the investigation. The consultant must comply with the requirements in the NR 700 Wis. Adm. Code rule series and should adhere to current WDNR technical guidance documents.

In addition, within 30 days of completion of the site investigation, your consultant should submit a Site Investigation Report to the WDNR or other agency with administrative authority.

For sites with petroleum contamination, when your investigation has established the degree and extent of contamination, your consultant will be able to determine whether the Department of Safety and Professional Services or the WDNR has authority over the case. For agrichemicals, your case will be transferred to the Department of Agriculture, Trade and Consumer Protection for oversight.

Sites where discharges to the environment have been reported are entered into the Bureau for Remediation and Redevelopment Tracking System ("BRRTS"), a version of which appears on the WDNR's internet site. You may view the information related to your site at any time (<http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>) and use the feedback system to alert us to any errors in the data.

If you want a formal written response from the department on a specific submittal, please be aware that a review fee is required in accordance with ch. NR 749, Wis. Adm. Code. If a fee is not submitted with your reports, you should proceed under the advice of your consultant to complete the site investigation and cleanup to maintain your compliance with the spills law and chapters NR 700 through NR 749. **Do not delay the investigation of your site by waiting for an agency response.** We have provided detailed technical guidance to environmental consultants. Your consultant is expected to know our technical procedures and administrative rules and should be able to answer your questions on meeting cleanup requirements.

All correspondence regarding this site should be sent to:

Erin Endsley
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
1701 N. 4th Street
Superior, WI 54880
Erin.Endsley@Wisconsin.gov

Unless otherwise requested, please send only one copy of plans and reports. In addition to the paper copy, an electronic copy may also be submitted. To speed processing, correspondence should reference the BRRTS and FID numbers (if assigned) shown at the top of this letter.

Site Investigation and Vapor Pathway Analysis

As you develop the site investigation work plan, we want to remind you to include an assessment of the vapor intrusion pathway. Chapter NR 716, Wisconsin Administrative Code outlines the requirements for investigation of contamination in the environment. Specifically, s. NR 716.11(3)(a) requires that the field investigation determine the "nature, degree and extent, both areal and vertical, of the hazardous substances or environmental pollution in all affected media." In addition, section NR 716.11(5) specifies that the field investigation include an evaluation of the "pathways for migration of the contamination, including drainage improvements, utility corridors, bedrock and permeable material or soil along which vapors, free product or contaminated water may flow."

You will need to include documentation with the Site Investigation Report that explains how the assessment was done. If the pathway is being ruled out, then the report needs to provide the appropriate justification for reaching this conclusion. If the pathway cannot be ruled out, then investigation and, if appropriate, remedial action must be taken to address the risk presented prior to submitting the site for closure. The WDNR has developed guidance to help responsible parties and their consultants comply with the requirements described above. The guidance includes a detailed explanation of how to assess the vapor intrusion pathway and provides criteria which identify when an investigation is necessary. The guidance is available at: <http://dnr.wi.gov/files/PDF/pubs/rr/RR800.pdf>.

Additional Information for Site Owners

We encourage you to visit our website at <http://dnr.wi.gov/topic/Brownfields/>, where you can find information on selecting a consultant, financial assistance and understanding the cleanup process. You will also find information there about liability clarification letters, post-cleanup liability and more.

Be aware that DSPS administers the PECFA program that reimburses money spent conducting investigation and cleanup of eligible petroleum storage tank sites. Information about the PECFA program, including eligibility and regulations, is available at this website: <http://dsps.wi.gov/er/ER-PECFA-Home.html>.

If you have questions, call the DNR Project Manager, Ms. Erin Endsley, at 715-392-3126, for more information or visit the RR web site at the address above.

Thank you for your cooperation.

Sincerely,



Brenda S. Halminiak, P.G.
Hydrogeologist
Remediation & Redevelopment Program

Enc: Table 2, Summary of Soil Analytical Results
Table 3, Summary of Groundwater Analytical Results
Figure 2, Site Layout and Areas of Contamination, Map Page 3 of 6

Cc: Erin Endsley, WDNR (email)

Table 2
 Summary of Soil Analytical Results
 Belknap Street (USH 2) Phase 2.5
 WisDOT ID #8680-00-01
 July 16-19, 2012

ANALYTE	UNITS	GENERIC RCL			B17C	B19A	B19B	B19C	B20A	B20B	B20C	B21A	B22B	B22C	B25	B26A	B26B	B27
		GW ⁽¹⁾	NON-INDUST ⁽²⁾	INDUST ⁽³⁾	10.0-13.0	7.5-10.0	1.0-3.0	1.0-3.0	1.0-4.0	3.0-5.0	2.5-5.0	3.0-5.0	1.0-4.0	7.5-10.0	3.0-5.0	0.5-2.0	0.5-2.5	1.0-3.0
PID	ppm	--	--	--	432.2	57.2	82.1	9.9	5.5	3.0	4.0	576.5	5.5	59.3	3.4	75.6	1.5	5.7
		NR 720 RCLs																
GRO	mg/kg	100	--	--	107	4.3	<3.1	<3.1	<3.2	<3.3	<3.3	621	--	7.8	<3.3	--	--	<3.0
DRO	mg/kg	100	--	--	<1.1	1.7J T4	12.7 T4	1.3J	1.5J	1.3J	<1.1	181 T4	--	5.0 T4	29.6 T4	--	--	74.1 T4
VOCs/PVOCs ⁽⁴⁾		NR 720 RCLs																
1,2,4-TRIMETHYLBENZENE	µg/kg	--	--	--	2100	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	288	<25.0	<25.0	<25.0	4110	<25.0	<25.0
1,3,5-TRIMETHYLBENZENE	µg/kg	--	--	--	864	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	66.1J	<25.0	<25.0	<25.0	808	<25.0	<25.0
BENZENE	µg/kg	5.5	--	--	592	5900	121	<25.0	<25.0	<25.0	<25.0	5370	<25.0	6140	<25.0	871	<25.0	<25.0
CIS-1,2-DICHLOROETHENE	µg/kg	--	--	--	--	<25.0	<25.0	<25.0	--	--	--	<25.0	920	<25.0	--	<25.0	<25.0	--
ETHYLBENZENE	µg/kg	2900	--	--	1080	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	1600	<25.0	<25.0	<25.0	1210	<25.0	<25.0
ISOPROPYLBENZENE (CUMENE)	µg/kg	--	--	--	--	<25.0	<25.0	<25.0	--	--	--	61.2J	<25.0	<25.0	--	320	<25.0	--
M&P-XYLENE	µg/kg	4100 ⁽⁴⁾	--	--	2370	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	1200	<50.0	<50.0	<50.0	3890	<50.0	<50.0
METHYLENE CHLORIDE	µg/kg	--	--	--	--	<25.0	<25.0	<25.0	--	--	--	<25.0	<25.0	<25.0	--	<25.0	<25.0	--
Methyl-tert-butyl ether (MTBE)	µg/kg	--	--	--	42.5J	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Naphthalene	µg/kg	--	--	--	686	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	102	<25.0	<25.0	<25.0	532	<25.0	<25.0
N-BUTYLBENZENE	µg/kg	--	--	--	--	<40.4	<40.4	<40.4	--	--	--	52.7J	<40.4	<40.4	--	453	<40.4	--
N-PROPYLBENZENE	µg/kg	--	--	--	--	<25.0	<25.0	<25.0	--	--	--	64.0J	<25.0	<25.0	--	947	<25.0	--
O-XYLENE	µg/kg	4100 ⁽⁴⁾	--	--	279	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	810	<25.0	<25.0	<25.0	749	<25.0	<25.0
P-ISOPROPYLTOLUENE	µg/kg	--	--	--	--	<25.0	<25.0	<25.0	--	--	--	82.5	<25.0	<25.0	--	110	<25.0	--
SEC-BUTYLBENZENE	µg/kg	--	--	--	--	<25.0	<25.0	<25.0	--	--	--	<25.1	<25.0	<25.0	--	183	<25.0	--
TETRACHLOROETHENE	µg/kg	--	--	--	--	<25.0	<25.0	<25.0	--	--	--	<25.0	1880	<25.0	--	<25.0	<25.0	--
TRICHLOROETHENE	µg/kg	--	--	--	--	<25.0	<25.0	<25.0	--	--	--	<25.0	621	<25.0	--	<25.0	<25.0	--
TOLUENE	µg/kg	1500	--	--	460	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	260	<25.0	<25.0	<25.0	1430	<25.0	<25.0
Total Metals		NR 720 RCLs																
Arsenic	mg/kg	--	0.039	1.6	--	--	--	--	--	--	--	3.9	--	3.9	--	--	--	--
Barium	mg/kg	--	--	--	--	--	--	--	--	--	--	121	--	218	--	--	--	--
Cadmium	mg/kg	--	8	510	--	--	--	--	--	--	--	<0.037	--	<0.037	--	--	--	--
Chromium	mg/kg	--	--	--	--	--	--	--	--	--	--	31.9	--	59.6	--	--	--	--
Lead	mg/kg	--	50	500	--	--	6.2	--	9.0	--	--	14.3	--	11.4	11.2	53.8	10.3	31.3
Mercury	mg/kg	--	--	--	--	--	--	--	--	--	--	0.041	--	0.019	--	--	--	--
Selenium	mg/kg	--	--	--	--	--	--	--	--	--	--	<0.58	--	<0.58	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--	--	--	--	0.47J	--	0.60J	--	--	--	--

Notes:
 J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 -- = Not analyzed.

NR 720 RCLs = generic RCL defined by Wisconsin Administrative Code NR 720.

RCLs = Residual Contaminant Levels.

PAH RCLs = Suggested generic soil RCLs for PAHs, WDNr publication RR-519-97

-- = Suggested RCL has not been established for this analyte.

bold = Indicates that the sample exceeds the groundwater pathway or industrial NR 720 RCL.

Footnotes:

⁽¹⁾ Value is the generic RCL for the groundwater pathway.

⁽²⁾ Value is the generic RCL for exposure by direct contact.

⁽³⁾ Soil samples collected were analyzed for either PVOCs or the WTLUST 8260 list for VOCs.

Only those analytes that were detected are listed. Non-detect results are reported on a wet weight basis.

⁽⁴⁾ RCL is for total Xylenes

T4: Result reported for hydrocarbons within the method-specific range that do not match pattern of laboratory standard.

B: Analyte was detected in the associated blank

Control By: Wesley Braga 8/15/12

Checked By: Ted O'Connell 8/29/12

Table 3
 Summary of Groundwater Analytical Results
 Belknap Street (USH 2) Phase 2.5
 WisDOT ID #8680-00-01
 July 16-19, 2012

ANALYTE	UNITS	NR 140 (GROUNDWATER)		B8B	B10A	B12A	B17A	B19B	B22A	B28B	B32
		ES	PAL								
Dissolved Metals											
Arsenic	µg/L	10	1	---	---	---	---	---	<4.7	---	<4.7
Barium	µg/L	2000	400	---	---	---	---	---	934	---	166
Cadmium	µg/L	5	0.5	---	---	---	---	---	1.8J	---	0.66J
Chromium	µg/L	100	10	---	---	---	---	---	<2.4	---	<2.4
Lead	µg/L	15	1.5	4.4J	4.7J	---	<1.4	3.1	3.8J	2.6J	<1.4
Mercury	µg/L	2	0.2	---	---	---	---	---	<0.10	---	<0.10
Selenium	µg/L	50	10	---	---	---	---	---	<5.8	---	<5.8
Silver	µg/L	50	10	---	---	---	---	---	<2.3	---	<2.3
VOCs⁽¹⁾											
1,2,4-TRIMETHYLBENZENE	µg/L	480	96	<0.97	53.8	<0.97	<0.43	<0.97	186	15.7	<0.97
1,3,5-TRIMETHYLBENZENE	µg/L	480	96	<0.83	22.5	<0.83	<0.40	<0.83	66.6	2.5	<0.83
BENZENE	µg/L	5	0.5	0.52J	13.7	55.3	<0.39	21.1	23800	123	<0.41
CHLOROMETHANE	µg/L	30	3	<0.24	---	<0.24	---	<0.24	<12.0	---	<0.24
CIS-1,2-DICHLOROETHENE	µg/L	70	7	<0.83	---	<0.83	---	<0.83	<41.5	---	<0.83
ETHYLBENZENE	µg/L	700	140	<0.54	12.5	<0.54	<0.41	0.62J	393	30.5	<0.54
ISOPROPYLBENZENE (CUMENE)	µg/L	--	--	<0.59	---	<0.59	---	<0.59	<29.5	---	<0.59
METHYL-TERT-BUTYL ETHER	µg/L	60	12	<0.61	<0.95	<0.61	<0.38	<0.61	<30.5	<0.38	<0.61
NAPHTHALENE	µg/L	100	10	2.1J	---	<0.89	<0.40	<0.89	65.4J	4.0	<0.89
N-BUTYLBENZENE	µg/L	--	--	<0.93	---	<0.93	---	<0.93	<46.5	---	<0.93
N-PROPYLBENZENE	µg/L	--	--	<0.61	---	<0.81	---	<0.81	<40.5	---	<0.61
P-ISOPROPYLTOLUENE	µg/L	--	--	<0.67	---	<0.67	---	<0.67	<33.5	---	<0.67
SEC-BUTYLBENZENE	µg/L	--	--	<0.89	---	<0.89	---	<0.89	<44.5	---	<0.89
TOLUENE	µg/L	1000	200	<0.67	<1.0	<0.67	<0.42	<0.67	114	55.1	<0.67
XYLENE (TOTAL)	µg/L	2000	400	<2.69	13.6	<2.63	<1.3	<2.63	1127	54.2	<2.63
Well Information											
Well Depth	Feet bgs			13	13	13	13	13	13	13	13
Depth To Water	Feet bgs			4.5	10.5	0.5 ⁽¹⁾	10.5	0.5 ⁽¹⁾	0.5 ⁽¹⁾	0.5 ⁽¹⁾	0.5 ⁽¹⁾

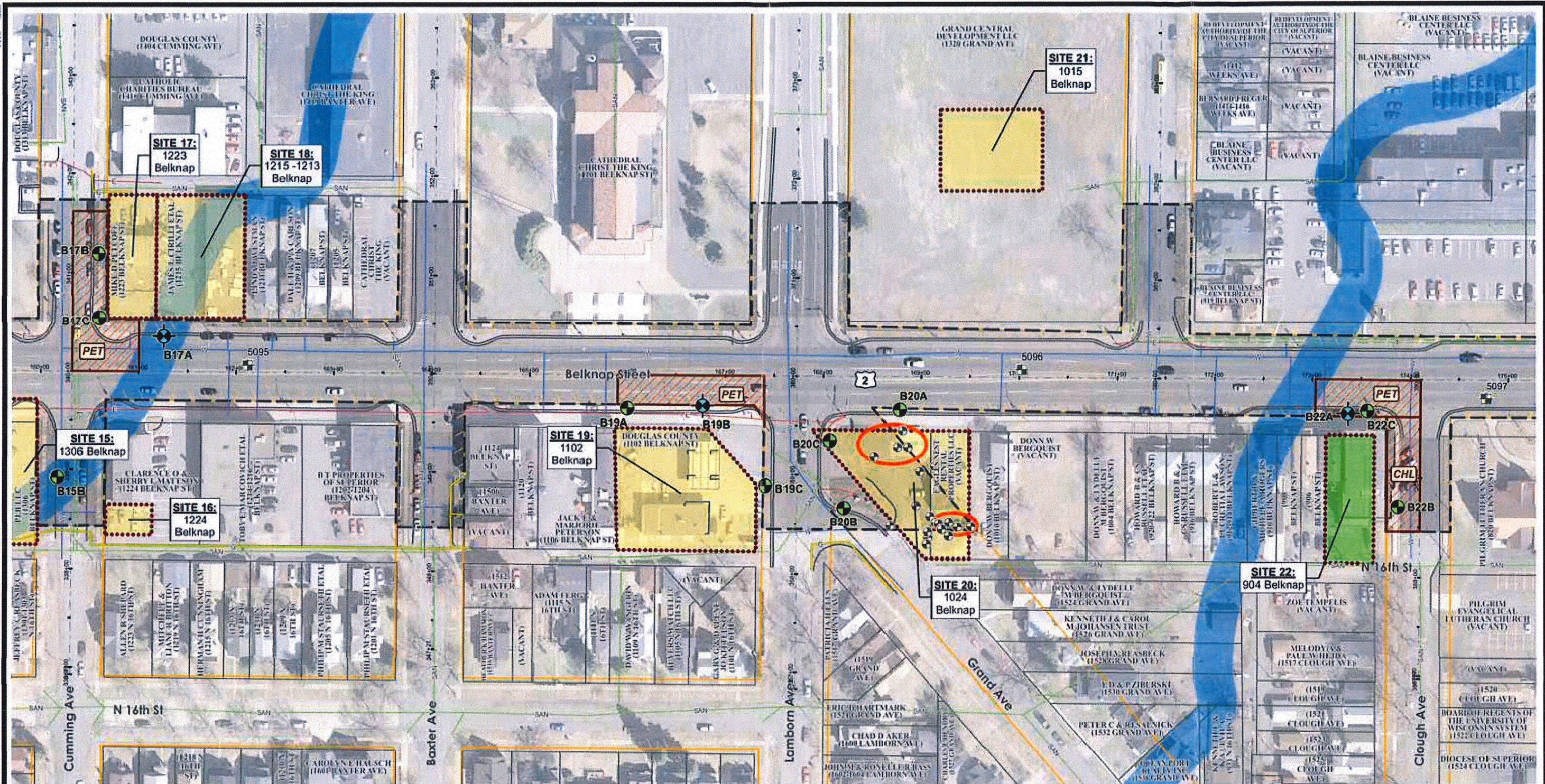
Notes:

Only analytes that were detected in at least one sample are listed in the above table.
 ES = NR 140 Enforcement Standard; analytical results that exceed the ES are shown in bold font.
 PAL = NR 140 Preventative Action Limit; analytical results that exceed the PAL are shown in italics.
 J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 -- = Suggested ES or PAL has not been established for this analyte.
 --- = Not Analyzed

Footnotes:

⁽¹⁾ Groundwater samples collected were analyzed for the WI Modified GRO list or the WI LUST 8260 list for VOCs. Only those analytes that were detected are listed.

Created By: Wesley Braga 8/15/12
 Checked By: Ted O'Connell 8/29/12

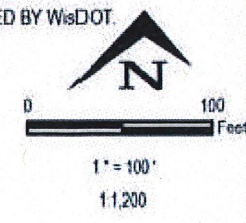


LEGEND

- | | | | | | |
|--|-------------------------------------|--|--|--|-------------------------|
| | APPROXIMATE PROJECT LIMITS | | PHASE I SITES | | EXISTING UTILITIES |
| | PROPERTY BOUNDARY | | PETROLEUM | | SANITARY SEWER |
| | RIGHT-OF-WAY BOUNDARY | | DRY CLEANER | | STORM SEWER |
| | SOIL BORING (JULY 2012) | | WOODWORKING | | UNDERGROUND WATER |
| | SOIL BORING / TEMP WELL (JULY 2012) | | APPROXIMATE EXTENT OF IMPACTS IN SOIL IDENTIFIED BY OTHERS (CURRENT AND REMOVED) | | UNDERGROUND ELECTRIC |
| | PREVIOUS SOIL BORING | | ESTIMATED EXTENTS OF SOIL CONTAMINATION IN CONSTRUCTION AREAS | | UNDERGROUND GAS |
| | PREVIOUS MONITORING WELL | | APPROXIMATE HISTORIC STREAM | | UNDERGROUND FIBER OPTIC |
| | PREVIOUS GEOTECHNICAL BORING | | | | UNDERGROUND TELECOM |

NOTES

- BASE MAP IMAGERY FROM DOUGLAS COUNTY / CITY OF SUPERIOR, 2006.
- PARCEL BOUNDARIES, RIGHT-OF-WAY BOUNDARIES, STORM SEWER LINES, AND SANITARY SEWER LINES PROVIDED BY CITY OF SUPERIOR GIS DEPARTMENT.
- OTHER UTILITIES AND EDGE OF PAVEMENT LINES SUPPLIED BY WisDOT.
- SITE ID DETAILS SUMMARIZED IN TABLE 1
- SOIL IMPACT CODES:
 *PET = PETROLEUM IMPACT
 *LL PET = LOW LEVEL PETROLEUM IMPACT
 *CHL = CHLORINATED IMPACT



PROJECT			
USH 2 (BELKNAP STREET)			
WISDOT ID# 8680-00-01			
SUPERIOR, WISCONSIN			
SHEET TITLE			
FIGURE 2			
SITE LAYOUT AND AREAS OF CONTAMINATION			
DRAWN BY:	PAPEZ J	SCALE:	1:1,200
CHECKED BY:	O'CONNELL T	PROJ. NO:	192580
APPROVED BY:	HAAK D	FILE NO.:	192580.001mb.mxd
DATE:	DECEMBER 2012	MAP PAGE 3 OF 6	
		708 Heartland Trail, Suite 3000 Madison, WI 53717 Phone: 608.826.3600 www.trcsolutions.com	