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July 25, 2016

Project # 3023

Mr. John Hnat  
Project Manager  
Remediation and Redevelopment Program  
Wisconsin Department of Natural Resources  
2300 N Martin Luther King, Jr. Drive  
Milwaukee, WI 53212-3128

RECEIVED

AUG 9 2016

Initial: 

**Subject:** Shop Rite Grocery (Former) / Villard Foodtown (Current)  
3217 West Villard Avenue, Milwaukee, WI  
**FID #** 241692110      **BRRTS #** 02-41-119925      **Tax Key #** 192-0853000  
*Semiannual Status Report*

**Dear John:**

On behalf of Villard Foodtown, LLC (Villard), O M Enterprise (OM) is submitting the Semiannual Status Report for the referenced site.

### **Topographic Location and Bordering Properties**

The property, part of the NW ¼ of the SE ¼ of Section 36, Township 8 North, Range 21 East, SW/4 Milwaukee-Wisconsin 15' Quadrangle.

The area of the property is approximately 56,296 square feet. West Villard Avenue borders the property to the north. A railroad borders the property to the east, northeast, and southeast. God's Anointed Ones Church is located to the west. Commercial properties are located to the west and southwest (**Figure 1**).

### **Use of Property for Lumber Sale, Grocery Retail, and Dry Cleaning**

A Phase I Environmental Site Assessment (ESA) was conducted in accordance with ASTM Standard E-1527-13. A brief summary of the uses of the property is as follows.

1910-1962	Lumber Company
1963	Existing Building
1962-1976	Coin Operated Laundry
1976	Use of <u>PCE</u> (perchloroethylene)
1978	Installation of Concrete Sump
1984	End of Dry Cleaning Operation

## **Former Dry Cleaning Area and Use of PCE from 1976 to 1984**

JJ Fish & Chicken, 3213 W Villard Avenue, is located in the northeast corner of the existing building. This northeast area of JJ Fish & Chicken is the location of the former dry cleaning area. The use of PCE began in 1976. A concrete holding tank was installed in 1978 to store the PCE waste. The concrete holding tank was abandoned in place.

## **Fate, Densities, and Solubilities of Detected Chlorinated Solvents**

The physical and chemical properties of chlorinated solvents govern their fates in air, soil, and water. At room temperature, most solvents are colorless with densities greater than that of water.

The densities of PCE, TCE, cis-DCE, and VC are 1.63 g/ml, 1.46 g/ml, 1.28 g/ml, and 0.91 g/ml, respectively. The solubilities of PCE, TCE, cis-DCE, and VC are 150 mg/L, 1100 mg/L, 3500 mg/L, and 2763mg/L, respectively.

## **Advancement of Soil Borings and Installation of Monitoring Wells**

Nine soil borings (B-1 through B-9) were advanced and converted into groundwater monitoring wells (MW-1 through MW-7, PZ-1 and PZ-2) between September 1991 and April 2016. Off-site soil boring B-7/monitoring well MW-7 is located at 5151 North 32<sup>nd</sup> Street. The soil borings and monitoring wells, summarized below, are described in **Table 1**.

September 20, 1991	Soil boring B-1 and B-2, each ~ 25' deep B-1 to MW-1 and B-2 to MW-2, each 10-foot screen
March 9, 1993	Soil boring B-3 and B-4, each ~ 15 feet deep B-3 to MW-3 and B-4 to MW-4, each 10-foot screen
April 7, 2016	Soil boring B-5, B-6, and B-7, each ~ 15' deep B-5 to MW-5, B-6 to MW-6, and B-7 to MW-7, each 15-foot screen
April 8, 2016	Soil boring B-8 and B-9, each ~ 25' deep B-8 to PZ-1 and B-9 to PZ-2, each 5-foot screen

## **Borings Logs, Well Construction Reports, and Well Development Forms**

The soil boring logs of five boring (B-5 through B-9); well construction reports of five monitoring wells (MW-5 through MW-7, PZ-1 and PZ-2; and well development forms of five monitoring wells (MW-5 through MW-7, PZ-1 and PZ-2) are included in **Appendix A**.

## Residual Contaminants Levels (RCLs) in Soil

Two soil samples (0-2 and 2-4 ft.) from each boring were tested for volatile organic compounds. The test results are included in **Appendix B** and are summarized in Table 2A through 2C. RCLs calculations are included in **Appendix C**. The RCLs for the direct contact issue and soil to groundwater pathways are summarized in Table 3A through 3N.

### ***Soil Boring B-1, S-2, 3.5 to 5.5 feet***

- a) Benzene, ethylbenzene, toluene, and xylenes were not detected.
- b) PCE, TCE, DCE, and VC were detected at 37 ppm, 3 ppm, 2.80 ppm, and 0.031 ppm, respectively.
- c) Non-industrial direct contact for PCE and TCE exceeded.
- d) For soil to groundwater, the concentrations exceeded for PCE, TCE, DCE, and VC.

*An existing intact asphalt cap/barrier is in place to prevent direct contact of contaminants. Additional soil borings and protective cover/cap are not warranted.*

### ***Soil Boring B-3, S-1, 1 to 3 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, and Vinyl chloride not detected.
- b) PCE, TCE, and DCE detected at 0.033 ppm, 0.0077 ppm, and 0.0084 ppm, respectively.
- c) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

*An existing intact asphalt cap/barrier is in place to prevent direct contact of contaminants. Additional soil borings and protective cover/cap are not warranted.*

### ***Soil Boring B-3, S-3, 6 to 8 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, PCE, TCE, and VC were not detected.
- b) DCE was detected at 0.036 ppm.
- c) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

*An existing intact asphalt cap/barrier is in place to prevent direct contact of contaminants. Additional soil borings and protective cover/cap are not warranted.*

### ***Soil Boring B-4, S-3, 6 to 8 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, and VC were not detected.
- b) PCE, TCE, and DCE were detected at 23 ppm, 0.49 ppm, and 0.07 ppm, respectively.
- c) For soil to groundwater, the concentrations exceeded for PCE, TCE, DCE, and VC.

*An existing intact asphalt cap/barrier is in place to prevent direct contact of contaminants. Additional soil borings and protective cover/cap are not warranted.*

**Soil Boring B-5, S-1, 0 to 2 feet**

- a) Benzene, ethylbenzene, toluene, xylenes, TCE, DCE, and VC were not detected.
- b) PCE was detected at 0.32 ppm.
- c) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

*An existing intact asphalt cap/barrier is in place to prevent direct contact of contaminants. Additional soil borings and protective cover/cap are not warranted.*

**Soil Boring B-5, S-2, 2 to 4 feet**

- a) Benzene, ethylbenzene, toluene, xylenes, TCE, DCE, and VC were not detected.
- b) PCE was detected at 0.40 ppm.
- c) Non-industrial direct contact did not exceed.
- d) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

*An existing intact asphalt cap/barrier is in place to prevent direct contact of contaminants. Additional soil borings and protective cover/cap are not warranted.*

**Soil Boring B-6, S-1, 0 to 2 feet**

- a) Benzene, ethylbenzene, toluene, xylenes, TCE, DCE, and VC were not detected.
- b) PCE was detected at 0.153 "J" ppm.
- c) Non-industrial direct contact did not exceed.
- d) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

*An existing intact asphalt cap/barrier is in place to prevent direct contact of contaminants. Additional soil borings and protective cover/cap are not warranted.*

**Soil Boring B-6, S-2, 2 to 4 feet**

- a) Benzene, ethylbenzene, toluene, xylenes, TCE, DCE, and VC were not detected.
- b) PCE was detected at 0.18 ppm.
- c) Non-industrial direct contact did not exceed.
- d) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

*An existing intact asphalt cap/barrier is in place to prevent direct contact of contaminants. Additional soil borings and protective cover/cap are not warranted.*

***Soil Boring B-7, S-1, 0 to 2 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, TCE, DCE, and VC were not detected.
- b) PCE was detected at 0.278 ppm.
- c) Non-industrial direct contact did not exceed.
- d) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

Off-site soil boring B-7 is located to the east of railroad at the former Associated Allied Industries/New Pleasant Grove Missionary Baptist Church, 5151 N 32<sup>nd</sup> Street. Associated Allied Industries, a former hazardous waste site, is listed under the following environmental databases.

- a) Wisconsin Solid & Hazardous Waste Information Management System (SHWIMS) (FID # 241807940), and
- b) Federal RCRA Non-Gen / NLR and FINDS (Facility Index System/Facility Registry System)
  - EPA Id # W1R000001883 as of 6/13/2001
  - Large Quantity Generator as of 3/28/95
  - Waste Code: D001
  - Ignitable Waste
  - FINDS: Registry Id: 110005508520

*PCE is also used as a vapor degreasing solvent in metal cleaning operations. O M believes that 0.278 ppm in the soil boring at this location may be associated with the former Associated Allied Industries.*

Former Associated Allied Industries, a contaminated site, is located approximately 385 feet south of the former Shop Rite grocery site and groundwater flow from the project site is northeast. Therefore, O M believes that contamination at 5151 N 32<sup>nd</sup> Street is not associated with the project site and additional soil boring is not warranted.

***Soil Boring B-7, S-2, 2 to 4 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, TCE, DCE, and VC were not detected.
- b) PCE was detected at 0.340 ppm.
- c) Non-industrial direct contact did not exceed.
- d) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

*PCE is also used as a vapor degreasing solvent in metal cleaning operations. O M believes that 0.278 ppm in the soil boring at this location may be associated with the former Associated Allied Industries.*

***Soil Boring B-8, S-1, 0 to 2 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, and VC were not detected.
- b) PCE, TCE, and DCE were detected at 11.1 ppm, 0.95 ppm, and 0.33 "J" ppm, respectively.

- c) Non-industrial direct contact did not exceed.
- d) For soil to groundwater, the concentrations exceeded for PCE, TCE, DCE, and VC.

*Additional boring to the northeast of B-8 on the rail road property and 5151 North 32<sup>nd</sup> Street is not possible.*

***Soil Boring B-8, S-2, 2 to 4 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, and VC were not detected.
- b) PCE was detected at 88 ppm.
- c) TCE was detected at 12 ppm.
- d) DCE was detected at 14.1 ppm.
- e) Non-industrial direct contact did not exceed.
- f) For soil to groundwater, the concentrations exceeded for PCE, TCE, DCE, and VC.

*There is no issue of direct contact of contaminants. Additional boring to the northeast of B-8 on the rail road property and 5151 North 32<sup>nd</sup> Street is not possible.*

***Soil Boring B-9, S-1, 0 to 2 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, TCE, DEC, and VC were not detected.
- b) PCE was detected at 0.278 ppm.
- c) Non-industrial direct contact did not exceed.
- d) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

There is no issue of direct contact of contaminants.

***Soil Boring B-9, S-2, 2 to 4 feet***

- a) Benzene, ethylbenzene, toluene, xylenes, and VC were not detected.
- b) PCE was detected at 9.3 ppm.
- c) TCE was detected at 0.206 ppm.
- d) DCE was detected at 0.0265 "J" ppm.
- e) Non-industrial direct contact did not exceed.
- f) For soil to groundwater, the concentrations exceeded for PCE, TCE, and VC.

*There is no issue of direct contact of contaminants.*

## **Investigation on the Right-of-Way of N 32" Street May Not be Warranted**

0 M believes that an environmental site investigation on the right-of-way (ROW) of North 32" Street may not be warranted because of the following observations.

- a) The ROW is sandwiched between suspected contaminated property located at N 5151 N 32<sup>nd</sup> and confirmed contaminated property located N 5150 N 32<sup>nd</sup> Street.
- b) Contamination on the suspected contaminated property has not been confirmed.
- c) Plume of contamination along the west lot line of N 5150 N 32<sup>nd</sup> Street appears to have been delineated for Metro Works.

## **Drilling on Former Metro Works, 5150 N 32<sup>nd</sup> Street May Not be Warranted**

- a) The former Philips Components/Central Lab as a LUST site (WDNR FID # 241573640; WDNR BRRTS # 03-41-002039). One 15000 gallon fuel oil tank was closed in place with inert material on October 25, 1985. The site was located along Villard Avenue. WDNR closed the LUST activity on December 29, 1992.
- b) Metro Works, located to south of Philips Components, is listed under the State/Federal environmental databases of LUST, UST, CRS, AUL, Brownfields. WDNR FID # 241032880; Status: closed; BRRTS If 03-41-391656.
- c) Soil boring GP-1 was advanced along the western lot line of 5150 North 32<sup>nd</sup> property. PVOCS and GROs were not detected at 13 to 15 feet below grade. However, low levels of DROs (7.08 ppm) were detected. Therefore, petroleum contamination along west lot line appears to have been delineated.

## **Use of Chlorinated Solvents at Metro Works, 5150 N 32" Street**

Central Lab, listed as RCRA NonGen/NLR, NY Manifest sites, was used to store and use the spent halogenated chlorinated solvents (Tetrachloroethylene; Trichloroethylene; Methylene Chloride; 1,1,1-Trichloroethane; Carbon tetrachloride; and Chlorinated fluorocarbons) in degreasing.

Also large quantity generator (LQG)      Waste Code: F001 NY Manifest: EPA ID # WID0061024

## Groundwater Quality

Groundwater samples of May 2, 2016 were tested for volatile organic compounds (VOCs) using EPA Method 8260B. The laboratory test results are included in **Appendix D**. Groundwater quality data are summarized in Table 4A through 4I.

### Monitoring Well MW-1

- a) Benzene was detected at less than 1 ppb between 1991 and 1993. However, benzene was detected less than 88 ppb in the last two rounds. An increase in the detection limit from 1 ppb to 88 ppb appears to be associated with the interferences of other known/unknown compounds.
- b) Chlorodibromomethane was detected less than 250 ppb, 100 ppb, 25 ppb, and 90 ppb, respectively. An increase in the detection limit from 25 ppb to 90 ppb appears to be associated with the interferences of other known/unknown compounds.
- c) DCE (cis 1, 2 Dichloroethene) was detected as 560 ppb, 960 ppb, 780 ppb, 2410 ppb, and 2260 ppb, respectively.
- d) Ethylbenzene was detected less than 1 ppb between 1991 and 1993. However, benzene was detected less than 142 ppb. An increase in the detection limit from 1 ppb to 142 ppb appears to be associated with the interferences of other contaminants.
- e) PCE (Tetrachloroethene) was detected at 14000 ppb, 38000 ppb, 34000 ppb, 21200 ppb, and 22100 ppb, respectively.
- f) Toluene was dected at 16 ppb, 4.1 ppb, 12 ppb, and less than 88 ppb, respectively. An increase in the detection limit from 1 ppb to 88 ppb appears to be associated with the interferences of other known/unknown compounds.
- g) TCE (Trichloroethylene) was detected at 220 ppb, 960 ppb, 700 ppb, 3400 ppb, and 2940 ppb, respectively.
- h) VC (Vinyl Chloride) was detected at 11 ppb, 33 ppb, 14 ppb, 84“J” ppb, and 104 “J” ppb, respectively. “J” denotes the concentration between the limit of detection (LOD) and limit of quantification (LOQ). An increase appears to be associated with the interferences of other known/unknown compounds.
- i) Xylenes were detected less than 3 ppb between 1991 and 1993. However, xylenes were detected at less than 620 ppb. An increase in the detection limit from 3 ppb to 620 ppb appears to be associated with the interferences of other known/unknown compounds.

*Groundwater samples of August 2016 sampling will be tested for VOCs.*

**Monitoring Well MW-2**

Benzene, chlorodibromomethane, DCE (cis 1, 2 Dichloroethene), ethylbenzene, PCE (Tetrachloroethene), toluene, TCE (Trichloroethylene), VC (Vinyl Chloride), xylenes were not detected.

*Groundwater samples of August 2016 sampling will be tested for PVOCs.*

**Monitoring Well MW-3**

Benzene, chlorodibromomethane, ethylbenzene, toluene, and xylenes were not detected.

The concentration of DCE (cis 1, 2 Dichloroethene) has significantly decreased. DCE was detected at 5.90 ppb in May 2016.

PCE (Tetrachloroethene) was not detected in three out of four rounds. PCE (1.17 "J" ppb) in May 2016 denotes a concentration between the limit of detection (LOD) and limit of quantification (LOQ).

TCE (Trichloroethylene) was not detected in two out of four rounds. TCE was detected at 0.69 "J" and 0.66 "J" ppb, respectively in the last two rounds.

The concentration of vinyl chloride (VC) ranged between 2.01 ppb and 4.8 ppb in three out of four rounds.

*Groundwater samples of August 2016 sampling will be tested for VOCs.*

**Monitoring Well MW-4**

Benzene, chlorodibromomethane, ethylbenzene, and xylenes were not detected in any of the four rounds.

DCE (cis 1, 2 Dichloroethene) concentrations ranged between 313 ppb (May 2016) and 1100 ppb (April 1993).

PCE (Tetrachloroethene) concentrations were detected at 2900 ppb, 2400 ppb, 39 ppb, and 44 ppb, respectively.

Toluene was not detected in the last two rounds.

TCE (Trichloroethylene) was detected at 440 ppb, 380 ppb, 33 ppb, and 24.6 ppb, respectively.

VC (Vinyl Chloride) was detected at 42 ppb, 48 ppb, 63 ppb, and 60 ppb, respectively.

*Groundwater samples of August 2016 sampling will be tested for VOCs.*

**Monitoring Well MW-5**

PVOCs and chlorinated solvents were not detected.

*Groundwater samples of August 2016 sampling will be tested for PVOCs.*

**Monitoring Well MW-6**

PVOCs and chlorinated solvents were not detected.

*Groundwater samples of August 2016 sampling will be tested for PVOCs.*

**Monitoring Well MW-7**

PVOCs and chlorinated solvents were not detected.

*Groundwater samples of August 2016 sampling will be tested for PVOCs.*

**Monitoring Well PZ-1**

DCE (84 ppb), PCE (75 ppb), TCE (20.20 ppb), and VC (0.97 ppb) were detected in the first round of sampling.

*Groundwater samples of August 2016 sampling will be tested for VOCs.*

**Monitoring Well PZ-2**

PCE was detected at 39000 ppb.

Benzene (< 220 ppb), chlorodibromomethane (< 225 ppb), DCE (230 "J" ppb), ethylbenzene (< 355 ppb), toluene (< 220 ppb), TCE (670 "J" ppb), VC (< 85 ppb), and xylenes (< 1550 ppb) were also detected.

"J" denotes the concentration between the limit of detection (LOD) and limit of quantification (LOQ).

An increase in the detection limit appears to be associated with the interferences of other known/unknown compounds.

*Groundwater samples of August 2016 sampling will be tested for VOCs.*

## Depth to Groundwater and Confirmed Groundwater Flow

Depth to groundwater of all monitoring wells and groundwater elevations of MW-1 through MW-4 are included in **Table 5**.

Groundwater elevations in MW-1 through MW-4 in May 2016 were 644.54 ft. MSL; 642.72 ft. MSL; 646.05 ft., MSL; and 645.72 ft. MSL, respectively. Groundwater appears to flow to the northeast.

## Survey of New Monitoring Wells Not Warranted

Three monitoring wells are required to determine the flow of groundwater. Four monitoring wells were surveyed during the previous investigation. Groundwater flow has been confirmed to the northeast. Therefore, survey of new wells is not warranted.

## Sieve # 2 Grain Size and Hydraulic Conductivity Testing

The laboratory test results are included in **Appendix E**. Soils at the site are predominantly silty clay with trace fines. The hydraulic conductivity appears to be less than  $1.0 \times 10^{-8}$  cm second.

## Summary, Conclusions, and Recommendations

The northeast part of the building was used for dry cleaning from 1976 to 1984. Nine soil borings were advanced and converted into monitoring well were between 1991 and 2016. Soils at the site are very cohesive. Groundwater appears to flow to northeast. The hydraulic conductivity appears to be less than  $1.0 \times 10^{-8}$  cm second.

Chlorinated solvents were detected in on-site borings B-1, B-3, B-4, B-8, and B-9. There is no issue of direct contact because the existing asphalt cover is intact. Additional drilling to the northeast of boring B-8 is not possible due to the presence of rail road and soil boring B-7 was advanced on the property located immediately east of the rail road.

Low level of PCE was detected in soil boring B-7 located at the former Associated Allied Industries, 5151 North 32<sup>nd</sup> Street. Associated Allied Industries, a former hazardous waste site, is listed under the Wisconsin Solid & Hazardous Waste Information Management System (SHWIMS) (FID # 241807940), and Federal RCRA Non-Gen / NLR and FINDS (Facility Index System/Facility Registry System) EPA Id # W1R000001883 as of 6/13/2002, Large Quantity Generator as of 3/28/95, Waste Code: D001, Ignitable Waste, FINDS: Registry Id: 110005508520. PCE is also used as a vapor degreasing solvent in metal cleaning operations. O M believes that 0.278 ppm in the soil boring at this location may be associated with the former Associated Allied Industries. Former Associated Allied Industries, a contaminated site, is located approximately 385 feet south of the former Shop Rite grocery site and groundwater flow from the project site is northeast. Therefore, O M believes that contamination at 5151 N 32<sup>nd</sup> Street is not associated with the project site and additional soil boring is not warranted.

Drilling on Former Metro Works, 5150 N 32<sup>nd</sup> Street may not be warranted because of the following reasons.

- d) The former Philips Components/Central Lab is a LUST site (BRRTS # 03-41-002039).
- e) Metro Works, located to south of Philips Components, is listed under the State/Federal environmental databases of LUST, UST, CRS, AUL, Brownfields (refer to Attachment B). WDNR FID # 241032880; Status: closed; BRRTS If 03-41-391656.
- f) Soil boring GP-1 was advanced along the western lot line of 5150 North 32<sup>nd</sup> property. PVOCS and GROs were not detected at 13 to 15 feet below grade. However, low levels of DROs (7.08 ppm) were detected. Therefore, petroleum contamination along west lot line appears to have been delineated.
- g) Central Lab, listed as RCRA NonGen/NLR, NY Manifest sites, was used to store and use the spent halogenated chlorinated solvents (Tetrachloroethylene; Trichloroethylene; Methylene Chloride; 1,1,1-Trichloroethane; Carbon tetrachloride; and Chlorinated fluorocarbons) in degreasing. Also large quantity generator (LQG) Waste Code: F001 NY Maanifest: EPA ID # WID0061024

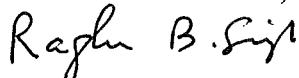
Chlorinated solvents were detected in monitoring wells MW-1, MW-3, MW-4, PZ-1, and PZ-2. Therefore, these wells will be tested for VOCs in August 2016.

Chlorinated solvents were not detected in monitoring wells MW-2, MW-5, MW-6, and MW-7. Therefore, these wells will be tested for PVOCS in August 2016.

Please contact at [raghuom@gmail.com](mailto:raghuom@gmail.com) or (262) 853-0712 if you need any additional information. Thank you for your cooperation

Sincerely,

**OM ENTERPRISES, INC.**



Raghu B. Singh, Ph. D.  
Project Scientist

**Enclosures:**

- Figure 1: Site Location and Existing Soil Borings and Monitoring Wells  
Table 1: Nomenclature of Soil Borings and Monitoring Wells  
Table 2A: Summary of Soil Quality Test Results (Soil Boring B-1 through B-4)  
Table 2B: Summary of Soil Quality Test Results (Soil Boring B-5 through B-7)  
Table 2C: Summary of Soil Quality Test Results (Soil Boring B-8 through B-9)

Table 3A: RCLs (Soil Boring B-1, S-2, 3.5 to 5.5 feet)  
Table 3B: RCLs (Soil Boring B-3, S-1, 1 to 3 feet)  
Table 3C: RCLs (Soil Boring B-3, S-3, 6 to 8 feet)  
Table 3D: RCLs (Soil Boring B-4, S-3, 6 to 8 feet)  
Table 3E: RCLs (Soil Boring B-5, S-1, 0 to 2 feet)  
Table 3F: RCLs (Soil Boring B-5, S-2, 2 to 4 feet)  
Table 3G: RCLs (Soil Boring B-6, S-1, 0 to 2 feet)  
Table 3H: RCLs (Soil Boring B-6, S-2, 2 to 4 feet)  
Table 3I: RCLs (Soil Boring B-7, S-1, 0 to 2 feet)  
Table 3J: RCLs (Soil Boring B-7, S-2, 2 to 4 feet)  
Table 3K: RCLs (Soil Boring B-8, S-1, 0 to 2 feet)  
Table 3L: RCLs (Soil Boring B-8, S-2, 2 to 4 feet)  
Table 3M: RCLs (Soil Boring B-9, S-1, 0 to 2 feet)  
Table 3N: RCLs (Soil Boring B-9, S-2, 2 to 4 feet)

Table 4A: Summary of Groundwater Quality Test Results for MW-1  
Table 4B: Summary of Groundwater Quality Test Results for MW-2  
Table 4C: Summary of Groundwater Quality Test Results for MW-3  
Table 4D: Summary of Groundwater Quality Test Results for MW-4  
Table 4E: Summary of Groundwater Quality Test Results for MW-5  
Table 4F: Summary of Groundwater Quality Test Results for MW-6  
Table 4G: Summary of Groundwater Quality Test Results for MW-7  
Table 4H: Summary of Groundwater Quality Test Results for PZ-1  
Table 4I: Summary of Groundwater Quality Test Results for PZ-2  
Table 5: Summary of Groundwater Elevations

Appendix A: Boring Logs of B-5, B-6, B-7, B-8, and B-9  
Well Construction Reports of MW-5, MW-6, MW-7, PZ-1, and PZ-2  
Well Development Forms of MW-5, MW-6, MW-7, PZ-1, and PZ-2

Appendix B: Laboratory Test Results of B-5, B-6, B-7, B-8, and B-9

Appendix C: RCLs Calculations

Appendix D: Groundwater Quality Test Results

Appendix E: Grain Size Analysis and Hydraulic Conductivity Testing

CC: Mr. Faraj A. Jaber/Owner, 3217 W Villard Avenue, Milwaukee, WI 53209

Child  
Care  
3311  
West  
Villard  
Ave.

B-2  
MW-2

B-5/MW-5

Gas

Water

Sewer

B-8  
PZ-1

B-3  
MW-3

B-4/MW-4

B-1/MW-1  
B-9/PZ-2

PARKING  
B-7/MW-7

Philips Components  
BRRTS # 03-41-002039  
**Central Lab**  
**Metro Works**  
BRRTS # 03-41 391656  
**5150 N 32<sup>nd</sup> Street**

5140 N 32<sup>nd</sup> Street



Approx. Former Dry Cleaning Area/  
Current **JJ Fish & Chicken**  
**3213 W Villard Avenue**

Approx. Location of Abandoned Concrete Holding Tank  
BRRTS # 02-41-119925  
**3217 W Villard Avenue**  
**Villard Foodtown**

**5151 N 32<sup>nd</sup> Street**  
Associated Allied  
Industries  
**5140 N 32<sup>nd</sup> Street**  
Machine & Tool

B-6  
MW6

Rail Road

North 32<sup>nd</sup> Street

**Figure 1:** Site Location and Existing Soil Borings and Monitoring Wells

Existing Monitoring Well



Date: 7/10/2016

Scale: Not to Scale

**O M Enterprises, Inc.**  
124 W Scott Street, Fond du Lac, WI 54935

**Table 1**  
**Nomenclature of Soil Borings and Monitoring Wells**

<b>BRRTS #</b>	02-41-119925
<b>FID #</b>	241692110
<b>SITE NAME:</b>	Villard Foodtown/Shop Rite Grocery (Former)
<b>SITE ADDRESS:</b>	3217 W Villard Avenue, Milwaukee, WI 53209

Soil Boring	Monitoring Well	Date Well	Well Depth	Screen Length	Surface Elevation	PVC Elevation	Screen Bottom Elevation	Screen Top Elevation
Id.	Id.	Installed	Feet	Feet	MSL	MSL	MSL	MSL
B-1	MW-1	9/20/1991	25.00	10.00	651.32	650.84	626.32	636.32
B-2	MW-2	9/20/1991	25.00	10.00	651.65	651.12	626.65	636.65
B-3	MW-3	3/9/1993	15.00	10.00	650.70	650.30	635.70	645.70
B-4	MW-4	3/9/1993	15.00	10.00	650.37	649.97	635.37	645.37
B-5	MW-5	4/7/2016	15.00	15.00				
B-6	MW-6	4/7/2016	15.00	15.00				
B-7	MW-7	4/7/2016	15.00	15.00				
B-8	PZ-1	4/8/2016	25.00	5.00				
B-9	PZ-2	4/8/2016	25.00	5.00				

**Table 2A**  
Summary of Soil Quality Test Results (Soil Boring B-1 through B-4)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:			
Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS:			
3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 4/01/2015			

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BORING #	B-1/MW-1		B-2/MW-2	B-3/MW-3		B-4/MW-4		Soil Residual Contaminants (mg/kg)			
DEPTH to Seasonal Low Water Table (ft BGS)	2.88		2.93					Non-Indus Direct Contact (ppm)	Soil to GW (ppm)	Flag E =	Flag E =
Date Collected	9/20/1991	9/20/1991	9/20/1991	3/3/1993	3/3/1993	3/3/1993	3/3/1993	Individual	(HQ)	Cancer Risk	Individual
SAMPLE IDENTIFICATION	B-1, S-2	B-1, S-7	B-2, S-7	B-3, S-1	B-3, S-3	B-4, S-3	B-4, S-4	Exceedance	from Data	(CR) from Data	Exceedance
SAMPLE DEPTH (ft below ground surface)	3.5 to 5.5	16 to 18	16 to 18	1 to 3	6 to 8	6 to 8	8.5 to 10				
SOIL TYPE	FILL	CLAY	CLAY	FILL	CLAY	CLAY	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm	ppm	ppm	ppm	ppm	ppm	ppm				
Benzene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005				
Ethylbenzene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005				
Toluene	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005				
Xylene	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015				
PCE (Tetrachloroethene)	37	140	< 0.005	0.0330	< 0.005	23	0.033				
TCE (Trichloroethylene)	3.00	0.42	< 0.005	0.0077	< 0.005	0.49	0.0090				
cis 1, 2 Dichloroethene (DCE)	2.80	< 0.02	< 0.005	0.0084	0.0360	0.07	0.022				
VC (VinylChloride)	0.031	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	0.026				

**Table 2B**  
Summary of Soil Quality Test Results (Soil Boring B-5 through B-7)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:			
Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS:			
3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-5/MW-5		B-6/MW-6		B-7/MW-7		Soil Residual Contaminants (mg/kg)			
DEPTH to Seasonal Low Water Table (ft BGS)	3.10	3.10	2.90	2.90	1.98	1.98	Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	4/7/2016	4/7/2016	4/7/2016	4/7/2016	4/7/2016	4/7/2016	Flag E = Individual	Hazrd Quotient (HQ)	Cancer Risk (CR) from Data	Flag E = Individual
SAMPLE IDENTIFICATION	S-1	S-2	S-1	S-2	S-1	S-2	Exceedance	from Data	Data	Exceedance
SAMPLE DEPTH (ft below ground surface)	0 to 2	2 to 4	0 to 2	2 to 4	0 to 2	2 to 4				
SOL TYPE	FILL	CLAY	FILL	CLAY	CLAY	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm	ppm	ppm	ppm	ppm	ppm				
Benzene	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016				
Ethylbenzene	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027	< 0.027				
Toluene	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031				
Xylene	< 0.099	< 0.099	< 0.099	< 0.099	< 0.099	< 0.099				
PCE (Tetrachloroethene)	0.320	0.400	0.153 "J"	0.180	0.278	0.340				
TCE (Trichloroethylene)	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042	< 0.042				
cis 1, 2 Dichloroethene (DCE)	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021				
VC (VinylChloride)	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01				

**Table 2C**  
Summary of Soil Quality Test Results (Soil Boring B-8 through B-9)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) / Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Vilard Avenue, Milwaukee, WI 53209		
RCLs Calculated:	5/06/2016		

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BORING #	B-8/PZ-1		B-9/PZ-2		Soil Residual Contaminants (mg/kg)			
	DEPTH to Seasonal Low Water Table (ft BGS)	8.72	8.72	7.25	7.25	Non-Indus Direct Contact (ppm)	Soil to GW (ppm)	Flag E =
Date Collected	4/8/2016	4/8/2016	4/8/2016	4/8/2016	Flag E = Individual	Hazrd Quotient (HQ)	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE IDENTIFICATION	S-1	S-2	S-1	S-2				
SAMPLE DEPTH (ft below ground surface)	0 to 2	2 to 4	0 to 2	2 to 4				
SOIL TYPE	FILL	CLAY	CLAY	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm	ppm	ppm	ppm				
Benzene	< 0.08	< 0.32	< 0.016	< 0.016				
Ethbylbenzene	< 0.135	< 0.54	< 0.027	< 0.027				
Toluene	< 0.155	< 0.62	< 0.031	< 0.031				
Xylene	< 0.499	< 1.98	< 0.099	< 0.099				
PCE (Tetrachloroethene)	11.100	88.000	0.278	9.300				
TCE (Trichloroethylene)	0.95	12.00	< 0.042	0.206				
cis 1, 2 Dichlortoethene (DCE)	0.33 "J"	14.10	< 0.021	0.0265 "J"				
VC (VinylChloride)	< 0.05	< 0.2	< 0.01	< 0.01				

Table 3A

RCLs (Soil Boring B-1, S-2, 3.5 to 5.5 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) / Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Vilard Avenue, Milwaukee, WI 53209		
RCLs Calculated:	4/01/2015		

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BORING #	B-1/MW-1	Soil Residual Contaminants (mg/kg)			
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
SAMPLE IDENTIFICATION	B-1, S-2	Flag E =	Hazrd Quotient	Cancer Risk	Flag E =
		Individual	(HQ) from Data	(CR) from Data	Individual Exceedance
SAMPLE DEPTH (ft below ground surface)	3.5 to 5.5	Exceedance			
SOIL TYPE	FILL				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.005	No	0	3.4 E - 09	No
Ethbylbenzene	< 0.005	No	0	6.7 E - 10	No
Toluene	< 0.005	No	0	No	No
Xylene	< 0.015	No	0	No	No
PCE (Tetrachloroethene)	37	Exceedance	0.3217	1.2 E - 06	Exceedance
TCE (Trichloroethylene)	3.00	Exceedance	0.4959	2.4 E - 06	Exceedance
cis 1, 2 Dichlortoethene (DCE)	2.80	No	0.0179	No	Exceedance
VC (VinylChloride)	0.031	No	0.0003	4.6 E - 07	Exceedance

Table 3B

## RCLS (Soil Boring B-3, S-1, 1 to 3 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) / Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Vilard Avenue, Milwaukee, WI 53209		
RCLs Calculated:	4/01/2015		

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BORING #	B-3/MW-3	Soil Residual Contaminants (mg/kg)				
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)		
DEPTH to Seasonal Low Water Table (ft BGS)	Date Collected	SAMPLE IDENTIFICATION	Flag E = Individual Exceedance	Hazrd Quotient (HQ) from Data	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE DEPTH (ft below ground surface)	1 to 3					
SOIL TYPE	FILL					
Parameters & Concentrations in mg/kg (or ppm)	ppm					
Benzene	< 0.005		No	0	3.4 E - 09	No
Ethbylbenzene	< 0.005		No	0	6.7 E - 10	No
Toluene	< 0.005		No	0	No	No
Xylene	< 0.015		No	0	No	No
PCE (Tetrachloroethene)	0.0330		No	0.0003	1.1 E - 09	Exceedance
TCE (Trichloroethylene)	0.0077		No	0.0013	6.1 E - 09	Exceedance
cis 1, 2 Dichlortoethene (DCE)	0.0084		No	0.0001	No	No
VC (VinylChloride)	< 0.005		No	0.0001	7.5 E - 08	Exceedance

Table 3C  
RCLs (Soil Boring B-3, S-3, 6 to 8 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) / Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Vilard Avenue, Milwaukee, WI 53209		
RCLs Calculated:	4/01/2015		

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BORING #	B-3/MW-3	Soil Residual Contaminants (mg/kg)			
DEPTH to Seasonal Low Water Table (ft BGS)		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	3/3/1993	Flag E = Individual Exceedance	Hazrd Quotient (HQ) from Data	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE IDENTIFICATION	B-3, S-3				
SAMPLE DEPTH (ft below ground surface)	6 to 8				
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.005	No	0	3.4 E - 09	No
Ethylbenzene	< 0.005	No	0	6.7 E - 10	No
Toluene	< 0.005	No	0	No	No
Xylene	< 0.015	No	0	No	No
PCE (Tetrachloroethene)	< 0.005	No	0.0003	1.1 E - 09	Exceedance
TCE (Trichloroethylene)	< 0.005	No	0.0008	4.0 E - 09	Exceedance
cis 1, 2 Dichloroethene (DCE)	0.0360	No	0.0002	No	No
VC (VinylChloride)	< 0.005	No	0.0001	7.5 E - 08	Exceedance

Table 3D

RCLs (Soil Boring B-4, S-3, 6 to 8 feet)

BRRTS #	02-41-119925	FID #	241692110
<b>SITE NAME:</b> Villard Foodtown (Current) / Shop Rite Grocery (Former)			
<b>SITE ADDRESS:</b> 3217 W Vilard Avenue, Milwaukee, WI 53209			
<b>RCLs Calculated:</b> 4/01/2015			

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BORING #	B-4/MW-4	Soil Residual Contaminants (mg/kg)			
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
DEPTH to Seasonal Low Water Table (ft BGS)	Date Collected	Flag E = Individual Exceedance	Hazrd Quotient (HQ) from Data	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE IDENTIFICATION	B-4, S-3				
SAMPLE DEPTH (ft below ground surface)	6 to 8				
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.005	No	0	3.4 E - 09	No
Ethylbenzene	< 0.005	No	0	6.7 E - 10	No
Toluene	< 0.005	No	0	No	No
Xylene	< 0.015	No	0	No	No
PCE (Tetrachloroethylene)	23	No	0.2000	7.5 E - 07	Exceedance
TCE (Trichloroethylene)	0.49	No	0.0810	3.9 E - 07	Exceedance
cis 1, 2 Dichloroethene (DCE)	0.07	No	0.0004	No	Exceedance
VC (VinylChloride)	< 0.05	No	0.0001	7.5 E - 08	Exceedance

Table 3D

## RCLs (Soil Boring B-4, S-3, 6 to 8 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) / Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Vilard Avenue, Milwaukee, WI 53209		
RCLs Calculated:	4/01/2015		

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BORING #	B-4/MW-4	Soil Residual Contaminants (mg/kg)					
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)			
DEPTH to Seasonal Low Water Table (ft BGS)	Date Collected	SAMPLE IDENTIFICATION	SAMPLE DEPTH (ft below ground surface)	Flag E = Individual	Hazrd Quotient (HQ)	Cancer Risk (CR) from Data	Flag E = Individual
Parameters & Concentrations in mg/kg (or ppm)	ppm			Exceedance	from Data	Data	Exceedance
Benzene	< 0.005			No	0	3.4 E - 09	No
Ethbylbenzene	< 0.005			No	0	6.7 E - 10	No
Toluene	< 0.005			No	0	No	No
Xylene	< 0.015			No	0	No	No
PCE (Tetrachloroethene)	23			No	0.2000	7.5 E - 07	Exceedance
TCE (Trichloroethylene)	0.49			No	0.0810	3.9 E - 07	Exceedance
cis 1, 2 Dichlortoethene (DCE)	0.07			No	0.0004	No	Exceedance
VC (VinylChloride)	< 0.05			No	0.0001	7.5 E - 08	Exceedance

**Table 3E**  
**RCLs (Soil Boring B-5, S-1, 0 to 2 feet)**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:			
Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS:			
3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-5/MW-5	Soil Residual Contaminants (mg/kg)			
DEPTH to Seasonal Low Water Table (ft BGS)	3.10	Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	4/7/2016	Flag E =	Hazrd Quotient	Cancer Risk	Flag E =
SAMPLE IDENTIFICATION	S-1	Individual	(HQ)	(CR) from	Individual
SAMPLE DEPTH (ft below ground surface)	0 to 2	Exceedance	from Data	Data	Exceedance
Benzene	< 0.016	No	0.0001	1.1 E-08	Exceedance
Ethbylbenzene	< 0.027	No	0	3.6 E-09	No
Toluene	< 0.031	No	0	0	No
Xylene	< 0.099	No	0.0001	0	No
PCE (Tetrachloroethene)	0.320	No	0.0028	1.0 E-08	Exceedance
TCE (Trichloroethylene)	< 0.042	No	0.0069	3.3 E-08	Exceedance
cis 1, 2 Dichlortoethene (DCE)	< 0.021	No	0.0001	No	No
VC (VinylChloride)	< 0.01	No	0.0001	1.5 E-07	Exceedance

**Table 3F**

## RCLs (Soil Boring B-5, S-2, 2 to 4 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS: 3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-5/MW-5	Soil Residual Contaminants (mg/kg)			
DEPTH to Seasonal Low Water Table (ft BGS)	3.10	Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	4/7/2016	Flag E = Individual	Hazrd Quotient (HQ)	Cancer Risk (CR) from Data	Flag E = Individual
SAMPLE IDENTIFICATION	S-2	Exceedance	from Data	Data	Exceedance
SAMPLE DEPTH (ft below ground surface)	2 to 4				
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.016	No	0.0001	1.1 E-08	Exceedance
Ethbylbenzene	< 0.027	No	0	3.6 E-09	No
Toluene	< 0.031	No	0	No	No
Xylene	< 0.099	No	0.0001	No	No
PCE (Tetrachloroethene)	0.400	No	0.0035	1.3 E-08	Exceedance
TCE (Trichloroethylene)	< 0.042	No	0.0069	3.3 E-08	Exceedance
cis 1, 2 Dichloroethene (DCE)	< 0.021	No	0.0001	No	No
VC (VinylChloride)	< 0.01	No	0.0001	1.5 E-07	Exceedance

**Table 3G**

RCLs (Soil Boring B-6, S-1, 0 to 2 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS: 3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-6/MW-6	Soil Residual Contaminants (mg/kg)					
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)			
DEPTH to Seasonal Low Water Table (ft BGS)	2.90	Date Collected	4/7/2016	Flag E =	Hazrd Quotient	Cancer Risk	Flag E =
				Individual	(HQ)	(CR) from	Individual
SAMPLE IDENTIFICATION	S-1	Exceedance	from Data	Data			Exceedance
SAMPLE DEPTH (ft below ground surface)	0 to 2						
SOIL TYPE	FILL						
Parameters & Concentrations in mg/kg (or ppm)	ppm						
Benzene	< 0.016	No	0.0001	1.1 E-08			Exceedance
Ethylbenzene	< 0.027	No	0	3.6 E-09			No
Toluene	< 0.031	No	0	No			No
Xylene	< 0.099	No	0.0001	No			No
PCE (Tetrachloroethene)	0.153 "J"	No	0.0013	5.0 E09			Exceedance
TCE (Trichloroethylene)	< 0.042	No	0.0069	3.3 E-08			Exceedance
cis 1, 2 Dichloroethene (DCE)	< 0.021	No	0.0001	No			No
VC (VinylChloride)	< 0.01	No	0.0001	1.5 E-07			Exceedance

**Table 3H**

RCLs (Soil Boring B-6, S-2, 2 to 4 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS: 3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-6/MW-6	Soil Residual Contaminants (mg/kg)			
SAMPLE IDENTIFICATION	S-2	Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
SAMPLE DEPTH (ft below ground surface)	2 to 4	Flag E = Individual Exceedance	Hazrd Quotient (HQ) from Data	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.016	No	0.0001	1.1 E-08	Exceedance
Ethbylbenzene	< 0.027	No	0	3.6 E-09	No
Toluene	< 0.031	No	0	No	No
Xylene	< 0.099	No	0.0001	No	No
PCE (Tetrachloroethene)	0.180	No	0.0016	3.3 E-08	Exceedance
TCE (Trichloroethylene)	< 0.042	No	0.0069	3.3 E-08	Exceedance
cis 1, 2 Dichlortoethene (DCE)	< 0.021	No	0.0001	No	No
VC (VinylChloride)	< 0.01	No	0.0001	1.5 E-07	Exceedance

**Table 3I**

RCLs (Soil Boring B-7, S-1, 0 to 2 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS: 3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-7/MW-7	Soil Residual Contaminants (mg/kg)			
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	4/7/2016	Flag E = Individual Exceedance	Hazrd Quotient (HQ) from Data	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE IDENTIFICATION	S-1				
SAMPLE DEPTH (ft below ground surface)	0 to 2				
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.016	No	0.0001	1.1 E-08	Exceedance
Ethbylbenzene	< 0.027	No	0	3.6 E-09	No
Toluene	< 0.031	No	0	No	No
Xylene	< 0.099	No	0.0001	No	No
PCE (Tetrachloroethene)	0.278	No	0.0024	9.1 E-09	Exceedance
TCE (Trichloroethylene)	< 0.042	No	0/0069	3.3 E-08	Exceedance
cis 1, 2 Dichloroethene (DCE)	< 0.021	No	0.0001	No	No
VC (VinylChloride)	< 0.01	No	0.0001	1.5 E-07	Exceedance

**Table 3J**

RCLS (Soil Boring B-7, S-2, 2 to 4 feet))

BRRTS #	02-41-119925	FID #	241692110
SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS: 3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-7/MW-7	Soil Residual Contaminants (mg/kg)			
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	4/7/2016	Flag E = Individual Exceedance	Hazrd Quotient (HQ) from Data	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE IDENTIFICATION	S-2				
SAMPLE DEPTH (ft below ground surface)	2 to 4				
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.016	No	0.0001	1.1 E-08	Exceedance
Ethbylbenzene	< 0.027	No	0	3.6 E-09	No
Toluene	< 0.031	No	0	No	No
Xylene	< 0.099	No	0.0001	No	No
PCE (Tetrachloroethene)	0.340	No	0.003	1.1 E-08	Exceedance
TCE (Trichloroethylene)	< 0.042	No	0.0069	3.3 E-08	Exceedance
cis 1, 2 Dichloroethene (DCE)	< 0.021	No	0.0001	No	No
VC (VinylChloride)	< 0.01	No	0.0001	1.5 E-07	Exceedance

**Table 3K**

RCLs (Soil Boring B-8, S-1, 0 to 2 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) / Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Vilard Avenue, Milwaukee, WI 53209		
RCLs Calculated:	5/06/2016		

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BORING #	B-8/PZ-1	Soil Residual Contaminants (mg/kg)			
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	4/8/2016	Flag E = Individual	Hazrd Quotient (HQ) from Data	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE IDENTIFICATION	S-1				
SAMPLE DEPTH (ft below ground surface)	0 to 2				
SOIL TYPE	FILL				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.08	No	0.0007	5.4 E-08	Exceedance
Ethbylbenzene	< 0.135	No	0	1.8 E-08	No
Toluene	< 0.155	No	0	No	No
Xylene	< 0.499	No	0.0006	No	No
PCE (Tetrachloroethene)	11.100	No	0.0965	3.6 E-07	Exceedance
TCE (Trichloroethylene)	0.95	No	0.157	7.5 E-07	Exceedance
cis 1, 2 Dichlortoethene (DCE)	0.33 "J"	No	0.0021	No	Exceedance
VC (VinylChloride)	< 0.05	No	0.0005	7.5 E-07	Exceedance

**Table 3L**

RCLs (Soil Boring B-8, S-2, 2 to 4 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS: 3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-8/PZ-1	Soil Residual Contaminants (mg/kg)			
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	4/8/2016	Flag E = Individual Exceedance	Hazrd Quotient (HQ) from Data	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE IDENTIFICATION	S-2				
SAMPLE DEPTH (ft below ground surface)	2 to 4				
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.32	No	0.0029	2.1 E-07	Exceedance
Ethbylbenzene	< 0.54	No	0.0001	7.2 E-08	No
Toluene	< 0.62	No	0.0001	No	No
Xylene	< 1.98	No	0.0022	No	No
PCE (Tetrachloroethene)	88.000	Exceedance	0.7652	2.9 E-06	Exceedance
TCE (Trichloroethylene)	12.00	Exceedance	1.9835	9.5 E-06	Exceedance
cis 1, 2 Dichlortoethene (DCE)	14.10	No	0.0904	No	Exceedance
VC (VinylChloride)	< 0.2	Exceedance	0.0021	3.0 E-06	Exceedance

**Table 3M**

RCLS (Soil Boring B-9, S-1, 0-2 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS: 3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-9/PZ-2	Soil Residual Contaminants (mg/kg)			
		Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
SAMPLE IDENTIFICATION	S-1	Flag E =	Hazrd Quotient (HQ)	Cancer Risk (CR) from Data	Flag E = Individual Exceedance
SAMPLE DEPTH (ft below ground surface)	0 to 2	Exceedance	from Data	Data	Exceedance
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.016	No	0.0001	1.1 E-08	Exceedance
Ethbylbenzene	< 0.027	No	0	3.6 E-09	No
Toluene	< 0.031	No	0	No	No
Xylene	< 0.099	No	0.0001	No	No
PCE (Tetrachloroethene)	0.278	No	0.0024	9.1 E-09	Exceedance
TCE (Trichloroethylene)	< 0.042	No	0.0069	3.3 E-08	Exceedance
cis 1, 2 Dichloroethene (DCE)	< 0.021	No	0.0001	No	No
VC (VinylChloride)	< 0.01	No	0.0001	1.5 E-07	Exceedance

**Table 3N**

RCLs (Soil Boring B-9, S-2, 2 to 4 feet)

BRRTS #	02-41-119925	FID #	241692110
SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)			
SITE ADDRESS: 3217 W Vilard Avenue, Milwaukee, WI 53209			
RCLs Calculated: 5/06/2016			

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BORING #	B-9/PZ-2	Soil Residual Contaminants (mg/kg)			
DEPTH to Seasonal Low Water Table (ft BGS)	7.25	Non-Indus Direct Contact (ppm)		Soil to GW (ppm)	
Date Collected	4/8/2016	Flag E =	Hazrd Quotient (HQ)	Cancer Risk (CR) from Data	Flag E =
SAMPLE IDENTIFICATION	S-2	Individual	Exceedance	Individual	Exceedance
SAMPLE DEPTH (ft below ground surface)	2 to 4				
SOIL TYPE	CLAY				
Parameters & Concentrations in mg/kg (or ppm)	ppm				
Benzene	< 0.016	No	0.0001	1.1 E-08	Exceedance
Ethbylbenzene	< 0.027	No	0	3.6 E-09	No
Toluene	< 0.031	No	0	No	No
Xylene	< 0.099	No	0.0001	No	No
PCE (Tetrachloroethene)	9.300	No	0.0809	3.0 E-07	Exceedance
TCE (Trichloroethylene)	0.206	No	0.034	1.6 E-07	Exceedance
cis 1, 2 Dichlortoethene (DCE)	0.0265 "J"	No	0.0002	No	No
VC (VinylChloride)	< 0.01	No	0.0001	1.5 E-07	Exceedance

**Table 4A**  
**Summary of Groundwater Quality Test Results for MW-1**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) /Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Villard Avenue, Milwaukee, WI 53209		

Date Installed	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991
Well Depth (FEET)	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Screen Length (FEET)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Surface Elevation (MSL)	651.32	651.32	651.32	651.32	651.32	651.32	651.32	651.32
PVC Elevation (MSL)	650.84	650.84	650.84	650.84	650.84	650.84	650.84	650.84
Bottom of Screen Elevation (MSL)	626.32	626.32	626.32	626.32	626.32	626.32	626.32	626.32
Top of Screen Elevation (MSL)	636.32	636.32	636.32	636.32	636.32	636.32	636.32	636.32
Elevation of Screened Interval (MSL)								
Depth to Groundwater (FEET)	2.88							
Groundwater Elevation (MSL)	647.96							
Date Collected	10/1/1991	4/14/1993	5/19/1993	4/13/2015	5/2/2016			
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ES      PAL
Benzene	< 1.0	< 1.0	< 1.0	< 88	< 88			5      0.5
Chlorodibromomethane	< 250	< 100	< 25	< 90	< 90			0.6      0.06
cis 1, 2 Dichloroethene (DCE)	<b>560</b>	<b>960</b>	<b>780</b>	<b>2410</b>	<b>2260</b>			70      7
Ethylbenzene	< 1.0	< 1.0	< 1.0	< 142	< 142			<b>700</b> 140
PCE (Tetrachloroethylene)	<b>14000</b>	<b>38000</b>	<b>34000</b>	<b>21200</b>	<b>22100</b>			5      0.5
Toluene	16	4.1	12.0	< 88	< 88			<b>800</b> 160
TCE (Trichloroethylene)	<b>220</b>	<b>960</b>	<b>700</b>	<b>3400</b>	<b>2940</b>			5      0.5
VC (VinylChloride)	<b>11</b>	<b>33</b>	<b>14</b>	<b>84 "J"</b>	<b>104 "J"</b>			0.2      0.02
Xylenes	< 3.0	< 3.0	< 3.0	< 620	< 620			<b>2000</b> 400

**Note:**

**Concentrations in bold (Equal to or greater than ES)**

*Concentrations in italics (Equal to or greater than PAL)*

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

**Table 4B**  
**Summary of Groundwater Quality Test Results for MW-2**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:			
Villard Foodtown (Current) /Shop Rite Grocery (Former)			
SITE ADDRESS:			
3217 W Villard Avenue, Milwaukee, WI 53209			

Date Installed	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991	9/20/1991
Well Depth (FEET)	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Screen Length (FEET)	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Surface Elevation (MSL)	651.32	651.32	651.32	651.32	651.32	651.32	651.32	651.32	651.32
PVC Elevation (MSL)	650.84	650.84	650.84	650.84	650.84	650.84	650.84	650.84	650.84
Bottom of Screen Elevation (MSL)	626.32	626.32	626.32	626.32	626.32	626.32	626.32	626.32	626.32
Top of Screen Elevation (MSL)	636.32	636.32	636.32	636.32	636.32	636.32	636.32	636.32	636.32
Elevation of Screened Interval (MSL)	626.65-636.65								
Depth to Groundwater (FEET)	2.93								
Groundwater Elevation (MSL)	647.91								
Date Collected	10/1/1991	4/14/1993	5/19/1993	4/13/2015	4/13/2015	5/2/2016			
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb	ppb	ppb			
Benzene	< 1.0	< 1.0	< 1.0	< 0.44	< 0.44	< 0.44			
Chlorodibromomethane	< 1.0	< 1.0	< 1.0	< 0.45	< 0.45	< 0.45			
cis 1, 2 Dichloroethene (DCE)	< 1.0	< 1.0	< 1.0	< 0.45	< 0.45	< 0.45			
Ethylbenzene	< 1.0	< 1.0	< 1.0	< 0.71	< 0.71	< 0.71			
PCE (Tetrachloroethene)	< 1.0	< 1.0	< 1.0	< 0.74	< 0.74	< 0.49			
Toluene	< 1.0	< 1.0	< 1.0	< 0.44	< 0.44	< 0.44			
TCE (Trichloroethylene)	< 1.0	< 1.0	< 1.0	< 0.47	< 0.47	< 0.47			
VC (VinylChloride)	< 1.0	< 1.0	< 1.0	< 0.17	< 0.17	< 0.17			
Xylenes	< 3.0	< 3.0	< 3.0	< 3.1	< 3.1	< 3.1			

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**Note:**

**Concentrations in bold (Equal to or greater than ES)**

*Concentrations in italics (Equal to or greater than PAL)*

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

**Table 4C**  
**Summary of Groundwater Quality Test Results for MW-3**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) /Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Villard Avenue, Milwaukee, WI 53209		

MONITORING WELL #	MW-3						
	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993
Date Installed	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993
Well Depth (FEET)	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Screen Length (FEET)	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Surface Elevation (MSL)	650.70	650.70	650.70	650.70	650.70	650.70	650.70
PVC Elevation (MSL)	650.30	650.30	650.30	650.30	650.30	650.30	650.30
Bottom of Screen Elevation (MSL)	635.70	635.70	635.70	635.70	635.70	635.70	635.70
Top of Screen Elevation (MSL)	645.70	645.70	645.70	645.70	645.70	645.70	645.70
Elevation of Screened Interval (MSL)	635.70-645.70						
Depth to Groundwater (FEET)							
Groundwater Elevation (MSL)							
Date Collected	4/14/1993	5/19/1993	4/13/2015	5/2/2016			
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb			
Benzene	< 1.0	< 1.0	< 0.44	< 0.44			
Chlorodibromomethane	< 1.0	< 1.0	< 0.45	< 0.45			
cis 1, 2 Dichlortoethene (DCE)	<b>180</b>	<b>190</b>	<i>11.90</i>	<i>5.90</i>			
Ethylbenzene	< 1.0	< 1.0	< 0.71	< 0.71			
PCE (Tetrachloroethene)	< 1.0	< 1.0	< 0.74	1.17 "J"			
Toluene	< 1.0	< 1.0	< 0.44	< 0.44			
TCE (Trichloroethylene)	< 1.0	< 1.0	<i>0.69 "J"</i>	<i>0.66 "J"</i>			
VC (VinylChloride)	< 1.0	<b>4.8</b>	<b>4.4</b>	<b>2.01</b>			
Xylenes	< 3.0	< 3.0	< 3.1	< 3.1			
					<b>2000</b>	<i>400</i>	

**Note:**

**Concentrations in bold (Equal to or greater than ES)**

*Concentrations in italics (Equal to or greater than PAL)*

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

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**ES**

*PAL*

**5**

*0.5*

**0.6**

*0.06*

**70**

*7*

**700**

*140*

**5**

*0.5*

**800**

*160*

**5**

*0.5*

**0.2**

*0.02*

**Table 4D**  
Summary of Groundwater Quality Test Results for MW-4

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:			
Villard Foodtown (Current) /Shop Rite Grocery (Former)			
SITE ADDRESS:			
3217 W Villard Avenue, Milwaukee, WI 53209			

MONITORING WELL #	MW-4						
	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993
Date Installed	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993	3/9/1993
Well Depth (FEET)	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Screen Length (FEET)	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Surface Elevation (MSL)	650.37	650.37	650.37	650.37	650.37	650.37	650.37
PVC Elevation (MSL)	649.97	649.97	649.97	649.97	649.97	649.97	649.97
Bottom of Screen Elevation (MSL)	635.37	635.37	635.37	635.37	635.37	635.37	635.37
Top of Screen Elevation (MSL)	645.37	645.37	645.37	645.37	645.37	645.37	645.37
Elevation of Screened Interval (MSL)	635.37-645.37						
Depth to Groundwater (FEET)							
Groundwater Elevation (MSL)							
Date Collected	4/14/1993	5/19/1993	4/13/2015	5/2/2016			
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb			ES      PAL
Benzene	< 1.0	< 1.0	< 4.4	< 4.4			<b>5</b> 0.5
Chlorodibromomethane	< 100	< 25	< 4.5	< 4.5			<b>0.6</b> 0.06
cis 1, 2 Dichlortoethene (DCE)	<b>1100</b>	<b>920</b>	<b>530</b>	<b>313</b>			<b>70</b> 7
Ethylbenzene	< 1.0	< 1.0	< 7.1	< 7.1			<b>700</b> 140
PCE (Tetrachloroethene)	<b>2900</b>	<b>2400</b>	<b>39</b>	<b>44</b>			<b>5</b> 0.5
Toluene	10	8.2	< 4.4	< 4.4			<b>800</b> 160
TCE (Trichloroethylene)	<b>440</b>	<b>380</b>	<b>33</b>	<b>24.60</b>			<b>5</b> 0.5
VC (VinylChloride)	<b>42</b>	<b>48</b>	<b>63</b>	<b>60</b>			<b>0.2</b> 0.02
Xylenes	< 3.0	< 3.0	< 31	< 31			<b>2000</b> 400

**Note:**

Concentrations in bold (Equal to or greater than ES)

Concentrations in italics (Equal to or greater than PAL)

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

**Table 4E**  
**Summary of Groundwater Quality Test Results for MW-5**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) /Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Villard Avenue, Milwaukee, WI 53209		

MONITORING WELL #	B-5/MW-5				
Date Installed	4/7/2016	4/7/2016	4/7/2016	4/7/2016	
Well Depth (FEET)	15.00	15.00	15.00	15.00	
Screen Length (FEET)	15.00	15.00	15.00	15.00	
Surface Elevation (MSL)					
PVC Elevation (MSL)					
Bottom of Screen Elevation (MSL)					
Top of Screen Elevation (MSL)					
Elevation of Screened Interval (MSL)					
Depth to Groundwater (FEET)					
Groundwater Elevation (MSL)					Chapter NR 140
Date Collected	5/2/2016				2015, No. 715
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb	<b>ES</b>
Benzene	< 0.44				<b>5</b>
Chlorodibromomethane	< 0.45				<b>0.6</b>
cis 1, 2 Dichloroethene (DCE)	< 0.45				<b>70</b>
Ethylbenzene	< 0.71				<b>700</b>
PCE (Tetrachloroethene)	< 0.49				<b>5</b>
Toluene	< 0.44				<b>800</b>
TCE (Trichloroethylene)	< 0.47				<b>5</b>
VC (VinylChloride)	< 0.17				<b>0.2</b>
Xylenes	< 3.1				<b>2000</b>
					400

**Note:**

**Concentrations in bold (Equal to or greater than ES)**

*Concentrations in italics (Equal to or greater than PAL)*

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

**Table 4F**  
**Summary of Groundwater Quality Test Results for MW-6**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) /Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Villard Avenue, Milwaukee, WI 53209		

MONITORING WELL #	B-6/MW-6					Chapter NR 140 2015, No. 715
Date Installed	4/7/2016	4/7/2016	4/7/2016	4/7/2016		
Well Depth (FEET)	15.00	15.00	15.00	15.00		
Screen Length (FEET)	15.00	15.00	15.00	15.00		
Surface Elevation (MSL)						
PVC Elevation (MSL)						
Bottom of Screen Elevation (MSL)						
Top of Screen Elevation (MSL)						
Elevation of Screened Interval (MSL)						
Depth to Groundwater (FEET)						
Groundwater Elevation (MSL)					ES 5 0.6 70 700 5 800 5 0.2 2000	PAL 0.5 0.06 7 140 160 0.5 0.02 400
Date Collected	5/2/2016					
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb	<b>ES</b> <b>5</b> <b>0.6</b> <b>70</b> <b>700</b> <b>5</b> <b>800</b> <b>5</b> <b>0.2</b> <b>2000</b>	<i>PAL</i> 0.5 0.06 7 140 160 0.5 0.02 400
Benzene	< 0.44					
Chlorodibromomethane	< 0.45					
cis 1, 2 Dichloroethene (DCE)	< 0.45					
Ethylbenzene	< 0.71					
PCE (Tetrachloroethene)	< 0.49					
Toluene	< 0.44					
TCE (Trichloroethylene)	< 0.47					
VC (VinylChloride)	< 0.17					
Xylenes	< 3.1					

Note:

Concentrations in bold (Equal to or greater than ES)

Concentrations in italics (Equal to or greater than PAL)

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

**Table 4G**  
**Summary of Groundwater Quality Test Results for MW-7**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) /Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Villard Avenue, Milwaukee, WI 53209		

MONITORING WELL #	B-7/MW-7				
Date Installed	4/7/2016	4/7/2016	4/7/2016	4/7/2016	
Well Depth (FEET)	15.00	15.00	15.00	15.00	
Screen Length (FEET)	15.00	15.00	15.00	15.00	
Surface Elevation (MSL)					
PVC Elevation (MSL)					
Bottom of Screen Elevation (MSL)					
Top of Screen Elevation (MSL)					
Elevation of Screened Interval (MSL)					
Depth to Groundwater (FEET)					
Groundwater Elevation (MSL)					Chapter NR 140
Date Collected	5/2/2016				2015, No. 715
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb	ES <i>PAL</i>
Benzene	< 0.44				<b>5</b> 0.5
Chlorodibromomethane	< 0.45				<b>0.6</b> 0.06
cis 1, 2 Dichlortoethene (DCE)	< 0.45				<b>70</b> 7
Ethbylbenzene	< 0.71				<b>700</b> 140
PCE (Tetrachloroethene)	< 0.49				<b>5</b> 0.5
Toluene	< 0.44				<b>800</b> 160
TCE (Trichloroethylene)	< 0.47				<b>5</b> 0.5
VC (VinylChloride)	< 0.17				<b>0.2</b> 0.02
Xylenes	< 3.1				<b>2000</b> 400

**Note:**

**Concentrations in bold (Equal to or greater than ES)**

*Concentrations in italics (Equal to or greater than PAL)*

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

**Table 4H**  
**Summary of Groundwater Quality Test Results for PZ-1**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) /Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Villard Avenue, Milwaukee, WI 53209		

MONITORING WELL #	B-8/PZ-1					Chapter NR 140 2015, No. 715
Date Installed	4/8/2016	4/8/2016	4/8/2016	4/8/2016		
Well Depth (FEET)	25.00	25.00	25.00	25.00		
Screen Length (FEET)	5.00	5.00	5.00	5.00		
Surface Elevation (MSL)						
PVC Elevation (MSL)						
Bottom of Screen Elevation (MSL)						
Top of Screen Elevation (MSL)						
Elevation of Screened Interval (MSL)						
Depth to Groundwater (FEET)						
Groundwater Elevation (MSL)						
Date Collected	5/2/2016					
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb	ES	<i>PAL</i>
Benzene	< 0.44				<b>5</b>	<i>0.5</i>
Chlorodibromomethane	< 0.45				<b>0.6</b>	<i>0.06</i>
cis 1, 2 Dichloroethene (DCE)	<b>84</b>				<b>70</b>	<i>7</i>
Ethylbenzene	< 0.71				<b>700</b>	<i>140</i>
PCE (Tetrachloroethene)	<b>75</b>				<b>5</b>	<i>0.5</i>
Toluene	< 0.44				<b>800</b>	<i>160</i>
TCE (Trichloroethylene)	<b>20.20</b>				<b>5</b>	<i>0.5</i>
VC (VinylChloride)	<b>0.97</b>				<b>0.2</b>	<i>0.02</i>
Xylenes	< 3.1				<b>2000</b>	<i>400</i>

**Note:**

**Concentrations in bold (Equal to or greater than ES)**

*Concentrations in italics (Equal to or greater than PAL)*

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

**Table 4I**  
**Summary of Groundwater Quality Test Results for PZ-2**

BRRTS #	02-41-119925	FID #	241692110
SITE NAME:	Villard Foodtown (Current) /Shop Rite Grocery (Former)		
SITE ADDRESS:	3217 W Villard Avenue, Milwaukee, WI 53209		

MONITORING WELL #	B-9/PZ-2					
Date Installed	4/8/2016	4/8/2016	4/8/2016	4/8/2016		
Well Depth (FEET)	25.00	25.00	25.00	25.00		
Screen Length (FEET)	5.00	5.00	5.00	5.00		
Surface Elevation (MSL)						
PVC Elevation (MSL)						
Bottom of Screen Elevation (MSL)						
Top of Screen Elevation (MSL)						
Elevation of Screened Interval (MSL)						
Depth to Groundwater (FEET)						
Groundwater Elevation (MSL)					Chapter NR 140	
Date Collected	5/2/2016				2015, No. 715	
Concentration in ug/L (or ppb)	ppb	ppb	ppb	ppb	ES	PAL
Benzene	< 220				5	0.5
Chlorodibromomethane	< 225				0.6	0.06
cis 1, 2 Dichloroethene (DCE)	230 "J"				70	7
Ethylbenzene	< 355				700	140
PCE (Tetrachloroethene)	39000				5	0.5
Toluene	< 220				800	160
TCE (Trichloroethylene)	670 "J"				5	0.5
VC (VinylChloride)	< 85				0.2	0.02
Xylenes	< 1550				2000	400

**Note:**

**Concentrations in bold (Equal to or greater than ES)**

*Concentrations in italics (Equal to or greater than PAL)*

"J" denotes concentration between limit of detection (LOD) and limit of quantification (LOQ).

Table S

### Summary of Groundwater Elevations

Page 1 of 2

BRRTS # 02-41-119925 FID # 241692110

SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)

SITE ADDRESS: 3217 W Villard Avenue, Milwaukee, WI 53209

Table 5

### Summary of Groundwater Elevations

Page 2 of 2

BRRTS # 02-41-119925 FID # 241692110

SITE NAME: Villard Foodtown (Current) / Shop Rite Grocery (Former)

SITE ADDRESS: 3217 W Villard Avenue, Milwaukee, WI 53209

**Appendix A**  
**Boring Logs of B-5, B-6, B-7, B-8, and B-9**  
**Well Construction Reports of MW-5, MW-6, MW-7, PZ-1, and PZ-2**  
**Well Development Forms of MW-5, MW-6, MW-7, PZ-1, and PZ-2**

Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name <u>Villard Foodton, LLC</u> <u>3217 W Villard Ave.</u>			License/Permit/Monitoring Number	Boring Number
				<u>B-51 mw-5</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>George</u> Last Name: <u>Wellner</u> Firm: <u>PSE Inc.</u>			Date Drilling Started <u>04/07/2016</u> <u>m m d d y y y y</u>	Date Drilling Completed <u>04/07/2016</u> <u>m m d d y y y y</u>
WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
				Borehole Diameter inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N, E			Lat 0 ° 0' "	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E
NW 1/4 of <u>SE 1/4 of Section 36, T 8 N, R 21 E</u>			Long 0 ° 0' "	Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W
Facility ID <u>241692110</u>	County <u>Milwaukee</u>	County Code <u>41</u>	Civil Town/City or Village <u>Milwaukee</u>	

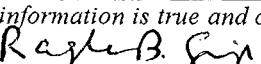
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit			USCS	Graphic Log	Well Diagram	Soil Properties					RQD/Comments
				PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200						
1	18	12	2	FILL - mixture of silt, sand and gravel. Top 3' asphalt.	0	7									
2	13	15	4	SILTY CLAY (CL) - Shift to very stiff, Brown to Grey, moist to wet.	0	3									
3	10	27	6		6	3									
4	16	21	8		0	5									
5	18	18	10	Trace sand and gravel from - 6' to	0	5									
6	15	10	12	14' bgs	0	6									
7	15	12	14		0	6									
8	18	22	16	E.O.B. @-15' bgs	0	6									
9			18	Converted to mw-5											
10			20												
11			22												
12			24												
			26												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Raghu B. Singh Firm Om Enterprises, Inc.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

# LOG OF TEST BORING

Location: 3217 W Villard Avenue, Milwaukee, WI 53209										Job #: 3023	Method: HSA							
Client: Villard Foodtown, LLC										Boring/Monitoring Well: B-5/MW-5								
Drill Firm: PSI, 1125 Tuckaway, Menasha, WI 54952										Page Number: 1 of 1								
Sam- ple No.	Blow Counts (N)					Reco- very (inch)	Moisture Level	Boring Depth (feet)	Observation, Classification, and Comments	Test Parameters								
	6" 1	12" 2	18" 3	24" 4	N (2+3+4)					PID Units	PCE ppm	TCE ppm	DCE ppm	VC ppm				
1	5	4	5	3	12	18	Moist	0.5 1.0 1.5 2.0	FILL-Mixture of silt, well graded sand and poorly graded gravel; black; moist; odorless odorless; Top 3" Asphalt	BK	0.32	< 0.042	< 0.021	< 0.01				
2	3	5	4	6	15	13	Moist	2.5 3.0 3.5 4.0	SILTY CLAY ((CL)-Stiff to Very Stiff; Brown to Grey; Moist to Wet; odorless	BK	0.40	< 0.042	< 0.021	< 0.01				
3	3	17	4	6	27	10	Moist	4.5 5.0 5.5 6.0										
4	3	6	9	6	21	16	Wet	6.5 7.0 7.5 8.0	Trace sand and gravel noted from approximately 6 feet to 14 feet below ground surface									
5	9	3	8	7	18	18	Wet	8.5 9.0 9.5 10.0										
6	7	3	3	4	10	15	Wet	10.5 11.0 11.5 12.0										
7	7	3	3	6	12	15	Wet	12.5 13.0 13.5 14.0										
8	8	3	10	9	22	18	Wet	14.5 15.0 15.5 16.0										
9								16.5 17.0 17.5 18.0	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-5									
10								18.5 19.0 19.5 20.0										
11								20.5 21.0 21.5 22.0										
12								22.5 23.0 23.5 24.0										
13								24.5 25.0 25.5 26.0										
Depth to Water (ft. bgs): ~ 5				Start: 4/7/2016				Consulting Firm:			Crew Chief: Gary Wellner							
Bedrock Encountered ? No				End: 4/7/2016				O M Enterprises, Inc.			Drill Rig: Diedrich							
I, hereby, certify that the above information is true and correct to the best of my knowledge.																		
Name: Raghu B. Singh	Signature: 								Date: 5/8/2016									

Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name <u>Villard Fortton, Inc</u> <u>3217 W Villard Ave</u>		License/Permit/Monitoring Number		Boring Number <u>B-6   MW-6</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>Greg</u> Last Name: <u>Wellner</u> Firm: <u>PSE</u> <u>Menards</u>		Date Drilling Started <u>04/07/2016</u> <u>m m d d y y y y</u>	Date Drilling Completed <u>04/07/2016</u> <u>m m d d y y y y</u>	Drilling Method <u>HSA</u>
WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
				Borehole Diameter inches
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/>		Local Grid Location		
State Plane _____ N, _____ E		Lat <u>0° 0' "</u>	□ N	□ E
NW 1/4 of <u>S1E</u> 1/4 of Section <u>36</u> , T <u>8</u> N, R <u>21</u> E		Long <u>0° 0' "</u>	Feet <input type="checkbox"/> S	Feet <input type="checkbox"/> W
Facility ID <u>241692110</u>	County <u>Milwaukee</u>	County Code <u>4</u>	Civil Town/City/Or Village <u>Milwaukee</u>	

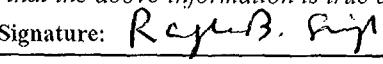
Sample Number and Type	Length Alt. & Recovered (in)	Blow Counts	Depth in Foot (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	Soil Properties					RQD/ Comments
								PI/D/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1	10	12	2	FILL - min. & s+stg, 3" Apx				0	M				
2	16	10	4	SILTY CLAY (cc) -				0	M				
3	14	14	6	Stiff to very stiff				0	M				
4	17	13	8	Brown, moist to wet;				0	M				
5	12	19	10	Tree sand and				6	W				
6	24	32	12	Gravel from ~ 41 to				0	W				
7	10	17	14	10' bgs				0	W				
8	14	18	16	E.O.B. @ ~ 15' bgs				0	W				
			18	Converted to									
			20	m w-6									
			22										
			24										
			26										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Ralph B. Fugl Firm OM Engineering

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# LOG OF TEST BORING

Location: 3217 W Villard Avenue, Milwaukee, WI 53209								Job #: 3023	Method: HSA							
Client: Villard Foodtown, LLC								Boring/Monitoring Well: B-6/MW-6								
Drill Firm: PSI, 1125 Tuckaway, Menasha, WI 54952								Page Number: 1 of 1								
Sample No.	Blow Counts (N)					Recovery (inch)	Moisture Level	Boring Depth (feet)	Observation, Classification, and Comments							
	6"	12"	18"	24"	N (2+3+4)				PID Units	PCE ppm	TCE ppm	DCE ppm	VC ppm			
1	2	3	5	4	12	10	Moist	0.5	FILL-Mixture of silt, sand, & gravel; moist; odorless; Top 3" asphalt							
								1.0	SILTY CLAY ((CL)-Stiff to very stiff; Brown; Moist to Wet; odorless	BK	0.153 "J"	< 0.042	< 0.021			
								1.5								
								2.0								
2	3	4	2	4	10	16	Moist	2.5								
								3.0								
								3.5	Trace sand and gravel noted from approximately 4 feet to 10 feet below grade	BK	0.18	< 0.042	< 0.021			
3	7	4	4	6	14	14	Moist	4.0								
								4.5								
								5.0								
								5.5								
								6.0								
4	8	3	6	4	13	17	Moist	6.5	SILTY CLAY ((CL)-Stiff to very stiff; Brown; Moist to Wet; odorless	BK	0.153 "J"	< 0.042	< 0.021			
								7.0								
								7.5								
								8.0								
5	4	3	8	8	19	12	Wet	8.5								
								9.0	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-6	BK	0.153 "J"	< 0.042	< 0.021			
								9.5								
								10.0								
6	6	8	10	14	32	24	Wet	10.5								
								11.0								
								11.5	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-6	BK	0.153 "J"	< 0.042	< 0.021			
7	2	8	5	4	17	10	Wet	12.0								
								12.5								
								13.0								
								13.5								
8	3	4	8	6	18	14	Wet	14.0								
								14.5	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-6	BK	0.153 "J"	< 0.042	< 0.021			
								15.0								
								15.5								
								16.0								
9								16.5								
								17.0	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-6	BK	0.153 "J"	< 0.042	< 0.021			
								17.5								
								18.0								
10								18.5								
								19.0								
								19.5	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-6	BK	0.153 "J"	< 0.042	< 0.021			
11								20.0								
								20.5								
								21.0								
								21.5								
12								22.0	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-6	BK	0.153 "J"	< 0.042	< 0.021			
								22.5								
								23.0								
								23.5								
								24.0								
13								24.5	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-6	BK	0.153 "J"	< 0.042	< 0.021			
								25.0								
								25.5								
								26.0								
Depth to Water (ft. bgs): ~ 8				Start: 4/7/2016				Consulting Firm: O M Enterprises, Inc.				Crew Chief: Gary Wellner				
Bedrock Encountered ? No				End: 4/7/2016				Drill Rig: Diedrich								
I, hereby, certify that the above information is true and correct to the best of my knowledge.																
Name: Raghu B. Singh	Signature: 						Date: 5/8/2016									

Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name <u>Villard Foodton, Inc.</u> <u>3217 W Villard Ave.</u>		License/Permit/Monitoring Number		Boring Number <u>B-71 mw-7</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>George</u> Last Name: <u>Wellner</u> Firm: <u>PSE</u> <u>Incana Inc.</u>		Date Drilling Started <u>04/07/2016</u> <u>mm dd yy</u>	Date Drilling Completed <u>04/07/2016</u> <u>mm dd yy</u>	Drilling Method <u>HSA</u>
WI Unique Well No. <u>241692110</u>	DNR Well ID No. <u>Milwaukee</u>	Final Static Water Level Feet MSL <u>0'</u>	Surface Elevation Feet MSL <u>0'</u>	Borehole Diameter inches <u>4"</u>
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N. <u>E</u>		Lat <u>0° 0' "</u>	Local Grid Location <input type="checkbox"/> N. <u>E</u> Feet <input type="checkbox"/> S. <u>W</u> Feet <input type="checkbox"/> W	
NW 1/4 of <u>S1E</u> 1/4 of Section <u>36, T 8 N, R 21 E</u>		Long <u>0° 0' "</u>		
Facility ID <u>241692110</u>	County <u>Milwaukee</u>	County Code <u>4</u>	Civil Town/City or Village <u>Milwaukee</u>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Foot (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	U.S.C.S.	Graphic Log	Well Diagram	Soil Properties					RQD/ Comments
								RID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1	10	17	2	FILL - Mix of silt & clay, 3" AM				0	m				
2	16	18	4	SILTY CLAY (Cu)- Stiff to very hard				0	m				
3	14	19	6	Grey to Brown, moist to wet				0	m				
4	17	13	8					0	m				
5	12	19	10					0	w				
6	24	32	12					0	w				
7	10	17	14					0	w				
8	14	21	16					0	w				
			18										
			20										
			22										
			24										
			26										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Raghu B. Singh Firm Om Enterprises

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# LOG OF TEST BORING

Location: 3217 W Villard Avenue, Milwaukee, WI 53209										Job #: 3023	Method: HSA			
Client: Villard Foodtown, LLC										Boring/Monitoring Well: B-7/MW-7/Off-Site				
Drill Firm: PSI, 1125 Tuckaway, Menasha, WI 54952										Page Number:	1 of 1			
Sam- ple No.	Blow Counts (N)					Reco- very (inch)	Moisture Level	Boring Depth (feet)	Observation, Classification, and Comments	Test Parameters				
	6" 1	12" 2	18" 3	24" 4	N (2+3+4)					PID Units	PCE ppm	TCE ppm	DCE ppm	VC ppm
1	5	3	5	9	17	10	Moist	0.5	FILL-Mixture of silt, sand, & gravel; black; moist; odorless; Top 3" Asphalt	BK	0.278	< 0.042	< 0.021	< 0.01
								1.0						
								1.5						
								2.0						
2	6	4	8	6	18	16	Moist	2.5	SILTY CLAY ((CL)-Stiff to Very Hard; Grey to Brown; Moist to Wet; odorless	BK	0.340	< 0.042	< 0.021	< 0.01
								3.0						
								3.5						
								4.0						
3	8	9	4	6	19	14	Moist	4.5						
								5.0						
								5.5						
								6.0						
4	8	3	6	4	13	17	Moist	6.5						
								7.0						
								7.5						
								8.0						
5	4	3	8	8	19	12	Wet	8.5						
								9.0						
								9.5						
								10.0						
6	6	8	10	14	32	24	Wet	10.5						
								11.0						
								11.5						
								12.0						
7	2	8	5	4	17	10	Wet	12.5						
								13.0						
								13.5						
								14.0						
8	6	4	8	9	21	14	Wet	14.5						
								15.0						
								15.5	End of Boring @~ 15 ft. bgs Converted into Monitoring Well MW-7					
								16.0						
9								16.5						
								17.0						
								17.5						
								18.0						
10								18.5						
								19.0						
								19.5						
								20.0						
11								20.5						
								21.0						
								21.5						
								22.0						
12								22.5						
								23.0						
								23.5						
								24.0						
13								24.5						
								25.0						
								25.5						
								26.0						

Depth to Water (ft. bgs): ~ 4 Start: 4/7/2016

Bedrock Encountered ? No End: 4/7/2016

Consulting Firm:

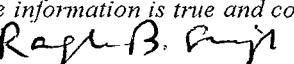
O M Enterprises, Inc.

Crew Chief: Gary Wellner

Drill Rig: Diedrich

I, hereby, certify that the above information is true and correct to the best of my knowledge.

Name: Raghu B. Singh

Signature: 

Date: 5/8/2016

Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name <u>Villard Footton, LLC 3217 W Villard Ave.</u>			License/Permit/Monitoring Number		Boring Number <u>B-8   P2-1</u>					
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>George</u> Last Name: <u>Wellner</u> Firm: <u>PSE Inc.</u>			Date Drilling Started <u>04/09/2016</u>	Date Drilling Completed <u>04/08/2016</u>	Drilling Method <u>HSA</u>					
WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter inches					
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane <u>N</u> , <u>E</u> <u>NW 1/4 of S1/4 of Section 36, T 8 N, R 21 E</u>			Lat <u>0° 0' "</u>	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S <input type="checkbox"/> W	Long <u>0° 0' "</u>					
Facility ID <u>241692110</u>	County <u>Milwaukee</u>	County Code <u>41</u>	Civil Town/City or Village <u>Milwaukee</u>							
Sample Number and Type	Length Alt. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil Properties						
				USCS	Graphic Log	Well Diagram	PI/D/FID	Compressive Strength	Moisture Content	Liquid Limit
1	18	13	2	FILL - mixture of sub-sand and gravel	0	m	w	w	w	w
2	21	12	4	7 ft 3" asphalt	0	w	w	w	w	w
3	12	17	6		0	w	w	w	w	w
4	16	13	8		0	w	w	w	w	w
5	18	11	10	SALTY CLAY (cc) - stiff to very stiff	0	w	w	w	w	w
6	19	15	12	Crypto Brown, moist to wet	0	w	w	w	w	w
7	15	10	14		0	w	w	w	w	w
8	18	20	16		0	w	w	w	w	w
			18							
			20							
			22							
			24							
			26	E.O.B. @ ~ 25' bgs Converted into P2-1						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Ralph B. Sny

Firm

OM Enterprises

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

# LOG OF TEST BORING

Location: 3217 W Villard Avenue, Milwaukee, WI 53209								Job #: 3023	Method: HSA							
Client: Villard Foodtown, LLC								Boring/Monitoring Well: B-8/PZ-1								
Drill Firm: PSI, 1125 Tuckaway, Menasha, WI 54952								Page Number: 1 of 1								
Sam- ple No.	Blow Counts (N)					Reco- very (inch)	Moisture Level	Boring Depth (feet)	Observation, Classification, and Comments	Test Parameters						
	6"	12"	18"	24"	N (2+3+4)					PID Units	PCE ppm	TCE ppm	DCE ppm	VC ppm		
1	2	4	3	6	13	18	Moist	0.5 1.0 1.5 2.0	FILL-Mixture of silt, sand, & gravel; black; moist to wet & saturated; odorless Top 3" Asphalt	BK	11.10	0.95	0.33 "J"	< 0.05		
2	4	2	6	4	12	21	Wet	2.5 3.0 3.5 4.0		BK	88.00	12	14.10	< 0.2		
3	4	6	3	8	17	12	Wet	4.5 5.0 5.5 6.0								
4	3	5	2	6	13	16	Wet	6.5 7.0 7.5 8.0								
5	4	6	3	2	11	18	Wet	8.5 9.0 9.5 10.0	SILTY CLAY ((CL)-Stiff to Very Stiff; Grey to Brown; Moist to Wet; odorless							
6	4	5	4	6	15	19	Wet	10.5 11.0 11.5 12.0								
7	4	2	3	5	10	15	Wet	12.5 13.0 13.5 14.0								
8	3	6	9	5	20	18	Wet	14.5 15.0 15.5 16.0								
9								16.5 17.0 17.5 18.0								
10								18.5 19.0 19.5 20.0								
11								20.5 21.0 21.5 22.0								
12								22.5 23.0 23.5 24.0								
13								24.5 25.0 25.5 26.0	End of Boring @~ 25 ft. bgs Converted into PZ-1							
Depth to Water (ft. bgs): ~ 4				Start: 4/8/2016		Consulting Firm:			Crew Chief: Gary Wellner							
Bedrock Encountered ? No				End: 4/8/2016		O M Enterprises, Inc.			Drill Rig: Diedrich							
I, hereby, certify that the above information is true and correct to the best of my knowledge.																
Rachna R. Singh				Signature: <i>Rachna R. Singh</i>				Date: 5/8/2016								

Route To: Watershed/Wastewater  Waste Management   
Remediation/Development  Other

Page 1 of 1

Facility/Project Name <u>Villard Foodtown, Inc.</u> <u>3217 W. Villard Ave.</u>		License/Permit/Monitoring Number		Boring Number <u>B-91 PZ-2</u>
Boring Drilled By: Name of crew chief (first, last) and Firm First Name: <u>George</u> Last Name: <u>Wellner</u> Firm: <u>PSE</u> <u>Incarnate</u>		Date Drilling Started <u>04/08/2016</u> <u>mm dd yy</u>	Date Drilling Completed <u>04/08/2016</u> <u>mm dd yy</u>	Drilling Method <u>H/S/A</u>
WI Unique Well No. <u>241692110</u>	DNR Well ID No. <u>Milwaukee</u>	Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Boring Location <input type="checkbox"/> State Plane N. E		Lat <u>0° 0' "</u>	Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E	
NW 1/4 of Section <u>36</u> , T <u>8</u> , N, R <u>21</u> E		Long <u>0° 0' "</u>	Feet <input type="checkbox"/> S	Feet <input type="checkbox"/> W
Facility ID <u>241692110</u>	County <u>Milwaukee</u>	County Code <u>41</u>	Civil Town/City/or Village <u>Milwaukee</u>	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties				RQD/ Comments
									Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	
1	21	16	2	FILL - mixture of silt, sand, and gravel				0	3				
2	18	18	4	Top 3" appear				0	m				
3	15	9	6	SILTY CLAY(CC)- Stiff to Very Stiff, Grey to Brown; Matrix to weak				0	m				
4	16	12	8					0	m				
5	21	32	10					0	w				
6	14	16	12					0	w				
7	19	15	14					0	w				
8	16	17	16					0	w				
			18										
			20										
			22										
			24										
			26	E.O.B. @ ~25' bgs Connected into PZ-2									

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Reyha B. Sy

Firm

om Enterprise

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

## LOG OF TEST BORING

I, hereby, certify that the above information is true and correct to the best of my knowledge.

Name: Raghu B. Singh

Signature: *Roger B. Ensign*

Date: 5/8/2016

*f my knowledge.*

*f my knowledge.*

Facility/Project Name <u>St. Luke's</u> <u>3217 W Villard Ave</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <u>MW - 5</u>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. _____ " Long. _____ " or St. Plane _____ ft. N. _____ ft. E. S/C/N	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID <u>241692110</u>	Section Location of Waste/Source <u>NW1/4 of SW 1/4 of Sec. 36, T. 8 N, R. 21 E</u>	Date Well Installed <u>04/07/2016</u> m m d d v v v
Type of Well Well Code _____ /	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: Name (first, last) and Firm <u>Gary Wellen</u> PSE
Distance from Waste/ Source _____ ft.	Enf. Stds. Apply <input type="checkbox"/>	Gov. Lot Number _____
<p>A. Protective pipe, top elevation _____ ft. MSL <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>B. Well casing, top elevation _____ ft. MSL <input type="checkbox"/> 8.0 in.</p> <p>C. Land surface elevation _____ ft. MSL <input type="checkbox"/> 1.0 ft.</p> <p>D. Surface seal, bottom _____ ft. MSL or _____ ft. <input type="checkbox"/> Steel <input type="checkbox"/> 0.4 Bentonite <input type="checkbox"/> Other <input type="checkbox"/></p> <p>E. Bentonite seal, top _____ ft. MSL or _____ ft. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>F. Fine sand, top _____ ft. MSL or _____ ft. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>G. Filter pack, top _____ ft. MSL or _____ ft. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>H. Screen joint, top _____ ft. MSL or <u>0.6ft</u> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>I. Well bottom _____ ft. MSL or <u>15.0ft</u> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>J. Filter pack, bottom _____ ft. MSL or <u>15.0ft</u> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>K. Borehole, bottom _____ ft. MSL or <u>15.0ft</u> <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>L. Borehole, diameter <u>8.00</u> in. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>M. O.D. well casing <u>2.25</u> in. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>N. I.D. well casing <u>2.00</u> in. <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		
<p>12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/></p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____</p> <p>17. Source of water (attach analysis, if required): <u>N/A</u></p> <p>18. Cap and lock? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>19. Protective cover pipe: a. Inside diameter: <u>8.0 in.</u> b. Length: <u>1.0 ft.</u> c. Material: <input type="checkbox"/> Steel <input checked="" type="checkbox"/> 0.4 Other <input type="checkbox"/></p> <p>d. Additional protection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: <u>PVC flange</u></p> <p>20. Surface seal: Bentonite <input checked="" type="checkbox"/> 3.0 Concrete <input type="checkbox"/> 0.1 Other <input type="checkbox"/></p> <p>21. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 3.0 Other <input type="checkbox"/></p> <p>22. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 3.3 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. _____ Lbs/gal mud weight ..... Bentonite slurry <input type="checkbox"/> 3.1 d. _____ % Bentonite ..... Bentonite-cement grout <input type="checkbox"/> 5.0 e. _____ ft<sup>3</sup> volume added for any of the above <input type="checkbox"/> 0.1 f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8</p> <p>23. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3.2 c. Other <input type="checkbox"/></p> <p>24. Fine sand material: Manufacturer, product name &amp; mesh size a. <u>N/A</u> <input type="checkbox"/> 3.3 b. Volume added _____ ft<sup>3</sup> <input type="checkbox"/></p> <p>25. Filter pack material: Manufacturer, product name &amp; mesh size a. <u>#30 feed plant</u> <input type="checkbox"/> 3.3 b. Volume added _____ ft<sup>3</sup> <input type="checkbox"/></p> <p>26. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/></p> <p>27. Screen material: a. Screen type: <u>PVC</u> <input type="checkbox"/> Factory cut <input checked="" type="checkbox"/> 1.1 Continuous slot <input type="checkbox"/> 0.1 Other <input type="checkbox"/></p> <p>b. Manufacturer <u>Tolson</u> <input type="checkbox"/> 0.016 in. c. Slot size: <input type="checkbox"/> 1.5 ft.</p> <p>28. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1.4 Other <input type="checkbox"/></p>		

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Ralph B. Syju Firm Om Enterprises, Inc.

State of Wisconsin  
Department of Natural Resources

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

MONITORING WELL CONSTRUCTION  
Form 4400-113A Rev. 7-98

Facility/Project Name <u>Shipmate</u> <u>3217 W Vilard Ave</u>	Local Grid Location of Well ft. N. <input type="checkbox"/> S. <input type="checkbox"/> ft. E. <input type="checkbox"/> W. Lat. " Long. "	Well Name <u>MW-6</u>
Facility License, Permit or Monitoring No. <u>241692110</u>	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. " Long. "	Wis. Unique Well No. <u>0410712016</u> DNR Well ID No.
Facility ID	St. Plane ft. N. <input type="checkbox"/> ft. E. <input type="checkbox"/> S/C/N	Date Well Installed <u>04/07/2016</u> m m d d y y y y
Type of Well	Section Location of Waste/Source <u>NW 1/4 of SW 1/4 of Sec. 36, T. 8 N.R. 21 E</u>	Well Installed By: Name (first, last) and Firm <u>Gary Wellen</u> <u>PSE</u>
Well Code <u>/</u>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number
Distance from Waste/ Source ft.	Enf. Stds. Apply <input type="checkbox"/>	

A. Protective pipe, top elevation	ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>8.0 in.</u> b. Length: <u>1.0 ft.</u> c. Material: <input checked="" type="checkbox"/> Steel <u>04</u> <input type="checkbox"/> Other <u>██████████</u>
C. Land surface elevation	ft. MSL	d. Additional protection? If yes, describe: <u>PVC flange</u>
D. Surface seal, bottom	ft. MSL or _____ ft.	3. Surface seal: <input checked="" type="checkbox"/> Bentonite <u>30</u> <input checked="" type="checkbox"/> Concrete <u>01</u> <input type="checkbox"/> Other <u>██████████</u>
12. USCS classification of soil near screen:		
GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
14. Drilling method used: Rotary <input type="checkbox"/> Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	4. Material between well casing and protective pipe: <input checked="" type="checkbox"/> Bentonite <u>30</u> <input type="checkbox"/> Other <u>██████████</u>	
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ..... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ..... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above	
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08	
17. Source of water (attach analysis, if required): <u>N/A</u>	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. _____ Other <u>██████████</u>	
E. Bentonite seal, top	ft. MSL or _____ ft.	7. Fine sand material: Manufacturer, product name & mesh size <u>N/A</u>
F. Fine sand, top	ft. MSL or _____ ft.	8. Filter pack material: Manufacturer, product name & mesh size <u>#30 Red Flint</u>
G. Filter pack, top	ft. MSL or _____ ft.	
H. Screen joint, top	ft. MSL or <u>0.0 ft.</u>	
I. Well bottom	ft. MSL or <u>15.0 ft.</u>	
J. Filter pack, bottom	ft. MSL or <u>15.0 ft.</u>	
K. Borehole, bottom	ft. MSL or <u>15.0 ft.</u>	
L. Borehole, diameter	<u>8.00</u> in.	
M. O.D. well casing	<u>2.25</u> in.	
N. I.D. well casing	<u>2.00</u> in.	
10. Screen material: a. Screen type: <u>PVC</u> Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> ██████████		
b. Manufacturer <u>Tidneer</u> c. Slot size: d. Slotted length: <u>0.01 in.</u> <u>15 ft.</u>		
11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Other <input type="checkbox"/> ██████████		

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Ragle B. Supt Firm Om Enterprises Inc

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name <u>Shiprock</u> <u>3217 W Villard Ave</u>	Local Grid Location of Well ft. <input type="checkbox"/> N. ft. <input type="checkbox"/> E. <input type="checkbox"/> S. ft. <input type="checkbox"/> W.	Well Name <u>MW-7</u>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. _____ "Long. _____ "	Wis. Unique Well No. _____ DNR Well ID No. _____
Facility ID <u>241692110</u>	St. Plane _____ ft. N. _____ ft. E. S/C/N _____	Date Well Installed <u>04/07/2016</u> m m d d v v v v
Type of Well	Section Location of Waste/Source <u>NW 1/4 of SW 1/4 of Sec. 36, T. 8, N. R. 21 E W</u>	Well Installed By: Name (first, last) and Firm <u>Gray Well</u> <u>PSE</u>
Well Code _____ /	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number _____
Distance from Waste/ Source ft.	Enf. Stds. Apply <input type="checkbox"/>	
A. Protective pipe, top elevation	ft. MSL	1. Cap and lock? <input type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	ft. MSL	2. Protective cover pipe: a. Inside diameter: 8.0 in. b. Length: 1.0 ft. c. Material: Steel <input type="checkbox"/> 0.4 Other <input type="checkbox"/>
C. Land surface elevation	ft. MSL	
D. Surface seal, bottom	ft. MSL or ft.	d. Additional protection? If yes, describe: <u>PVC plug</u>
12. USCS classification of soil near screen:		Steel <input type="checkbox"/> 0.4 Other <input type="checkbox"/>
GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>		15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____		17. Source of water (attach analysis, if required): <u>N/A</u>
E. Bentonite seal, top	ft. MSL or ft.	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 3.3 b. Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. Lbs/gal mud weight ..... Bentonite slurry <input type="checkbox"/> 3.1 d. % Bentonite ..... Bentonite-cement grout <input type="checkbox"/> 5.0 e. Ft <sup>3</sup> volume added for any of the above
F. Fine sand, top	ft. MSL or ft.	f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8
G. Filter pack, top	ft. MSL or ft.	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3.2 c. _____ Other <input type="checkbox"/>
H. Screen joint, top	ft. MSL or 0.0 ft.	7. Fine sand material: Manufacturer, product name & mesh size <u>N/A</u>
I. Well bottom	ft. MSL or 15.0 ft.	8. Filter pack material: Manufacturer, product name & mesh size <u>#30 feed plant</u>
J. Filter pack, bottom	ft. MSL or 15.5 ft.	b. Volume added _____ ft <sup>3</sup>
K. Borehole, bottom	ft. MSL or 15.5 ft.	9. Well casing: Flush threaded PVC schedule 40 <input type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/>
L. Borehole, diameter	8.00 in.	10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 1.1 Continuous slot <input type="checkbox"/> 0.1 Other <input type="checkbox"/>
M. O.D. well casing	2.25 in.	b. Manufacturer <u>Johner</u> c. Slot size: 0.01 in. d. Slotted length: 15 ft.
N. I.D. well casing	2.00 in.	11. Backfill material (below filter pack): None <input type="checkbox"/> 1.4 Other <input type="checkbox"/>

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Ray B. Engle Firm OM Enterprises, Inc.

State of Wisconsin  
Department of Natural Resources

Route to: Watershed/Wastewater

Waste Management

Remediation/Redevelopment

Other

### MONITORING WELL CONSTRUCTION

Form 4400-113A

Rev. 7-98

Facility/Project Name <i>Ship Rite 3217 W. Meader</i>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <b>PZ-1</b>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. <input type="checkbox"/> Long. <input type="checkbox"/> or	Wis. Unique Well No. <input type="checkbox"/> DNR Well ID No. <input type="checkbox"/>
Facility ID <b>241692110</b>	St. Plane <input type="checkbox"/> ft. N. <input type="checkbox"/> ft. E. S/C/N	Date Well Installed <b>04/08/2016</b> m m d d y y y y
Type of Well	Section Location of Waste/Source <b>SW 1/4 of SW 1/4 of Sec. 36, T. 8 N.R. 21</b>	Well Installed By: Name (first, last) and Firm <b>Gary Wellman</b>
Well Code <input type="checkbox"/> /	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number <input type="checkbox"/> <b>P3 F</b>
Distance from Waste/ Source ft. Enf. Stds. Source ft. Apply <input type="checkbox"/>		
A. Protective pipe, top elevation <input type="checkbox"/> ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
B. Well casing, top elevation <input type="checkbox"/> ft. MSL	2. Protective cover pipe: a. Inside diameter: <b>8.6 in.</b>	
C. Land surface elevation <input type="checkbox"/> ft. MSL	b. Length: <b>-1.5 ft.</b>	
D. Surface seal, bottom <input type="checkbox"/> ft. MSL or <input type="checkbox"/> ft.	c. Material: <b>Steel <input checked="" type="checkbox"/> 0.4 Other <input type="checkbox"/></b>	
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		
13. Sieve analysis performed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>		
15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9		
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe <input type="checkbox"/>		
17. Source of water (attach analysis, if required): <b>N/A</b>		
E. Bentonite seal, top <input type="checkbox"/> ft. MSL or <input type="checkbox"/> 2.02 ft.	3. Surface seal: <b>Asphalt</b>	
F. Fine sand, top <input type="checkbox"/> ft. MSL or <input type="checkbox"/> 17.0 ft.	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 3.0 Concrete <input type="checkbox"/> 0.1 Other <input type="checkbox"/>	
G. Filter pack, top <input type="checkbox"/> ft. MSL or <input type="checkbox"/> 18.0 ft.	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 3.3 b. Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. Lbs/gal mud weight ..... Bentonite slurry <input type="checkbox"/> 3.1 d. % Bentonite ..... Bentonite-cement grout <input type="checkbox"/> 5.0 e. Ft <sup>3</sup> volume added for any of the above <input type="checkbox"/>	
H. Screen joint, top <input type="checkbox"/> ft. MSL or <input type="checkbox"/> 19.5 ft.	f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8	
I. Well bottom <input type="checkbox"/> ft. MSL or <input type="checkbox"/> 24.5 ft.	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 3.2 c. Other <input type="checkbox"/>	
J. Filter pack, bottom <input type="checkbox"/> ft. MSL or <input type="checkbox"/> 24.5 ft.	7. Fine sand material: Manufacturer, product name & mesh size a. #45-55 Rediller <input type="checkbox"/>	
K. Borehole, bottom <input type="checkbox"/> ft. MSL or <input type="checkbox"/> 24.5 ft.	8. Filter pack material: Manufacturer, product name & mesh size a. #30 Red Olin <input type="checkbox"/> b. Volume added <input type="checkbox"/> ft <sup>3</sup>	
L. Borehole, diameter <input type="checkbox"/> in.	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/>	
M. O.D. well casing <input type="checkbox"/> in.	10. Screen material: PVC a. Screen type: Factory cut <input checked="" type="checkbox"/> 1.1 Continuous slot <input type="checkbox"/> 0.1 Other <input type="checkbox"/>	
N. I.D. well casing <input type="checkbox"/> in.	b. Manufacturer <b>Johnson</b> c. Slot size: <input type="checkbox"/> 0.010 in. d. Slotted length: <input type="checkbox"/> 5 ft.	
11. Backfill material (below filter pack): None <input type="checkbox"/> 1.4 Other <input type="checkbox"/>		

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

*Rey B. Sing*

Firm

*OM Enterprise Inc.*

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Facility/Project Name <i>Sly Rd. 3217 W. Weeden</i>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <b>PZ-2</b>
Facility License, Permit or Monitoring No.	Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/> Lat. <input type="checkbox"/> Long. <input type="checkbox"/> " or	Wis. Unique Well No. <input type="checkbox"/> DNR Well ID No. <input type="checkbox"/>
Facility ID <b>241692110</b>	St. Plane <input type="checkbox"/> ft. N. <input type="checkbox"/> ft. E. S/C/N	Date Well Installed <b>84/08/2016</b> m m d d y y y
Type of Well	Section Location of Waste/Source <b>1/4 of SW 1/4 of Sec. 36, T. 8 N, R. 21</b>	Well Installed By: Name (first, last) and Firm <b>Gary Wellner</b>
Well Code <input type="checkbox"/> / <input type="checkbox"/>	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Gov. Lot Number <b>PSE</b>
Distance from Waste/ Source ft.	Enf. Stds. Apply <input type="checkbox"/>	

A. Protective pipe, top elevation	ft. MSL	1. Cap and lock? <input type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	ft. MSL	2. Protective cover pipe: a. Inside diameter: <b>8 in.</b> b. Length: <b>1.5 ft.</b> c. Material: <b>Steel</b> <input type="checkbox"/> 04 Other <input type="checkbox"/>
C. Land surface elevation	ft. MSL	d. Additional protection? If yes, describe: <b>PVC Plug</b>
D. Surface seal, bottom	ft. MSL or <input type="checkbox"/>	3. Surface seal: <b>Asphalt</b>
12. USCS classification of soil near screen:	GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: <b>Sand</b>
13. Sieve analysis performed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular/Chipped Bentonite <input type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight .... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ..... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above
14. Drilling method used:	Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 99		6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite chips <input checked="" type="checkbox"/> 32 c. Other <input type="checkbox"/>
16. Drilling additives used?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7. Fine sand material: Manufacturer, product name & mesh size <b>#45-55 Rediller</b>
Describe _____		8. Filter pack material: Manufacturer, product name & mesh size <b>#30 Red Orlit</b>
17. Source of water (attach analysis, if required): <b>N/A</b>		9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>

E. Bentonite seal, top	ft. MSL or <b>2.00 ft.</b>	10. Screen material: a. Screen type: <b>PVC</b> Factory cut <input type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
F. Fine sand, top	ft. MSL or <b>1.75 ft.</b>	b. Manufacturer <b>Johnson</b> c. Slot size: d. Slotted length: <b>0.010 in.</b> <b>-5 ft.</b>
G. Filter pack, top	ft. MSL or <b>1.50 ft.</b>	11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Other <input type="checkbox"/>
H. Screen joint, top	ft. MSL or <b>1.50 ft.</b>	
I. Well bottom	ft. MSL or <b>2.50 ft.</b>	
J. Filter pack, bottom	ft. MSL or <b>2.50 ft.</b>	
K. Borehole, bottom	ft. MSL or <b>2.50 ft.</b>	
L. Borehole, diameter	<b>8.00 in.</b>	
M. O.D. well casing	<b>2.25 in.</b>	
N. I.D. well casing	<b>2.00 in.</b>	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature *Gary Wellner* Firm *OM Enterprise, Inc.*

Route to: Watershed/Wastewater     Waste Management

Remediation/Redevelopment

Other \_\_\_\_\_

Facility/Project Name <i>Shop Rite Grocery</i>	County Name <i>Milwaukee</i>	Well Name <i>M W - 5</i>
Facility License, Permit or Monitoring Number <i>FSD# 241 692 110</i>	County Code <i>41</i>	Wis. Unique Well Number DNR Well ID Number

1. Can this well be purged dry?  Yes  No

2. Well development method

- surged with bailer and bailed
- surged with bailer and pumped
- surged with block and bailed
- surged with block and pumped
- surged with block, bailed and pumped
- compressed air
- bailed only
- pumped only
- pumped slowly
- Other \_\_\_\_\_

3. Time spent developing well \_\_\_\_\_ 45 min.

4. Depth of well (from top of well casisng) \_\_\_\_\_ 14.7 ft.

5. Inside diameter of well \_\_\_\_\_ 2.0 in.

6. Volume of water in filter pack and well casing \_\_\_\_\_ ~15.7 gal.

7. Volume of water removed from well \_\_\_\_\_ ~18.5 gal.

8. Volume of water added (if any) *N/A* \_\_\_\_\_ gal.

9. Source of water added *N/A* \_\_\_\_\_

10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

*N/A*

17. Additional comments on development:

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 3.10 ft.	13.25 ft.
Date	b. <i>05/01/2016</i>	<i>05/01/2016</i>
Time	c. <i>9:00 a.m.</i>	<i>9:45 a.m.</i>
12. Sediment in well bottom	— 6.0 inches	— 6.0 inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe)	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe)
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	<i>N/A</i> _____ mg/l	_____ mg/l
16. Well developed by: Name (first, last) and Firm		
First Name: <i>Raghbir Singh</i>	Last Name: <i>Singh</i>	
Firm: <i>Om Enterprise, Inc.</i>		

Name and Address of Facility Contact/Owner/Responsible Party
First Name: <i>Frank</i> Last Name: <i>Jaber</i>
Facility/Firm: <i>Villard Ford Inc.</i>
Street: <i>3217 W Villard Ave</i>
City/State/Zip: <i>Milwaukee, WI 53209</i>

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: <i>Raghbir Singh</i>
Print Name: <i>RAGHIB SINGH</i>
Firm: <i>Om Enterprise, Inc.</i>

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name 3217 W Villard Ave	County Name Milwaukee	Well Name MW-6
Facility License, Permit or Monitoring Number FED# 241692110	County Code 41	Wis. Unique Well Number DNR Well ID Number

1. Can this well be purged dry?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Depth to Water (from top of well casing) a. <u>2.90</u> ft. <u>14.20</u> ft.
2. Well development method		Before Development After Development
surged with bailer and bailed	<input checked="" type="checkbox"/> 41	Date <u>b. 05/01/2016</u>
surged with bailer and pumped	<input type="checkbox"/> 61	mm <u>05</u> dd <u>01</u> yy <u>16</u>
surged with block and bailed	<input type="checkbox"/> 42	Time <u>c. 10:00</u> a.m. <u>10:30</u> a.m.
surged with block and pumped	<input type="checkbox"/> 62	<input type="checkbox"/> p.m. <input checked="" type="checkbox"/> p.m.
surged with block, bailed and pumped	<input type="checkbox"/> 70	12. Sediment in well bottom <u>0.0</u> inches <u>0.0</u> inches
compressed air	<input type="checkbox"/> 20	13. Water clarity Clear <input type="checkbox"/> 10 <input checked="" type="checkbox"/> 15
bailed only	<input type="checkbox"/> 10	Turbid <input checked="" type="checkbox"/> 25
pumped only	<input type="checkbox"/> 51	(Describe) _____
pumped slowly	<input type="checkbox"/> 50	_____
Other _____	<input checked="" type="checkbox"/>	_____
3. Time spent developing well	<u>30</u> min.	_____
4. Depth of well (from top of well casing)	<u>15.3</u> ft.	_____
5. Inside diameter of well	<u>2.00</u> in.	_____
6. Volume of water in filter pack and well casing	<u>~16.8</u> gal.	_____
7. Volume of water removed from well	<u>~18.5</u> gal.	Fill in if drilling fluids were used and well is at solid waste facility:
8. Volume of water added (if any)	<u>N/A</u> gal.	14. Total suspended solids <u>N/A</u> mg/l
9. Source of water added	<u>N/A</u>	15. COD <u>N/A</u> mg/l
10. Analysis performed on water added?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, attach results)	16. Well developed by: Name (first, last) and Firm First Name: <u>Raghu</u> Last Name: <u>Singh</u> Firm: <u>Om Enterprise, Inc</u>
17. Additional comments on development:		

Name and Address of Facility Contact/Owner/Responsible Party First Name: <u>Frank</u> Last Name: <u>Jaber</u>	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm: <u>Villard Food Pan, Inc</u>	Signature: <u>Raghu B Singh</u>
Street: <u>3217 W Villard Ave</u>	Print Name: <u>RAGHU B. SINGH</u>
City/State/Zip: <u>Milwaukee, WI 53209</u>	Firm: <u>Om Enterprise, Inc.</u>

Route to: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Facility/Project Name <u>Shop Rite Grocery</u> <u>3217 W Villard Ave</u>	County Name <u>Milwaukee</u>	Well Name <u>MW-7</u>
Facility License, Permit or Monitoring Number <u>F-5D # 241 692 110</u>	County Code <u>41</u>	Wis. Unique Well Number _____
		DNR Well ID Number _____

1. Can this well be purged dry? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Depth to Water (from top of well casing) a. <u>1.98</u> ft.      Before Development      After Development
2. Well development method surged with bailer and bailed <input checked="" type="checkbox"/> 41 surged with bailer and pumped <input type="checkbox"/> 61 surged with block and bailed <input type="checkbox"/> 42 surged with block and pumped <input type="checkbox"/> 62 surged with block, bailed and pumped <input type="checkbox"/> 70 compressed air <input type="checkbox"/> 20 bailed only <input type="checkbox"/> 10 pumped only <input type="checkbox"/> 51 pumped slowly <input type="checkbox"/> 50 Other _____	b. <u>05/01/2016</u> <input type="checkbox"/> a.m. <u>05/01/2016</u> <input checked="" type="checkbox"/> a.m. m m d d y y y y m m d d y y y y
3. Time spent developing well <u>65</u> min.	c. <u>10:40</u> <input checked="" type="checkbox"/> a.m. <u>11:45</u> <input type="checkbox"/> p.m.
4. Depth of well (from top of well casing) <u>14.0</u> ft.	12. Sediment in well bottom <u>0.0</u> inches <u>0.0</u> inches
5. Inside diameter of well <u>2.00</u> in.	13. Water clarity Clear <input type="checkbox"/> 10 <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 15 <input checked="" type="checkbox"/> 25 (Describe) _____
6. Volume of water in filter pack and well casing <u>~16.3</u> gal.	14. Total suspended solids <u>N/A</u> mg/l
7. Volume of water removed from well <u>~15.8</u> gal.	15. COD <u>N/A</u> mg/l
8. Volume of water added (if any) <u>N/A</u> gal.	16. Well developed by: Name (first, last) and Firm First Name: <u>Raghbir</u> Last Name: <u>Singh</u> Firm: <u>Om Enterprises, Inc.</u>
9. Source of water added <u>N/A</u>	
10. Analysis performed on water added? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, attach results) <u>N/A</u>	
17. Additional comments on development:	

Name and Address of Facility Contact/Owner/Responsible Party
First Name: <u>Frank</u> Last Name: <u>Jakob</u>
Facility/Firm: <u>Villard Food Pan, Inc</u>
Street: <u>3217 W Villard Ave</u>
City/State/Zip: <u>Milwaukee, WI 53209</u>

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: <u>Raghbir Singh</u>
Print Name: <u>RAGHIB SINGH</u>
Firm: <u>Om Enterprises, Inc.</u>

<input checked="" type="checkbox"/> Watershed/Wastewater	<input type="checkbox"/> Waste Management	
<input checked="" type="checkbox"/> Remediation/Redevelopment		
Facility/Project Name 3217 W Villard Ave	County Name Milwaukee	Well Name P2-1
Facility License, Permit or Monitoring Number F-5D # 241 692 110	County Code 41	Wis. Unique Well Number _____
DNR Well ID Number _____		

1. Can this well be purged dry?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Before Development	After Development
2. Well development method		11. Depth to Water (from top of well casing)	a. 8.72 ft. - 21.58 ft.
surged with bailer and bailed	<input checked="" type="checkbox"/> 41	Date	b. 05/01/2016 05/01/2016
surged with bailer and pumped	<input type="checkbox"/> 61	Time	c. 12:15 <input type="checkbox"/> a.m. 1:30 <input type="checkbox"/> p.m.
surged with block and bailed	<input type="checkbox"/> 42	12. Sediment in well bottom	- 0.0 inches - 0.0 inches
surged with block and pumped	<input type="checkbox"/> 62	13. Water clarity	Clear <input type="checkbox"/> 10 Clear <input type="checkbox"/> 20
surged with block, bailed and pumped	<input type="checkbox"/> 70	Turbid <input checked="" type="checkbox"/> 15 Turbid <input checked="" type="checkbox"/> 25	
compressed air	<input type="checkbox"/> 20	(Describe) _____	(Describe) _____
bailed only	<input type="checkbox"/> 10	_____	_____
pumped only	<input type="checkbox"/> 51	_____	_____
pumped slowly	<input type="checkbox"/> 50	_____	_____
Other _____	<input type="checkbox"/>	_____	_____
3. Time spent developing well	25 min.	Fill in if drilling fluids were used and well is at solid waste facility:	
4. Depth of well (from top of well casing)	24.5 ft.	14. Total suspended solids	mg/l mg/l
5. Inside diameter of well	2.00 in.	N/A	mg/l mg/l
6. Volume of water in filter pack and well casing	~ 21.4 gal.	15. COD	N/A mg/l mg/l
7. Volume of water removed from well	~ 20.5 gal.	16. Well developed by: Name (first, last) and Firm	First Name: Raghu Last Name: Singh
8. Volume of water added (if any)	N/A gal.	Firm: Om Enterprise, Inc	
9. Source of water added	N/A		
10. Analysis performed on water added?	<input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, attach results)		
11. Additional comments on development:			

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Frank Last Name: Jaber
Facility/Firm: Villard Food Pan, Inc
Street: 3217 W Villard Ave
City/State/Zip: Milwaukee, WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: RAGHU B. SINGH
Print Name: RAGHU B. SINGH
Firm: Om Enterprise, Inc.

<u>Route to:</u> Watershed/Wastewater <input type="checkbox"/>	<u>Waste Management</u> <input type="checkbox"/>	
<u>Remediation/Redevelopment</u> <input checked="" type="checkbox"/>		
Facility/Project Name <u>Shop Rite Grocery 3217 W Villard Ave</u>	County Name <u>Milwaukee</u>	Well Name <u>PZ-2</u>
Facility License, Permit or Monitoring Number <u>FID # 241 692 110</u>	County Code <u>41</u>	Wis. Unique Well Number _____
DNR Well ID Number _____		

1. Can this well be purged dry? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Depth to Water (from top of well casing) a. <u>7.25</u> ft.
2. Well development method surged with bailer and bailed surged with bailer and pumped surged with block and bailed surged with block and pumped surged with block, bailed and pumped compressed air bailed only pumped only pumped slowly Other _____	Before Development After Development b. <u>05/01/2016</u> <input type="checkbox"/> a.m. <u>05/01/2016</u> <input type="checkbox"/> p.m. c. <u>2:15</u> <input checked="" type="checkbox"/> p.m. <u>3:45</u> <input checked="" type="checkbox"/> p.m.
3. Time spent developing well <u>90</u> min.	12. Sediment in well bottom <u>0.0</u> inches <u>0.0</u> inches
4. Depth of well (from top of well casing) <u>24.35</u> ft.	13. Water clarity Clear <input type="checkbox"/> 10 <input checked="" type="checkbox"/> 15 Turbid <input checked="" type="checkbox"/> 15 <input checked="" type="checkbox"/> 25 (Describe) _____
5. Inside diameter of well <u>2.00</u> in.	14. Total suspended solids <u>N/A</u> mg/l mg/l
6. Volume of water in filter pack and well casing <u>23.2</u> gal.	15. COD <u>N/A</u> mg/l mg/l
7. Volume of water removed from well <u>21.5</u> gal.	16. Well developed by: Name (first, last) and Firm First Name: <u>Raghu</u> Last Name: <u>Singh</u> Firm: <u>Om Enterprise, Inc</u>
8. Volume of water added (if any) <u>N/D</u> gal.	
9. Source of water added <u>N/A</u>	
10. Analysis performed on water added? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, attach results) <u>N/A</u>	
17. Additional comments on development:	

Name and Address of Facility Contact/Owner/Responsible Party First Name: <u>Frank</u> Last Name: <u>Jaber</u>	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm: <u>Villard Food Pan, Inc</u>	Signature: <u>Raghu B. Singh</u>
Street: <u>3217 W Villard Ave</u>	Print Name: <u>RAGHU B. SINGH</u>
City/State/Zip: <u>Milwaukee, WI 53209</u>	Firm: <u>Om Enterprise, Inc.</u>

NOTE: See instructions for more information including a list of county codes and well type codes.

**Appendix B**  
**Laboratory Test Results of B-5, B-6, B-7, B-8, and B-9**

CHAIN OF JSTODY RECORD

# Synergy

*Environmental Lab, Inc.*

Chain # No. 270

Page 1 of 1

Lab I.D. #	
Account No.:	Quote No.:
Project #: 3023	
Sampler: (signature) Raghu B. Singh	

Project (Name / Location): 3217 W Villard Ave., Milwaukee, WI 53209

Reports To: Raghu B. Singh

Invoice To: Frank Jaber

Company Om Enterprise, Inc.

Company Villard Foodtown, LLC

Address 124 W Scott Street

Address 3217 W Villard Avenue

City State Zip Fond du Lac, WI 54937

City State Zip Milwaukee, WI 53209

Phone (262) 853-0712

Phone

FAX

FAX

Lab I.D.	Sample I.D.	Collection Date Time		Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)	Preservation	Analysis Requested						Other Analysis					
		DRO (MSD DRO Sep 95)	GRO (Mod GRO Sep 95)							LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 5422)	VOC (EPA 8260)	B-RCRA METALS
5030827 H	B-5, S-1	4/17/16 9:00		X			2	Sed	meas												
B	B-5, S-2	" 9:30		X			2	Sed	meas												
C	B-6, S-1	" 10:45		X			2	Sed	meas												
D	B-6, S-2	" 11:15		X			2	Sed	meas												
E	B-7, S-1	" 1:00		X			2	Sed	meas												
F	B-7, S-2	" 1:45		L			2	Sed	meas												

Comments/Special Instructions ("Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: ShirtTemp. of Temp. Blank: °C On Ice Cooler seal intact upon receipt: Yes  No 

Relinquished By: (sign)

Raghu B. Singh

Time

Date

Received By: (sign)

Time

Date

Received in Laboratory By:

John R.

Time: 8:00

Date: 4/11/16

# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

RAGHU B SINGH, PH D  
OM ENTERPRISES, INC.  
124 W. SCOTT STREET  
FOND DU LAC, WI 54935

Report Date 19-May-16

Project Name 3217 VILLARD AVE.,  
Project # 3023

Invoice # E30827

Lab Code 5030827A  
Sample ID B-5, S-1  
Sample Matrix Soil  
Sample Date 4/7/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent										
	83.2	%			1	5021		4/12/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		4/13/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		4/13/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		4/13/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		4/13/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		4/13/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		4/13/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		4/13/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		4/13/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		4/13/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		4/13/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		4/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		4/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		4/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		4/13/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		4/13/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/13/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		4/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		4/13/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		4/13/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		4/13/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		4/13/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		4/13/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827A  
**Sample ID** B-5, S-1  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B			CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B			CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B			CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B			CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B			CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B			CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B			CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B			CJR	1
Tetrachloroethene	0.32	mg/kg	0.054	0.17	1	8260B			CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B			CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B			CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B			CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B			CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B			CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B			CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B			CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B			CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B			CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B			CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B			CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B			CJR	1
SUR - Toluene-d8	105	Rec %			1	8260B			CJR	1
SUR - Dibromofluoromethane	116	Rec %			1	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	106	Rec %			1	8260B			CJR	1
SUR - 4-Bromofluorobenzene	104	Rec %			1	8260B			CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827B  
**Sample ID** B-5, S-2  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>General</b>										
<b>General</b>										
Solids Percent	76.8	%			1	5021		4/12/2016	NJC	1
<b>Organic</b>										
<b>VOC's</b>										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		4/13/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		4/13/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		4/13/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		4/13/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		4/13/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		4/13/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		4/13/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		4/13/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		4/13/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		4/13/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		4/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		4/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		4/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		4/13/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		4/13/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/13/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		4/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		4/13/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		4/13/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		4/13/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		4/13/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		4/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		4/13/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		4/13/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/13/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		4/13/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		4/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		4/13/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		4/13/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		4/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
Tetrachloroethene	0.40	mg/kg	0.054	0.17	1	8260B		4/13/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		4/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		4/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/13/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		4/13/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		4/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		4/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		4/13/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		4/13/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		4/13/2016	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		4/13/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827B  
**Sample ID** B-5, S-2  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - 1,2-Dichloroethane-d4	113	Reo %			1	8260B		4/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	106	Reo %			1	8260B		4/13/2016	CJR	1
SUR - Dibromofluoromethane	114	Reo %			1	8260B		4/13/2016	CJR	1
SUR - Toluene-d8	108	Reo %			1	8260B		4/13/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827C  
**Sample ID** B-6, S-1  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>General</b>										
General										
Solids Percent	79.7	%			1	5021		4/12/2016	NJC	1
<b>Organic</b>										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		4/13/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		4/13/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		4/13/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		4/13/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		4/13/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		4/13/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		4/13/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		4/13/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		4/13/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		4/13/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		4/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		4/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		4/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		4/13/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		4/13/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/13/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		4/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		4/13/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		4/13/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		4/13/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		4/13/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		4/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		4/13/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		4/13/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/13/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		4/13/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		4/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		4/13/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		4/13/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		4/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
Tetrachloroethene	0.153 "J"	mg/kg	0.054	0.17	1	8260B		4/13/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		4/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		4/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/13/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		4/13/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		4/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		4/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		4/13/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		4/13/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		4/13/2016	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		4/13/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827C  
**Sample ID** B-6, S-1  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - Dibromofluoromethane	108	Rec %			1	8260B		4/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	114	Rec %			1	8260B		4/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	116	Rec %			1	8260B		4/13/2016	CJR	1
SUR - Toluene-d8	106	Rec %			1	8260B		4/13/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827D  
**Sample ID** B-6, S-2  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
General										
General										
Solids Percent	83.3	%			1	5021		4/12/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		4/13/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		4/13/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		4/13/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		4/13/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		4/13/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		4/13/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		4/13/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		4/13/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		4/13/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/13/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		4/13/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		4/13/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		4/13/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		4/13/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/13/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		4/13/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		4/13/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/13/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		4/13/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		4/13/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		4/13/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		4/13/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		4/13/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		4/13/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		4/13/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		4/13/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/13/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		4/13/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		4/13/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		4/13/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		4/13/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/13/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		4/13/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		4/13/2016	CJR	1
Tetrachloroethene	0.18	mg/kg	0.054	0.17	1	8260B		4/13/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		4/13/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/13/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/13/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		4/13/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/13/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		4/13/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		4/13/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		4/13/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		4/13/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		4/13/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		4/13/2016	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		4/13/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827D

**Sample ID** B-6, S-2

**Sample Matrix** Soil

**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - Toluene-d8	104	Rec %			1	8260B		4/13/2016	CJR	1
SUR - Dibromofluoromethane	106	Rec %			1	8260B		4/13/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	112	Rec %			1	8260B		4/13/2016	CJR	1
SUR - 4-Bromofluorobenzene	101	Rec %			1	8260B		4/13/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827E  
**Sample ID** B-7, S-1  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
General										
General										
Solids Percent	83.0	%			1	5021		4/12/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		4/18/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		4/18/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		4/18/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		4/18/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		4/18/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		4/18/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		4/18/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		4/18/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		4/18/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		4/18/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		4/18/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		4/18/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		4/18/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		4/18/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		4/18/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		4/18/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		4/18/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		4/18/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		4/18/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		4/18/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		4/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		4/18/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		4/18/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		4/18/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		4/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		4/18/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		4/18/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
Tetrachloroethene	0.278	mg/kg	0.054	0.17	1	8260B		4/18/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		4/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/18/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		4/18/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		4/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		4/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		4/18/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		4/18/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		4/18/2016	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827E

**Sample ID** B-7, S-1

**Sample Matrix** Soil

**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - 1,2-Dichloroethane-d4	110	Rec %			1	8260B		4/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	103	Rec %			1	8260B		4/18/2016	CJR	1
SUR - Dibromofluoromethane	113	Rec %			1	8260B		4/18/2016	CJR	1
SUR - Toluene-d8	106	Rec %			1	8260B		4/18/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827F  
**Sample ID** B-7, S-2  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>General</b>										
General										
Solids Percent	73.0	%			1	5021		4/12/2016	NJC	1
<b>Organic</b>										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		4/18/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		4/18/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		4/18/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		4/18/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		4/18/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		4/18/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		4/18/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		4/18/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		4/18/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		4/18/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		4/18/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		4/18/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		4/18/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		4/18/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		4/18/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		4/18/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		4/18/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		4/18/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		4/18/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		4/18/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		4/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		4/18/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		4/18/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		4/18/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		4/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		4/18/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		4/18/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
Tetrachloroethene	0.34	mg/kg	0.054	0.17	1	8260B		4/18/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		4/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/18/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		4/18/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		4/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		4/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		4/18/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		4/18/2016	CJR	1
m,p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		4/18/2016	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30827

**Lab Code** 5030827F  
**Sample ID** B-7, S-2  
**Sample Matrix** Soil  
**Sample Date** 4/7/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - Toluene-d8	104	Rec %			1	8260B		4/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	125	Rec %			1	8260B		4/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	108	Rec %			1	8260B		4/18/2016	CJR	1
SUR - Dibromofluoromethane	111	Rec %			1	8260B		4/18/2016	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

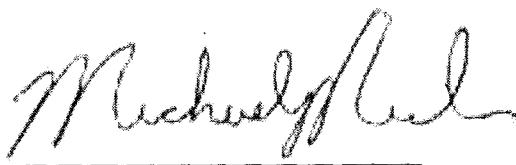
LOQ Limit of Quantitation

*Code*      *Comment*

1      Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



## CHAIN OF JSTODY RECORD

# Synergy

## Environmental Lab, Inc.

Chain # No. 270

Page 1 of 1

Lab I.D. #	
Account No. :	Quote No.:
Project #: 3023	
Sampler: (signature) Raghu B. Singh	

Project (Name / Location): 3217 W Villard Ave, Milwaukee, WI 53209

Reports To: Raghu B. Singh  
 Company Om Enterprise Inc.  
 Address 124 W Scott Street  
 City State Zip Fond du Lac, WI 54937  
 Phone  
 FAX

Invoice To: Frank Jolar  
 Company Villard Foundation LLC.  
 Address 3217 W Villard Ave  
 City State Zip Milwaukee, WI 53209  
 Phone  
 FAX

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Analysis Requested		Other Analysis			PID/FID							
									DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 512.2)	VOC (EPA 8280)
503088A	B-8,5-1	4/8/16	10:11		X		2	Soil	maer												
B	B-8,5-2	"	10:45		X		2	Soil	maer												
C	B-9,5-1	"	1:30		X		2	Soil	maer												
D	B-9,5-2	"	1:45		X		2	Soil	maer												

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Clip

Temp. of Temp. Blank \_\_\_\_ °C On Ice: X

Cooler seal intact upon receipt: Yes No X

Relinquished By: (sign)

Raghu B. Singh

Time

Date

Received By: (sign)

Time

Date

Received in Laboratory By: Raghu B. Singh

Time: 8:00

Date: 4/11/16

# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

RAGHU B SINGH, PH D  
OM ENTERPRISES, INC.  
124 W. SCOTT STREET  
FOND DU LAC, WI 54935

**Report Date 25-Apr-16**

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30828

**Lab Code** 5030828A  
**Sample ID** B-8, S-1  
**Sample Matrix** Soil  
**Sample Date** 4/8/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>General</b>										
General										
Solids Percent										
Organic /	89.9	%			1	5021		4/12/2016	NJC	1
VOC's										
Benzene	< 0.08	mg/kg	0.08	0.245	5	8260B		4/21/2016	CJR	1
Bromobenzene	< 0.195	mg/kg	0.195	0.6	5	8260B		4/21/2016	CJR	1
Bromodichloromethane	< 0.075	mg/kg	0.075	0.24	5	8260B		4/21/2016	CJR	1
Bromoform	< 0.115	mg/kg	0.115	0.365	5	8260B		4/21/2016	CJR	1
tert-Butylbenzene	< 0.175	mg/kg	0.175	0.55	5	8260B		4/21/2016	CJR	1
sec-Butylbenzene	< 0.18	mg/kg	0.18	0.55	5	8260B		4/21/2016	CJR	1
n-Butylbenzene	< 0.43	mg/kg	0.43	1.35	5	8260B		4/21/2016	CJR	1
Carbon Tetrachloride	< 0.105	mg/kg	0.105	0.335	5	8260B		4/21/2016	CJR	1
Chlorobenzene	< 0.195	mg/kg	0.195	0.6	5	8260B		4/21/2016	CJR	1
Chloroethane	< 0.225	mg/kg	0.225	0.7	5	8260B		4/21/2016	CJR	1
Chloroform	< 0.13	mg/kg	0.13	0.405	5	8260B		4/21/2016	CJR	1
Chloromethane	< 1.25	mg/kg	1.25	3.9	5	8260B		4/21/2016	CJR	1
2-Chlorotoluene	< 0.145	mg/kg	0.145	0.465	5	8260B		4/21/2016	CJR	1
4-Chlorotoluene	< 0.16	mg/kg	0.16	0.5	5	8260B		4/21/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.39	mg/kg	0.39	1.25	5	8260B		4/21/2016	CJR	1
Dibromochloromethane	< 0.155	mg/kg	0.155	0.49	5	8260B		4/21/2016	CJR	1
1,4-Dichlorobenzene	< 0.15	mg/kg	0.15	0.48	5	8260B		4/21/2016	CJR	1
1,3-Dichlorobenzene	< 0.15	mg/kg	0.15	0.485	5	8260B		4/21/2016	CJR	1
1,2-Dichlorobenzene	< 0.195	mg/kg	0.195	0.6	5	8260B		4/21/2016	CJR	1
Dichlorodifluoromethane	< 0.215	mg/kg	0.215	0.7	5	8260B		4/21/2016	CJR	1
1,2-Dichloroethane	< 0.15	mg/kg	0.15	0.48	5	8260B		4/21/2016	CJR	1
1,1-Dichloroethane	< 0.125	mg/kg	0.125	0.395	5	8260B		4/21/2016	CJR	1
1,1-Dichloroethene	< 0.145	mg/kg	0.145	0.465	5	8260B		4/21/2016	CJR	1
cis-1,2-Dichloroethene	0.33 "J"	mg/kg	0.105	0.34	5	8260B		4/21/2016	CJR	1
trans-1,2-Dichloroethene	< 0.12	mg/kg	0.12	0.38	5	8260B		4/21/2016	CJR	1
1,2-Dichloropropane	< 0.125	mg/kg	0.125	0.39	5	8260B		4/21/2016	CJR	1
2,2-Dichloropropane	< 0.5	mg/kg	0.5	1.65	5	8260B		4/21/2016	CJR	1
1,3-Dichloropropane	< 0.155	mg/kg	0.155	0.485	5	8260B		4/21/2016	CJR	1
Di-isopropyl ether	< 0.06	mg/kg	0.06	0.2	5	8260B		4/21/2016	CJR	1

Project Name 3217 VILLARD AVE.,  
Project # 3023

Invoice # E30828

Lab Code 5030828A  
Sample ID B-8, S-1  
Sample Matrix Soil  
Sample Date 4/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
EDB (1,2-Dibromoethane)	< 0.175	mg/kg	0.175	0.55	5	8260B	4/21/2016	CJR	1	
Ethylbenzene	< 0.135	mg/kg	0.135	0.43	5	8260B	4/21/2016	CJR	1	
Hexachlorobutadiene	< 0.55	mg/kg	0.55	1.8	5	8260B	4/21/2016	CJR	1	
Isopropylbenzene	< 0.185	mg/kg	0.185	0.6	5	8260B	4/21/2016	CJR	1	
p-Isopropyltoluene	< 0.28	mg/kg	0.28	0.9	5	8260B	4/21/2016	CJR	1	
Methylene chloride	< 1.1	mg/kg	1.1	3.5	5	8260B	4/21/2016	CJR	1	
Methyl tert-butyl ether (MTBE)	< 0.125	mg/kg	0.125	0.39	5	8260B	4/21/2016	CJR	1	
Naphthalene	< 0.435	mg/kg	0.435	1.4	5	8260B	4/21/2016	CJR	1	
n-Propylbenzene	< 0.175	mg/kg	0.175	0.55	5	8260B	4/21/2016	CJR	1	
1,1,2,2-Tetrachloroethane	< 0.065	mg/kg	0.065	0.2	5	8260B	4/21/2016	CJR	1	
1,1,1,2-Tetrachloroethane	< 0.145	mg/kg	0.145	0.465	5	8260B	4/21/2016	CJR	1	
Tetrachloroethene	11.1	mg/kg	0.27	0.85	5	8260B	4/21/2016	CJR	1	
Toluene	< 0.155	mg/kg	0.155	0.495	5	8260B	4/21/2016	CJR	1	
1,2,4-Trichlorobenzene	< 0.425	mg/kg	0.425	1.35	5	8260B	4/21/2016	CJR	1	
1,2,3-Trichlorobenzene	< 0.6	mg/kg	0.6	1.9	5	8260B	4/21/2016	CJR	1	
1,1,1-Trichloroethane	< 0.2	mg/kg	0.2	0.65	5	8260B	4/21/2016	CJR	1	
1,1,2-Trichloroethane	< 0.165	mg/kg	0.165	0.55	5	8260B	4/21/2016	CJR	1	
Trichloroethene (TCE)	0.95	mg/kg	0.21	0.65	5	8260B	4/21/2016	CJR	1	
Trichlorofluoromethane	< 0.3	mg/kg	0.3	0.95	5	8260B	4/21/2016	CJR	1	
1,2,4-Trimethylbenzene	< 0.39	mg/kg	0.39	1.25	5	8260B	4/21/2016	CJR	1	
1,3,5-Trimethylbenzene	< 0.445	mg/kg	0.445	1.4	5	8260B	4/21/2016	CJR	1	
Vinyl Chloride	< 0.05	mg/kg	0.05	0.155	5	8260B	4/21/2016	CJR	1	
m&p-Xylene	< 0.35	mg/kg	0.35	1.1	5	8260B	4/21/2016	CJR	1	
o-Xylene	< 0.145	mg/kg	0.145	0.46	5	8260B	4/21/2016	CJR	1	
SUR - Toluene-d8	101	Rec %			5	8260B	4/21/2016	CJR	1	
SUR - 1,2-Dichloroethane-d4	94	Rec %			5	8260B	4/21/2016	CJR	1	
SUR - 4-Bromofluorobenzene	107	Rec %			5	8260B	4/21/2016	CJR	1	
SUR - Dibromofluoromethane	119	Rec %			5	8260B	4/21/2016	CJR	1	

Project Name 3217 VILLARD AVE.,  
 Project # 3023

Invoice # E30828

Lab Code 5030828B  
 Sample ID B-8, S-2  
 Sample Matrix Soil  
 Sample Date 4/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	78.7	%			1	5021			NJC	1
Organic										
VOC's										
Benzene	< 0.32	mg/kg	0.32	0.98	20	8260B	4/21/2016	CJR	1	
Bromobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B	4/21/2016	CJR	1	
Bromodichloromethane	< 0.3	mg/kg	0.3	0.96	20	8260B	4/21/2016	CJR	1	
Bromoform	< 0.46	mg/kg	0.46	1.46	20	8260B	4/21/2016	CJR	1	
tert-Butylbenzene	< 0.7	mg/kg	0.7	2.2	20	8260B	4/21/2016	CJR	1	
sec-Butylbenzene	< 0.72	mg/kg	0.72	2.2	20	8260B	4/21/2016	CJR	1	
n-Butylbenzene	< 1.72	mg/kg	1.72	5.4	20	8260B	4/21/2016	CJR	1	
Carbon Tetrachloride	< 0.42	mg/kg	0.42	1.34	20	8260B	4/21/2016	CJR	1	
Chlorobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B	4/21/2016	CJR	1	
Chloroethane	< 0.9	mg/kg	0.9	2.8	20	8260B	4/21/2016	CJR	1	
Chloroform	< 0.52	mg/kg	0.52	1.62	20	8260B	4/21/2016	CJR	1	
Chloromethane	< 5	mg/kg	5	15.6	20	8260B	4/21/2016	CJR	1	
2-Chlorotoluene	< 0.58	mg/kg	0.58	1.86	20	8260B	4/21/2016	CJR	1	
4-Chlorotoluene	< 0.64	mg/kg	0.64	2	20	8260B	4/21/2016	CJR	1	
1,2-Dibromo-3-chloropropane	< 1.56	mg/kg	1.56	5	20	8260B	4/21/2016	CJR	1	
Dibromochloromethane	< 0.62	mg/kg	0.62	1.96	20	8260B	4/21/2016	CJR	1	
1,4-Dichlorobenzene	< 0.6	mg/kg	0.6	1.92	20	8260B	4/21/2016	CJR	1	
1,3-Dichlorobenzene	< 0.6	mg/kg	0.6	1.94	20	8260B	4/21/2016	CJR	1	
1,2-Dichlorobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B	4/21/2016	CJR	1	
Dichlorodifluoromethane	< 0.86	mg/kg	0.86	2.8	20	8260B	4/21/2016	CJR	1	
1,2-Dichloroethane	< 0.6	mg/kg	0.6	1.92	20	8260B	4/21/2016	CJR	1	
1,1-Dichloroethane	< 0.5	mg/kg	0.5	1.58	20	8260B	4/21/2016	CJR	1	
1,1-Dichloroethene	< 0.58	mg/kg	0.58	1.86	20	8260B	4/21/2016	CJR	1	
cis-1,2-Dichloroethene	14.1	mg/kg	0.42	1.36	20	8260B	4/21/2016	CJR	1	
trans-1,2-Dichloroethene	< 0.48	mg/kg	0.48	1.52	20	8260B	4/21/2016	CJR	1	
1,2-Dichloropropane	< 0.5	mg/kg	0.5	1.56	20	8260B	4/21/2016	CJR	1	
2,2-Dichloropropane	< 2	mg/kg	2	6.6	20	8260B	4/21/2016	CJR	1	
1,3-Dichloropropane	< 0.62	mg/kg	0.62	1.94	20	8260B	4/21/2016	CJR	1	
Di-isopropyl ether	< 0.24	mg/kg	0.24	0.8	20	8260B	4/21/2016	CJR	1	
EDB (1,2-Dibromoethane)	< 0.7	mg/kg	0.7	2.2	20	8260B	4/21/2016	CJR	1	
Ethylbenzene	< 0.54	mg/kg	0.54	1.72	20	8260B	4/21/2016	CJR	1	
Hexachlorobutadiene	< 2.2	mg/kg	2.2	7.2	20	8260B	4/21/2016	CJR	1	
Isopropylbenzene	< 0.74	mg/kg	0.74	2.4	20	8260B	4/21/2016	CJR	1	
p-Isopropyltoluene	< 1.12	mg/kg	1.12	3.6	20	8260B	4/21/2016	CJR	1	
Methylene chloride	< 4.4	mg/kg	4.4	14	20	8260B	4/21/2016	CJR	1	
Methyl tert-butyl ether (MTBE)	< 0.5	mg/kg	0.5	1.56	20	8260B	4/21/2016	CJR	1	
Naphthalene	< 1.74	mg/kg	1.74	5.6	20	8260B	4/21/2016	CJR	1	
n-Propylbenzene	< 0.7	mg/kg	0.7	2.2	20	8260B	4/21/2016	CJR	1	
1,1,2,2-Tetrachloroethane	< 0.26	mg/kg	0.26	0.8	20	8260B	4/21/2016	CJR	1	
1,1,1,2-Tetrachloroethane	< 0.58	mg/kg	0.58	1.86	20	8260B	4/21/2016	CJR	1	
Tetrachloroethene	88	mg/kg	1.08	3.4	20	8260B	4/21/2016	CJR	1	
Toluene	< 0.62	mg/kg	0.62	1.98	20	8260B	4/21/2016	CJR	1	
1,2,4-Trichlorobenzene	< 1.7	mg/kg	1.7	5.4	20	8260B	4/21/2016	CJR	1	
1,2,3-Trichlorobenzene	< 2.4	mg/kg	2.4	7.6	20	8260B	4/21/2016	CJR	1	
1,1,1-Trichloroethane	< 0.8	mg/kg	0.8	2.6	20	8260B	4/21/2016	CJR	1	
1,1,2-Trichloroethane	< 0.66	mg/kg	0.66	2.2	20	8260B	4/21/2016	CJR	1	
Trichloroethene (TCE)	12	mg/kg	0.84	2.6	20	8260B	4/21/2016	CJR	1	
Trichlorofluoromethane	< 1.2	mg/kg	1.2	3.8	20	8260B	4/21/2016	CJR	1	
1,2,4-Trimethylbenzene	< 1.56	mg/kg	1.56	5	20	8260B	4/21/2016	CJR	1	
1,3,5-Trimethylbenzene	< 1.78	mg/kg	1.78	5.6	20	8260B	4/21/2016	CJR	1	
Vinyl Chloride	< 0.2	mg/kg	0.2	0.62	20	8260B	4/21/2016	CJR	1	
m&p-Xylene	< 1.4	mg/kg	1.4	4.4	20	8260B	4/21/2016	CJR	1	
o-Xylene	< 0.58	mg/kg	0.58	1.84	20	8260B	4/21/2016	CJR	1	

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30828

**Lab Code** 5030828B

**Sample ID** B-8, S-2

**Sample Matrix** Soil

**Sample Date** 4/8/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - Dibromofluoromethane	99	Rec %			20	8260B		4/21/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	105	Rec %			20	8260B		4/21/2016	CJR	1
SUR - 4-Bromofluorobenzene	105	Rec %			20	8260B		4/21/2016	CJR	1
SUR - Toluene-d8	107	Rec %			20	8260B		4/21/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30828

**Lab Code** 5030828C  
**Sample ID** B-9, S-1  
**Sample Matrix** Soil  
**Sample Date** 4/8/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>General</b>										
<b>General</b>										
Solids Percent	95.7	%			1	5021		4/12/2016	NJC	1
<b>Organic</b>										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		4/18/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		4/18/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		4/18/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		4/18/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		4/18/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		4/18/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		4/18/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		4/18/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		4/18/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		4/18/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		4/18/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		4/18/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		4/18/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		4/18/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		4/18/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
cis-1,2-Dichloroethene	0.0265 "J"	mg/kg	0.021	0.068	1	8260B		4/18/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		4/18/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		4/18/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		4/18/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		4/18/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		4/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		4/18/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		4/18/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		4/18/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		4/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		4/18/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		4/18/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2016	CJR	1
Tetrachloroethene	9.3	mg/kg	0.054	0.17	1	8260B		4/18/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		4/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		4/18/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2016	CJR	1
Trichloroethene (TCE)	0.206	mg/kg	0.042	0.13	1	8260B		4/18/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		4/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		4/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		4/18/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		4/18/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		4/18/2016	CJR	1
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30828

**Lab Code** 5030828C  
**Sample ID** B-9, S-1  
**Sample Matrix** Soil  
**Sample Date** 4/8/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - Toluene-d8	105	Rec %			1	8260B		4/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	107	Rec %			1	8260B		4/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	106	Rec %			1	8260B		4/18/2016	CJR	1
SUR - Dibromofluoromethane	112	Rec %			1	8260B		4/18/2016	CJR	1

**Project Name** 3217 VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30828

**Lab Code** 5030828D  
**Sample ID** B-9, S-2  
**Sample Matrix** Soil  
**Sample Date** 4/8/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>General</b>										
<b>General</b>										
Solids Percent	89.6	%			1	5021		4/12/2016	NJC	1
<b>Organic</b>										
<b>VOC's</b>										
Benzene	< 0.32	mg/kg	0.32	0.98	20	8260B		4/21/2016	CJR	1
Bromobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B		4/21/2016	CJR	1
Bromodichloromethane	< 0.3	mg/kg	0.3	0.96	20	8260B		4/21/2016	CJR	1
Bromoform	< 0.46	mg/kg	0.46	1.46	20	8260B		4/21/2016	CJR	1
tert-Butylbenzene	< 0.7	mg/kg	0.7	2.2	20	8260B		4/21/2016	CJR	1
sec-Butylbenzene	< 0.72	mg/kg	0.72	2.2	20	8260B		4/21/2016	CJR	1
n-Butylbenzene	< 1.72	mg/kg	1.72	5.4	20	8260B		4/21/2016	CJR	1
Carbon Tetrachloride	< 0.42	mg/kg	0.42	1.34	20	8260B		4/21/2016	CJR	1
Chlorobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B		4/21/2016	CJR	1
Chloroethane	< 0.9	mg/kg	0.9	2.8	20	8260B		4/21/2016	CJR	1
Chloroform	< 0.52	mg/kg	0.52	1.62	20	8260B		4/21/2016	CJR	1
Chloromethane	< 5	mg/kg	5	15.6	20	8260B		4/21/2016	CJR	1
2-Chlorotoluene	< 0.58	mg/kg	0.58	1.86	20	8260B		4/21/2016	CJR	1
4-Chlorotoluene	< 0.64	mg/kg	0.64	2	20	8260B		4/21/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.56	mg/kg	1.56	5	20	8260B		4/21/2016	CJR	1
Dibromochloromethane	< 0.62	mg/kg	0.62	1.96	20	8260B		4/21/2016	CJR	1
1,4-Dichlorobenzene	< 0.6	mg/kg	0.6	1.92	20	8260B		4/21/2016	CJR	1
1,3-Dichlorobenzene	< 0.6	mg/kg	0.6	1.94	20	8260B		4/21/2016	CJR	1
1,2-Dichlorobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B		4/21/2016	CJR	1
Dichlorodifluoromethane	< 0.86	mg/kg	0.86	2.8	20	8260B		4/21/2016	CJR	1
1,2-Dichloroethane	< 0.6	mg/kg	0.6	1.92	20	8260B		4/21/2016	CJR	1
1,1-Dichloroethane	< 0.5	mg/kg	0.5	1.58	20	8260B		4/21/2016	CJR	1
1,1-Dichloroethene	< 0.58	mg/kg	0.58	1.86	20	8260B		4/21/2016	CJR	1
cis-1,2-Dichloroethene	2.47	mg/kg	0.42	1.36	20	8260B		4/21/2016	CJR	1
trans-1,2-Dichloroethene	< 0.48	mg/kg	0.48	1.52	20	8260B		4/21/2016	CJR	1
1,2-Dichloropropane	< 0.5	mg/kg	0.5	1.56	20	8260B		4/21/2016	CJR	1
2,2-Dichloropropane	< 2	mg/kg	2	6.6	20	8260B		4/21/2016	CJR	1
1,3-Dichloropropane	< 0.62	mg/kg	0.62	1.94	20	8260B		4/21/2016	CJR	1
Di-isopropyl ether	< 0.24	mg/kg	0.24	0.8	20	8260B		4/21/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.7	mg/kg	0.7	2.2	20	8260B		4/21/2016	CJR	1
Ethylbenzene	< 0.54	mg/kg	0.54	1.72	20	8260B		4/21/2016	CJR	1
Hexachlorobutadiene	< 2.2	mg/kg	2.2	7.2	20	8260B		4/21/2016	CJR	1
Isopropylbenzene	< 0.74	mg/kg	0.74	2.4	20	8260B		4/21/2016	CJR	1
p-Isopropyltoluene	< 1.12	mg/kg	1.12	3.6	20	8260B		4/21/2016	CJR	1
Methylene chloride	< 4.4	mg/kg	4.4	14	20	8260B		4/21/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.5	mg/kg	0.5	1.56	20	8260B		4/21/2016	CJR	1
Naphthalene	< 1.74	mg/kg	1.74	5.6	20	8260B		4/21/2016	CJR	1
n-Propylbenzene	< 0.7	mg/kg	0.7	2.2	20	8260B		4/21/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.26	mg/kg	0.26	0.8	20	8260B		4/21/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.58	mg/kg	0.58	1.86	20	8260B		4/21/2016	CJR	1
Tetrachloroethene	111	mg/kg	1.08	3.4	20	8260B		4/21/2016	CJR	1
Toluene	< 0.62	mg/kg	0.62	1.98	20	8260B		4/21/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	mg/kg	1.7	5.4	20	8260B		4/21/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.4	mg/kg	2.4	7.6	20	8260B		4/21/2016	CJR	1
1,1,1-Trichloroethane	< 0.8	mg/kg	0.8	2.6	20	8260B		4/21/2016	CJR	1
1,1,2-Trichloroethane	< 0.66	mg/kg	0.66	2.2	20	8260B		4/21/2016	CJR	1
Trichloroethene (TCE)	5.2	mg/kg	0.84	2.6	20	8260B		4/21/2016	CJR	1
Trichlorofluoromethane	< 1.2	mg/kg	1.2	3.8	20	8260B		4/21/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.56	mg/kg	1.56	5	20	8260B		4/21/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.78	mg/kg	1.78	5.6	20	8260B		4/21/2016	CJR	1
Vinyl Chloride	< 0.2	mg/kg	0.2	0.62	20	8260B		4/21/2016	CJR	1
m&p-Xylene	< 1.4	mg/kg	1.4	4.4	20	8260B		4/21/2016	CJR	1
o-Xylene	< 0.58	mg/kg	0.58	1.84	20	8260B		4/21/2016	CJR	1

Project Name 3217 VILLARD AVE.,  
Project # 3023

Invoice # E30828

Lab Code 5030828D  
Sample ID B-9, S-2  
Sample Matrix Soil  
Sample Date 4/8/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
SUR - Toluene-d8	104	Rec %			20	8260B			4/21/2016	CJR 1
SUR - 1,2-Dichloroethane-d4	96	Rec %			20	8260B			4/21/2016	CJR 1
SUR - 4-Bromofluorobenzene	109	Rec %			20	8260B			4/21/2016	CJR 1
SUR - Dibromofluoromethane	110	Rec %			20	8260B			4/21/2016	CJR 1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

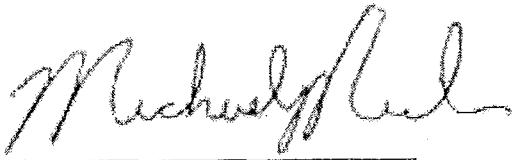
LOQ Limit of Quantitation

*Code*      *Comment*

1      Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



## **Appendix C**

### **RCLs Calculations**

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type ' ', 'NA' nor 'space bar.' Leave purple cells as is.
2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not To Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)
Benzene	71-43-2	111.	1.49	1.49	ca		0.005
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.005
Toluene	108-88-3	5,300.	-	818.	Csat		0.005
Xylenes	1330-20-7	890.	-	258.	Csat		0.015
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca		
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca		
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca		
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		3.
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		37.
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.031
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc		
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc		
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc		
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat		2.8
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca		
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc		
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat		
Naphthalene	91-20-3	188.	5.15	5.15	ca		
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca		
Acenaphthene	83-32-9	3,440.	-	3,440.	nc		
Acenaphthylene	208-96-8	-					
Anthracene	120-12-7	17,200.	-	17,200.	nc		
Benzo[a]anthracene	56-55-3	-	0.148	0.148	ca		
Benzo[ <i>j</i> ]fluoranthene	205-82-3	-	0.377	0.377	ca		
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca		
Benzog,h,lperylene	191-24-2	-	-	-			
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca		
Chrysene	218-01-9	-	14.8	14.8	ca		
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca		
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca		
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca		
Fluoranthene	206-44-0	2,290.	-	2,290.	nc		
Fluorene	86-73-7	2,290.	-	2,290.	nc		
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca		
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca		
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc		
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca		
Perylene	198-55-0	-					
Phenanthrene	85-01-8	-					
Pyrene	129-00-0	1,720.	-	1,720.	nc		
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.	
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca	8.	
Barium	7440-39-3	15,300.	-	15,300.	nc	364.	
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc		
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc	1.	

Comparison / Hazard Index / Cumulative Cancer Risk			
Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data	Target CR used:
			1.00E-06

B-1, S-2

3. 5-5'

Contaminant	CAS Number	NC RCL (mg/kg)	CC RCL (mg/kg)	Not To Exceed DC RCL (mg/kg)	Basis	Background Threshold value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Calcium	7440-70-2	-	-	-	-	14,536	-			
Chromium(VI)	18540-29-9	234	0.293	0.293	ca					
Chromium(II), Insoluble Salts	16065-83-1	117,000	-	100,000	ceiling					
Chromium, Total	7440-47-3	-	-	-	-	44				
Cobalt	7440-48-4	23.4	422	23.4	nc	22				
Copper	7440-50-8	3,130	-	3,130	nc	35				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800	-	54,800	nc	34,314				
Lead and Compounds	7439-92-1	-	-	400	nc	52				
Magnesium	7439-95-4	-	-	-	-	8,290				
Manganese (Non-diet)	7439-96-5	1,830	-	1,830	nc	2,937				
Molybdenum	7439-98-7	391	-	391	nc					
Nickel Soluble Salts	7440-02-0	1,550	14,600	1,550	nc	31				
Selenium	7782-49-2	391	-	391	nc					
Strontium, Stable	7440-24-6	46,900	-	46,900	nc	55				
Vanadium and Compounds	7440-62-2	393	-	393	nc	85				
Zinc and Compounds	7440-66-6	23,500	-	23,500	nc	150				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,4,4',5,5'- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	0.159	0.159	ca					
Aroclor 1232	11141-16-5	-	0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244	55.8	55.8	ca					
Acetaldehyde	75-07-0	127	15	15	ca					
Acetochlor	34256-82-1	1,220	-	1,220	nc					
Acetone	67-64-1	63,800	-	63,800	nc					
Acetone Cyanohydrin	75-86-5	77	-	77	nc					
Acetonitrile	75-05-8	1,260	-	1,260	nc					
Acetophenone	98-86-2	7,820	-	2,520	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000	-	30,000	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000	-	100,000	ceiling					
Alachlor	15972-60-8	611	8.67	8.67	ca					
ALAR	1596-84-5	9,170	27	27	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Aliv	74223-64-6	15,300	-	15,300	nc					

B-1

S-2

3-5-5<sup>1</sup>

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not To Exceed D-C RCL (mg/kg)		Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Triphenylphosphine Oxide	791-28-6	1,220.	-	1,220.		nc				
Tripotassium phosphate	7778-53-2	3,800,000.	-	100,000.		ceiling				
Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8	1,220.	-	1,220.		nc				
Tris(1-chloro-2-propyl)phosphate	13674-84-5	611.	-	611.		nc				
Tris(2-chloroethyl)phosphate	115-96-8	428.	24.3	24.3		ca				
Tris(2-ethylhexyl)phosphate	78-42-2	6,110.	152.	152.		ca				
Trisodium phosphate	7601-54-9	3,800,000.	-	100,000.		ceiling				
Uranium (Soluble Salts)	NA	234.	-	234.		nc				
Urethane	51-79-6	-	0.115	0.115		ca				
Vanadium Pentoxide	1314-62-1	663.	458.	458.		ca				
Vernolate	1929-77-7	61.1	-	61.1		nc				
Vinclozolin	50471-44-8	1,530.	-	1,530.		nc				
Vinyl Acetate	108-05-4	1,400.	-	1,400.		nc				
Vinyl Bromide	593-60-2	6.66	0.162	0.162		ca				
Warfarin	81-81-2	18.3	-	18.3		nc				
Xylene, m-	108-38-3	839.	-	388.		Csat				
Xylene, o-	95-47-6	981.	-	434.		Csat				
Xylene, P-	106-42-3	855.	-	390.		Csat				
Zinc Cyanide	557-21-1	3,910.	-	3,910.		nc				
Zinc Phosphide	1314-84-7	23.5	-	23.5		nc				
Zineb	12122-67-7	3,060.	-	3,060.		nc				
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								

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B-1, S-2, 3-5-51	Exceedance Count / Hazard Index / Cumulative Cancer Risk:	2	0.836	4.1E-06
		↑	↑	↑
	To Pass, data must meet all these criteria:	Exceedance Count = 0	HI $\leq 1.0$	Cumulative CR $\leq 1e-05$
Bottom-Line:	NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.			
8. 01/22/2015				

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - →	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance	02-41-119925
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02			
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00			
Aalachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03			
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03			
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02			
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01			
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02			
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01			
Atmos, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03			
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02			
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01			
Benzene	71-43-2	5.	5.	2.58E-03		5.12E-03	0.005		
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01			
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01			
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00			
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00			
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04			
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03			
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03			
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01			
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01			
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02			
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02			
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01			
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03			
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02			
chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00			
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01			
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03			
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02			
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02			
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI	3.60E+05 If no Cr-VI				Re-assess if Cr-VI present
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01			
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00			
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01			
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04			
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00			
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01			
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05			
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02			
1,2-Dibromo-3-chloropropane (DCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04			
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00			
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01			
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00			
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00			
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01			
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00			
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01			
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03			
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03			
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02	4.12E-02	2.8	E		
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02			
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02			
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03			
1,3-Dichloropropene (cis/trans) (Telone)	542-75-6	-	0.4	1.43E-04		2.86E-04			

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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B-1

S-2

3. S-5'

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.005	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03	4.54E-03	37.	E	
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01	1.11E+00	0.005		
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03	3.58E-03	3.	E	
2,3,3-Trichloropropene (DCE)	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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B-1

S-2

3.5 to 5

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-pggs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-pggs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - →	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01		
Tetrahydrofuran (1,2-d and 1,3-d combined)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.031	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00		3.94E+00	0.015	

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B-1

J-2

3-5-5'

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-' 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

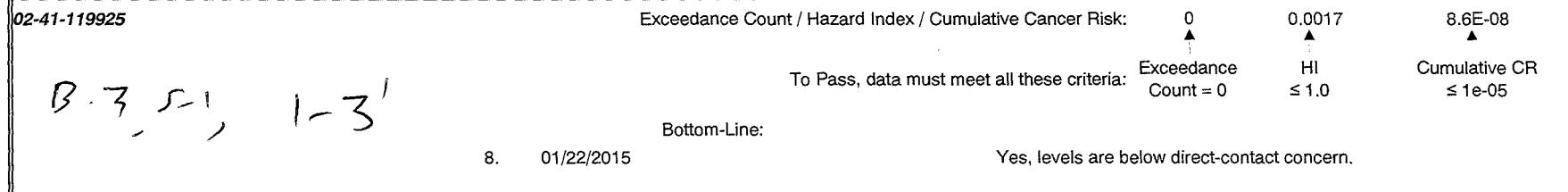
Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Comparison / Hazard Index / Cumulative Cancer Risk		
								Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: 1.00E-06 Cancer Risk (CR) from Data
Benzene	71-43-2	111.	1.49	1.49	ca		0.005			
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.005			
Toluene	108-88-3	5,300.	-	818.	Csat		0.005			
Xylenes	1330-20-7	890.	-	258.	Csat		0.015			
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca					
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca					
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca					
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.008			
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		0.033			
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.005			
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc			0.0013	6.1E-09	
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc			0.0003	1.1E-09	
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc			0.0001	7.5E-08	
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat		0.008			
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca					
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc					
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat					
Naphthalene	91-20-3	188.	5.15	5.15	ca					
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca					
Acenaphthene	83-32-9	3,440.	-	3,440.	nc					
Acenaphthylene	208-96-8	-								
Anthracene	120-12-7	17,200.	-	17,200.	nc					
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca					
Benzo[ <i>j</i> ]fluoranthene	205-82-3	-	0.377	0.377	ca					
Benzo[ <i>b</i> ]fluoranthene	205-99-2	-	0.148	0.148	ca					
Benzo[ <i>g,h,i</i> ]perylene	191-24-2	-								
Benzo[ <i>k</i> ]fluoranthene	207-08-9	-	1.48	1.48	ca					
Chrysene	218-01-9	-	14.8	14.8	ca					
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca					
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca					
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca					
Fluoranthene	206-44-0	2,290.	-	2,290.	nc					
Fluorene	86-73-7	2,290.	-	2,290.	nc					
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca					
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca					
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc					
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca					
Perylene	198-55-0	-								
Phenanthrene	85-01-8	-								
Pyrene	129-00-0	1,720.	-	1,720.	nc					
Aluminum	7429-90-5	77,500.	-	77,500.	nc		28,721.			
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca		8.			
Barium	7440-39-3	15,300.	-	15,300.	nc		364.			
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc					
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1.			
Calcium	7440-70-2	-					14,536.			
Chromium(VI)	18540-29-9	234.	0.293	0.293	ca					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,4,4',5,5- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	0.159	0.159	ca					
Aroclor 1232	11141-16-5	-	0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
Aluminum metaphosphate	13776-88-0	3,800,000.	-	100,000.	ceiling					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, p-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								



**Residual Contaminant Levels Protective of Groundwater Quality**  
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NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (if Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Ascarine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.005	
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramphen	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI	3.60E+05 If no Cr-VI			Re-assess if Cr-VI present
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.008	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenylacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (cis/trans) (Tetra)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (if Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.005	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metrabuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazaine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	0.033	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.005	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03		
2,3,3,4-Tetrachloropropene and C,3,3-TCPGA	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01		
Trimethylbenzenes (1,2,4- and 1,3,5-combined)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.005	E
Xylene (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00		3.94E+00	0.015	

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type 'l', 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Comparison / Hazard Index / Cumulative Cancer Risk		
								Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: 1.00E-06 Cancer Risk (CR) from Data
Benzene	71-43-2	111.	1.49	1.49	ca		0.005			3.4E-09
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.005			6.7E-10
Toluene	108-88-3	5,300.	-	818.	Csat		0.005			0.
Xylenes	1330-20-7	890.	-	258.	Csat		0.015			0.
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca					
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca					
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca					
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.005			0.0008 4.0E-09
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		0.033			0.0003 1.1E-09
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.005			0.0001 7.5E-08
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc					
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc					
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc					
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat		0.036			0.0002
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca					
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc					
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat					
Naphthalene	91-20-3	188.	5.15	5.15	ca					
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca					
Acenaphthene	83-32-9	3,440.	-	3,440.	nc					
Acenaphthylene	208-96-8	-								
Anthracene	120-12-7	17,200.	-	17,200.	nc					
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca					
Benzo[i]fluoranthene	205-82-3	-	0.377	0.377	ca					
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca					
Benzo[g,h,i]perylene	191-24-2	-								
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca					
Chrysene	218-01-9	-	14.8	14.8	ca					
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca					
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca					
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca					
Fluoranthene	206-44-0	2,290.	-	2,290.	nc					
Fluorene	86-73-7	2,290.	-	2,290.	nc					
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca					
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca					
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc					
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca					
Perylene	198-55-0	-								
Phenanthrene	85-01-8	-								
Pyrene	129-00-0	1,720.	-	1,720.	nc					
Aluminum	7429-90-5	77,500.	-	77,500.	nc		28,721			
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca		8			
Barium	7440-39-3	15,300.	-	15,300.	nc		364			
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc					
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1			
Calcium	7440-70-2	-					14,536			
Chromium(VI)	18540-29-9	234.	0.293	0.293	ca					

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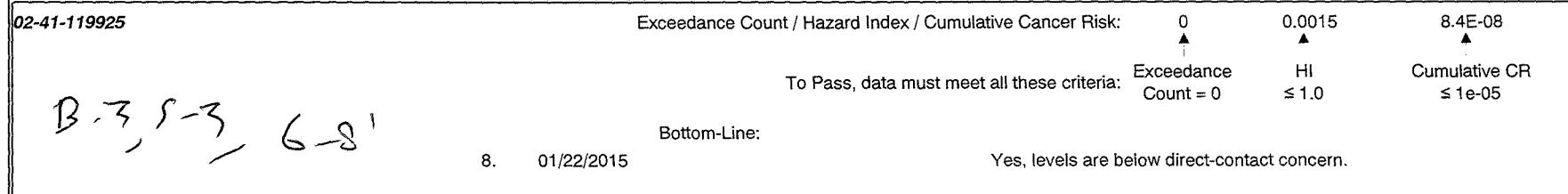
Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4' (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	-	0.159	0.159	ca				
Aroclor 1232	11141-16-5	-	-	0.159	0.159	ca				
Aroclor 1242	53469-21-9	-	-	0.221	0.221	ca				
Aroclor 1248	12672-29-6	-	-	0.221	0.221	ca				
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	-	0.221	0.221	ca				
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	-	0.221	0.221	ca				
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	-	0.128	0.128	ca				
Acrotein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
Aluminum metaphosphate	13776-88-0	3,800,000.	-	100,000.	ceiling					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								



**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search) )

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Atmos. total chlorinated residue	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.005	
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI	3.60E+05 If no Cr-VI			Re-assess if Cr-VI present
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.036	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (caprone) (Tetone)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (if Red. MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - >	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.005	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazaine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	0.005	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.005	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.005	E
	1,2,3-Trichloropropane	93-72-1	50.	2.75E-02		5.50E-02		
	1,2,3-Trichloropropene	96-18-4	-	2.59E-02		5.19E-02		

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B-3

S-3

C-S'

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Trifluralin	1582-09-8	-	7.5	2.47E-01	4.95E-01		
Toluenebenzenes (1,2,4- and 1,3,5-combined)	95-63-6 / 108-67-8	-	480.	6.91E-01	1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01	6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05	1.38E-04	0.005	E
Xylene (m-, o-, p-combined)	1330-20-7	10,000.	2,000.	1.97E+00	3.94E+00	0.015	

02-41-119925

B-3

S-3

6-S'

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202/>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '!', 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)
Benzene	71-43-2	111.	1.49	1.49	ca		0.005
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.005
Toluene	108-88-3	5,300.	-	818.	Csat		0.005
Xylenes	1330-20-7	890.	-	258.	Csat		0.015
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca		
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca		
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca		
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.49
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		23.
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.005
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc		
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc		
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc		
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat		0.07
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca		
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc		
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat		
Naphthalene	91-20-3	188.	5.15	5.15	ca		
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca		
Acenaphthene	83-32-9	3,440.	-	3,440.	nc		
Acenaphthylene	208-96-8	-					
Anthracene	120-12-7	17,200.	-	17,200.	nc		
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca		
Benzo[j]fluoranthene	205-82-3	-	0.377	0.377	ca		
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca		
Benzo[g,h,i]perylene	191-24-2	-					
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca		
Chrysene	218-01-9	-	14.8	14.8	ca		
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca		
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca		
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca		
Fluoranthene	206-44-0	2,290.	-	2,290.	nc		
Fluorene	86-73-7	2,290.	-	2,290.	nc		
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca		
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca		
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc		
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca		
Perylene	198-55-0	-					
Phenanthrene	85-01-8	-					
Pyrene	129-00-0	1,720.	-	1,720.	nc		
Aluminum	7429-90-5	77,500.	-	77,500.	nc		
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca	28,721.	8.
Barium	7440-39-3	15,300.	-	15,300.	nc		364.
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc		
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1.
Calcium	7440-70-2	-					14,536.
Chromium(VI)	18540-29-9	234.	0.293	0.293	ca		

Comparison / Hazard Index / Cumulative Cancer Risk			
		Target CR used: 1.00E-06	
Contaminant	Hazard Quotient (HQ) from Data	Flag E = Individual Exceedance!	Cancer Risk (CR) from Data
Benzene	0.	0.	3.4E-09
Ethylbenzene	0.	0.	6.7E-10
Toluene	0.	0.	
Xylenes	0.	0.	
Methyl tert-Butyl Ether (MTBE)			
Dichloroethane, 1,2-			
Dibromoethane, 1,2-			
Trichloroethylene	0.081	0.49	3.9E-07
Tetrachloroethylene	0.2	23.	7.5E-07
Vinyl Chloride	0.0001	0.005	7.5E-08
Dichloroethylene, 1,1-			
Dichloroethylene, 1,2-trans-			
Dichloroethylene, 1,2-cis-			
Trichloroethane, 1,1,1-	0.0004	0.07	
Carbon Tetrachloride			
Trimethylbenzene, 1,2,4-			
Trimethylbenzene, 1,3,5-			
Naphthalene			
Benzo[a]pyrene			
Acenaphthene			
Acenaphthylene			
Anthracene			
Benz[a]anthracene			
Benzo[j]fluoranthene			
Benzo[b]fluoranthene			
Benzo[g,h,i]perylene			
Benzo[k]fluoranthene			
Chrysene			
Dibenz[a,h]anthracene			
Dibenzo(a,e)pyrene			
Dimethylbenz(a)anthracene, 7,12-			
Fluoranthene			
Fluorene			
Indeno[1,2,3-cd]pyrene			
Methylnaphthalene, 1-			
Methylnaphthalene, 2-			
Nitropyrene, 4-			
Perylene			
Phenanthrene			
Pyrene			
Aluminum			
Arsenic, Inorganic			
Barium			
Beryllium and compounds			
Cadmium (Diet)			
Calcium			
Chromium(VI)			

B-4  
S-3  
G-8

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4'- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4'- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5' (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5' (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5' (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016		12674-11-2	3.93	6.33	3.93	nc				
Aroclor 1221		11104-28-2	-	0.159	0.159	ca				
Aroclor 1232		11141-16-5	-	0.159	0.159	ca				
Aroclor 1242		53469-21-9	-	0.221	0.221	ca				
Aroclor 1248		12672-29-6	-	0.221	0.221	ca				
Aroclor 1254		11097-69-1	1.12	0.221	0.221	ca				
Aroclor 1260		11096-82-5	-	0.221	0.221	ca				
Aroclor 5460		11126-42-4	36.7	-	36.7	nc				
Polychlorinated Biphenyls (high risk)		1336-36-3	-	0.221	0.221	ca				
Acephate		30560-19-1	244.	55.8	55.8	ca				
Acetaldehyde		75-07-0	127.	15.	15.	ca				
Acetochlor		34256-82-1	1,220.	-	1,220.	nc				
Acetone		67-64-1	63,800.	-	63,800.	nc				
Acetone Cyanohydrin		75-86-5	77.	-	77.	nc				
Acetonitrile		75-05-8	1,260.	-	1,260.	nc				
Acetophenone		98-86-2	7,820.	-	2,520.	Csat				
Acetylaminofluorene, 2-		53-96-3	-	0.128	0.128	ca				
Acrolein		107-02-8	0.223	-	0.223	nc				
Acrylamide		79-06-1	122.	0.23	0.23	ca				
Acrylic Acid		79-10-7	30,000.	-	30,000.	nc				
Acrylonitrile		107-13-1	24.7	0.314	0.314	ca				
Adiponitrile		111-69-3	9,760,000.	-	100,000.	ceiling				
Alachlor		15972-60-8	611.	8.67	8.67	ca				
ALAR		1596-84-5	9,170.	27.	27.	ca				
Aldicarb		116-06-3	61.1	-	61.1	nc				
Aldicarb Sulfone		1646-88-4	61.1	-	61.1	nc				
Aldrin		309-00-2	1.83	0.029	0.029	ca				
Ally		74223-64-6	15,300.	-	15,300.	nc				
Allyl Alcohol		107-18-6	305.	-	305.	nc				
Allyl Chloride		107-05-1	2.57	0.966	0.966	ca				
Aluminum metaphosphate		13776-88-0	3,800,000.	-	100,000.	ceiling				

B-4

S-3

G-8

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								

02-41-119925

Exceedance Count / Hazard Index / Cumulative Cancer Risk:

0

0.2816

1.2E-06

To Pass, data must meet all these criteria:  
Exceedance  
Count = 0HI  
≤ 1.0Cumulative CR  
≤ 1e-05

B-4 S-3, 6-8'

Bottom-Line:

8. 01/22/2015

Yes, levels are below direct-contact concern.

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - →	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Aalachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Atrazine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.005	
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloranben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI		3.60E+05 If no Cr-VI		
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.07	E
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (cis/trans) (Tecone)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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B-4

S-3

G-8'

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search) )

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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B-4

J-3

C-8'

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.005	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NODA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	23.	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.005	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.49	E
2,4,5-Trichlorophenol and 2,4,5-TCP	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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B-4

S-3

6 -8'

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (if Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Trifluralin	1582-09-8	-	7.5	2.47E-01	4.95E-01		
Trichloroethylene (1,2,4 and 1,3,5 combined)	95-63-6 / 108-67-8	-	480.	6.91E-01	1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01	6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05	1.38E-04	0.005	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00	3.94E+00	0.015	

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B-4

S-3

G-8'

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202/>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '1', 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Comparison / Hazard Index / Cumulative Cancer Risk		
								Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	111.	1.49	1.49	ca		0.016		0.0001	1.1E-08
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.027		0.	3.6E-09
Toluene	108-88-3	5,300.	-	818.	Csat		0.031		0.	
Xylenes	1330-20-7	890.	-	258.	Csat		0.099		0.0001	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca					
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca					
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca					
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.042		0.0069	3.3E-08
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		0.32		0.0028	1.0E-08
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.01		0.0001	1.5E-07
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc					
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc					
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc		0.021		0.0001	
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat					
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca					
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc					
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat					
Naphthalene	91-20-3	188.	5.15	5.15	ca					
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca					
Acenaphthene	83-32-9	3,440.	-	3,440.	nc					
Acenaphthylene	208-96-8	-								
Anthracene	120-12-7	17,200.	-	17,200.	nc					
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca					
Benzo[j]fluoranthene	205-82-3	-	0.377	0.377	ca					
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca					
Benz[g,h,i]perylene	191-24-2	-								
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca					
Chrysene	218-01-9	-	14.8	14.8	ca					
Dibenzo[a,h]anthracene	53-70-3	-	0.015	0.015	ca					
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca					
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca					
Fluoranthene	206-44-0	2,290.	-	2,290.	nc					
Fluorene	86-73-7	2,290.	-	2,290.	nc					
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca					
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca					
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc					
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca					
Perlylene	198-55-0	-								
Phenanthrene	85-01-8	-								
Pyrene	129-00-0	1,720.	-	1,720.	nc					
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.				
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca	8.				
Barium	7440-39-3	15,300.	-	15,300.	nc	364.				
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc					
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc	1.				
Calcium	7440-70-2	-				14,536.				
Chromium(VI)	18540-29-9	234.	0.293	0.293	ca					

B - 5

S - 1

0 - 2

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4' (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016		12674-11-2	3.93	6.33	3.93	nc				
Aroclor 1221		11104-28-2	-	0.159	0.159	ca				
Aroclor 1232		11141-16-5	-	0.159	0.159	ca				
Aroclor 1242		53469-21-9	-	0.221	0.221	ca				
Aroclor 1248		12672-29-6	-	0.221	0.221	ca				
Aroclor 1254		11097-69-1	1.12	0.221	0.221	ca				
Aroclor 1260		11096-82-5	-	0.221	0.221	ca				
Aroclor 5460		11126-42-4	36.7	-	36.7	nc				
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
Aluminum metaphosphate	13776-88-0	3,800,000.	-	100,000.	ceiling					

B-5

S-1

O-21

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								

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Exceedance Count / Hazard Index / Cumulative Cancer Risk:

0

0.0102

2.1E-07

▲

▲

▲

To Pass, data must meet all these criteria: Exceedance Count = 0

HI ≤ 1.0

Cumulative CR ≤ 1e-05

Bottom-Line:

8. 01/22/2015

Yes, levels are below direct-contact concern.

B-5, S-1, O-21

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Atrazine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.016	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI	3.60E+05 If no Cr-VI			
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Diethyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.021	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (cis/trans) (Toluene)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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Re-assess if Cr-VI present

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - →	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1748-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-progs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-progs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.027	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitroodiphenylamine (NODA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	0.32	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.031	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.042	E
1,1,1,2-Tetrachloroethane	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (if Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01		
Tetrahydrofuran (1,3-a- and 1,3-b- combined)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.01	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00		3.94E+00	0.099	

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202/>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '.', 'NA' nor 'space bar.' Leave purple cells "as is."
  2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)
Benzene	71-43-2	111.	1.49	1.49	ca	
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca	
Toluene	108-88-3	5,300.	-	818.	Csat	
Xylenes	1330-20-7	890.	-	258.	Csat	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca	
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca	
Dibromoethane, 1,2-	106-93-4	107	0.047	0.047	ca	
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca	
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca	
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca	
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc	
Dichloroethylene, 1,2-trans-	156-60-5	1,560	-	1,560.	nc	
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc	
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat	
Carbon Tetrachloride	56-23-5	137	0.854	0.854	ca	
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc	
Trimethylbenzene, 1,3,5-	108-67-8	782	-	182.	Csat	
Naphthalene	91-20-3	188.	5.15	5.15	ca	
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca	
Acenaphthene	83-32-9	3,440.	-	3,440.	nc	
Acenaphthylene	208-96-8	-				
Anthracene	120-12-7	17,200.	-	17,200.	nc	
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca	
Benzo(j)fluoranthene	205-82-3	-	0.377	0.377	ca	
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca	
Benzo[g,h,i]perylene	191-24-2	-				
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca	
Chrysene	218-01-9	-	14.8	14.8	ca	
Dibenzo[a,h]anthracene	53-70-3	-	0.015	0.015	ca	
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca	
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca	
Fluoranthene	206-44-0	2,290.	-	2,290.	nc	
Fluorene	86-73-7	2,290.	-	2,290.	nc	
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca	
Methylnaphthalene, 1-	90-12-0	4,010	15.6	15.6	ca	
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc	
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca	
Perlylene	198-55-0	-				
Phenanthrene	85-01-8	-				
Pyrene	129-00-0	1,720.	-	1,720.	nc	
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca	8
Barium	7440-39-3	15,300.	-	15,300.	nc	364.
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc	1
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc	14,536.
Calcium	7440-70-2	-				
Chromium(VI)	18540-29-9	234.	0.293	0.293	ca	

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-		400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.		391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4'-5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4'-5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2		0.159	0.159	ca					
Aroclor 1232	11141-16-5		0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.		1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7		0.314	0.314	ca				
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
Aluminum metaphosphate	13776-88-0	3,800,000.	-	100,000.	ceiling					

B - 5

S - 2

2 - 41

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								

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Exceedance Count / Hazard Index / Cumulative Cancer Risk:

0

0.0109

2.1E-07

To Pass, data must meet all these criteria:  
Exceedance  
Count = 0HI  
 $\leq 1.0$ Cumulative CR  
 $\leq 1e-05$ 

B - 5, S - 2, 2 - u!

Bottom-Line:

8. 01/22/2015

Yes, levels are below direct-contact concern.

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Atrazine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.016	E
Benz(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benz(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.18E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI		3.60E+05 If no Cr-VI		Re-assess if Cr-VI present
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Diethyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.021	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (trans-1,3-butadiene)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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B-5

S-2

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.omi.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.omi.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E – Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00	2.00	2.88E+00	
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04	
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04	
2,6-Dinitrotoluene	608-20-2	-	0.05	6.88E-05		1.38E-04	
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04	
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01	
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03	
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05	
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01	
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01	

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B-5

S-2

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Residual Contaminant Levels Protective of Groundwater Quality  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.027	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metachloroform-Metachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	0.4	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.031	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03		
2,4-Tetrachlorophenol and 2,4,4'-TPD <sup>a</sup>	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02	0.042	E

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B - 5  
 S - 2  
 2 - 4

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.omi.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.omi.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01		
Triethylbenzenes (1,2,4- and 1,3,5 combined)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.01	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00		3.94E+00	0.099	

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B - 5

S - 2  
2 - 4'

#####
#

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type ' ', 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)
Benzene	71-43-2	111.	1.49	1.49	ca		0.016
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.027
Toluene	108-88-3	5,300.	-	818.	Csat		0.031
Xylenes	1330-20-7	890.	-	258.	Csat		0.099
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca		
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca		
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca		
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.042
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		0.153
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.01
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc		
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc		
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc		
Trichloroethylene, 1,1,1-	71-55-6	12,300.	-	640.	Csat		0.021
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca		
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc		
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat		
Naphthalene	91-20-3	188.	5.15	5.15	ca		
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca		
Acenaphthene	83-32-9	3,440.	-	3,440.	nc		
Acenaphthylene	208-96-8	-					
Anthracene	120-12-7	17,200.	-	17,200.	nc		
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca		
Benzo(b)fluoranthene	205-82-3	-	0.377	0.377	ca		
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca		
Benzo[g,h,i]perylene	191-24-2	-					
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca		
Chrysene	218-01-9	-	14.8	14.8	ca		
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca		
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca		
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca		
Fluoranthene	206-44-0	2,290.	-	2,290.	nc		
Fluorene	86-73-7	2,290.	-	2,290.	nc		
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca		
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca		
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc		
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca		
Perylene	198-55-0	-					
Phenanthrene	85-01-8	-					
Pyrene	129-00-0	1,720.	-	1,720.	nc		
Aluminum	7429-90-5	77,500.	-	77,500.	nc		
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca		
Barium	7440-39-3	15,300.	-	15,300.	nc		364.
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc		
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1.
Calcium	7440-70-2	-					14,536.
Chromium(VI)	18540-29-9	234.	0.293	0.293	ca		

Comparison / Hazard Index / Cumulative Cancer Risk		
		Target CR used: 1.00E-06
	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data
		Cancer Risk (CR) from Data

B - 6, S - 1

O - 21

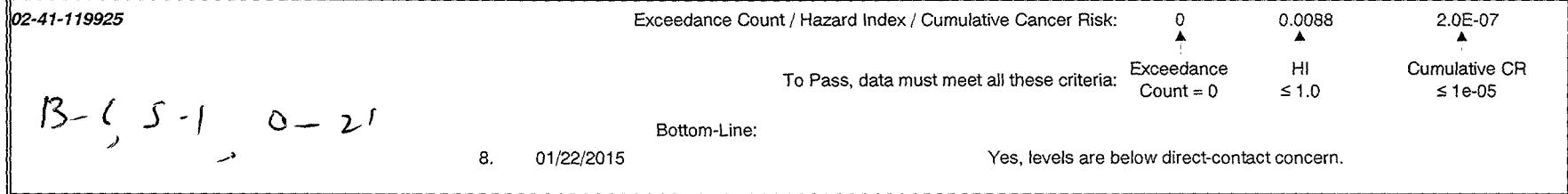
Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4,5,5'- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	0.159	0.159	ca					
Aroclor 1232	11141-16-5	-	0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
Aluminum	13776-88-0	3,800,000.	-	100,000.	ceiling					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								



**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Asurino, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.016	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI		3.60E+05 If no Cr-VI		
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.021	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (1,3-TCP) (Terpine)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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Re-assess if Cr-VI present

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
D(2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2. or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.027	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	0.153	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.031	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.042	E
1,1,2,2-Tetrachloroethane and 1,1,2-Tetrachloroethane	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Trifluralin	1582-09-8	-	7.5	2.47E-01	4.95E-01		
	95-63-6 / 108-67-8	-	480.	6.91E-01	1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01	6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05	1.38E-04	0.01	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00	3.94E+00	0.099	

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-' 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)
Benzene	71-43-2	111.	1.49	1.49	ca		0.016
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.027
Toluene	108-88-3	5,300.	-	818.	Csat		0.031
Xylenes	1330-20-7	890.	-	258.	Csat		0.099
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800	59.4	59.4	ca		
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca		
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca		
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.042
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		0.18
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.01
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc		
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc		
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc		
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat		0.021
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca		
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc		
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat		
Naphthalene	91-20-3	188.	5.15	5.15	ca		
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca		
Acenaphthene	83-32-9	3,440.	-	3,440.	nc		
Acenaphthylene	208-96-8	-	-	-			
Anthracene	120-12-7	17,200.	-	17,200.	nc		
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca		
Benzo[ <i>j</i> ]fluoranthene	205-82-3	-	0.377	0.377	ca		
Benzo[ <i>b</i> ]fluoranthene	205-99-2	-	0.148	0.148	ca		
Benzo[ <i>g,h,i</i> ]perylene	191-24-2	-	-	-			
Benzo[ <i>k</i> ]fluoranthene	207-08-9	-	1.48	1.48	ca		
Chrysene	218-01-9	-	14.8	14.8	ca		
Dibenzo[ <i>a,h</i> ]anthracene	53-70-3	-	0.015	0.015	ca		
Dibenzo[ <i>a,e</i> ]pyrene	192-65-4	-	0.038	0.038	ca		
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca		
Fluoranthene	206-44-0	2,290.	-	2,290.	nc		
Fluorene	86-73-7	2,290.	-	2,290.	nc		
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca		
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca		
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc		
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca		
Perylene	198-55-0	-	-	-			
Phenanthrene	85-01-8	-	-	-			
Pyrene	129-00-0	1,720.	-	1,720.	nc		
Aluminum	7429-90-5	77,500.	-	77,500.	nc		
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca		8.
Barium	7440-39-3	15,300.	-	15,300.	nc		364.
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc		
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1.
Calcium	7440-70-2	-	-	-			14,536.
	18540-29-9	234.	0.293	0.293	ca		

Comparison / Hazard Index / Cumulative Cancer Risk			
		Target CR used: 1.00E-06	Cancer Risk (CR) from Data
Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data		

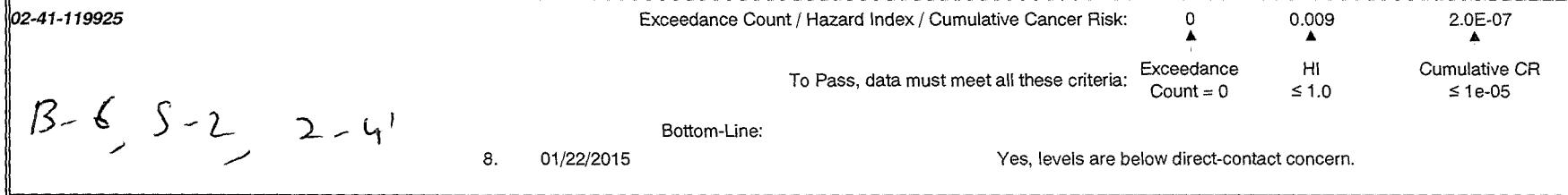
B - 6, S - 2

2 - 4'

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5' (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5' (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5' (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	0.159	0.159	ca					
Aroclor 1232	11141-16-5	-	0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acetophenone	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
Aluminum metaphosphate	13776-88-0	3,800,000.	-	100,000.	ceiling					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								



**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - →	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Atrazine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.016	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI		3.60E+05 If no Cr-VI		Re-assess if Cr-VI present
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Diethyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.021	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (cis/trans) (Tolene)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search) )

NR 140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - =>	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.027	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metachloro/s-Metachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	0.18	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.031	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.042	
1,1,1,2-Tetrachloropropane	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01		
Tetrahydrobenzenes (1,2,4- and 1,3,5 combined)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.01	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00		3.94E+00	0.099	

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type 'L', 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Comparison / Hazard Index / Cumulative Cancer Risk		
								Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: 1.00E-06 Cancer Risk (CR) from Data
Benzene	71-43-2	111.	1.49	1.49	ca		0.016		0.0001	1.1E-08
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.027		0.	3.6E-09
Toluene	108-88-3	5,300.	-	818.	Csat		0.031		0.	
Xylenes	1330-20-7	890.	-	258.	Csat		0.099		0.0001	
(Methyl tert-Butyl Ether (MTBE))	1634-04-4	23,800.	59.4	59.4	ca					
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca					
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca					
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.042		0.0069	3.3E-08
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		0.278		0.0024	9.1E-09
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.01		0.0001	1.5E-07
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc					
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc					
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc					
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat		0.021		0.0001	
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca					
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc					
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat					
Naphthalene	91-20-3	188.	5.15	5.15	ca					
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca					
Acenaphthene	83-32-9	3,440.	-	3,440.	nc					
Acenaphthylene	208-96-8	-								
Anthracene	120-12-7	17,200.	-	17,200.	nc					
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca					
Benzo[j]fluoranthene	205-82-3	-	0.377	0.377	ca					
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca					
Benzo[g,h,i]perylene	191-24-2	-								
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca					
Chrysene	218-01-9	-	14.8	14.8	ca					
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca					
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca					
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca					
Fluoranthene	206-44-0	2,290.	-	2,290.	nc					
Fluorene	86-73-7	2,290.	-	2,290.	nc					
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca					
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca					
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc					
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca					
Perylene	198-55-0	-								
Phenanthrene	85-01-8	-								
Pyrene	129-00-0	1,720.	-	1,720.	nc					
Aluminum	7429-90-5	77,500.	-	77,500.	nc		28,721.			
Arsenic, inorganic	7440-38-2	34.3	0.613	0.613	ca		8.			
Barium	7440-39-3	15,300.	-	15,300.	nc		364.			
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc					
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1.			
Calcium	7440-70-2	-					14,536.			
	10540-99-9	234.	0.293	0.293	ca					

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S-1

O-2<sup>1</sup>

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,4,4',5,5- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	0.159	0.159	ca					
Aroclor 1232	11141-16-5	-	0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
	13776-88-0	3,800,000.	-	100,000.	ceiling					

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C-2'

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								

02-41-119925	Exceedance Count / Hazard Index / Cumulative Cancer Risk:	0	0.0099	2.1E-07
To Pass, data must meet all these criteria:		Exceedance Count = 0	HI ≤ 1.0	Cumulative CR ≤ 1e-05
<i>B-7 S1, O-21</i>				
Bottom-Line:				
8. 01/22/2015 Yes, levels are below direct-contact concern.				

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Aalachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Aszino, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.016	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramphen	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI		3.60E+05 If no Cr-VI		
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Ditromo-3-chloropropane (DCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Diethyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.021	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (cis/trans) (Tetra)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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S-1

O-2

Re-assess if Cr-VI present

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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S-1

O-2'

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.027	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metrizobuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	6.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	0.278	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.031	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.042	E
2,2,2-Trichloropropane and 2,2,1-Trichloropropane	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropene	96-18-4	-	60.	2.59E-02		5.19E-02		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.orml.gov/ogl-bin/chemicals/csl\\_search](http://epa-prgs.orml.gov/ogl-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (if Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01		
Termitrybarones (1,2,4 and 1,3,5 combined)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.01	E
Xylenes (m-, o-, p-combined)	1330-20-7	10,000.	2,000.	1.97E+00		3.94E+00	0.099	

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-' 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Comparison / Hazard Index / Cumulative Cancer Risk		
								Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: 1.00E-06 Cancer Risk (CR) from Data
Benzene	71-43-2	111.	1.49	1.49	ca		0.016		0.0001	1.1E-08
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.027		0.	3.6E-09
Toluene	108-88-3	5,300.	-	818.	Csat		0.031		0.	
Xylenes	1330-20-7	890.	-	258.	Csat		0.099		0.0001	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca					
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca					
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca					
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.042		0.0069	3.3E-08
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		0.34		0.003	1.1E-08
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.01		0.0001	1.5E-07
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc					
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc					
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc					
Trichloroethylene, 1,1,1-	71-55-6	12,300.	-	640.	Csat		0.021		0.0001	
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca					
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc					
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat					
Naphthalene	91-20-3	188.	5.15	5.15	ca					
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca					
Acenaphthene	83-32-9	3,440.	-	3,440.	nc					
Acenaphthylene	208-96-8	-								
Anthracene	120-12-7	17,200.	-	17,200.	nc					
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca					
Benzo[i]fluoranthene	205-82-3	-	0.377	0.377	ca					
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca					
Benzo[g,h,i]perylene	191-24-2	-								
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca					
Chrysene	218-01-9	-	14.8	14.8	ca					
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca					
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca					
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca					
Fluoranthene	206-44-0	2,290.	-	2,290.	nc					
Fluorene	86-73-7	2,290.	-	2,290.	nc					
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca					
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca					
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc					
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca					
Perylene	198-55-0	-								
Phenanthrene	85-01-8	-								
Pyrene	129-00-0	1,720.	-	1,720.	nc					
Aluminum	7429-90-5	77,500.	-	77,500.	nc		28,721.			
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca		8.			
Barium	7440-39-3	15,300.	-	15,300.	nc		364.			
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc					
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1.			
Calcium	7440-70-2	-					14,536.			
Chromium(VI)	18540-29-9	234.	0.293	0.293	ca					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4'- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4'-5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016		12674-11-2	3.93	6.33		3.93	nc			
Aroclor 1221		11104-28-2	-	0.159		0.159	ca			
Aroclor 1232		11141-16-5	-	0.159		0.159	ca			
Aroclor 1242		53469-21-9	-	0.221		0.221	ca			
Aroclor 1248		12672-29-6	-	0.221		0.221	ca			
Aroclor 1254		11097-69-1	1.12	0.221		0.221	ca			
Aroclor 1260		11096-82-5	-	0.221		0.221	ca			
Aroclor 5460		11126-42-4	36.7	-		36.7	nc			
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	-	0.314	0.314	ca				
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	-	0.966	0.966	ca				
	13776-88-0	3,800,000.	-	100,000.	ceiling					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not To Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								

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Exceedance Count / Hazard Index / Cumulative Cancer Risk:

0

0.0104

2.1E-07

To Pass, data must meet all these criteria: Exceedance Count = 0 HI ≤ 1.0 Cumulative CR ≤ 1e-05

Bottom-Line:

8. 01/22/2015

Yes, levels are below direct-contact concern.

B-7, S-2, 2-4!

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (if Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Anazine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.016	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI		3.60E+05 If no Cr-VI		
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.021	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (cis/trans) (Toluene)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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Re-assess if Cr-VI present

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR 140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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Residual Contaminant Levels Protective of Groundwater Quality  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.027
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01	
Ethyleneglycol	107-21-1	-	14,000.	2.83E+00		5.66E+00	
Fluoranthene	205-44-0	-	400.	4.44E+01		8.89E+01	
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01	
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03	
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00	
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01	
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02	
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.18E-03	
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02	
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00	
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01	
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03	
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01	
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01	
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00	
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00	
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03	
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00	
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01	
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02	
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01	
Metrabuzin	21087-64-9	-	70.	2.14E-02		4.27E-02	
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00	
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01	
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01	
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01	
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02	
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02	
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00	
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01	
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03	
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02	
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02	
Pyrene (PAH)	129-90-0	-	250.	2.71E+01		5.41E+01	
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03	
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01	
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01	
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03	
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01	
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03	
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02	
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04	
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03	0.34	4.54E-03	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02	
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01	
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.031
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01	
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01	
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01	
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03	
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.042
1,1,1,2-Tetrachloroethane and 1,1,1,2-Tetrachloroethane	93-72-1	50.	50.	2.75E-02		5.50E-02	E
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02	

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red. MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01		
Proprietary substance (1,2,4- and 1,3,5-trinitrobenzene)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.01	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00		3.94E+00	0.099	

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202/>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '!', 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	Comparison / Hazard Index / Cumulative Cancer Risk		
							INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data
Benzene	71-43-2	111.	1.49	1.49	ca		0.08		
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.135		
Toluene	108-88-3	5,300.	-	818.	Csat		0.155		
Xylenes	1330-20-7	890.	-	258.	Csat		0.499		
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca				
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca				
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca				
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		0.95		
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca		11.1		
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		0.05		
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc				
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc				
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc		0.33		
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat				
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca				
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc				
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat				
Naphthalene	91-20-3	188.	5.15	5.15	ca				
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca				
Acenaphthene	83-32-9	3,440.	-	3,440.	nc				
Acenaphthylene	208-96-8	-	-	-					
Anthracene	120-12-7	17,200.	-	17,200.	nc				
Benzo[a]anthracene	56-55-3	-	0.148	0.148	ca				
Benzo(j)fluoranthene	205-82-3	-	0.377	0.377	ca				
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca				
Benzo(g,h,i)perylene	191-24-2	-	-	-					
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca				
Chrysene	218-01-9	-	14.8	14.8	ca				
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca				
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca				
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca				
Fluoranthene	206-44-0	2,290.	-	2,290.	nc				
Fluorene	86-73-7	2,290.	-	2,290.	nc				
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca				
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca				
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc				
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca				
Perylene	198-55-0	-	-	-					
Phenanthrene	85-01-8	-	-	-					
Pyrene	129-00-0	1,720.	-	1,720.	nc				
Aluminum	7429-90-5	77,500.	-	77,500.	nc		28,721.		
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca		8.		
Barium	7440-39-3	15,300.	-	15,300.	nc		364.		
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc				
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1.		
	7440-70-2	-	-	0.293	0.293	ca	14,536.		

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1			400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4'- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4'-5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016		12674-11-2	3.93	6.33	3.93	nc				
Aroclor 1221		11104-28-2	-	0.159	0.159	ca				
Aroclor 1232		11141-16-5	-	0.159	0.159	ca				
Aroclor 1242		53469-21-9	-	0.221	0.221	ca				
Aroclor 1248		12672-29-6	-	0.221	0.221	ca				
Aroclor 1254		11097-69-1	1.12	0.221	0.221	ca				
Aroclor 1260		11096-82-5	-	0.221	0.221	ca				
Aroclor 5460		11126-42-4	36.7	-	36.7	nc				
Polychlorinated Biphenyls (high risk)	1336-36-3	-		0.221	0.221	ca				
Acephate	30560-19-1	244.		55.8	55.8	ca				
Acetaldehyde	75-07-0	127.		15.	15.	ca				
Acetochlor	34256-82-1	1,220.	-		1,220.	nc				
Acetone	67-64-1	63,800.	-		63,800.	nc				
Acetone Cyanohydrin	75-86-5	77.	-		77.	nc				
Acetonitrile	75-05-8	1,260.	-		1,260.	nc				
Acetophenone	98-86-2	7,820.	-		2,520.	Csat				
Acetylaminofluorene, 2-	53-96-3	-		0.128	0.128	ca				
Acrolein	107-02-8	0.223	-		0.223	nc				
Acrylamide	79-06-1	122.		0.23	0.23	ca				
Acrylic Acid	79-10-7	30,000.	-		30,000.	nc				
Acrylonitrile	107-13-1	24.7		0.314	0.314	ca				
Adiponitrile	111-69-3	9,760,000.	-		100,000.	ceiling				
Alachlor	15972-60-8	611.		8.67	8.67	ca				
ALAR	1596-84-5	9,170.		27.	27.	ca				
Aldicarb	116-06-3	61.1	-		61.1	nc				
Aldicarb Sulfone	1646-88-4	61.1	-		61.1	nc				
Aldrin	309-00-2	1.83		0.029	0.029	ca				
Ally	74223-64-6	15,300.	-		15,300.	nc				
Allyl Alcohol	107-18-6	305.	-		305.	nc				
Lemonic acid	107-05-1	2.57		0.966	0.966	ca				
		100,000.	-		100,000.	ceiling				

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								

02-41-119925	Exceedance Count / Hazard Index / Cumulative Cancer Risk:	0	0.2575	1.9E-06
	To Pass, data must meet all these criteria:	Exceedance Count = 0	HI $\leq 1.0$	Cumulative CR $\leq 1e-05$
<i>B-8, S-1, O-21</i>				
Bottom-Line:				
8. 01/22/2015 Yes, levels are below direct-contact concern.				

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Atrazine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.08	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI	3.60E+05 If no Cr-VI			
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dichloro-3-chloropropane (DECP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.33	E
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (cis/trans) (Tetraene)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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Re-assess if Cr-VI present

Residual Contaminant Levels Protective of Groundwater Quality  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

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NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - =>	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

Residual Contaminant Levels Protective of Groundwater Quality  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red. MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.135	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.18E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	11.1	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.155	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.95	E
2,4,4-Trichloropropene and 2,4,4,5-Tetrachloro-	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search) )

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance	02-41-119925
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01			
Trimethylbenzene (1,2,4- and 1,3,5 combined)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00			
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01			
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.05	E	
Xylenes (m-, o-, p- combined)	1330-20-7	10,000	2,000.	1.97E+00		3.94E+00	0.499		

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-' 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	Comparison / Hazard Index / Cumulative Cancer Risk		
							INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data
Benzene	71-43-2	111.	1.49	1.49	ca	0.32			0.0029
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca	0.54			0.0001
Toluene	108-88-3	5,300.	-	818.	Csat	0.62			0.0001
Xylenes	1330-20-7	890.	-	258.	Csat	1.98			0.0022
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca				
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca				
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca				
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca				
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca				
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca				
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc				
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc				
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc				
Trichloroethylene, 1,1,1-	71-55-6	12,300.	-	640.	Csat				
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca				
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc				
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat				
Naphthalene	91-20-3	188.	5.15	5.15	ca				
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca				
Acenaphthene	83-32-9	3,440.	-	3,440.	nc				
Acenaphthylene	208-96-8	-							
Anthracene	120-12-7	17,200.	-	17,200.	nc				
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca				
Benzo(i)fluoranthene	205-82-3	-	0.377	0.377	ca				
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca				
Benzo[g,h,i]perylene	191-24-2	-							
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca				
Chrysene	218-01-9	-	14.8	14.8	ca				
Dibenzo[a,h]anthracene	53-70-3	-	0.015	0.015	ca				
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca				
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca				
Fluoranthene	206-44-0	2,290.	-	2,290.	nc				
Fluorene	86-73-7	2,290.	-	2,290.	nc				
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca				
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca				
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc				
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca				
Perylene	198-55-0	-							
Phenanthrene	85-01-8	-							
Pyrene	129-00-0	1,720.	-	1,720.	nc				
Aluminum	7429-90-5	77,500.	-	77,500.	nc				
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca				8.
Barium	7440-39-3	15,300.	-	15,300.	nc				364.
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc				
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc				1.
Calcium	7440-70-2	-							14,536.
	18540-29-9	234.	0.293	0.293	ca				

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc					
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'-(PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5-(PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'-(PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5-(PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5-(PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5-(PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5-(PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5-(PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5-(PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5'-(PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5'-(PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5'-(PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	0.159	0.159	ca					
Aroclor 1232	11141-16-5	-	0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
	107-05-1	2.57	0.966	0.966	ca					
				100,000.	ceiling					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, p-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								

02-41-119925	Exceedance Count / Hazard Index / Cumulative Cancer Risk:	3	2.8466	1.6E-05
	To Pass, data must meet all these criteria:	Exceedance Count = 0	HI $\leq 1.0$	Cumulative CR $\leq 1e-05$
<i>B-S, S-2, 2-u'</i>				
Bottom-Line: 8. 01/22/2015      NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.				

Residual Contaminant Levels Protective of Groundwater Quality  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - →	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Azoxine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.08	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI		3.60E+05 If no Cr-VI		
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Diethyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.33	E
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (trans, Toluene)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search) )

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.135	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethyleneglycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metribuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	11.1	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.155	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.95	E
2,4,5-Tri-N-nitrophenol and 2,4,5-TGA	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (if Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!	02-41-119925
Trifluralin	1582-09-8	-	7.5	2.47E-01		4.95E-01			
DimethylBiphenyls (1,2,4 and 1,3,5 combined)	95-63-6 / 108-67-8	-	480.	6.91E-01		1.38E+00			
Vanadium	7440-62-2	-	30.	3.00E+01		6.00E+01			
Vinyl chloride	75-01-4	2.	0.2	6.90E-05		1.38E-04	0.05	E	
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00		3.94E+00	0.499		

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202/>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-' 'NA' nor 'space bar.' Leave purple cells "as is."
  2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INF
Benzene	71-43-2	111.	1.49	1.49	ca		
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		
Toluene	108-88-3	5,300.	-	818.	Csat		
Xylenes	1330-20-7	890.	-	258.	Csat		
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca		
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca		
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca		
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca		
Tetrachloroethylene	127-18-4	115	30.7	30.7	ca		
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca		
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc		
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc		
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc		
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat		
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca		
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc		
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat		
Naphthalene	91-20-3	188	5.15	5.15	ca		
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca		
Acenaphthene	83-32-9	3,440.	-	3,440.	nc		
Acenaphthylene	208-96-8	-					
Anthracene	120-12-7	17,200.	-	17,200.	nc		
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca		
Benzo(j)fluoranthene	205-82-3	-	0.377	0.377	ca		
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca		
Benzo[g,h,i]perylene	191-24-2	-					
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca		
Chrysene	218-01-9	-	14.8	14.8	ca		
Dibenz[a,h]anthracene	53-70-3	-	0.015	0.015	ca		
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca		
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca		
Fluoranthene	206-44-0	2,290.	-	2,290.	nc		
Fluorene	86-73-7	2,290.	-	2,290.	nc		
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca		
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca		
Methylnaphthalene, 2-	91-57-6	229.	-	229	nc		
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca		
Perlylene	198-55-0	-					
Phenanthrene	85-01-8	-					
Pyrene	129-00-0	1,720.	-	1,720.	nc		
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.	
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca	8.	
Barium	7440-39-3	15,300.	-	15,300.	nc	364.	
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc		
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc		1.
Calcium	7440-70-2	-					
Chromium(VI)	18540-29-9	234.	0.293	0.293	ca	14,536.	

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5' (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5' (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5' (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	0.159	0.159	ca					
Aroclor 1232	11141-16-5	-	0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
	10776-88-0	3,800,000.	-	100,000.	ceiling					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)	Wis. DRO									
Test2Chem(GRO)	Wis. GRO									

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Exceedance Count / Hazard Index / Cumulative Cancer Risk:

0

0.0099

2.1E-07

To Pass, data must meet all these criteria:  
Exceedance Count = 0HI  
≤ 1.0Cumulative CR  
≤ 1e-05

B-95-1, 0-21

Bottom-Line:

8. 01/22/2015

Yes, levels are below direct-contact concern.

Residual Contaminant Levels Protective of Groundwater Quality  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Alachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Arzino, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.016	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(a)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramben	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI	3.60E+05 If no Cr-VI			Re-assess if Cr-VI present
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromodichloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.021	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (methylvinyl)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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Residual Contaminant Levels Protective of Groundwater Quality  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.027	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.98E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metrizobuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyl's (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03		4.54E-03	0.278	E
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01		1.11E+00	0.031	
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03	0.042	E
2,4,5-Tri-N-methylphenyl acetate (2,4,5-TPCA)	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

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**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Trifluralin	1582-09-8	-	7.5	2.47E-01	4.95E-01		
Tolueneethers (1,2-d and 1,3-d combined)	95-63-6 / 108-67-8	-	480.	6.91E-01	1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01	6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05	1.38E-04	0.01	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00	3.94E+00	0.099	

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Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: <http://pubs.usgs.gov/sir/2011/5202>.

1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '.', 'NA' nor 'space bar.' Leave purple cells "as is."

2. After completing data entry, See Summary in Row 892.

(Contaminants not in the provided list can be added starting at Row 880.)

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Comparison / Hazard Index / Cumulative Cancer Risk		
								Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Target CR used: 1.00E-06 Cancer Risk (CR) from Data
Benzene	71-43-2	111.	1.49	1.49	ca	0.016			0.0001	1.1E-08
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca	0.027			0.	3.6E-09
Toluene	108-88-3	5,300.	-	818.	Csat	0.031			0.	
Xylenes	1330-20-7	890.	-	258.	Csat	0.099			0.0001	
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca					
Dichloroethane, 1,2-	107-06-2	46.7	0.608	0.608	ca					
Dibromoethane, 1,2-	106-93-4	107.	0.047	0.047	ca					
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca				0.034	1.6E-07
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca				0.0809	3.0E-07
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca				0.0001	1.5E-07
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc					
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc					
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc					
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat	0.027			0.0002	
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca					
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc					
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat					
Naphthalene	91-20-3	188.	5.15	5.15	ca					
Benz[a]pyrene	50-32-8	-	0.015	0.015	ca					
Acenaphthene	83-32-9	3,440.	-	3,440.	nc					
Acenaphthylene	208-96-8									
Anthracene	120-12-7	17,200.	-	17,200.	nc					
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca					
Benzo(j)fluoranthene	205-82-3	-	0.377	0.377	ca					
Benzo[b]fluoranthene	205-99-2	-	0.148	0.148	ca					
Benzo[g,h,i]perylene	191-24-2	-								
Benzo[k]fluoranthene	207-08-9	-	1.48	1.48	ca					
Chrysene	218-01-9	-	14.8	14.8	ca					
Dibenzo[a,h]anthracene	53-70-3	-	0.015	0.015	ca					
Dibenzo(a,e)pyrene	192-65-4	-	0.038	0.038	ca					
Dimethylbenz(a)anthracene, 7,12-	57-97-6	-	4.31E-04	4.31E-04	ca					
Fluoranthene	206-44-0	2,290.	-	2,290.	nc					
Fluorene	86-73-7	2,290.	-	2,290.	nc					
Indeno[1,2,3-cd]pyrene	193-39-5	-	0.148	0.148	ca					
Methylnaphthalene, 1-	90-12-0	4,010.	15.6	15.6	ca					
Methylnaphthalene, 2-	91-57-6	229.	-	229.	nc					
Nitropyrene, 4-	57835-92-4	-	0.377	0.377	ca					
Perylene	198-55-0	-								
Phenanthrene	85-01-8	-								
Pyrene	129-00-0	1,720.	-	1,720.	nc					
Aluminum	7429-90-5	77,500.	-	77,500.	nc	28,721.				
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca	8.				
Barium	7440-39-3	15,300.	-	15,300.	nc	364.				
Beryllium and compounds	7440-41-7	156.	1,580.	156.	nc					
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc	1.				
Calcium	7440-70-2	-				14,536.				
	18540-29-9	234.	0.293	0.293	ca					

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2-u)

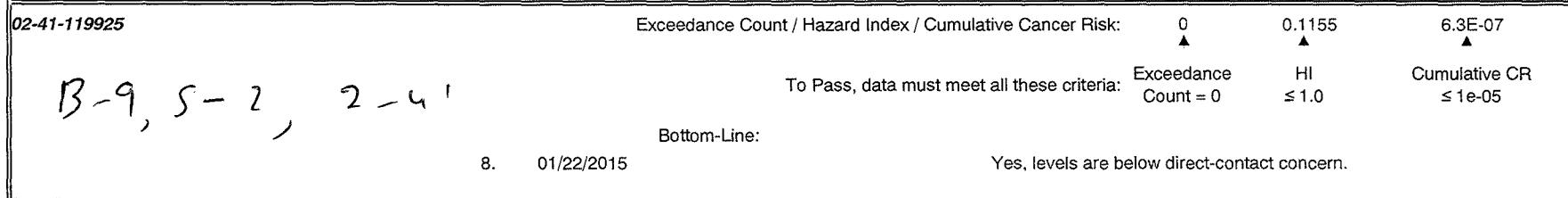
Contaminant	CAS Number	NC RCL (mg/kg)	CRCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Chromium(III), Insoluble Salts	16065-83-1	117,000.	-	100,000.	ceiling					
Chromium, Total	7440-47-3	-	-			44.				
Cobalt	7440-48-4	23.4	422.	23.4	nc	22.				
Copper	7440-50-8	3,130.	-	3,130.	nc	35.				
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat					
Iron	7439-89-6	54,800.	-	54,800.	nc	34,314.				
Lead and Compounds	7439-92-1	-	-	400.	nc	52.				
Magnesium	7439-95-4	-	-			8,290.				
Manganese (Non-diet)	7439-96-5	1,830.	-	1,830.	nc	2,937.				
Molybdenum	7439-98-7	391.	-	391.	nc					
Nickel Soluble Salts	7440-02-0	1,550.	14,600.	1,550.	nc	31.				
Selenium	7782-49-2	391.	-	391.	nc					
Strontium, Stable	7440-24-6	46,900.	-	46,900.	nc	55.				
Vanadium and Compounds	7440-62-2	393.	-	393.	nc	85.				
Zinc and Compounds	7440-66-6	23,500.	-	23,500.	nc	150.				
Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	0.393	0.034	0.034	ca					
Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	0.131	0.011	0.011	ca					
Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.31	0.114	0.114	ca					
Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.93E-04	3.41E-05	3.41E-05	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 157)	69782-90-7	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.31	0.114	0.114	ca					
Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	0.001	1.14E-04	1.14E-04	ca					
Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.31	0.114	0.114	ca					
Aroclor 1016	12674-11-2	3.93	6.33	3.93	nc					
Aroclor 1221	11104-28-2	-	0.159	0.159	ca					
Aroclor 1232	11141-16-5	-	0.159	0.159	ca					
Aroclor 1242	53469-21-9	-	0.221	0.221	ca					
Aroclor 1248	12672-29-6	-	0.221	0.221	ca					
Aroclor 1254	11097-69-1	1.12	0.221	0.221	ca					
Aroclor 1260	11096-82-5	-	0.221	0.221	ca					
Aroclor 5460	11126-42-4	36.7	-	36.7	nc					
Polychlorinated Biphenyls (high risk)	1336-36-3	-	0.221	0.221	ca					
Acephate	30560-19-1	244.	55.8	55.8	ca					
Acetaldehyde	75-07-0	127.	15.	15.	ca					
Acetochlor	34256-82-1	1,220.	-	1,220.	nc					
Acetone	67-64-1	63,800.	-	63,800.	nc					
Acetone Cyanohydrin	75-86-5	77.	-	77.	nc					
Acetonitrile	75-05-8	1,260.	-	1,260.	nc					
Acetophenone	98-86-2	7,820.	-	2,520.	Csat					
Acetylaminofluorene, 2-	53-96-3	-	0.128	0.128	ca					
Acrolein	107-02-8	0.223	-	0.223	nc					
Acrylamide	79-06-1	122.	0.23	0.23	ca					
Acrylic Acid	79-10-7	30,000.	-	30,000.	nc					
Acrylonitrile	107-13-1	24.7	0.314	0.314	ca					
Adiponitrile	111-69-3	9,760,000.	-	100,000.	ceiling					
Alachlor	15972-60-8	611.	8.67	8.67	ca					
ALAR	1596-84-5	9,170.	27.	27.	ca					
Aldicarb	116-06-3	61.1	-	61.1	nc					
Aldicarb Sulfone	1646-88-4	61.1	-	61.1	nc					
Aldrin	309-00-2	1.83	0.029	0.029	ca					
Ally	74223-64-6	15,300.	-	15,300.	nc					
Allyl Alcohol	107-18-6	305.	-	305.	nc					
Allyl Chloride	107-05-1	2.57	0.966	0.966	ca					
Aluminum metaphosphate	13776-88-0	3,800,000.	-	100,000.	ceiling					

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Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Xylene, o-	95-47-6	981.	-	434.	Csat					
Xylene, P-	106-42-3	855.	-	390.	Csat					
Zinc Cyanide	557-21-1	3,910.	-	3,910.	nc					
Zinc Phosphide	1314-84-7	23.5	-	23.5	nc					
Zineb	12122-67-7	3,060.	-	3,060.	nc					
Test1Chem(DRO)		Wis. DRO								
Test2Chem(GRO)		Wis. GRO								



**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Acetochlor	34256-82-1	-	7.	5.57E-03		1.11E-02		
Acetone	67-64-1	-	9,000.	1.84E+00		3.68E+00		
Aalachlor	15972-60-8	2.	2.	1.65E-03		3.30E-03		
Aldicarb	116-06-3	3.	10.	2.49E-03		4.99E-03		
Aluminum	7429-90-5	-	200.	3.00E+02		6.00E+02		
Antimony	7440-36-0	6.	6.	2.71E-01		5.42E-01		
Anthracene	120-12-7	-	3,000.	9.89E+01		1.98E+02		
Arsenic	7440-38-2	10.	10.	2.92E-01		5.84E-01		
Atrazine, total chlorinated residues	1912-24-9	3.	3.	1.95E-03		3.90E-03		
Barium	7440-39-3	2,000.	2,000.	8.24E+01		1.65E+02		
Bentazon	25057-89-0	-	300.	6.57E-02		1.31E-01		
Benzene	71-43-2	5.	5.	2.56E-03		5.12E-03	0.016	E
Benzo(a)pyrene (PAH)	50-32-8	0.2	0.2	2.35E-01		4.70E-01		
Benzo(b)fluoranthene (PAH)	205-99-2	-	0.2	2.40E-01		4.79E-01		
Beryllium	7440-41-7	4.	4.	3.16E+00		6.32E+00		
Boron	7440-42-8	-	1,000.	3.21E+00		6.42E+00		
Bromodichloromethane (THM)	75-27-4	80.	0.6	1.63E-04		3.26E-04		
Bromoform (THM)	75-25-2	80.	4.4	1.17E-03		2.33E-03		
Bromomethane	74-83-9	-	10.	2.53E-03		5.06E-03		
Butylate	2008-41-5	-	400.	3.89E-01		7.77E-01		
Cadmium	7440-43-9	5.	5.	3.76E-01		7.52E-01		
Carbaryl	63-25-2	-	40.	3.63E-02		7.26E-02		
Carbofuran	1563-66-2	40.	40.	1.56E-02		3.12E-02		
Carbon disulfide	75-15-0	-	1,000.	2.96E-01		5.92E-01		
Carbon tetrachloride	56-23-5	5.	5.	1.94E-03		3.88E-03		
Chloramphen	133-90-4	-	150.	3.64E-02		7.29E-02		
Chlorodifluoromethane	75-45-6	-	7,000.	2.89E+00		5.79E+00		
Chloroethane	75-00-3	-	400.	1.13E-01		2.27E-01		
Chloroform (THM)	67-66-3	80.	6.	1.67E-03		3.33E-03		
Chlorpyrifos	2921-88-2	-	2.	2.94E-02		5.88E-02		
Chloromethane	74-87-3	-	30.	7.76E-03		1.55E-02		
Chromium (total)	7440-47-3	100.	100.	1.80E+05 No Cr-VI		3.60E+05 If no Cr-VI		Re-assess if Cr-VI present
Chrysene (PAH)	218-01-9	-	0.2	7.23E-02		1.45E-01		
Cobalt	7440-48-4	-	40.	1.80E+00		3.61E+00		
Copper	7440-50-8	1,300.	1,300.	4.58E+01		9.16E+01		
Cyanazine	21725-46-2	-	1.	4.69E-04		9.37E-04		
Cyanide, free	57-12-5	200.	200.	2.02E+00		4.04E+00		
Dacthal (DCPA)	1861-32-1	-	70.	8.52E-02		1.70E-01		
1,2-Dibromoethane	106-93-4	0.05	0.05	1.41E-05		2.82E-05		
Dibromochloromethane (THM)	124-48-1	80.	60.	1.60E-02		3.20E-02		
1,2-Dibromo-3-chloropropane (DCP)	96-12-8	0.2	0.2	8.64E-05		1.73E-04		
Dibutyl phthalate	84-74-2	-	1,000.	2.52E+00		5.04E+00		
Dicamba	1918-00-9	-	300.	7.76E-02		1.55E-01		
1,2-Dichlorobenzene	95-50-1	600.	600.	5.84E-01		1.17E+00		
1,3-Dichlorobenzene	541-73-1	-	600.	5.76E-01		1.15E+00		
1,4-Dichlorobenzene	106-46-7	75.	75.	7.20E-02		1.44E-01		
Dichlorodifluoromethane	75-71-8	-	1,000.	1.54E+00		3.09E+00		
1,1-Dichloroethane	75-34-3	-	850.	2.41E-01		4.83E-01		
1,2-Dichloroethane	107-06-2	5.	5.	1.42E-03		2.84E-03		
1,1-Dichloroethylene	75-35-4	7.	7.	2.51E-03		5.02E-03		
1,2-Dichloroethylene (cis)	156-59-2	70.	70.	2.06E-02		4.12E-02	0.027	
1,2-Dichloroethylene (trans)	156-60-5	100.	100.	2.94E-02		5.88E-02		
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	70.	70.	1.81E-02		3.62E-02		
1,2-Dichloropropane	78-87-5	5.	5.	1.66E-03		3.32E-03		
1,3-Dichloropropene (cis/trans) (Toluene)	542-75-6	-	0.4	1.43E-04		2.86E-04		

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2 - 4'

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Di (2-ethylhexyl) phthalate	117-81-7	6.	6.	1.44E+00		2.88E+00		
Dimethoate	60-51-5	-	2.	4.51E-04		9.01E-04		
2,4-Dinitrotoluene	121-14-2	-	0.05	6.75E-05		1.35E-04		
2,6-Dinitrotoluene	606-20-2	-	0.05	6.88E-05		1.38E-04		
Dinitrotoluene, Total Residues	25321-14-6	-	0.05	6.88E-05		1.38E-04		
Dinoseb	88-85-7	7.	7.	6.15E-02		1.23E-01		
1,4-Dioxane (p-dioxane)	123-91-1	-	3.	6.15E-04		1.23E-03		
Dioxin (2,3,7,8-TCDD)	1746-01-6	3.00E-05	3.00E-05	1.50E-05		3.00E-05		
Endrin	72-20-8	2.	2.	8.08E-02		1.62E-01		
EPTC	759-94-4	-	250.	1.32E-01		2.64E-01		

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2-4'

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csi\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csi_search))

NR 140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF ->	2.00	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance!
Ethylbenzene	100-41-4	700.	700.	7.85E-01		1.57E+00	0.027	
Ethyl Ether (Diethyl Ether)	60-29-7	-	1,000.	2.24E-01		4.48E-01		
Ethylene glycol	107-21-1	-	14,000.	2.83E+00		5.66E+00		
Fluoranthene	206-44-0	-	400.	4.44E+01		8.89E+01		
Fluorene (PAH)	86-73-7	-	400.	7.40E+00		1.48E+01		
Fluoride	7782-41-4	4,000.	4,000.	6.01E+02		1.20E+03		
Fluorotrichloromethane	75-69-4	-	3,490.	2.24E+00		4.48E+00		
Formaldehyde	50-00-0	-	1,000.	2.02E-01		4.04E-01		
Heptachlor	76-44-8	0.4	0.4	3.31E-02		6.62E-02		
Heptachlor epoxide	1024-57-3	0.2	0.2	4.08E-03		8.16E-03		
Hexachlorobenzene	118-74-1	1.	1.	1.26E-02		2.52E-02		
n-Hexane	110-54-3	-	600.	4.22E+00		8.44E+00		
Lead	7439-92-1	15.	15.	1.35E+01		2.70E+01		
Lindane	58-89-9	0.2	0.2	1.16E-03		2.32E-03		
Manganese	7439-96-5	-	300.	1.96E+01		3.92E+01		
Mercury	7439-97-6	2.	2.	1.04E-01		2.08E-01		
Methanol	67-56-1	-	5,000.	1.01E+00		2.02E+00		
Methoxychlor	72-43-5	40.	40.	2.16E+00		4.32E+00		
Methylene chloride	75-09-2	5.	5.	1.28E-03		2.56E-03		
Methyl ethyl ketone (MEK)	78-93-3	-	4,000.	8.33E-01		1.67E+00		
Methyl isobutyl ketone (MIBK)	108-10-1	-	500.	1.13E-01		2.27E-01		
Methyl tert-butyl ether (MTBE)	1634-04-4	-	60.	1.35E-02		2.70E-02		
Metolachlor/s-Metolachlor	51218-45-2	-	100.	1.18E-01		2.36E-01		
Metrizobuzin	21087-64-9	-	70.	2.14E-02		4.27E-02		
Molybdenum	7439-98-7	-	40.	8.10E-01		1.62E+00		
Monochlorobenzene	108-90-7	100.	100.	6.79E-02		1.36E-01		
Naphthalene	91-20-3	-	100.	3.29E-01		6.58E-01		
Nickel	7440-02-0	-	100.	6.53E+00		1.31E+01		
N-Nitrosodiphenylamine (NDPA)	86-30-6	-	7.	3.82E-02		7.64E-02		
Pentachlorophenol (PCP)	87-86-5	1.	1.	1.01E-02		2.02E-02		
Phenol	108-95-2	-	2,000.	1.15E+00		2.29E+00		
Picloram	1918-02-1	500.	500.	1.39E-01		2.78E-01		
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5	0.03	4.69E-03		9.38E-03		
Prometon	1610-18-0	-	100.	4.74E-02		9.49E-02		
Propazine	139-40-2	-	10.	8.89E-03		1.78E-02		
Pyrene (PAH)	129-00-0	-	250.	2.71E+01		5.41E+01		
Pyridine	110-86-1	-	10.	3.43E-03		6.87E-03		
Selenium	7782-49-2	50.	50.	2.60E-01		5.20E-01		
Silver	7440-22-4	-	50.	4.25E-01		8.50E-01		
Simazine	122-34-9	4.	4.	1.97E-03		3.94E-03		
Styrene	100-42-5	100.	100.	1.10E-01		2.20E-01		
Tertiary Butyl Alcohol (TBA)	75-65-0	-	12.	2.45E-03		4.90E-03		
1,1,1,2-Tetrachloroethane	630-20-6	-	70.	2.67E-02		5.34E-02		
1,1,2,2-Tetrachloroethane	79-34-5	-	0.2	7.82E-05		1.56E-04		
Tetrachloroethylene (PCE)	127-18-4	5.	5.	2.27E-03	4.54E-03	9.3	E	
Tetrahydrofuran	109-99-9	-	50.	1.11E-02		2.22E-02		
Thallium	7440-28-0	2.	2.	1.42E-01		2.84E-01		
Toluene	108-88-3	1,000.	800.	5.54E-01	1.11E+00	0.031		
Toxaphene	8001-35-2	3.	3.	4.64E-01		9.28E-01		
1,2,4-Trichlorobenzene	120-82-1	70.	70.	2.04E-01		4.08E-01		
1,1,1-Trichloroethane	71-55-6	200.	200.	7.01E-02		1.40E-01		
1,1,2-Trichloroethane	79-00-5	5.	5.	1.62E-03		3.24E-03		
Trichloroethylene (TCE)	79-01-6	5.	5.	1.79E-03		3.58E-03		
2,4-D-Trichlorophenoxypropanoic acid (2,4-D-TPGAA)	93-72-1	50.	50.	2.75E-02		5.50E-02		
1,2,3-Trichloropropane	96-18-4	-	60.	2.59E-02		5.19E-02		

02-41-119925

B-9

S-2

2-4

**Residual Contaminant Levels Protective of Groundwater Quality**  
 (Soil-to-Groundwater Scenario Results from: [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search))

NR140 Substance	NR 140 CAS	Fed MCL (ug/l) (If Red, MCL>ES)	NR 140 ES (ug/l)	RCL-gw (mg/kg) DF=1	Use 2, or input the calculated site-specific DF - ->	INPUT NUMERIC SOIL Site Data Max (mg/kg)	Flag E = Individual Exceedance
Trifluralin	1582-09-8	-	7.5	2.47E-01	4.95E-01		
Trichloroethylene (1,2,1,1-trichloroethane)	95-63-6 / 108-67-8	-	480.	6.91E-01	1.38E+00		
Vanadium	7440-62-2	-	30.	3.00E+01	6.00E+01		
Vinyl chloride	75-01-4	2.	0.2	6.90E-05	1.38E-04	0.01	E
Xylenes (m-, o-, p- combined)	1330-20-7	10,000.	2,000.	1.97E+00	3.94E+00	0.099	

02-41-119925

B-9

S-2

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## **Appendix D**

### **Groundwater Quality Test Results**

CHAIN OF JUSTODY RECORD

# Synergy

## Environmental Lab, Inc.

Chain # No. 270

Page 01 of 01

Lab I.D. #	
Account No.:	Quote No.:
Project #: 3023	
Sampler (signature) Raghu B. Singh	

Project (Name / Location): 3217 W Villard Avenue, Milwaukee, WI 53209

Reports To: Raghu B. Singh Invoice To: Frank Jaber

Company GM Enterprises, Inc. Company Villard Foodtown, LLC

Address 124 W Scott Street Address 3217 W Villard Avenue

City State Zip Fond du Lac, WI 54937 City State Zip Milwaukee, WI 53209

Phone (262) 853-0712 Phone

FAX (920) 923-3950 FAX

## Sample Handling Request

Rush Analysis Date Required  
(Rushes accepted only with prior authorization) Normal Turn Around

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	Analysis Requested		Other Analysis		PID/FID									
										DRO (Mod DRO Sep 96)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8221)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 5422)	VOC (EPA 8280)	8-RCRRA METALS
S03096SA	MW-1	5/21/06	8:30	X	N/A	3	GW	HCl															
B	MW-2	11	9:15	X	N/A	3	GW	HCl															
C	MW-3	11	10:00	X	N/A	3	GW	HCl															
D	MW-4	11	10:30	X	N/A	3	GW	HCl															
E	MW-5	11	12:10	X	N/A	3	GW	HCl															
F	MW-6	4	1:55	X	N/A	3	GW	HCl															
G	MW-7	6	3:45	X	N/A	3	GW	HCl															
H	PZ-1	4	5:30	X	N/A	3	GW	HCl															
I	PZ-2	7	7:30	X	N/A	3	GW	HCl															

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: ClerkTemp. of Temp. Blank: °C On Ice: XLat: X Yes    No   

Relinquished By: (sign)

Raghu B. Singh

Time

Date

Received By: (sign)

Time

Date

Arrived in Laboratory By: PJTime: 1308Date: 5/3/06

# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

RAGHU B SINGH, PH D  
OM ENTERPRISES, INC.  
124 W. SCOTT STREET  
FOND DU LAC, WI 54935

**Report Date** 06-May-16

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

**Lab Code** 5030965A  
**Sample ID** MW-1  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
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**Organic**

**VOC's**

Benzene	< 88	ug/l	88	280	200	8260B		5/4/2016	CJR	1
Bromobenzene	< 96	ug/l	96	300	200	8260B		5/4/2016	CJR	1
Bromodichloromethane	< 92	ug/l	92	300	200	8260B		5/4/2016	CJR	1
Bromoform	< 92	ug/l	92	300	200	8260B		5/4/2016	CJR	1
tert-Butylbenzene	< 220	ug/l	220	680	200	8260B		5/4/2016	CJR	1
sec-Butylbenzene	< 240	ug/l	240	760	200	8260B		5/4/2016	CJR	1
n-Butylbenzene	< 200	ug/l	200	660	200	8260B		5/4/2016	CJR	1
Carbon Tetrachloride	< 102	ug/l	102	320	200	8260B		5/4/2016	CJR	1
Chlorobenzene	< 92	ug/l	92	280	200	8260B		5/4/2016	CJR	1
Chloroethane	< 130	ug/l	130	420	200	8260B		5/4/2016	CJR	1
Chloroform	< 86	ug/l	86	280	200	8260B		5/4/2016	CJR	1
Chloromethane	< 380	ug/l	380	1200	200	8260B		5/4/2016	CJR	1
2-Chlorotoluene	< 80	ug/l	80	260	200	8260B		5/4/2016	CJR	1
4-Chlorotoluene	< 126	ug/l	126	400	200	8260B		5/4/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 280	ug/l	280	900	200	8260B		5/4/2016	CJR	1
Dibromochloromethane	< 90	ug/l	90	280	200	8260B		5/4/2016	CJR	1
1,4-Dichlorobenzene	< 98	ug/l	98	320	200	8260B		5/4/2016	CJR	1
1,3-Dichlorobenzene	< 104	ug/l	104	320	200	8260B		5/4/2016	CJR	1
1,2-Dichlorobenzene	< 92	ug/l	92	300	200	8260B		5/4/2016	CJR	1
Dichlorodifluoromethane	< 174	ug/l	174	560	200	8260B		5/4/2016	CJR	1
1,2-Dichloroethane	< 96	ug/l	96	300	200	8260B		5/4/2016	CJR	1
1,1-Dichloroethane	< 220	ug/l	220	720	200	8260B		5/4/2016	CJR	1
1,1-Dichloroethene	< 130	ug/l	130	420	200	8260B		5/4/2016	CJR	1
cis-1,2-Dichloroethene	2260	ug/l	90	280	200	8260B		5/4/2016	CJR	1
trans-1,2-Dichloroethene	< 108	ug/l	108	340	200	8260B		5/4/2016	CJR	1
1,2-Dichloropropane	< 86	ug/l	86	274	200	8260B		5/4/2016	CJR	1
2,2-Dichloropropane	< 620	ug/l	620	1960	200	8260B		5/4/2016	CJR	1
1,3-Dichloropropane	< 84	ug/l	84	260	200	8260B		5/4/2016	CJR	1
Di-isopropyl ether	< 88	ug/l	88	280	200	8260B		5/4/2016	CJR	1
EDB (1,2-Dibromoethane)	< 126	ug/l	126	400	200	8260B		5/4/2016	CJR	1
Ethylbenzene	< 142	ug/l	142	460	200	8260B		5/4/2016	CJR	1
Hexachlorobutadiene	< 440	ug/l	440	1420	200	8260B		5/4/2016	CJR	1
Isopropylbenzene	< 164	ug/l	164	520	200	8260B		5/4/2016	CJR	1

Project Name 3217 W. VILLARD AVE.,

Invoice # E30965

Project # 3023

Lab Code 5030965A

Sample ID MW-1

Sample Matrix Water

Sample Date 5/2/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 220	ug/l	220	700	200	8260B		5/4/2016	CJR	1
Methylene chloride	< 260	ug/l	260	840	200	8260B		5/4/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 220	ug/l	220	740	200	8260B		5/4/2016	CJR	1
Naphthalene	< 320	ug/l	320	1040	200	8260B		5/4/2016	CJR	1
n-Propylbenzene	< 154	ug/l	154	480	200	8260B		5/4/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 104	ug/l	104	340	200	8260B		5/4/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 96	ug/l	96	300	200	8260B		5/4/2016	CJR	1
Tetrachloroethene	22100	ug/l	98	300	200	8260B		5/4/2016	CJR	1
Toluene	< 88	ug/l	88	280	200	8260B		5/4/2016	CJR	1
1,2,4-Trichlorobenzene	< 340	ug/l	340	1120	200	8260B		5/4/2016	CJR	1
1,2,3-Trichlorobenzene	< 540	ug/l	540	1720	200	8260B		5/4/2016	CJR	1
1,1,1-Trichloroethane	< 168	ug/l	168	540	200	8260B		5/4/2016	CJR	1
1,1,2-Trichloroethane	< 96	ug/l	96	304	200	8260B		5/4/2016	CJR	1
Trichloroethene (TCE)	2940	ug/l	94	300	200	8260B		5/4/2016	CJR	1
Trichlorofluoromethane	< 174	ug/l	174	560	200	8260B		5/4/2016	CJR	1
1,2,4-Trimethylbenzene	< 320	ug/l	320	1000	200	8260B		5/4/2016	CJR	1
1,3,5-Trimethylbenzene	< 300	ug/l	300	960	200	8260B		5/4/2016	CJR	1
Vinyl Chloride	104 "J"	ug/l	34	108	200	8260B		5/4/2016	CJR	1
m&p-Xylene	< 440	ug/l	440	1380	200	8260B		5/4/2016	CJR	1
o-Xylene	< 180	ug/l	180	580	200	8260B		5/4/2016	CJR	1
SUR - Dibromofluoromethane	103	REC %			200	8260B		5/4/2016	CJR	1
SUR - Toluene-d8	104	REC %			200	8260B		5/4/2016	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			200	8260B		5/4/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	117	REC %			200	8260B		5/4/2016	CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

**Lab Code** 5030965B  
**Sample ID** MW-2  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B			CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B			CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B			CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B			CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B			CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B			CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B			CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B			CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B			CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B			CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B			CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B			CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B			CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B			CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B			CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B			CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B			CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B			CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B			CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B			CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B			CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B			CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B			CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B			CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B			CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B			CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B			CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B			CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B			CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B			CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B			CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B			CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B			CJR	1
SUR - 4-Bromofluorobenzene	103	REC %			1	8260B			CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B			CJR	1
SUR - Toluene-d8	101	REC %			1	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %			1	8260B			CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

**Lab Code** 5030965C  
**Sample ID** MW-3  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B			CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B			CJR	1
n-Butylbenzene	< 1	ug/l		1	3.3	1	8260B		CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B			CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B			CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B			CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B			CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B			CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B			CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B			CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B			CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
1,1-Dichloroethane	< 1.1	ug/l		1.1	3.6	1	8260B		CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
cis-1,2-Dichloroethene	5.9	ug/l	0.45	1.4	1	8260B			CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B			CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B			CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B			CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B			CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B			CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B			CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B			CJR	1
p-Isopropyltoluene	< 1.1	ug/l		1.1	3.5	1	8260B		CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B			CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B			CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Tetrachloroethene	1.17 "J"	ug/l	0.49	1.5	1	8260B			CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B			CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B			CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B			CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B			CJR	1
Trichloroethene (TCE)	0.66 "J"	ug/l	0.47	1.5	1	8260B			CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B			CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B			CJR	1
Vinyl Chloride	2.01	ug/l	0.17	0.54	1	8260B			CJR	1
m-&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B			CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B			CJR	1
SUR - Toluene-d8	104	REC %			1	8260B			CJR	1
SUR - 4-Bromofluorobenzene	100	REC %			1	8260B			CJR	1
SUR - Dibromofluoromethane	100	REC %			1	8260B			CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

**Lab Code** 5030965D  
**Sample ID** MW-4  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Organic										
VOC's										
Benzene	< 4.4	ug/l	4.4	14	10	8260B			CJR	1
Bromobenzene	< 4.8	ug/l	4.8	15	10	8260B			CJR	1
Bromodichloromethane	< 4.6	ug/l	4.6	15	10	8260B			CJR	1
Bromoform	< 4.6	ug/l	4.6	15	10	8260B			CJR	1
tert-Butylbenzene	< 11	ug/l	11	34	10	8260B			CJR	1
sec-Butylbenzene	< 12	ug/l	12	38	10	8260B			CJR	1
n-Butylbenzene	< 10	ug/l	10	33	10	8260B			CJR	1
Carbon Tetrachloride	< 5.1	ug/l	5.1	16	10	8260B			CJR	1
Chlorobenzene	< 4.6	ug/l	4.6	14	10	8260B			CJR	1
Chloroethane	< 6.5	ug/l	6.5	21	10	8260B			CJR	1
Chloroform	< 4.3	ug/l	4.3	14	10	8260B			CJR	1
Chloromethane	< 19	ug/l	19	60	10	8260B			CJR	1
2-Chlorotoluene	< 4	ug/l	4	13	10	8260B			CJR	1
4-Chlorotoluene	< 6.3	ug/l	6.3	20	10	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 14	ug/l	14	45	10	8260B			CJR	1
Dibromochloromethane	< 4.5	ug/l	4.5	14	10	8260B			CJR	1
1,4-Dichlorobenzene	< 4.9	ug/l	4.9	16	10	8260B			CJR	1
1,3-Dichlorobenzene	< 5.2	ug/l	5.2	16	10	8260B			CJR	1
1,2-Dichlorobenzene	< 4.6	ug/l	4.6	15	10	8260B			CJR	1
Dichlorodifluoromethane	< 8.7	ug/l	8.7	28	10	8260B			CJR	1
1,2-Dichloroethane	< 4.8	ug/l	4.8	15	10	8260B			CJR	1
1,1-Dichloroethane	< 11	ug/l	11	36	10	8260B			CJR	1
1,1-Dichloroethene	< 6.5	ug/l	6.5	21	10	8260B			CJR	1
cis-1,2-Dichloroethene	313	ug/l	4.5	14	10	8260B			CJR	1
trans-1,2-Dichloroethene	15.7 "J"	ug/l	5.4	17	10	8260B			CJR	1
1,2-Dichloropropane	< 4.3	ug/l	4.3	13.7	10	8260B			CJR	1
2,2-Dichloropropane	< 31	ug/l	31	98	10	8260B			CJR	1
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	10	8260B			CJR	1
Di-isopropyl ether	< 4.4	ug/l	4.4	14	10	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 6.3	ug/l	6.3	20	10	8260B			CJR	1
Ethylbenzene	< 7.1	ug/l	7.1	23	10	8260B			CJR	1
Hexachlorobutadiene	< 22	ug/l	22	71	10	8260B			CJR	1
Isopropylbenzene	< 8.2	ug/l	8.2	26	10	8260B			CJR	1
p-Isopropyltoluene	< 11	ug/l	11	35	10	8260B			CJR	1
Methylene chloride	< 13	ug/l	13	42	10	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 11	ug/l	11	37	10	8260B			CJR	1
Naphthalene	< 16	ug/l	16	52	10	8260B			CJR	1
n-Propylbenzene	< 7.7	ug/l	7.7	24	10	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 5.2	ug/l	5.2	17	10	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 4.8	ug/l	4.8	15	10	8260B			CJR	1
Tetrachloroethene	44	ug/l	4.9	15	10	8260B			CJR	1
Toluene	< 4.4	ug/l	4.4	14	10	8260B			CJR	1
1,2,4-Trichlorobenzene	< 17	ug/l	17	56	10	8260B			CJR	1
1,2,3-Trichlorobenzene	< 27	ug/l	27	86	10	8260B			CJR	1
1,1,1-Trichloroethane	< 8.4	ug/l	8.4	27	10	8260B			CJR	1
1,1,2-Trichloroethane	< 4.8	ug/l	4.8	15.2	10	8260B			CJR	1
Trichloroethene (TCE)	24.6	ug/l	4.7	15	10	8260B			CJR	1
Trichlorofluoromethane	< 8.7	ug/l	8.7	28	10	8260B			CJR	1
1,2,4-Trimethylbenzene	< 16	ug/l	16	50	10	8260B			CJR	1
1,3,5-Trimethylbenzene	< 15	ug/l	15	48	10	8260B			CJR	1
Vinyl Chloride	60	ug/l	1.7	5.4	10	8260B			CJR	1
m&p-Xylene	< 22	ug/l	22	69	10	8260B			CJR	1
o-Xylene	< 9	ug/l	9	29	10	8260B			CJR	1
SUR - Toluene-d8	106	REC %			10	8260B			CJR	1
SUR - Dibromofluoromethane	99	REC %			10	8260B			CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			10	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	96	REC %			10	8260B			CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

**Lab Code** 5030965E  
**Sample ID** MW-5  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B			CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B			CJR	1
n-Butylbenzene	< 1	ug/l		3.3	1	8260B			CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B			CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B			CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B			CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B			CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B			CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B			CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B			CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B			CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B			CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B			CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B			CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B			CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B			CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B			CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B			CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B			CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B			CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B			CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B			CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B			CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B			CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B			CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B			CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B			CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B			CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B			CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B			CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B			CJR	1
m-&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B			CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B			CJR	1
SUR - 4-Bromofluorobenzene	109	REC %		1		8260B			CJR	1
SUR - Dibromofluoromethane	104	REC %		1		8260B			CJR	1
SUR - Toluene-d8	103	REC %		1		8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	91	REC %		1		8260B			CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

**Lab Code** 5030965F  
**Sample ID** MW-6  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Organic										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B			CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B			CJR	1
n-Butylbenzene	< 1	ug/l		3.3	1	8260B			CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B			CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B			CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B			CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B			CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B			CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B			CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B			CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B			CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B			CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B			CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B			CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B			CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B			CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B			CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B			CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B			CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B			CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B			CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B			CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B			CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B			CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B			CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B			CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B			CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B			CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B			CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B			CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B			CJR	1
m-&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B			CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	109	REC %			1	8260B			CJR	1
SUR - 4-Bromofluorobenzene	105	REC %			1	8260B			CJR	1
SUR - Dibromofluoromethane	101	REC %			1	8260B			CJR	1
SUR - Toluene-d8	102	REC %			1	8260B			CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023  
**Lab Code** 5030965G  
**Sample ID** MW-7  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

**Invoice #** E30965

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B			CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B			CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B			CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B			CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B			CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B			CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B			CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B			CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B			CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B			CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B			CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B			CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B			CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B			CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B			CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B			CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B			CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B			CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B			CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B			CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B			CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B			CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B			CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B			CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B			CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B			CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B			CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B			CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B			CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B			CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B			CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B			CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B			CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B			CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B			CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B			CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B			CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B			CJR	1
m,p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B			CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B			CJR	1
SUR - 1,2-Dichloroethane-d4	111	REC %			1	8260B			CJR	1
SUR - 4-Bromofluorobenzene	102	REC %			1	8260B			CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B			CJR	1
SUR - Toluene-d8	104	REC %			1	8260B			CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

**Lab Code** 5030965H  
**Sample ID** PZ-1  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic VOC's</b>										
Benzene										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		5/4/2016	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		5/4/2016	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		5/4/2016	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		5/4/2016	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		5/4/2016	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		5/4/2016	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		5/4/2016	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		5/4/2016	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		5/4/2016	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		5/4/2016	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		5/4/2016	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		5/4/2016	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		5/4/2016	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		5/4/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		5/4/2016	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		5/4/2016	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		5/4/2016	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		5/4/2016	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		5/4/2016	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		5/4/2016	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		5/4/2016	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		5/4/2016	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		5/4/2016	CJR	1
cis-1,2-Dichloroethene	84	ug/l	0.45	1.4	1	8260B		5/4/2016	CJR	1
trans-1,2-Dichloroethene	0.99 "J"	ug/l	0.54	1.7	1	8260B		5/4/2016	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		5/4/2016	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		5/4/2016	CJR	1
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		5/4/2016	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		5/4/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		5/4/2016	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		5/4/2016	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		5/4/2016	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		5/4/2016	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		5/4/2016	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		5/4/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		5/4/2016	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		5/4/2016	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		5/4/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		5/4/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		5/4/2016	CJR	1
Tetrachloroethene	75	ug/l	0.49	1.5	1	8260B		5/4/2016	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		5/4/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		5/4/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		5/4/2016	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		5/4/2016	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		5/4/2016	CJR	1
Trichloroethene (TCE)	20.2	ug/l	0.47	1.5	1	8260B		5/4/2016	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		5/4/2016	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		5/4/2016	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		5/4/2016	CJR	1
Vinyl Chloride	0.97	ug/l	0.17	0.54	1	8260B		5/4/2016	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		5/4/2016	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		5/4/2016	CJR	1
SUR - Toluene-d8	98	REC %			1	8260B		5/4/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	88	REC %			1	8260B		5/4/2016	CJR	1
SUR - 4-Bromofluorobenzene	104	REC %			1	8260B		5/4/2016	CJR	1
SUR - Dibromofluoromethane	86	REC %			1	8260B		5/4/2016	CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

**Lab Code** 5030965I  
**Sample ID** PZ-2  
**Sample Matrix** Water  
**Sample Date** 5/2/2016

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
<b>Organic</b>										
VOC's										
Benzene	< 220	ug/l	220	700	500	8260B			CJR	1
Bromobenzene	< 240	ug/l	240	750	500	8260B			CJR	1
Bromodichloromethane	< 230	ug/l	230	750	500	8260B			CJR	1
Bromoform	< 230	ug/l	230	750	500	8260B			CJR	1
tert-Butylbenzene	< 550	ug/l	550	1700	500	8260B			CJR	1
sec-Butylbenzene	< 600	ug/l	600	1900	500	8260B			CJR	1
n-Butylbenzene	< 500	ug/l	500	1650	500	8260B			CJR	1
Carbon Tetrachloride	< 255	ug/l	255	800	500	8260B			CJR	1
Chlorobenzene	< 230	ug/l	230	700	500	8260B			CJR	1
Chloroethane	< 325	ug/l	325	1050	500	8260B			CJR	1
Chloroform	< 215	ug/l	215	700	500	8260B			CJR	1
Chloromethane	< 950	ug/l	950	3000	500	8260B			CJR	1
2-Chlorotoluene	< 200	ug/l	200	650	500	8260B			CJR	1
4-Chlorotoluene	< 315	ug/l	315	1000	500	8260B			CJR	1
1,2-Dibromo-3-chloropropane	< 700	ug/l	700	2250	500	8260B			CJR	1
Dibromo-chloromethane	< 225	ug/l	225	700	500	8260B			CJR	1
1,4-Dichlorobenzene	< 245	ug/l	245	800	500	8260B			CJR	1
1,3-Dichlorobenzene	< 260	ug/l	260	800	500	8260B			CJR	1
1,2-Dichlorobenzene	< 230	ug/l	230	750	500	8260B			CJR	1
Dichlorodifluoromethane	< 435	ug/l	435	1400	500	8260B			CJR	1
1,2-Dichloroethane	< 240	ug/l	240	750	500	8260B			CJR	1
1,1-Dichloroethane	< 550	ug/l	550	1800	500	8260B			CJR	1
1,1-Dichloroethene	< 325	ug/l	325	1050	500	8260B			CJR	1
cis-1,2-Dichloroethene	230 "J"	ug/l	225	700	500	8260B			CJR	1
trans-1,2-Dichloroethene	< 270	ug/l	270	850	500	8260B			CJR	1
1,2-Dichloropropane	< 215	ug/l	215	685	500	8260B			CJR	1
2,2-Dichloropropane	< 1550	ug/l	1550	4900	500	8260B			CJR	1
1,3-Dichloropropane	< 210	ug/l	210	650	500	8260B			CJR	1
Di-isopropyl ether	< 220	ug/l	220	700	500	8260B			CJR	1
EDB (1,2-Dibromoethane)	< 315	ug/l	315	1000	500	8260B			CJR	1
Ethylbenzene	< 355	ug/l	355	1150	500	8260B			CJR	1
Hexachlorobutadiene	< 1100	ug/l	1100	3550	500	8260B			CJR	1
Isopropylbenzene	< 410	ug/l	410	1300	500	8260B			CJR	1
p-Isopropyltoluene	< 550	ug/l	550	1750	500	8260B			CJR	1
Methylene chloride	< 650	ug/l	650	2100	500	8260B			CJR	1
Methyl tert-butyl ether (MTBE)	< 550	ug/l	550	1850	500	8260B			CJR	1
Naphthalene	< 800	ug/l	800	2600	500	8260B			CJR	1
n-Propylbenzene	< 385	ug/l	385	1200	500	8260B			CJR	1
1,1,2,2-Tetrachloroethane	< 260	ug/l	260	850	500	8260B			CJR	1
1,1,1,2-Tetrachloroethane	< 240	ug/l	240	750	500	8260B			CJR	1
Tetrachloroethene	39000	ug/l	245	750	500	8260B			CJR	1
Toluene	< 220	ug/l	220	700	500	8260B			CJR	1
1,2,4-Trichlorobenzene	< 850	ug/l	850	2800	500	8260B			CJR	1
1,2,3-Trichlorobenzene	< 1350	ug/l	1350	4300	500	8260B			CJR	1
1,1,1-Trichloroethane	< 420	ug/l	420	1350	500	8260B			CJR	1
1,1,2-Trichloroethane	< 240	ug/l	240	760	500	8260B			CJR	1
Trichloroethene (TCE)	670 "J"	ug/l	235	750	500	8260B			CJR	1
Trichlorofluoromethane	< 435	ug/l	435	1400	500	8260B			CJR	1
1,2,4-Trimethylbenzene	< 800	ug/l	800	2500	500	8260B			CJR	1
1,3,5-Trimethylbenzene	< 750	ug/l	750	2400	500	8260B			CJR	1
Vinyl Chloride	< 85	ug/l	85	270	500	8260B			CJR	1
m&p-Xylene	< 1100	ug/l	1100	3450	500	8260B			CJR	1
o-Xylene	< 450	ug/l	450	1450	500	8260B			CJR	1
SUR - Toluene-d8	101	REC %		500	8260B				CJR	1
SUR - 1,2-Dichloroethane-d4	103	REC %		500	8260B				CJR	1
SUR - 4-Bromofluorobenzene	112	REC %		500	8260B				CJR	1
SUR - Dibromofluoromethane	101	REC %		500	8260B				CJR	1

**Project Name** 3217 W. VILLARD AVE.,  
**Project #** 3023

**Invoice #** E30965

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

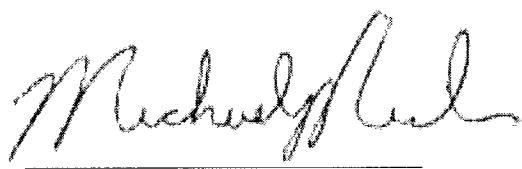
LOQ Limit of Quantitation

**Code**      **Comment**

1      Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

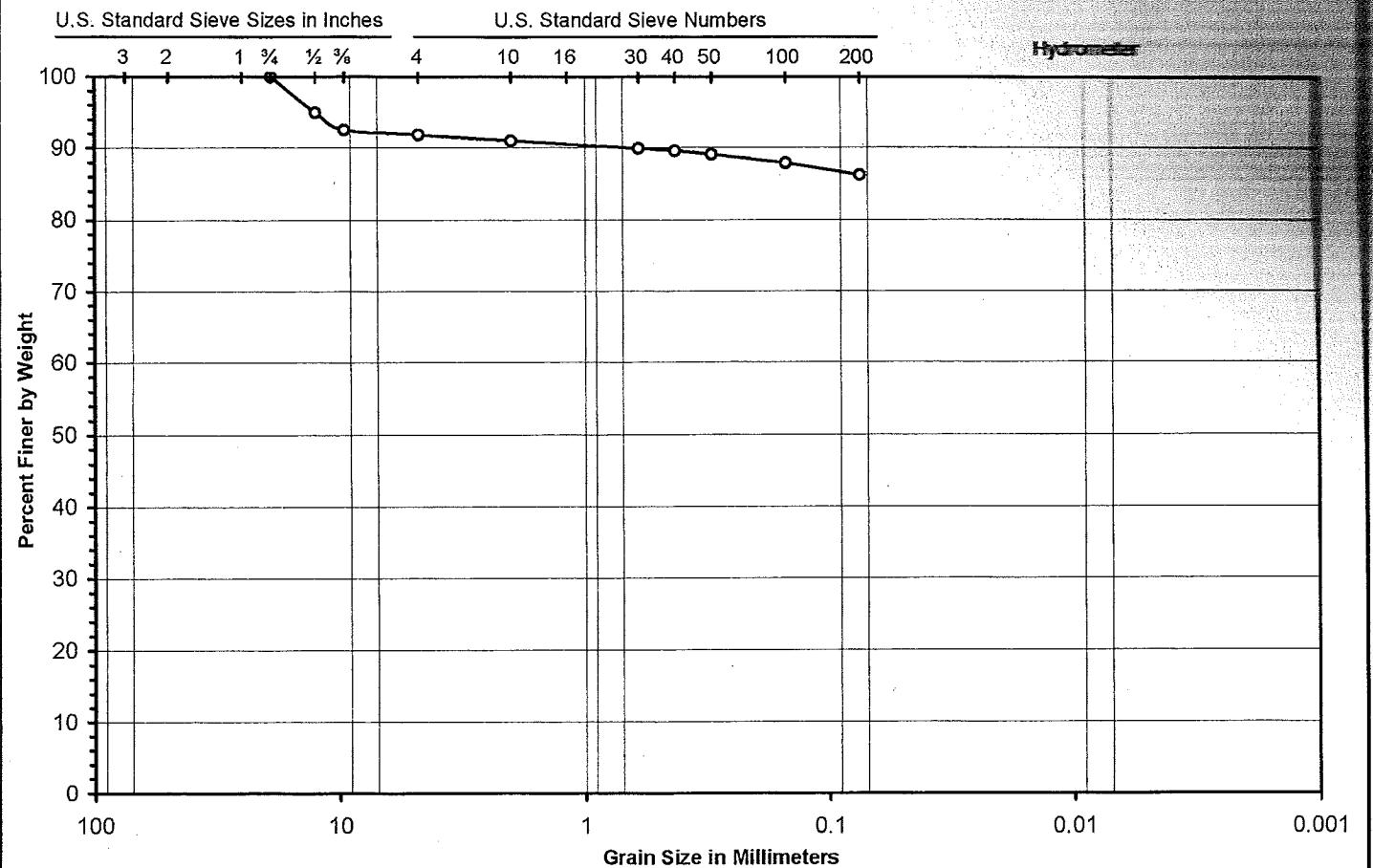
**Authorized Signature**



## **Appendix E**

### **Grain Size Analysis and Hydraulic Conductivity Testing**

## GRAIN SIZE ANALYSIS TEST RESULTS



<i>UNIFIED</i>	GRAVEL	SAND	SILT AND CLAY
AASHTO	GRAVEL	SAND	SILT AND CLAY

SIEVE SIZE	PERCENT FINER	SPEC	SAMPLE ID: B-5, MW-5, S-6, 10'-12'	
125 mm (5")	-	-	<u>Description/Classification</u>	Silt/Clay (ML/MH/CL/CH/CL-ML)
100 mm (4")	-	-		
90 mm (3½")	-	-		
75 mm (3")	-	-		
63 mm (2½")	-	-		
50 mm (2")	-	-		
37.5 mm (1½")	-	-	<u>Coefficients</u>	<u>Other Test Data</u>
31.5 mm (1¼")	-	-		
25.0 mm (1")	-	-		
19.0 mm (3/4")	100.0	-		
12.5 mm (1/2")	94.9	-		
9.5 mm (3/8")	92.5	-		
4.75 mm (# 4)	91.8	-		
2.36 mm (# 8)	-	-		
2.00 mm (# 10)	91.0	-		
1.18 mm (# 16)	-	-		
600 µm (# 30)	89.9	-	D60 = -- mm	Moisture Content = percent
425 µm (# 40)	89.5	-	D30 = -- mm	Dry Unit Weight = lbs./cu.ft.
300 µm (# 50)	89.0	-	D10 = -- mm	Hydraulic Conductivity = cm./sec.
180 µm (# 80)	-	-	Cu = --	Liquid Limit =
150 µm (# 100)	87.8	-	Cc = --	Plastic Limit =
75 µm (# 200)	86.2	-		



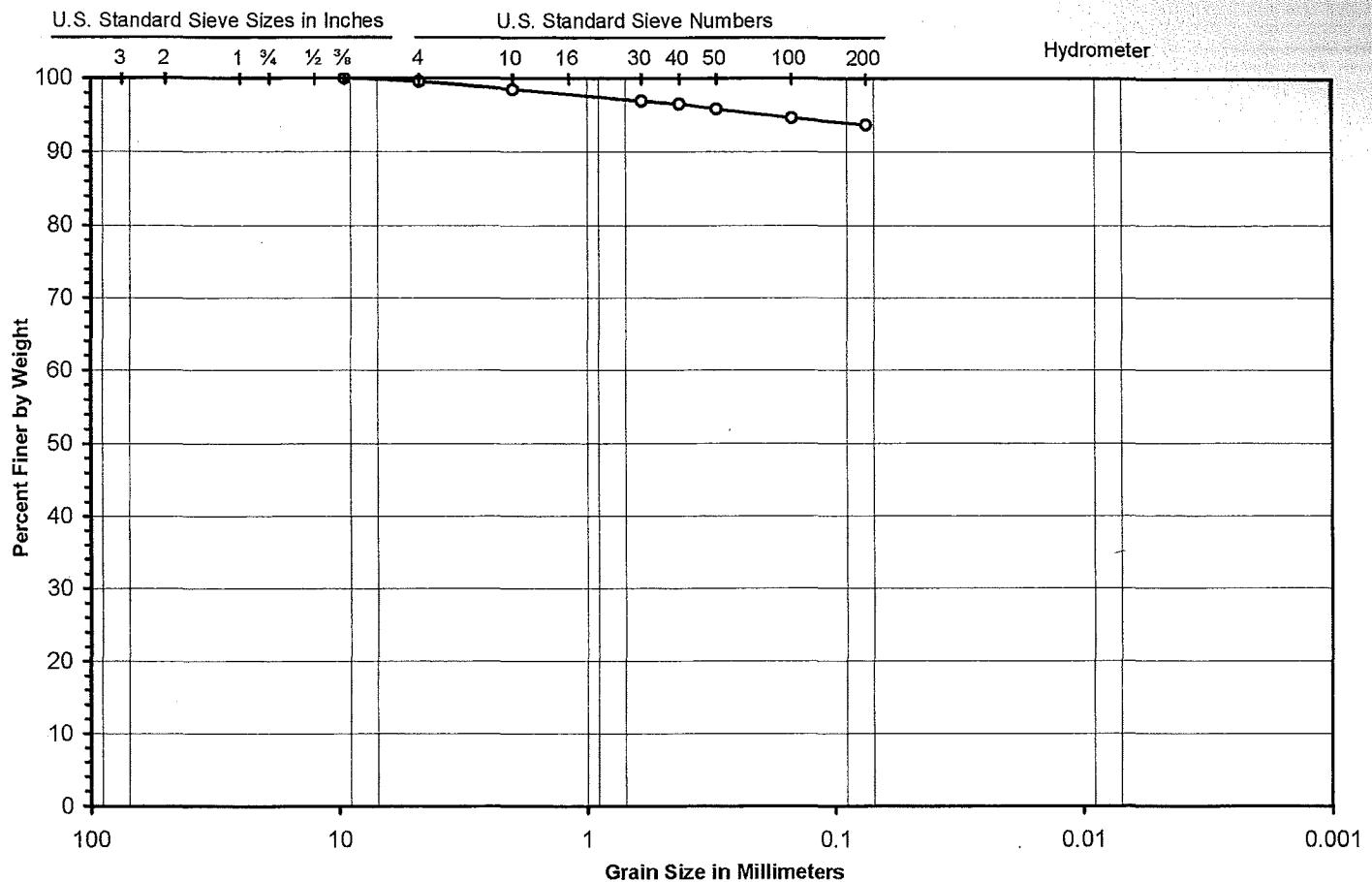
Job No. 0165-16-001

SHOP RITE GROCERY / VILLARD FOOTOWN  
3217 West Villard Avenue  
Milwaukee, Wisconsin 53209

For OM Enterprises, Inc.  
Project No. 3023

May 4, 2016

## GRAIN SIZE ANALYSIS TEST RESULTS



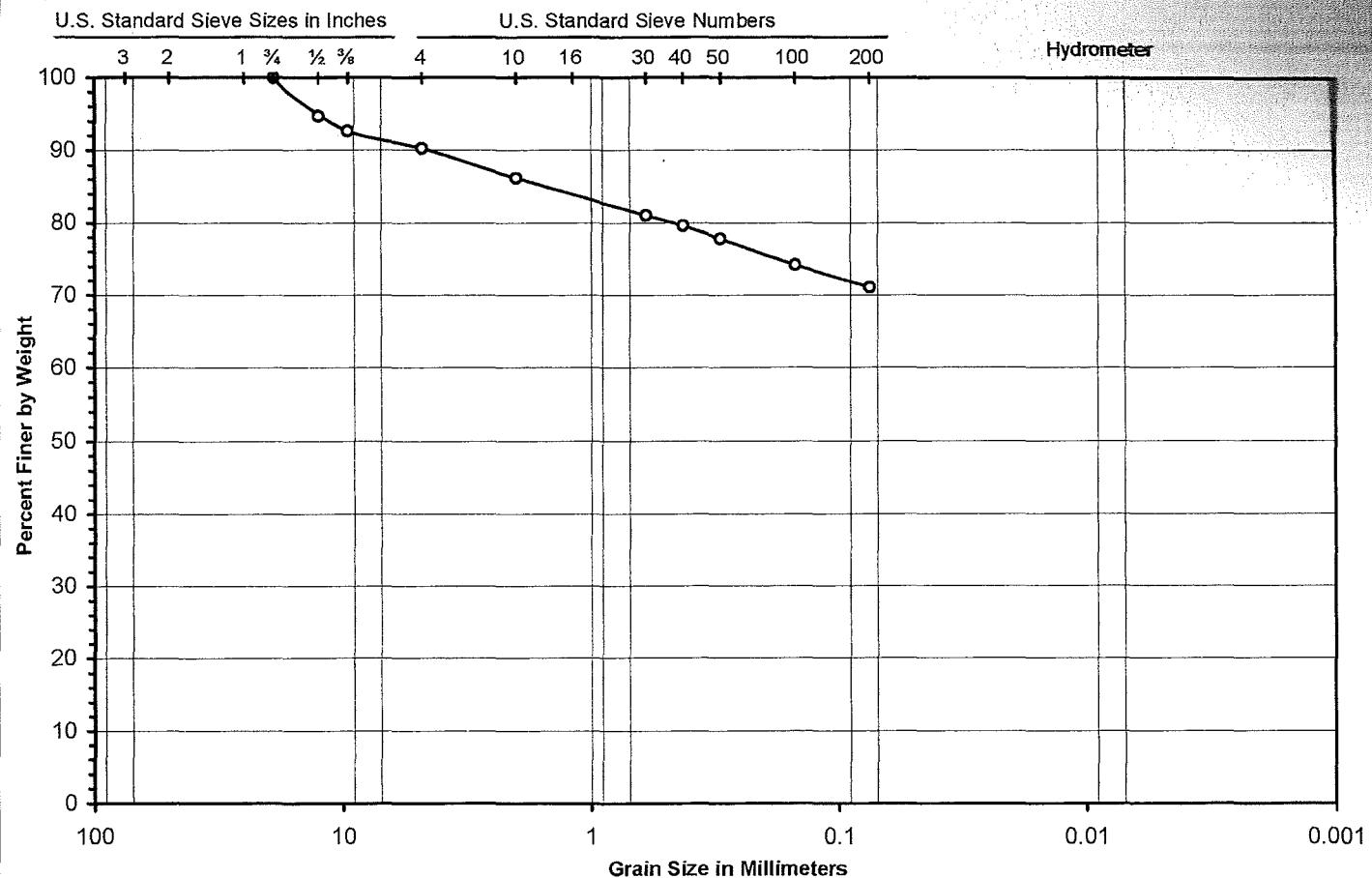
UNIFIED	GRAVEL	SAND	SILT AND CLAY
AASHTO	GRAVEL	SAND	SILT AND CLAY

SIEVE SIZE	PERCENT FINER	SPEC	SAMPLE ID: B-6, MW-6, S-6, 10'-12'	
125 mm (5")	-	-	Description/Classification  Silt/Clay (ML/MH/CL/CH/CL-ML)	
100 mm (4")	-	-		
90 mm (3½")	-	-		
75 mm (3")	-	-		
63 mm (2½")	-	-		
50 mm (2")	-	-		
37.5 mm (1½")	-	-		
31.5 mm (1¼")	-	-		
25.0 mm (1")	-	-		
19.0 mm (3/4")	-	-		
12.5 mm (1/2")	-	-	Coefficients  D <sub>60</sub> = -- mm D <sub>30</sub> = -- mm D <sub>10</sub> = -- mm C <sub>u</sub> = -- C <sub>c</sub> = --	Other Test Data  Moisture Content = percent Dry Unit Weight = lbs./cu.ft. Hydraulic Conductivity = cm./sec. Liquid Limit = Plastic Limit =
9.5 mm (3/8")	100.0	-		
4.75 mm (# 4)	99.6	-		
2.36 mm (# 8)	-	-		
2.00 mm (# 10)	98.5	-		
1.18 mm (# 16)	-	-	SHOP RITE GROCERY / VILLARD FOOTOWN 3217 West Villard Avenue Milwaukee, Wisconsin 53209  For OM Enterprises, Inc. Project No. 3023	
600 µm (# 30)	96.9	-		
425 µm (# 40)	96.5	-		
300 µm (# 50)	95.8	-		
180 µm (# 80)	-	-		
150 µm (# 100)	94.6	-	May 4, 2016	
75 µm (# 200)	93.7	-		



Job No. 0165-16-001

## GRAIN SIZE ANALYSIS TEST RESULTS



<b>UNIFIED</b>	GRAVEL	SAND	SILT AND CLAY
AASHTO	GRAVEL	SAND	SILT AND CLAY

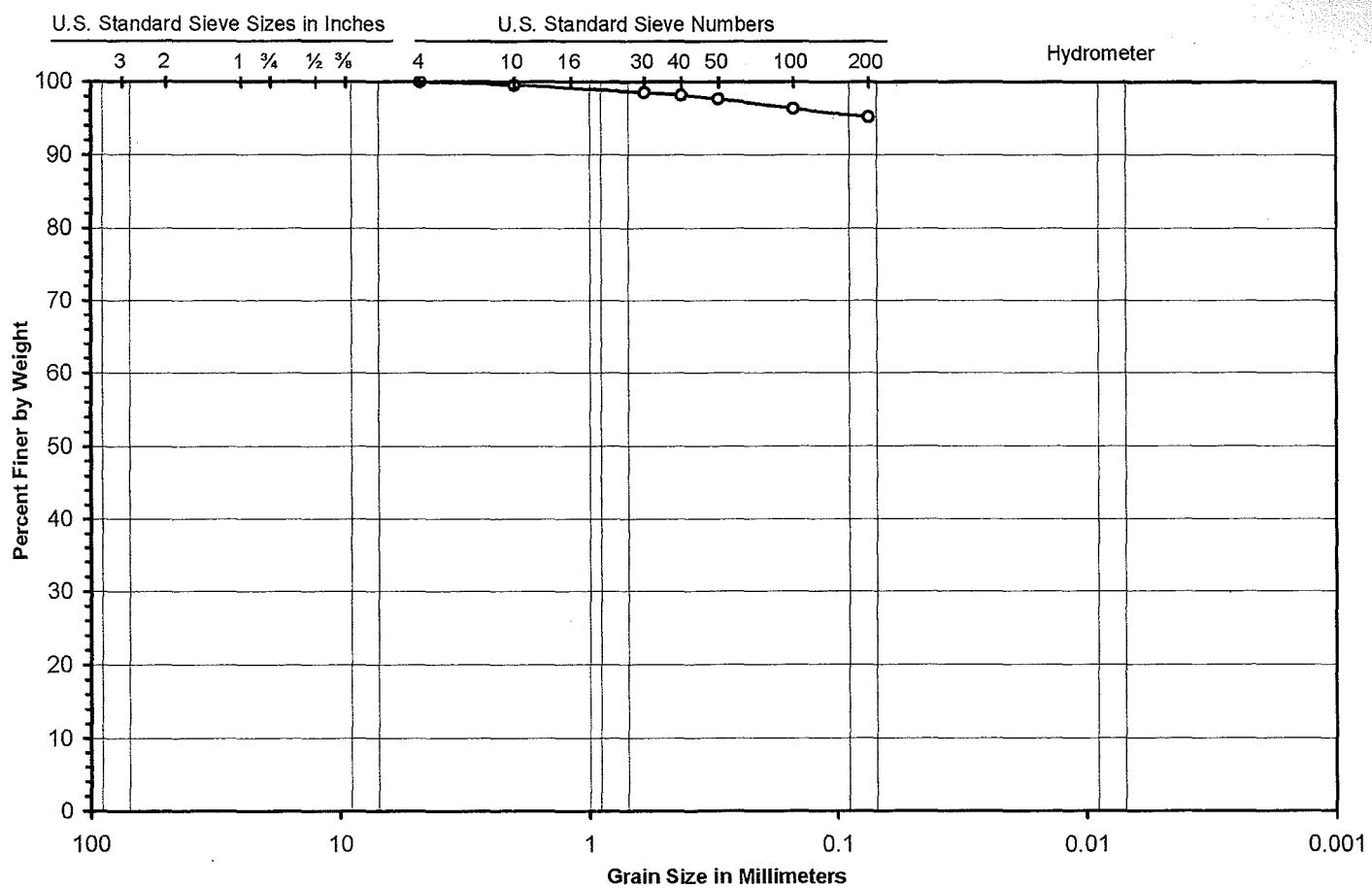
SIEVE SIZE	PERCENT FINER	SPEC	SAMPLE ID: B-7, MW-7, S-6, 10'-12'	
125 mm (5")	-	-	Description/Classification  Silt/Clay with sand (ML/MH/CL/CH/CL-ML)	
100 mm (4")	-	-		
90 mm (3 1/2")	-	-		
75 mm (3")	-	-		
63 mm (2 1/2")	-	-		
50 mm (2")	-	-	Coefficients  D60 = -- mm D30 = -- mm D10 = -- mm Cu = -- Cc = --	Other Test Data  Moisture Content = percent Dry Unit Weight = lbs./cu.ft. Hydraulic Conductivity = cm./sec. Liquid Limit = Plastic Limit =
37.5 mm (1 1/2")	-	-		
31.5 mm (1 1/4")	-	-		
25.0 mm (1")	-	-		
19.0 mm (3/4")	100.0	-		
12.5 mm (1/2")	94.7	-		
9.5 mm (3/8")	92.6	-		
4.75 mm (# 4)	90.3	-		
2.36 mm (# 8)	-	-		
2.00 mm (# 10)	86.2	-		
1.18 mm (# 16)	-	-	SHOP RITE GROCERY / VILLARD FOOTOWN 3217 West Villard Avenue Milwaukee, Wisconsin 53209	
600 µm (# 30)	81.0	-		
425 µm (# 40)	79.6	-		
300 µm (# 50)	77.8	-		
180 µm (# 80)	-	-		
150 µm (# 100)	74.2	-	For OM Enterprises, Inc. Project No. 3023	
75 µm (# 200)	71.1	-		



Job No. 0165-16-001

May 4, 2016

## GRAIN SIZE ANALYSIS TEST RESULTS



UNIFIED	GRAVEL	SAND	SILT AND CLAY
AASHTO	GRAVEL	SAND	SILT AND CLAY

SIEVE SIZE	PERCENT FINER	SPEC	SAMPLE ID: B-8, PZ-1, S-11, 20'-22'	
125 mm (5")	-	-	<u>Description/Classification</u>	
100 mm (4")	-	-	Silt/Clay (ML/MH/CL/CH/CL-ML)	
90 mm (3 1/2")	-	-		
75 mm (3")	-	-		
63 mm (2 1/2")	-	-		
50 mm (2")	-	-	<u>Coefficients</u>	
37.5 mm (1 1/2")	-	-	D60 = -- mm	Moisture Content = percent
31.5 mm (1 1/4")	-	-	D30 = -- mm	Dry Unit Weight = lbs./cu.ft.
25.0 mm (1")	-	-	D10 = -- mm	Hydraulic Conductivity = cm./sec.
19.0 mm (3/4")	-	-	Cu = --	Liquid Limit =
12.5 mm (1/2")	-	-	Cc = --	Plastic Limit =
9.5 mm (3/8")	-	-		
4.75 mm (# 4)	100.0	-		
2.36 mm (# 8)	-	-		
2.00 mm (# 10)	99.5	-		
1.18 mm (# 16)	-	-		
600 µm (# 30)	98.6	-		
425 µm (# 40)	98.2	-		
300 µm (# 50)	97.6	-		
180 µm (# 80)	-	-		
150 µm (# 100)	96.3	-		
75 µm (# 200)	95.2	-		



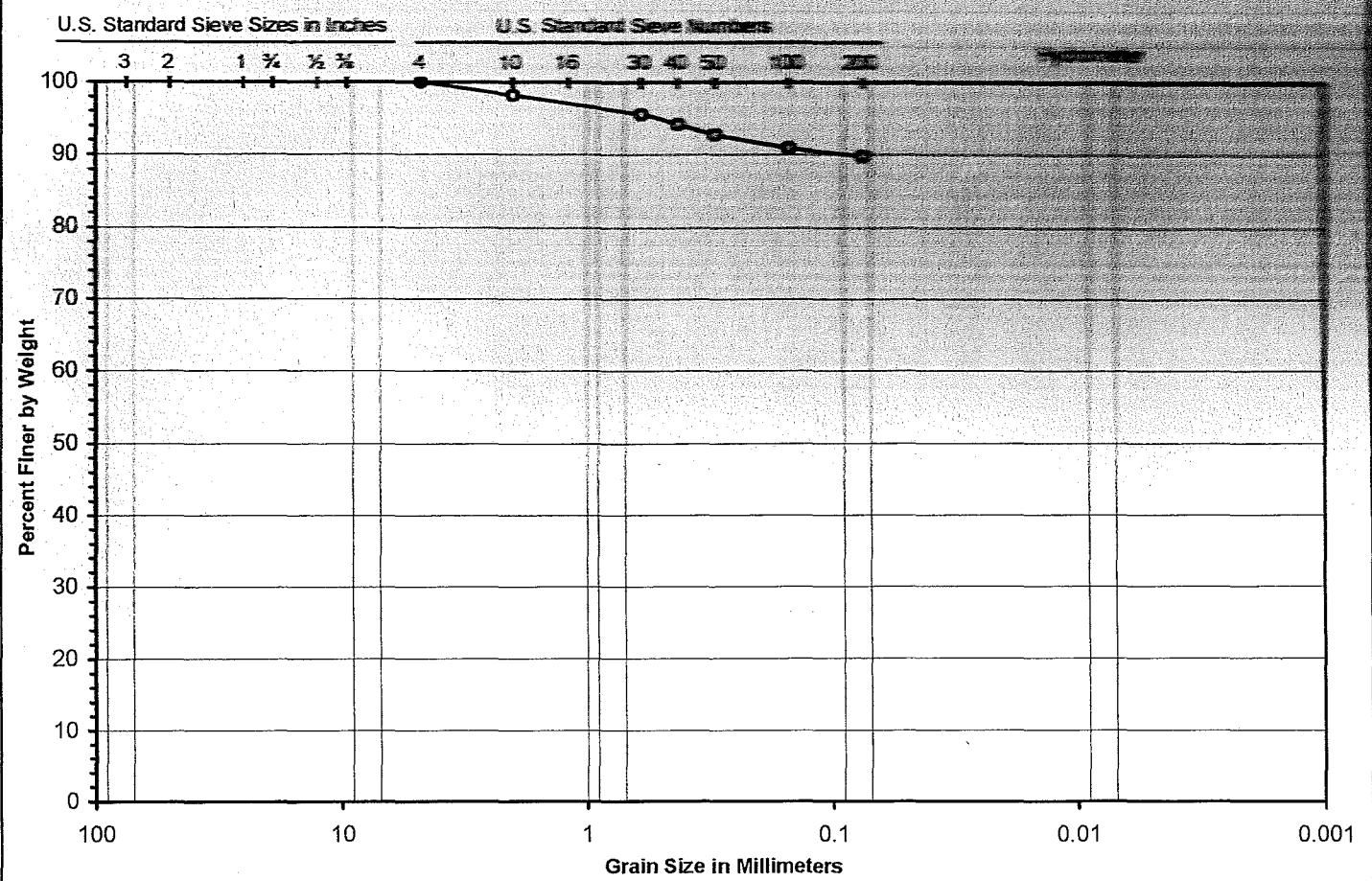
Job No. 0165-16-001

SHOP RITE GROCERY / VILLARD FOODTOWN  
3217 West Villard Avenue  
Milwaukee, Wisconsin 53209

For OM Enterprises, Inc.  
Project No. 3023

May 4, 2016

## GRAIN SIZE ANALYSIS TEST RESULTS



SIEVE SIZE	PERCENT FINER	SPEC	SAMPLE ID: B-9, PZ-2, S-11, 20'-22'	
125 mm (5")	-	-	<u>Description/Classification</u>  Silt/Clay (ML/MH/CL/CH/CL-ML)	
100 mm (4")	-	-		
90 mm (3½")	-	-		
75 mm (3")	-	-		
63 mm (2½")	-	-		
50 mm (2")	-	-		
37.5 mm (1½")	-	-		
31.5 mm (1¼")	-	-		
25.0 mm (1")	-	-		
19.0 mm (3/4")	-	-		
12.5 mm (1/2")	-	-	<u>Coefficients</u>  D <sub>60</sub> = -- mm D <sub>30</sub> = -- mm D <sub>10</sub> = -- mm C <sub>u</sub> = -- C <sub>c</sub> = --	<u>Other Test Data</u>  Moisture Content = percent Dry Unit Weight = lbs./cu.ft. Hydraulic Conductivity = cm./sec. Liquid Limit = Plastic Limit =
9.5 mm (3/8")	-	-		
4.75 mm (# 4)	100.0	-		
2.36 mm (# 8)	-	-		
2.00 mm (# 10)	98.2	-		
1.18 mm (# 16)	-	-	  SHOP RITE GROCERY / VILLARD FOODTOWN 3217 West Villard Avenue Milwaukee, Wisconsin 53209  For OM Enterprises, Inc. Project No. 3023  May 4, 2016	
600 µm (# 30)	95.5	-		
425 µm (# 40)	94.2	-		
300 µm (# 50)	92.7	-		
180 µm (# 80)	-	-		
150 µm (# 100)	91.0	-	Job No. 0165-16-001	
75 µm (# 200)	89.8	-		



Raghu Singh <raghuom@gmail.com>

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**FW: GeoTest Report for project: 5054 / Report: 16-2553-1 and 2 others...**

1 message

Jeff Smith <jsmith@witestlab.com>  
To: Raghu Singh <raghuom@gmail.com>

Wed, Jun 22, 2016 at 9:53 AM

Raghu,  
The results of the hydraulic conductivity tests are attached. GeoTest's Sample No. 16-2553-1 is from your Project No. 3023, MW-5, S-6. Sample No. 16-2553-2 is from your Project No. 3024, MW-2, S-6.  
Thank you,

Jeffrey G. Smith, P.E.  
Principal Engineer  
Wisconsin Testing Laboratories, LLC  
W140 N5886 Lilly Road, Menomonee Falls, WI 53051-6046  
Phone 262-252-3300 Ext. 100 / Fax 262-252-5373 / Cell 262-707-1121  
jsmith@witestlab.com

-----Original Message-----

From: support@elmtreesystem.com [mailto:support@elmtreesystem.com] On Behalf Of GeoTest Inc.  
Sent: Wednesday, June 22, 2016 9:09 AM  
To: jsmith@witestlab.com  
Subject: GeoTest Report for project: 5054 / Report: 16-2553-1 and 2 others...

Dear Jeffery Smith,

Attached are your new reports from GeoTest Inc..

Thank you,  
GeoTest Inc.

---

3 attachments

- 16-2553-1.pdf  
100K
- 16-2553-2.pdf  
100K
- 16-2553.pdf  
70K



2135 South 119th Street  
West Allis, WI 53219  
414-761-1111

**REPORT: Laboratory Test Report - Hydraulic Conductivity**

LAB NO: 16-2553-1  
Test Method: See Below

Project: OM Project  
Location:  
Client: Wisconsin Testing Labs, LLC  
Acct. No: WTESTI  
Client PO:

Report Date: 06/09/2016  
Date Sampled: 06/09/2016  
Sampled By: Emil Bautista  
By Order Of: Client  
Order Number:  
Report No: 16-2553-1  
Project No: 5054

Field Number: MW-5, S6                           **TEST RESULTS**  
Thank you for giving us the opportunity to be of service. Attached are your laboratory test results.

Test Methods (If Applicable):ASTM D5084, D2434

Orig: Wisconsin Testing Labs, LLC (Menomonee Falls, WI)  
Attn: Jeffery Smith (1-ec copy)

Respectfully Submitted,  
GeoTest, Inc.

Emil G. Bautista, Testing Services Manager



GeoTest, Inc.

2135 S. 116th Street West Allis, Wisconsin 53227

414-321-6378 fax 414-321-6355

## Hydraulic Conductivity of Saturated Porous Materials Laboratory Test Report

Project: OM Project      Report Date: 6/21/2016  
Location:                      Report No.: 16-2553  
Client: Wisconsin Testing Laboratories, LLC      Project No.: 5054  
  
Source:                         Sampled By: Client  
Test                              Flex -Wall Hydraulic Conductivity - ASTM D5084      Date Sampled: 6/2/2016  
Material Type: Clay

Sampled at:

Sample	Description	Test Result	Units
16-2553-1	Red Lean CLAY with trace of Sand	< 1.00 E-8	cm/s
16-2553-2	Brown Lean CLAY with trace of Sand	< 1.00 E-9	cm/s

Note: ASTM D5084 calls for outflow to inflow ratio between 0.75 and 1.25. Due to the extremely low hydraulic conductivity flow ratios were not between the recommend range. Since the ratio of outflow to inflow rate was not able to be establish for these samples, a precise number for hydraulic conductivity was not able to be calculated. Instead a range was given.  
MW-5  
S-6