



April 16, 2018

RON VAN ASTEN
W459 CINDY ANN LANE
KAUKAUNA WI 54130

Subject: Response to Remedial Action Plan for
Barb & Ron's Cleaners (Former), 1700 S. Lawe St., Appleton, WI
DNR BRRTS # 02-45-297744

Dear Mr. Van Asten:

On February 2, 2018, the Wisconsin Department of Natural Resources (DNR) received a *Remedial Action Plan* dated January 29, 2018 (RAP) for the above-named site for property located at 1700 South Lawe Street, Appleton, Outagamie County, Wisconsin (the "Property"). EnviroForensics, LLC ("EnviroForensics") submitted the RAP on your behalf. The DNR also received the \$1,050 review fee in accordance with ch. NR 749, Wis. Adm. Code. The Property boundaries, monitoring wells and proposed excavation locations referenced in this letter are located on the attached Figure 2, *Soil Analytical Results Map with Proposed Excavation Extent*, by EnviroForensics, dated 1/9/18.

Summary of Planned Remedy and Remedial History

According to the RAP, the planned remedy includes removal of the former building slab and foundation; excavation of source area soil contamination beneath the former building to a depth of either six feet below ground surface (bgs) or 10 feet bgs; collection of soil confirmation samples; backfilling with compacted soil; capping with two feet of compacted clay (i.e., impermeable cover), topsoil and a vegetative cap; replacement of MW4100; and performance groundwater monitoring for two initial rounds from MW800, MW1100, MW1300, MW1600, MW2300 and the replacement well for MW4100. Excavation is estimated to include 75 tons of hazardous waste soil and 445 tons of solid waste soil for proper disposal. Post-excavation groundwater analysis will include volatile organic compounds (VOCs) and natural attenuation parameters. Depending upon post-excavation groundwater data, EnviroForensics may consider proposal for injection of a chemical additive(s) to address residual contamination.

This planned remedy supplements previously approved and performed remedial actions of excavation of accessible contaminated soil beyond the former building footprint in 2003 and multiple injections of sodium permanganate, an oxidant, beneath the building between 2004 and 2006. The structure was demolished above-grade in May 2016, leaving the building slab and foundation in place. The remainder of the property is covered by concrete or asphalt.

Determination

The DNR makes the following determination with respect to ch. NR 724, Wis. Adm. Code:

- The remedial action plan is approved conditional upon proper characterization and disposal of the concrete building slab and foundation to access the soil contamination.

Additional Considerations

The building slab and foundation must be characterized prior to disposal to determine if prior land use as a dry cleaner released VOCs inside the building such that the concrete is a hazardous waste (s. NR 661.03, Wis. Adm. Code) or solid waste (s. NR 661.02, Wis. Adm. Code). If not identified as a hazardous or solid waste, the concrete can be disposed as exempt waste (s. NR 500.08(2)(a), Wis. Adm. Code).

The local municipality may have additional site condition criteria once removal of the building slab is complete (e.g., removal of asphalt parking lot). These local requirements need to be considered prior to mobilizing to the site to assure protection of the groundwater monitoring well network and maintenance of the impermeable surface cover over the entire Property, which is currently asphalt or concrete beyond the building footprint.

The impermeable condition of the Property must be maintained during construction activities to avoid the need for long-term groundwater monitoring. Once concrete or asphalt is removed, any permeable area on the Property must be protected from infiltration until an acceptable impermeable cover is replaced. If it is your intent and desire to close this case with no cover or barrier maintenance plan required for the Property, then long-term groundwater monitoring will need to take place to monitor the behavior of the residual contamination under permeable conditions. Please contact me if you wish to discuss obligations that will likely continue on or off the Property after closure under ch. NR 726, Wis. Adm. Code (i.e., continuing obligations).

The last groundwater data reported to DNR for this site was the March and October 2016 groundwater data received on November 21, 2016 from new temporary wells. At that time, the groundwater monitoring network was last sampled in September 2005. The RAP referred to baseline groundwater monitoring performed in advance of the excavation at MW800, MW1100, MW1300, MW1600, MW2300 and MW4100. The RAP mentions that EnviroForensics intends to submit this data in the Remedial Action Report (i.e., construction documentation). S. NR 716.14(2), Wis. Adm. Code requires data to be submitted to the DNR within 10 business days from receipt. However, s. NR 716.14(3), Wis. Adm. Code allows the DNR to approve of a different notification schedule. Any groundwater data collected since October 2016 needs to be submitted to the DNR in a brief status update (cover letter, site map with monitoring well locations and updated historical groundwater data table) by May 16, 2018. DNR will review this groundwater data and discuss any new concerns with EnviroForensics.

Monitoring points for post excavation performance groundwater sampling include the replacement well for MW4100 and wells immediately surrounding the excavation (MW1100, MW1300, MW1600 and MW2300). While a specific groundwater monitoring plan was not included in the RAP beyond two post-excavation events from this subset of wells, please note that groundwater from all monitoring wells will need to be sampled prior to requesting closure to confirm the extent remains defined since 2005 and verify plume stability over time after excavation.

Recall that a document titled, *Supplemental Site Investigation Report*, was submitted by EnviroForensics dated November 17, 2016 along with a review fee for "other technical assistance" in accordance with ch. NR 749, Wis. Adm. Code. DNR responded in writing to the status update on December 9, 2016 with approval to develop a supplemental remedial action plan. More importantly, DNR included a list of investigation issues to address, including the need to submit a Site Investigation Report in accordance with s. NR 716.15, Wis. Adm. Code. While numerous remedial actions have been

performed since 2003, it is important to note that the site investigation has not yet been deemed complete.

Documentation (ch. NR 724, Wis. Adm. Code)

Construction documentation in accordance with s. NR 724.15, Wis. Adm. Code must be submitted within 60 days of construction completion or when the construction is "determined to be essentially complete". DNR considers placement of compacted clay, topsoil and a vegetative cap as the construction being essentially complete. Therefore, the construction documentation must be submitted within 60 days of placement of compacted clay, topsoil and vegetative cap (e.g., grass seed or sod). If a detailed review and written response is requested, a review fee in accordance with ch. NR 749, Wis. Adm. Code should be submitted with the report.

Future Actions

The DNR understands EnviroForensics will schedule removal of the building slab, foundation and soil excavation upon receipt of this approval. During on-site demolition and excavation activities, every effort must be made to protect the groundwater monitoring well network. If damaged, monitoring wells will need to be repaired or properly abandoned and replaced for post-remedial groundwater monitoring.

Thank you for the opportunity to review the RAP. I look forward to receipt of a brief groundwater data update **by May 16, 2018** as discussed above. Please contact me with any questions in Oshkosh by phone at 920-424-7887 or by email at jennifer.borski@wisconsin.gov.

Sincerely,



Jennifer Borski
Hydrogeologist
Remediation & Redevelopment Program

Attachments:

Figure 2, *Soil Analytical Results Map with Proposed Excavation Extent*, by EnviroForensics, 1/9/18

cc: Ron Van Asten, rvanasten@new.rr.com
Rob Hoverman, EnviroForensics, rhoverman@enviroforensics.com

Legend

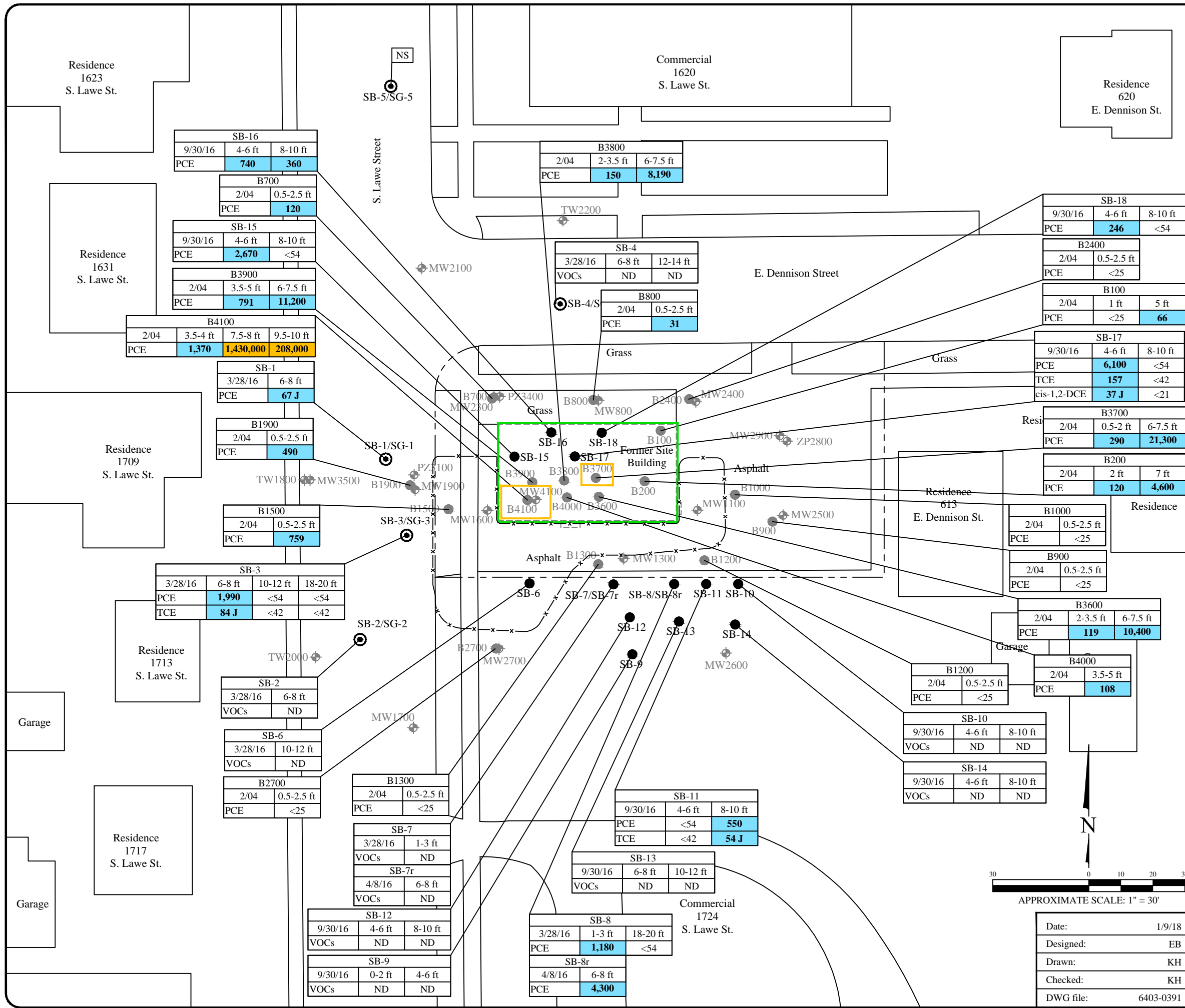
- Property boundary
- MW1100 Monitoring well location (By Others)
- B100 Soil boring location (By Others)
- SB-1 Soil boring location
- SG-1 Soil gas sample

Analyte	Soil to Groundwater Residual Contaminant Level	Non-Industrial Residual Contaminant Level	Industrial Residual Contaminant Level
PCE	4.5	30,700	153,000
TCE	3.6	1,260	8,810
cis-1,2-DCE	41.2	156,000	2,040,000

- Proposed excavation area to 6 feet bgs
- Proposed excavation area to 10 feet bgs
- Extent of 2003 excavation

Note:

1. Bolded and blue shaded values exceed the Soil to Groundwater Residual Contaminant Level
2. Bolded values are above detection limits
3. J = Analyte concentration less than laboratory detection limits
4. Samples analyzed using EPA SW-846 Method 8260
5. All results reported in units of micrograms per kilogram (µg/kg)
6. PCE = Tetrachloroethene
7. TCE = Trichloroethene
8. cis-1,2-DCE = Cis-1,2-Dichloroethene
9. ND = Not detected
10. VOCs = Volatile Organic Compounds
11. NS = No Sample
12. bgs = Below Ground Surface



SOIL ANALYTICAL RESULTS MAP WITH PROPOSED EXCAVATION EXTENT

Former Barb and Ron's Cleaners
1700 South Lawe Street
Appleton, Wisconsin

Date: 1/9/18 Designed: EB Drawn: KH Checked: KH DWG file: 6403-0391	 825 North Capitol Avenue • Indianapolis, IN 46204 EnviroForensics.com
	Figure 2 Project 6403

