



January 24, 2018

JOSEPH M GAUG  
ASSOCIATE GENERAL COUNSEL  
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PO BOX 1907  
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Subject: Response to Site Investigation Report and Long-Term Groundwater Monitoring Plan for  
Appleton Wire (Former), 908 N. Lawe St., Appleton, WI  
DNR BRRTS # 02-45-000015

Dear Mr. Gaug:

On October 27, 2017, the Wisconsin Department of Natural Resources (DNR) received a *Site Investigation Report* (SIR) and a *Long-Term Groundwater Monitoring Plan* (LTMP), both dated October 19, 2017 for the above-named site for property located at 908 North Lawe Street, Appleton, Outagamie County, Wisconsin (the "Property"). EnviroForensics, LLC ("EnviroForensics") submitted the SIR and LTMP on behalf of Albany International Corp. ("Albany"). The DNR also received the \$1,050 review fee in accordance with ch. NR 749, Wis. Adm. Code.

The Northeast Region (NER) Closure Committee performed a peer-review of the SIR on January 18, 2018.

### **Determinations**

The DNR makes the following determinations with respect to chs. NR 716 and 724, Wis. Adm. Code:

- Additional soil sampling is needed to define the horizontal extent of hexavalent chromium in unsaturated soil resulting from air deposition, direct release to soil or via migration.
- No additional monitoring wells or piezometers are needed for delineation of chromium in groundwater at this time.
- Additional investigation is needed to fully define the degree and extent of chlorinated volatile organic compound (CVOC) contamination in soil and groundwater.
- A vapor intrusion site investigation is needed to investigate potential impacts to air from CVOCs.
- Piezometers MW-5C, MW-19C and MW-20C can be filled and sealed in accordance with ch. NR 141, Wis. Adm. Code prior to performance of a remedial action.
- The proposed monitoring schedule in the LTMP is approved.

### **Additional Investigation**

Additional soil sampling is needed: to the west of MW-25 and GP-1, west of the warehouse; to the west of the collection trench under the building; off-site to the north; and along the sanitary utility main in Meade Street to define the horizontal extent of hexavalent chromium in unsaturated soil resulting from air deposition, direct release to soil or migration. Based on the results of this investigation, additional delineation in groundwater may be necessary; however, the DNR does not anticipate the need for additional groundwater investigation for chromium based on the data from monitoring wells: MW-

25/MW-25A, MW-17/MW-17A, MW-22/MW-22A, UB-1, MW-23/MW-23A, MW-10R/MW-10B, MW-24/MW-24A and UB-2.

Additional investigation is needed to fully define the degree and extent of CVOC contamination in unsaturated soil and groundwater west and northwest of MW-21, MW-25 and MW-26. Additional research is needed into possible preferential pathways from the former chrome plating areas to the MW-21 area along with the historical use of CVOCs on the property outside of the former chrome plating area.

Since the vapor pathway cannot be ruled out based on the presence of CVOCs in soil and groundwater beneath the building, a vapor investigation is needed. High-purge volume (HPV) sampling is recommended at this facility which will also eliminate the need for multiple vapor sampling events. Since there will be substantial disturbance of the subsurface within the warehouse in the near future, DNR *recommends* the vapor investigation take place after CVOCs are fully defined in soil and groundwater and after the remedy to address chromium is implemented. Please reference the guidance document, *Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin*, RR-800. A dramatically enhanced version of this guidance is expected to be published in January or February 2018.

### **Long Term Monitoring Plan**

Piezometers MW-5C, MW-19C and MW-20C can be filled and sealed in accordance with ch. NR 141, Wis. Adm. Code prior to performance of a remedial action as proposed in the LTMP. Well abandonment forms should be submitted upon completion of this action.

The proposed monitoring schedule described in the LTMP is approved. A revised LTMP should be submitted after installation of additional monitoring wells for the CVOC investigation and receipt of the initial groundwater results.

### **Documentation**

Upon completion of the additional investigation, an abbreviated Supplemental Site Investigation Report (SSIR) should be submitted that focuses on the investigation activities performed since submittal of the SIR. The SSIR should include updated site maps and data tables, as appropriate, and supporting documentation such as soil boring log(s), well construction form(s), etc. The SSIR will need to incorporate the following changes or updates to documentation:

1. **Contact Information.** Include the name and address of the present property owner, company responsible for the contamination and consultant along with email addresses and telephone numbers for the respective contacts (s. NR 716.15(2)(c), Wis. Adm. Code). While some of this information was included in the cover letter, cover page, Executive Summary and Introduction, it is best to include a complete set of the information in the general information section.
2. **Site Plans.** The following additional site features could be added to site plans to assist with identifying features in photographs as well as understanding interior access and/or barriers: exterior doors of the warehouse and east side of the manufacturing building; the receiving dock; stairs to the basement; location of office/mezzanine within the warehouse.

3. Table 1, *Soil Analytical Results*. B-1/MW-1, B-2/MW-2, B-10/MW-10, B-11/MW-11 are listed on Table 1 and need to be reconciled with nomenclature listed on the site plans (SB-1/MW-1, SB-2/MW-2, B-1(TW), B-2(TW), MW-10 and MW-11).
4. Table 2, *Groundwater Analytical Results (Chromium)*. Sample dates need to be corrected for MW-26A, MW-27 and MW-27B.
5. Figures 7-9, *Geologic Cross Sections*. Not all dissolved chromium results match with the listed dissolved hexavalent chromium results. Some pairs appear to have been collected on different dates according to Table 2. These should be updated for future submittals. In addition, less than the reported limit of detection (e.g., "<0.2") should be listed as reported in Table 1 in lieu of "ND" for no detect.

### Future Actions

The DNR received a *Remedial Action Options Report (RAOR)* and associated review fee on January 22, 2018. The DNR understands a *Remediation Injection Request* for a pilot test and fee for technical assistance for this site have been mailed. Separate written responses will be generated after review of the RAOR and injection request. The supplemental investigation can take place on a parallel track with the remediation to address chromium.

The SSIR should be submitted within 60 days of completing the investigation and receipt of the lab data in accordance with s. NR 716.15(1)(a), Wis. Adm. Code. If a detailed review and written response is requested by Albany, a review fee in accordance with ch. NR 749, Wis. Adm. Code should be submitted with the SSIR.

Thank you for the opportunity to review the SIR and LTMP. Please contact me with any questions in Oshkosh by phone at 920-424-7887 or by email at [jennifer.borski@wisconsin.gov](mailto:jennifer.borski@wisconsin.gov).

Sincerely,



Jennifer Borski  
Hydrogeologist  
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