



August 17, 2017

BERT DOWNING JR – VP/TREAS
F V STEEL AND WIRE COMPANY
5430 LBJ FREEWAY STE 1700
DALLAS TX 75240

Subject: DNR Review of *Initial Site Investigation Report, Work Plan for Additional Site Investigation and Work Plan Addendum for Additional Site Investigation*
F V Steel and Wire Company, 111, N. Douglas St., Hortonville, Outagamie County, WI
BRRTS # 02-45-560221

Dear Mr. Downing, Jr.:

On September 9, 2016, the Department of Natural Resources (DNR) received an *Initial Site Investigation Report* by AECOM dated August 31, 2017 (the "SIR") submitted on behalf of F V Steel and Wire Company for 111 North Douglas Street in Hortonville, Outagamie County, Wisconsin (the "Property"). On February 3, 2017, the DNR received a \$1,050 fee for review of the SIR in accordance with ch. NR 749, Wis. Adm. Code with the request to also review a work plan for additional investigation yet to be submitted. On March 8, 2017, the DNR received a *Work Plan for Additional Site Investigation* by AECOM dated March 1, 2017 (the "SIWP") submitted on behalf of F V Steel and Wire Company for the Property that proposed delineation of groundwater contamination at depth on and adjacent to the Property.

The Property is 6.64 acres in the Village of Hortonville with parcel identification number 240031100. Property boundaries are shown on the attached Figure 2, Site Overview by AECOM dated 8/18/2016. DNR began review of the SIR and SIWP and requested additional information to complete the review including the certifications required under ch. NR 712, Wis. Adm. Code, cross-sections required under s. NR 716.15, Wis. Adm. Code and clarification on potable well data from the Property. The DNR received the certifications and cross sections on June 2, 2017. Subsequently, DNR and AECOM discussed the need to better define the suspected source area. On July 20, 2017, the DNR received a *Work Plan Addendum for Additional Site Investigation* by AECOM dated July 17, 2017 (the "SIWP Addendum") also submitted on behalf of F V Steel and Wire Company for the Property based on these conversations. On August 8, 2017, DNR emailed a notice to proceed with scheduling installation of the piezometers proposed in the SIWP and SIWP Addendum.

DNR recently completed review of the SIR, SIWP and SIWP Addendum. Additional investigation and documentation is necessary to meet the requirements of ch. NR 716, Wis. Adm. Code and is detailed below. As a result, the site investigation cannot be approved at this time. A Supplemental Site Investigation Report (SSIR) should be submitted following delineation of the degree and extent of contamination that includes documentation of the items listed below:

1. A vapor assessment or investigation was not discussed in the SIR and must be addressed (ss. NR 716.11(5), 716.11(3)(a) and 716.15(3)(g), Wis. Adm. Code);
2. A discussion of the management of investigative waste from soil borings KS-01 through KS-25 performed in April 2015, piezometer PZ-1 installed in December 2015 and PZ-2 and PZ-3 installed in January 2016 is missing from the SIR (ss. NR 716.11(6) and (7), Wis. Adm. Code);

3. Conclusions and recommendations were not specifically included in the SIR (s. NR 716.15(6), Wis. Adm. Code);
4. Future site detail maps must include all required items including underground sewer mains and laterals to adequately evaluate preferential pathways and potential receptors (s. NR 716.15(2)(c)6, Wis. Adm. Code);
5. A map identifying the extent of volatile organic compound (VOC) and polynuclear aromatic hydrocarbon (PAH) contamination in unsaturated soil with iso-concentration line(s) is needed. Multiple maps may be appropriate. Please note when delineating soil contamination that residual contaminant levels (RCLs) for PAHs were recently revised (s. NR 716.15(4)(c), Wis. Adm. Code);
6. The map identifying the extent of VOC contamination in shallow groundwater above standards should include iso-concentration lines above the preventive action limit (PAL) as well as the enforcement standard (ES) in future submittals. Note that any PAH impacts above the ES and PAL are also necessary, if applicable, and multiple maps may be appropriate. (s. NR 716.15(4)(c), Wis. Adm. Code);
7. A map including iso-concentration lines of VOC and PAH contamination above the PAL and ES in deep groundwater is recommended to communicate the degree and extent of contamination in groundwater. Multiple maps may be appropriate. (s. NR 716.15(4)(c), Wis. Adm. Code);
8. The data tables should only include the contaminants of concern for this release (VOCs and PAHs) and any relevant natural attenuation results. All results relating to the contamination addressed under BRRTS #02-45-553699 (metals, primarily zinc, and cyanide) should be excluded from the summary tables for this case. Please note when updating the soil data tables that RCLs for PAHs were recently revised;
9. Table 2 includes groundwater data for "PW-115" on pages 45 and 46 of 52 in the SIR. According to documentation in the Fox Valley Steel and Wire case, BRRTS #02-45-563699, data from "PW-115" was collected from the potable well at the Property that is no longer used. I believe this was meant to be recorded as "PW-111" for 111 N. Douglas St. but was inadvertently recorded as "PW-115". Documentation regarding a well inspection was submitted to the DNR in an e-mail from Tim Anderson of UEC:
The potable well inspection indicated the well is seven (7) inches in diameter and eighty five (85) feet in depth. The screen extends from eighty two (82) feet to eighty five (85) feet. The top of the pump is at seventy (70) feet. The static water elevation is at eleven (11) feet.
Sam's well drilling personnel declined to reinstall the existing pump stating the piping is fragile and would most likely break. The 3/4 HP galvanized pump was removed and placed in the plant. The piping remains on the ground adjacent to the well.

In order to clearly identify the location of the groundwater data on Table 2 under "PW-115", all site maps should clarify the production well is also "PW-115" on the data table and this should be discussed in text of future reports;
10. A copy of the most recent deed, certified survey map and legal description is required to be included in the SIR (s. NR 716.15(5), Wis. Adm. Code);

11. Abandonment forms for soil borings KS-01 through KS-25 abandoned in April 2015 are not signed by Jeffrey S. Calson and need to be resubmitted (s. NR 716.15(4)(g), Wis. Adm. Code); and
12. Wisconsin Unique Well Numbers (WUWN) are required to be assigned to all monitoring points but do not appear to have been assigned to piezometers PZ-2 and PZ-3 installed in January 2016. Once assigned, the monitoring well constructions forms should be revised and resubmitted. In the future, please note that WUWNs are to be included on the respective soil boring logs and well development forms as well. Once these monitoring points are abandoned, the WUWNs are also to be included on the well abandonment forms. (ss. NR 141.23(2) and NR 716.15(4)(g), Wis. Adm. Code).

Additional investigation may be needed after the approved piezometers are installed to fully define the source of contamination and degree and extent of contamination in all affected media as required in s. NR 716.11(3)(a), Wis. Adm. Code. Once the site investigation is complete, a SSIR should be submitted. The SSIR will need to include proper certifications as required under ch. NR 712, Wis. Adm. Code as well as all items required under s. NR 716.15, Wis. Adm. Code, including revised and updated site figures, cross sections, tables, supporting documentation and, where applicable, revised appendices.

After the site investigation is complete, a remedial action options evaluation must also be performed in accordance with ch. NR 722, Wis. Adm. Code and a Remedial Action Options Report (RAOR) in accordance with s. NR 722.13, Wis. Adm. Code submitted to the DNR. The SSIR and RAOR can be combined, if desired. If a detailed DNR review of the SSIR and/or RAOR is requested, the applicable review fee listed under ch. NR 749, Wis. Adm. Code must accompany the report(s).

Thank you for the opportunity to review the SIR, SIWP and SIWP Addendum in detail and provide this written response. 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

Attachment:

Figure 2, Site Overview by AECOM dated 8/18/2016

cc: Courtney Riley, Keystone Consolidated Industries, Inc., criley@valhi.net
Bob Mottl, AECOM, robert.mottl@aecom.com
Jeff Maletzke, AECOM, jeff.maletzke@aecom.com



SITE OVERVIEW
FV Steel and Wire Company
111 N. Douglas Street, Hortonville, WI

Legend

- ⊕ Geoprobe Location (Previous Investigation)
- ⊙ Soil Boring
- ⊕ Production Well
- ⊕ Well Location
- Railroad
- ▭ Project Area

Notes:

1. MW wells are monitoring wells less than 15 feet below ground surface. PZ wells are piezometers set between 50 and 80 feet below ground surface.
2. Geoprobe locations from previous investigation are approximate.
3. GP-1 through GP-8 are assumed to be the B-1 through B-8 sample locations.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Drawn: S. DAY	8/18/2016
Approved: R. MOTT	8/18/2016
Scale:	AS SHOWN
PROJECT NUMBER	60301459
FIGURE NUMBER	2