



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott Walker, Governor
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November 15, 2016

MR JORDAN HAFSTAD
FRASER SHIPYARDS INC
1 CLOUGH AVE
SUPERIOR WI 54880

Subject: Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request for the Site Investigation at the Fraser Shipyard Punch Shed Addition, Fraser Shipyard Facility, Superior, Wisconsin
WDNR BRRTS #02-16-562599

Dear Mr. Hafstad:

On October 20, 2016, the Department of Natural Resources' (DNR) Remediation and Redevelopment program received a completed Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request (Form 4400-237), prepared for the above named site by Environmental Troubleshooters, Inc. and dated October 17, 2016. This form was accompanied by the appropriate review fee for "Other Technical Assistance" as required under section NR 749.04, Wisconsin Administrative Code, as well as a compilation of the soil and groundwater investigation results and visual aids (i.e., maps and figures) collected to date.

As your consultant pointed out, the investigation results suggest that the contamination associated with the Punch Shed Addition release overlies a larger area of what appears to be historic soil and groundwater contamination. The request for technical assistance related to the current extent of investigation and whether or not further investigation would be needed to delineate the historic contamination.

Our evaluation consisted of reviewing the investigation data included with the request for technical assistance, as well as previous submittals from, and email correspondence with, Environmental Troubleshooters, Inc. I also presented the investigation data to the DNR's Northern Region Closure Committee for a discussion of the adequacy of the site investigation. Based on this evaluation, we concluded the following:

- We concur with the assessment of Environmental Troubleshooters, Inc. that the data likely represent two or more releases in this area, historic and more recent. Your consultant has delineated the more recent release(s) using the relatively high naphthalene concentrations in soil, as depicted on Figure 5 Soil Naphthalene from the packet that accompanied the request for technical assistance.
- The extent of soil contamination (historic and more recent) has been adequately defined to the north and west. Residual contamination under the Punch Shed Building will be addressed in the final closure letter through a continuing obligation for a structural impediment.

- The extent of historic soil contamination to the east and south of the New Office Building has not been adequately defined. Although your consultant has attributed this contamination to historic fill, given the 100+ year history of industrial operations at this facility, it is just as likely (if not more so) that the contamination is attributable to past activities at the facility. We believe that you should install a minimum of three additional soil borings to the east, south-east and south of the New Office Building to more completely delineate the extent of historic contamination.
- It appears from Figure 2 Vicinity Map that the Punch Shed Building and New Office Building area is near the former AOC #9 (part of DNR BRRTS Activity #02-16-000079), identified and investigated in the 1990s. If your consultant has not already done so, they should review the case file information for AOC #9 to see if any of that investigation data could be applied to the current investigation.
- The Closure Committee also questioned whether or not soil was excavated during construction of the New Office Building and, if so, was that soil characterized for the presence of contamination. If characterization was performed, your consultant should include those results with the site investigation results.
- It does appear that you have adequately delineated the degree and extent of groundwater contamination. You should continue to monitor groundwater quality until you can demonstrate stable or decreasing concentrations, as required for closure under ch. NR 726, Wis. Adm. Code.

The DNR appreciates the opportunity to review and comment on your results at this stage of the investigation. We find that this type of fee-based evaluation early in the process leads to more successful case closure applications at the end. We would be happy to discuss these conclusions further with you and/or your consultant.

If you have any questions concerning this letter or the project in general, please do not hesitate to write or call me at 715-685-2920. I can also be reached by e-mail at Christopher.Saari@Wisconsin.gov.

Sincerely,



Christopher A. Saari
Hydrogeologist

cc: John McCarthy – Environmental Troubleshooters, Inc.