



December 8, 2017

02-16-275446

Racheal Snyder-Cochan
Utility & Environmental Compliance
Superior Water Light & Power
2915 Hill Avenue
Superior WI 54880

Subject: Supplemental Remedial Investigation Report

Dear Ms. Snyder-Cochran:

The Department has received and reviewed the Supplemental Remedial Investigation Report submitted November 11, 2017. This document was reviewed along with the previous Remedial Investigation Report iterations and feel that the remedial investigation of the site is substantially complete. Due to the complexity of the site and the number of remedial investigation reports submitted over the years the Department is requesting that all of the remedial investigation data be pulled together into one "final" Remedial Investigation Report. This document will aid as SWL&P continue through the remedial design process and further review of future documents.

I have a couple of comments that may clarify information in this "final" document.

1. **Overlay Historic Information on Maps:** Critical pieces of information regarding the conceptual site model (CSM), degree and extent of contamination, and history of the site would be beneficial to overlay onto the Figures showing the contamination, such as Figures 20, 21, 24, and 25. Specifically, items such as the gas holders, the MGP building, location of the clay tile pipe, shoreline and shoreline features as they have changed over time.
2. **Perpendicular Cross Sections:** This will be an item for design, but cross-sections perpendicular to the slip, parallel to the shoreline, would be valuable on a set interval (x-number of feet). The Report describes nearly 30,000 CY of material on the bank of the WWTP berm. Differentiating the berm material from the sediment will be critical for determining appropriate target dredge volume.
3. **Section 5.4 Contaminant Migration:** The Report asserts that the MGP residue, also called tarry material, is not mobile. Considerable experience on other MGP sites with tarry material from carbureted water gas has proven otherwise. Obtaining samples of the MGP residue, often called non-aqueous phase liquid (NAPL), is difficult. Finding NAPL during remediation in areas where it was not found previously has been documented at MGPs.
4. **Abandonment on monitoring wells MW 23, 24, and 25:** As communicated by email on December 4, 2017, the department approves the proper abandonment on MWs 23, 24, and 25.

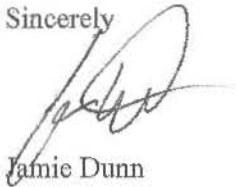
As you move into remedial design, there are a few suggestions:

- The site should be separated into 2 phases. The first phase should focus on the on-land portion of the site. Contaminated soils, groundwater and potential NAPL migration. NAPL removal is required to the extent practicable.
- The second phase should focus on contaminated sediments.

The reasoning behind this split is to assure that residual contamination on land does not re-contaminate the sediment portion once complete.

If you have any questions or comments regarding these issues, feel free to contact me at 715 635-4049. I will also offer that a meeting to discuss remedial design issues may stream line the design/approval process.

Sincerely



Jamie Dunn

Hydrogeologist

Remediation & Redevelopment Program

cc: William Gregg, Summit Envirnsolutions, 1210 E. 115th St., Burnsville, MN 55337
Scott Inman – Fitchburg
Joe Graham - Spooner