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November 21, 2003

Mr. William Bombich  
Superior Water Light & Power Company  
2915 Hill Avenue  
Superior, WI 54880

*via electronic mail*

**RE: Recommendations for Further Investigation at the Former Manufactured Gas Plant Site, Superior, Wisconsin  
ENSR Project: 09413-098**

Dear Mr. Bombich:

The purpose of this letter is to summarize ENSR's recommendations for further investigation at the former Manufactured Gas Plant (MGP) site located at the intersection of Winter and Water Street, Superior, Wisconsin.

#### **BACKGROUND**

ENSR completed sediment sampling in March and April 2003. Sediment samples were collected from the adjacent boat slip in Superior Bay and from a nearby storm sewer. The concentrations of total polyaromatic hydrocarbons (PAH) in the boat slip samples were up to an order of magnitude less than the comparable samples collected by the Wisconsin Department of Natural Resources in September 2000. Further sampling would be necessary to determine if the levels of PAH discovered by WDNR are reproducible.

#### **RECOMMENDATIONS**

The sediment sampling indicates that PAH may be less of a problem in the boat slip than originally thought, and that the focus of the additional MGP investigation can shift back to the known areas of MGP-impact on land. The focus of the proposed Phase II, Part III investigation is to determine the extent of the previously-discovered PAH and volatile organic compound (VOC) impacts to the soil and groundwater. The extent of the soil and groundwater impacts has been delineated to the west and south of the site.



November 21, 2003  
Mr. Bombich  
Page 2

Based on the above, ENSR recommends conducting additional investigations to the north and east of the site. Specifically, up to eight Geoprobe borings and five monitoring wells will be installed. Figure 1 illustrates the location of the proposed monitoring wells and Geoprobe® soil borings.

The sampling methodologies outlined in the November 2001 and July 2002 Work Plans will be used during the proposed Phase II, Part III investigation. Soil samples will be collected from the Geoprobe borings and from the monitoring well borings for PAH and VOC analysis. Groundwater samples will be collected from temporary 1-inch wells installed in the Geoprobe borings. Groundwater samples will also be collected from the new monitoring wells after they are properly developed, and from existing wells MW-5, MW-6, and MW-7. The groundwater samples will be analyzed for PAH and VOC.

The placement of the borings and wells may be modified depending on whether access agreements can be obtained from the off-site property owners. The Phase II, Part III fieldwork will begin after receiving signed access agreements.

If you have any questions or require additional information, feel free to contact Chris or Bill at (952) 924-0117.

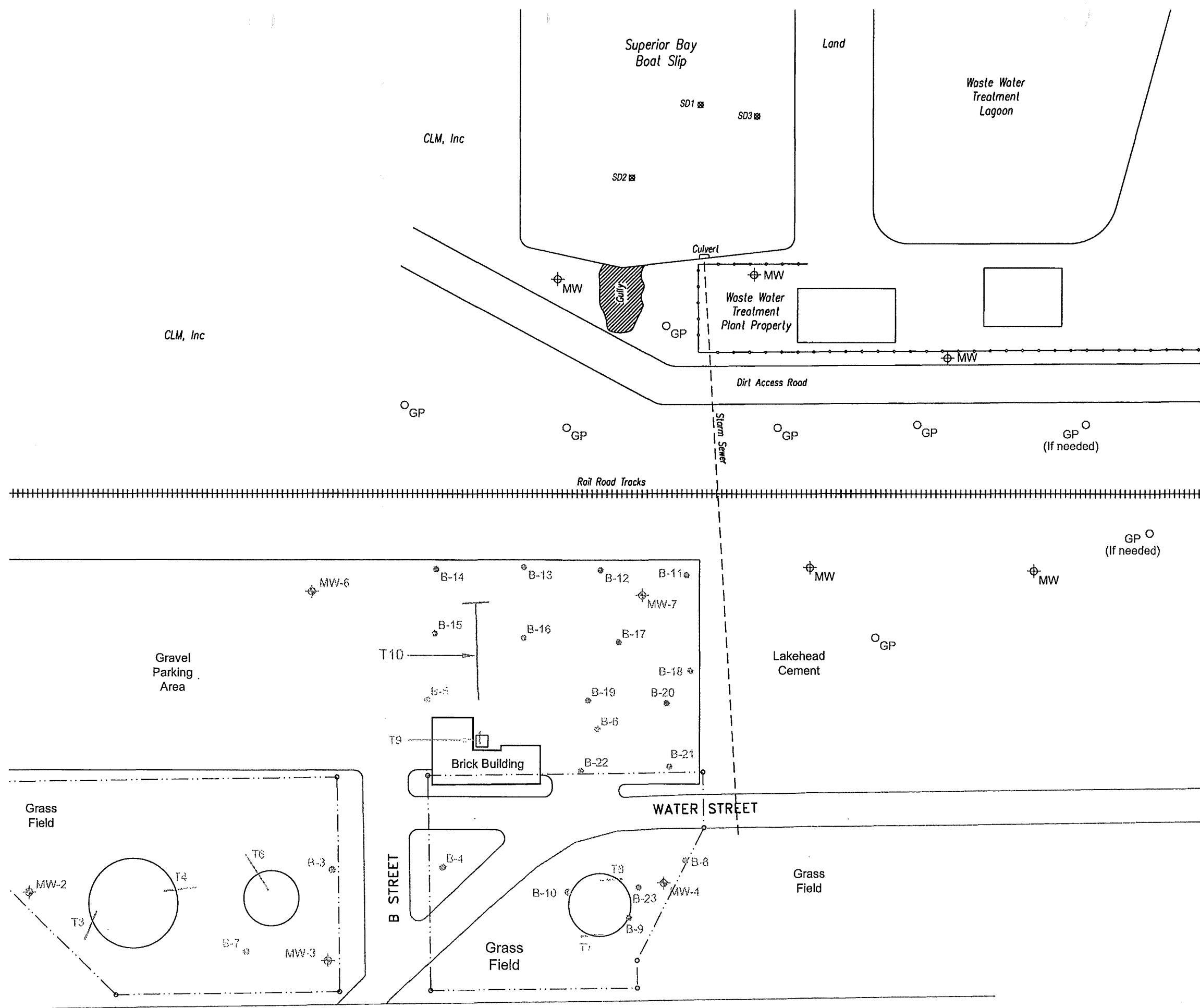
Sincerely,

Christina M. Boehm Carlson  
Geologist

William M. Gregg, PG  
Project Manager

Attachment

Cc: Stephen R. David, General Manager, ENSR St. Louis Park, Minnesota



- EXPLANATION:**
- GP Proposed Geoprobe Boring
  - ⊕ MW Proposed Monitoring Well
  - ||||| Railroad Tracks
  - SWL&P Property Boundary
  - ⊗ SD1 Sediment Sample Location (March 2003)
  - B-2 Geoprobe Soil Boring (Nov 2001/Sept 2002)
  - ⊕ MW-1 Monitoring Well Location (Nov 2001)
  - ↘ T10 Test Trench (Nov 2001/Sept 2002)
  - Former Gas Holder

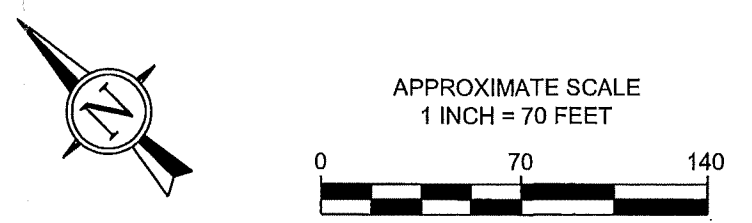
**NOTES:**

TR1 to TR4 and TR6 to TR9, B-1 to B-7, and MW-1 to MW-7 were in were installed in November 2001.

TR10 and B-9 to B-23 were in were installed in September 2002.

**SOURCE:**

Survey of SWL&P Property performed by Salo Engineering, dated 12/13/01 and ENSR field observations.



**Figure 1**  
**PROPOSED GEOPROBE BORING AND**  
**MONITORING WELL LOCATIONS**  
 Superior Water Light & Power  
 Former MGP  
 Superior, Wisconsin

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