

COPY



September 19, 2014

Karl Beaster
Enbridge Energy
1320 Grand Avenue
Superior WI 54880

SUBJECT: Facility-Wide Site Investigation and Remedial Action Plan
Enbridge Energy Superior Terminal, Superior, WI
WDNR BRRTS Activity #: 02-16-560657

Dear Mr. Beaster:

Purpose

The purpose of this letter is to provide you with a response to the technical assistance request submitted for the Enbridge Energy Superior Terminal located at 2800 East 21st Street ("the Property"). The Property consists of numerous parcels and is located in Sections 30 and 31, Township 49 North and Range 13 West, and Section 36, Township 49 North and Range 14 West. The Property includes approximately 560 acres of land located in the City of Superior, in Douglas County.

Request

On June 27, 2013, you requested that the Department of Natural Resources ("the Department") review and approve a Site Investigation and Response Action Plan, Proposed Risk-Based Site Wide Approach ("SI/RAP"), prepared by Barr Engineering. The purpose of the submittal is to provide the technical basis for a proposed negotiated agreement that would result in the use of a performance standard as a remedial action to address the groundwater pathway for releases at the Superior Terminal.

The Department provided comments and technical assistance on a draft version of the SI/RAP in a letter dated September 26, 2013 and in an email dated January 29, 2014. Based on the information contained in the SI/RAP it appears Barr has incorporated the Department's comments from the above referenced correspondence into the final version of the SI/RAP.

It appears the SI/RAP will meet the requirements under the ch. NR 700 rule series, Wis. Adm. Code. The Department received the appropriate fee for providing technical assistance, in accordance with s. NR 749.04(1), Wis. Adm. Code. Based on the information contained in the SI/RAP, the Department approves the SI/RAP with the following conditions:

1. The SI/RAP covers petroleum releases where Enbridge is responsible under 292.11(3) Wis. Stats and the release is confined to the Property.

2. For emergency, immediate and interim actions taken under NR 708, Wis. Adm. Code, the horizontal and vertical extent of contamination will be defined visually and with the use of a Photo Ionization Detector (PID) at the time of the emergency, immediate or interim action. All necessary action will be taken to recover free product and to eliminate the direct contact contaminant pathway. The immediate and interim actions will typically be excavation and disposal of contaminated media. A PID equipped with an 11.7ev lamp will be used to guide the excavation and determine the extent of the direct contact risk. Standard practices for headspace analysis of soil samples will be used to analyze soil samples. A 10ppm PID concentration will be used to identify contaminated soil for removal and as a screening criteria to determine if additional sampling is necessary.
3. Confirmation soil samples will be collected for laboratory analysis following NR 708, Wis. Adm. Code, actions for reportable spills in areas where contamination remains based on observation and PID analysis. Confirmation soil sample(s) will be analyzed for PVOCs and naphthalene. Soil samples will be collected from the base and sidewalls of an excavated area as necessary to adequately determine the degree of remaining contamination. The Department may request laboratory analysis of confirmation soil samples, additional samples and/or analytical parameters based on the size, type and complexity of the release. In general, the Department will not request laboratory analysis of confirmation soil samples for non-reportable spills where an emergency and immediate action has been conducted according to the SI/RAP and this letter.
4. The lateral extent of observed impacts following an NR 708, Wis. Adm. Code, action, determined as stated above, will be used to document areas of remaining contamination if a GIS package is needed to document remaining contamination for addition to the facility wide ERP site and GIS Registry.
5. Appropriate action will be taken under NR 708, Wis. Adm. Code, to address the direct contact pathway in areas identified to have contamination from historical releases. Following any action taken under NR 708, Wis. Adm. Code, and collection of confirmation soil samples as outlined above, the Department will determine if additional investigation is needed to define the degree and extent of contamination under NR 716, Wis. Adm. Code, to define the source, degree and extent of soil contamination as necessary to determine whether the performance standard is an appropriate remedial action for the release
6. A performance standard is being used as a remedial action to address the soil to groundwater contamination pathway. If evidence becomes available to show the performance standard is not adequate to protect groundwater quality the Department may require additional investigation of the degree and extent of contamination at potential source areas including areas with remaining contamination following actions taken under NR 708 Wis. Adm. Code to address contamination under the Negotiated Agreement. The Department may request additional remedial action once it is determined the source area or areas causing the performance standard to fail.
7. Section 1.5.2 of the SI/RAP states that groundwater will be sampled annually as part of the Groundwater Monitoring Plan. Appendix E Groundwater Monitoring and Program Sampling and Analysis Plan states groundwater will be sampled annually. The Department expects semi-annual groundwater sampling will be conducted according to the plan in Appendix E.

8. The Department retains the ability to require additional site investigation and/or remedial action for hazardous substance releases on the Property if information becomes available that shows the site investigation, remedial action plan and/or the Performance Standard does not comply with Section 292 Stats. and/or NR 700-NR 754 Wis. Adm. Code.
9. The Department will consider the range of options available under NR 140.24 and NR 140.26 Wis. Adm. Code when a NR140 Preventive Action Limit or Enforcement Standard is attained or exceeded in analysis of water samples collected from the monitoring wells installed to monitor the Performance Standard.
10. The Department approves the groundwater monitoring well network depicted in the attached figure, "Proposed Additional Monitoring Well Locations". We understand some of the wells were installed this year with the remainder of the wells to be installed in 2015. The SI/RAP approval is contingent upon all wells on the attached map being installed and sampled according to the Groundwater Monitoring Plan. Please submit all documentation required under NR141 Wis. Adm. Code for construction of the remaining wells to my attention at the letterhead address.
11. The Department may request additional monitoring wells if it is shown that the monitoring well network is not sufficient to evaluate the Performance Standard proposed in the SI/RAP.
12. This SI/RAP is conditionally approved contingent upon the execution and implementation of a negotiated agreement between Enbridge and the Department. If the pending negotiated agreement is not finalized or the negotiated agreement is terminated each hazardous substance release will be regulated by the Department as a separate Spill or Environmental Repair site.

Please include a draft of the proposed negotiated agreement, along with the appropriate technical assistance fee, so that we may begin the process of finalizing the wording of the agreement while we work on obtaining RR management team approval for the final facility-wide plan.

The Department appreciates Enbridge's actions to complete the SI/RAP and is looking forward to working with Enbridge to finalize the negotiated agreement. If you have any questions, please contact me at 715-392-3126 or via email at erin.endsley@wisconsin.gov. Thank you for your cooperation.

Sincerely,

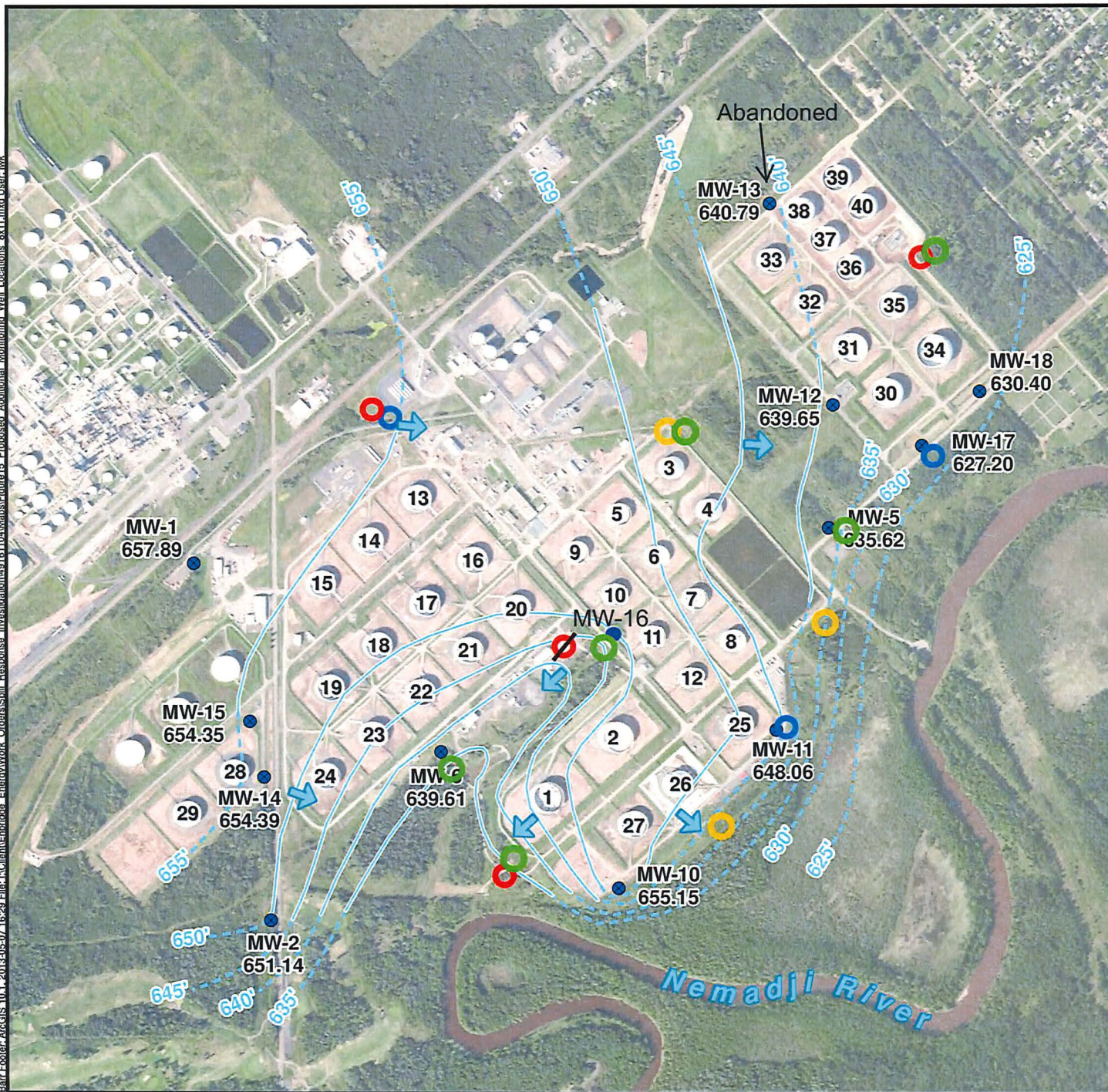


Erin Endsley
Hydrogeologist
Remediation & Redevelopment Program

Attachment: Figure 15, Proposed Additional Monitoring Well Locations

cc: Judy Fassbender, Wisconsin Department of Natural Resources
John Robinson, Wisconsin Department of Natural Resources
John Sager, Wisconsin Department of Natural Resources
Lynette Carney, Barr Engineering

Barr Footer: ArcGIS 10.1, 2013.05.07 16:29 File: H:\Client\Enbridge_Energy\Work_Orders\Spill_Response_Investigation\1911104\Mapa\Figure 15_Proposed_Additional_Monitoring_Well_Locations_8x11.mxd User: iwk



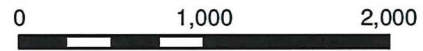
- Proposed Piezometer
- Proposed Shallow Well
- Monitoring Well Location and Groundwater Elevation (ft)
630.40
- Groundwater Contour
Dashed where inferred
(Contour Interval = 5.0 ft)
- ➔ Inferred Groundwater Flow Direction

Monitoring well groundwater elevations were measured on September 26, 2012

Note:
Monitoring well locations 17 and 18 are newly installed and were not used in groundwater contour modeling

DNR Revisions

- proposed shallow well
- proposed piezometer
- ⊘ well not needed



Feet
1 Inch = 1,000 Feet

ESRI World Imagery Circa August, 2011

Figure 15

**PROPOSED ADDITIONAL
MONITORING WELL LOCATIONS
SUPERIOR TERMINAL**
Enbridge Energy, L.P.
Superior, Wisconsin

