

July 15, 2016

Mr. Randy Coil
BP Products North America, Inc.
201 Helios Way – Helios Plaza 6.370A
Houston, TX 77079

Subject: Case Closure Denial
Amoco Oil Terminal, 2904 Winter Street, Superior, Wisconsin
DNR BRRTS Activity # 02-16-000331

Dear Mr. Coil:

On April 7, 2016, the Wisconsin Department of Natural Resources (WDNR) Northern Region Closure Committee (Closure Committee) reviewed a request for closure of the case described above that was submitted to the WDNR on your behalf by Antea USA, Inc. (Antea). The Closure Committee reviews environmental remediation cases for compliance with state and federal laws to maintain consistency in the closure of these cases. As discussed with Antea on May 9, 2016, the closure committee has denied closure because additional requirements must be met. The purpose of this letter is to inform you of the remaining requirements for obtaining closure. We request that within 60 days of this letter, you provide us with your written response regarding the necessary work and a schedule for completion of this work.

As noted above, additional site work is necessary in order to meet the requirements for site closure:

- Depiction of areas of remaining groundwater contamination on figures associated with the Amoco Oil Terminal site Closure Request.
- Additional groundwater investigation is necessary to define the extent of contamination.
- Additional vapor assessment is necessary to determine risk
- A Remedial Action Options Analysis that fulfills the requirements of Chapter NR722 Wis. Adm. Code is needed to evaluate options for the remaining mass of petroleum contamination remaining on site.

Need to Define the Degree and Extent of Contamination

Additional investigation is needed in order to fully define the degree and extent of contamination. Groundwater contamination was documented on the northwest portion of the terminal property. Free product and benzene at concentrations greater than the NR 140 Enforcement Standards were detected at monitoring wells on the northwest portion of the terminal property including MW-19R, MW-15S. The extent of this groundwater contamination has not been defined west of the Amoco Terminal Property. The groundwater contamination on the northwest portion of the property must also be included in documentation of remaining contamination on Form 4400-202, Case Closure GIS Registry.

Although groundwater samples were collected from direct push soil borings near monitoring wells MW-31 and MW-17 showed favorable groundwater analytical results, permanent piezometers are necessary in order to monitor plume behavior over time to demonstrate a stable or receding contaminant plume. Along with monitoring wells installed west of the site these wells will assist in plume definition.

Need to Continue Groundwater Monitoring

Groundwater Monitoring should continue at the site to document plume definition and behavior over time. Antea submitted a draft monitoring schedule to the WDNR via email on May 13, 2016. The WDNR has reviewed the proposed plan. The WDNR has the following comments on the plan:

- Annual upgradient monitoring should continue at MW-3
- Annual sidegradient monitoring should continue at a portion of the monitoring wells EW-8 through EW-10 and MW-10.
- Annual monitoring should continue at MW-31 along with any new piezometers associated with this well as well as any new piezometers associated with MW-17.
- Annual monitoring should continue at MW-33
- The monitoring plan will be reviewed and the WDNR may request changes to the monitoring plan based on analytical results from new groundwater wells.

Need to Complete a Vapor Investigation

Antea reported the results of an assessment of vapor concentrations in the clay, approximately 5 feet below grade and in the sand layer below the clay, approximately 17 feet below grade. These samples were collected from soil outside of the footprint of the building on site or surrounding buildings. An assessment of risk of vapor intrusion has not been conducted for the terminal buildings or surrounding buildings that may be at risk. Additional site investigation is needed to determine whether or not vapor intrusion is a completed pathway at this site, or if there is a risk of future exposure due to residual contamination. If vapor intrusion is an issue at this site, document all source control actions taken.

Need to Evaluate Remedial Action Alternatives

The Department acknowledges the remediation activities conducted to date have removed a significant volume of contaminant mass from the terminal site. However, a large mass of contaminants remain in place in the northeast portion of the terminal property. For this site to be considered for closure it must be shown that Antea's determination that natural attenuation is an appropriate remedial action for the remaining contamination will be an effective remedy. Antea must show that the selection of natural attenuation as a remedial action for the remaining contamination will comply with the requirements of NR 722 Wis. Adm. Code. Additional remedial action may be necessary in order to comply with the remedial action requirements contained in NR 722 Wis. Adm. Code and the closure criteria of ch. NR 726 Wis. Adm. Code.

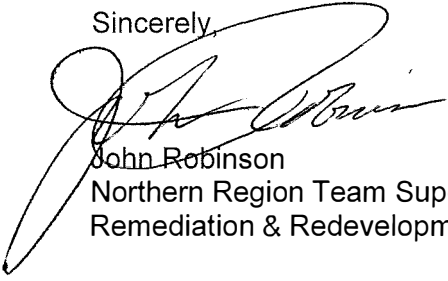
A complete closure request should be re-submitted once all the above requirements have been satisfied, together with any required documentation, to let the Department know that applicable requirements have been met. Case closure can be considered once all the above requirements have been satisfied.

Within 60 days of the date of this letter, please respond in writing with a schedule of your plans to meet these requirements. Until requirements have been met, your site will remain "open" and you will also need to continue to submit the semi-annual progress reports, as required by s. NR 700.11, Wis. Adm. Code. You will also be responsible for any operation and maintenance activities required under s. NR 724.13, Wis. Adm. Code.

We appreciate your efforts to restore the environment at this site. If you have any questions regarding

this letter, please contact John Sager at (715) 392-7822.

Sincerely,

A handwritten signature in black ink, appearing to read "John Robinson". The signature is fluid and cursive, with a large initial "J" and "R".

John Robinson
Northern Region Team Supervisor
Remediation & Redevelopment Program

cc: Mr. Jonathan Zimdars, Antea Group
John Sager, DNR Superior
Judy Fassbender, DNR Madison RR/5