MEMORANDUM

AYRES ASSOCIATES

To: Tauren Beggs, 2984 Shawano Avenue (WDNR)

From: Lynn Scherbert - Ayres

Date: May 26, 2016

Re: *Closure Committee Review to Determine Site Investigation Completeness*
Former White (BRRTS # 02-36-096500) and Lesperance (BRRTS # 02-36-560273) Properties
Two Rivers, Wisconsin 53105

Dear Mr. Beggs:

Ayres Associates (Ayres) reviewed the Committee's recommendations for additional actions at the above referenced Environmental Repair Program (ERP) sites and has the following observations.

Additional Actions

"Historic soil samples (Confirmation soil samples could potentially be collected by DNR since the initial sampling was done by EPA, additional discussion may be needed for this):"

- The memo suggests that the department may collect samples to confirm soil standard exceedances of metals and PAHs at historic sample locations S-13 and S-15. Is the department planning to collect these samples?

Response following discussion with Tauren: Tauren spoke with WDNR finance and they will provide funding support/scope to "add" to Ayres Associates existing scope to address these two additional sampling points.

"A soil sample S-10, collected near a historic soil pile area in 1994 on White had PCB Aroclor 1260 at 1.7J mg/kg. A confirmation soil sample SGP-3 collected in December 2012 within approximately 20-30 feet of S-10 had no detection of any PCB aroclors. Therefore, the DNR does not require any further sampling in this area for PCBs."

- *Concur*

"Concur with consultant recommendation that additional soil delineation is needed for PCBs around soil sample AGP-7 on White."

- *Concur*

"In addition, groundwater will need to be assessed in the AGP-7 area on White since PCB concentrations were above the soil to groundwater pathway standard. This proposed groundwater sampling location is also within the most contaminated portion of the volatile organic compound (VOC) plume, so should be analyzed for VOCs as well."

- In 2015, Ayres installed well nest AMW-4/APZ-4 approximately 45-feet down gradient of AGP-7 to focus on groundwater within the former release area. Samples collected from these wells did not detect any significant concentrations of VOCs or PAHs emanating from the former release area. While Ayres does recommend additional soil sampling to delineate the extent of PCB contamination around AGP-7, the relativity low concentration combined with the low solubility

N17 W24222 Riverwood Drive, Suite 310 ● Waukesha, WI 53188-1132
262.523.4488 ● Fax: 262.523.4477 ● www.AyresAssociates.com

of PCBs make it unlikely that dissolved PCBs will be detected in groundwater. However, groundwater samples from AMW-4 could be analyzed for PCBs as an alternative.

WDNR prefers a well within the area where PCBs were identified previously within the soil due to their low solubility to delineate this specific area beneath the soil. The existing wells, although within approximately 40 feet are not directly impacted by the historic soil hit of PCB. Tauren stated that a temporary well (constructed in accordance with NR 141) is to be sampled and if the first round of groundwater collected has no indication of PCBs, NO FURTHER SAMPLING is required. WDNR stated that a single temporary well in the location of the previous AGP-7 boring.

"Two groundwater monitoring wells need to be installed on Lesperance, one near HA-17/SGP-21 area to assess up gradient, and one within the ASTs area."

- Groundwater samples collected from well nest AMW-2/APZ-2 did not indicate that groundwater down gradient of the AST area has been impacted. If groundwater down gradient of the AST area is not impacted, an up gradient well is unlikely to provide any additional information. Based upon the locations and data associated with AMW-2/APZ-2 we would recommend eliminating the installation of these wells and conducting three more rounds from existing wells.

WDNR stated that a single well would be sufficient, that two are not necessary and that this could also be installed as a temporary well in accordance with NR 141 criteria. The well should be installed between the former locations of ha-17 and AGP-3 in the vicinity of the former ASTs. The same protocol would be followed in that if there no indications of VOCs/PAHs in the groundwater above Enforcement Standards after the first round of sampling, NO FURTHER SAMPLING would be required.

"Resampling of the groundwater monitoring wells installed in 2015 is needed."

- Concur: Ayres has proposed three additional rounds of groundwater monitoring at wells AMW-2, APZ-2, AMW-3, AMW-4, APZ-4, AMW-5, and AMW-6. Samples will be analyzed for PAHs, RCRA metals, and VOCs. AMW-4/APZ-4 can also be analyzed for PCBs as stated above.

"Metal and PAH exceedances in soil above industrial direct contact standards on Lesperance and White are unable to be delineated, so are assumed to be across the property from property boundary to property boundary. Exception for Lesperance: There is limited soil data on the east half of Lesperance within the direct contact zone in the soil fill. Additional soil samples need to be collected and analyzed for PAHs and metals within the upper four feet to assess if direct contact exceedances are present on the east half of the property. If no exceedances, an argument could be made to exclude the east half of the property from capping requirements."

- While there is limited soil data from the east half of the Lesperance property, the majority of this area is under roof or has recently been capped by with an asphalt parking area. With the site being capped and negligible up gradient findings: (PZ-1; arsenic 3.7 mg/Kg below background threshold levels) and APZ-1, AMW-1, selenium (42.9 ug/L) below Enforcement Standards; this does not appear warranted.

To achieve closure without a specific delineation of potential concerns along the east side of the Lesperance property – WDNR would accept a "boundary to boundary cap. If the East side is already capped and that will be maintained – additional sampling would not be required within this area.

"There is historic sediment data adjacent to White and Lesperance. Additional sediment investigation is being conducted in the area in the near future. When future sediment data is received by DNR, the DNR will re-evaluate if there is a need for any further sediment investigation. The County can choose to sample prior to or concurrent with the upcoming sediment investigation in the area before further evaluation of future data is completed by the DNR and/or provide justification for these sites."

- At this time, we do not feel any further sediment investigation by the County is warranted.

WDNR commented that it is not necessary at this time to address the sediment but a large investigation is being conducted in the area and pending those findings WDNR may require future action.

We'll contact you as soon as possible to discuss these items and confirm the WDNR strategies prior to conducting future sampling activities for the County.