



December 11, 2015

Mr. Greg Margulis
c/o Mr. Don Gallo
Whyte Hirschboeck Dudek
555 E. Wells St., Suite 1900
Milwaukee, WI 53202-3819

Subject: Remedial action proposal selection – review comments and request for revised proposal(s)
Milwaukee Fabricare, Inc., 4419 W. Fond du Lac Ave., Milwaukee WI
BRRTS#02-41-548258 FID#241303810

Dear Mr. Gallo:

You have notified the Department of the proposed selection of a remedial action plan for the Milwaukee Fabricare site. Three remedial action proposals were submitted to the Department, in accordance with the Dry Cleaner Environmental Response Fund (DERF), to address soil, groundwater and soil vapor contamination at the site. Bids were submitted by KPRG, Fehr Graham and Terracon. You have selected the KPRG bid, or a portion of the proposal related to soil remediation. Based on review of the selected bid and the rationale provided for selection, we are not able to approve the KPRG bid as submitted. We provide the following comments regarding minimum remedial goals and tasks that should be included in a successful bid proposal. We suggest that you consider requesting revised bid(s) from KPRG and/or the other bidders to address these comments.

Remedial goals

Site investigation at the property has identified significant contaminant source in both unsaturated and saturated soil below the dry cleaner building. High concentrations of tetrachloroethylene and possible DNAPL has also been identified just outside the building next to the location of the dry cleaning machines and former sump. Very high soil vapor concentrations and groundwater contamination present below the building pose a threat to occupants of the adjacent building and potentially other buildings from vapor intrusion which could be migrating along utility lines adjacent to the site.

The Department believes successful remediation of this site must include contaminant source reduction in both unsaturated and saturated soil and include the area around and below the dry cleaning machines.

Bids

KPRG is the only remedial action bid that includes source reduction in both the unsaturated and saturated zones below the building. In-situ chemical oxidation (ISCO) using sodium permanganate is proposed to treat soil at depths from 0-8 feet and enhanced reductive dechlorination (ERD) via injection of soluble carbon with zero valent iron, is proposed for treatment of saturated soil below 8 feet. The \$419,970 cost estimate for this plan is considerably higher than the other bids, however more comprehensive. You have recommended approval of the KPRG bid for the ISCO only followed by evaluation to determine if the resulting soil remediation is sufficient to address pathways of concern (groundwater and vapor). Eliminating the groundwater treatment step (ERD) would reduce KPRG's bid by \$207,302. Since this approach does not result in treatment of the significant contamination present at depths greater than 8 feet, the Department will not consider approval of this option, and due to KPRG's total cost estimate for the full remediation plan, we cannot approve KPRG's bid as presented. The Department suggests that you ask KPRG to revise their proposal to address the items listed below, and with an

effort to reduce the overall cost estimate for remediation of the site. Alternatively, you could request revised plans from the other bidders as well.

Issues/recommendations

- Implementation of chemical injection pilot or full scale remediation will require obtaining exemptions under ch.NR 140.28 Wis. Adm. Code and NR 812.05. Costs associated with obtaining these approvals must be included in bids.
- Bids should include costs to conduct one round of groundwater monitoring prior to implementation of pilot test/remedial actions.
- We suggest including costs to conduct additional soil sampling pre-treatment to better define source areas. In particular, this should be done outside of the building near MW-1 as there are currently no shallow samples in this area and it has been proposed as the location for a pilot test. Contaminant location and concentrations pre-treatment should be well understood in order to determine the success of the pilot and determining treatment areas.
- The post pilot sampling in the area of treatment should be described and include details of how the success of the pilot test will be determined.
- KPRG proposes an area of approximately 3,250 square feet for soil treatment using ISCO, however, no figure was provided with their proposal and it is not clear how they arrived at this calculation. A figure identifying treatment area must be provided.
- KPRG's groundwater treatment proposal is to inject water soluble carbon with ZVI via 98 temporary injection points "over the entire property." No figure was provided to show exactly these points would be placed nor did they indicate the depth to which injection would occur. The Department suggests that KPRG reconsider the treatment area to focus on the highly contaminated source areas below/around the dry cleaning machines and near MW-1/1D. Reducing the proposed treatment area should reduce the cost of treatment and may provide sufficient source reduction and improvement of groundwater quality.
- Assessment of groundwater/vapor migration along the sewer lateral will need to be assessed as a potential contaminant migration pathway. Costs associated with additional off-site vapor sampling should be included as indoor air sampling at the 4427 W. Fond du Lac property will be required and sub-slab samples below the 4443 W. Fond du Lac property may also be required. The latter could be included as contingency costs.

The Department assumes that access to source areas for treatment will be provided and is essential to successful remediation. Some interruption of business operations and/or relocation of machines and other obstacles must be expected. It should be confirmed for KPRG or any bidder that they will have access to source areas to allow for remedial activities. The logistics of where and how access will be provided should be communicated to bidders.

Records indicate DERF reimbursements to date are \$102,493. The DERF maximum allowable reimbursement of \$500,000, limits our ability to approve costs beyond this amount. Mr. Margulis, can of course choose to select a remedial action that exceeds these costs, but any amount exceeding this limit would not be eligible for reimbursement.

We suggest that you solicit revised bids from KPRG, and/or the other bidders, to address items noted above, and emphasize that remediation must be conducted to achieve contaminant source reduction in both saturated and unsaturated areas.

The Department understands that property ownership has changed. Please provide current owner contact information to the Department so that we may copy them in future correspondence and also provide a current address for Mr. Margulis. The Department looks forward to receiving a revised remedial action bid (s) and your selection of a new proposal in the near future. Please keep us informed of your intentions for soliciting new or revised bids. Do not hesitate to contact me at (414) 263-8533 if you have any questions or concerns regarding this letter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Nancy D. Ryan".

Nancy D. Ryan, Hydrogeologist
Remediation and Redevelopment