State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 3911 Fish Hatchery Road Fitchburg WI 53711-5397

### Tony Evers, Governor

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May 6, 2024

John Cresto
IRC Retail Centers, LLC
814 Commerce Drive, Suite 300
Oak Brook IL 60523
Sent by email: jcresto@pinetree.com

SUBJECT: Technical assistance for the Pilgrim Cleaners remediation project

7475 Mineral Point Road, Madison

BRRTS # 02-13-551995

Dear Mr. Cresto:

The Department of Natural Resources (DNR) received a status update report for the Pilgrim Cleaners project on February 7, 2024, sent by SCS Engineers on your behalf. On March 4, 2024, DNR received a technical assistance request form and the fee for a formal review and response. In the update report, you asked for DNR approval to:

- shut down the soil vapor extraction system
- stop groundwater monitoring, and
- carry out some additional sub-slab vapor sampling to confirm that the existing vapor mitigation system is adequate to address vapor intrusion risk from former dry cleaner operations.

## Soil vapor extraction system

Based on Figures 4 and 5, it doesn't appear the chlorinated volatile organic compound (CVOC) removal has plateaued yet. Seeing a clear plateau on those graphs would be one line of evidence that remediation was completed to the extent practicable, a requirement for closure of sites with vapor contamination (Wisconsin Administrative Code section NR 726.05(8)(b)1). Based on this information, soil vapor extraction should be continued. If there are other compelling lines of evidence that it is impracticable to continue soil vapor extraction, you may present them to DNR for further consideration.

It may be possible to extract additional CVOCs by pulsing the system, extracting from hotspots while resting other extraction points, or using similar operational variations to optimize extraction. When planning operational variations, consider the radius of influence of the extraction points and if some are pulling clean vapor from outside the source area.

# **Groundwater sampling**

DNR recommends you consider what additional groundwater sampling may be needed to reach case closure. You will need to show that the degree and extent of groundwater contamination is defined (NR 716.11(5)(e)) and that the groundwater contamination plume is stable or receding (NR 726.05(6)(c)).

Downgradient well MW-5, which monitors the deep zone, has been sampled several times and consistently has tetrachloroethene 5-6 times the NR 140 standard, indicating that the extent of groundwater contamination has not been fully defined yet. Additional sampling points are likely needed to determine the full extent of the CVOC groundwater plume.

Groundwater sampling has shown contaminants in both the shallow and deep zones of groundwater, and it appears that groundwater flow direction in these zones is not the same. Comparison of the site investigation cross-section and plume maps to figures showing the current conditions can be used to show if the groundwater plume



is stable or receding. An updated geologic cross-section with the information indicated in NR 716.15(4)(d) may be a useful tool for understanding contaminant transport and will be needed for your case closure request in the future.

# Vapor mitigation system

DNR concurs that another round of sub-slab vapor sampling in the Weight Watchers and Balance Chi Massage units is appropriate to help determine the effectiveness of the existing vapor mitigation system (VMS). Has pressure field extension been measured to determine how far the vacuum from the VMS extends into the other units? This will be needed to determine if the existing VMS is sufficient for units beyond the Pilgrim Cleaners unit. Before the case can be closed, several rounds of pressure field extension measurement will need to be done (if they haven't already) to commission the VMS as described in DNR publication RR-800 (Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin). These measurement rounds can be done together to avoid duplication of effort.

#### **DERF** reimbursement

If any work discussed above has not already been covered by a Drycleaner Environmental Response Fund change order, you may submit one when you send in a plan for future work. Although reimbursement funding is uncertain at present, getting an approval in advance will let you keep the option to ask for reimbursement for approved work.

### Other items before requesting closure

One thing we ask of all cases before closure is to send in an emerging contaminants statement, which is a statement about whether PFAS or 1,4-dioxane could be contaminants at the site, based on past land uses and practices. This is part of our standard closure process unless it was already taken care of at the site investigation stage. The emerging contaminants statement will be reviewed by DNR to determine if sampling for PFAS and/or 1,4-dioxane is needed. DNR recommends you submit the emerging contaminant statement as soon as possible.

If a closure request is submitted a significant amount of time after the most recent groundwater sampling event, DNR may request some additional groundwater samples to determine groundwater quality at the time of closure.

Thank you for your efforts to restore the environment. If you have any questions, please contact me at cynthia.koepke@wisconsin.gov or 608-219-2181.

Sincerely,

Cynthia L. Koepke, P.G.

Hydrogeologist Program Coordinator

Remediation & Redevelopment

South Central Region

Copy: R. Langdon – SCS Engineers