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December 15, 2020

Mary Gail Scott, CHMM, Environmental Compliance Manager Water Gremlin Co 4400 Otter Lake Rd White Bear Township MN 55110

RE: MPCA Comments on Draft Additional Supplemental Remedial Investigation Summary Report Water Gremlin Company

MPCA Site ID: SR0001534

Billing ID: 2005

Dear Mary Gail Scott:

On September 30, 2020, the Minnesota Pollution Control Agency (MPCA) received a *Draft Additional Supplemental Remedial Investigation Summary Report* (Draft Report) prepared by Wenck Associates, Inc. for Water Gremlin dated September 2020.

MPCA Site Remediation and Redevelopment Section staff have completed their review of the Draft Report. MPCA has provided specific comments within the Draft Report located at the following link:

A summary of our comments on the Draft Report are provided below:

Laboratory Analytical

The VOC samples collected for the Supplemental Remedial Investigation were analyzed using EPA Method 8260D per the PDF lab reports, which is the correct up-to-date method. However, the EDDs received from Pace stated the method was 8260B. In addition, Tables 4 and 5 still list method 8260B and 8260B is referenced in several locations in the report regarding VOC and 1,4-dioxane analysis. Please update these tables to correctly represent the analytical method used. In addition, please make sure that the correct version of the method is used throughout the text.

Reporting detection limits for trichloroethene (TCE) were not acceptable in a number of samples. The reporting detection limit on some of samples were 1.0, 2.0, 5.0, and 10.0 ug/L, all of which are above the health risk limit (HRL) for TCE of 0.40 ug/L. The method detection limit for most of these samples was below the HRL. Pace Analytical, the analytical laboratory used, can include values between the method detection limit and reporting detection limit as estimated values qualified with a J flag. Please

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confirm with Pace that J-flagged values were included in the reported analytical results. Future VOC samples are required to have the reporting detection limit below the HRL for all constituents analyzed.

Conclusion Section

- 1. MPCA staff agree with the general geologic setting described in Section 8.0 Conclusion 1.
- 2. MPCA staff agree with Section 8.0 Conclusion 2 that the soil samples collected in June and July 2020 did not indicate any lead, 1,4-dioxane, or VOC above the applicable screening criteria.
- 3. MPCA staff agree with Section 8.0 Conclusion 3 that groundwater VOC impacts were consistent with past investigations and permanent monitoring wells should be installed on the Water Gremlin property.
- 4. MPCA staff agree with Section 8.0 Conclusion 4 that additional investigation for 1,4-dioxane in both the shallow unconfined and deeper confined aquifer is warranted to both the north and south of the site. Given the presence of 1,4-dioxane in groundwater above the HRL at locations GP-33, GP-44, GP-46 and GP-50 additional investigation is also required to the east and west.
- 5. Section 8.0 Conclusion 5 states "Wenck does not recommend further evaluation of off-site drinking water receptors at this time." MPCA does not agree with the recommendation of no further evaluation of off-site drinking water receptors. Additional off-site private well sampling for 1,4-dioxane is required. An additional round of confirmation testing is necessary for private wells where 1,4-dioxane was detected above the reporting limit but below the established HRL. The remaining 65 properties identified in the well receptor survey should also be sampled for 1,4-dioxane. These properties should be contacted and sent a sample request form. The initial round described in this report was a focused survey in areas with previous detections of 1,4-dioxane. All wells identified in the well receptor survey within the 1-mile radius require sampling. The April 23, 2020 letter stated that the well sampling is to be conducted in a stepwise manner and additional sampling events will be required after completion of the initial well sampling:

A more focused stepwise approach for the letter survey and subsequent well sampling is required. Water Gremlin is required to focus the first round of letters to properties located to the west and southwest of the plant and along Goose Lake Road based upon the domestic well sampling already performed by MDH. Water Gremlin will then be required to expand the letters and sampling after completion of the sampling of the initial wells. The surveys and sampling are required to continue until the contamination is bounded. The list of specific properties to be included in each round of mailings must be submitted to and approved by MPCA and MDH staff prior to mailing to the residents.

No private wells identified in the well receptor survey located to the north, west, or east of the Water Gremlin facility have been sampled yet. An expansion of the well survey must be completed to the southwest of the 1,4-dioxane detections in residential supply wells in the southern portion of the survey area. While there were few detects in the residential samples collected in the northern portion of the first round of the private well sampling, a pathway in

the deeper confined glacial aquifer to the west of the Water Gremlin facility is possible as no groundwater samples have been collected off-site in this area and there were detections of 1,4-dioxane above the HRL in well GP-50, the location south of Lambert Creek and to the west of Otter Lake Road.

- 6. MPCA staff agree that a second round of sub-slab vapor samples shall be collected at the South campus during the heating season as stated in Section 8.0 Conclusion 6. TCE and trans-1,2-dichloroethene were detected above laboratory reporting limits, but below 33X commercial/industrial ISVs, in all four of the sub-slab samples collected at the South Campus building. Tetrachloroethene (PCE) was also detected in three of the four sub-slab samples above laboratory reporting limits, but below the 33X commercial/industrial ISV. Please provide an explanation for the source of the chlorinated VOC detections beneath the building floor slab.
- 7. MPCA staff agree with Section 8.0 Conclusion 7 that no additional sediment evaluation is recommended at this time and that the east stormwater pond should be dredged to remove lead-impacted sediment.
- 8. MPCA staff agree with Section 8.0 Conclusion 8 that there is no need for further evaluation of lead in surface water at this time. However, based upon the results of the additional 1,4-dioxane groundwater sampling additional surface water sampling for 1,4-dioxane may be required in the future.
- 9. MPCA staff agree with Section 8.0 Conclusion 9 that additional monitoring to determine seasonality of groundwater-surface water interaction is required.
- 10. MPCA staff will review the vapor mitigation report once submitted as stated in Section 8.0 Conclusion 10.

Action Items/RI Next Steps

Water Gremlin is required to submit an updated version of the Draft Report addressing these comments. In addition, Water Gremlin is required to submit a work plan containing details about off-site groundwater monitoring for determining extent and magnitude of 1,4-dioxane impacts in groundwater and proposed locations for the on-site permanent monitoring well network. In addition, the work plan should detail the next round of residential well sampling for 1,4-dioxane including a list of properties to be sampled based on properties identified in the well receptor survey that have not yet received a sample request letter and a proposed extended sample area to the southwest of the current survey area.

MPCA staff are available to meet with you to discuss this letter as well as the plan for ongoing site work. Please contact me at michael.ginsbach@state.mn.us or 651-757-2329 with any questions. Your continued cooperation is appreciated.

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Sincerely,

Michael Ginsbach

This document has been electronically signed.

Michael Ginsbach

Hydrologist Remediation Division

MG:mg

cc: Denise L' Allier-Pray, Water Gremlin Company (electronic)

Shane Waterman, Wenck (electronic)

Aaron Benker, Wenck (electronic)

Jennifer Carlson, MPCA (electronic)

Tom Higgins, MPCA (electronic)

Tim Grape, MPCA (electronic)