Diesch, Ed

From: Diesch, Ed
Sent: Thursday, May 27, 2021 2:37 PM
To: Stanek, Linda K - DNR
Cc: Brian Schneider (brian.schneider@graef-usa.com)
Subject: Spic and Span Requested Material
Attachments: Sewer Vapor Sample Collection Photos.pdf; Sewer Structure Vapor Sample Collection Methodology.pdf

Linda,

I have attached the vapor sampling methodology with photographs for the sanitary and storm sewers.

The original soil boring logs B1 thru B8 and B9 thru B15 were submitted with the site investigation Report submitted 10/27/20.
The last round of soil boring logs SB-16 thru SB-19 were submitted with the Report Amendment on 5/7/21.

Indoor air vapor sample analytical results were submitted on 4/20/20 as part of Form 4400-225 / Notification for Hazardous Substance Discharge.
Sub slab vapor sample analytical results were submitted with the site investigation report on 10/27/20 (SSVS-1 thru SSVS-6).
Sub Slab vapor sample SSV7 and sanitary sewer and storm sewer vapor sample analytical results were submitted with the Report Amendment on 5/7/21.

If you need copies of any of the above mentioned items, please let me know.

Thank you,

Edward G Diesch
Senior Environmental Tech IV

GRAEF

275 West Wisconsin Avenue, Suite 300
Milwaukee, WI 53203-3318

414-259-1500 office
414-266-9029 direct
414-217-5525 mobile (optional)
414-259-0037 fax

ed.diesch@graef-usa.com
"Type Your LinkedIn Address Here" (Will auto hyperlink after hitting enter.)

www.graef-usa.com

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Manhole Sampling Methodology

A survey rod was used to position the tubing above the bottom of the structures out of the water if the structure had flow. The depth of the sewer manholes were previously measured, so the depth to set the tubing in the structure was known and set prior to sampling. The Teflon tubing was wired tied to the survey rod for the known depths. The sanitary sewer cover was opened just enough to get the rod and tubing down into the structure on the shallow sanitary sewer. The storm sewer cover continued to slide back onto the survey rod and had to be opened further to get the rod and tubing down into the structure on the deeper storm sewer (due to the depth of the storm sewer at over 18 feet the chances of venting were considered to be minimal). At each manhole, a new syringe was used to purge the line before the sample was collected (two syringe volumes for the sanitary sewer and four volumes for the storm sewer). The Teflon tubing was then connected to the summa canister and vacuum gauge. The starting vacuum level was checked before connection to the sample tubing. The starting vacuum level was recorded, and the time noted. The valve was opened all the way for one minute to fill the canister with the sample. The valve was then closed, end time and vacuum recorded, tubing and regulator were then removed from the summa canister, and it was caped for shipment back to the lab.

The sub slab sample was collected following the methodology previously used for the other sub slab vapor samples collected at the site.

See the attached photo page for photos of the manhole vapor sample collection

Figure 1 Teflon tubing held at set depth with wire ties.

Figure 2 Survey rod and tubing set in structure to collect sample.

Figure 3 Starting vacuum reading on canister.

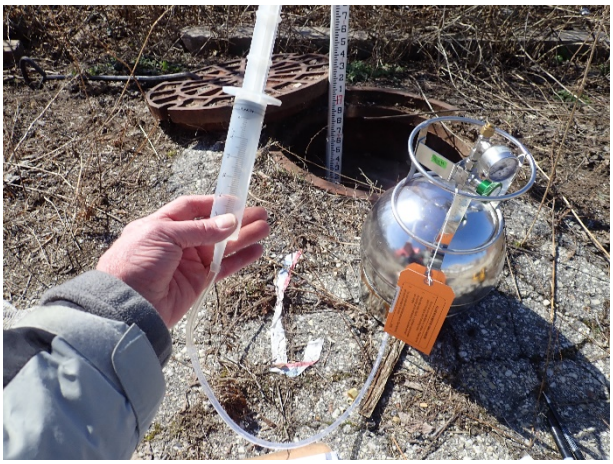

Figure 4 Purge teflon tubing with new syringe.

Figure 5 Start time and vacuum level.

Figure 6 End time and vacuum level.

Figure 7 Starting vacuum reading on canister.

Figure 8 Purge teflon tubing with new syringe.

Figure 9 Start time and vacuum level

Figure 10 End time and vacuum level

Figure 11 Survey rod and tubing set in structure to collect sample