

TRANSMITTAL LETTER



To:
Jeanne Schlaufman
Michigan Department of
Environment, Great Lakes &
Energy
27700 Donald Court
Warren, MI 48092

From:
Kris Hinskey

Arcadis U.S., Inc.
28550 Cabot Drive
Suite 500
Novi
Michigan 48377
Tel 248 994 2240

Copies:

Date:
January 31, 2023

Subject:
Livonia Transmission Plant
EGLE Site ID No. 82002970
Offsite Interim Preemptive
Mitigation Installation Quarterly
Update

Arcadis Project No.:
30146655

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MEMO

To:

Jeanne Schlaufman
Environmental Quality Specialist
EGLE Warren District Office
27700 Donald Court
Warren, Michigan 48092-2793

Copies:

Mr. Paul Owens, EGLE
Ms. Beth Vens, EGLE
Mr. Todd Walton, Ford

From:

Kris Hinskey

Arcadis of Michigan, LLC
28550 Cabot Drive
Suite 500
Novi
Michigan 48377
Tel 248 994 2240
Fax 248 994 2241

Date:

January 31, 2023

Arcadis Project No.:

30146655

Subject:

Livonia Transmission Plant
36200 Plymouth Road, Livonia, Wayne County, Michigan
EGLE Site ID No. 82002970
Offsite Interim Preemptive Mitigation Installation Quarterly Update

On behalf of Ford Motor Company (Ford), Arcadis of Michigan, LLC (Arcadis) has prepared this quarterly update to the interim preemptive mitigation system installation for the Livonia Transmission Plant (LTP) site (the site) as requested by Michigan Department of Environment, Great Lakes, and Energy (EGLE) via email on May 26, 2019 and on July 26, 2019. As discussed during the meeting with EGLE on October 22, 2020 and documented in the November 30, 2020 letter from EGLE, Ford is providing the mitigation updates on a quarterly basis, with this quarterly update covering the quarter of October through December 2022.

As of December 31, 2022, the following progress has been made at 33 residential properties in the Alden Village subdivision:

- 33 of 33 IPM systems are designed. 31 of 33 are installed and operating. The status of the remaining 2 are described below:
 - Arcadis is in discussion with EGLE regarding an alternative monitoring plan for 12124 Boston Post and 12121 Boston Post in lieu of mitigation.
- 10 of 10 sheds where Retro-Coat™ has been proposed have had it applied to the floor. One shed was removed from the proposed list during the second quarter of 2021 as described below:
 - Arcadis requested an alternative monitoring plan for the remaining shed at 12100 Boston Post which was approved and documented in a letter from EGLE dated April 14, 2021.
- 10 of 10 garages have had Retro-Coat™ applied to the floor.
 - Arcadis requested an alternative monitoring plan for the 3 garages located at 34424 Capitol, 34450 Capitol, and 12091 Brewster which was approved and documented in a letter from EGLE dated April 14, 2021.

Ford has established an Electrical Reimbursement Program to reimburse residents for the electrical costs associated with the operation of interim preemptive mitigation systems. The Electrical Reimbursement Program is administrated by Arcadis on behalf of Ford. Arcadis continues to work with the residents, new and existing, to assist them with the paperwork (W-9) needed to process as required by the federal tax laws. Electrical reimbursements will continue to be processed and distributed on a quarterly basis.

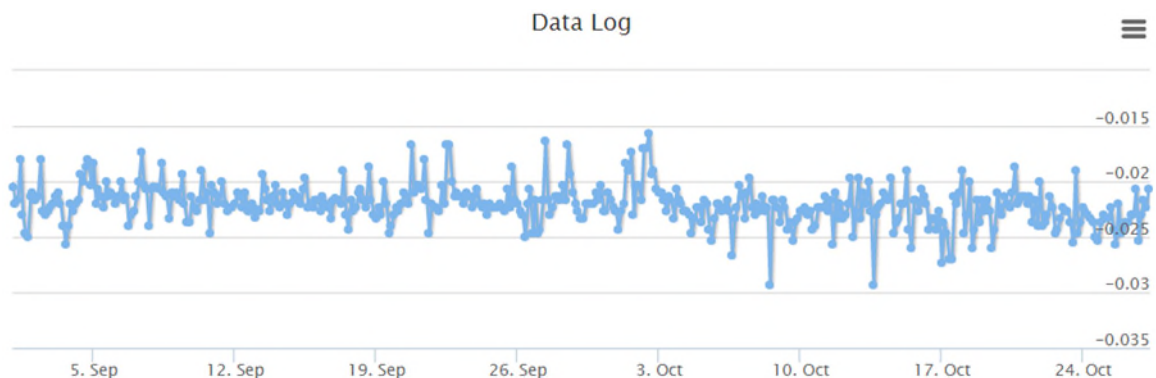
On October 5, 2021, a meeting was held with EGLE to review individual conceptual site models (CSM's) for 11 of the off-site properties.

As described in the EGLE letter dated February 1, 2019, EGLE required for the entirety of the residential structure floor to be depressurized to a minimum of -0.02 inches of water column (iwc) for the residential interim preemptive mitigation system. Due to various reasons such as competency of the slab and subgrade obstructions, -0.02 iwc could not be met for select homes. The issue was discussed with EGLE who ultimately recommended the installation of vacuum transmitters at these structures. The transmitters continuously monitor the presence of vacuum below the slab to confirm that a negative differential pressure is being maintained which may be less than -0.02 iwc. The graphs of the continuously monitored differential pressure at these structures are depicted below. Arcadis continues to work diligently to maintain the interim preemptive mitigation systems.

Details are provided below for all 33 locations.

Interim Preemptive Mitigation Systems Currently Operating

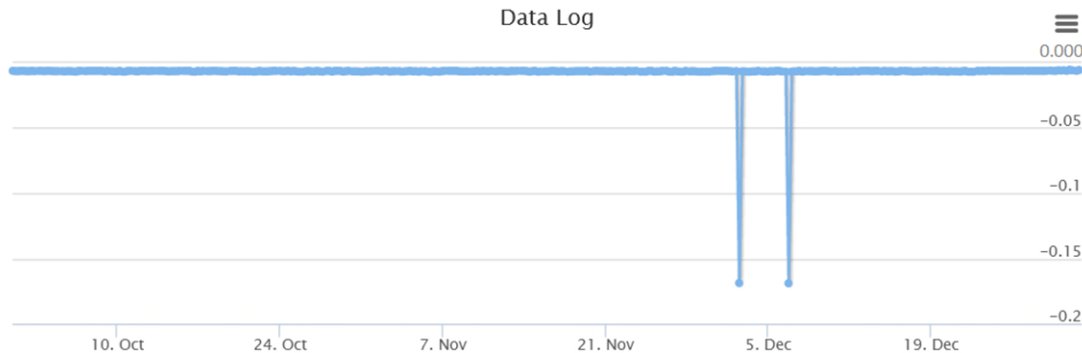
- **34380 Beacon** – The system is currently in operation and maintenance.
- **34424 Beacon** – The system is currently in operation and maintenance.
- **34450 Beacon** – The system is currently in operation and maintenance.
- **34550 Beacon** – The system is currently in operation and maintenance.
- **34591 Beacon** – The system is currently in operation and maintenance. An update of the data logged by the vacuum transmitter connected to SSMP-1 is presented below through the end of October 2022. The transmitter response in November and December 2022 fell out of calibration and requires replacement of the transmitter. Arcadis is preparing to complete this maintenance in the first quarter of 2023.



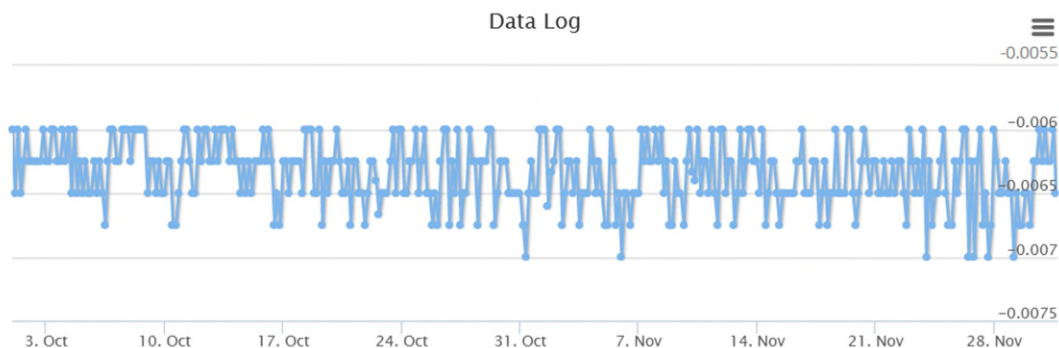
The plot shows that SSMP-1 consistently had vacuum through September and most of October 2022.

- **34600 Beacon** – The system is currently in operation and maintenance.
- **34644 Beacon** – The system is currently in operation and maintenance.

- **34682 Beacon** – The system is currently in operation and maintenance. An update of the data logged by the continuously monitored vacuum transmitter connected to sub-membrane monitoring point MP-5 is presented below indicating that the system continues to operate effectively. The transmitter data provided within previous monthly updates has also shown that vacuum in the area being monitored by the transmitter has been maintained. The two spikes in vacuum on 12/2/22 and 12/6/22 were outliers that appear to be related to temporarily turning the system fan on and off which self-corrected immediately after restarting the system fan.



Below is a zoomed in portion of the data log showing the IPM system continuing to maintain vacuum level at the monitoring point which is typical of normal operation at this property.

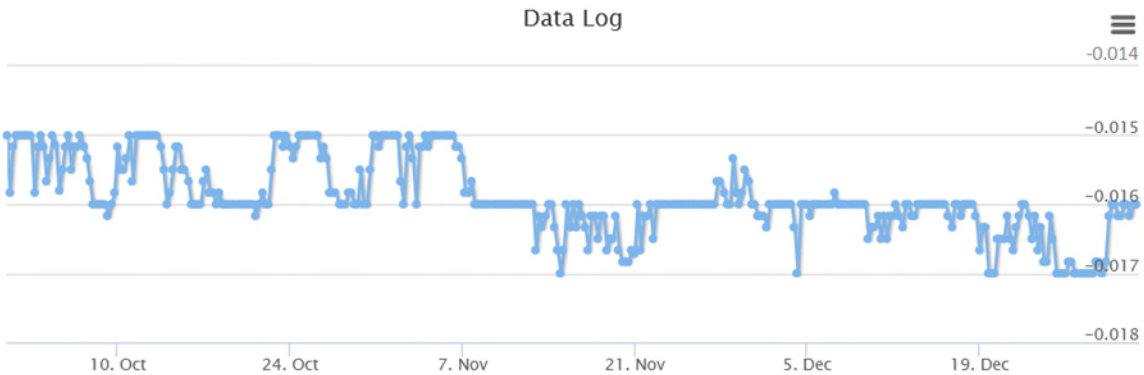


Monitoring in accordance with the EGLE approved property specific monitoring program is underway. Recent quarterly groundwater sampling results for vinyl chloride at MW-115S have not exceeded the historic high of 3.9 µg/L observed in November 2019 and have not exceeded the groundwater screening level of 1.0 µg/L at MW-154S and MW-155S. Therefore, additional sub-slab sampling was not required.

- **34920 Beacon** – The system is currently in operation and maintenance.
- **34940 Beacon** – The system is currently in operation and maintenance. On February 1, 2022, Arcadis inspected the Retro-Coat™ in the basement and no damage was observed on the basement walls, but damage was observed on the basement floor. The Retro-Coat on the floor had several large cracks and appeared to be coming up off the floor. Arcadis offered the property owner an air purifying unit, but the property owner declined. On March 28, 2022, Arcadis deployed two concrete moisture tests on the exposed concrete basement floor where the Retro-Coat™ was removed for the test. On March 31, 2022, Arcadis collected the two moisture tests and provided results to the manufacturer to determine the root cause. On January 6, 2023, Arcadis deployed an air purifier in the basement and inspected

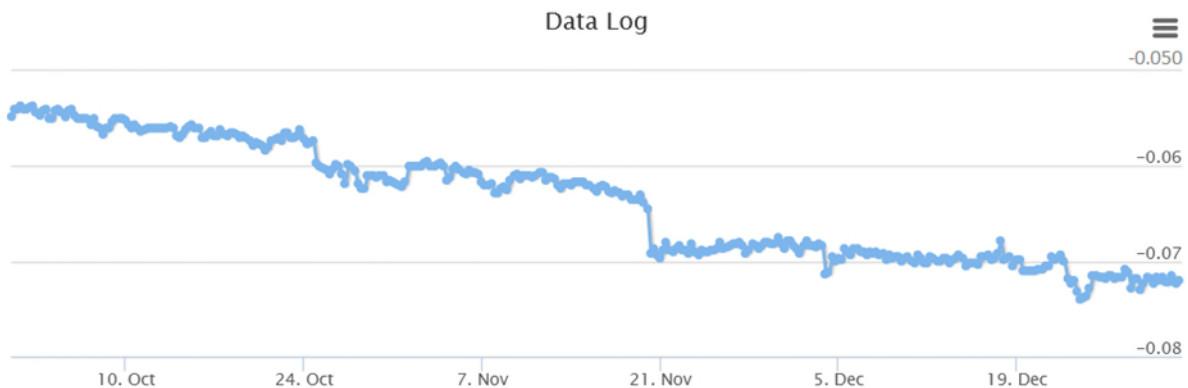
the condition of the Retro-Coat™ on the basement floor. An additional air purifier was deployed on January 27, 2023 for the first floor of the home after the homeowner approved the additional deployment on January 24, 2023. Arcadis is developing a path forward to resolve the delamination issue at this property.

- **34950 Beacon** – The system is currently in operation and maintenance.
- **34990 Beacon** – The system is currently in operation and maintenance. An update of the data logged by the vacuum transmitter connected to MP-7 is presented below demonstrating that the system continues to operate effectively.



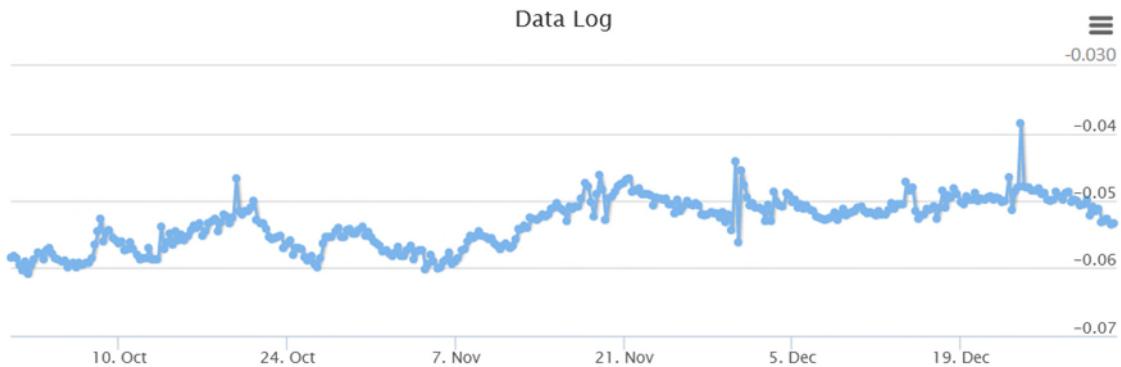
This home was sold in June of 2021 and the new owner provided access to the property on July 27, 2021. The previous property owner had denied the application of Retro-Coat™ in the detached garage since the floor has an existing epoxy coating and imbedded tubing for radiant heat. Arcadis is in discussions with EGLE to develop a monitoring program to assess vapor intrusion potential associated with the slab at this property.

- **12066 Boston Post** – The system is currently in operation and maintenance.
- **12067 Boston Post** – The system is currently in operation and maintenance. An update of the data logged by the vacuum transmitter connected to MP-1 is presented below demonstrating that the system continues to operate effectively.



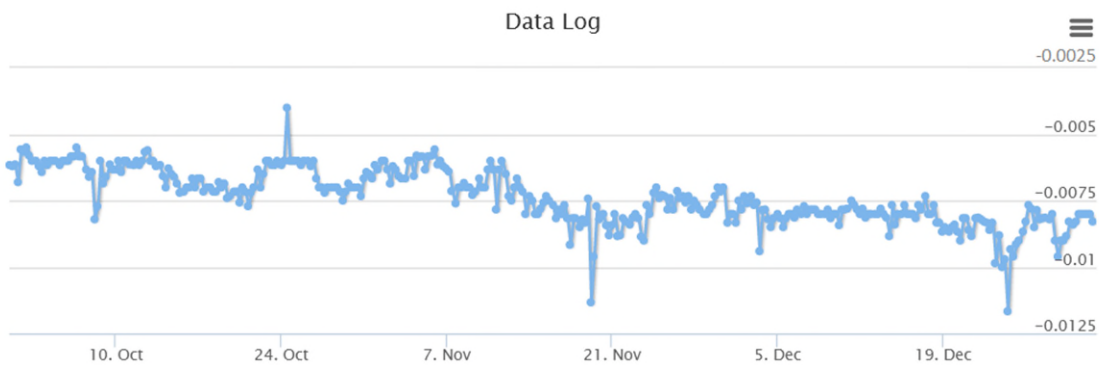
- **12070 Boston Post** – The system is currently in operation and maintenance.
- **12089 Boston Post** – The system is currently in operation and maintenance.

- **12100 Boston Post** – The system is currently in operation and maintenance. An update of the data logged by the vacuum transmitter connected to sub-slab monitoring point SSMP-4 is presented below demonstrating the system continues to operate effectively.



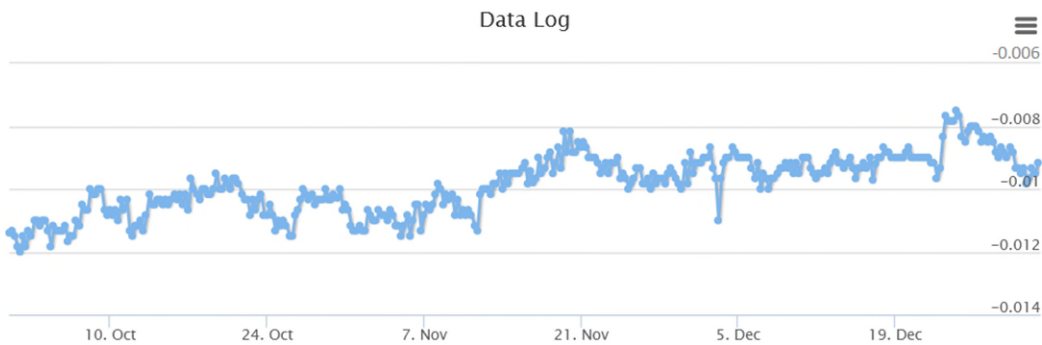
Monitoring in accordance with the EGLE approved property specific monitoring program is underway. Recent quarterly groundwater sampling results for vinyl chloride at MW-115S have not exceeded the historic high of 3.9 µg/L observed in November 2019. Groundwater vinyl chloride concentrations at MW-156S have not exceeded the groundwater screening level of 1.0 µg/L, and the well was dry in the fourth quarter 2022 sampling event. The groundwater sample collected at MW-79SR on November 1, 2022 had a vinyl chloride concentration of 1.2 µg/L which exceeds the groundwater screening level of 1.0 µg/L at MW-79SR. In accordance with the property specific monitoring program for this property, sub-slab sampling at SSMP-2 will be implemented until the respective groundwater vinyl chloride concentration is less than the newly established high concentration. Arcadis will be coordinating with the homeowner to begin sampling at SSMP-2 in the first quarter of 2023.

- **12131 Boston Post** –The system is currently in operation and maintenance. An update of the data logged by the vacuum transmitter connected to MP-4 is presented below demonstrating that the system continues to operate effectively. The area being monitored by the transmitter is located beneath a small breezeway between the attached garage and the home. The transmitter data provided within previous quarterly updates has also shown that vacuum in the area being monitored by the transmitter has been maintained.

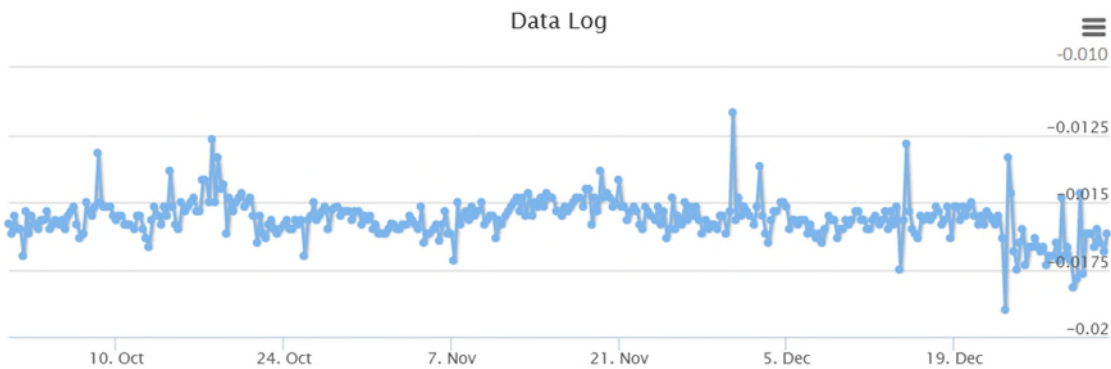


- **12141 Boston Post** – The system is currently in operation and maintenance. An update of the data logged by the vacuum transmitter connected to MP-4 is presented below demonstrating that the system continues to operate effectively. The transmitter data provided within previous quarterly

updates has also shown that vacuum in the area being monitored by the transmitter has been maintained.



- **12017 Brewster** – The system is currently in operation and maintenance.
- **12036 Brewster** – The system is currently in operation and maintenance. An update of the data logged by the vacuum transmitter connected to SSMP-2 is presented below demonstrating that the system continues to operate effectively.



- **12075 Brewster** – The system is currently in operation and maintenance.
- **12088 Brewster** – The system is currently in operation and maintenance.
- **12091 Brewster** – The system is currently in operation and maintenance. Monitoring in accordance with the EGLE approved property specific monitoring program is underway.

Quarterly groundwater sampling results for vinyl chloride at MW-123S and MW-151S have not exceeded the historic high of 4.6 µg/L observed in December 2018. Therefore, sub-slab sampling was not required.

- **12101 Brewster** – The system is currently in operation and maintenance.
- **34367 Capitol Avenue** – The system is currently in operation and maintenance.
- **34380 Capitol Avenue** – The system is currently in operation and maintenance.
- **34401 Capitol Avenue** – The system is currently in operation and maintenance.
- **34424 Capitol Avenue** – The system is currently in operation and maintenance. Monitoring in accordance with the EGLE approved property specific monitoring program is underway.

Quarterly groundwater sampling results for vinyl chloride have not exceeded the groundwater screening level of 1.0 µg/L at MW-90S, MW-103S, and MW-169S. The groundwater sample collected at MW-148S on November 14, 2022 had a vinyl chloride concentration of 2.1 µg/L which was below the historic peak of 2.3 µg/L at MW-148S. The groundwater sample collected at MW-136S on November 15, 2022 had a vinyl chloride concentration of 3.2 µg/L which exceeds the historic peak of 1.4 µg/L at MW-136S. In accordance with the property specific monitoring program for this property, sub-slab sampling at SSMP-1 and SSMP-2 will be implemented until the respective groundwater vinyl chloride concentration is less than the newly established high concentration. Arcadis will be coordinating with the homeowner to begin SSMP sampling at both SSMP-1, SSMP-2, and SSMP-3 in the first quarter of 2023.

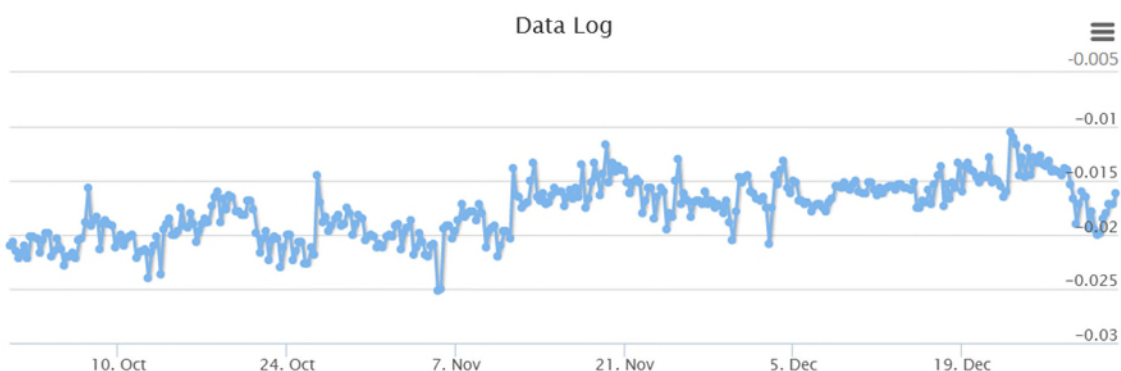
On December 14, 2022, Arcadis completed the SSMP sampling at the sub-slab sample port, SSMP-3 per the alternative monitoring plan which was approved and documented in a letter from EGLE dated April 14, 2021. Results were below the residential sub-slab volatilization to indoor air criteria for all four quarters of monitoring at SSMP-3.

- **34450 Capitol Avenue** – The system is currently in operation and maintenance. Monitoring in accordance with the EGLE approved property specific monitoring program is underway.

Quarterly groundwater sampling results for vinyl chloride have not exceeded the groundwater screening level of 1.0 µg/L at MW-108S, MW-168S, and MW-169S. At MW-137S, which is 137 feet away from the home, groundwater results from the August 15, 2022 sample had a vinyl chloride detection of 1.2 µg/L which exceeded the historic high of 1.1 µg/L observed in September 2019. Arcadis had the data validated through the normal quality control process to determine if the results had any errors which needed to be discussed with the lab or if the monitoring well needed to be resampled to verify the August 2022 results. Arcadis resampled monitoring well MW-137S to confirm previous sample results on November 17, 2022. The vinyl chloride concentration at monitoring well MW-137S dropped back to 0.73 µg/L. Arcadis will continue to monitor monitoring well MW-137S to determine if sub-slab sampling will be necessary as outlined in the property specific monitoring program. During the 3Q2022 and 4Q2022 groundwater sampling events monitoring well MW-169S which resides on the property and is 73 feet away from the house was non-detect for all site related COCs. Arcadis will continue to monitor monitoring well MW-137S and if warranted conduct sub-slab sampling at the property if the 1Q2023 exceeds 1.2 ug/L for vinyl chloride.

- **34480 Capitol Avenue** – The system is currently in operation and maintenance.

An update of the data logged by the vacuum transmitter connected to SSMP-2 is presented below demonstrating that the system continues to operate effectively.



Interim Preemptive Mitigation Systems – Extension Requested

- **12124 Boston Post** – The property owner has declined an air purifier unit in the past and continues to decline. On October 6, 2020, the homeowner told Arcadis he really did not want a mitigation system installed in his home and he stated that if there was anything that can be done to prevent the installation, he would be very happy. Three rounds of pre-mitigation IA and SS data have been completed. No detections of vinyl chloride were reported in any of the samples. Additionally, all groundwater samples from the closest upgradient monitoring wells, MW-118S (8 rounds) and MW-79SR (9 rounds) have been below the groundwater screening level of 1.0 µg/L. On October 5, 2021, a meeting was held with EGLE to review the CSM data which demonstrates that mitigation is not required at this location and to propose an alternative monitoring plan for 12124 Boston Post.
- **12121 Boston Post** – Under the supervision of EGLE, Ford is continuing to monitor groundwater proximate to the home to accommodate the homeowners' refusal to grant access to their property for other investigation, characterization, or mitigation activities.