

TRANSMITTAL LETTER



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

From:
Kris Hinskey

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Copies:

Date:
May 20, 2024

Subject:

Livonia Transmission Plant
EGLE Site ID No. 82002970
Schlaufmanj1@michigan.gov
Quarterly Residential Mitigation
Update Letter

Arcadis Project No.:
30206169

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SUBJECT

Ford Livonia Transmission Plant -
REVISED Quarterly Residential
Mitigation Update Letter
36200 Plymouth Road
Livonia, Wayne County, Michigan

TO

Jeanne Schlaufman

EGLE Warren District Office
Environmental Quality Specialist
27700 Donald Court
Warren, Michigan 48092-2793
Schlaufmanj1@michigan.gov

EGLE Site ID No. 82002970

DATE

May 20, 2024

PROJECT NUMBER

30206169.0201.02

DEPARTMENT

Environment

NAME

Kris Hinskey

Kristoffer.Hinskey@arcadis.com

On behalf of Ford Motor Company (Ford), Arcadis of Michigan, LLC (Arcadis) has prepared this quarterly update letter to the interim preemptive mitigation (IPM) 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 January through March 2024. This update letter was originally submitted April 30, 2024 and a revised version was submitted May 20, 2024.

As of March 31, 2024, 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:
 - 12124 Boston Post: Between 2018 and 2020, four rounds of sub-slab and indoor air samples were collected from this residence with results below EGLE residential sub-slab volatilization to indoor air criteria. The property owner refused the installation of the mitigation system because no vapor impacts were detected inside or under the residence by the vapor samples collected. Ford and Arcadis will follow the process outlined in the Consent Decree to request an alternative monitoring plan in lieu of mitigation in a remedial action plan.
 - 12121 Boston Post: Arcadis has not been granted access to this property and a groundwater monitoring plan is in place in lieu of mitigation.
- 10 of 10 sheds where Retro-Coat™ has been proposed have had it applied to the floor. 10 of 10 garages have had Retro-Coat™ applied to the floor.

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. Electrical reimbursements will continue to be processed and distributed on a quarterly basis.

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 systems. Due to various reasons such as competency of the slab and subgrade obstructions, -0.02 iwc

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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 is being maintained and monitored. The fourth annual OM&M event was scheduled for April 3, 2024.
- **34424 Beacon** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on March 13, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc. During the OM&M check, Arcadis noted cracking in the concrete slab of the shed resulting in damage to the Retro-Coat®. The concrete slab of the shed has settled and is not repairable without major structural updates or replacement. The damaged concrete pad is being evaluated for repairs and recommendations will be included in the upcoming remedial investigation report (RIR) and response activity plan (RAP). The interim preemptive mitigation system installed at this home was installed presumptively; and to date, no pre- or post-mitigation indoor air samples collected from within the residence have identified detections that exceed the residential indoor air recommended interim action screening levels. Additional details regarding the vapor intrusion assessment will be provided in the RIR.



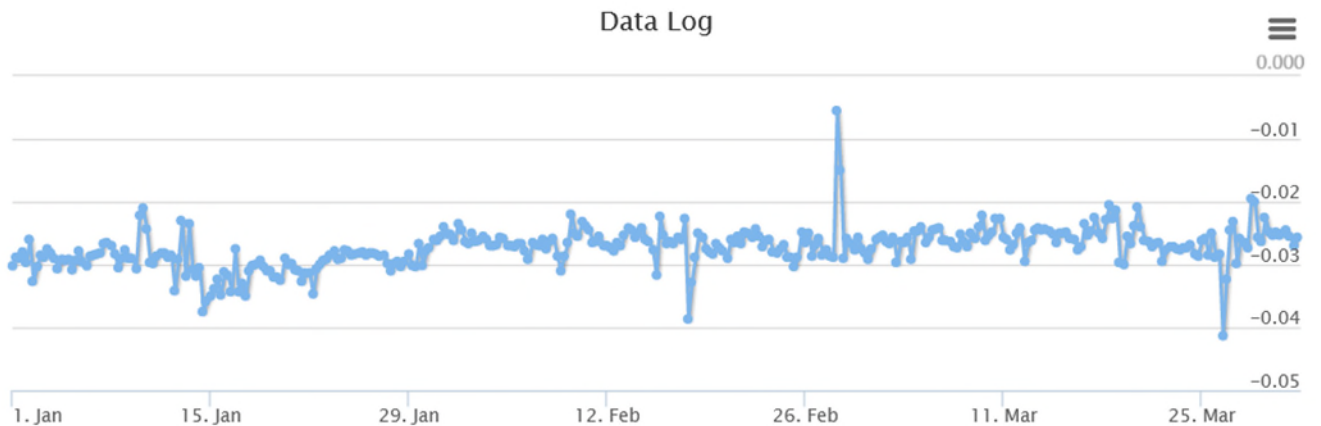
34424 Beacon Detached shed with Retro-Coat®, photographs taken on March 13, 2024.

- **34450 Beacon** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on March 11, 2024. All accessible monitoring points achieved the performance metric established by EGLE of -0.02 iwc. One monitoring point, SSMP-5, was inaccessible at the time of the OM&M visit as documented in the photo below.



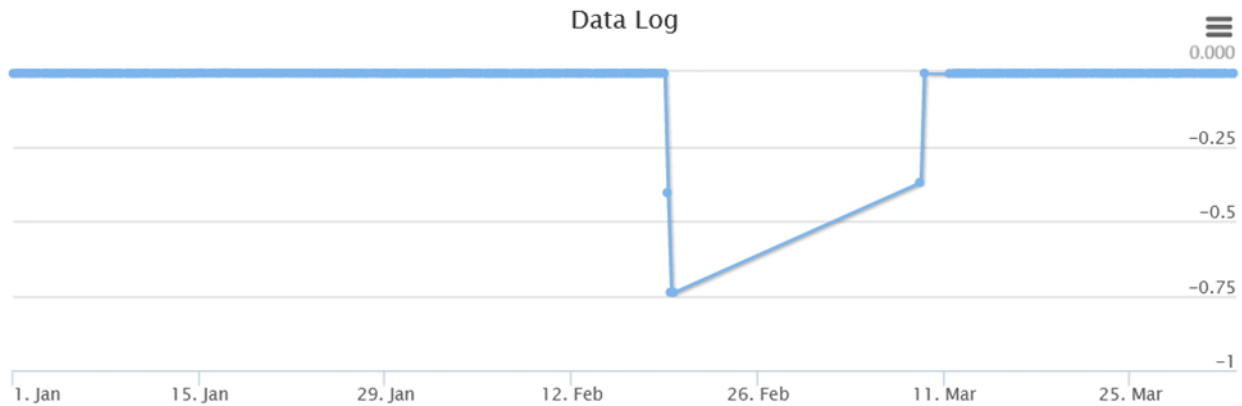
34450 Beacon Sunroom obstruction at SSMP-5.

- **34550 Beacon** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 16, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.
- **34591 Beacon** – The fourth annual OM&M event was completed on January 29, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc, except SSMP-1 which is being continuously monitored by a vacuum transmitter. During the monitoring event, Arcadis calibrated the vacuum transmitter. An update of the data logged by the vacuum transmitter connected to SSMP-1 is presented below.

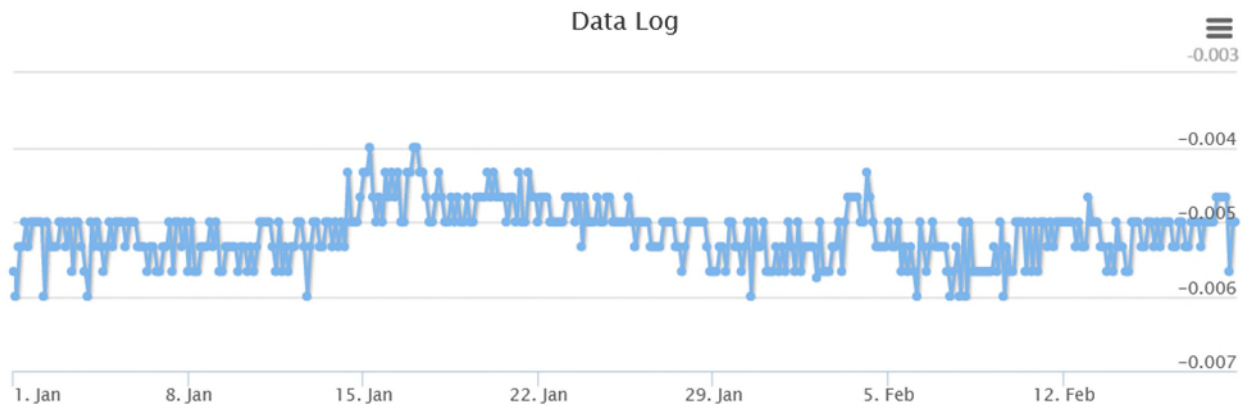


- **34600 Beacon** – The system is currently in operation and is being maintained and monitored. The homeowner has not been available to conduct the monitoring event. Arcadis will continue to contact the homeowner to schedule the annual OM&M event.
- **34644 Beacon** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 16, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.

- **34682 Beacon** – The system is currently in operation and is being maintained and monitored. The homeowner has not been available to conduct the monitoring event and has asked to have the OM&M event scheduled in April. Arcadis will continue to contact the homeowner to schedule the annual OM&M event. An update of the data logged by the continuously monitored vacuum transmitter connected to sub-membrane monitoring point MP-5 is presented below. During the period between February 19th 2024 and March 11th 2024 the transmitter had power disconnected due to ongoing renovations at the home.



Below is a zoomed in portion of the data plot 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. First quarter 2024 groundwater sampling results for vinyl chloride were 0.45 µg/L at MW-115S and did not exceed the historical high of 3.9 µg/L observed in November 2019. The vinyl chloride concentrations were non-detect at MW-155S and did not exceed the groundwater screening level of 1.0 µg/L. MW-154S was not accessible at the time of sampling. Therefore, additional sub-slab sampling was not required.

- **34920 Beacon** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 12, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.
- **34940 Beacon** – The system is currently in operation and is being maintained and monitored.

The fourth annual OM&M event was completed on March 15, 2024. All monitoring points except one achieved the performance metric established by EGLE of -0.02 iwc. Arcadis recorded vacuum influence readings at the

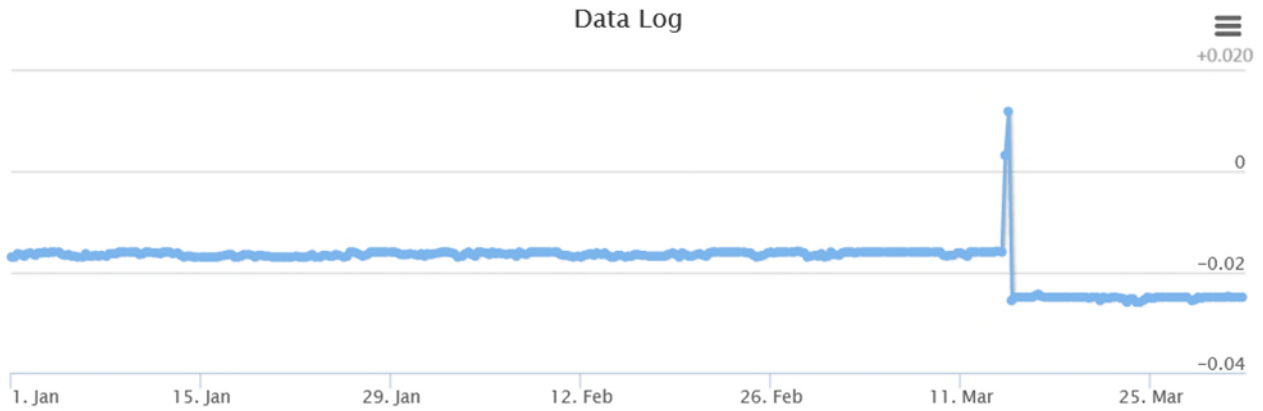
monitoring points: MP-01: -0.097 iwc., SSMP-01: -0.240 iwc., SSMP-02: -0.009 iwc., and SSMP-03: -0.020 iwc. Arcadis was unable to make system adjustments or repairs to resolve the low vacuum readings at SSMP-02 due to the limited availability of the homeowner's schedule. Arcadis completed a follow up visit to address vacuum influence readings on April 24, 2024 but was unable to increase vacuum influence at SSMP-02, which is located in the southeast corner of the garage. The other SSMPs located with the garage (SSMP-01 and SSMP-03) both still exceeded the performance metric of -0.02 iwc.

On April 24, 2024 Arcadis also completed repairs to the deposits and depressions located in the western portion of the basement which were first observed in September 2023. Arcadis consulted with the Retro-Coat® manufacturer, Land Science, and installation contractor to review procedures to complete repair to the Retro-Coat®. The repair process included cleaning and removal of deposits, scouring the existing Retro-Coat® surface by sanding to the surface, followed by application of 10 mils of Retro-Coat®. Following completion of the work, Arcadis inspected the repair area on April 25, 2024 and observed that the deposits had returned within the work repair area. Arcadis has reached out to the Retro-Coat® manufacturer, Land Science, to determine additional repair procedures.

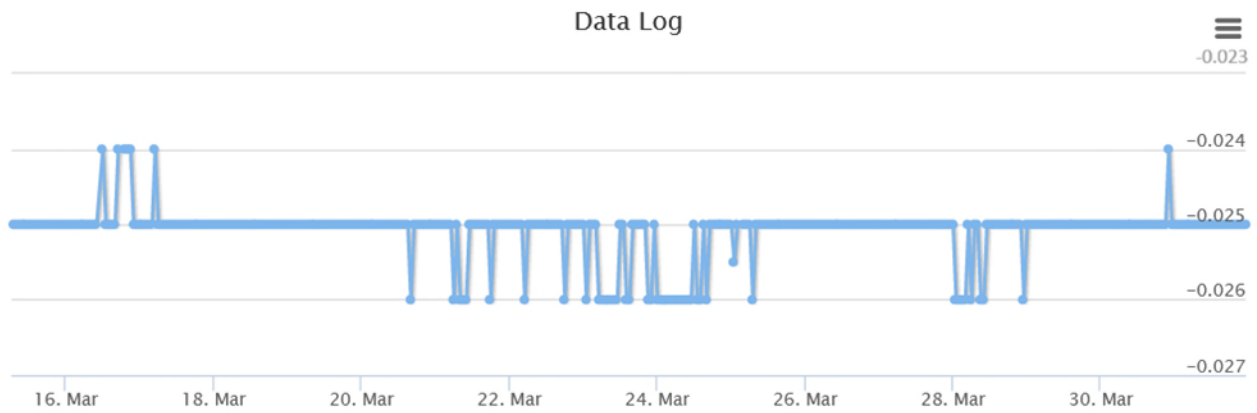
Any additional repairs required will be evaluated and recommendations will be included in the upcoming RIR and RAP. The interim preemptive mitigation system installed at this home was installed presumptively; and to date, no pre- or post-mitigation indoor air samples collected from within the residence have identified detections that exceed the residential indoor air recommended interim action screening levels. A total of five sub-slab vapor samples have been collected at this residence, and all are below the residential sub-slab volatilization to indoor air criteria as well. Additional details regarding the vapor intrusion assessment will be provided in the RIR.

- **34950 Beacon** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on January 29, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.
- **34990 Beacon** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on March 14, 2024. All monitoring points except two achieved the performance metric established by EGLE of -0.02 iwc. Arcadis recorded vacuum influence readings at the monitoring points MP-01: -0.017 iwc., MP-02: -0.012 iwc., MP-03: -0.050 iwc., MP-04: -0.036 iwc., MP-05: -0.035 iwc., MP-06: -0.089 iwc., MP-07: -0.022 iwc. Arcadis was unable to make system adjustments or repairs to resolve the low vacuum readings at MP-01 and MP-02 due to the limited availability of the homeowner's schedule. Arcadis has scheduled a follow up visit with the homeowner to correct the vacuum influence readings. During the monitoring event, Arcadis calibrated the vacuum transmitter. An update of the data logged by the vacuum transmitter connected to MP-7 and a current photo of the detached shed floor condition at the property is presented below.

Jeanne Schlaufman
EGLE Warren District Office
May 20, 2024

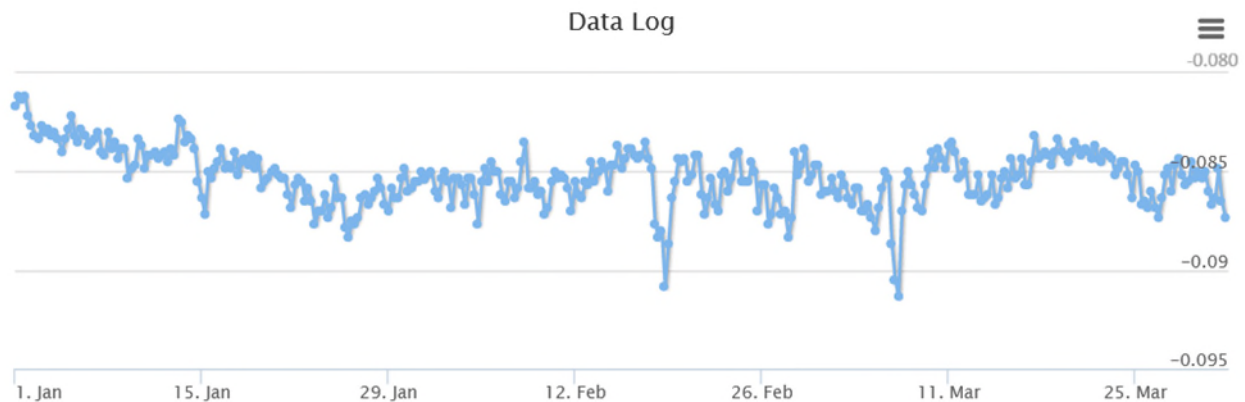


Below is a zoomed in portion of the data plot showing the IPM system continuing to maintain vacuum level at the monitoring point which is typical of normal operation at this property.



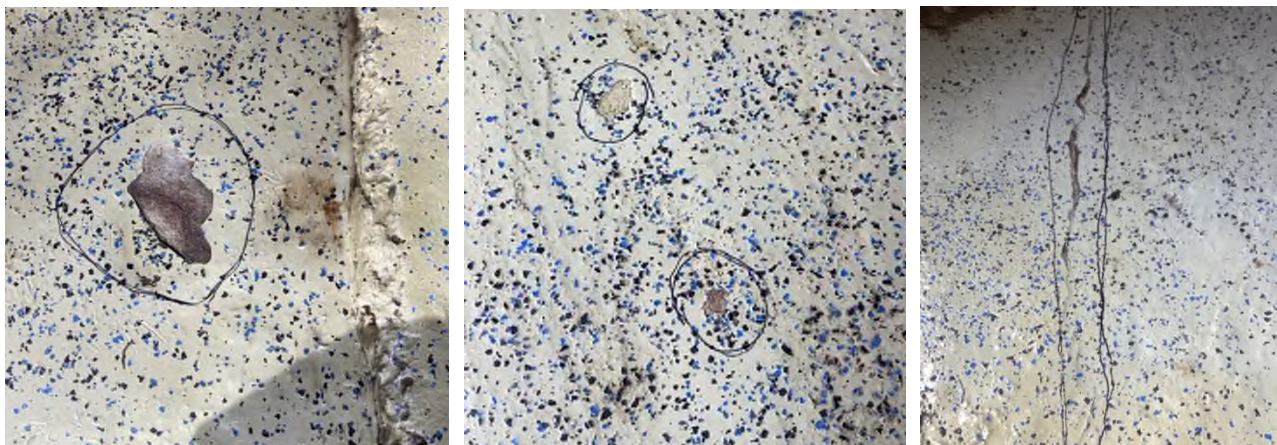
34990 Beacon detached shed with Retro-Coat®, photograph taken on March 14, 2024.

- **12066 Boston Post** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 16, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.
- **12067 Boston Post** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 12, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc. During the monitoring event, Arcadis calibrated the vacuum transmitter. An update of the data logged by the vacuum transmitter connected to MP-1 is presented below.



- **12070 Boston Post** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on March 13, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.
- **12089 Boston Post** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 14, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc. During the OM&M event Arcadis noted cracks and chips in the Retro-Coat® coating in the detached garage. Arcadis scheduled a follow up visit with the homeowner to make repairs to the Retro-Coat®.

On March 21, 2024, Arcadis completed a follow up visit to make repairs to the Retro-Coat®. The repairs were made in accordance to the procedures outline in the maintenance plan. Arcadis cleaned the cracks and chips, then applied urethane caulk over the damaged Retro-Coat®. Arcadis will continue to monitor the repairs made to the RetroCoat® and if additional RetroCoat® will need to be applied in the future.



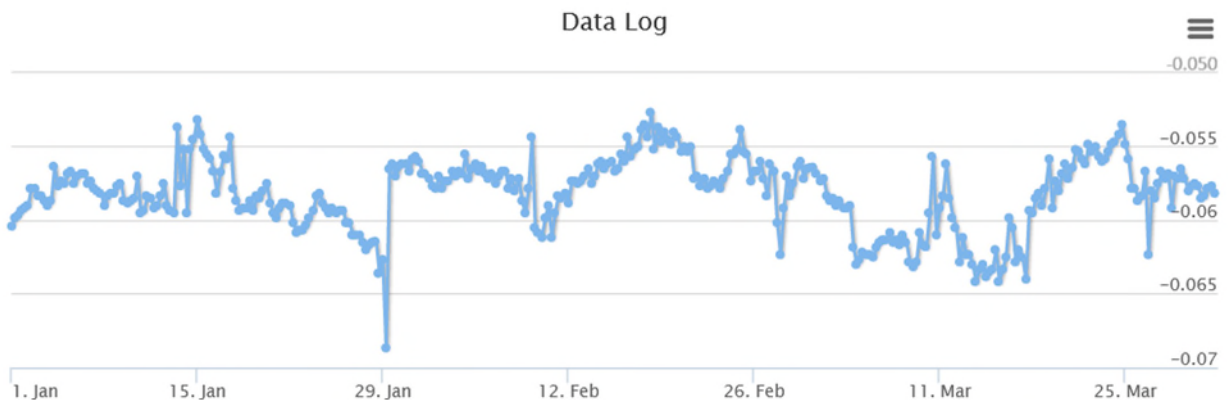
12089 Boston Post - Three photographs above show the chips and crack outlined in black marker.



12089 Boston Post - Two photographs above show the complete repairs to the chips and crack using urethane caulk.

- **12100 Boston Post** – The system is currently in operation and is being maintained and monitored. On December 29, 2023, Arcadis was notified of a noise and vibration coming from the fan by the homeowner. On January 2, 2024, Arcadis inspected the system fan and cleaned and removed sediment which resolved the noise and vibrations.

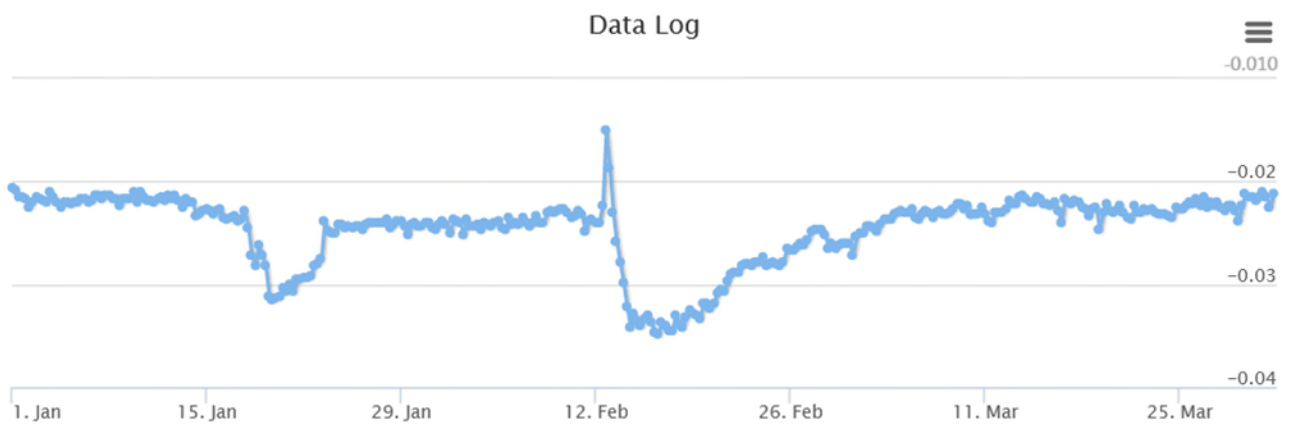
The fourth annual OM&M event was completed on January 29, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc. During the monitoring event, Arcadis calibrated the vacuum transmitter. An update of the data logged by the vacuum transmitter connected to sub-slab monitoring point SSMP-4 is presented below.



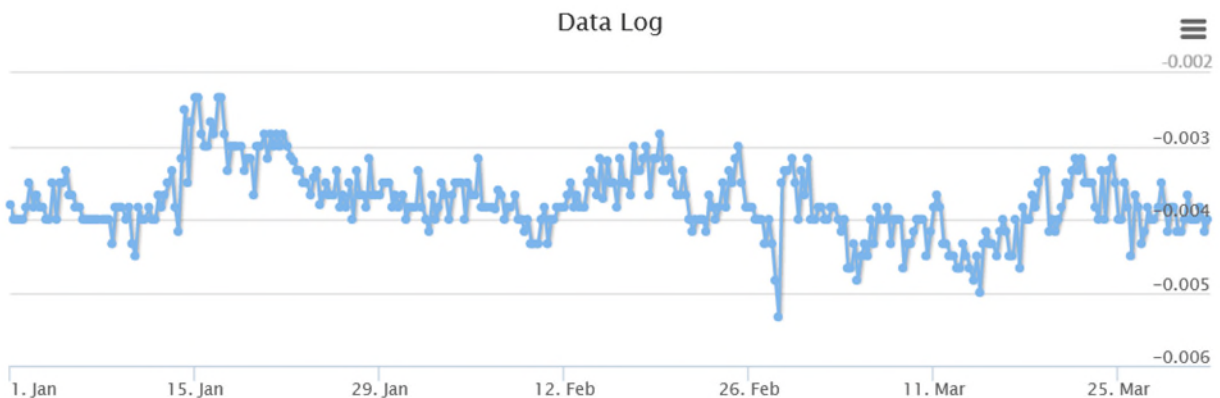
Due to the vinyl chloride concentration of 1.5 µg/L collected in the fourth quarter ground water sample collected at MW-79SR, Arcadis collected a sub-slab air sample at SSMP-02 on January 29, 2024. The analytical result for vinyl chloride in this sub-slab air sample were non-detect. Arcadis provided the analytical data package to all required parties consistent with the access agreement after receipt and validation.

Monitoring in accordance with the EGLE-approved property-specific monitoring program is underway. First quarter 2024 groundwater sampling results for vinyl chloride were 0.72 µg/L at MW-115S and did not exceed the historic high of 3.9 µg/L observed in November 2019. The vinyl chloride concentration was non-detect at MW-79SR which did exceed the historical high of 1.5 µg/L observed in November 2023. The vinyl chloride concentration was non-detect at MW-156S and did not exceed the groundwater screening level of 1.0 µg/L.

- **12131 Boston Post** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 12, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc. During the monitoring event, Arcadis calibrated the vacuum transmitter. The update of the data logged by the vacuum transmitter connected to MP-4 is presented below.



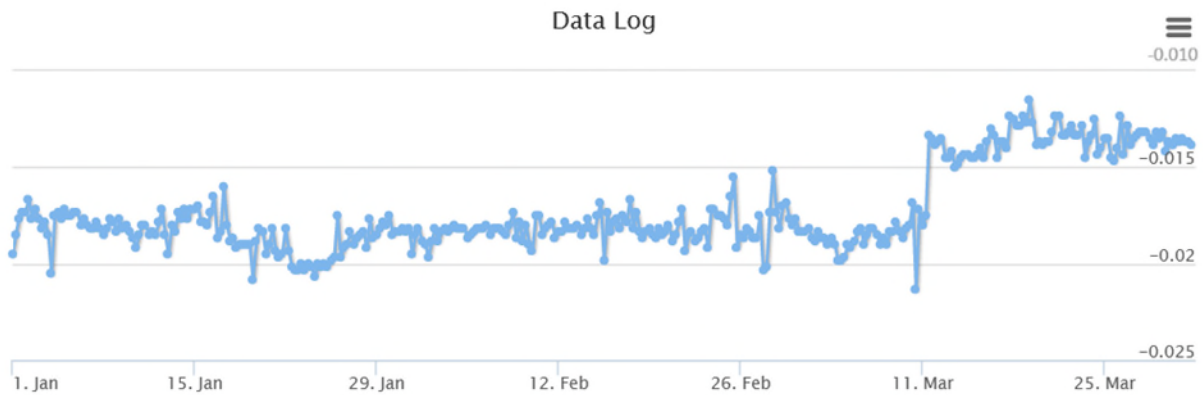
- **12141 Boston Post** – The system is currently in operation and is being maintained and monitored. The homeowner has not been available to conduct the monitoring event and has asked to have the OM&M event scheduled in April. Arcadis will continue to contact the homeowner to schedule the annual OM&M event. An update of the data logged by the vacuum transmitter connected to MP-4 is presented below.



- **12017 Brewster** – The system is currently in operation and is being maintained and monitored. The homeowner has not been available to conduct the monitoring event and has asked to have the OM&M event scheduled in May. Arcadis will continue to contact the homeowner to schedule the annual OM&M event.

Jeanne Schlaufman
EGLE Warren District Office
May 20, 2024

- **12036 Brewster** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 12, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc. During the monitoring event, Arcadis calibrated the vacuum transmitter. An update of the data logged by the vacuum transmitter connected to SSMP-2 and a current photo of detached shed floor condition at the property is presented below.



12036 Brewster - Detached shed with Retro-Coat®, photograph taken on March 13, 2024.

- **12075 Brewster** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on January 29, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc. Current photos of the detached shed floor condition at the property are presented below.



12075 Brewster - Detached shed with Retro-Coat®, photograph taken on April 17, 2024.

- **12088 Brewster** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 15, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.
- **12091 Brewster** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 14, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.
- **12101 Brewster** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on March 13, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.
- **34367 Capitol Avenue** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 15, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.

During the OM&M event Arcadis noted cracks in the Retro-Coat® coating in the detached garage. Arcadis scheduled a follow up visit with the homeowner to make repairs to the Retro-Coat®.

On March 21, 2024, Arcadis completed a follow up visit to make repairs to the Retro-Coat®. The repairs were made in accordance to the procedures outline in the maintenance plan. .The cracks were cleaned and, then urethane caulk was applied over the damaged Retro-Coat®. Arcadis will continue to monitor the repairs made to the RetroCoat® and if additional RetroCoat® will need to be applied in the future.



34367 Capitol - Two photographs above show the crack and repairs to the crack using urethane caulk.

- **34380 Capitol Avenue** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 14, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.

34401 Capitol Avenue – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on February 15, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc.

During the OM&M event Arcadis noted cracks in the Retro-Coat ® coating in the detached garage. Arcadis scheduled a follow up visit with the homeowner to make repairs to the Retro-Coat ®.

On March 14, 2024, Arcadis completed a follow up visit to make repairs to the Retro-Coat ®. The repairs were made in accordance to the procedures outline in the maintenance plan. The cracks were cleaned and, then urethane caulk was applied over the damaged Retro-Coat ®. Photos of the repair are presented below. Arcadis will continue to monitor the repairs made to the RetroCoat® and if additional RetroCoat® will need to be applied in the future.



34401 Capitol - Two photographs above show the crack and repairs to the crack using urethane caulk.

- **34424 Capitol Avenue** – The system is currently in operation and is being maintained and monitored. The tenant has not been available to conduct the monitoring event. Arcadis will continue to contact the tenant to schedule the annual OM&M event.

Monitoring in accordance with the EGLE-approved property-specific monitoring program is underway. First quarter 2024 groundwater sampling results for vinyl chloride were non-detect at MW-90S, MW-103S, and MW-169S and did not exceed the groundwater screening level of 1.0 µg/L. The vinyl chloride concentration was non-detect at MW-136S and did not exceed the historical high of 3.2 µg/L observed in November 2020. The vinyl chloride concentration was 0.45 µg/L at MW-148S and did not exceed the historical high of 2.3 µg/L observed in November 2020. Therefore, additional sub-slab sampling was not required.

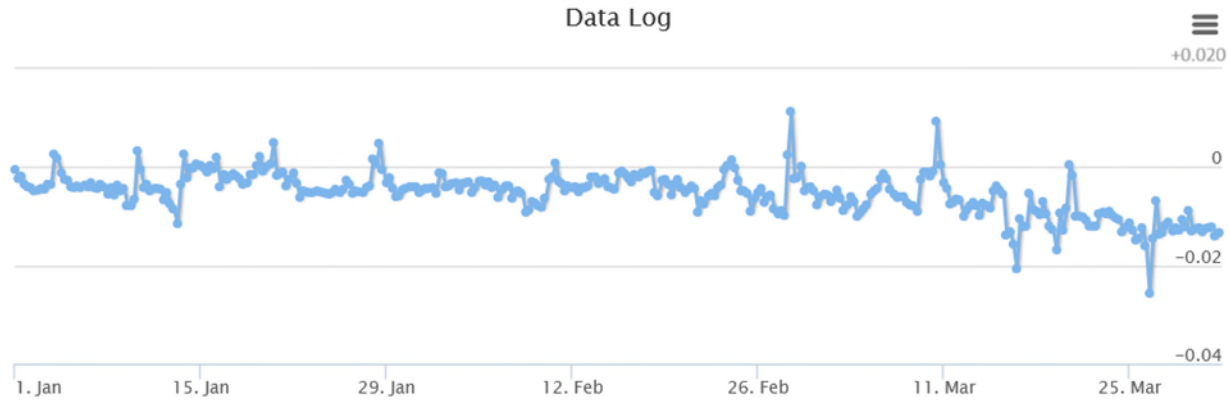
- **34450 Capitol Avenue** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on March 15, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc

Monitoring in accordance with the EGLE-approved property-specific monitoring program is underway. First quarter 2024 groundwater sampling results for vinyl chloride were non-detect at MW-108S, MW-168S, and MW-169S and did not exceed the groundwater screening level of 1.0 µg/L. The vinyl chloride concentration was 0.49 µg/L at MW-137S and did not exceed the historical high of 1.2 µg/L observed in August 2022. Therefore, additional sub-slab sampling was not required.

- **34480 Capitol Avenue** – The system is currently in operation and is being maintained and monitored. The fourth annual OM&M event was completed on March 15, 2024. All monitoring points achieved the performance metric established by EGLE of -0.02 iwc. During the monitoring event, Arcadis calibrated the vacuum transmitter. An update of the data logged by the vacuum transmitter connected to SSMP-2 is presented below.

Throughout the first quarter, there were brief positive vacuum readings recorded by the vacuum transmitter. Arcadis monitored the vacuum readings and the vacuum readings returned to normal negative levels. During

the annual OM&M event Arcadis tested and calibrated the vacuum transmitter. Following the OM&M event on March 15, 2024, vacuum levels have returned to normal negative levels.



Interim Preemptive Mitigation Systems Not Installed

- **12124 Boston Post** –Three rounds of pre-mitigation indoor air 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 well MW-118S were non-detect in the first quarter of 2024 and have been below the groundwater screening level of 1.0 µg/L.
- **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.