TRANSMITTAL LETTER

ARCADIS

To:
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Warren, Michigan 48092-2793
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From:
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Date:
July 31, 2025

Arcadis Project No.:
30251157

Subject:
Livonia Transmission Plant
EGLE Site ID No. 82002970
Quarterly Residential Mitigation Update Letter

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

TO
Erik Gurshaw
EGLE Warren District Office
27700 Donald Court
Warren, Michigan 48092-2793
gurshawe@michigan.gov

EGLE Site ID No. 82002970
CD Number 2:1712372-GAD-RSW

DATE
July 31, 2025

PROJECT NUMBER
30251157.201.02

DEPARTMENT
Environment

NAME
Megan Meckley
Megan.Meckley@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) systems 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 IPM updates on a quarterly basis, with this quarterly update covering the second quarter including April through June 2025.

As of June 30, 2025, the status of the 33 residential properties in the Alden Village subdivision is as follows:

- 31 of 33 of the IPMs 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 (RAP).
    - 12121 Boston Post: Arcadis continues to be denied access to this property.
- 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 IPM 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 the entirety of the residential structure floor to be depressurized to a minimum of -0.02 inches of water column (iwc) for the residential IPM systems. 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 which 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 although may not be meeting -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 IPM systems.

Details are provided below for all 33 locations.

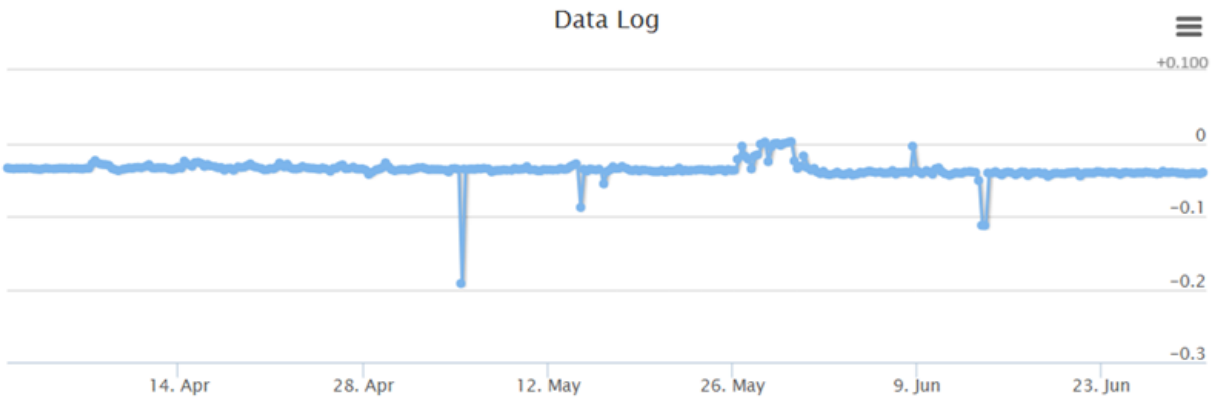
Interim Preemptive Mitigation Systems Currently Operating

- **34380 Beacon –** The system is currently in operation and is being maintained and monitored. The homeowner has not been available to conduct the monitoring event. Arcadis will continue to contact the homeowner to schedule the annual OM&M event.
- **34424 Beacon –** The system is currently in operation and is being maintained and monitored. Arcadis previously observed cracking in the concrete slab of the unoccupied shed resulting in damage to the Retro-Coat ™ which was outlined in the second quarter 2024 quarterly update letter. Ford and Arcadis continue to follow the guidance outlined in the Consent Decree and alterations to the mitigation system will be requested in the response activity plan.
- **34450 Beacon –** The system is currently in operation and is being maintained and monitored.

  On April 3, 2025, May 4, 2025, and June 5, 2025, following rain events that produced more than 1 inch of rain in a 24-hour period, Arcadis inspected the barrier in the crawl space and removed approximately 10 gallons, 1 gallon, and 0 gallons of water, respectively. Vacuum influence measurements were collected following the rain inspection and readings exceeded the performance metric established by EGLE of -0.02 iwc.
- **34550 Beacon –** The system is currently in operation and is being maintained and monitored.
- **34591 Beacon –** The system is currently in operation and is being maintained and monitored. The fifth annual OM&M event was completed on April 7, 2025. Vacuum influence measurements were collected, and all readings exceeded the performance metric established by EGLE of -0.02 iwc.

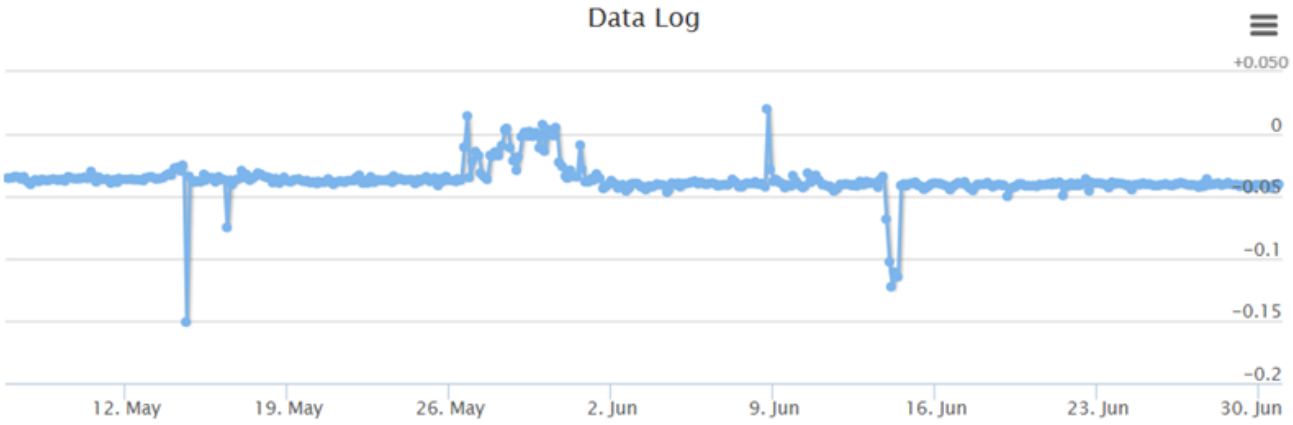
  On April 3, 2025, May 4, 2025, and June 5, 2025, following rain events that produced more than 1 inch of rain in a 24-hour period, Arcadis inspected the barrier and water was not observed in the crawlspace in any of the three rain events. Vacuum influence measurements were collected following the rain inspection and readings exceeded the performance metric established by EGLE of -0.02 iwc.

  An update of the data logged by the vacuum transmitter connected to SSMP-1 is presented below.



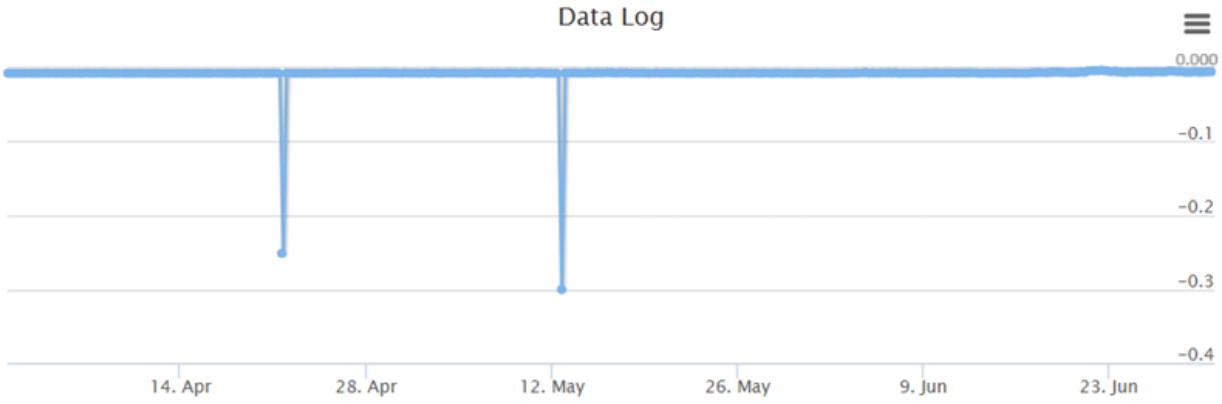
Below is a zoomed in portion of the data plot showing the IPM system continuing to maintain vacuum level at the monitoring point which is typical of normal operation at this property. Periodic changes in vacuum were

observed remotely by Arcadis but were followed by restoration of vacuum influence shortly after each deviation.

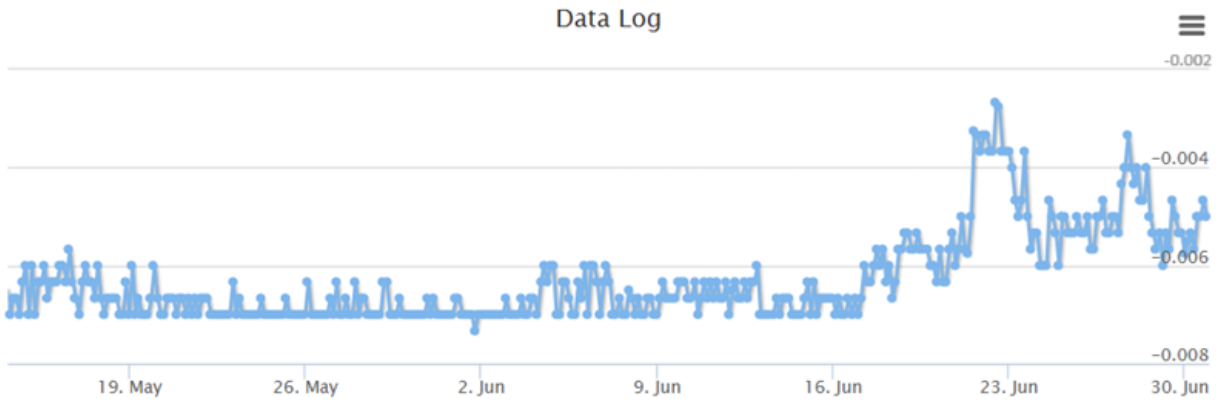


- **34600 Beacon –** The system is currently in operation and is being maintained and monitored.
- **34644 Beacon –** The system is currently in operation and is being maintained and monitored.
- **34682 Beacon –** The system is currently in operation and is being maintained and monitored. The fifth annual OMM event is scheduled for July 28, 2025, which will be summarized in the third quarter 2025 update.

  An update of the data logged by the continuously monitored vacuum transmitter connected to sub-membrane monitoring point MP-5 is presented below. This data plot shows the IPM system continuing to maintain vacuum level at the monitoring point which is typical of normal operation at this property.



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 ongoing. The second quarter 2025 groundwater sampling results for vinyl chloride was non-detect at MW-115S and did not exceed the historical high of 3.9 µg/L observed in November 2019. The vinyl chloride concentrations at MW-154S and MW-155S were non-detect and did not exceed the groundwater screening level of 1.0 µg/L. Therefore, additional sub-slab sampling was not required.

- **34920 Beacon –** The system is currently in operation and is being maintained and monitored. The fifth annual OMM event occurred July 22, 2025, and will be summarized in the third quarter 2025 update.
- **34940 Beacon –** The portion of the IPM system in the garage and vapor extraction connected to the sump is currently in operation and is being maintained and monitored. Updates to the IPM were also completed in accordance with the EGLE approval letter for Response Activity Plan-Revised Interim Response Activity Plan – for 34940 Beacon Street dated January 3, 2025 that was prepared to address water under the basement floor that adversely affected the RetroCoat ®.

  Arcadis completed monthly indoor air sampling at the property as requested by EGLE via electronic correspondence dated November 25, 2024. Arcadis followed the methodologies and sampling procedures identified in the EGLE approved Response Activity Plan – Vapor Intrusion Evaluation dated April 13, 2018, and the Quality Assurance Project Plan dated August 2017. In the second quarter 2025, on April 2, 2025, Arcadis deployed indoor air samplers and collected them on April 3, 2025.

  The analytical results for the air samples are summarized in **Table 1** below.

Erik Gurshaw
EGLE Warren District Office
July 31, 2025

Table 1 – 34940 Beacon Second Quarter Indoor and Ambient Air Analytical Results:

Location: / Date:	Unit	EGLE Residential SSVIAC	IAF-34940BEACON 4/2/2025	IAB-34940BEACON 4/2/2025	AA-34940BEACON 4/2/2025
Volatile Organic Compounds (VOCs via Method (USEPA) TO-15 (Full Scan/SIM))					
1,1-Dichloroethene	µg/m^3	210	ND (<0.69)	ND (<0.066), [ND (<0.13)]	ND (<0.069)
1,4-Dioxane	µg/m^3	5.1	ND (<1.8)	ND (<0.60), [ND (<1.8)]	ND (<0.63)
cis-1,2-Dichloroethene	µg/m^3	8.3	ND (<0.40)	ND (<0.13), [ND(<0.39)]	ND (<0.14)
Tetrachloroethene	µg/m^3	41	ND (<0.69)	ND (<0.23), [ND (<0.67)]	ND (<0.24)
trans-1,2-Dichloroethene	µg/m^3	83	ND (<2.0)	ND (<0.66), [ND (<2.0)]	ND (<0.69)
Trichloroethene	µg/m^3	2.0	ND (<0.54)	ND (<0.18), [ND (<0.53)]	ND (<0.19)
Vinyl chloride	µg/m^3	1.6	ND (<0.13)	ND (<0.043), [ND (<0.13)]	ND (<0.045)

< Denotes not detected above reporting limit or method detection limit
[<0.49] - Indicates the duplicate sample value.
ND – not detected
IAB – indoor air basement
IAF – indoor air first floor
AA – ambient air exterior
µg/m3 – micrograms per cubic meter

Following installation of a perimeter drainage system in the basement, on April 4, 2025, Arcadis removed small patches of the Retro-Coat® on the basement floor for the placement of two calcium chloride moisture tests. On April 7, 2025, the two moisture tests were deployed after allowing the exposed concrete to equilibrate. On April 10, 2025, the moisture tests were collected, and the results of the moisture tests were reviewed with the Retro-Coat® installation contractor to verify that the moisture levels were low enough for the application of the Retro-Coat®.

On April 23, 2025, the Retro-Coat® contractor began removing the Retro-Coat® with an electric floor grinder with HEPA vacuum attachment and prepared the surface of the basement concrete floor for the application of replacement Retro-Coat®. Removal of the Retro-Coat® was completed by the Retro-Coat® installation contractor on May 2, 2025. Additional calcium chloride moisture tests were deployed on the concrete following the Retro-Coat® removal. The tests were deployed on April 30, 2025 and collected on May 2, 2025. The results from the moisture test were acceptable for the application of the Retro-Coat®. The application of the replacement Primer MV and Retro-Coat® began on May 6, 2025, and was completed on May 9, 2025.

On May 15, 2025, a licensed residential plumber installed the in-line carbon filtration system on the sump basin discharge pipe.

Water turbidity associated with construction initially plugged the in-line carbon filters installed at this property. Time was needed to allow turbidity to settle; therefore, at the request of EGLE, Arcadis collected weekly sump water samples prior to the new carbon filter installation. Eight weekly samples were collected during the second quarter 2025 between April 1, 2025, and May 22, 2025, and submitted for analysis of the seven site COCs. The May 22, 2025 sampling was the first quarterly sampling conducted to document performance in accordance with the performance monitoring detailed in the Response Activity Plan-Revised Interim Response Activity Plan – for 34940 Beacon Street. The sump water samples were below site-specific volatilization to indoor air criteria for the seven site specific constituents. The sump head space was under vacuum as part of the IPM operation following the sump pump alterations completed on March 19, 2025. The analytical results for the sump water samples are summarized in **Table 2** below.

Table 2 – 34940 Beacon Second Quarter Sump Water Analytical Results:

Location: / Date:	Unit	EGLE Residential SSVIAC	SUMP_34940BEACON 4/1/2025	SUMP_34940BEACON 4/7/2025	SUMP_34940BEACON 4/14/2025	SUMP_34940BEACON 4/21/2025	SUMP_34940BEACON 4/28/2025
Volatile Organic Compounds (VOCs via Method 8260 or 8265)							
1,1-Dichloroethene	µg/L	18	ND (<0.49)	ND (<0.49)	ND (<0.49)	ND (<0.49)	ND (<0.49)
1,4-Dioxane	µg/L	1,900	ND (<0.86)	ND (<0.86)	ND (<0.86)	ND (<0.86)	ND (<0.86)
cis-1,2-Dichloroethene	µg/L	3.4	1.1	ND (<0.46)	0.71	1.1	0.95 J
Tetrachloroethene	µg/L	1.5	ND (<0.44)	ND (<0.44)	ND (<0.44)	ND (<0.44)	ND (<0.44)
trans-1,2-Dichloroethene	µg/L	13	ND (<0.51)	ND (<0.51)	ND (<0.51)	ND (<0.51)	ND (<0.51)
Trichloroethene	µg/L	1.0	ND (<0.44)	ND (<0.44)	ND (<0.44)	ND (<0.44)	ND (<0.44)
Vinyl chloride	µg/L	1.0	ND (<0.45)	ND (<0.45)	ND (<0.45)	ND (<0.45)	ND (<0.45)

Location: / Date:	Unit	EGLE Residential SSVIAC	SUMP_34940BEACON 5/5/2025	SUMP_34940BEACON 5/13/2025	SUMP_34940BEACON 5/22/2025	POSTCARBON_34940 BEACON 5/22/2025
Volatile Organic Compounds (VOCs via Method 8260 or 8265)						
1,1-Dichloroethene	µg/L	18	ND (<0.49)	ND (<0.49)	ND (<0.49)	ND (<0.49)
1,4-Dioxane	µg/L	1,900	ND (<0.86)	ND (<0.86)	ND (<0.86)	ND (<0.86)
cis-1,2-Dichloroethene	µg/L	3.4	1.2	1.1	1.3	1.1
Tetrachloroethene	µg/L	1.5	ND (<0.44)	ND (<0.44)	ND (<0.44)	ND (<0.44)
trans-1,2-Dichloroethene	µg/L	13	ND (<0.51)	ND (<0.51)	ND (<0.51)	ND (<0.51)
Trichloroethene	µg/L	1.0	ND (<0.44)	ND (<0.44)	ND (<0.44)	ND (<0.44)
Vinyl chloride	µg/L	1.0	ND (<0.45)	ND (<0.45)	ND (<0.45)	ND (<0.45)

< Denotes not detected above reporting limit or method detection limit
J - Estimated value.
ND – not detected
Sump – Basement sump water
POSTCARBON – Sump water after carbon treatment

The remaining revised interim activities for this property are to be completed at the schedule outlined below:

- Monthly inspections of the Retro-Coat® through August 2025.
- Quarterly samples from the in-line carbon filtration system to be completed during the same quarterly groundwater sampling schedule.
- Maintenance of the perimeter drainage system in the basement.

Photos from the construction process are included in **Exhibit 1** below.

Exhibit 1: Construction Photos

Photo 1 (left): Retro-Coat® removal using an electric grinder and HEPA vacuum attachment

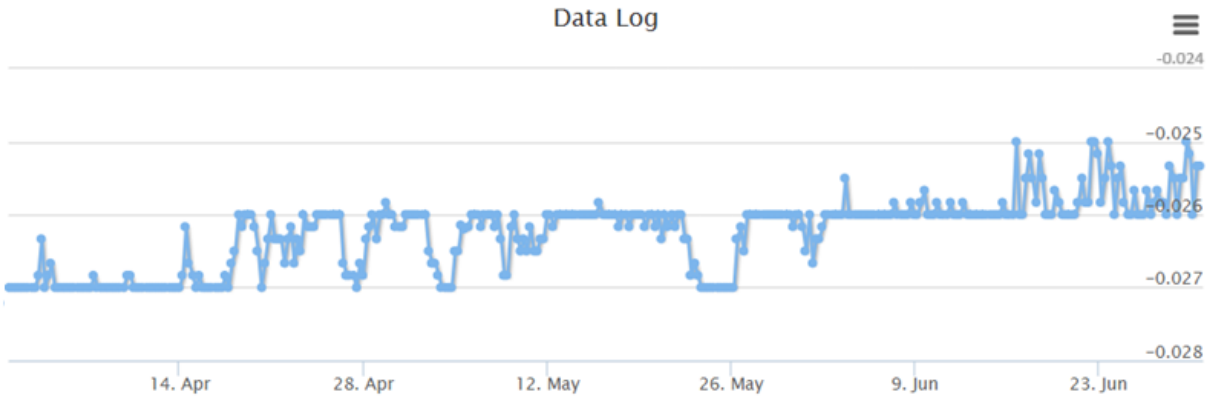
Photo 2 (right): Application of Primer MV on the basement floor.

Photo 3 (left): Application of the Retro-Coat® on the basement floor.

Photo 4 (right): Completed installation of the in-line sediment filter and carbon filtration tank on the sump basin discharge line.

- **34950 Beacon –** The system is currently in operation and is being maintained and monitored.
- **34990 Beacon –** The system is currently in operation and is being maintained and monitored.

  An update of the data logged by the vacuum transmitter connected to MP-7 is presented below. Below is 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.

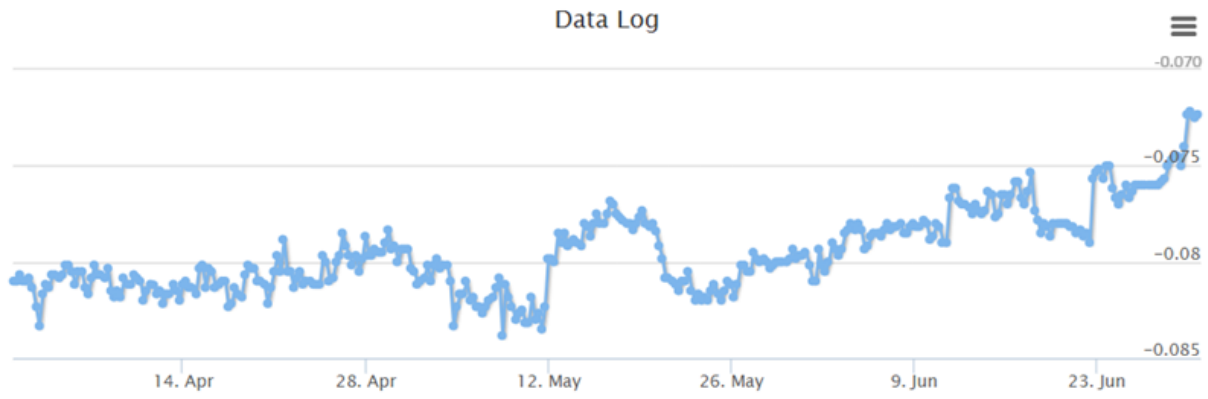


- **12066 Boston Post –** The system is currently in operation and is being maintained and monitored.

  On April 3, 2025, May 4, 2025, and June 5, 2025, following rain events that produced more than 1 inch of rain in a 24-hour period, Arcadis inspected the barrier and water was not observed in the crawlspace for any of the three rain events. Vacuum influence measurements were collected following the rain inspection and readings exceeded 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.

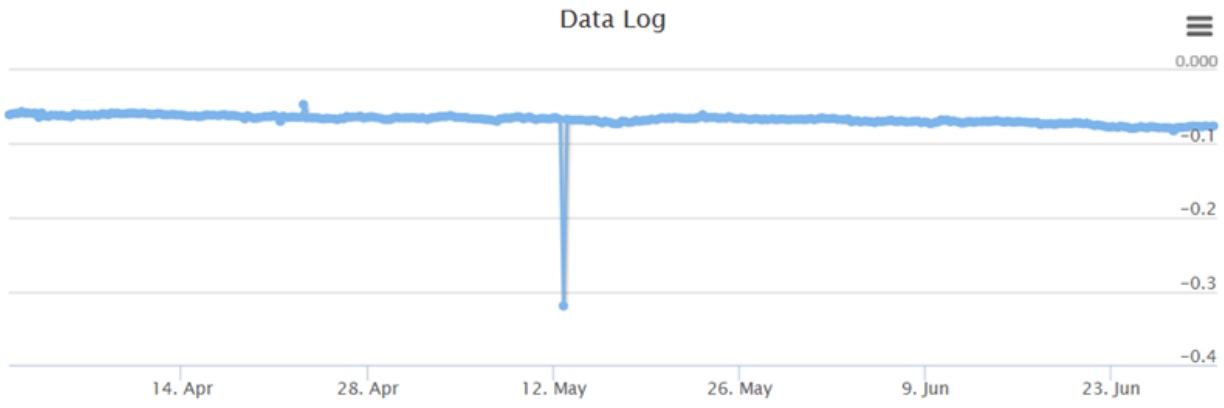
  On April 3, 2025, May 4, 2025, and June 5, 2025, following rain events that produced more than 1 inch of rain in a 24-hour period, Arcadis inspected the barrier and removed approximately 10 gallons, 5 gallons, and 0 gallons of water, respectively. Vacuum influence measurements were collected following the rain inspection and readings exceeded the performance metric established by EGLE of -0.02 iwc.

  An update of the data logged by the vacuum transmitter connected to MP-1 is presented below. Below is 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.

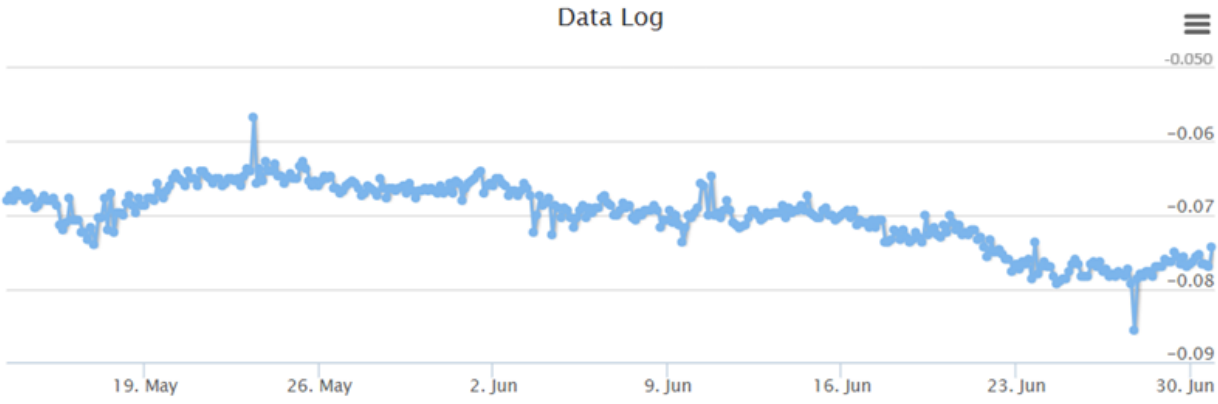


- **12070 Boston Post –** The system is currently in operation and is being maintained and monitored.
- **12089 Boston Post –** The system is currently in operation and is being maintained and monitored.
- **12100 Boston Post –** The system is currently in operation and is being maintained and monitored.

  An update of the data logged by the vacuum transmitter connected to sub-slab monitoring point SSMP-4 is presented below. Below is 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.



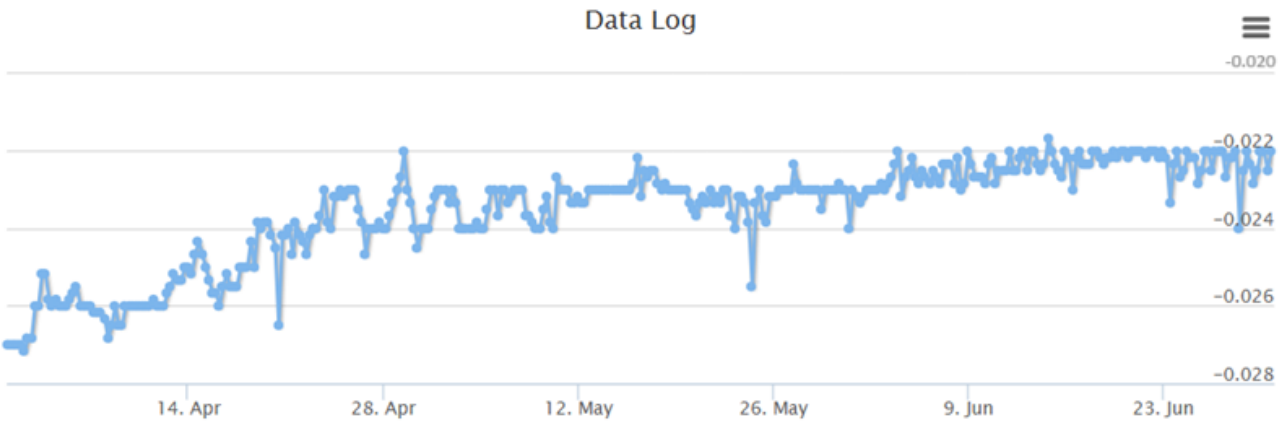
  Below is a zoomed in portion of the data plot showing the IPM system continuing to maintain vacuum level at the monitoring point which is typical of normal operation at this property.



  Monitoring in accordance with the EGLE-approved property-specific monitoring program is underway. The second quarter 2025 groundwater sampling result for vinyl chloride was non-detect at MW-115S and did not exceed the historical high of 3.9 µg/L observed in November 2019. The vinyl chloride concentration was non-detect at MW-79SR which did not 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.

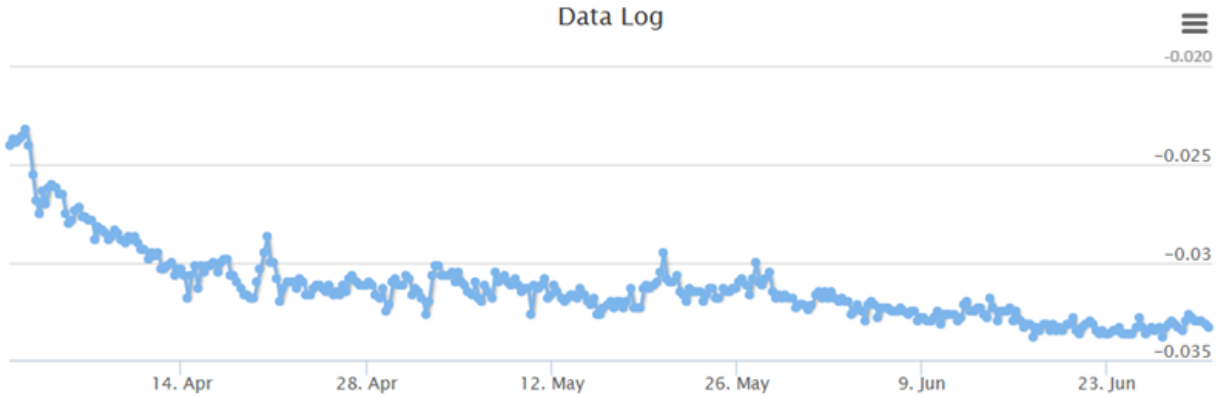
- **12131 Boston Post** – The system is currently in operation and is being maintained and monitored.

The update of the data logged by the vacuum transmitter connected to MP-4 is presented below.

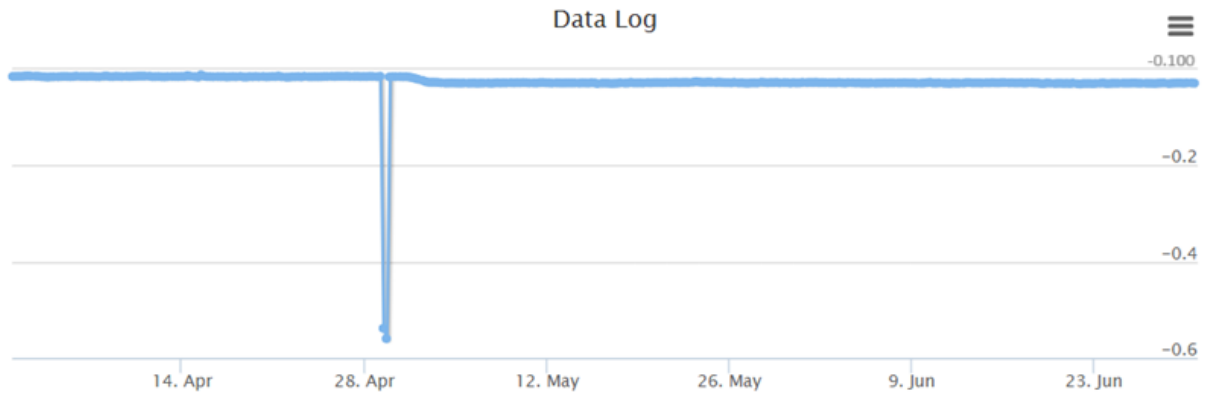


- **12141 Boston Post –** The system is currently in operation and is being maintained and monitored.

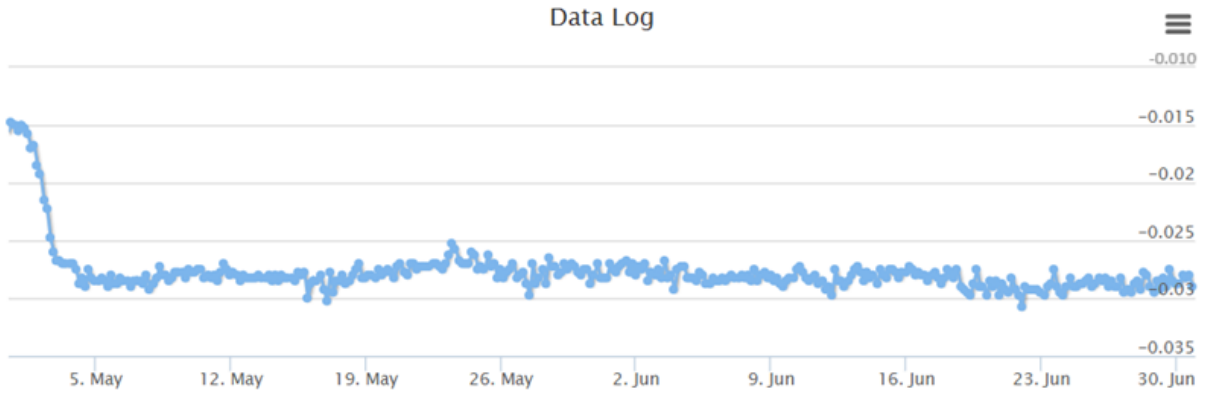
  An update of the data logged by the vacuum transmitter connected to MP-4 is presented below.



- **12017 Brewster –** The system is currently in operation and is being maintained and monitored. The fifth annual OMM event is scheduled for July 30, 2025, which will be summarized in the third quarter 2025 update.
- **12036 Brewster –** The system is currently in operation and is being maintained and monitored. An update of the data logged by the vacuum transmitter connected to SSMP-2 is presented below. Below is 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.



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.



- **12075 Brewster –** The system is currently in operation and is being maintained and monitored.

  On April 3, 2025, May 4, 2025, and June 5, 2025, following rain events that produced more than 1 inch of rain in a 24-hour period, Arcadis inspected the barrier and removed approximately 3 gallons, 0 gallons, and 2 gallons of water, respectively. Vacuum influence measurements were collected following the rain inspection and readings exceeded the performance metric established by EGLE of -0.02 iwc.

- **12088 Brewster** – The system is currently in operation and is being maintained and monitored.

  On April 3, 2025, May 4, 2025, and June 5, 2025, following rain events that produced more than 1 inch of rain in a 24-hour period, Arcadis inspected the barrier and water was not observed in the crawlspace for any of the three rain events. Vacuum influence measurements were collected following the rain inspection and readings exceeded the performance metric established by EGLE of -0.02 iwc.

- **12091 Brewster –** The system is currently in operation and is being maintained and monitored.

- **12101 Brewster –** The system is currently in operation and is being maintained and monitored.

  On April 3, 2025, May 4, 2025, and June 5, 2025, following rain events that produced more than 1 inch of rain in a 24-hour period, Arcadis inspected the barrier and water was not observed in the crawlspace for any of the

three rain events. Vacuum influence measurements were collected following the rain inspection and readings exceeded the performance metric established by EGLE of -0.02 iwc.

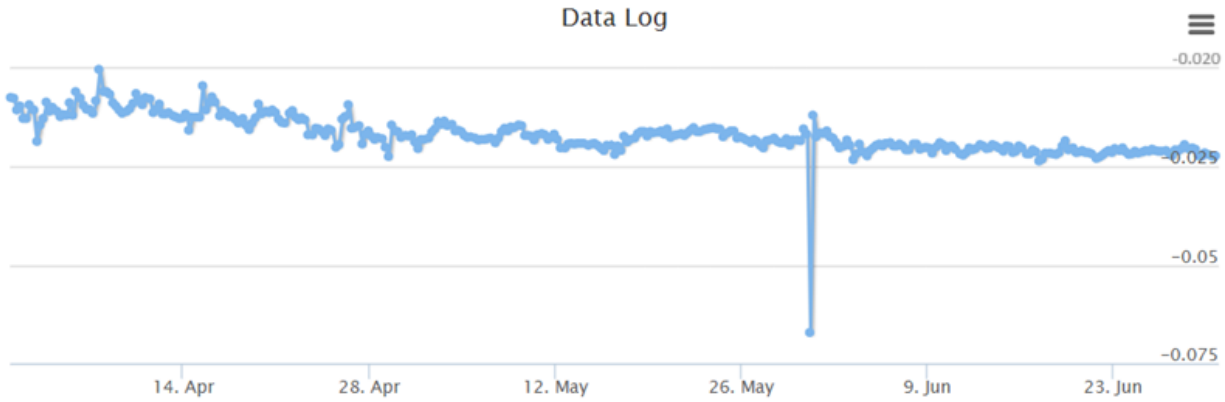
- **34367 Capitol Avenue –** The system is currently in operation and is being maintained and monitored.
- **34380 Capitol Avenue –** The system is currently in operation and is being maintained and monitored.
- **34401 Capitol Avenue –** The system is currently in operation and is being maintained and monitored.

  On April 3, 2025, May 4, 2025, and June 5, 2025, following rain events that produced more than 1 inch of rain in a 24-hour period, Arcadis inspected the barrier and water was not observed in the crawlspace for any of the three rain events. Vacuum influence measurements were collected following the rain inspection and readings exceeded the performance metric established by EGLE of -0.02 iwc.
- **34424 Capitol Avenue –** The system is currently in operation and is being maintained and monitored. The fifth annual OMM event is scheduled for July 30, 2025, which will be summarized in the third quarter 2025 update.

  Monitoring in accordance with the EGLE-approved property-specific monitoring program is ongoing. The second quarter 2025 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 non-detect 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.

  Monitoring in accordance with the EGLE-approved property-specific monitoring program is underway. The second quarter 2025 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 non-detect 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 fifth annual OM&M event was completed on April 25, 2025. Vacuum influence measurements were collected, and all readings exceeded the performance metric established by EGLE of -0.02 iwc except for SSMP-2 which is monitored by a vacuum transmitter.

  An update of the data logged by the vacuum transmitter connected to SSMP-2 is presented below. Below is 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.



Interim Preemptive Mitigation Systems Not Installed

- **12124 Boston Post –** Four rounds of pre-mitigation indoor air and sub-slab data were completed between 2018 and 2020. No detections of vinyl chloride were reported in any of the samples. Additionally, all groundwater samples collected to date from the closest upgradient monitoring well (MW-118S) have been below the groundwater screening level of 1.0 µg/L, including the second quarter 2025 sample which was non-detect.
- **12121 Boston Post** – Under the supervision of EGLE, Ford is continuing to monitor groundwater proximate to the home to accommodate the homeowner's refusal to grant access to their property for other investigation, characterization, or mitigation activities.