

# MEMO

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Date:  
April 30, 2020

Arcadis Project No.:  
30050315

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

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On behalf of Ford Motor Company (Ford), Arcadis of Michigan, LLC (Arcadis) has prepared this monthly 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. Based on the groundwater data collected in the third quarter of 2019 from the shallow groundwater monitoring wells the 100-foot buffer line was modified. On November 13, 2019, EGLE sent Ford an email indicating that due to the 100-foot buffer line moving more to the north along Capitol, three (3) additional homes were added to the interim preemptive mitigation (IPM) program.

On March 17, 2020, Ford sent a memo to EGLE titled "COVID-19 Force Majeure" requesting to temporarily halt off-site vapor intrusion (VI) sampling and mitigation work in residential homes and commercial businesses, due to the spread of the Coronavirus Disease (COVID-19), pursuant to the Force Majeure provisions contained in the Consent Decree entered on July 27, 2017 in Michigan Department of Environmental Quality v. Ford Motor Company, Case No. 2:1712372-GAD-RSW. On March 23, 2020 EGLE responded to the memo granting that off-site vapor intrusion (VI) sampling and mitigation work in residential homes and commercial business be temporarily suspended for 30 days. In the memo EGLE stipulated that if a residential mitigation system fails during this 30-day Force Majeure event, Ford will be required to evaluate the mitigation system and conduct repairs to make the system effective and operational using the CDC social distancing strategies. On April 24, 2020, EGLE approved an extension to the Force Majeure until April 30, 2020 and advised that the situation be re-evaluated based upon the relevant guidance and orders from the State of Michigan Executive Office. In addition, on April 24, 2020 Governor Gretchen Whitmer issued an extension to the executive order for all non-essential workers to stay at home until May 15, 2020.

As a result, all VI sampling appointments and mitigation system installations were temporarily suspended and will resume on Monday May 18, 2020 if the executive order is lifted by the

Governor. As of April 30, 2020, the following progress has been made at 33 residential properties in the Alden Village subdivision:

- 33 of 33 IPM systems are designed. 27 of 33 are installed and operating as designed. The status of the remaining 6 are:
  - 2 of 33 IPM systems are installed but require modification.
  - 2 of 33 IPM systems are under construction.
  - 1 of 33 IPM systems is scheduled to begin installation.
  - 1 of 33 current property owners is unwilling to allow the IPM system to be installed at their property.
  
- 10 of 11 sheds requiring Retro-Coat™ have had it applied to the floor. The status of the remaining shed is:
  - 1 of 11 property owners with sheds have not approved Retro-Coat™ application due to the conditions of the roof on the shed, which makes entry unsafe.
  
- 10 of 16 detached garages requiring Retro-Coat™ have had it applied to the floor. The status of the remaining 6 are:
  - 3 detached garages will be completed during the spring/summer 2020
  - 3 detached garage owners have not approved Retro-Coat™ application

Arcadis continues to work diligently to coordinate and install the interim preemptive mitigation systems. Details are provided below for all 33 locations.

#### **Interim Preemptive Mitigation System Currently Being Installed or Scheduled**

Details are provided below regarding the status of the work at the individual properties.

- **34380 Capitol Avenue** – Arcadis and their subcontractors met with the homeowner on February 25, 2020 to collect information required for the City of Livonia permits. Arcadis will continue to coordinate the installation of the mitigation system with the homeowner. An interim air purifier unit was deployed on November 20, 2019. At the request of the homeowner a second unit was deployed on November 22, 2019. Both purifiers were replaced on February 17, 2020. Monthly vapor intrusion sampling was completed on December 9, 2019, January 14, 2020, and February 18, 2020. The VI sampling was scheduled with the homeowner for March 17, 2020 and was cancelled as a result of the COVID-19 Force Majeure. Monthly sampling is scheduled to resume in May after the COVID-19 Force Majeure suspension has passed. The December 2019 analytical data package was provided to all interested parties on January 29, 2020. The January 2020 analytical data package was provided to all interested parties on March 12, 2020. The February 2020 analytical data package was provided to all interested parties on April 16, 2020.
  
- **34450 Capitol Avenue** – An interim air purifier unit was deployed on November 20, 2019. On February 20, 2020 Arcadis changed out the air purifier in the home. During the week of February 24, 2020 Arcadis and its subcontractors conducted additional inspections and evaluation of structural members that would need to be addressed in preparation for the mitigation system installation. Installation of the mitigation system began on March 3, 2020. Work is currently suspended due to the COVID-19 Force Majeure and will resume after the suspension has passed.

- **12124 Boston Post** – The property owner declined an interim air purifier unit. Work required prior to beginning IPM construction was initiated during January and continued during February 2020 and included installation of a new exterior crawlspace access, installation of a locking door at the existing interior crawlspace access, and asbestos abatement. The installation of the IPM system is pending concurrence from the City of Livonia on structural repairs needed to enable construction of the IPM system. Work will resume after the Force Majeure suspension has passed and upon approval from the City of Livonia to proceed.

### **Interim Preemptive Mitigation Systems Operating as Designed**

- **34644 Beacon** – Arcadis began construction of the IPM system on February 13, 2020, and installation was substantially complete on March 6, 2020 with all monitoring points meeting the performance metric established by EGLE of -0.02 in water column (wc). The post-mitigation OMM and indoor air sampling will be completed after the COVID-19 Force Majeure suspension has passed. Arcadis received a system alarm on April 24, 2020 indicating that the system was not operating. Arcadis contacted the homeowner, and he stated that he had turned off the fan due to increased electrical cost. The homeowner stated he would not turn the fan back on until he was reimbursed for the cost of the fan operating. The Arcadis communication liaison asked if the homeowner would turn the system back while the issue was under investigation. On April 28, 2020, Arcadis was notified remotely that the system had been turned on.
- **12088 Brewster** – The system is currently in routine operation and maintenance. The first routine semi-annual Operation, Maintenance, and Monitoring (OM&M) monitoring event was completed on February 3, 2020 and included the final routine indoor air sampling event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The Retro-Coat™ in the shed floor was inspected, and no damage was observed. The analytical data package was provided to all interested parties on March 24, 2020 as outlined in the access agreement.

On March 30, 2020, following a rain event, Arcadis inspected the crawlspace and identified water on the barrier. Less than one gallon of water was removed from the crawlspace barrier. Minor repairs were made to the barrier to prevent water from pooling on the barrier.

- **12075 Brewster** – The system is currently in routine operation and maintenance. The first routine semi-annual OM&M monitoring event was completed on February 3, 2020 and included the final routine indoor air sampling event. All monitoring points met the performance metric established by EGLE of -0.02 in wc, with the exception of Monitoring Point MP-2 which was measured at -0.019 in wc. Additional work was completed to reinforce the barrier seams, and as of February 19, 2020 all sub-membrane monitoring points are exceeding the performance metric of -0.02 in wc. The Retro-Coat™ in the shed floor was inspected, and no damage was observed. The analytical data package was provided to all interested parties on March 25, 2020 as outlined in the access agreement.

On March 30, 2020, following a rain event, Arcadis called the homeowner to verify that water was not observed in the crawlspace from the rain event. The homeowner stated that they were unable to verify if there was water on the barrier. Due to CDC social distancing guidelines and the location of the crawlspace access being inside the home, Arcadis was not able to enter the crawlspace and check the barrier for water. Arcadis will reinspect the barrier, remove any water, and make repairs if necessary, after the COVID-19 Force Majeure suspension has passed.

- **12089 Boston Post** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 15, 2020 along with the first routine semi-annual

OM&M monitoring event. Sub-slab monitoring point SSMP-4 was not accessible for monitoring; however, all other sub-slab monitoring points met the performance metric established by EGLE of -0.02 in wc. The Retro-Coat™ in the detached garage floor was inspected, and no damage was observed. The data package was submitted to all parties as outlined in the access agreement on February 4, 2020.

On March 30, 2020, following a rain event, Arcadis called the homeowner and to verify that water was not observed in the basement from the rain event. The homeowner stated that there was not any water observed. Due to CDC social distancing guidelines, Arcadis was not able to enter the basement and check for water.

On April 24, 2020 Arcadis received a system alarm. Arcadis reached out to the homeowner who stated that he was working in the basement and would turn the system on after finishing the work. On April 25, 2020, the system returned to normal operation.

- **34450 Beacon** - The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 6, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties on March 26, 2020 as outlined in the access agreement.

On March 30, 2020, following a rain event, Arcadis inspected the property and observed standing water in the back yard. Due to CDC social distancing guidelines and the location of the crawlspace access being inside the home, Arcadis was not able to enter the crawlspace and check the barrier for water. The homeowner was able to observe water on the barrier in the crawlspace. Arcadis will reinspect the barrier, remove any water, and make repairs if necessary, after the COVID-19 Force Majeure suspension has passed.

- **34401 Capitol** –The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 13, 2020 along with the first routine semi-annual OM&M monitoring event. This event was completed following a heavy rainfall, and a reduced vacuum level was measured at Monitoring Point MP-1 of -0.005 in wc. The vacuum level at the other monitoring point, MP-2 continued to exceed the performance metric established by EGLE of -0.02 in wc. A barrier seam was repaired, and as of February 13, 2020 all sub-membrane monitoring points are exceeding the performance metric of -0.02 in wc. The analytical data package from the January 2020 sampling event was provided to all interested parties consistent with the access agreement on March 12, 2020.

On March 30, 2020, following a rain event, Arcadis inspected the crawlspace, and identified water on the barrier. Less than one gallon of water was removed from the crawlspace barrier. Minor repairs were made to the barrier to prevent water from pooling on the barrier. All monitoring points were measured and confirmed vacuum influence.

- **34380 Beacon** – The system is currently in routine operation and maintenance. The first routine semi-annual OM&M monitoring event will be scheduled with the property owner and will include the final routine indoor air sampling event. The homeowner has stated that they will not be available until April 2020 and it will be scheduled after the COVID-19 Force Majeure suspension has passed. If the OM&M monitoring event is completed outside of the heating season, the final OM&M sampling event will not occur until the fourth quarter so that it can be completed during the heating season.

On March 30, 2020, following a rain event, Arcadis inspected the crawlspace, and did not observe any water on the liner.

- **12091 Brewster** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 22, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on March 12, 2020.

Arcadis has contacted the homeowner on multiple occasions and the homeowner continues to deny access to mitigate the detached garage. Arcadis will continue to inquire with the homeowner regarding gaining access to mitigate the garage. The garage is not inhabited or occupied at this time and is primarily used to store a motorcycle and vehicle. In addition, three rounds of vapor intrusion sampling have been completed to date, and there have been no exceedances of the seven constituents of concern (COCs) for indoor air or sub-slab soil gas in the garage or home. During the OMM/sampling event on January 23, 2020, Arcadis asked the homeowner again about access to the garage for the application of Retro-Coat™. The property owner is reconsidering allowing access to the detached garage to have Retro-Coat™ applied later in the fall of 2020. Arcadis will continue to work with the homeowner to arrange access for the retro coat application in the spring of 2020.

- **34424 Beacon** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 8, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on February 26, 2020.
- **34920 Beacon** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on February 24, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The Retro-Coat™ was inspected in the garage, and no damage was observed. The analytical data package was provided to all interested parties consistent with the access agreement on April 16, 2020.
- **34950 Beacon** – The system is currently in routine operation and maintenance. The final routine OMM sampling event was completed on January 29, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on March 12, 2020.

On April 7, 2020 Arcadis responded to a system alarm and during the visit identified water on the crawlspace barrier at the crawlspace entrance. The alarm condition was cleared, and the water removed from the liner. In total 19 gallons were removed, and the gutter downspout was relocated by the homeowner to prevent water from entering through the crawlspace access door. Following the removal of water, all monitoring points were measured and confirmed vacuum influence.

- **12017 Brewster** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 2, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on February 26, 2020.
- **34600 Beacon** – The system is currently in routine operation and maintenance. The final routine OM&M sampling was completed on January 14, 2020 along with the first routine semi-annual OM&M monitoring event. The IPM at this property consists of Retro-Coat™ vapor intrusion coating applied in the basement and attached garage and sump depressurization. The IPM was inspected for damage,

and no damage was observed. The analytical data package was provided to all interested parties consistent with the access agreement on March 12, 2020.

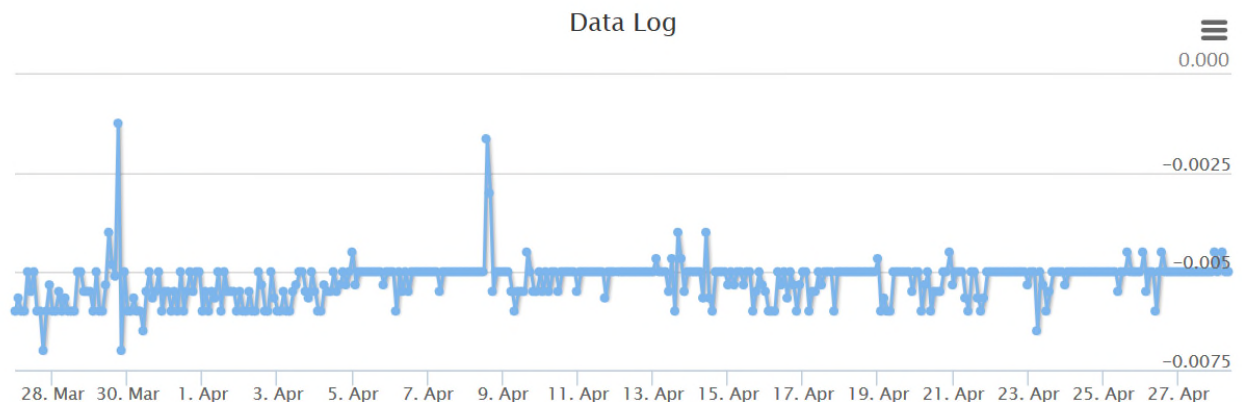
- 12131 Boston Post** –The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 20, 2020 along with the first routine semi-annual OM&M monitoring event. The vacuum transmitter installed at sub-membrane monitoring point MP-4 continues to confirm vacuum influence, and the other five sub-membrane monitoring points and two sub-slab monitoring points installed at this property were all measured at a stronger vacuum influence. The Retro-Coat™ was inspected in the shed and the basement and no damage was observed. The analytical data package was provided to all interested parties consistent with the access agreement on March 13, 2020.

On February 10, 2020, the homeowner reported the presence of moisture on the geotextile that was installed between the barrier covering the Cupolex® and the plywood flooring that was installed in the basement portion of the home as part of the mitigation system. Arcadis provided the homeowner with a dehumidifier on February 20, 2020. Arcadis removed a portion of the plywood flooring and geotextile where moisture was present on February 27, 2020.

During a call with the homeowners on March 18, 2020 to discuss the flooring, Arcadis indicated that work is currently suspended due to the COVID-19 Force Majeure. The homeowner indicated during the call that they are not comfortable with people working in their house at this time due to the spread of the COVID-19 virus. Work is currently suspended due to the COVID-19 Force Majeure and Arcadis will work with the homeowner to schedule after it has passed to assess the floor. During a call with the homeowners on March 31, 2020, Arcadis was informed that water had backed up around the sump and was felt beneath the barrier. The water present under the barrier was due to the sump pump not working properly. The homeowner was able to turn on the sump pump, and during follow up communication with Arcadis identified debris in the sump that may have prevented the float switch from activating the pump. On April 14, 2020, the homeowner indicated that the sump pump remained operational and they had not observed any additional water.

An update of the data logged by the vacuum transmitter connected to MP-4 is presented below demonstrating that vacuum is continuously being maintained and that the system continues to operate effectively.

On March 29, 2020 and April 8, 2020, during high wind weather events, Arcadis received system alarms. Arcadis confirmed the system returned to normal operations following the end of the weather events.

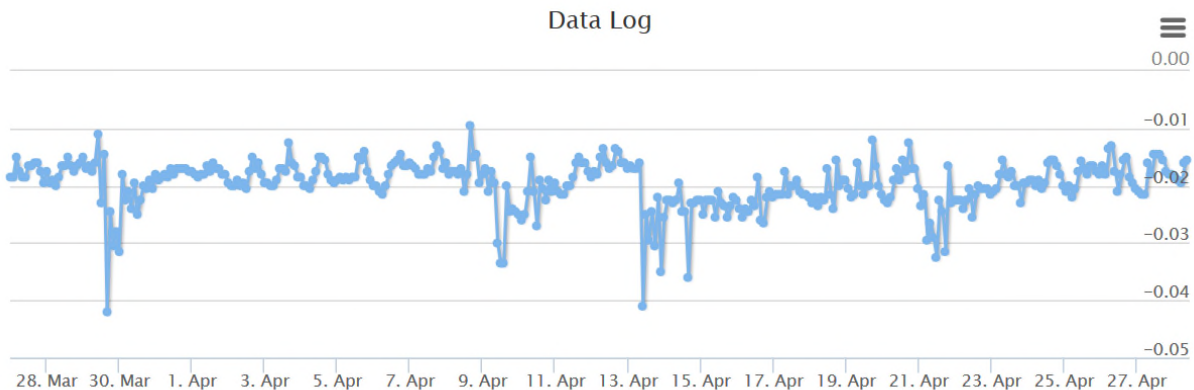




- **12101 Brewster** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 20, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on March 12, 2020.

On March 31, 2020, Arcadis inspected the crawlspace following a rain event and identified water on the barrier adjacent to the crawlspace entrance where the access door was left open by the homeowner. Seven gallons of water was removed from the barrier.

- **12067 Boston Post** –The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 6, 2020 along with the first routine semi-annual OM&M monitoring event. The vacuum transmitter installed at sub-membrane monitoring point MP-1 continues to confirm vacuum influence, and the three other sub-membrane monitoring points installed at this property all meet the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on February 26, 2020. An update of the data logged by the vacuum transmitter connected to MP-1 is presented below demonstrating that vacuum is continuously being maintained and that the system continues to operate effectively.

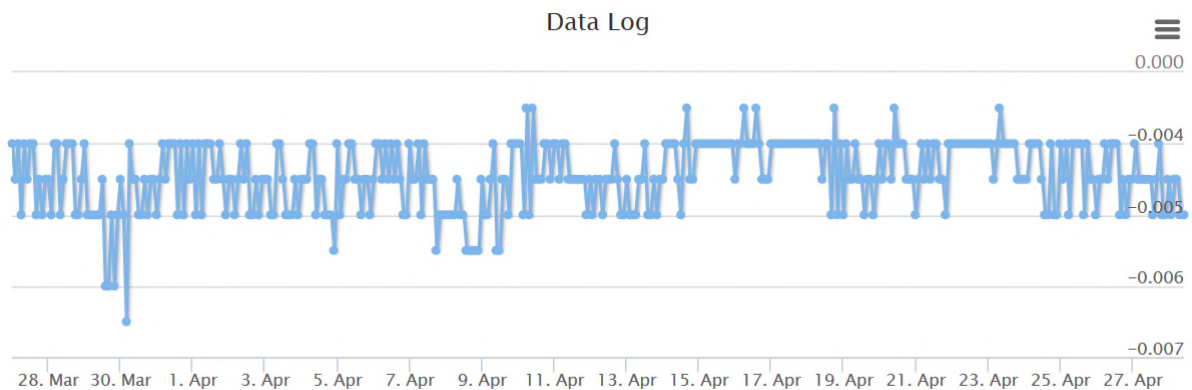


- **34550 Beacon** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on February 26, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on April 29, 2020.
- **34940 Beacon** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on February 27, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on April 16, 2020.
- **12141 Boston Post** –The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 2, 2020 along with the first routine semi-annual OM&M monitoring event. The vacuum transmitter installed at sub-membrane monitoring point MP-4 continues to confirm vacuum influence, and the other three sub-membrane monitoring points and one

sub-slab monitoring point installed at this property were all measured at a stronger vacuum influence. The analytical data package was provided to all interested parties consistent with the access agreement on February 26, 2020. Additional non-routine indoor air sampling will be continued to demonstrate effectiveness of the mitigation system in the portion of the home that is not being monitored for sub-slab vacuum influence.

Arcadis has made multiple attempts to contact the homeowners to discuss installing a monitoring point in the northern living room space including email on March 2, texts on March 3, March 16, March 17, and a request to join a call on March 17, 2020. The homeowner has responded and said they would consider it and provided availability for the call; however, they did not join the call that was scheduled. Arcadis will continue to work to coordinate the monitoring point installation with the homeowner.

An update of the data logged by the vacuum transmitter connected to MP-4 is presented below demonstrating that vacuum is continuously being maintained and that the system continues to operate effectively. Additional valve adjustments are proposed and will be completed after the stay at home order is passed to further increase the vacuum level at MP-4.



- 12066 Boston Post** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 6, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on February 26, 2020.

On March 30, 2020, following a rain event, Arcadis inspected the crawlspace and identified water on the barrier. On March 31, 2020, Arcadis removed less than one gallon of water from the crawlspace barrier. Minor repairs were conducted following the water removal. All monitoring points were measured and confirmed vacuum influence. in wc.

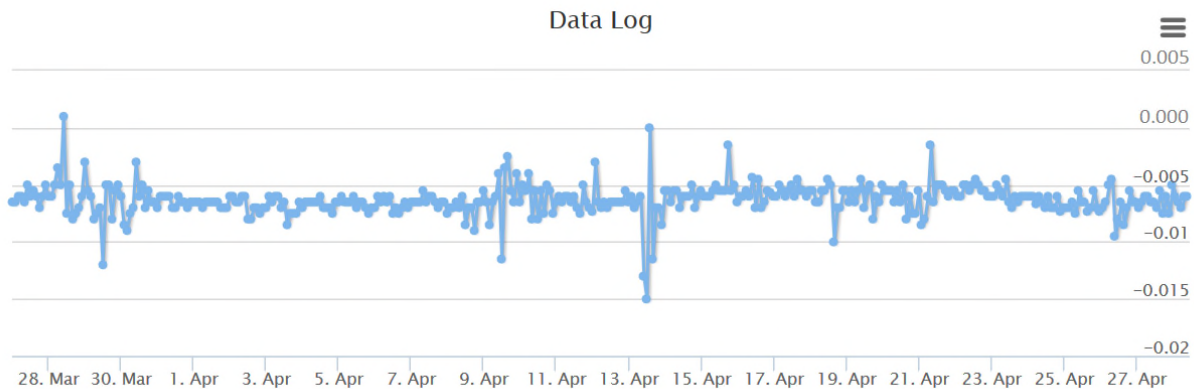
- 12036 Brewster** - The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 28, 2020 along with the first routine semi-annual OM&M monitoring event. The vacuum transmitter installed at sub-slab monitoring point SSMP-2 continues to confirm vacuum influence, and the other four sub-slab monitoring points installed at this property were all measured at a stronger vacuum influence. The Retro-Coat in the basement™ was inspected, and no damage was observed. The analytical data package was provided to all interested parties consistent with the access agreement on March 12, 2020.

On January 30, 2020, SSMP-2 was replaced, and the system valves were adjusted to optimize system performance. An update of the data logged by the vacuum transmitter connected to SSMP-2 is

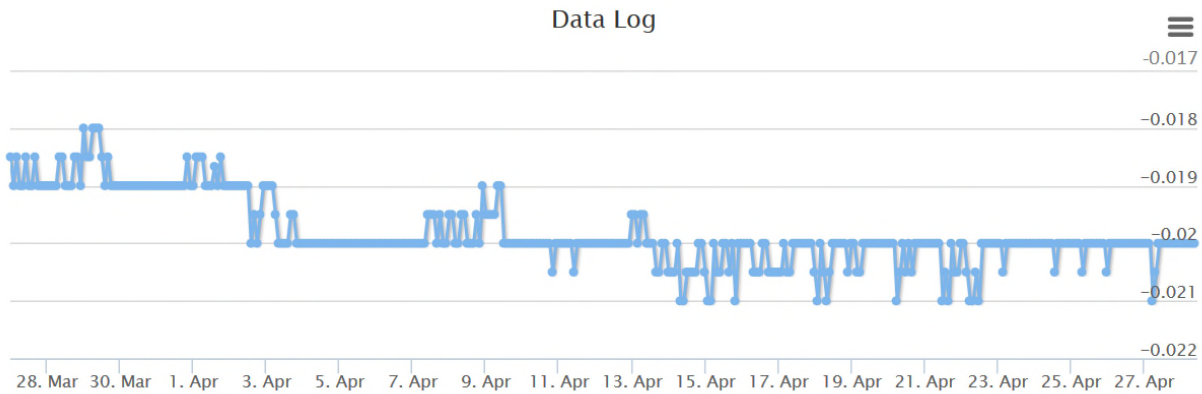


presented below demonstrating that vacuum is being maintained, except for one logged data point on March 28, 2020 (0.005 in wc); two logged data points on March 29, 2020 (0.001 in wc and 0.000 in wc); one logged data point on April 14, 2020 (0.004 in wc); and one logged data point on April 15, 2020 (0.002 in wc). Each were individual logged readings, in which the previous and subsequent readings were negative, indicating these were short term events. Note that SSMP-2 is located in a garage that is not routinely occupied. Additionally, due to the garage being vented to the outdoors it can be expected that the differential pressure measurements will reflect changes in outdoor air pressure caused by temporary weather events such as wind gusts. For example, weather data from April 14, 2020 indicates wind gust of up to 30 miles per hour were occurring on that day. Therefore, although vacuum was lost at SSMP-2 for short durations, the system is considered to be operating effectively.

On March 30, 2020, following a rain event, Arcadis called the homeowner to verify that water was not observed in the basement from the rain event. The homeowner stated that there was not any water observed. Due to CDC social distancing guidelines, Arcadis was not able to enter the basement and check the for water.



- 34990 Beacon** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event scheduled for March 30, 2020 was delayed as a result of the COVID-19 Force Majeure. The sampling event will be completed after the COVID-19 Force Majeure suspension has passed. If the OM&M monitoring event is completed outside of the heating season, the final OM&M sampling event will not occur until the fourth quarter so that it can be completed during the heating season. The vacuum transmitter installed at sub-membrane monitoring point MP-7 continues to confirm vacuum influence, and the three other sub-membrane monitoring points installed at this property all meet the performance metric established by EGLE of -0.02 in wc. An update of the data logged by the vacuum transmitter connected to MP-7 is presented below demonstrating that vacuum is continuously being maintained and that the system continues to operate effectively.



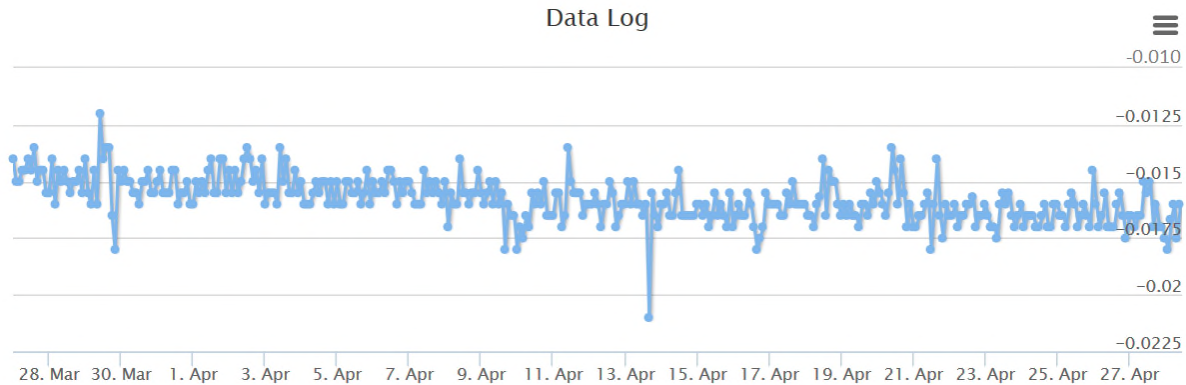
The property owner has initially denied the application of Retro-Coat™ in the detached garage since the floor has an existing epoxy coating and imbedded tubing for radiant heat. Arcadis provided an alternate mitigation system design for the garage to the homeowner for approval on March 19, 2020. In addition, there have been four rounds of indoor air sampling that has been conducted in the garage, and to date there has been no detections or exceedances of the seven constituents of concern.

Reconstruction including the installation of drywall covering the basement walls that have been mitigated through the application of Retro-Coat™ began on February 6, 2020 and was substantially completed in March 2020. The reconstruction of the basement included installation of a water sensor and access panels. Outstanding work including the installation of carpeting on the basement stairs will be completed after the Force Majeure suspension has passed.

- **34591 Beacon** – The system is currently in routine operation and maintenance. The first routine semi-annual OM&M monitoring event was completed on February 19, 2020 and included the final routine indoor air sampling event. The analytical data package was provided to all interested parties consistent with the access agreement on April 23, 2020.

The vacuum transmitter installed at sub-slab monitoring point SSMP-1 continues to confirm vacuum influence, and the other three sub-membrane monitoring points installed at this property were all measured during the event at equivalent or stronger vacuum influence. Some seams in the crawlspace barrier were identified for additional sealing, which was completed on February 28, 2020. An update of the data logged by the vacuum transmitter connected to SSMP-1 is presented below demonstrating that vacuum is continuously being maintained and that the system continues to operate effectively.

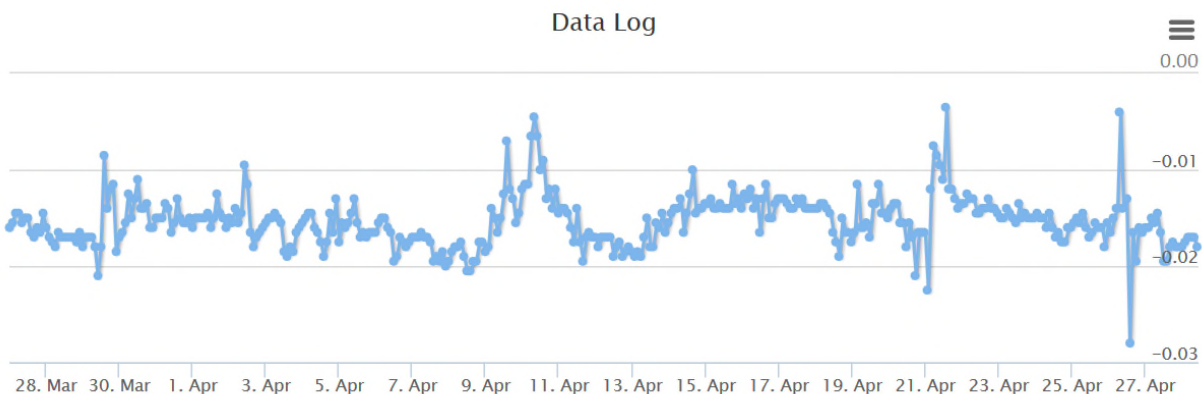
On March 31, 2020, following a rain event, Arcadis inspected the crawlspace, and identified water on the barrier. Twenty-five gallons of water was removed from the crawlspace barrier. Minor repairs were made to the barrier to prevent water from pooling on the barrier. All monitoring points were measured and confirmed vacuum influence.



- 34367 Capitol** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 31, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The data package was submitted to all parties on March 24, 2020 as outlined in the access agreement.
- 34480 Capitol** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event for the first quarter of 2020 was completed on January 7, 2020 along with the first routine semi-annual OM&M monitoring event. The analytical data package was provided to all interested parties consistent with the access agreement on February 26, 2020.

During the January 7, 2020 inspection the sub-slab monitoring point SSMP-2, which is connected to the vacuum transmitter, was measured at -0.002 in wc, and the other three sub-membrane monitoring points installed at this property were all measured at equivalent or stronger vacuum influence: MP-1 (-0.031 in wc), MP-2 (-0.017 in wc), and MP-3 (-0.013 in wc).

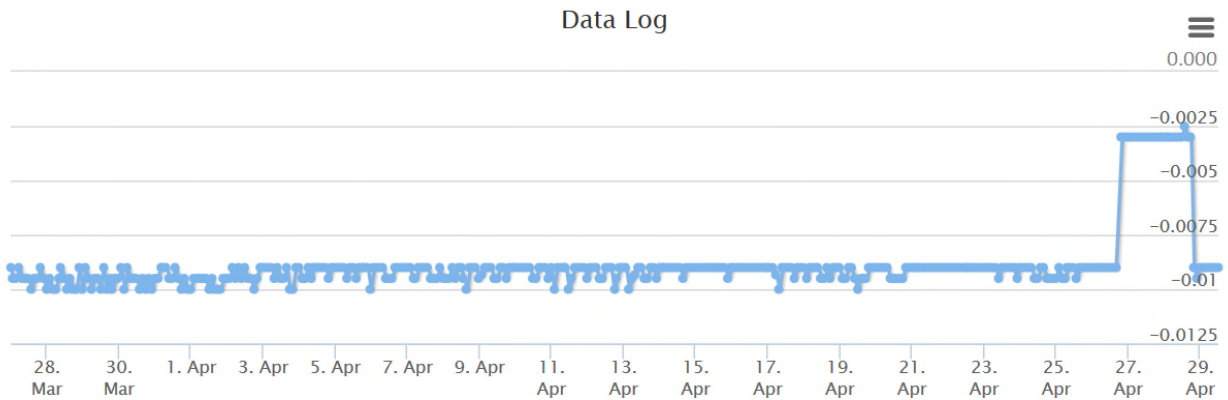
An update of the data logged by the vacuum transmitter connected to SSMP-2 shows improvements in the vacuum level following valve adjustments performed on February 26, 2020 and reconfiguring of the horizontal suction points on March 2, 2020 and is presented below demonstrating that vacuum is continuously being maintained and that the system is operating effectively.



- **12070 Boston Post** – The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on January 28, 2020 along with the first routine semi-annual OM&M monitoring event. All monitoring points met the performance metric established by EGLE of -0.02 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on March 24, 2020.
- **34682 Beacon** - The system is currently in routine operation and maintenance. The final routine OM&M sampling event was completed on February 24, 2020 along with the first routine semi-annual OM&M monitoring event. During the monitoring event the differential pressure at SSMP-4 and SSMP-5 were measured at 0.000 in wc. Reduced vacuum levels were also measured at all of the remaining sub-slab monitoring points: SSMP-1 (-0.007 in wc), SSMP-2 (-0.005 in wc), and SSMP-3 (-0.003 in wc). An additional round of monitoring was conducted on February 26, 2020 at which time the following monitoring point data was collected: SSMP-1 (-0.009 in wc), SSMP-2 (-0.007 in wc), and SSMP-3 (-0.002 in wc). The level at SSMP-5 had recovered to -0.003 in wc (this is a correction from the -0.009 in wc that was included in the February 2020 Monthly Update). The level at SSMP-4 was measured at 0.000 in wc. To accommodate the homeowner's schedule the event was scheduled for 7:00 pm in the evening, Arcadis was not able to complete additional troubleshooting during this event. Arcadis will continue to work with the homeowner to coordinate additional O&M activities after the COVID-19 Force Majeure suspension has passed to resolve this condition. In the interim, an air purifier was provided to the homeowner on March 25, 2020. The analytical data package was provided to all interested parties consistent with the access agreement on April 16, 2020.

On March 30, 2020, following a rain event, Arcadis inspected the property to document the condition of the drainage swale in the front yard. No flooding in the swale was observed. Due to CDC social distancing guidelines and the location of the crawlspace access being inside the home, Arcadis was not able to enter the crawlspace and check the barrier for water. The homeowner reported that there was no water in the crawlspace.

On April 26, 2020 Arcadis received an alarm for the fan disconnect switch, low vacuum switch, and vacuum transmitter. On April 28, 2020, Arcadis reached out the homeowner and the system was turned back on. The homeowner was tired of hearing the fan noise while he was working in the garage and outside so he had turned the fan off. An update of the data logged by the vacuum transmitter connected to sub-membrane monitoring point MP-5 is presented below indicating that vacuum readings returned to normal after the system was turned back on, and sub-membrane depressurization continues to be maintained.



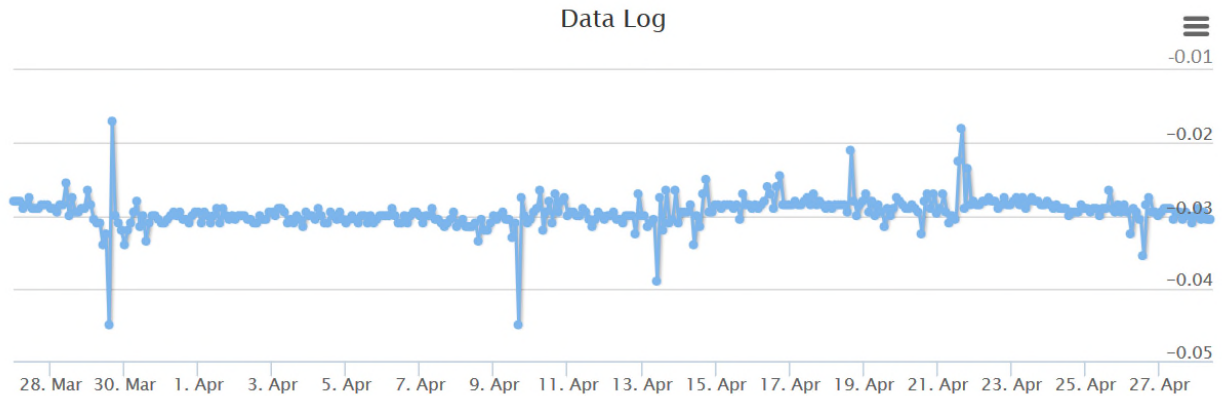
### Interim Preemptive Mitigation System is Installed but Requires Modification

Mitigation systems at 2 of the 33 properties require additional mitigation activities. Details are provided below regarding the status of the work at this property.

- 34424 Capitol Avenue** - An interim air purifier unit was on November 21, 2019 and a replacement unit was deployed on February 2, 2020. Arcadis began construction of the IPM system on January 7, 2020, and installation was substantially complete on February 13, 2020. However, work continued at the property through February 19, 2020 to complete the installation of the new crawlspace access door.
- 12100 Boston Post** – The property owner declined an interim air purifier unit. An interim preemptive mitigation system was installed as designed and has been in operation since March 25, 2019. The routine OM&M sampling event for the first quarter of 2020 was completed on February 10, 2020 along with the routine semi-annual OM&M monitoring event. The vacuum transmitter installed at sub-slab monitoring point SSMP-4 continues to confirm vacuum influence, and the other two sub-membrane monitoring points and two sub-slab monitoring points installed at this property were all measured at stronger vacuum influence. However sub-slab monitoring point SSMP-2 was measured at -0.001 in wc. The analytical data package was provided to all interested parties consistent with the access agreement on April 23, 2020.

Arcadis has contacted the property owner to propose additional system modifications and will work with the homeowner to schedule the completion of this task after the COVID-19 Force Majeure suspension has passed. Additionally, during the OM&M visit, the homeowner again denied access to the shed, indicating that the roof is falling in. The homeowner stated that the shed may be accessible later this year if the roof is repaired by the homeowner. Arcadis will again request access to the shed during each routine semi-annual OM&M event until access has been granted.

An update of the data logged by the vacuum transmitter connected to sub-slab monitoring point SSMP-4 is presented below demonstrating that vacuum is continuously being maintained at SSMP-4.



### **Interim Preemptive Mitigation Systems Declined – Extension Requested**

- 12121 Boston Post** –The property owner was presented with an air purifier on March 21, 2019 as part of the initial preemptive mitigation approach. The air purifier remained on the front porch until March 24, 2019, when an Arcadis employee retrieved the unit. The air purifier was retrieved from the location, so damage did not occur to the unit from being outside and exposed to the weather. The draft design for the preemptive mitigation system was provided on March 29, 2019. On April 16, 2019, the property owners sent an email indicating that Ford nor Arcadis had access to the property any longer. A complaint was filed on July 10, 2019 in the Michigan state court to gain access to this home to complete the installation of the interim preemptive mitigation system.

The suit seeking access to the property at 12121 Boston Post was removed by those property owners to federal court. Ford moved to remand that lawsuit to state court and it was remanded on January 7, 2020. Ford will continue to pursue access through that proceeding in state court. The property owners at 12121 Boston Post are the only remaining property owners currently refusing to allow the mitigation systems to be installed at their properties.

In the July 26, 2019 letter EGLE requested an update for the property located at 12034 Brewster. On April 19, 2019, Arcadis provided EGLE documentation based on groundwater data that had been collected from a newly installed shallow monitoring well MW-192S. Monitoring well MW-192S analytical results showed no presence of vinyl chloride or any other constituent of concern. Based upon that data the 100-foot buffer was moved to the north. Subsequently, 12034 Brewster no longer resided in the 100-foot buffer; therefore, the installation of the interim preemptive mitigation system was put on hold. Although the interim preemptive mitigation system installation was put on hold vapor intrusion sampling continues.

Arcadis continues to work diligently to continue to schedule the additional work at 12100 Boston Post and 34424 Capitol to complete the installation of the interim preemptive mitigation systems in addition to the three remaining properties (34380 Capitol, 34450 Capitol, and 12124 Boston Post). Arcadis will continue to coordinate and complete OM&M activities as necessary to evaluate the performance of the operating preemptive mitigation systems.