



**Environmental Quality Office
Sustainability, Environment & Safety
Engineering**

**Ford Motor Company
Fairlane Plaza North
290 Town Center Drive, Suite 800
Dearborn, MI 48126**

May 24, 2019

Mr. Paul Owens
District Supervisor, Warren District Office
EGLE Remediation and Redevelopment Division
27700 Donald Court
Warren, Michigan 48092-2793
owensp@michigan.gov
VIA E-MAIL

Re: Ford Livonia Transmission Plant
Response to EGLE Letter dated May 8, 2019

Dear Paul:

This letter and the attached memorandum dated May 24, 2019 prepared by Arcadis of Michigan, LLC (Arcadis) supplement our May 17, 2019 response and provides additional information as requested in your May 8, 2019 review letter.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Todd M. Walton".

Todd M. Walton
Manager, Global Site Assessment & Remediation

cc: Mr. Kris Hinskey, Arcadis
Mr. Shawn Collins, The Collins Law Firm, PC
Mr. Paul Bernier, City of Livonia
Ms. Maureen Franklin, Wayne County DNVCW
Senator Dayna Polehanki
Representative Laurie Pohutsky
Mr. Brian Negele, MDAG
Mr. Aaron Cooch, DHHS
Ms. Alexandra Rafalski, DHHS
Ms. Beth Vens MDEQ
Mr. Brandon Alger, MDEQ

MEMO

To:
Paul Owens, District Supervisor
EGLE Warren District Office
27700 Donald Court
Warren, Michigan 48092-2793
owensp@michigan.gov

Copies:
Ms. Beth Vens, EGLE
Mr. Brandon Alger, EGLE
Mr. Todd Walton, Ford

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From:
Kris Hinskey

Date:
May 24, 2019

Arcadis Project No.:
MI001454.0007

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

On behalf of Ford Motor Company (Ford), Arcadis of Michigan, LLC (Arcadis) has prepared an update to the installation of the interim preemptive mitigation system installation for the Livonia Transmission Plant (LTP) site (the site). The intent of this memo is to provide the Michigan Department of Environment, Great Lakes, and Energy (EGLE) an update to the installation of the interim preemptive mitigation systems that are installed, currently being installed, and an update of the current schedule. A status update of the activities completed and that are currently ongoing was requested by EGLE in the May 8, 2019 letter sent to Ford.

On May 14, 2019, Ford received a letter from EGLE that requested for homes with basements that a schedule to be provided when the additional work will be completed. The additional work is to be agreed upon in written response between the property owner and Arcadis, then provided to EGLE by June 7, 2019. Arcadis is currently coordinating with the property owners to acquire the documentation EGLE has requested.

The proposed schedule that is attached is based on the agreement or tentative agreement with the homeowner's availability.

Detailed below is a summary of completed activities as of May 17, 2019.

- 16 of the 30 homes currently have a preemptive mitigation system in operation,
- 6 of the 30 homes currently have preemptive mitigation systems in operation but will require follow up activities due to the presence of a basement,
- 6 of the 30 homes are either in current construction or scheduled for installation.
- 2 of the 30 homes have declined the installation of the interim preemptive mitigation system.

Arcadis continues to work diligently to coordinate and install the interim preemptive mitigation systems. Details are provided below on the specifics of all 30 locations.

Interim Preemptive Mitigation Systems in Operation and Maintenance

- 12088 Brewster – Interim preemptive mitigation system is currently installed and has been in operation since March 8, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling was completed the week of April 15, 2019.
- 12075 Brewster – Interim preemptive mitigation system is currently in operation and has been on operation since March 11, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling was completed the week of April 15, 2019.
- 12089 Boston Post – Interim preemptive mitigation system is currently in operation and has been on operation since March 13, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling was completed the week of April 22, 2019.
- 34450 Beacon - Interim preemptive mitigation system is currently in operation and has been on operation since March 14, 2019. An additional piping leg is currently being installed to the geo membrane to produce more efficient vacuum. Post mitigation sampling was completed the week of April 26, 2019. Arcadis continues to coordinate with the property owner on a weekly basis to repair the liner in the crawl space due to the flooding that has occurred Alden Village subdivision. The repair of the liner is dependent on water levels near the home.
- 12066 Boston Post - Interim preemptive mitigation system is currently in operation and has been on operation since March 17, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling is currently scheduled for the week of May 27, 2019.
- 34401 Capitol – Interim preemptive mitigation system is currently in operation and has been on operation since March 17, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling was completed the week of April 15, 2019.
- 12100 Boston Post – Interim preemptive mitigation system is currently in operation and has been on operation since March 25, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling was completed the week of April 29, 2019. Arcadis is coordinating with the property owner to gain access to evaluate performance metrics of the interim preemptive mitigation system. The monitoring point in the garage addition show vacuum but is not meeting the performance metric requested by EGLE, which is -0.02. A vacuum transmitter will be proposed to show vacuum is constant.
- 34380 Beacon - Interim preemptive mitigation system began operation on April 2, 2019. The preemptive mitigation system went down on April 4, 2019, due to unknown reasons. Access issues have been resolved with the property owner and the mitigation system has been operation since April 19, 2019. Post mitigation sampling was conducted the week of May 20, 2019.
- 12091 Brewster – Interim preemptive mitigation system is currently in operation and has been in operation since April 3, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling was completed the week of May 6, 2019.

- 12141 Boston Post – Interim preemptive mitigation system is currently in operation and has been in operation since April 9, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling was conducted the week of May 20, 2019. Arcadis has not been able to seal the cracks in the garage, so although the interim preemptive mitigation system is in operation the garage is not meeting performance metrics. On a phone conversation that occurred on May 15, 2019, the property owner indicated that they would prefer if the crack sealing could be done in June. Thus far the performance metrics for the home is unknown, because monitoring points cannot be installed in finished spaces (carpeted and/or finished floors) per the property owners request. The conversation between the property owner and Arcadis was documented in the March 29, 2019 field notes. Arcadis initially requested to install up to three monitoring points (two in the home and one in the garage) to measure the performance of the interim preemptive mitigation system. Two of the proposed monitoring points are within a finished space in the home. One monitoring point is installed in the garage that is used to sample soil gas and will be used to measure performance in the garage. Indoor air samples will be used to measure performance metrics in areas that do not currently have a monitoring points installed.
- 34424 Beacon – Interim preemptive mitigation system is currently in operation and has been in operation since April 12, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling was completed the week of May 13, 2019.
- 34682 Beacon - Interim preemptive mitigation system is currently in operation and has been in operation since May 3, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling will be scheduled 30 days from when the mitigation system started. The slab on grade addition that was formerly a garage was renovated to be a living space. The renovated living space is currently not meeting performance metrics. The renovated living space has a floor that has been built over the slab. Arcadis is currently evaluating options, but the slab cannot be visually inspected to determine if cracks are present. The property owner indicated on April 17, 2019 to an Arcadis field engineer, that the living space is potentially going to be remodeled in 2019. If the remodeling does occur Arcadis then will be able to assess the condition of the slab beneath the floor. Arcadis will continue to contact the property owner to determine if the remodeling will occur.
- 34920 Beacon – Interim preemptive mitigation system is currently in operation and has been in operation since May 15, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling will be scheduled 30 days from when the mitigation system started.
- 34950 Beacon – Interim preemptive mitigation system is currently in operation and has been in operation since April 19, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling is currently schedule for the week of June 3, 2019.
- 34591 Beacon – Interim preemptive mitigation system is currently in operation and has been in operation since April 19, 2019. The slab on grade addition that was formerly a garage was renovated to be a living space. The renovated living space is currently not meeting performance metrics. The renovated living space has a floor that has been built over the concrete slab. Arcadis is currently evaluating options, but the slab cannot be visually inspected to determine if cracks are present. Arcadis has installed a monitoring point in the living space, but the monitoring point is below performance metrics outlined by EGLE. The system is currently in routine operation and

maintenance. Post mitigation sampling will be scheduled 30 days from when the mitigation system started. Post mitigation sampling was completed the week of May 20, 2019.

- 12017 Brewster – Interim preemptive mitigation system is currently in operation and has been in operation since April 19, 2019. The system is currently in routine operation and maintenance. Post mitigation sampling is scheduled for the week of May 27, 2019.

Interim Preemptive Mitigation Systems in Operation and Maintenance – Additional Work Required Extension Requested

Six of the 30 properties will require additional activities due to the presence of a basement. The current properties have an active air purifier within the basement that runs 24 hours per day. Per the Vapor Intrusion (VI) Response Activity Plan (RespAp), and EGLE VI Guidance Section 5.5 dated May 2013 indoor air sampling will continue on a monthly basis until the mitigation systems are fully operational. Vinyl chloride has never been detected at or above a screening level in exterior soil vapor, sub-slab soil vapor, or indoor air samples collected in the neighborhood. Details are provided below regarding the status of the work at the individual properties.

- 12131 Boston Post – The interim preemptive mitigation system is currently in operation with an interim air purifier unit for the basement since March 13, 2019. The interim preemptive design for the basement will involve addition of a false floor in combination of the application of RetroCoat. The property owner has tentatively scheduled for the second phase of this work to begin on June 17, 2019. A confirmation from the property owner will be provided to EGLE as part of the June 7, 2019 submittal.
- 12070 Boston Post – Interim preemptive mitigation system is currently in operation with an interim air purifier unit for the basement since March 13, 2019. The property owner is currently reviewing the revised plans that addresses the concerns regarding the hot water heater being placed on plywood and clarified the design approach. Arcadis discussed the design approach with the resident on May 22, 2019 via telephone at 3:57 pm. During the same telephone conversation on May 22, 2019, the property owner also requested an in-person meeting to review the full design. The property requested this previously in an email received by Arcadis on May 20, 2019. Arcadis is attempting to schedule the meeting the week of May 27, 2019. Arcadis will coordinate with the property owner as soon as the design is approved. A confirmation from the property owner will be provided to EGLE as part of the June 7, 2019 submittal.
- 34940 Beacon – Interim preemptive mitigation system is currently in operation as of March 27, 2019, in combination with an interim air purifier unit that was deployed on March 17, 2019 for the basement. At this time, additional mitigation activities are on hold pending application of RetroCoat to concrete the poured walls and slab. Application of RetroCoat will occur once temperatures are warm enough, since the furnace and water heater will need to be removed. Arcadis will coordinate with the property owner as soon as it is determined how long the hot water heater and furnace will be not in operation. Arcadis will coordinate with the resident to determine if the duration of no furnace and no hot water that will be acceptable to the property owner and schedule the additional work. A confirmation from the property owner will be provided to EGLE as part of the June 7, 2019 submittal.

- 12036 Brewster - Interim preemptive mitigation system is currently in operation as of April 2, 2019, in combination with an air purifier unit that was deployed on March 17, 2019 for the basement. The block wall depressurization for the basement is not meeting EGLE vacuum standards of -0.02. Therefore, Arcadis will propose another design to the property owner and EGLE, by the week of May 27, 2019. Upon confirmation that the design for the interim preemptive mitigation system from all parties is acceptable, Arcadis will schedule the additional work . A confirmation from the property owner will be provided to EGLE as part of the June 7, 2019 submittal.
- 34600 Beacon – Interim preemptive mitigation system is currently in operation and has been in operation since April 3, 2019. The block wall depressurization for the basement is not meeting EGLE vacuum standards of -0.02. Therefore, Arcadis is proposing another design to the property owner and EGLE. Arcadis contacted the property owner’s son via telephone on March 18, 2019 to schedule an appointment to switch out the fan and to discuss the additional work. On March 17, 2019, Arcadis received an email at 9:32 pm from the property owner’s son indicated that Wednesday May 22, 2019 would be fine for the meeting. Arcadis emailed the property owner on May 19, 2019 at 4:24 pm and indicated if the meeting could be help on Thursday May 23, 2019. Arcadis is working with the property owner to schedule an in-person meeting to discuss the fan replacement and RetroCoat application. A confirmation from the property owner will be provided to EGLE as part of the June 7, 2019 submittal.
- 34990 Beacon – Interim preemptive mitigation system is currently in operation with an interim air purifier unit for the basement. The preemptive design for the basement will involve the application of RetroCoat, which will occur in the warmer season in the event the furnace and/or hot water heater need to be removed. Arcadis met the resident on May 21, 2019 at 1:00 pm and discussed the steps for the application of the RetroCoat. Arcadis is coordinating another site visit the week of June 3, 2019 to review the scope with the subcontractor who will be performing the demolition of the interior walls. A confirmation from the property owner will be provided to EGLE as part of the June 7, 2019 submittal.

Remaining Interim Preemptive Mitigation Systems

Interim preemptive mitigation system installation is currently in progress or scheduled for the following properties.

- 34550 Beacon – The installation of the interim preemptive mitigation system installation is ongoing. An air purifying unit was deployed at the home on March 17, 2019. The installation has been slowed due to property owner availability and overall difficulty installing the liner in the multiple crawl spaces. It has been determined that a concrete pad will be needed in a portion of the crawl space, which was successfully installed. Additional sealing in the crawl space will be conducted on May 18, 2019. The interim preemptive mitigation system is anticipated to be completed the week of May 20, 2019 and performance metrics will be evaluated at that time.
- 12101 Brewster – On March 21, 2019, Arcadis oversaw the removal of debris under the crawl space. Upon further investigation of the crawl space it was determined that application of the liner was not feasible due to the HVAC duct work laying on the ground. Ford, Arcadis, and EGLE discussed this particular home on April 9, 2019. Upon further evaluation of the home a liner will be placed in the

crawl space once the deteriorating duct work is removed. Arcadis has hired a licensed HVAC subcontractor to remove and replace the duct work.

- 34367 Capitol – The installation of the preemptive mitigation system is currently ongoing and began on May 13, 2019. The current property is rented to a tenant and the property owners want to be present for the installation. On May 16, 2019, Arcadis identified wood bracing that appeared to be supporting a portion of the sub-floor. Arcadis is currently coordinating with the City of Livonia Building Department to determine if the structural supports are in code or if repairs are necessary prior to finalizing the installation of the liner. A follow up email will be provided to EGLE once a path forward has been determined.
- 34480 Capitol – The installation of the preemptive mitigation system began on April 29, 2019. The property owner is only available Mondays and Tuesdays of each week. Arcadis intends to complete the installation by June 30, 2019.
- 12067 Boston Post – On April 15, 2019, Arcadis began the installation of the preemptive mitigation system. Arcadis confirmed with the property owner that the foundation had been repaired prior to mitigation activities and the excess soil had been moved to the middle of the crawl space. In order to install the liner for within the crawl space the soil will need to be removed. The excess soil was successfully removed the week of May 20, 2019. The removal of the approximately 30 cubic yards of soil delayed the installation of the interim preemptive mitigation system by two weeks. Prior to the soil being removed waste characterization samples had to be collected and equipment coordination to remove the excess soil. Once Arcadis was able to remove debris from the crawl space it was determined that a potential structural repair may be necessary since the first floor of the house is currently supported with wood posts.
- 34644 Beacon - The interim preemptive mitigation system is tentatively scheduled to begin on May 15, 2019. The property owner is only allowing construction activities to occur when they are home, which is after 4:00 PM. The property owner is also requesting a white liner instead of the black liner that is currently being used at all other locations. Arcadis is currently working with the property owner to address their concerns. Arcadis intends to complete the installation in June 30, 2019.

Interim Preemptive Mitigation Systems Declined – Extension Requested

- 12121 Boston Post – Ford’s outside counsel continues to work with plaintiff’s counsel to gain access to the home to complete the installation of the interim preemptive mitigation system. The home owner was presented with an air purifier on March 21, 2019. 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.
- 12124 Boston Post – This property was scheduled for the installation of the preemptive mitigation system on March 23, 2019. On March 19, 2019, Arcadis received an email from the property owner declining the installation of the preemptive mitigation system. The property owner indicated that he wanted to discuss in further detail with his attorney. The property owner also declined the air purifier

MEMO

citing the purifier would make too much noise and take up too much space on March 18, 2019. As of April 16, 2019, Arcadis has been unable to schedule further the installation of the interim preemptive mitigation system. The resident is allowing Arcadis to complete vapor intrusion sampling.

Arcadis continues to work diligently to install the interim preemptive mitigation systems and anticipates the installations should be completed by the end of June 2019. The attached schedule provides the completion dates for the remaining interim preemptive mitigation systems to be installed.

2019

CALENDAR YEAR

JUNE

CALENDAR MONTH

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
27 Memorial Day	28	29 34367 Capitol 12067 Boston Post 12101 Brewster	30 34367 Capitol 12067 Boston Post 12101 Brewster	31 34367 Capitol 12067 Boston Post 12101 Brewster	01 34367 Capitol 35540 Beacon 12101 Brewster	02
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Notes:

Tentative Schedule - Pending Homeowner Confirmation