



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

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

April 17, 2019

Mr. Paul Owens  
District Supervisor, Southeast Michigan District Office  
MDEQ Remediation and Redevelopment Division  
27700 Donald Court  
Warren, Michigan 48092-2793  
[owensp@michigan.gov](mailto:owensp@michigan.gov)  
**VIA E-MAIL**

Re: Ford Livonia Transmission Plant  
Extension Request to MDEQ Letters dated February 1, 2019 and March 21, 2019

Dear Paul:

On behalf of Ford Motor Company (Ford), this letter provides an update on efforts by Arcadis of Michigan, LLC (Arcadis) to complete the preemptive mitigation of off-site structures on properties in the area of the Livonia Transmission Plant, and to request an additional extension for the preemptive mitigation as described in the attached Arcadis memorandum dated April 17, 2019.

As you know, via letter dated February 1, 2019, MDEQ directed Ford to conduct additional shallow groundwater sampling to identify locations with vinyl chloride at or above 1 ppb, and to install mitigation systems in residential properties within 100 feet of those locations within 45 days. Since then, Ford and Arcadis have been working diligently to complete the engineering surveys, engineering design plans, and additional groundwater sampling necessary to delineate vinyl chloride in shallow groundwater and install mitigation systems where appropriate.

In addition, Ford requested a 60-day extension to complete this preemptive mitigation work on March 14, 2019. The request included a very detailed list of the unanticipated challenges encountered during the implementation of the preemptive mitigation work. It also included a Force Majeure section regarding Ford's review and interpretation of the Consent Decree.

The MDEQ replied on March 21, 2019 granting a 30-day extension for select properties and requesting more information for others. The attached Arcadis memorandum describes the current status and requests an extension for all of the outstanding interim preemptive work.

Finally, as an additional temporary preemptive measure, Ford has offered to set up mobile air purifiers capable of treating vinyl chloride in the homes that have not been fully mitigated to-date.

Paul Owens, MDEQ

April 17, 2019

Page 2

**We remain fully committed to protecting human health and the environment. Importantly, as previously shared with you, all indoor air sampling, sub-slab sampling, and sump sampling (if a sump exists) shows no detection of vinyl chloride in the residential neighborhood.**

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

Sincerely,

A handwritten signature in blue ink that reads "Todd M. Walton". The signature is written in a cursive style with a horizontal line at the end.

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  
Senator Dayna Polehanki  
Representative Laurie Pohutsky  
Mr. Brian Negele, MDAG  
Mr. Aaron Cooch, DHHS  
Ms. Alexandra Rafalski, DHHS  
Mr. Darren Bowling, MDEQ  
Ms. Cyndi Mollenhour, MDEQ  
Ms. Krista Reed, MDEQ  
Ms. Beth Vens MDEQ  
Mr. Brandon Alger, MDEQ

# MEMO

To:

Paul Owens, District Supervisor  
MDEQ SE Michigan District Office  
27700 Donald Court  
Warren, Michigan 48092-2793

[owensp@michigan.gov](mailto:owensp@michigan.gov)

Copies:

Mr. Brian Negele, MOAG  
Mr. Darren Bowling, MDEQ  
Ms. Cyndi Mollenhour, MDEQ  
Ms. Beth Vens, MDEQ  
Ms. Krista Reed, MDEQ  
Mr. Brandon Alger, MDEQ  
Mr. Todd Walton, Ford

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

From:

Kris Hinskey  
Joe Quinnan

Date:

April 17, 2019

Arcadis Project No.:

MI001454.0007

Subject:

Livonia Transmission Plant  
36200 Plymouth Road, Livonia, Wayne County, Michigan  
MDEQ Site ID No. 82002970  
Reply to Extension Request to MDEQ Letter dated March 21, 2019

---

On behalf of Ford Motor Company (Ford), this extension request has been prepared by Arcadis of Michigan, LLC for the Livonia Transmission Plant (LTP) site (the site). The Michigan Department of Environmental Quality (MDEQ) provided comments regarding the extension request submitted by Ford on March 14, 2019. In the March 21, 2019 letter, the MDEQ denied the 60-day extension requested by Ford but indicated a 30-day extension could be approved based on individual property circumstances. The intent to this memo is to request an extension on the properties that are currently in construction or currently scheduled and waiting for construction to begin. The proposed schedule is based on the agreement or tentative agreement with the home owners availability.

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

- 12 of the 31 homes currently have a preemptive mitigation system in operation,
- 4 of the 31 homes currently have preemptive mitigation systems in operation but will require follow up activities due to the presence of a basement,
- 3 of the 31 homes are either in current construction or scheduled for installation. Additional review is requested by the MDEQ.
- 10 of the 31 homes were part of a multiple lines of evidence assessment
- 2 of the 31 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 31 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 is scheduled for 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 is scheduled for 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 is scheduled for 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. The system is currently in routine operation and maintenance. Post mitigation sampling is scheduled for the week of April 22, 2019.
- 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 being scheduled with the property owner.
- 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 is scheduled for the week of April 16, 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 is currently being scheduled with the property owner.
- 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. As of 4/16/2019, Arcadis has no access to the location pending resolution over apparent damage to the home unrelated to mitigation installation activities.
- 34600 Beacon – 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 and is relying on telemetry and indoor air samples to meet the performance objectives. Post mitigation sampling will be scheduled 30 days from when the mitigation system started.
- 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 will be scheduled 30 days from when the mitigation system started.

- 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 will be scheduled 30 days from when the mitigation system started.
- 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 will be scheduled 30 days from when the mitigation system started.

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

Four of the 31 properties will require additional activities due to the presence of a basement. The current properties have an active air purifier within the basement and runs 24 hours a day. Per the Vapor Intrusion (VI) Response Activity Plan (RespAp), and MDEQ VI Guidance Section 5.5 seasonal (quarterly) indoor air sampling will continue during the interim period when air filtration is deployed. 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 individual properties and when the remaining work will be completed by.

- 12131 Boston Post – Interim preemptive mitigation system is currently in operation with an interim air purifier unit for the basement since March 13, 2019. At this time, additional mitigation activities are on hold pending MDEQ design submittal for the basement. The preemptive design for the basement will involve some type of dewatering, which will occur in the dry season to minimize water infiltration into the basement during construction. Currently the proposed scope of work is to be completed by July 31, 2019.
- 12070 Boston Post – Interim preemptive mitigation system is currently in operation with an interim air purifier unit for the basement since March 13, 2019. At this time, additional mitigation activities are on hold pending MDEQ design submittal for the basement. The preemptive design for the basement will involve some type of dewatering, which will occur in the dry season to minimize water infiltration into the basement during construction. Currently the proposed scope of work is to be completed by July 31, 2019.
- 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. Application of the RetroCoat is recommended to be installed in warmer conditions in order to not freeze water lines and inconvenience the property owners since heat will not be available. Arcadis will work with the current property owner to schedule the remaining activities as soon as temperatures become milder. Currently the proposed scope of work is to be completed by June 30, 2019.
- 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. Additional wall coating may be necessary to seal the interior walls to increase block wall depressurization or the installation of a secondary system. Currently the proposed scope of work is to be completed by June 30, 2019.

### **Interim Preemptive Mitigation Systems Current Design are Being Reviewed – Extension Requested**

- 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. The concrete pad is needed in order to fasten the liner. The approach was discussed with the MDEQ on April 9, 2019 and all parties agreed that the installation of the concrete pad was sufficient. The concrete pad is expected to be installed the week of April 22, 2019. Completion is anticipated before the end of April 2019.
- 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 MDEQ discussed this particular home on April 9, 2019. Prior to installation, Arcadis and Ford are seeking concurrence that the proposed interim preemptive mitigation system will be sufficient. The revised design was submitted to the MDEQ on April 17, 2019. Pending concurrence, Arcadis will schedule the implementation of the interim preemptive mitigation system and is anticipated to be completed by the end of May 2019.
- 34990 Beacon - The installation of the preemptive mitigation system is tentatively scheduled to begin on April 26, 2019. Arcadis intends to complete the installation in early May 2019. Arcadis and Ford continue to discuss the interim preemptive mitigation design with the MDEQ, due to the complexities of the home. Arcadis and Ford are requesting a final determination by April 19, 2019.

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

The following properties detailed below were located in areas where long term monitoring was proposed instead of the installation of an interim preemptive mitigation system. Arcadis and Ford provided a detailed conceptual site model for each location in a memo that was provided to the MDEQ on March 14, 2019. On March 21, 2019, the MDEQ provided a denial letter to Ford indicating that interim preemptive mitigation systems are necessary and are to be installed. Below is the status of each property.

- 12017 Brewster – On April 3, 2019, Arcadis began the installation of the preemptive mitigation system. Arcadis intends to complete the installation in April 2019.
- 34591 Beacon – On April 15, 2019, Arcadis began the installation of the preemptive mitigation system. Arcadis intends to complete the installation in April 2019.
- 34682 Beacon - On April 15, 2019, Arcadis began the installation of the preemptive mitigation system. Arcadis intends to complete the installation in April 2019.

- 34367 Capitol – The installation of the preemptive mitigation system is tentatively scheduled to begin on May 13, 2019. The current property is rented to a tenant and the property owners want to be present for the installation. Coordination and scheduling will be based on property owner’s availability. Arcadis intends to complete the installation in May 2019.
- 34480 Capitol – The installation of the preemptive mitigation system is tentatively scheduled to begin on May 20, 2019. The property owner is only available Mondays, Tuesdays, and Sundays of each week. Arcadis intends to complete the installation by June 30, 2019.
- 34920 Beacon - The installation of the preemptive mitigation system is tentatively scheduled to begin on May 1, 2019. Arcadis intends to complete the installation in early May 2019.

108 shallow monitoring wells were installed to define the extent of potential properties in an area of concern. 4 of the 31 properties were located on the fringe of the 100-foot buffer and/or were near multiple shallow groundwater wells that were below the 1.0 µg/L criteria. The 100-foot buffer was detailed in the letter provided to the MDEQ on March 11, 2019. Although the current data set does not suggest interim preemptive mitigation systems are warranted, these locations were included in the response

- 34950 Beacon – On April 12, 2019, Arcadis began the installation of the preemptive mitigation system. Arcadis intends to complete the installation in April 2019
- 12034 Brewster – A pre-construction meeting is scheduled for April 17, 2019 at the property location to discuss the mitigation activities. The installation of the preemptive mitigation system is tentatively scheduled to begin on April 23, 2019. Arcadis intends to complete the installation in early May 2019.
- 12067 Boston Post – On April 15, 2019, Arcadis began the installation of the preemptive mitigation system. Arcadis intends to complete the installation in April 2019.
- 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 May 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 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 most if not all installations should be completed by the end of May 2019. The detailed schedule (attached) provides the completion date for the remaining locations that are requiring an interim preemptive mitigation system to be completed in May 2019, with the exception of the 4 homes (12131 Boston Post, 12070 Boston Post, 34940 Beacon, and 12036 Brewster) that will require additional activities due to the presence of a basement and 34480 Capitol. Those anticipated completion dates are described above.



April 2019

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
01	02	03	04	05	06	07
			12141 Boston Post 34424 Beacon 12017 Brewster	12141 Boston Post 34424 Beacon 12017 Brewster 34550 Beacon 12036 Brewster	12017 Brewster 34550 Beacon 12141 Boston Post	12017 Brewster
08	09	10	11	12	13	14
12017 Brewster 34424 Beacon 34591 Beacon	12017 Brewster 34424 Beacon 34591 Beacon 12141 Boston Post 12100 Boston Post	12017 Brewster 34424 Beacon 34591 Beacon 12141 Boston Post 12100 Boston Post	12017 Brewster 34424 Beacon 34591 Beacon	12017 Brewster 34424 Beacon 34591 Beacon 34550 Beacon 34950 Beacon	12017 Brewster 12036 Brewster 34591 Beacon 34600 Beacon 34950 Beacon	
15	16	17	18	19	20	21
34591 Beacon 34950 Beacon 12067 Boston Post	34591 Beacon 34950 Beacon 12067 Boston Post 12017 Beacon	34550 Beacon 34950 Beacon 12067 Boston Post	34950 Beacon 12067 Boston Post	HOLIDAY 12067 Boston Post 34950 Beacon		HOLIDAY
22	23	24	25	26	27	28
	12067 Boston Post 12034 Brewster 34682 Beacon	12067 Boston Post 12034 Brewster 34682 Beacon 34550 Beacon	12067 Boston Post 12034 Brewster 34682 Beacon	12067 Boston Post 34990 Beacon 34682 Beacon	12067 Boston Post 34682 Beacon 34550 Beacon	
29	30	01	02	03	04	05
34682 Beacon 34480 Capitol 34990 Beacon	12034 Brewster 34990 Beacon					

May 2019

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
29 34682 Beacon 34480 Capitol 34990 Beacon	30 12034 Brewster 34990 Beacon	01 34920 Beacon 12034 Brewster 34990 Beacon	02 34920 Beacon 12034 Brewster 34990 Beacon	03 34920 Beacon 12034 Brewster 34990 Beacon	04 34920 Beacon 34990 Beacon	05
06 12034 Brewster 34480 Capitol 34920 Beacon	07 12034 Brewster 34480 Capitol 34920 Beacon	08 12101 Brewster 34644 Beacon	09 12101 Brewster 34644 Beacon	10 12101 Brewster 34644 Beacon	11 12101 Brewster 34644 Beacon	12
13 12101 Brewster 12124 Boston Post	14 12101 Brewster 12124 Boston Post	15 34644 Beacon 12101 Brewster 12124 Boston Post	16 34644 Beacon 12101 Brewster 12124 Boston Post	17 34644 Beacon 12101 Brewster 12124 Boston Post	18 34644 Beacon 12124 Boston Post	19
34480 Capitol 34367 Capitol	34480 Capitol 34367 Capitol	34367 Capitol	34367 Capitol	34367 Capitol		
20 34644 Beacon 12124 Boston Post	21 12124 Boston Post	22 12124 Boston Post	23	24	25	26
34480 Capitol	34480 Capitol					
27 HOLIDAY	28	29	30	31	01	02

Notes:

Tentative Schedule - Pending Homeowner Confirmation