



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
SOUTHEAST MICHIGAN DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

February 1, 2019

Mr. Todd M. Walton  
Ford Motor Company  
Fairlane Plaza North, 8F  
290 Town Center Drive-  
Dearborn, Michigan 48126

Dear Mr. Walton:

**SUBJECT:** Ford Livonia Transmission Plant  
36200 Plymouth Road, Livonia, Wayne County, Michigan  
MDEQ Site ID No. 82002970

The Michigan Department of Environmental Quality (MDEQ), Remediation and Redevelopment Division (RRD), requested shallow groundwater wells intersecting the top of the groundwater table be installed to evaluate the volatilization to indoor air pathway (VIAP) as a part of the implementation of the "Response Activity Plan – Vapor Intrusion Evaluation" (Plan) approved with modifications on August 30, 2018, as part of the July 27, 2017 Consent Decree between the MDEQ and Ford Motor Company. On December 13, 2018, Ford Motor Company submitted a map to the MDEQ identifying the location of shallow monitor wells to assess the VIAP and notified the MDEQ that these wells were being installed. The MDEQ received data showing detections of vinyl chloride above the target detection level (TDL) of 1 part per billion (ppb) between January 18, 2019 and January 25, 2019 for these specific wells:

Well ID	Vinyl Chloride (ppb)
MW-80SR	1.4
MW-73SR	1.7
MW-85S	7.8
MW-102	1.6
MW-123S	4.6
MW-115S	2.7
MW-127S	1.5
MW-130S	1.1

These detections of vinyl chloride represent a groundwater plume and this plume must be delineated using groundwater data from shallow monitor wells that have data below the TDL of 1 ppb. Any residential structures within this plume and within 100 feet of this plume will require mitigation for the residential structures if they are above the applicable criteria as described below. This is a requirement under Section 6.6, Interim Response Activities (d)(iii) of the Consent Decree. Note that Attachment D of the Consent Decree incorrectly included Time-Sensitive Recommended Interim Action Screening Levels for groundwater, soil and soil gas in

addition to indoor air. Time-Sensitive Recommended Interim Action Screening Levels are applicable for indoor air only and are used to evaluate indoor air data to determine if structures are inhabitable based on contaminant concentrations. Therefore, the site-specific volatilization to indoor air criteria for groundwater, soil, and soil gas calculated by the MDEQ Toxicology Unit dated August 7, 2017 and October 30, 2018 (different property uses, building types, and depths to groundwater within each) are the correct criteria to use for evaluation of data and will be used by the MDEQ.

In accordance with the Part 201 of Act 451 of 1994, Environmental Remediation, of Natural Resources and Environmental Protection Act, Section 20120a (10), when the TDL for a hazardous substance is greater than the developed cleanup criterion, the criterion is the TDL. Therefore, the site-specific volatilization to indoor air criteria for groundwater for residential homes with basements defaults to the TDL of 1 ppb per Part 201, Section 20120a (10). Site specific volatilization to indoor air criteria for groundwater for homes with a slab-on-grade or crawl spaces with groundwater depths ranging from surface level to 1.18 meters below ground surface defaults to the TDL of 1 ppb per Part 201, Section 20120a (10), and with groundwater depths deeper than 1.18 meters below ground surface is 1.4 ppb. However, concentrations within the groundwater plume are above both criteria and the plume must be evaluated as a whole, which requires mitigation of all structures within the groundwater plume, regardless of the type of building structure or property specific depth to groundwater. Additionally, seasonal and yearly groundwater fluctuations must be taken into account, and the shallowest level of groundwater, whether current or historical, should be used when determining groundwater depth and which criteria are applicable.

Site specific volatilization to indoor air criteria for non-residential uses also varies depending on building construction type and depth to groundwater. The extent of the groundwater plume should be determined, and non-residential building type and property use verified, and this information supplied to the MDEQ by February 8, 2019. Any non-residential buildings exceeding the applicable site-specific volatilization to indoor air criteria for groundwater will require mitigation.

Mitigation of structures should be completed and effective within 45 calendar days of this letter. For all structures where sub-slab depressurization systems will be utilized, they will be required to depressurize the entire floor area of the structures to a minimum of -0.02 inches of water column, have points to measure the pressure on a regular basis across the floor area, operate 24/7, and be effective and reliable. Mitigation systems other than sub-slab depressurization systems will need to be demonstrated to be effective, reliable, and operate 24/7. Specific details on system design, operations and maintenance, contingency actions, etc., will be required in the future submittal of the Vapor Intrusion Assessment and Mitigation Plan as required in Section 6.6, Interim Response Activities (b)(ii) of the Consent Decree.

Groundwater levels and concentrations can fluctuate based on precipitation events, seasonal fluctuations, temperature, and a variety of factors. Shallow monitor wells with a result below the TDL of 1 ppb may be above criteria in a subsequent sampling event. Therefore, it is critical that additional quarterly sampling events be conducted as planned and on schedule. Additionally, the other shallow groundwater wells that have not been installed to date because of access issues are critical to assess the volatilization to indoor air pathway for shallow groundwater. All efforts to secure access and install these wells should be taken on an expedited basis.

If you should have further questions or concerns, please contact Ms. Beth Vens, Assistant District Supervisor, at 586-753-3825, or vensb@michigan.gov; or Brandon Alger, Project Manager, Southeast Michigan District Office, MDEQ, RRD, 27700 Donald Court, Warren, Michigan 48092, 586-753-3826; algerb@michigan.gov; or you may contact me.

Sincerely,

*Beth Vens, acting for Paul Owens*

Paul Owens, District Supervisor  
Southeast Michigan District Office  
Remediation and Redevelopment Division  
586-235-6990  
owensp@michigan.gov

cc: Mr. Kris Hinskey, Arcadis U.S., Inc.  
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  
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Ms. Beth Vens MDEQ  
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