



# VAPOR INTRUSION AND GROUNDWATER CONTAMINATION PLUME FORD LIVONIA TRANSMISSION PLANT, LIVONIA

Project Update – March 2019

## Project Overview

The Department of Environmental Quality (DEQ) is providing oversight of Ford Motor Company's (Ford) environmental investigation activities at the Livonia Transmission Plant through a Consent Decree entered into in July 2017. The environmental investigation activities are currently focused on the residential neighborhood due east of the Livonia Transmission Plant.

## Background and Site History

While renovating the Livonia Transmission Plant, Ford reported the presence of chlorinated compounds in the groundwater at the plant. Ford investigated the contamination and determined that one of these compounds, vinyl chloride, had migrated east of the plant in groundwater at concentrations exceeding DEQ generic residential cleanup criteria and notified the DEQ in late 2015.

Prior to the Consent Decree, Ford installed some monitoring wells to collect groundwater samples from deeper and intermediate depth intervals. Soil gas wells were installed to assess the volatilization to indoor air pathway (vapor intrusion) but groundwater in the area was found to be too shallow for the soil gas wells to provide reliable information.

The Consent Decree requires Ford to conduct investigative and remedial activities and DEQ has formal oversight of these activities. After some modifications, Response Activity Plans from Ford were approved by the DEQ in October 2018. These Response Activity Plans required Ford to further investigate the contamination from releases at the Livonia Transmission Plant and take interim response activities if conditions warranted.

## Recent Site Activities:

Groundwater in the area is very shallow and since the DEQ's approval of the plan in October 2018, Ford has been installing shallow monitor wells in order to assess the volatilization to indoor air pathway (vapor intrusion) from the groundwater. Shallow wells have been installed in the right-of-way in some streets and adjacent to many residential homes. Additional monitor wells are currently being installed.

Additional activities conducted by Ford to date include securing access to off-site properties, obtaining information about building construction such as if basements or sump pumps are present, collecting sub-slab vapor samples where building construction and groundwater depth allowed this, and collecting indoor air samples within commercial and residential buildings.

Data submitted by Ford has been reviewed by DEQ staff and put through strict quality control measures. Ford was notified in cases where DEQ identified issues with data quality and was required to correct them. Resampling is needed in some circumstances to provide representative samples, and re-sampling is underway at these locations.

DEQ developed site-specific criteria for the volatilization to indoor air pathway. This is routinely done where shallow groundwater exists because generic criteria is not applicable for such sites. Results from the recently installed shallow groundwater wells detected vinyl chloride above site-specific volatilization to indoor air (vapor intrusion) criteria in some wells. Ford was required to delineate the vinyl chloride plume and mitigate any residences within the plume

and a 100' distance from the outer edge of the plume (the lateral inclusion zone). Ford was given 45 days to complete the mitigation of these residences and has been working with residences that provided access to install mitigation systems. Most homes are having a sub-slab depressurization system installed, which is similar to a radon system. This work is required to be completed by March 18, 2019.

In response to citizens request, the DEQ has been collecting "split samples" (samples collected at the same time as Ford's) of groundwater from shallow monitor wells. The wells are selected at random and samples are analyzed at the State of Michigan environmental laboratory. To date results from DEQ groundwater samples and Ford groundwater samples are acceptably comparable.

## Next Steps:

Ford will continue to install shallow monitor wells adjacent to residences and to define the groundwater plume with DEQ oversight. If additional exceedances of criteria are detected at additional homes or businesses, Ford will be required to mitigate at those properties as well. Additional groundwater, soil-gas and indoor air sampling will be performed, and inspections and maintenance of the mitigation systems will be required of Ford. The Consent Decree also requires Ford to address source areas at the Livonia Transmission Plant and conduct remedial actions for the source areas.

## Where to Find Additional Information

The DEQ has a project web page at [www.michigan.gov/LivoniaVI](http://www.michigan.gov/LivoniaVI). Please visit this page for additional information and contact information for any questions. Ford also maintains a website for access to all data and submissions at: [www.fordlivoniabostonbeaconproject.com](http://www.fordlivoniabostonbeaconproject.com). It should be noted that the DEQ does not review or approve the content of Ford's website narrative.

## DEQ Contact

To reach a DEQ representative, please contact the Environmental Assistance Center by phone at 800-662-9278, or by email at [DEQ-RRD-Ford-Livonia@michigan.gov](mailto:DEQ-RRD-Ford-Livonia@michigan.gov).

You are welcome to register to be part of our e-mail listserv. This is another way the DEQ is providing up-to-date information to interested parties. Go to our website at [www.michigan.gov/deq](http://www.michigan.gov/deq) to sign up. Click on the red envelope at the bottom of the page and type in your email address. Next find "Local Topic Updates" and select [Ford Livonia Vapor Intrusion](#).

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*Meaningful involvement of residents ensures an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.*