TRANSMITTAL LETTER

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Copies:

Date:
May 18, 2022

Subject:
Utility Corridor Response Activity Plan for Interim Response Activities (ResAP IRA) – Livonia Transmission Plant

Arcadis Project No.:
30080642

We are sending you copies:

☒ **Attached** ☐ **Under Separate Cover Via _____ the Following Items:**

☐ Shop Drawings ☐ Plans ☐ Specifications ☐ Change Order
☐ Prints ☐ Samples ☐ Copy of Letter ☒ Reports
☐ Other:

Copies	Delivery Date	Drawing No.	Rev.	Description	Action*
1	5/19/2022			Utility Corridor ResAP – hard copy	
1	5/19/2022			Utility Corridor ResAP – electronic copy CD	

Action*

☐ A Approved ☐ CR Correct and Resubmit ☐ Resubmit _____ Copies
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☐ AS As Requested ☐ FA For Approval ☐ Review and Comment
☒ Other: As Requested per the April 13, 2022 letter provided by EGLE.

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Ford Motor Company

UTILITY CORRIDOR RESPONSE ACTIVITY PLAN FOR INTERIM RESPONSE ACTIVITIES

Livonia Transmission Plant

This document is a DRAFT document that has not received approval from the Michigan Department of Environmental, Great Lakes, and Energy (EGLE). This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the EGLE.

May 18, 2022

UTILITY CORRIDOR RESPONSE ACTIVITY PLAN FOR INTERIM RESPONSE ACTIVITIES

Livonia Transmission Plant

Area of Concern

Court Case: No. 2:1712372-GAD-RSW

May 18, 2022

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Acronyms and Abbreviations

ATNPC	Automatic Transmission New Products Center
CCTV	closed-circuit television
CD	Consent Decree
cDCE	cis-1,2-dichloroethene
cfm	cubic feet per minute
CIPPL	cured-in-place pipe lining
COC	constituent of concern
1,1-DCE	1,1-dichloroethene
EDC	Eastern Diversion Chamber
EGLE	Michigan Department of Environment, Great Lakes, and Energy
GLWA	Great Lakes Water Authority
HCS	Hydraulic Control System
iwc	inches of water column
LTP	Livonia Transmission Plant
MDEQ	Michigan Department of Environmental Quality
O&M	operation and maintenance
PCE	tetrachloroethene
QAPP	Quality Assurance Project Plan
ResAP IRA	Response Activity Plan for Interim Response Activities
RI	Remedial Investigation
ROW	right-of-way
SAMH	sanitary sewer manhole
SSVE	sanitary sewer vapor extraction system
SSVIAC	Site-Specific Volatilization to Indoor Air Criteria
TCE	trichloroethene
tDCE	trans-1,2-dichloroethene
TDL	target detection limit
VC	vinyl chloride
WDC	Western Diversion Chamber
WWTP	wastewater treatment plant

Highlights

Arcadis of Michigan, LLC (Arcadis) has prepared the following Utility Corridor Response Activity Plan for Interim Response Activities (ResAP IRA) on behalf of Ford Motor Company (Ford) for the Livonia Transmission Plant (LTP) site (the site). Key highlights of completed and planned activities are outlined below followed by details throughout the ResAP IRA:

On-site

- Cleaning, closed-circuit television (CCTV), and rehabilitation of sanitary sewers completed in 2021, as shown on **Figure 1**;
- Installation and operation of Powerhouse pump and treat system for sump water discharge to sanitary sewer system was completed in November 2021;
- FROG 5000™ screening was implemented and identified additional pipe segments that require investigation, cleaning, and/or rehabilitation.
- Sanitary sewer structural and connection assessment and rehabilitation to occur in June 2022, shown of **Figure 1**;
- Sanitary Sewer Vapor Extraction System installation to begin in May 2022.

Off-site

- Access agreements obtained at 6 of 9 commercial properties along Plymouth Road, totaling 16 commercial buildings including the tenants at one property.
- Access agreements obtained at 9 of 10 residential properties along Stark Road and Hathaway Avenue.
- Cleaning, CCTV, and documentation of laterals completed on portions of Plymouth Road, Stark Road, and Hathaway Avenue sanitary sewers.
- Plumbing inspections completed at 9 of the commercial buildings. 4 of the 9 commercial buildings have had dye testing completed confirming lateral connections to the main sewer line. Therefore, no additional action is proposed at the 4 properties that have had the dye testing completed.
- Plumbing inspections completed at 8 of the 10 residential properties. Property located at 9375 Stark is currently scheduled for a plumbing inspection on May 20, 2022. Sanitary sewer lateral connections to the main sanitary sewer were confirmed at all 8 residential properties. Therefore, no additional investigation is necessary at those properties.

On-site and Off-site

- In response to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) request related to groundwater and sewer interaction, the buried sanitary sewer mainlines (both on-site and off-site) were determined to be submerged or have the potential to come in contact with groundwater.
- Sanitary sewer still photos documenting the location of laterals within the main sanitary sewer pipes were submitted per EGLE request.

Introduction

Arcadis of Michigan, LLC (Arcadis) has prepared the following Utility Corridor Response Activity Plan for Interim Response Activities (ResAP IRA) on behalf of Ford Motor Company (Ford) for the Livonia Transmission Plant (LTP) site (the site). The on-site and off-site layout of the utility corridor assessment completed to date is included on **Figure 2** and **Figure 3**. This document describes the Remedial Investigation (RI) activities conducted to comprehensively assess the potential exposure pathway via the utility corridors in accordance with the Consent Decree (CD) effective July 27, 2017 (entered into by the Michigan Department of Environmental Quality [MDEQ] and Ford; No: 2:1712372-GAD-RSW) and satisfies the Section 6.7a requirement for a response activity plan for conducting an RI and Michigan Department of Environment, Great Lakes, and Energy (EGLE; formerly MDEQ) letter and acknowledged by Ford on April 19, 2022.

All work has been and currently is being performed under the guidance of the EGLE in accordance with the following approved ResAPs:

- ResAP – Utility Corridor Evaluation Revised, dated February 11, 2020;
- ResAP – Utility Corridor Evaluation Revised Addendum, dated December 4, 2020; and
- ResAP – Utility Corridor Evaluation Revised Addendum #2, dated January 27, 2021.

Arcadis has submitted the following documents to EGLE detailing the completion of utility corridor RI activities since the approval of the ResAPs listed above and approved by EGLE:

- Memo – Utility Corridor Analytical Results, dated May 5, 2021;
- Memo – Utility Corridor Response Activity Plan Progress Update – 30 Day Response, July 2, 2021;
- Memo – Response to EGLE – Sewer Investigation and Impact to Utility Corridors – Vapor Mitigation, dated November 19, 2021;
- Report – Utility Corridor Evaluation Report, dated December 9, 2021;
- Memo – Utility Corridor Assessment – Response to EGLE Letter dated February 11, 2022 and Scope of Work for Offsite Utility Corridor Assessment, dated March 4, 2022;
- Memo – Utility Corridor Assessment Update, dated April 1, 2022;
- Report – 4Q2021 Progress Report, dated January 31, 2022; and
- Report –1Q2022 Progress Report, dated April 29, 2022.

The response activities completed to date address the comments provided by EGLE in the following documentation

- *Utility Corridor Analytical Results* date June 2, 2021,
- *Compliance with Consent Decree No. 2:21712372-GAD-RSW (CJ) Sewer Investigation and Impact to Utility Corridors* dated November 9, 2021,
- *Compliance with Consent Decree No. 2:21712372-GAD-RSW (CD) Sewer Investigation and Impact to Utility Corridors – Vapor Mitigation* dated February 11, 2022, and
- *Compliance with Consent Decree No. 2:21712372-GAD-RSW (CD) Utility Corridors Assessment Response (March 4, 2022)* dated April 13, 2022

This ResAP IRA also responds to the January 4, 2022 discussion between EGLE and Ford and EGLE's January 28, 2022 email to Arcadis (Ford)..

Ford and Arcadis have continued to meet with EGLE during bi-weekly meetings, and the work has progressed based on the investigation results. The scope of work completed under the approved ResAPs systematically assesses the potential exposure pathway related to the utility corridors on site and off site. Additional phases of investigation may be required based on the activities completed and outlined in this ResAP IRA.

This ResAP IRA is organized to describe on-site and off-site RI activities, results, and interim and proposed response activities.

On-site RI activities completed include:

- Sanitary Sewer and Compliance Point Vapor and Liquid Sampling; and
- Sanitary Sewer Screening with the FROG-5000™.

Off-site RI activities completed include:

- Off-site Sanitary Sewer and Compliance Point Vapor and Liquid Sampling.

Interim response activities completed include:

- On-site and off-site sanitary sewer cleaning, CCTV, and rehabilitation;
- On-site installation and operation of a pump and treatment system for Powerhouse sump water discharge to the sanitary sewer system; and
- Off-site commercial and residential property plumbing inspections.

Proposed response activities include:

- On-site Sanitary Sewer Mitigation;
- On-site Sanitary Sewer cleaning and Rehabilitation; and
- Off-site installation of backflow preventers.

The constituents of concern (COCs) for the site, as defined by the CD, include:

- Trichloroethene (TCE);
- Tetrachloroethene (PCE);
- 1,1-Dichloroethene (DCE);
- Cis-1,2-dichloroethene (cDCE);
- Trans-1,2-dichoroethene (tDCE);
- Vinyl chloride (VC); and
- 1,4-Dioxane.

The target detection limits (TDLs) for COCs in vapor are defined in the Site-Specific Volatilization to Indoor Air Criteria (SSVIAC) to evaluate vapor migration in preferential pathways provided by EGLE on September 11, 2020. TDLs for COCs in liquid samples collected in the sanitary sewer were not provided by EGLE for these media.

Investigation sampling, routine monitoring, and laboratory analysis methods employed during the RI are presented in two Quality Assurance Project Plans (QAPPs; Arcadis 2017a, 2017b), prepared and submitted to EGLE in August 2017. QAPP addenda may be prepared and submitted to EGLE for review and approval should an investigation method require additional description.

Schedule

The additional activities proposed that were not included in the previous submittals to EGLE listed above are described herein and will begin upon approval from EGLE. A schedule is provided below to show the approximate duration of the proposed response activities. The status of previous activities discussed in previous submittals to EGLE is also provided below.

Scope Defined Below	Duration	Status
On Site		
Sampling – liquid and vapor sampling of sanitary sewers during baseflow conditions	September 2020 – Present	Ongoing
Cleaning and CCTV of sanitary sewers and laterals	March 2021	Completed
Cleaning of sanitary sewer system in preparation for rehabilitation and to identify cracks or structural defects	July 2021	Completed
Rehabilitation of sanitary sewer system	July – November 2021	Completed
Diversion of sump water from Powerhouse basement sumps to frac tanks	October 2021	Completed
Installation (completed) and operation of Powerhouse pump and treat system for sump water discharge to the sanitary sewer system	November 2021	Ongoing
Screening of sanitary sewer system with FROG 5000™	March 2022	Completed
Sanitary sewer structural and connection assessment under LTP floor	March 2022	Ongoing
Installation and operation of sanitary sewer vapor extraction system	May 2022	Pending

Scope Defined Below	Duration	Status
Off Site		
Sampling – liquid and vapor sampling of sanitary sewers during baseflow conditions	September 2020 – Present	Ongoing
Access agreements sent to commercial property owners located on Plymouth Road and west of Stark Road	June 2021	Completed
Cleaning and CCTV of sanitary sewers and laterals along Plymouth Road up to Stark Road	June – July 2021	Completed
Plumbing inspections completed at commercial properties where access was granted	July 2021	Ongoing
Additional access agreements mailed to residential properties	March 2022	Ongoing
Cleaning and CCTV of sanitary sewers and laterals at Stark Road and Hathaway Avenue intersection	December 2021 – March 2022	Completed
Commercial and residential property plumbing inspections and dye testing to identify laterals	March 2022 – Present	Ongoing
Installation of backflow preventers on sanitary sewer laterals at select commercial and residential properties	TBD	Pending

TBD = To be determined

Utility Corridor Remedial Investigations

Utility Corridor Connectivity Summary and Groundwater Interaction

On-Site Reconnaissance

Details regarding the on-site reconnaissance completed since approval of the ResAPs were submitted to EGLE and provided in the following reports/memos:

- Utility Corridor Evaluation Report, dated December 9, 2021;
- Utility Corridor Assessment – Response to EGLE Letter dated February 11, 2022 and Scope of Work for Offsite Utility Corridor Assessment dated March 4, 2022 ; and
- Utility Corridor Assessment Update dated April 1, 2022 .

In the March 4, 2022, memo Arcadis provided an updated figure that addressed EGLE's comments regarding sanitary sewer connections. The figure, provided in the March 2022 memo, includes the locations of the on-site manholes, vaults, floor drains, and other site features identified and inspected. In addition, the figure within the memorandum (memo) dated March 4, 2022 also provided the locations of above grade sanitary piping versus below grade sanitary piping and on-site lateral connections.

On May 5, 2022, Arcadis provided an email in response to EGLE's request for still shots of the laterals documenting their location within the main sanitary sewer pipes. The lateral still shots with connection position are provided in **Appendix A**. The documentation satisfies EGLE's request from the April 13, 2022 letter to identify the connection of the sanitary sewer and groundwater.

The most up-to-date figure detailing these features was provided in the memo dated April 1, 2022.

Off-Site Reconnaissance

Details regarding off-site reconnaissance completed since approval of the ResAPs have been provided to EGLE in the following reports:

- Utility Corridor Response Activity Plan Progress Update – 30 Day Response dated July 2, 2021 memo;
- Response to EGLE – Sewer Investigation and Impact to Utility Corridors – Vapor Mitigation dated November 19, 2021 memo;
- Utility Corridor Assessment – Response to EGLE Letter Dated February 11, 2022 and Scope of Work for Offsite Utility Corridor Assessment dated March 4, 2022 ; and
- Utility Corridor Assessment Update dated April 1, 2022 .

In the March 4, 2022 and the April 1, 2022 memos, Arcadis provided a figure that documented which sanitary sewers were connected or not connected to Plymouth and Stark Roads. The figure detailed where Arcadis had visually confirmed sanitary sewer connections to either Plymouth or Stark Roads. The remainder of the sanitary sewer lines and manholes identified in the memos listed above had been located by the City of Livonia.

The remaining unknown sewer connection not included in the April 1, 2022 memo was located west of the Stark Road and Hathaway Avenue intersection at the south end of Laurel Avenue. This location was visually inspected in the field, and field staff were able to determine that the Laurel Avenue sewer connects to Stark Road.

Field staff were unable to determine if the Wayne Road sewer connects to Stark Road, but the City of Livonia provided historical figures documenting the connection to Stark Road. Refer to **Figure 4** for locations of the updated sanitary sewer connections.

On May 5, 2022, Arcadis provided an email in response to EGLE's request for still shots of the laterals documenting their locations within the main pipe. The lateral still shots are provided in **Appendix B**. The documentation satisfies EGLE's request provided in the April 13, 2022 letter for identifying the connection of the sanitary sewer and groundwater.

Sanitary Sewer Groundwater Interaction

Between December 2018 and December 2020, Arcadis surveyed on-site and off-site manhole rims, inverts, and sumps to understand the relationship between depths of the sanitary sewers and the elevation of groundwater. The findings of that survey indicate that the buried sanitary sewer mainlines (both on site and off site) are submerged or have the potential to come in contact with groundwater. Background information regarding the

utility corridor surveying and connection to groundwater was provided in the Utility Corridor Evaluation Report, dated December 9, 2021. In addition to the mail lines, the laterals are primarily partially submerged and are/or have the potential to be in contact with groundwater. Off-site cross sections depicting the water table and the approximate depth of the mainline sanitary sewer on Plymouth Road are provided on **Figure 5** and **Figure 6**. The cross sections clearly indicate that the sanitary sewers are submerged in groundwater and not above the water table as indicated in the EGLE letter dated April 13, 2022. The documentation satisfies EGLE's request from the April 13, 2022 letter to identify the connection of the sanitary sewer and groundwater.

Utility Corridor Sampling

Between September 14, 2020, and May 11, 2022, Arcadis collected approximately 605 vapor samples and 562 liquid samples from on-site and off-site sanitary sewer manholes (**Figure 2** and **Figure 3**) to evaluate the presence of COCs on site and off site within the sanitary sewer. Vapor and liquid samples were collected from manholes along Plymouth Road, Stark Road, and Hathaway Avenue. The following bullet list summarizes the vapor and liquid sampling frequency history:

- Quarterly sampling began in the third quarter of 2020 and continued through the fourth quarter of 2021.
- In November 2021, two rounds of samples were collected each month.
- Since January 10, 2022, Arcadis has conducted weekly vapor and liquid grab sampling from sanitary sewer manholes on site and off site along Plymouth Road, Stark Road, and Hathaway Avenue.

Refer to the ResAP - Utility Corridor Evaluation Revised Addendum #2 dated January 27, 2021 for details on the grab sampling methods.

On-Site Sanitary Sewer Sampling

In order to build the dataset and evaluate if impacted groundwater and/or potential vapor is interacting with the on-site sanitary sewers and subsequently allowing vapor to migrate to off-site sanitary sewers, Ford and Arcadis have continued to collect vapor grab samples and liquid samples from on-site sanitary sewer manholes (SAMHs) since September 14, 2020. As of May 11, 2022, approximately 144 vapor samples and 119 liquid samples have been collected on site.

The on-site SAMHs sampled include the following seven structures: SAMH-1231, SAMH-1231A, SAMH-1244, SAMH-1255, SAMH-1256, SAMH-1259, and SL-2 as shown on **Figure 2**.

Off-Site Sanitary Sewer Sampling

In order to evaluate if impacted groundwater and/or potential vapors are interacting with the on-site sanitary sewer and potentially could be migrating off site, Ford and Arcadis have continued to collect liquid and vapor grab samples from off-site SAMHs since September 14, 2020. As of May 11, 2022, approximately 452 vapor samples have been collected and 443 liquid samples have been collected off site. The off-site SAMHs include the following 21 structures: SL-3, SL-4, SL-5, SL-6, SL-7, SL-8, SL-9, SL-10, SL-11, SL-12, SL-13, SL-14, SL-15, SL-16, SL-17, SL-18, SL-19, SL-20, SL-21, SL-22, and SL-23 as shown on **Figure 2** and **Figure 3**.

On-Site FROG 5000™ Screening

During the January 4, 2022 meeting between EGLE, Ford, and Arcadis, EGLE requested a scope of work to determine if there was a potential source of the vapor contamination on the site using real-time screening and/or analytical results for site-specific COCs.

In response to EGLE's request, Ford and Arcadis detailed an adaptive investigation scope of work using the FROG 5000™. The results of the screening were included in the March 4, 2022 and April 1, 2022 memos. The adaptive investigation was completed from February 14, 2022 to March 10, 2022 to screen vapor in sanitary sewer locations (manholes and cleanouts) on site in an effort to determine if a potential source could be identified within the sanitary sewer. Please refer to these memos for details on how the FROG 5000™ vapor screening was completed.

The FROG 5000™ screening was not intended to delineate a source, but rather to assist in locating a specific area(s) on site where vapors are consistently present in the sanitary sewer at concentrations above SSVIAC. No singular specific source could be identified, but the screening did identify pipe segments that require additional investigation and/or cleaning.

Utility Corridor Results

Information regarding the utility corridor results has been provided to EGLE in the following memos and reports:

- Utility Corridor Analytical Results related to the Ford Livonia Transmission Plant, 36200 Plymouth Road, Wayne County, Michigan dated May 5, 2021;
- Utility Corridor Response Activity Plan Progress Update – 30 Day Response dated July 2, 2021
- Utility Corridor Evaluation Report dated December 9, 2021;
- Utility Corridor Assessment – Response to EGLE Letter Dated February 11, 2022 and Scope of Work for Offsite Utility Corridor Assessment dated March 4, 2022;
- Utility Corridor Assessment Update dated April 1, 2022;
- 4Q2021 Progress Report dated January 31, 2022; and
- 1Q2022 Progress Report dated April 29, 2022.

The information detailed below provides an update on the utility corridor sample results following the 1Q2022 Progress Report dated April 29, 2022.

On-Site and Plymouth Road Results

Results from the vapor samples collected on site during the weekly sampling events were compared to the Restricted Non-residential 12-hour workday exposure SSVIAC (**Table 1, Table 2, and Figure 7**). The results from the weekly vapor samples collected since April 1, 2022 exhibited exceedances of the SSVIAC at five of the seven on-site locations (SAMH-1231, SAMH-1231A, SAMH-1244, SAMH-1255, and SAMH-1259). The results from the vapor samples collected exhibited exceedances of SSVIAC in all samples collected since weekly sampling began in January 2022. Results from the liquid samples collected are provided in **Table 3** and on **Figure 8**.

On-Site FROG 5000™ Screening Results

Summaries and conclusions of the FROG 5000™ screening were provided in the memos dated March 4, 2022, and April 1, 2022, and in the Quarterly Progress Report dated April 29, 2022.

The highest vapor concentrations recorded by the FROG 5000™ were at locations MH-1244, MH-1255, MH-1256, MH-1259, MH-1260B, MH-A-B-54, CO-A-B-54, MH-OD-OE-52, MH-A-B-36, and MH-B-22 (see the Quarterly Progress Report dated April 29, 2022 for the figure showing these locations and results). Manhole locations MH-1244, MH-1255, MH-1256, MH-1259, and MH-1260B have been rehabilitated in order to reduce the potential for groundwater infiltration into the sanitary sewer but would not prevent vapors from entering via the invert.

Off-Site Plymouth Road, Stark Road, and Hathaway Avenue Results

Results from the vapor samples collected along the northern portion of Stark Road (north of Plymouth Road) were compared to both the EGLE Unrestricted Residential SSVIAC and the Restricted Non-residential 12-hour workday exposure SSVIAC (**Table 4 and Figure 7**). Results from the vapor samples collected along the southern portion of Stark Road and Hathaway Avenue were compared to the Unrestricted Residential SSVIAC (**Table 4** and **Figure 9**). Vapor sample results collected from locations along Plymouth Road were compared to the Restricted Non-residential 12-hour workday exposure SSVIAC, and vapor sample results collected from locations on Stark Road on the east side of Alden Village were compared to the Unrestricted Residential SSVIAC. Vapor sample results exhibited exceedances of the respective SSVIAC in vapor samples collected in eight of the 21 off-site locations during the weekly sampling events since April 1, 2022. Results from the liquid samples collected are provided in **Table 3** and on **Figure 10**.

Water Contribution into Sanitary Sewer vs. Vapor and Liquid Results

Analytical trend graphs showing TCE and VC vapor results, along with daily liquid contribution (pumping) volumes, have been completed for the following manhole locations: SAMH-1231, SAMH-1231A, SAMH-1244, SAMH-1255, SAMH-1256, SAMH-1259, SL-2, SL-5, SL-12, SL-16, and SL-17. Vapor sampling has been completed weekly since January 2022 with less frequent sampling completed previously. All available vapor data for each structure have been included in the analytical trend graphs. The contribution of liquid to each of these structures is a result of daily pumping volumes from the LTP, Automatic Transmission New Products Center (ATNPC), Wastewater Treatment Plant (WWTP), Hydraulic Control System (HCS), Powerhouse, Eastern Diversion Chamber (EDC), and Western Diversion Chamber (WDC). Pumping volumes for the LTP (48,368 gal), ATNPC (1,600 gal), and Powerhouse (3,000 gal) are estimated, as their pumping volumes are not recorded, and their respective contributions were incorporated as fixed volumes. Pumping volumes for the WWTP, HCS, EDC, and WDC are monitored and recorded daily, and their respective daily volumes were used. Only the applicable liquid contribution sources (represented on the trend graphs) were used for each structure. Key conclusions from an analysis of the trend graphs include:

- There was a significant decrease in vapor concentrations following the rehabilitation of the on-site utility corridor, which was completed in November 2021 and detailed below.

Structure	Pre-Rehabilitation Maximum Concentration (µg/m³)	Post-Rehabilitation Maximum Concentration (µg/m³)
SAMH-1231	23,000 (VC)/19,000 (TCE)	2,300 (VC)/45 (TCE)
SAMH-1244	8,500 (VC)/11,000 (TCE)	1,200 (VC)/15 (TCE)
SAMH-1255	7,800 (VC)/140 (TCE)	1,100 (VC)/54 (TCE)
SAMH-1256	14,000 (VC)/15,000 (TCE)	1,600 (VC)/6.9 (TCE)
SL-2	1,700 (VC)/2,200 (TCE)	250 (VC)/190 (TCE)
SL-5	6,500 (VC)/7,800 (TCE)	75 (VC)/9.4 (TCE)
SL-12	3,100 (VC)/3,900 (TCE)	110 (VC)/11 (TCE)

- There is no clear correlation between the pumping volumes and the vapor collected in the sanitary sewers. At select locations (SAMH-1231, SAMH-1244, SL-2, SL-16, and SL-17) it appears that, when high pumping volumes are present, vapor concentrations are higher.
- There is no clear correlation between the pumping volumes and the liquid concentrations detected in the sanitary sewers. At select locations (SAMH-1231, SAMH-1244, SL-12, SL-16, and SL-17), it appears that, when lower pumping volumes are present, site-specific COC concentrations are higher in the liquid.
- The trend graphs are provided in **Appendix C**.

Utility Corridor Interim Response Activities

On-Site Sanitary Sewer Cleaning, CCTV, and Rehabilitation

From March 2021 to November 2021, Arcadis and a specialty contractor cleaned, conditionally assessed, and rehabilitated the sanitary sewer on the Ford property and along Plymouth Road directly in front of the Ford property. Additional details for the scope of work were explained in the Utility Corridor Evaluation Report, dated December 9, 2021. As stated in the April 1, 2022 memo, Arcadis and a specialty contractor returned to the site and completed an initial structural and connection assessment of the sanitary sewer network within the LTP on March 26, 2022. Since the submittal of the April 1, 2022 memo, no additional cleaning or CCTV inspection has been completed on site.

Powerhouse Pump and Treat System

In response to the presence of site-specific COCs beneath the LTP powerhouse building and within the associated sanitary sewer, Ford (Arcadis) designed, installed, and is operating an interim treatment system that removes contaminants from water collected in two floor sumps within the Powerhouse. The Powerhouse treatment system is intended to mitigate the potential for discharge of impacted water to the sanitary sewer. Construction of the Powerhouse treatment system began in October 2021, and the system began treating water discharged from the floor sumps on November 23, 2021.

The Powerhouse treatment system has been operating continuously to date in compliance with the Great Lakes Water Authority (GLWA) discharge permit before discharging to the sanitary sewer. Additional detail regarding the installation and operation of the Powerhouse treatment system is documented in the Quarterly Progress Reports dated January 31, 2022 and April 29, 2022.

Off-Site Sanitary Sewer Cleaning and CCTV

From June 16 through July 1, 2021, Arcadis oversaw the cleaning and CCTV inspection of the sanitary sewer system along Plymouth Road from SL-2 east to Stark Road. Additional details for the scope of work were explained in the Utility Corridor Evaluation Report, dated December 9, 2021. Multiple events occurred from December 2021 to March 2022, during which Arcadis oversaw a specialty contractor clean and document lateral connections within the sanitary sewer along Stark Road and Hathaway Avenue. No additional cleaning work has been completed since the April 1, 2022 memo. Arcadis has completed additional CCTV work documenting lateral connections from the commercial properties during the dye tracing described in detail in the first quarter 2022 Quarterly Progress Report dated April 29, 2022.

Off-Site Access Agreements

As detailed in the memos dated March 4, 2022 and April 1, 2022, in response to the letter from EGLE dated February 11, 2022, access agreements were mailed to select off-site commercial and residential properties. The locations designated to receive an access agreement were based on laboratory analytical results from sanitary sewer vapor samples located along Plymouth and Stark Roads. The previously executed access agreements were provided in the March 4, 2022 and April 1, 2022 memos and in the Quarterly Progress Report dated April 29, 2022. No additional executed access agreements have been obtained since submittal of the Quarterly Progress Report, but Ford and Arcadis are working diligently to acquire access to the three remaining commercial properties and the one residential location. The commercial and residential access agreement status update figures are included as **Figure 11** and **Figure 12**, respectively.

Off-site commercial and residential plumbing inspections were initiated for properties for which access agreements have been executed. The inspection results are detailed in the sections below and include initial visual observation and dye tracing, as necessary, in accordance with the *Plumbing Inspection Scope of Work* presented in the April 1, 2022 memo. To date, Arcadis has performed dye tracing at four commercial property building locations (34850 Plymouth Road, 34900 Plymouth Road, 35000 Plymouth Road, and 35200 Plymouth Road). **Exhibit 1** provides the status of the plumbing inspection at each property through May 18, 2022.

Exhibit 1: Residential and Commercial Access Agreement Requests

Property Designation	Site Address (Livonia, MI 48150)	Date Access Agreement Sent/Provided	Date Access Agreement Signed	Status of Plumbing Inspection (Initial Visual Observation)	Date Dye Test Completed
Commercial	34450 Plymouth	6/29/2021 3/3/2022 3/24/2022 4/19/2022 4/21/2022	Access agreement not received as of May 18, 2022. Refer to the communication log for more detailed correspondence.		

Property Designation	Site Address (Livonia, MI 48150)	Date Access Agreement Sent/Provided	Date Access Agreement Signed	Status of Plumbing Inspection (Initial Visual Observation)	Date Dye Test Completed
Commercial	34500 Plymouth	6/29/2021 9/15/2021 3/3/2022 3/25/2022 4/19/2022	Access agreement not received as of May 18, 2022. Refer to the communication log for more detailed correspondence.		
Commercial	34706-34730 Plymouth	6/29/2021 9/15/2021 3/3/2022 3/25/2022	3/26/2022	Coordinating with tenants to complete the plumbing inspections, details provided below in the offsite commercial inspection section of this report	
	34712 Plymouth			Completed 4/13/2022	
	34716 Plymouth			Completed 4/13/2022	
	34722-34726 Plymouth			Completed 4/14/2022	
	34728 Plymouth			Completed 5/10/2022	
	34730 Plymouth			Completed 5/16/2022	
Commercial	34800 Plymouth	6/29/2021 9/15/2021 3/3/2022 4/13/2022	Access agreement not received as of May 18, 2022. Refer to the communication log for more detailed correspondence.		
Commercial	34850 Plymouth	6/29/2021	7/16/2021	Completed 3/24/2022	Completed 4/19/2022, no additional investigation necessary due to confirmation of lateral connection
Commercial	34900 Plymouth	6/29/2021	7/12/2021	Completed 3/23/2022	Completed 4/20/2022, no additional investigation necessary due to confirmation of lateral connection

Property Designation	Site Address (Livonia, MI 48150)	Date Access Agreement Sent/Provided	Date Access Agreement Signed	Status of Plumbing Inspection (Initial Visual Observation)	Date Dye Test Completed
Commercial	35000 Plymouth	6/29/2021	7/2/2021	Completed 3/25/2022	Completed 4/21/2022, no additional investigation necessary due to confirmation of lateral connection
Commercial	35200 Plymouth	Access Obtained*	Access obtained*	Completed 3/28/2022	Completed 4/18/2022, no additional investigation necessary due to confirmation of lateral connection
Commercial	35400 Plymouth	Access Obtained*	Access obtained*	Coordinating with property owner	
Residential	9375 Stark	3/3/2022 3/24/2022 4/12/2022 4/19/2022	4/25/2022	Scheduled for 5/20/2022	
Residential	9480 Stark	3/3/2022	3/24/2022	Completed 4/6/2022, no additional investigation necessary due to confirmation of lateral connection	
Residential	9487 Stark	3/3/2022 3/24/2022 4/19/2022 4/21/2022	4/21/2022	Completed 5/11/2022, no additional investigation necessary due to confirmation of lateral connection	
Residential	9491 Stark	3/3/2022	3/24/2022	Completed 4/5/2022, no additional investigation necessary due to confirmation of lateral connection	
Residential	9551 Stark	3/3/2022 3/24/2022 4/19/2022	Access agreement not received as of May 18, 2022. Refer to the communication log for more detailed correspondence.		

Property Designation	Site Address (Livonia, MI 48150)	Date Access Agreement Sent/Provided	Date Access Agreement Signed	Status of Plumbing Inspection (Initial Visual Observation)	Date Dye Test Completed
Residential	9552 Stark	3/3/2022 3/24/2022 4/19/2022	4/21/2022	Completed 5/11/2022, no additional investigation necessary due to confirmation of lateral connection	
Residential	34247 Hathaway	3/3/2022	3/18/2022	Completed 4/7/2022, no additional investigation necessary due to confirmation of lateral connection	
Residential	34252 Hathaway	3/3/2022	3/23/2022	Completed 4/12/2022, no additional investigation necessary due to confirmation of lateral connection	
Residential	34277 Hathaway	3/3/2022	3/18/2022	Completed 3/29/2022, no additional investigation necessary due to confirmation of lateral connection	
Residential	34284 Hathaway	3/3/2022 4/19/2022	4/21/2022	Completed 5/9/2022, no additional investigation necessary due to confirmation of lateral connection	

*Access to these properties was previously obtained.

Ford continues to negotiate in good faith to obtain access to the remaining residential property and the commercial properties along Plymouth Road, west of Stark, and the remaining residential location for completion of response activities. Details regarding access for the remaining properties are provided in the communication log presented in **Appendix D**.

Off-Site Commercial Plumbing Inspections

As stated in the previous section, off-site commercial plumbing inspections were initiated for properties along Plymouth Road west of Stark Road where access agreements have been executed. The inspections included initial visual observation and dye tracing, as necessary, in accordance with the *Plumbing Inspection Scope of Work* presented in the April 1, 2022 memo. To date, Arcadis has completed commercial plumbing inspections at eight commercial property building locations along Plymouth Road (34712 Plymouth, 34716 Plymouth, 34722 Plymouth, 34728 Plymouth, 34850 Plymouth, 34900 Plymouth, 35000 Plymouth, and 35200 Plymouth) and

performed dye tracing at four commercial property building locations along Plymouth Road (34850 Plymouth, 34900 Plymouth, 35000 Plymouth, and 35200 Plymouth). The results and findings of the previously completed commercial plumbing inspections and dye test were described in the April 1, 2022 memo and the 1Q2022 Progress Report, dated April 29, 2022. Additional inspections have been completed since the submittal of Progress Report, and the results of these additional inspections are provided below.

34728 Plymouth Road

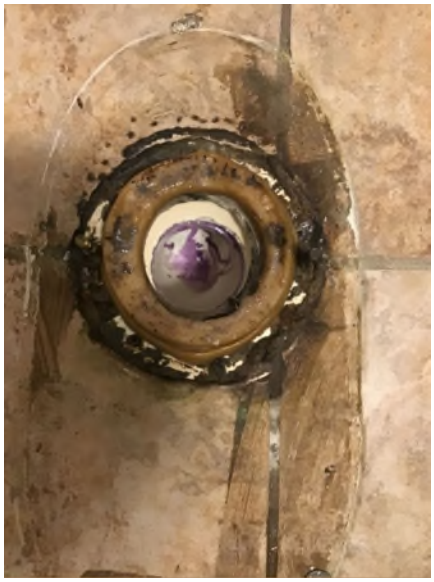
- The initial plumbing inspection at 34728 Plymouth Road was completed on May 10, 2022. The property is currently used as an audiology clinic and is in operation Monday through Friday 9:00 a.m. to 5:00 p.m. A licensed plumber inspected two P-traps (which were located under sinks), one toilet wax ring, caulking around the base of one toilet, and used a camera to visually scope the sewer lateral from the toilet located in the restroom (due to the absence of a cleanout) to the sewer main along the northern right-of-way (ROW) on Plymouth Road. The following details the findings of the plumbing inspection:
- At both sinks, the P-traps were visually inspected and verified to be wetted by observing water through the drain opening. Pipe fittings under the sink were verified to be fully tightened using a wrench. Water was added to each sink to verify the plumbing and fittings were not leaking and the P-trap remained wetted after use.
- The toilet was removed to verify the presence of a wax ring on the pipe flange. The wax ring was present. During removal of the toilet, the wax ring was damaged and deformed; therefore, a new wax ring was installed by the plumber. After the toilet was reinstalled, the plumber caulked the seam between the toilet and the floor. The toilets were flushed multiple times to confirm the absence of leaks.
- A cleanout was not located in this tenant space. The plumber used the open pipe when the toilet was removed to inspect the lateral line using a camera scope to visually confirm the lateral connection with the sewer main on Plymouth Road in the northern ROW, but could not determine a specific location of the connection. During the camera inspection, the plumber noted the lateral pipe was currently not obstructed by roots and was functioning properly. The plumber also noted the sanitary sewer lateral for this tenant space is shared with the neighboring tenant space.
- Arcadis will schedule a dye test for this tenant space to identify the active sanitary sewer lateral connections for the entire commercial strip mall to the sanitary sewer main along Plymouth Road.
- Arcadis documented and photographed the inspection that occurred at the property.
- The plumber inspection report is included in **Appendix E**.

Exhibit 2. Plumbing Inspection Results at 34728 Plymouth Road

Sewer lateral inspected via camera from the restroom toilet

Inspected P-trap under the restroom sink

Inspected P-trap at the kitchen sink



Existing wax ring and caulk seal around removed toilet

New wax ring installed on toilet flange

Toilet reinstalled and new caulk applied around the base

Off-Site Residential Plumbing Inspections

As stated in the off-site access agreements section, off-site residential plumbing inspections were initiated for properties for which access agreements have been executed. The inspections included initial visual observation in accordance with the *Plumbing Inspection Scope of Work* presented in the April 1, 2022 memo. To date, Arcadis has completed residential plumbing inspections at eight residential properties (34247 Hathaway, 34277 Hathaway, 34252 Hathaway, 34284 Hathaway, 9480 Stark, 9487 Stark, 9494 Stark, and 9552 Stark). The results and findings of the previously completed residential property plumbing inspections were described in the April 1, 2022 memo and Quarterly Progress Report dated April 29, 2022. Additional inspections have been completed since the submittal of the 1Q2022 Progress Report and the results of these additional inspections are provided below.

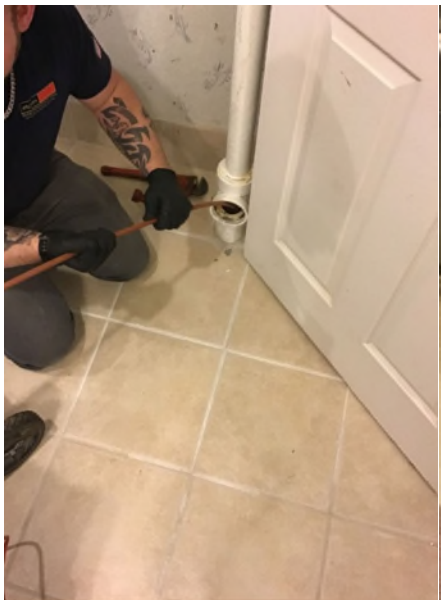
34284 Hathaway Avenue

The initial plumbing inspection at 34284 Hathaway was completed on May 9, 2022. A licensed plumber inspected five P-traps (which were located under sinks), three toilet wax rings, caulking around the bases of three toilets, one P-trap (which was located under a bathtub), two P-traps (which were located under two showers), and used a camera to visually scope the sewer lateral from a cleanout located in one of the bathrooms to the sewer main along Hathaway. The following details the findings of the plumbing inspection:

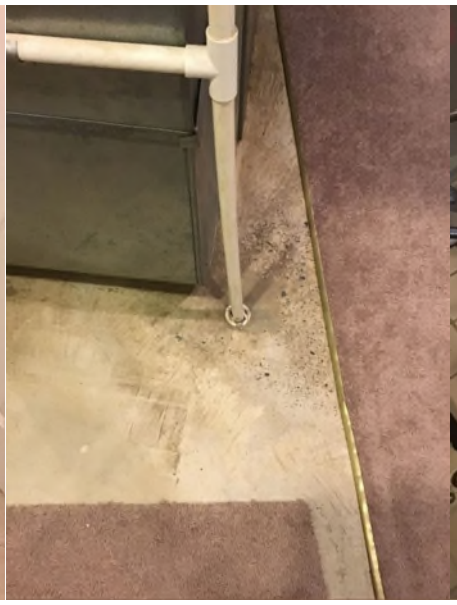
- At all five sinks throughout the house, P-traps were visually inspected and verified to be wetted by observing water through the drain opening. Pipe fittings under the sink were verified to be fully tightened using a wrench. Water was added to each sink to verify the plumbing and fittings were not leaking. In addition, water was added to verify the P-trap remained wetted after use.
- The three toilets were removed to verify the presence of a wax ring on the pipe flange. The wax rings were present at two of the toilets. The third toilet had a wax-less rubber gasket installed on the pipe flange. The plumber inspected the rubber seal and determined the rubber was in good condition, it was not cracked or damaged, and did not need replacing. During removal of the toilet, the wax rings were damaged and deformed; therefore, new wax rings were installed by the plumber. After the toilet was reinstalled, the plumber caulked the seam between the toilet and the floor. The toilets were flushed multiple times to confirm the absence of leaks.
- At the two showers and one bathtub, the P-traps were visually inspected and verified to be wetted by observing water through the drain opening. Water was added to each P-trap to verify the P-traps remained wetted after use. The plumber entered the crawlspace under the home, inspected the P-trap for the bathtub, and confirmed the P-trap was wetted and not leaking. At the two showers, there was not a crawlspace under the floor; therefore, the plumber was not able to inspect the undersides of the P-trap.
- Three cleanouts are located inside the house: two are located in bathrooms, and one is located in the basement. The cleanout located in the bathrooms were inspected using a camera scope to visually confirm the lateral connection with the sewer main on Hathaway Avenue. During the camera inspection, the plumber observed the lateral pipe was currently not obstructed by any roots and was functioning properly.
- A condensate drain for the forced air furnace was inspected by the plumber. The plumber was able to visually confirm the presence of water in a P-trap below the concrete floor. Water was added to the P-trap to verify the P-trap remained wetted after use.
- No additional investigations are planned because the plumbing has been confirmed to be in working order, and the lateral has been identified on Hathaway.

- Arcadis documented and photographed the inspection that occurred at the property.
- The plumber inspection report is included in **Appendix E**.

Exhibit 3. Plumbing Inspection Results at 34284 Hathaway



Interior cleanout inspected lateral with a camera



Inspected P-trap at the furnace condensate drain below the concrete floor

Inspected wax-less toilet gasket under toilet

Existing wax ring and caulk seal around removed toilet

New wax ring installed on toilet flange

Toilet reinstalled and new caulk applied around the base

9487 Stark

The initial plumbing inspection at 9487 Stark was completed on May 11, 2022. A licensed plumber inspected five P-traps (which were located under sinks), two toilet wax rings, caulking around the bases of two toilets, one P-trap (which was located under a bathtub), one floor drain located in the basement floor, and used a camera to visually scope the sewer lateral from a cleanout located on the interior of the house to the sewer main along Stark Road. The following details the findings of the plumbing inspection:

- At all five sinks throughout the house, P-traps were visually inspected and verified to be wetted by observing water through the drain opening. Pipe fittings under the sink were verified to be fully tightened using a wrench. Water was added to each sink to verify the plumbing and fittings were not leaking. In addition, water was added to verify the P-trap remained wetted after use.
- The two toilets were removed to verify the presence of a wax ring on the pipe flange. The wax rings were present at both toilets. During removal of the toilets, the wax rings were damaged and deformed; therefore, new wax rings were installed by the plumber. After each toilet was reinstalled, the plumber caulked the seam between the toilet and the floor. The toilets were flushed multiple times to confirm the absence of leaks.
- At the bathtub, the P-trap was visually inspected and verified to be wetted by observing water through the drain opening. Water was added to the P-trap to verify the P-trap remains wetted after use. The plumber entered the basement under the home, inspected the P-trap for the bathtub from the underside, and confirmed the P-traps were wetted and not leaking.
- One cleanout is located inside the house in the basement. The cleanout was inspected using a camera scope to visually confirm the lateral connection with the sewer main on Stark Road. During the camera inspection, the plumber observed the lateral pipe was currently not obstructed by any roots and was functioning properly.
- A basement floor drain was inspected by the plumber. The plumber was able to visually confirm the presence of water in a P-trap below the concrete floor. Water was added to the P-trap to verify the P-trap remained wetted after use.
- No additional investigations are planned because the plumbing has been confirmed to be in working order, and the lateral has been identified on Hathaway.
- Arcadis documented and photographed the inspection that occurred at the property.
- The plumber inspection report is included in **Appendix E**.

Exhibit 4. Plumbing Inspection Results at 9487 Stark Road

Interior cleanout inspected lateral with a camera

Inspected P-trap under the bathtub in the basement

Inspected P-trap under the bathroom sink

Existing wax ring and caulk seal around removed toilet

New wax ring installed on toilet flange

Toilet reinstalled and new caulk applied around the base

9552 Stark

The initial plumbing inspection at 9552 Stark was completed on May 11, 2022. A licensed plumber inspected four P-traps (which were located under sinks), two toilet wax rings, caulking around the bases of two toilets, one P-trap (which was located under a bathtub), one P-trap (which was located under a shower), one floor drain located in the basement, and used a camera to visually scope the sewer lateral from a cleanout located in the basement of the house to the sewer main along Stark Road. The following details the findings of the plumbing inspection:

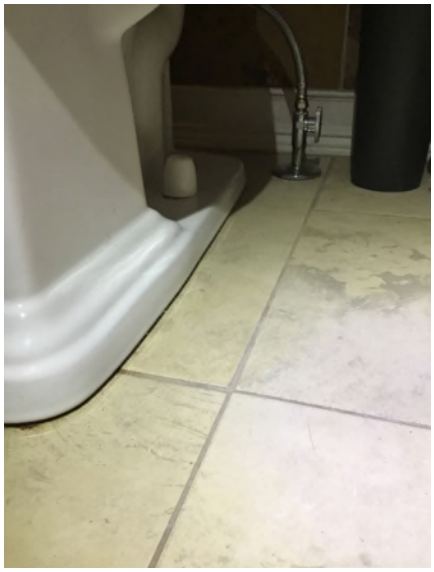
- At all five sinks throughout the house, P-traps were visually inspected and verified to be wetted by observing water through the drain opening. Pipe fittings under the sink were verified to be fully tightened using a wrench. Water was added to each sink to verify the plumbing and fittings were not leaking. In addition, water was added to verify the P-trap remained wetted after use.
- The property owner did not allow the two toilets to be removed for inspection. The property owner stated the bathrooms were recently renovated and did not want the tile floor or the toilets damaged. The plumber was unable to inspect the wax ring. The toilets were flushed multiple times to confirm the absence of leaks. The plumber noted that one of the toilets was grouted to the floor, and the other toilet was not caulked at the base with the floor. The property owner did not want caulk applied to the base of the toilet.
- At the one shower and one bathtub, the P-traps were visually inspected and verified to be wetted by observing water through the drain opening. Water was added to each P-trap to verify the P-traps remained wetted after use. The plumber entered the basement under the home, inspected the P-traps for both the bathtub and the shower, and confirmed the P-traps were wetted and not leaking.
- One cleanout is located inside the house in the basement. The cleanout was inspected using a camera scope to visually confirm the lateral connection with the sewer main on Stark Road. During the camera inspection, the plumber observed the lateral pipe was currently not obstructed by any roots and was functioning properly.
- A condensate drain for the forced air furnace was inspected by the plumber. The plumber was able to visually confirm the presence of water in a P-trap below the concrete floor. Water was added to the P-trap to verify the P-trap remained wetted after use.
- No additional investigations are planned because the plumbing has been confirmed to be in working order and the lateral has been identified on Hathaway.
- Arcadis documented and photographed the inspection that occurred at the property.
- The plumber inspection report is included in **Appendix E**.

Exhibit 5. Plumbing Inspection Results at 9552 Stark Road

Interior cleanout inspected lateral with a camera

Inspected P-trap under the shower in the basement

Inspected P-trap under the bathtub in the basement



Existing toilet without caulk sealing around the base

P-trap inspected under the laundry room sink

Toilet grouted to the tile floor

Arcadis has completed residential plumbing inspections at eight of nine properties for which access agreements have been signed by the property owners, and no additional inspections are scheduled or planned based on the inspections of the licensed plumber.

Utility Corridor Response Activities

On-site Response Activities

Sanitary Sewer Vapor Extraction System.

In response to the presence of site-specific COCs in vapor that have the potential to migrate within the sanitary sewer, Ford is currently designing and installing a sanitary sewer vapor extraction system (SSVE). The purpose of the SSVE system is to prevent vapors present in the on-site sanitary sewers from migrating off site along Plymouth Road. The SSVE system will not treat liquid present in the sanitary sewer. The SSVE system is scheduled to be delivered to the site and begin operating the week of May 23, 2022.

The SSVE system is composed of a blower capable of reaching an airflow of 900 cubic feet per minute (cfm) and maximum vacuum of approximately 30 inches of water column (iwc). Vapor treatment will consist of one 2,000-pound (lb) vessel containing vapor granulated activated carbon and one 2,000 lb vessel containing zeolite impregnated with potassium permanganate, arranged in series. The piping and instrumentation diagram is provided in **Appendix F.** The SSVE system will be equipped with process safety devices and interlocks that will cause it to shut down if equipment is operating outside of design/safe ranges. The SSVE system will also be equipped with a telemetry system that will send out notifications to operation and maintenance (O&M) staff in the event of an alarm or system shutdown.

The SSVE system will be temporarily installed to extract from on-site manhole SAMH-1244, while a new cleanout is installed on the sewer lateral north of manhole SAMH-1231 to accommodate vapor extraction. Once this cleanout is installed, the SSVE system equipment will be relocated further to the east to extract from the new cleanout. This extraction point is preferred, as it should allow for the extraction system to recover vapors more effectively from both on-site laterals that connect to the sanitary sewer located on Plymouth Road. Both proposed SSVE system staging locations are shown on **Figure 1**. The table below details the implementation schedule for the SSVE system.

SSVE System Schedule	Date
SSVE system to arrive onsite	Week of May 23, 2022
Connection of Manhole Location SAMH-1244 to begin pulling vapor	Week of May 23, 2022
Excavation for Sanitary Connection near Manhole Location SAMH-1231	June 2022
Connection of Sanitary Cleanout of SAMH-1231	June 2022

System Operation and Compliance Sampling

Compliance sampling and vapor screening using the FROG 5000™ will be completed to confirm that the SSVE system is removing site-related COCs in vapor from the sanitary sewer system to levels below SSVIAC before migrating to the Plymouth Road sanitary sewer system.

Following installation of the system, a one-time screening of on-site and off-site sanitary sewer manholes downgradient of MH-1244 (SAMH-1231 and SL-2) will be completed using the FROG 5000™. One round of grab vapor samples will also be collected to confirm FROG 5000™ screening results. These data will be used to establish baseline vapor concentrations before system startup.

Following the baseline sampling, the SSVE system will be activated and set to extract from manhole location MH-1244 at an airflow rate of approximately 200 to 300 cfm. After approximately 24 hours of extraction, another round of FROG 5000™ screening and grab sampling will be completed on the manholes identified above. System operations will be adjusted as necessary to optimize the extraction flow rate based on the vapor monitoring results.

- If screening indicates a potential exceedance, and/or a grab vapor sample results are above SSVIAC, the extraction airflow rate will be increased to enhance removal of vapors from the sanitary sewer system. After the extraction flow rate is increased, another round of screening/grab sampling will be performed approximately 24 hours after the extraction flow rate is increased. This process will be repeated until vapor concentrations are below SSVIAC and startup vapor monitoring can be transitioned to compliance sampling or the system reaches its maximum airflow capacity.
- If the grab vapor sample results are below SSVIAC, then the SSVE system will continue operating without adjustment, and startup vapor monitoring will be transitioned to compliance sampling.

Once system startup and extraction flow optimization is complete, compliance sampling will continue weekly with the FROG 5000™ screening and grab sampling at the manhole locations identified above to confirm that vapor sample results remain below SSVIAC. If results remain below SSVIAC for 3 weeks, the sampling frequency will be reduced to monthly.

When the SSVE system is relocated north of manhole SAMH-1231, the same startup and compliance sampling procedure will be conducted as detailed above.

During system operation, weekly inspections will be completed inside the LTP on structures connected to the sanitary sewer lines (e.g., sinks, toilets, drains) to confirm that the extraction system is not pulling water from P-traps or otherwise affecting the plumbing system.

Routine operational monitoring of system equipment and manufacturer-recommended maintenance will be performed during the weekly vapor monitoring events while the system is operating.

Sanitary Sewer Cleaning and Rehabilitation

Based on the on-site analytical results and the FROG 5000™ screening results, additional sanitary sewer lines within the plant will be scheduled for cleaning and potential rehabilitation (refer to **Figure 1**). Arcadis will also confirm lateral and floor drain connections using dye to confirm tap-in locations to the main lines. Following the dye testing, cleaning will commence in an effort to prepare the sanitary lines and laterals for rehabilitation. The pipe conditions within the plant are severely degraded, and potential collapse is possible; therefore, heavy cleaning will not be implemented. If the pipe segments can be cleaned enough to allow for rehabilitation, then rehabilitation will consist of cured-in-place pipe lining (CIPPL). The rehabilitation of select pipe segments is a

continuing effort to prevent the infiltration of groundwater into the sewer, which is likely the source of vapors identified in the on-site sanitary sewer. A schedule is provided below for each activity.

Pipe Rehabilitation	Date
Dye Testing and Lateral Confirmation	Week of May 23, 2022
Cleaning and CCTV	June 2022
Design of Liner for CIPPL	June 2022
Installation of CIPPL	June 2022

Off-site Response Activities

Ford and Arcadis have continued to collect liquid and vapor grab samples weekly from off-site sanitary sewer manholes while determining a path forward with the on-site response. Bi-weekly sampling at sanitary locations SL-8, SL-9, SL-10, SL-11, and SL-23 will be performed to monitor the off-site sewers during operation of the on-site sanitary sewer vapor extraction system, pipe rehabilitation, and/or repair to the on-site sewers. If analytical results indicate an exceedance of one or more of the site-specific COCs, and the exceedance is confirmed over multiple sampling events (i.e., two in a row), Ford will request access to the properties within the vicinity of the exceedance and up to the next sanitary sewer manhole location that does not exhibit concentrations exceeding the SSVIAC. Property inspections will also be considered delineated if a property has previously been inspected and the plumbing has been considered in working condition with no deficiencies.

Once an access agreement has been executed for a property, Arcadis will implement the process described in the Scope of Work section within the March 4, 2022 and April 1, 2022 memos including the following:

- Obtain building construction or layout drawings for the property (if available).
- Complete a visual plumbing inspection and dye testing with CCTV to confirm where lateral pipes connect to the sanitary sewer mainlines (if necessary).
- Conduct indoor air sampling to evaluate potential deficiencies in the plumbing (if necessary).

Additionally, if an exterior vapor trap is present along the sanitary sewer lateral, a sample of the vapor between the exterior vapor trap and the structure will be collected to evaluate compliance. If no exterior vapor trap is present, a backflow preventer and upgradient sample port will be installed on the sanitary lateral, as detailed in the Utility Corridor Backflow Preventer Work Plan provided in **Appendix G,** if the property owner refuses access into the home or commercial building. Grab vapor samples will be collected from sample ports installed upstream of the backflow preventer (structure side) to evaluate for compliance of the sewer vapor in the sewer lateral between the structure and backflow preventer. If sample results indicate exceedances of site-related COCs, and there are deficiencies in the plumbing that cannot be rectified, indoor air sampling will be completed inside the structure to evaluate compliance, as described in the March 4, 2022 and April 1, 2022 memos.

Closing

The goal of the ResAP IRA outlined above is to document conditions that require response activities regarding the utility corridor on and off site. The IRA also provides a method to document how Ford has addressed and will continue to address these conditions. This ResAP IRA also addresses the comments provided by EGLE in the letters dated June 2, 2021, November 9, 2021, and February 11, 2022; responds to the January 4, 2022 discussion between EGLE and Ford and EGLE's January 28, 2022 email to Arcadis (Ford); and responds to and satisfies the 30-day requirement established in EGLE's April 18, 2022 letter. Progress updates will continue to be provided to EGLE throughout the RI process, monthly meetings, and quarterly progress reports.

References

Arcadis. 2017a. Quality Assurance Project Plan for the Ford Livonia Transmission Plant – On-Site. August.

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Arcadis. 2020a. Response Activity Plan – Utility Corridor Evaluation. February 11.

Arcadis. 2020b. Response Activity Plan – Utility Corridor Evaluation Addendum. December 4.

Arcadis. 2021a. Response Activity Plan – Utility Corridor Evaluation Addendum 2. January 27.

Arcadis. 2021b. Memo: Utility Corridor Analytical Results related to the Ford Livonia Transmission Plant, 36200 Plymouth Road, Livonia, Wayne County, Michigan, EGLE Site ID No.: 82002970. May 5.

Arcadis. 2021c. Memo: Utility Corridor Response Activity Plan Progress Update – 30 Day Response Ford Livonia Transmission Plant, 36200 Plymouth Road, Livonia, Wayne County, Michigan, EGLE Site ID No.: 82002970. July 2.

Arcadis. 2021d. Memo: Response to EGLE – Sewer Investigation and Impact to Utility Corridors – Vapor Mitigation - Livonia Transmission Plant (LTP) – 36200 Plymouth Road, Livonia, Wayne County, Consent Decree No 2:1712372GAD-RSW (CJ), Site ID No.: 82002970. November 19.

Arcadis. 2021e. Utility Corridor Evaluation Report, Livonia Transmission Plant, Area of Concern, Court Case: No. 2:1712372GAD-RSW. December 9.

Arcadis. 2021f. Quarterly Progress Report – 4Q 2021, Livonia Transmission Plant. January 31.

Arcadis. 2022a. Memo: Utility Corridor Assessment – Response to EGLE Letter Dated February 11, 2022 and Scope of Work for offsite Utility Corridor Assessment, 36200 Plymouth Road, Livonia, Wayne County, Michigan, Consent Decree No 2:1712372GAD-RSW (CJ), Site ID No.: 82002970. March 4.

Arcadis. 2022b. Memo: Utility Corridor Assessment Update, 36200 Plymouth Road, Livonia, Wayne County, Michigan, Consent Decree No 2:1712372GAD-RSW (CJ), Site ID No.: 82002970. April 1.

Arcadis. 2022c. Quarterly Progress Report – 1Q 2022, Livonia Transmission Plant. April 29.

Tables

Table 1
Utility Corridor On-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1231 SAMH-1231 6/9/2020	MH-1231 SAMH-1231 9/16/2020	MH-1231 SAMH-1231 12/15/2020	MH-1231 SAMH-1231 3/22/2021	MH-1231 SAMH-1231 4/19/2021	MH-1231 SAMH-1231 10/7/2021	MH-1231 SAMH-1231 11/2/2021	MH-1231 SAMH-1231 11/24/2021	MH-1231 SAMH-1231 12/14/2021	MH-1231 SAMH-1231 1/14/2022	MH-1231 SAMH-1231 1/20/2022	MH-1231 SAMH-1231 1/27/2022	MH-1231 SAMH-1231 2/1/2022	MH-1231 SAMH-1231 2/9/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 37	240 J	100 J	190 J	67 J	< 16	12 J	2.7 J [2.6 J]	4.1 [3.1 J]	3.8	5.0	5.3	4.1 [3.6]	18 [17]
1,4-Dioxane	24	< 97	< 150	< 50	< 180	< 27	< 12	< 6.6	< 1.6 [< 1.5]	< 1.6 [< 1.6]	< 0.49	< 0.49	< 0.49	< 0.49 [< 0.49]	< 0.6 [< 0.6]
cis-1,2-Dichloroethene	25	**25,000**	**42,000**	**37,000**	**46,000**	**27,000**	**4,400**	**880**	**440 [370]**	**710 [620]**	**480**	**660**	**430**	**340 [330]**	**1500 [1400]**
Tetrachloroethene	82	< 52	< 97	< 36	< 96	< 19	< 13	7.3 J	2.9 J [2.5 J]	4.1 J [4.0 J]	2.3	2.2	1.4	2.7 [2.6]	9.1 [9.8]
trans-1,2-Dichloroethene	250	**270**	**440**	**260**	**400**	180	53	13 J	4.4 [3.8 J]	6.4 [5.9]	4.1	5.7	3.9	5.5 [5.8]	18 [18]
Trichloroethene	4.0	**15,000**	**18,000**	**14,000**	**19,000**	**10,000**	**1,600**	**33**	9.3 [8.0]	**18 [18]**	**11**	**11**	**8**	**16 [16]**	**45 [44]**
Vinyl chloride	27	**9,600**	**16,000**	**11,000**	**23,000**	**9,800**	**1,500**	**1,300**	**460 [380]**	**770 [690]**	**520**	**710**	**550**	**810 [810]**	**2300 [2200]**

Notes:
All results reported in µg/m^3.

Bold Result exceeds the EGLE site-specific volatilization to indoor air criteria (SSVIAC) to evaluate vapor migration in preferential pathways developed for restricted nonresidential 12-hour workday exposure.

< Denotes not detected above method detection limit.

Abbreviations:

µg/m^3	micrograms per cubic meter
EDC	eastern diversion chamber
EGLE	Michigan Department of Environment, Great Lakes, and Energy
ID	identification
J	estimated result
MH	manhole
NA	not available/not applicable
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SL	sample location
UB	Analyte considered non-detect at the listed value due to associated blank contamination
WDC	western diversion chamber

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method TO-15

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Table 1
Utility Corridor On-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1231 SAMH-1231 2/18/2022	MH-1231 SAMH-1231 2/24/2022	MH-1231 SAMH-1231 3/2/2022	MH-1231 SAMH-1231 3/7/2022	MH-1231 SAMH-1231 3/14/2022	MH-1231 SAMH-1231 3/21/2022	MH-1231 SAMH-1231 3/29/2022	MH-1231 SAMH-1231 4/6/2022	MH-1231 SAMH-1231 4/11/2022	MH-1231 SAMH-1231 4/20/2022	MH-1231 SAMH-1231 4/27/2022	MH-1231A NA 1/27/2022	MH-1231A NA 2/4/2022	MH-1231A NA 2/7/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.6 [0.63 J]	0.71 J [0.62 J]	2.7 [3.1]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	20 [12]	< 0.6 [< 0.60]	< 0.60 [< 0.60]	8.7	< 0.31	< 0.6
1,4-Dioxane	24	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	1.9 J [1.5 J]	< 0.6 [< 0.6]	< 0.60 [< 0.60]	0.66 J	< 0.49	< 0.6
cis-1,2-Dichloroethene	25	2.9 [2.1]	9.2 [18]	14 **[37]**	25 [20]	**300 [390]**	1.7 [3.7]	2.9 **[41]**	**27** [9.0]	**1,400 [1000]**	3.2 [0.65 J]	**26** [22]	**870**	< 0.27	1.1
Tetrachloroethene	82	< 1 [< 1]	< 1 [< 1]	< 1 [< 1]	< 1 [< 1]	1.2 J [1.5]	< 1.0 [< 1.0]	< 1.0 [3.4]	< 1.0 [< 1.0]	3.2 [2.4]	< 1.0 [< 1.0]	< 1.0 [< 1.0]	3.1	< 0.4	< 1
trans-1,2-Dichloroethene	250	< 0.62 [< 0.62]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	0.75 J [0.89]	3.5 [4.2]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	15 [10]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	8.6	< 0.28	< 0.62
Trichloroethene	4.0	< 0.72 [< 0.72]	< 0.72 [< 0.72]	1.1 [0.88 J]	1.5 [1.5]	**7.1 [9.5]**	< 0.72 [< 0.72]	< 0.72 [1.2]	1.1 [< 0.72]	**45 [31]**	0.86 J [< 0.72]	< 0.72 [< 0.72]	**23**	< 0.4	< 0.72
Vinyl chloride	27	4.7 [< 0.46]	13 [< 0.46]	**28 [65]**	**39 [34]**	**410 [470]**	< 0.46 [4.4]	1.0 [16]	< 0.46 [17]	**1,900 [1300]**	< 0.46 [< 0.46]	**30** [25]	**1,000**	< 0.2	0.88

Notes:

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Abbreviations:

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Analytical Methods:

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Table 1
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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1231A NA 2/16/2022	MH-1231A NA 2/24/2022	MH-1231A NA 3/3/2022	MH-1231A NA 3/10/2022	MH-1231A NA 3/17/2022	MH-1231A NA 3/22/2022	MH-1231A NA 3/30/2022	MH-1231A NA 4/7/2022	MH-1231A NA 4/13/2022	MH-1231A NA 4/21/2022	MH-1231A NA 4/27/2022	MH-1233 SAMH-1233 6/10/2021	MH-1234 SAMH-1234 6/10/2021	MH-1244 SAMH-1244 12/15/2020
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.6	< 0.6	< 0.6	0.78 J	< 0.60	0.62 J	< 0.60	< 0.60	68	< 0.60	< 0.60	< 1.3	< 1.2	< 0.66
1,4-Dioxane	24	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	1.9 J	< 0.60	< 0.60	< 1.1	< 1.0	< 1.2
cis-1,2-Dichloroethene	25	**70**	7.7	4.4	23	15	**53**	6.8	9.4	**3,200**	18	9.1	5.7	1.9 J	**400**
Tetrachloroethene	82	< 1	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	10	< 1.0	< 1.0	< 1.0	< 0.93	< 0.85
trans-1,2-Dichloroethene	250	0.67 J	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	41	< 0.62	< 0.62	< 1.0	1.9 J	3.7 J
Trichloroethene	4.0	2.6	< 0.72	< 0.72	< 0.72	< 0.72	1.8	< 0.72	< 0.72	**110**	0.82 J	< 0.72	**8.2**	3.8 J	**280**
Vinyl chloride	27	**91**	15	5.7	21	**30**	**100**	7.1	12	**3,900**	20	8.7	< 0.77	< 0.71	**100**

Notes:

All results reported in µg/m^3.

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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1244 SAMH-1244 3/22/2021	MH-1244 SAMH-1244 4/19/2021	MH-1244 SAMH-1244 1/14/2022	MH-1244 SAMH-1244 1/27/2022	MH-1244 SAMH-1244 2/1/2022	MH-1244 SAMH-1244 2/7/2022	MH-1244 SAMH-1244 2/16/2022	MH-1244 SAMH-1244 2/22/2022	MH-1244 SAMH-1244 3/3/2022	MH-1244 SAMH-1244 3/10/2022	MH-1244 SAMH-1244 3/17/2022	MH-1244 SAMH-1244 3/23/2022	MH-1244 SAMH-1244 3/30/2022	MH-1244 SAMH-1244 4/6/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	14	87	< 0.31	5.5 [3.7]	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	8.3	< 0.60	< 0.60
1,4-Dioxane	24	< 7.4	< 14	< 0.49	< 0.49 [< 0.49]	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	25	**1,000**	**21,000**	0.73 J	**460 [430]**	13	7	14	**360**	< 0.58	0.71 J	1.3	**340**	0.71 J	9.7
Tetrachloroethene	82	< 4.0	< 10	< 0.4	1.5 [1.4]	< 0.4	< 1	< 1	< 1	< 1	< 1	< 1.0	1.2 J	< 1.0	< 1.0
trans-1,2-Dichloroethene	250	20	180	< 0.28	4.5 [3.8]	< 0.28	< 0.62	< 0.62	3.1	< 0.62	< 0.62	< 0.62	3.7	< 0.62	< 0.62
Trichloroethene	4.0	**1,100**	**11,000**	< 0.4	**10 [7.8]**	1.2	< 0.72	0.92 J	**15**	< 0.72	< 0.72	< 0.72	**9.7**	< 0.72	< 0.72
Vinyl chloride	27	**1,200**	**8,500**	0.73	**650 [610]**	11	3.2	**39**	**360**	< 0.46	< 0.46	< 0.46	**1,200**	< 0.46	< 0.46

Notes:

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36200 Plymouth Road
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Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.60	< 0.60	< 0.60	< 0.63	< 1.4	< 0.63	< 1.4 [< 1.4]	< 0.66	< 1.1	32	37 J	4.3 J [3.2 J]	5.6	< 0.31
1,4-Dioxane	24	< 0.60	< 0.60	< 0.60	< 1.1	< 3.8	1.2 J	< 2.3 [< 2.3]	< 1.2	< 0.94	< 8.4	< 32	< 1.5 [< 2.1]	0.63 J	< 0.49
cis-1,2-Dichloroethene	25	**470**	**120**	**37**	**150**	2.2 J	< 0.71	6.0 [6.8]	5.8	2.8 J	**510**	**810**	**260 [250]**	**420**	< 0.27
Tetrachloroethene	82	4.0	< 1.0	< 1.0	< 0.81	< 2.0	< 0.81	< 1.2 [< 1.2]	< 0.86	< 0.88	< 6.0	< 16	< 1.1 [< 1.5]	0.73 J	< 0.4
trans-1,2-Dichloroethene	250	5.1	1.2	< 0.62	2.6 J	< 0.85	< 1.0	< 1.1 [< 1.1]	< 1.1	< 0.89	20 J	37 J	8.6 [6.9 J]	3.1	< 0.28
Trichloroethene	4.0	**13**	3.1	1.6	**120**	2.0 J	< 0.86	**12 [10]**	2.2 J	3.2 J	**83**	**140**	**9.3 [9.1 J]**	**12**	< 0.4
Vinyl chloride	27	**200**	**36**	< 0.46	**45**	< 0.49	< 0.51	< 0.71 [0.89 J]	3.0	0.88 J	**5,600**	**7,800**	**1,200 [1,200]**	**400**	< 0.2

Notes:

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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1255 SAMH-1255 2/7/2022	MH-1255 SAMH-1255 2/16/2022	MH-1255 SAMH-1255 2/24/2022	MH-1255 SAMH-1255 3/3/2022	MH-1255 SAMH-1255 3/7/2022	MH-1255 SAMH-1255 3/17/2022	MH-1255 SAMH-1255 3/22/2022	MH-1255 SAMH-1255 3/30/2022	MH-1255 SAMH-1255 4/7/2022	MH-1255 SAMH-1255 4/13/2022	MH-1255 SAMH-1255 4/21/2022	MH-1255 SAMH-1255 4/27/2022	MH-1256 SAMH-1256 12/16/2020	MH-1256 SAMH-1256 3/22/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	1.2	1.4	< 0.6	3.5	1.6	5.1	< 0.60	1.1	4.0	20	9.5	< 0.60	< 0.73	35
1,4-Dioxane	24	< 0.6	< 0.6	< 0.6	< 0.6	1 J	< 0.60	< 0.60	< 0.60	< 0.60	2.1 J	< 0.60	< 0.60	< 1.3	< 19
cis-1,2-Dichloroethene	25	**110**	**100**	15	**250**	**36**	**300**	6.1	**99**	**280**	**1,200**	**860**	0.76 J	**150**	**7,400**
Tetrachloroethene	82	1.3 J	1.8	< 1	1.2 J	1.9	1.5	< 1.0	< 1.0	< 1.0	1.7	1.2 J	< 1.0	< 0.94	< 9.6
trans-1,2-Dichloroethene	250	1.2	1.3	< 0.62	2.8	1.5	4.9	< 0.62	1.3	2.8	12	7.3	< 0.62	< 1.2	63
Trichloroethene	4.0	4	**4.5**	< 0.72	**6**	2.3	**9.2**	< 0.72	2.3	**11**	**54**	**26**	< 0.72	**15**	**2,100**
Vinyl chloride	27	**140**	**120**	27	**500**	**62**	**820**	13	**250**	**260**	**1,100**	**860**	< 0.46	10	**3,100**

Notes:
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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1256 SAMH-1256 4/19/2021	MH-1256 SAMH-1256 1/27/2022	MH-1256 SAMH-1256 2/4/2022	MH-1256 SAMH-1256 2/7/2022	MH-1256 SAMH-1256 2/16/2022	MH-1256 SAMH-1256 2/22/2022	MH-1256 SAMH-1256 3/3/2022	MH-1256 SAMH-1256 3/7/2022	MH-1256 SAMH-1256 3/17/2022	MH-1256 SAMH-1256 3/23/2022	MH-1256 SAMH-1256 3/30/2022	MH-1256 SAMH-1256 4/7/2022	MH-1256 SAMH-1256 4/13/2022	MH-1256 SAMH-1256 4/21/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	140	1.4	< 0.31	< 0.6	1.7	< 0.6	< 0.6	2.6	3.0	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60
1,4-Dioxane	24	< 21	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	25	**30,000**	**98**	< 0.27	**64**	**130**	**160**	**160**	**290**	**3,200**	3.0	2.6	4.0	1.4	0.73 J
Tetrachloroethene	82	< 15	< 0.4	< 0.4	< 1	1.1 J	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	250	**270**	1.1	< 0.28	< 0.62	2.1	< 0.62	< 0.62	1.4	2.9	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
Trichloroethene	4.0	**15,000**	2.8	< 0.4	< 0.72	**6.9**	1.1	< 0.72	2.4	3.8	< 0.72	1.7	< 0.72	2.2	1.0 J
Vinyl chloride	27	**14,000**	**160**	< 0.2	**86**	**320**	**210**	**150**	**250**	**1,600**	0.90	< 0.46	< 0.46	0.49 J	< 0.46

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Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1256 SAMH-1256 4/28/2022	MH-1258 SAMH-1258 12/16/2020	MH-1258 SAMH-1258 3/22/2021	MH-1258 SAMH-1258 4/19/2021	MH-1259 SAMH-1259 3/23/2021	MH-1259 SAMH-1259 4/19/2021	MH-1259 SAMH-1259 1/27/2022	MH-1259 SAMH-1259 2/4/2022	MH-1259 SAMH-1259 2/7/2022	MH-1259 SAMH-1259 2/16/2022	MH-1259 SAMH-1259 2/24/2022	MH-1259 SAMH-1259 3/3/2022	MH-1259 SAMH-1259 3/10/2022	MH-1259 SAMH-1259 3/16/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.60	< 0.69	< 1.3	< 0.61	< 1.5	0.70 J	4.6	13	3.8	3.1	3.7	4.1	9.6	52
1,4-Dioxane	24	< 0.60	< 1.2	< 2.2	< 1.1	< 3.8	< 1.2	0.53 J	< 0.49	1.9 J	< 0.6	1.4 J	1.8 J	3.1 J	4.7 J
cis-1,2-Dichloroethene	25	8.6	**860**	**43**	**260**	< 1.1	5.4	**140**	**580**	**270**	**180**	**180**	**150**	**400**	**2,300**
Tetrachloroethene	82	< 1.0	< 0.89	< 1.1	2.2 J	< 2.1	< 0.85	< 0.4	2.5	2.1	< 1	< 1	< 1	1.4	8.2
trans-1,2-Dichloroethene	250	< 0.62	3.7 J	< 1.1	1.4 J	< 0.86	< 1.1	1.3	7.1	2.6	3.2	2	1.6	4.3	40
Trichloroethene	4.0	< 0.72	**70**	3.4 J	**20**	1.7 J	**7.0**	**13**	**29**	**16**	**21**	**14**	**7.4**	**16**	**78**
Vinyl chloride	27	< 0.46	**100**	5.8	**32**	0.56 J	7.0	**62**	**830**	**230**	**100**	**300**	**160**	**440**	**5,800**

Notes:

All results reported in µg/m^3.

Bold Result exceeds the EGLE site-specific volatilization to indoor air criteria (SSVIAC) to evaluate vapor migration in preferential pathways developed for restricted nonresidential 12-hour workday exposure.

< Denotes not detected above method detection limit.

Abbreviations:

µg/m^3 micrograms per cubic meter
EDC eastern diversion chamber
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
J estimated result
MH manhole
NA not available/not applicable
SAMH sanitary manhole
SL sample location
UB Analyte considered non-detect at the listed value due to associated blank contamination
WDC western diversion chamber

Analytical Methods:

United States Environmental Protection Agency (USEPA) Method TO-15

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Table 1
Utility Corridor On-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1259 SAMH-1259 3/23/2022	MH-1259 SAMH-1259 3/30/2022	MH-1259 SAMH-1259 4/7/2022	MH-1259 SAMH-1259 4/13/2022	MH-1259 SAMH-1259 4/21/2022	MH-1259 SAMH-1259 4/28/2022	MH-1261 SAMH-1261 6/10/2021	EDC NA 6/9/2020	EDC NA 9/16/2020	EDC NA 12/15/2020	EDC NA 3/23/2021	EDC NA 4/20/2021	WDC NA 6/9/2020	WDC NA 9/16/2020
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	4.2	31	5.0	13	7.2	27	< 1.2	< 1.9	< 5.6	< 0.66	< 1.4	< 0.60	< 1.8	< 1.2
1,4-Dioxane	24	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 1.1	< 4.9	< 12	< 1.2	< 3.6	< 1.1	< 4.6	< 2.8
cis-1,2-Dichloroethene	25	**250**	**930**	**270**	**240**	**160**	**480**	2.0 J	< 1.4	< 6.9	< 0.75	4.6	3.3 J	< 1.4	< 1.5
Tetrachloroethene	82	< 1.0	6.8	< 1.0	< 1.0	< 1.0	< 1.0	< 0.99	< 2.6	48 UB	< 0.85	< 1.9	< 0.78	< 2.5	< 1.8
trans-1,2-Dichloroethene	250	2.6	28	5.3	2.5	1.8	6.3	< 1.0	< 1.1	< 7.8	< 1.1	< 0.81	1.0 J	< 1	< 1.7
Trichloroethene	4.0	**19**	**72**	**20**	**47**	**28**	**96**	2.9 J	**16**	< 7.6	< 0.90	**7.5**	**19**	3.5 J	**17**
Vinyl chloride	27	**270**	**3,200**	**170**	**74**	**86**	**350**	< 0.76	< 0.64	< 3.6	< 0.54	0.58 J	< 0.49	< 0.6	< 0.81

Notes:

All results reported in µg/m^3.

Bold	Result exceeds the EGLE site-specific volatilization to indoor air criteria (SSVIAC) to evaluate vapor migration in preferential pathways developed for restricted nonresidential 12-hour workday exposure.
<	Denotes not detected above method detection limit.

Abbreviations:

µg/m^3	micrograms per cubic meter
EDC	eastern diversion chamber
EGLE	Michigan Department of Environment, Great Lakes, and Energy
ID	identification
J	estimated result
MH	manhole
NA	not available/not applicable
SAMH	sanitary manhole
SL	sample location
UB	Analyte considered non-detect at the listed value due to associated blank contamination
WDC	western diversion chamber

Analytical Methods:

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Utility Corridor On-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	WDC NA 12/15/2020	WDC NA 3/23/2021	WDC NA 4/20/2021	SL-2 NA 6/9/2020	SL-2 NA 9/15/2020	SL-2 NA 12/15/2020	SL-2 NA 3/30/2021	SL-2 NA 4/20/2021	SL-2 NA 10/7/2021	SL-2 NA 11/2/2021	SL-2 NA 11/24/2021	SL-2 NA 12/14/2021	SL-2 NA 1/14/2022	SL-2 NA 1/20/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.72	< 1.3	< 0.59	9.5	16	14 J	< 1.4	6.0 J	< 2.2	< 2.2	< 2.0	< 2.2	< 0.31	< 0.31
1,4-Dioxane	24	< 1.3	< 3.5	< 1.0	< 5.1	< 8.5	< 6.3	< 2.2	< 2.1	< 1.6	< 1.6	< 1.5	< 1.6	< 0.49	< 0.49
cis-1,2-Dichloroethene	25	< 0.82	< 1.0	< 0.66	**1,900**	**4,600**	**6,800**	**89**	**2,200**	**880**	11	4.6	**65**	8.7	3.0
Tetrachloroethene	82	< 0.94	< 1.9	2.1 J	< 2.7	< 5.5	< 4.6	< 1.2	< 1.5	< 1.8	3.0 J	< 1.7	< 1.8	< 0.4	< 0.4
trans-1,2-Dichloroethene	250	< 1.2	< 0.78	< 0.95	29	48	44	< 1.1	17	12	< 2.0	< 1.8	< 1.9	< 0.28	< 0.28
Trichloroethene	4.0	< 0.98	**5.6**	< 0.80	**1,500**	**2,000**	**2,200**	**52**	**880**	**320**	< 2.4	< 2.3	2.5 J	< 0.4	< 0.4
Vinyl chloride	27	< 0.59	< 0.45	< 0.48	**520**	**1,700**	**1,700**	**34**	**640**	**250**	14	4.4	**62**	10	4.0

Notes:
All results reported in µg/m^3.

Bold Result exceeds the EGLE site-specific volatilization to indoor air criteria (SSVIAC) to evaluate vapor migration in preferential pathways developed for restricted nonresidential 12-hour workday exposure.

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SAMH	sanitary manhole
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Analytical Methods:
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Table 1
Utility Corridor On-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-2 NA 1/27/2022	SL-2 NA 2/1/2022	SL-2 NA 2/9/2022	SL-2 NA 2/18/2022	SL-2 NA 2/24/2022	SL-2 NA 3/2/2022	SL-2 NA 3/9/2022	SL-2 NA 3/14/2022	SL-2 NA 3/21/2022	SL-2 NA 3/29/2022	SL-2 NA 4/5/2022	SL-2 NA 4/11/2022	SL-2 NA 4/20/2022	SL-2 NA 4/27/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	1.2	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60
1,4-Dioxane	24	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	25	3.2	**28**	8.7	1.9	12	< 0.58	4.5	13	**260**	7.3	4.5	5.5	6.9	15
Tetrachloroethene	82	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	8.1
trans-1,2-Dichloroethene	250	< 0.28	14	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	2.3	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
Trichloroethene	4.0	< 0.4	**190**	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	**5.7**	< 0.72	< 0.72	0.90 J	1.0 J	0.82 J
Vinyl chloride	27	4.4	12	11	2.7	< 0.46	0.91	3.4	9.5	**250**	5.7	< 0.46	1.8	< 0.46	< 0.46

Notes:
All results reported in µg/m^3.

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Analytical Methods:
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Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1001 STMH-1001 6/10/2020	MH-1001 STMH-1001 9/15/2020	MH-1001 STMH-1001 12/16/2020	MH-1001 STMH-1001 3/23/2021	MH-1020 SAMH-1020 6/16/2020	MH-1020 SAMH-1020 9/18/2020	MH-1020 SAMH-1020 12/17/2020	MH-1020 SAMH-1020 3/24/2021	MH-1041 STMH-1041 6/9/2020	MH-1041 STMH-1041 9/15/2020	MH-1041 STMH-1041 12/15/2020	MH-1041 STMH-1041 3/23/2021	MH-1043 SAMH-1043 6/16/2020	MH-1043 SAMH-1043 9/18/2020
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 2	< 1.3	< 0.70	< 1.4	< 1.9	< 1.2	< 1.6	< 1.5	< 1.9	< 1.3 [< 1.2]	< 0.69	< 1.4	< 1.9	< 0.73
1,4-Dioxane	24	< 5.2	< 2.9	< 1.2	< 2.2	< 4.9	< 0.89	< 2.6	< 3.9	< 5.1	< 2.9 [< 2.7]	< 1.2	< 2.3	< 4.9	< 1.3
cis-1,2-Dichloroethene	25	< 1.5	< 1.6	< 0.79	7.5	< 1.4	< 0.68	< 1.7	< 1.1	< 1.5	< 1.6 [< 1.5]	< 0.78	< 1.6	< 1.4	< 0.83
Tetrachloroethene	82	< 2.8	< 1.9	< 0.90	< 1.1	< 2.6	< 1	< 1.3	< 2.1	< 2.7	< 1.9 [< 1.7]	< 0.89	< 1.2	< 2.6	< 0.94
trans-1,2-Dichloroethene	250	< 1.2	2.1 J	< 1.1	< 1.1	< 1.1	< 1.1	< 1.2	< 0.88	< 1.1	< 1.8 [< 1.6]	< 1.1	< 1.1	< 1.1	< 1.2
Trichloroethene	4.0	**26**	< 1.8	< 0.95	< 0.81	< 1.8	< 0.55	< 0.94	< 1.4	**47**	< 1.8 [< 1.6]	< 0.94	< 0.84	< 1.8	< 0.99
Vinyl chloride	27	< 0.67	< 0.84	< 0.57	< 0.67	< 0.63	< 0.46	< 0.78	< 0.51	< 0.66	< 0.85 [< 0.77]	< 0.56	< 0.70	< 0.64	< 0.59

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1043 SAMH-1043 12/17/2020	MH-1043 SAMH-1043 3/24/2021	MH-1066 STMH-1066 6/9/2020	MH-1066 STMH-1066 9/16/2020	MH-1066 STMH-1066 12/15/2020	MH-1066 STMH-1066 3/23/2021	MH-1067 SAMH-1067 6/16/2020	MH-1067 SAMH-1067 9/18/2020	MH-1067 SAMH-1067 12/17/2020	MH-1067 SAMH-1067 3/24/2021	MH-1082 SAMH-1082 6/15/2020	MH-1082 SAMH-1082 9/18/2020	MH-1082 SAMH-1082 12/17/2020	MH-1082 SAMH-1082 3/24/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 1.7	< 1.5	< 2	< 1.2	< 0.71	< 1.4	< 1.8	< 1.1	< 1.6	< 1.5	< 1.8	< 0.68	< 1.6	< 1.4
1,4-Dioxane	24	< 2.7	< 2.4	< 5.2	< 2.8	< 1.3	< 2.3	< 4.6	< 0.79	< 2.7	< 2.5	< 4.6	< 1.2	< 2.6	< 2.4
cis-1,2-Dichloroethene	25	< 1.8	< 1.6	< 1.5	< 1.5	< 0.81	< 1.5	< 1.4	< 0.6	< 1.8	< 1.7	< 1.3	< 0.76	< 1.8	< 1.6
Tetrachloroethene	82	2.9 J	< 1.2	< 2.8	< 1.8	< 0.92	< 1.2	< 2.5	< 0.91	22	< 1.3	< 2.5	< 0.87	20	< 1.2
trans-1,2-Dichloroethene	250	< 1.3	< 1.2	< 1.2	< 1.7	< 1.2	< 1.1	< 1	< 0.97	< 1.3	< 1.2	< 1	< 1.1	< 1.3	< 1.1
Trichloroethene	4.0	< 1.0	< 0.88	< 1.9	< 1.7	< 0.97	< 0.83	**97**	< 0.49	< 0.98	< 0.91	3.7 J	< 0.92	2.5 J	< 0.86
Vinyl chloride	27	< 0.83	< 0.73	< 0.68	< 0.80	< 0.58	< 0.69	< 0.6	< 0.4	< 0.81	< 0.76	< 0.6	< 0.55	< 0.80	< 0.72

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	MH-1088 STMH-1088 6/9/2020	MH-1088 STMH-1088 9/16/2020	MH-1088 STMH-1088 12/15/2020	MH-1088 STMH-1088 3/23/2021	MH-1171 STMH-1171 6/10/2020	MH-1171 STMH-1171 9/16/2020	MH-1171 STMH-1171 12/15/2020	MH-1171 STMH-1171 3/23/2021	MH-1181 SAMH-1181 6/15/2020	MH-1181 SAMH-1181 9/18/2020	MH-1181 SAMH-1181 12/17/2020	MH-1181 SAMH-1181 3/23/2021	SL-3 NA 12/16/2020	SL-3 NA 3/22/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 1.9	< 1.3	< 0.69	< 1.3	< 1.9	< 1.3	< 0.69	< 1.4	< 1.7	< 1.3	< 1.5	< 1.5	7.6 J	6.6 J
1,4-Dioxane	24	< 5.1	< 2.9	< 1.2	< 2.2	< 4.9	< 3.0	< 1.2	< 2.3	< 4.5	< 0.92	< 2.5	< 4.0	< 3.0	< 3.6
cis-1,2-Dichloroethene	25	< 1.5	< 1.6	< 0.78	< 1.5	**79**	6.1	< 0.78	**40**	< 1.3	< 0.7	< 1.7	< 1.2	**4,300**	**1,700**
Tetrachloroethene	82	< 2.7	< 1.9	< 0.89	< 1.1	< 2.6	< 1.9	< 0.89	< 1.2	< 2.4	< 1.1	1.4 J	< 2.1	< 2.1	< 1.9
trans-1,2-Dichloroethene	250	< 1.1	< 1.8	< 1.1	< 1.0	< 1.1	< 1.8	< 1.1	< 1.1	< 1	< 1.1	< 1.2	< 0.89	28	14
Trichloroethene	4.0	< 1.9	< 1.8	< 0.94	< 0.79	**67**	< 1.8	< 0.94	1.7 J	< 1.6	< 0.57	< 0.92	< 1.4	**1,400**	**1,000**
Vinyl chloride	27	< 0.66	< 0.83	< 0.56	< 0.66	< 0.64	3.3	< 0.56	1.8 J	< 0.59	< 0.47	< 0.77	< 0.52	**1,100**	**650**

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-3 NA 4/19/2021	SL-3 NA 10/7/2021	SL-3 NA 11/2/2021	SL-3 NA 11/24/2021	SL-3 NA 12/10/2021	SL-3 NA 12/14/2021	SL-3 NA 1/14/2022	SL-3 NA 1/20/2022	SL-3 NA 1/27/2022	SL-3 NA 1/31/2022	SL-3 NA 2/8/2022	SL-3 NA 2/18/2022	SL-3 NA 2/21/2022	SL-3 NA 3/2/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.59 [< 2.3]	< 2.2	< 2.2	< 2.1	< 2.3	4.2	0.54 J	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	1.8
1,4-Dioxane	24	< 1.0 [< 4.2]	< 1.6	< 1.6	< 1.6	< 1.7	< 1.6	< 0.49	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6
cis-1,2-Dichloroethene	25	**37 [19]**	**120**	< 1.7	< 1.7	4.4	**390**	**27**	0.49 J	2	0.59 J	2.1	< 0.58	17	**51**
Tetrachloroethene	82	< 0.76 [< 3.0]	< 1.8	3.9 J	< 1.7	< 1.9	2.9 J	< 0.4	< 0.4	< 0.4	< 0.4	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	250	< 0.95 [< 3.8]	< 1.9	< 2.0	< 1.9	< 2.1	7.0	0.33 J	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	1.6	1.4
Trichloroethene	4.0	**14** [7.7 J]	**36**	< 2.4	< 2.3	< 2.6	**27**	0.92 J	< 0.4	< 0.4	< 0.4	< 0.72	< 0.72	**17**	2.1
Vinyl chloride	27	6.6 [< 1.9]	18	< 1.9	< 1.8	4.3	**480**	**35**	0.38 J	2.7	< 0.2	2.2	< 0.46	**35**	**76**

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-3 NA 3/7/2022	SL-3 NA 3/14/2022	SL-3 NA 3/21/2022	SL-3 NA 3/29/2022	SL-3 NA 4/6/2022	SL-3 NA 4/11/2022	SL-3 NA 4/20/2022	SL-3 NA 4/27/2022	SL-4 NA 3/22/2021	SL-4 NA 4/19/2021	SL-4 NA 10/7/2021	SL-4 NA 11/2/2021	SL-4 NA 11/24/2021	SL-4 NA 12/14/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	1.7	< 0.60 U	6.1	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	33	24 J	30	< 2.0	< 2.2 [< 2.1]	< 2.1 [< 2.0]
1,4-Dioxane	24	< 0.6	< 0.60 U	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.6 0	< 29	< 7.3	< 11	< 1.5	< 1.6 [< 1.6]	< 1.6 [< 1.5]
cis-1,2-Dichloroethene	25	**33**	< 0.58 U	**560**	3.1	1.9	1.6	2.6	5.4	**7,200**	**7,900**	**8,200**	5.0	< 1.7 [< 1.7]	< 1.7 [< 1.6]
Tetrachloroethene	82	< 1	< 1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 15	< 5.3	< 12	13	< 1.8 [< 1.7]	< 1.7 [< 1.6]
trans-1,2-Dichloroethene	250	3	< 0.62 U	5.5	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	75	60	130	< 1.8	< 2.0 [< 1.9]	< 1.9 [< 1.8]
Trichloroethene	4.0	**18**	< 0.72 U	**31**	< 0.72	< 0.72	< 0.72	< 0.72	1.1 J	**4,400**	**3,500**	**4,000**	< 2.3	< 2.4 [< 2.3]	< 2.4 [< 2.2]
Vinyl chloride	27	**150**	< 0.46 U	**460**	2.0	< 0.46	< 0.46	< 0.46	< 0.46	**3,100**	**2,400**	**2,800**	3.2	< 1.9 [< 1.8]	< 1.8 [< 1.8]

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-4 NA 1/13/2022	SL-4 NA 1/18/2022	SL-4 NA 1/27/2022	SL-4 NA 2/1/2022	SL-4 NA 2/8/2022	SL-4 NA 2/16/2022	SL-4 NA 2/21/2022	SL-4 NA 2/28/2022	SL-4 NA 3/7/2022	SL-4 NA 3/14/2022	SL-4 NA 3/21/2022	SL-4 NA 3/28/2022	SL-4 NA 4/4/2022	SL-4 NA 4/11/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.31	< 0.31	0.57 J	< 0.31 [< 0.31]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	1 [1]	< 0.60 U [< 0.60 U]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	< 0.60 [< 0.60]
1,4-Dioxane	24	< 0.49	< 0.49	< 0.49	< 0.49 [< 0.49]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.6 [< 0.6]	< 0.60 U [< 0.60 U]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	< 0.60 [< 0.60]	< 0.60 [< 0.60]
cis-1,2-Dichloroethene	25	< 0.27	< 0.27	3.3	5.1 [5.1]	< 0.58 [< 0.58]	< 0.58 [< 0.58]	< 0.58 [< 0.58]	< 0.58 [< 0.58]	**35 [36]**	< 0.58 U [< 0.58 U]	1.1 [< 0.58]	< 0.58 [< 0.58]	< 0.58 [< 0.58]	0.68 J [1.0]
Tetrachloroethene	82	< 0.4	< 0.4	11	1.2 J [1.2 J]	< 1 [< 1]	< 1 [< 1]	< 1 [< 1]	< 1 [< 1]	< 1 [< 1]	< 1.0 U [< 1.0 U]	< 1.0 [< 1.0]	< 1.0 [< 1.0]	< 1.0 [< 1.0]	< 1.0 [< 1.0]
trans-1,2-Dichloroethene	250	< 0.28	< 0.28	0.52 J	< 0.28 [< 0.28]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	2.2 [2.3]	< 0.62 U [< 0.62 U]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	< 0.62 [< 0.62]	< 0.62 [< 0.62]
Trichloroethene	4.0	< 0.4	< 0.4	1.8	1.3 [2]	0.73 J [< 0.72]	< 0.72 [< 0.72]	< 0.72 [< 0.72]	< 0.72 [< 0.72]	**13 [14]**	< 0.72 U [< 0.72 U]	< 0.72 [< 0.72]	< 0.72 [< 0.72]	< 0.72 [< 0.72]	< 0.72 [< 0.72]
Vinyl chloride	27	< 0.2	< 0.2	0.49 J	10 [< 0.2]	< 0.46 [< 0.46]	< 0.46 [< 0.46]	< 0.46 [< 0.46]	< 0.46 [< 0.46]	**150 [150]**	< 0.46 U [< 0.46 U]	< 0.46 [< 0.46]	< 0.46 [< 0.46]	< 0.46 [< 0.46]	< 0.46 [< 0.46]

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-4 NA 4/18/2022	SL-4 NA 4/27/2022	SL-16 NA 11/2/2021	SL-16 NA 11/24/2021	SL-16 NA 12/10/2021	SL-16 NA 12/14/2021	SL-16 NA 1/14/2022	SL-16 NA 1/20/2022	SL-16 NA 1/27/2022	SL-16 NA 1/31/2022	SL-16 NA 2/8/2022	SL-16 NA 2/18/2022	SL-16 NA 2/21/2022	SL-16 NA 3/2/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.6 [< 0.60]	< 0.60 [< 0.60]	< 2.1	< 2.1	< 2.1	< 2.1	< 0.31	< 0.31	0.4 J	< 0.31	< 0.6	< 0.6	1.8	1.6
1,4-Dioxane	24	< 0.6 [< 0.60]	< 0.60 [< 0.60]	< 1.6	< 1.6	2.8 J	< 1.5	< 0.49	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6
cis-1,2-Dichloroethene	25	< 0.58 [< 0.58]	2.2 [0.86]	< 1.7	< 1.7	6.9	3.8 J	0.33 J	< 0.27	23	< 0.27	< 0.58	< 0.58	**150**	**46**
Tetrachloroethene	82	< 1 [< 1.0]	< 1.0 [< 1.0]	< 1.7	< 1.7	< 1.7	< 1.7	< 0.4	< 0.4	< 0.4	< 0.4	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	250	< 0.62 [< 0.62]	< 0.62 [< 0.62]	< 1.9	< 1.9	< 1.9	< 1.9	< 0.28	< 0.28	0.36 J	< 0.28	< 0.62	< 0.62	9.1	1
Trichloroethene	4.0	< 0.72 [< 0.72]	< 0.72 [< 0.72]	< 2.4	**17**	< 2.4	< 2.3	< 0.4	< 0.4	1.9	< 0.4	< 0.72	< 0.72	**100**	**4.6**
Vinyl chloride	27	< 0.46 [< 0.46]	< 0.46 [< 0.46]	< 1.8	< 1.8	6.5	2.9	< 0.2	< 0.2	**35**	< 0.2	< 0.46	< 0.46	**330**	**50**

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-16 NA 3/7/2022	SL-16 NA 3/14/2022	SL-16 NA 3/21/2022	SL-16 NA 3/28/2022	SL-16 NA 4/6/2022	SL-16 NA 4/11/2022	SL-16 NA 4/20/2022	SL-16 NA 4/27/2022	SL-17 NA 11/2/2021	SL-17 NA 11/24/2021	SL-17 NA 12/10/2021	SL-17 NA 12/14/2021	SL-17 NA 1/12/2022	SL-17 NA 1/20/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	2.5	< 0.60 U	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 2.0	< 2.1	< 2.2	< 2.1	< 0.31	< 0.31
1,4-Dioxane	24	0.88 J	< 0.60 U	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 1.5	< 1.6	2.0 J	< 1.6	< 0.49	< 0.49
cis-1,2-Dichloroethene	25	**42**	**120**	2.7	0.70 J	< 0.58	3.9	6.6	< 0.58	< 1.6	< 1.7	2.9 J	< 1.7	0.63 J	< 0.27
Tetrachloroethene	82	< 1	< 1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.6	< 1.7	< 1.8	< 1.7	< 0.4	< 0.4
trans-1,2-Dichloroethene	250	3.9	1.5	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 1.8	< 1.9	< 2.0	< 1.9	< 0.28	< 0.28
Trichloroethene	4.0	**24**	**8.3**	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	**620**	< 2.3	3.9 J	< 2.4	< 0.4	< 0.4
Vinyl chloride	27	**260**	**77**	< 0.46	< 0.46	< 0.46	5.5	13	< 0.46	< 1.7	< 1.8	2.4 J	< 1.8	< 0.2	< 0.2

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-17 NA 1/27/2022	SL-17 NA 1/31/2022	SL-17 NA 2/8/2022	SL-17 NA 2/16/2022	SL-17 NA 2/21/2022	SL-17 NA 3/2/2022	SL-17 NA 3/7/2022	SL-17 NA 3/14/2022	SL-17 NA 3/21/2022	SL-17 NA 3/28/2022	SL-17 NA 4/6/2022	SL-17 NA 4/11/2022	SL-17 NA 4/20/2022	SL-17 NA 4/25/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	2.7	1.7	< 0.60 U	< 0.60	< 0.60	< 0.60	2.4	< 0.6	< 0.60
1,4-Dioxane	24	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60 U	< 0.60	< 0.60	< 0.60	< 0.60	< 0.6	< 0.60
cis-1,2-Dichloroethene	25	1.8	0.49 J	< 0.58	< 0.58	4.2	**130**	**36**	< 0.58 U	1.8	2.0	2.0	**83**	9.3	< 0.58
Tetrachloroethene	82	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1	< 1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1	< 1.0
trans-1,2-Dichloroethene	250	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	2	3.6	< 0.62 U	< 0.62	< 0.62	< 0.62	2.7	< 0.62	< 0.62
Trichloroethene	4.0	< 0.4	< 0.4	< 0.72	< 0.72	2.2	**10**	**22**	< 0.72 U	< 0.72	< 0.72	< 0.72	**19**	1.2	< 0.72
Vinyl chloride	27	1.3	0.28 J	0.71	< 0.46	8.1	**120**	**200**	< 0.46 U	< 0.46	< 0.46	< 0.46	**280**	< 0.46	< 0.46

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-18 NA 11/2/2021	SL-18 NA 11/24/2021	SL-18 NA 12/14/2021	SL-18 NA 1/13/2022	SL-18 NA 1/18/2022	SL-18 NA 1/27/2022	SL-18 NA 1/31/2022	SL-18 NA 2/8/2022	SL-18 NA 2/16/2022	SL-18 NA 2/21/2022	SL-18 NA 2/28/2022	SL-18 NA 3/7/2022	SL-18 NA 3/14/2022	SL-18 NA 3/21/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	610	< 2.2	< 2.2	< 2.1	< 0.31	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	2.6	< 0.60 U	< 0.60
1,4-Dioxane	24	< 1.6	< 1.6	< 1.6	< 0.49	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60 U	< 0.60
cis-1,2-Dichloroethene	25	< 1.8	< 1.7	< 1.6	< 0.27	< 0.27	0.41 J	0.3 J	0.67 J	< 0.58	9.6	< 0.58	**64**	1.5	2.3
Tetrachloroethene	82	< 1.8	< 1.8	< 1.7	< 0.4	< 0.4	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1	< 1.0 U	< 1.0
trans-1,2-Dichloroethene	250	< 2.0	< 2.0	< 1.9	< 0.28	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	< 0.62	5.2	< 0.62 U	< 0.62
Trichloroethene	4.0	< 2.4	< 2.4	< 2.3	< 0.4	< 0.4	< 0.4	< 0.4	< 0.72	< 0.72	3.8	< 0.72	**32**	< 0.72 U	< 0.72
Vinyl chloride	27	< 1.9	< 1.9	< 1.8	< 0.2	< 0.2	0.55	< 0.2	0.93	< 0.46	18	< 0.46	**350**	2.9	0.61

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Nonresidential SSVIAC 12 hour exposure	SL-18 NA 3/28/2022	SL-18 NA 4/4/2022	SL-18 NA 4/11/2022	SL-18 NA 4/20/2022	SL-18 NA 4/26/2022
Volatile Organic Compounds (VOCs)						
1,1-Dichloroethene	610	< 0.60	< 0.60	< 0.60	< 0.60	2.0
1,4-Dioxane	24	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	25	< 0.58	< 0.58	0.71 J	< 0.58	**82**
Tetrachloroethene	82	< 1.0	< 1.0	< 1.0	< 1.0	1.7
trans-1,2-Dichloroethene	250	< 0.62	< 0.62	< 0.62	< 0.62	2.1
Trichloroethene	4.0	< 0.72	0.84 J	< 0.72	< 0.72	**8.1**
Vinyl chloride	27	< 0.46	< 0.46	0.62	< 0.46	**240**

See Notes on Last Page.

Table 2
Utility Corridor Off-site Non-Residential Vapor Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Notes:
All results reported in µg/m^3.

Bold	Result exceeds the EGLE site-specific volatilization to indoor air criteria (SSVIAC) to evaluate vapor migration in preferential pathways developed for restricted nonresidential 12-hour workday exposure
<	Denotes not detected above reporting limit or method detection limit.

Abbreviations:

[ ]	duplicate sample result
µg/m^3	micrograms per cubic meter
EGLE	Michigan Department of Environment, Great Lakes, and Energy
ID	identification
J	estimated result
MH	manhole
SAMH	sanitary manhole
STMH	storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method TO-15

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	MH-1020	MH-1020	MH-1020	MH-1020	MH-1043	MH-1043	MH-1043	MH-1043	MH-1067	MH-1067	MH-1067	MH-1082	MH-1096	MH-1096	MH-1096
Survey ID:	SAMH-1020	SAMH-1020	SAMH-1020	SAMH-1020	SAMH-1043	SAMH-1043	SAMH-1043	SAMH-1043	SAMH-1067	SAMH-1067	SAMH-1067	SAMH-1082	SAMH-1096	SAMH-1096	SAMH-1096
Sample Date:	6/16/2020	9/18/2020	12/17/2020	3/24/2021	6/16/2020	9/18/2020	12/17/2020	3/24/2021	6/16/2020	12/17/2020	3/24/2021	6/15/2020	6/15/2020	9/18/2020	12/16/2020
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 4.3	< 4.3	< 0.86	< 2.6	1.2 J	< 0.86	< 0.86	2.8 J	< 0.86	< 0.86	< 0.86	1.2 J	< 0.86	0.89 J	5.2 [5.2]
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.95	< 0.63	< 0.63	< 0.63	< 0.95	< 0.38	< 0.38	< 1.5	< 0.95	< 0.95	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19 [< 0.19]
cis-1,2-Dichloroethene	< 0.80	< 0.53	< 0.53	< 0.53	< 0.80	< 0.32	< 0.32	< 1.3	< 0.80	< 0.80	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16 [< 0.16]
Tetrachloroethene	< 0.75	< 0.50	< 0.50	< 0.50	< 0.75	< 0.30	< 0.30	< 1.2	< 0.75	< 0.75	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15 [< 0.15]
trans-1,2-Dichloroethene	< 0.95	< 0.63	< 0.63	< 0.63	< 0.95	< 0.38	< 0.38	< 1.5	< 0.95	< 0.95	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19 [< 0.19]
Trichloroethene	< 0.50	< 0.33	< 0.33	< 0.33	< 0.50	< 0.20	< 0.20	< 0.80	< 0.50	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10 [< 0.10]
Vinyl chloride	< 1.0	< 0.67	< 0.67	< 0.67	< 1.0	< 0.40	< 0.40	< 1.6	< 1.0	< 1.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20 [< 0.20]

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	MH-1096	MH-1181	MH-1181	MH-1181	MH-1181	MH-1231A	MH-1231A	MH-1231A	MH-1231A	MH-1231A	MH-1231A	MH-1231A	MH-1231A	MH-1231A	MH-1231A
Survey ID:	SAMH-1096	SAMH-1181	SAMH-1181	SAMH-1181	SAMH-1181	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	3/22/2021	6/15/2020	9/18/2020	12/17/2020	3/23/2021	2/4/2022	2/7/2022	2/16/2022	2/24/2022	3/3/2022	3/10/2022	3/17/2022	3/22/2022	3/30/2022	4/7/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 2.6 [< 0.86]	< 0.86	< 0.86	< 0.86	< 0.86	11	20	20	20	14	7.8	20	16	22	27
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.95 [< 0.95]	< 0.19	< 0.19	< 0.19	< 0.19	< 0.49	< 0.49	< 0.49	0.49 J	< 0.49	< 0.49	< 0.98	< 0.98	< 0.98	< 0.98
cis-1,2-Dichloroethene	< 0.80 [< 0.80]	< 0.16	< 0.16	< 0.16	0.42 J	28	69	29	47	26	28	49	38	63	52
Tetrachloroethene	< 0.75 [< 0.75]	< 0.15	< 0.15	< 0.15	< 0.15	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.88	< 0.88	< 0.88	< 0.88
trans-1,2-Dichloroethene	< 0.95 [< 0.95]	< 0.19	< 0.19	< 0.19	< 0.19	< 0.51	0.70 J	< 0.51	< 0.51	< 0.51	< 0.51	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	< 0.50 [< 0.50]	< 0.10	< 0.10	< 0.10	< 0.10	0.53 J	1.0	< 0.44	2.4	< 0.44	0.45 J	< 0.88	< 0.88	1.2 J	< 0.88
Vinyl chloride	< 1.0 [< 1.0]	< 0.20	< 0.20	< 0.20	< 0.20	39	75	19	40	26	18	57	42	65	36

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	MH-1231A	MH-1231A	MH-1231A	MH-1244	MH-1244	MH-1244	MH-1244	MH-1244	MH-1244	MH-1244	MH-1244	MH-1244	MH-1244	MH-1244	MH-1244
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	4/13/2022	4/21/2022	4/27/2022	1/14/2022	2/1/2022	2/7/2022	2/16/2022	2/22/2022	3/3/2022	3/10/2022	3/17/2022	3/23/2022	3/30/2022	4/6/2022	4/13/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	24	20	21	22	< 0.86	< 0.86	1.1 J	1.6 J	2.1	7.5	5.3	6.2	5.5	3.4	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.98	< 0.98	< 0.98	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49 J	< 0.49	< 0.49
cis-1,2-Dichloroethene	60	34	53	11	< 0.46	6.1	0.69 J	0.91 J	3.4	15	29	180	30 J	8.7	1.5
Tetrachloroethene	< 0.88	< 0.88	< 0.88	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	1.5 J	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 1.0	< 1.0	< 1.0	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51 J	< 0.51	< 0.51
Trichloroethene	1.1 J	< 0.88	0.95 J	0.69 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44 J	< 0.44	< 0.44
Vinyl chloride	59	19	63	3.6	< 0.45	1.7	< 0.45	0.53 J	1.4	6.8	8.2	26	11 J	2.8	0.48 J

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	MH-1244	MH-1244	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255	MH-1255
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	4/21/2022	4/28/2022	2/4/2022	2/7/2022	2/16/2022	2/24/2022	3/3/2022	3/10/2022	3/17/2022	3/22/2022	3/30/2022	4/7/2022	4/13/2022	4/21/2022	4/27/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 0.86	4.4	22	25	31	22	29	18	16	16	21	25	26	25	19
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	0.53 J	< 0.49	< 0.49	< 0.49	< 0.49	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
cis-1,2-Dichloroethene	2.4	28	61	75	61	51	67	59	48	47	70	64	78	60	69
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88	< 0.88
trans-1,2-Dichloroethene	< 0.51	< 0.51	0.65 J	0.71 J	0.52 J	< 0.51	0.65 J	< 0.51	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	< 0.44	< 0.44	1.0	1.2	0.46 J	1.2	1.3	0.87 J	< 0.88	< 0.88	1.2 J	< 0.88	1.2 J	< 0.88	1.1 J
Vinyl chloride	0.66 J	5.3	100	92	61	68	80	69	60	63	84	84	110	33	93

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1256	MH-1259	MH-1259
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/4/2022	2/7/2022	2/16/2022	2/22/2022	3/3/2022	3/10/2022	3/17/2022	3/23/2022	3/30/2022	4/7/2022	4/13/2022	4/21/2022	4/28/2022	2/4/2022	2/7/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	1.3 J	2.1	< 0.86	1.5 J	5.8	23	< 0.86	< 0.86	2.1	4.9	< 0.86	2.1	< 0.86	6.1	5.1
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	3.5	2.5	1.5	17	58	76 E	1.8	< 0.46	0.78 J	< 0.46	< 0.46	0.97 J	6.5	7.8
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	3.5	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	1.6	1.5
Vinyl chloride	< 0.45	1.0	0.85 J	< 0.45	7.8	22	18	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	0.94 J	3.7	2.7

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
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Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	MH-1259	MH-1259	MH-1259	MH-1259	MH-1259	MH-1259	MH-1259	MH-1259	MH-1259	MH-1259	MH-1259	SL-2	SL-2	SL-2	SL-2
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/16/2022	2/24/2022	3/3/2022	3/10/2022	3/16/2022	3/23/2022	3/30/2022	4/7/2022	4/13/2022	4/21/2022	4/28/2022	4/20/2021	10/7/2021	11/2/2021	11/24/2021
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	4.0	8.2	6.8	3.6	5.9	4.3	5.2	5.0	12	7.4	11	5.5	7.4	< 0.86	7.0
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	0.52 J	0.89 J	< 0.49	0.74 J	< 0.76	< 1.2	< 0.49	< 0.49
cis-1,2-Dichloroethene	4.2	8.1	7.1	4.7	6.6	6.5	13	9.1	17	9.2	16	53	91	0.46 J	5.2
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.60	< 1.1	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.76	< 1.3	< 0.51	< 0.51
Trichloroethene	0.84 J	1.7	1.4	0.99 J	1.4	1.2	1.9	1.6	3.1	2.1	3.6	15	20	1.2	< 0.44
Vinyl chloride	1.6	3.5	2.6	1.9	2.9	2.6	6.5	3.9	7.4	3.2	6.1	8.8	14	< 0.45	2.8

Notes:
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Abbreviations:
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Analytical Methods:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2	SL-2
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	12/14/2021	1/14/2022	1/20/2022	2/1/2022	2/9/2022	2/18/2022	2/24/2022	3/2/2022	3/9/2022	3/14/2022	3/21/2022	3/29/2022	4/6/2022	4/11/2022	4/20/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	4.6	5.4	3.5	< 0.86	12	3.7	6.5	2.4	3.9	4.2	6.5	5.1	6.5	6.0	4.1
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	4.9	9.1	6.5	7.3	13	5.7	4.6	2.7	4.5	7.0	8.5	14	8.9	10	5.0
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	0.72 J	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	2.5	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	27	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	3.9	6.0	5.1	2.1	7.5	5.3	3.5	1.9	2.5	5.6	6.0	6.1	7.6	8.7	2.7

Notes:
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< Denotes not detected above Method Detection Limit.

Abbreviations:
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µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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Analytical Methods:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-2	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	4/27/2022	4/19/2021	10/7/2021	11/2/2021	11/24/2021	12/10/2021	12/14/2021	1/14/2022	1/20/2022	1/31/2022	2/8/2022	2/18/2022	2/21/2022	3/2/2022	3/7/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	1.1 J	7.0	8.3	4.4	16	6.1	6.5	< 0.86	4.6	6.7	9.0	1.7 J	1.7 J	0.97 J	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 2.7	< 2.5	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.98
cis-1,2-Dichloroethene	2.7	280	140	5.1	4.4	10	6.0	0.93 J	9.0	11	11	4.0	2.9	1.4	1.3 J
Tetrachloroethene	0.44 J	< 2.1	< 2.2	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.88
trans-1,2-Dichloroethene	< 0.51	< 2.7	< 2.6	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	0.58 J	< 0.51	< 1.0
Trichloroethene	< 0.44	79	25	< 0.44	< 0.44	< 0.44	< 0.44	2.5	< 0.44	< 0.44	< 0.44	1.9	5.7	< 0.44	< 0.88
Vinyl chloride	1.8	44	17	4.4	2.3	11	4.5	< 0.45	7.0	12	7.0	3.7	1.6	0.94 J	< 0.90

Notes:
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Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
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Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-3	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	3/14/2022	3/21/2022	3/29/2022	4/6/2022	4/11/2022	4/20/2022	4/27/2022	4/19/2021	10/7/2021	11/2/2021	11/24/2021	12/14/2021	1/13/2022	1/18/2022	2/1/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	4.8	9.0	7.2	8.5	3.2	< 0.86	4.2	6.6	6.7	3.6	5.2 [5.4]	4.5 [5.1]	8.5	3.7	2.4 [2.4]
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.98	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 1.9	< 1.2	< 0.49	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.49	< 0.49	< 0.49 [< 0.49]
cis-1,2-Dichloroethene	7.6	19	20	7.8	6.9	11	1.1	210	97	3.7	4.0 [1.2 J]	5.5 [4.9]	6.3	5.3	4.4 [4.5]
Tetrachloroethene	< 0.88	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 1.5	< 1.1	< 0.44	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.44	< 0.44	< 0.44 [< 0.44]
trans-1,2-Dichloroethene	< 1.0	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 1.9	< 1.3	< 0.51	< 0.51 [< 0.51]	< 0.51 [< 0.51]	< 0.51	< 0.51	< 0.51 [< 0.51]
Trichloroethene	< 0.88	< 0.44	< 0.44	2.0	< 0.44	0.60 J	1.5	56	17	< 0.44	< 0.44 [0.54 J]	< 0.44 [< 0.44]	< 0.44	< 0.44	< 0.44 [0.48 J]
Vinyl chloride	5.5	8.1	11	7.3	5.2	6.3	0.49 J	26	11	2.6	2.9 [< 0.45]	4.0 [2.9]	3.1	4.5	4.3 [4.9]

Notes:
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Abbreviations:
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µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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Analytical Methods:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-4	SL-5	SL-5	SL-5
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/8/2022	2/16/2022	2/21/2022	2/28/2022	3/7/2022	3/14/2022	3/21/2022	3/28/2022	4/4/2022	4/11/2022	4/18/2022	4/27/2022	4/20/2021	6/10/2021	7/13/2021
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	5.5 [6.3]	3.5 [3.7]	7.1 [1.1 J]	7.5 [7.0]	1.7 J [< 0.86]	4.4 [4.4]	7.5 [5.7]	1.7 J [3.6]	0.93 J [0.89 J]	0.99 J [1.9 J]	4.6 [4.7]	0.95 J [1.7 J]	5.8	4.7 [5.1]	0.91 J [1.6 J]
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.98 [< 0.49]	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.49 [< 0.49]	< 0.95	< 2.5 [< 2.5]	< 2.5 [< 2.0]
cis-1,2-Dichloroethene	4.0 [4.2]	8.3 J [8.8 J]	3.9 [5.3]	7.4 [8.2]	3.5 [4.3]	5.6 [5.1]	14 [14]	5.7 [7.8]	4.2 [4.2]	4.4 [4.3]	7.5 [7.3]	2.3 [2.1]	160	110 [140]	81 J [110 J]
Tetrachloroethene	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.88 [< 0.44]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	< 0.75	< 2.2 [< 2.2]	< 2.2 [< 1.8]
trans-1,2-Dichloroethene	< 0.51 [< 0.51]	< 0.51 [< 0.51]	< 0.51 [< 0.51]	< 0.51 [< 0.51]	< 0.51 [< 0.51]	< 1.0 [< 0.51]	< 0.51 [< 0.51]	< 0.51 [< 0.51]	0.73 J [0.71 J]	< 0.51 [< 0.51]	< 0.51 [< 0.51]	< 0.51 [< 0.51]	< 0.95	< 2.6 [< 2.6]	< 2.6 [< 2.0]
Trichloroethene	0.70 J [0.76 J]	< 0.44 [< 0.44]	1.2 [1.2]	< 0.44 [< 0.44]	0.68 J [0.47 J]	< 0.88 [0.48 J]	< 0.44 [< 0.44]	0.79 J [< 0.44]	8.4 [8.2]	4.3 [2.0]	< 0.44 [< 0.44]	< 0.44 [< 0.44]	34	27 [33]	20 [26]
Vinyl chloride	2.3 [3.0]	6.6 J [7.4 J]	3.0 [4.2]	4.2 [6.0]	1.6 [2.8]	3.5 [3.2]	6.4 [7.1]	3.0 [4.5]	1.7 [1.6]	3.3 [3.8]	3.7 [3.9]	1.5 [1.1]	14	14 [17]	10 [18]

Notes:
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Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5	SL-5
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	10/7/2021	11/2/2021	11/23/2021	12/16/2021	1/12/2022	1/19/2022	1/31/2022	2/15/2022	2/23/2022	3/1/2022	3/8/2022	3/15/2022	3/22/2022	3/31/2022	4/5/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	2.9 [3.0]	2.3 [1.6 J]	14	2.9	2.2	1.7 J	2.0	5.6	9.0	4.8	1.4 J	4.4	3.7	3.2	2.9
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.98 [< 0.98]	< 0.98 [< 0.49]	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.98	< 0.98	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	44 J [40]	1.5 J [1.2]	3.0	2.2	2.6	2.4	2.1	2.7	5.4	3.5	1.2 J	2.9	6.3	4.2	3.9
Tetrachloroethene	< 0.88 [< 0.88]	< 0.88 [< 0.44]	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.88	< 0.88	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 1.0 [< 1.0]	< 1.0 [< 0.51]	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 1.0	< 1.0	< 0.51	< 0.51	< 0.51
Trichloroethene	7.4 [7.2]	< 0.88 [< 0.44]	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.88	< 0.88	< 0.44	< 0.44	< 0.44
Vinyl chloride	4.1 [4.6]	< 0.90 [0.74 J]	1.5	1.7	1.4	1.9	1.7	2.1	2.7	1.9	< 0.90	1.6 J	3.3	2.9	2.3

Notes:
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Abbreviations:
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µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-5	SL-5	SL-5	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	4/12/2022	4/19/2022	4/26/2022	6/10/2021	7/13/2021	10/7/2021	11/2/2021	11/23/2021	12/16/2021	1/12/2022	1/19/2022	1/31/2022	2/15/2022	2/23/2022	3/1/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	3.0	1.5 J	2.8	< 0.86	< 0.86	0.92 J	< 0.86	1.2 J	< 0.86	3.4	< 0.86	< 0.86	1.5 J	1.1 J	4.3
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	4.1	2.2	4.1	1.3	5.2	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Tetrachloroethene	1.2	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	3.9	< 0.44	0.73 J	0.96 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	3.2	0.90 J	2.6	< 0.45	0.80 J	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45

Notes:
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Abbreviations:
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USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-6	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	3/8/2022	3/15/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022	4/26/2022	6/10/2021	7/13/2021	10/7/2021	11/2/2021	11/23/2021	12/16/2021	1/12/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	1.2 J	2.9	2.1	1.3 J	< 0.86	0.86 J	6.9	0.96 J	< 0.86	< 0.86	0.95 J	< 0.86	12	< 0.86	0.92 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.98	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.92	< 0.46	< 0.46
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	4.9	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.88	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 1.0	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.88	< 0.44	< 0.44
Vinyl chloride	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.90	< 0.45	< 0.45

Notes:
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Abbreviations:
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USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-7	SL-8	SL-8
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	1/19/2022	1/31/2022	2/15/2022	2/23/2022	3/1/2022	3/8/2022	3/15/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022	4/26/2022	6/10/2021	7/13/2021
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 0.86	< 0.86	1.5 J	3.8	2.3	1.3 J	2.1	1.4 J	1.1 J	5.6	1.3 J	9.1	3.9	5.4	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 3.9	< 3.9
cis-1,2-Dichloroethene	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	180	63
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	3.7	0.46 J	0.48 J	< 3.5	< 3.5
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 4.1	< 4.1
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	47	18
Vinyl chloride	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	26	8.8

Notes:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8	SL-8
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	10/7/2021	11/2/2021	11/23/2021	12/16/2021	1/12/2022	1/19/2022	2/1/2022	2/15/2022	3/1/2022	2/22/2022	3/8/2022	3/15/2022	3/22/2022	3/31/2022	4/5/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	4.8	2.2	23	2.8	3.1	2.9	4.3	4.7	2.2	2.1	2.3	1.4 J	3.5	2.0	1.3 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.98	< 0.98	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	38	1.9	3.7	2.5	3.6	3.2	4.7	2.8 J	3.7	3.1	2.0	1.6 J	4.0	2.9	2.8
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.88	< 0.88	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 1.0	< 1.0	< 0.51	< 0.51	< 0.51
Trichloroethene	8.9	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	2.3	< 0.88	< 0.88	< 0.44	< 0.44	< 0.44
Vinyl chloride	8.8	1.4	2.3	1.8	2.1	2.2	3.8	2.2 J	2.2	2.1	1.2 J	0.90 J	2.2	1.8	1.9

Notes:
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Abbreviations:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-8	SL-8	SL-8	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	4/12/2022	4/19/2022	4/26/2022	6/10/2021	7/13/2021	10/7/2021	11/2/2021	11/23/2021	12/16/2021	1/12/2022	1/19/2022	2/1/2022	2/15/2022	2/22/2022	3/1/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	2.1	< 0.86	< 0.86	2.8	1.1 J	< 0.86	2.2	19	2.8	1.7 J	2.7	2.2	4.3	< 0.86	5.5
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 2.5	< 2.5	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	4.6	2.2	3.1	110	48	18	2.1	4.5	3.4	3.1	3.7	3.1	4.1	2.6	3.4
Tetrachloroethene	0.73 J	< 0.44	< 0.44	< 2.2	< 2.2	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 2.6	< 2.6	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	3.9	< 0.44	26	15	4.7	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	4.5	< 0.44
Vinyl chloride	3.5	0.98 J	1.1	12	6.7	2.1	1.3	2.8	2.5	1.6	2.5	2.3	3.2	1.1	1.9

Notes:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-9	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	3/8/2022	3/15/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022	4/26/2022	7/13/2021	10/7/2021	11/2/2021	11/23/2021	12/16/2021	1/12/2022	1/19/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	2.8	1.5 J	1.3 J	2.1	0.88 J	1.6 J	< 0.86	1.0 J	< 0.86	2.7	2.0	19	2.6	2.9	1.8 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.98	< 0.98	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	2.1	1.5 J	2.9	3.2	1.9	4.2	2.4	4.8	35	34	1.8	3.7	2.8	2.1	2.2
Tetrachloroethene	< 0.88	< 0.88	< 0.44	< 0.44	< 0.44	0.98 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 1.0	< 1.0	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.88	< 0.88	< 0.44	< 0.44	< 0.44	< 0.44	4.0	< 0.44	12	7.5	< 0.44	< 0.44	< 0.44	0.49 J	< 0.44
Vinyl chloride	1.4 J	0.94 J	1.1	2.1	1.2	2.5	1.1	2.2	6.0	4.6	1.4	2.3	2.3	1.0	1.4

Notes:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-11	SL-11	SL-11
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/1/2022	2/16/2022	2/22/2022	3/2/2022	3/9/2022	3/16/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022	4/26/2022	7/13/2021	10/7/2021	11/2/2021
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	1.9 J	12	1.4 J	12	< 0.86	3.9	2.0	2.0	0.93 J	1.9 J	< 0.86	< 0.86	< 0.86	3.1	1.5 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.82	< 0.49	< 0.49
cis-1,2-Dichloroethene	2.3	4.6 J	2.8	15	5.8	11	4.3	3.1	1.7	4.4	2.8	3.5	28	31	1.1
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	0.66 J	< 0.44	< 0.44	< 0.73	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.85	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	4.2	< 0.44	0.66 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	3.5	< 0.44	10	6.5	< 0.44
Vinyl chloride	1.6	2.8 J	1.5	4.0	1.1	2.6	1.6	1.9	1.2	3.1	1.1	1.4	4.0	4.2	1.1

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	11/23/2021	12/16/2021	1/12/2022	1/19/2022	2/1/2022	2/16/2022	2/22/2022	3/2/2022	3/9/2022	3/16/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	18	2.5	2.8	1.9 J	1.7 J	6.3	1.2 J	9.6	2.2 J	3.2	1.2 J	2.1	< 0.86	1.9 J	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49 J	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	2.8	2.5	2.5	1.7	2.1	3.2	3.1	13	9.5 J	7.2	2.6	2.7	1.0	4.7	2.1
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44 J	< 0.44	< 0.44	< 0.44	< 0.44	0.53 J	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51 J	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	1.3	< 0.44	< 0.44 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	3.2
Vinyl chloride	1.7	1.9	1.2	1.1	1.3	1.7	2.3	3.1	2.3 J	2.1	0.93 J	1.5	0.68 J	2.7	0.92 J

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-11	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	4/26/2022	7/13/2021	10/7/2021	11/2/2021	11/23/2021	12/10/2021	12/16/2021	1/13/2022	1/19/2022	2/1/2022	2/16/2022	2/22/2022	3/2/2022	3/9/2022	3/16/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	1.7 J	< 0.86	1.7 J	< 0.86	13	< 0.86	1.8 J	1.4 J	1.2 J	1.3 J	6.3	0.90 J	1.5 J	1.3 J	1.4 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.98	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49 J	< 0.49
cis-1,2-Dichloroethene	4.1	26	19	1.0	1.8	< 0.46	1.5	1.7	1.0	1.3	4.8 J	2.0	3.8	2.6 J	4.5
Tetrachloroethene	< 0.44	< 0.88	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44 J	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 1.0	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51 J	< 0.51
Trichloroethene	< 0.44	9.0	4.0	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	1.0	< 0.44	< 0.44 J	< 0.44
Vinyl chloride	2.0	3.9	2.3	0.50 J	0.72 J	< 0.45	0.72 J	0.66 J	0.47 J	0.89 J	2.0 J	1.5	0.65 J	0.67 J	1.3

Notes:
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< Denotes not detected above Method Detection Limit.

Abbreviations:
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EGLE Michigan Department of Environment, Great Lakes, and Energy
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Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022	4/26/2022	7/13/2021	10/7/2021	11/2/2021	11/23/2021	12/16/2021	1/12/2022	1/19/2022	1/31/2022	2/15/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	2.3	< 0.86	< 0.86	1.2 J	< 0.86	< 0.86	< 0.86	1.1 J	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	2.6	< 0.46	1.4	2.7	1.4	0.84 J	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Tetrachloroethene	< 0.44	< 0.44	< 0.44	0.83 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	1.9	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	1.2	< 0.45	0.91 J	1.4	0.54 J	< 0.45	1.2	< 0.45	< 0.45	< 0.45	0.49 J	< 0.45	< 0.45	< 0.45	< 0.45

Notes:
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< Denotes not detected above Method Detection Limit.

Abbreviations:
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EGLE Michigan Department of Environment, Great Lakes, and Energy
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Analytical Methods:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-14	SL-14	SL-14	SL-14	SL-14
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/23/2022	3/1/2022	3/8/2022	3/15/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022	4/26/2022	7/13/2021	10/7/2021	11/2/2021	11/23/2021	12/16/2021
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	0.50 J	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45

Notes:
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< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
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Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-15
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	1/12/2022	1/19/2022	1/31/2022	2/15/2022	2/23/2022	3/1/2022	3/8/2022	3/15/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022	4/26/2022	7/13/2021
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	1.7 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
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µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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Analytical Methods:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	10/7/2021	11/2/2021	11/23/2021	12/16/2021	1/12/2022	1/19/2022	1/31/2022	2/15/2022	2/23/2022	3/1/2022	3/8/2022	3/15/2022	3/22/2022	3/30/2022	4/5/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	1.3 J	< 0.86	< 0.86	< 0.86	0.94 J	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45

Notes:
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< Denotes not detected above Method Detection Limit.

Abbreviations:
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EGLE Michigan Department of Environment, Great Lakes, and Energy
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Analytical Methods:
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Table 3
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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-15	SL-15	SL-15	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	4/12/2022	4/19/2022	4/26/2022	11/2/2021	11/24/2021	12/10/2021	12/14/2021	1/14/2022	1/20/2022	1/31/2022	2/8/2022	2/18/2022	2/21/2022	3/2/2022	3/7/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 0.86	< 0.86	< 0.86	4.2	19	3.9	4.7	4.3	4.5	3.9	7.4	< 0.86	1.9 J	1.7 J	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	< 0.46	< 0.46	5.0	3.7	7.6	5.0	8.1	6.8	5.2	11	2.2	5.2	2.6	1.3
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	0.52 J	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	2.5	5.3	< 0.44	0.86 J
Vinyl chloride	< 0.45	< 0.45	< 0.45	4.2	2.1	8.3	3.5	4.9	5.0	4.1	6.9	1.3	3.3	1.1	1.0

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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Table 3
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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16	SL-16	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	3/14/2022	3/21/2022	3/28/2022	4/6/2022	4/11/2022	4/20/2022	4/27/2022	11/2/2021	11/24/2021	12/10/2021	12/14/2021	1/13/2022	1/20/2022	1/31/2022	2/8/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	4.7	1.3 J	4.9	3.8	4.4	4.0	6.2	1.9 J	28	5.1	5.6	2.9	6.2	3.6	8.7
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	8.2	9.7	14	9.1	9.6	9.6	14	4.5	13	7.0	6.7	6.2	8.5	4.8	9.2
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	1.8	0.86 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	1.0	< 0.44
Vinyl chloride	6.5	4.7	6.8	7.1	8.1	5.7	8.0	3.5	12	7.1	5.7	3.8	5.9	3.4	5.5

Notes:
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Abbreviations:
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µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17	SL-17	SL-18	SL-18	SL-18	SL-18
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/16/2022	2/21/2022	3/2/2022	3/7/2022	3/14/2022	3/21/2022	3/28/2022	4/6/2022	4/11/2022	4/20/2022	4/25/2022	11/2/2021	11/24/2021	12/14/2021	1/13/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	4.2	< 0.86	5.3	< 0.86	5.0	3.0	3.2	3.7	3.1	2.5	< 0.86	3.3	13	4.1	4.2
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.98	< 0.98	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	11	1.8	0.65 J	1.0 J	8.0	9.6	7.6	7.4	7.0	4.6	3.3	4.5	3.7	5.1	8.0
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.88	< 0.88	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 1.0	< 1.0	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	4.6	< 0.44	< 0.88	< 0.88	0.64 J	0.46 J	< 0.44	< 0.44	0.79 J	2.2	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	6.2	0.51 J	< 0.45	< 0.90	5.6	6.2	5.3	5.9	6.1	2.6	1.8	3.2	1.9	4.0	5.1

Notes:
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< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
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Analytical Methods:
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USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-18	SL-19
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	1/18/2022	1/31/2022	2/8/2022	2/16/2022	2/21/2022	2/28/2022	3/7/2022	3/14/2022	3/21/2022	3/28/2022	4/4/2022	4/11/2022	4/20/2022	4/25/2022	11/23/2021
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	4.7	5.2	7.1	6.5	1.6 J	1.9 J	1.6 J	4.1	3.6	4.2	1.0 J	2.0	3.2	0.86 J	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	6.2	8.5	6.9	10	2.0	3.8	1.4	6.3	8.4	9.9	5.1	4.3	8.5	4.5	< 0.46
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	1.4	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	0.44 J	< 0.44	4.0	1.4	1.0	< 0.44	< 0.44	< 0.44	15	< 0.44	< 0.44	1.3	< 0.44
Vinyl chloride	5.3	7.5	4.2	6.3	0.73 J	1.9	0.94 J	4.2	4.7	5.1	2.0	4.0	4.0	2.0	< 0.45

Notes:
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< Denotes not detected above Method Detection Limit.

Abbreviations:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19	SL-19
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	12/10/2021	12/16/2021	1/13/2022	1/19/2022	2/1/2022	2/16/2022	2/22/2022	3/2/2022	3/9/2022	3/16/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	1.8 J	< 1.7	< 1.7	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	1.9	< 0.46	< 0.46	< 0.46
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	1.3	< 0.45	< 0.45	< 0.45

Notes:
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Abbreviations:
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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-19	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20	SL-20
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	4/26/2022	11/23/2021	12/10/2021	12/14/2021	1/13/2022	1/18/2022	1/27/2022	2/1/2022	2/8/2022	2/15/2022	2/23/2022	2/28/2022	3/7/2022	3/14/2022	3/21/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 0.86	9.6	1.2 J	< 0.86	< 0.86	2.0	3.2	1.3 J	1.0 J	2.2	1.7 J	1.0 J	1.8 J	1.1 J	1.0 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	1.4	1.0	0.74 J	0.85 J	1.9	1.6	1.8	0.73 J	1.6 J	1.8	1.1	1.8	1.8	2.3
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	0.65 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	< 0.45	0.68 J	0.69 J	< 0.45	< 0.45	1.1	1.1	1.1	< 0.45	1.0 J	0.78 J	< 0.45	1.2	0.90 J	0.88 J

Notes:
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Abbreviations:
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µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
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Analytical Methods:
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Table 3
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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-20	SL-20	SL-20	SL-20	SL-20	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	3/29/2022	4/4/2022	4/11/2022	4/18/2022	4/25/2022	11/24/2021	12/10/2021	12/14/2021	1/14/2022	1/18/2022	1/27/2022	1/31/2022	2/8/2022	2/15/2022	2/23/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	1.7 J	1.6 J	1.5 J	< 0.86	< 0.86	3.9	1.9 J	0.86 J	1.4 J	1.6 J	2.3	0.98 J	2.1	1.7 J	1.2 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	2.5	2.4	3.6	1.6	2.2	0.96 J	1.2	0.84 J	1.4	1.3	1.7	0.73 J	1.0	1.3	1.8
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	1.2	1.2	2.0	0.62 J	0.94 J	< 0.45	1.1	< 0.45	0.73 J	0.84 J	0.95 J	< 0.45	< 0.45	0.95 J	0.75 J

Notes:
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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21	SL-21	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/28/2022	3/7/2022	3/14/2022	3/21/2022	3/29/2022	4/4/2022	4/11/2022	4/18/2022	4/25/2022	11/23/2021	12/10/2021	12/14/2021	1/13/2022	1/18/2022	1/27/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	1.3 J	1.1 J	2.1	2.2	1.3 J	0.95 J	1.3 J	1.2 J	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	1.7	1.3	2.0	4.2	1.9	1.5	3.2	2.0	1.5	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	0.63 J	< 0.44	< 0.44	< 0.44	< 0.44	0.85 J	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	0.88 J	0.70 J	0.92 J	1.3	0.50 J	0.60 J	1.8	0.72 J	0.64 J	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45

Notes:
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Abbreviations:
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µg/L micrograms per liter
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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22	SL-22	SL-23	SL-23
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/1/2022	2/8/2022	2/16/2022	2/23/2022	2/28/2022	3/7/2022	3/14/2022	3/21/2022	3/29/2022	4/4/2022	4/11/2022	4/18/2022	4/25/2022	1/13/2022	1/19/2022
Semi-Volatile Organic Compounds (SVOCs)															
1,4-Dioxane	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	2.7	1.9 J
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	2.5	2.7
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44
Vinyl chloride	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	0.86 J	2.3

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 3
Utility Corridor On-site and Off-site Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location:	SL-23	SL-23	SL-23	SL-23	SL-23	SL-23	SL-23	SL-23	SL-23	SL-23	SL-23	SL-23
Survey ID:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample Date:	2/1/2022	2/16/2022	2/22/2022	3/2/2022	3/9/2022	3/16/2022	3/22/2022	3/31/2022	4/5/2022	4/12/2022	4/19/2022	4/26/2022
Semi-Volatile Organic Compounds (SVOCs)												
1,4-Dioxane	2.1	9.2	1.5 J	6.1	2.0 J	1.9 J	2.6	2.5	1.0 J	2.4	< 0.86	1.2 J
Volatile Organic Compounds (VOCs)												
1,1-Dichloroethene	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49 J	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	2.4	3.6 J	2.6	8.0	9.2 J	3.1	3.5	2.4	1.8	5.0	2.0	3.0
Tetrachloroethene	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44 J	< 0.44	< 0.44	< 0.44	< 0.44	0.48 J	< 0.44	< 0.44
trans-1,2-Dichloroethene	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51 J	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51	< 0.51
Trichloroethene	< 0.44	< 0.44	2.0	< 0.44	< 0.44 J	0.59 J	< 0.44	< 0.44	< 0.44	< 0.44	3.0	< 0.44
Vinyl chloride	1.6	1.8 J	1.8	1.9	2.1 J	0.85 J	1.7	1.6	1.4	2.9	0.81 J	0.83 J

Notes:
All results are reported in µg/L.
< Denotes not detected above Method Detection Limit.

Abbreviations:
[ ] duplicate sample results
µg/L micrograms per liter
EGLE Michigan Department of Environment, Great Lakes, and Energy
ID identification
NA not available
J estimated result
R Sample results rejected due to analysis conducted outside of hold time
MH manhole
SAMH sanitary manhole
SDG sample delivery group
STMH storm manhole

Analytical Methods:
United States Environmental Protection Agency (USEPA) Method 8260B Selected Ion Monitoring (SIM) for SVOCs
USEPA Method 8260B for VOCs

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Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-5 NA 3/23/2021	SL-5 NA 4/20/2021	SL-5 NA 6/10/2021	SL-5 NA 7/13/2021	SL-5 NA 10/7/2021	SL-5 NA 11/2/2021	SL-5 NA 11/23/2021	SL-5 NA 12/16/2021	SL-5 NA 1/12/2022	SL-5 NA 1/19/2022	SL-5 NA 1/31/2022	SL-5 NA 2/15/2022	SL-5 NA 2/23/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 1.3	< 0.61	55 [64]	19 J [16]	< 2.0 [< 2.1]	< 2.0 [< 2.2]	< 2.2	< 2.3	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6
1,4-Dioxane	5.1	24	< 3.4	< 1.1	< 9.7 [< 12]	< 10 [< 3.3]	< 1.5 [< 1.5]	< 1.5 [< 1.6]	< 1.6	< 1.7	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6
cis-1,2-Dichloroethene	8.3	25	**230**	**50**	**13,000 [17,000]**	**3,300 [3,600]**	**440 [390]**	< 1.6 [< 1.8]	< 1.7	< 1.8	1.1	< 0.27	0.36 J	< 0.58	2.7
Tetrachloroethene	41	82	< 1.8	< 0.79	< 9.0 [< 11]	< 9.8 [< 3.1]	< 1.6 [< 1.7]	< 1.7 [< 1.8]	7.6	< 1.8	< 0.4	< 0.4	< 0.4	< 1	< 1
trans-1,2-Dichloroethene	83	250	3.5 J	< 0.99	**140 [170]**	36 J [39]	4.8 [5.6]	< 1.8 [< 2.0]	< 2.0	< 2.0	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62
Trichloroethene	2.0	4.0	**110**	**38**	**7,800 [9,700]**	**2,200 [2,300]**	**140 [110]**	< 2.3 [< 2.4]	< 2.4	< 2.5	< 0.4	< 0.4	< 0.4	< 0.72	< 0.72
Vinyl chloride	1.6	27	**71**	**6.3**	**6,500 [8,100]**	**1,600 [1,600]**	**97 [100]**	< 1.8 [< 1.9]	< 1.9	< 2.0	1	< 0.2	0.34 J	< 0.46	**3.7**

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-5 NA 3/1/2022	SL-5 NA 3/8/2022	SL-5 NA 3/15/2022	SL-5 NA 3/22/2022	SL-5 NA 3/31/2022	SL-5 NA 4/5/2022	SL-5 NA 4/12/2022	SL-5 NA 4/19/2022	SL-5 NA 4/26/2022	SL-6 NA 6/10/2021	SL-6 NA 7/13/2021	SL-6 NA 10/7/2021	SL-6 NA 11/2/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	0.75 J	< 0.60	< 0.60	< 3.4	8.9	< 12	< 2.1
1,4-Dioxane	5.1	24	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.6	< 0.60	< 0.60	< 2.9	2.9 J	< 8.6	< 1.6
cis-1,2-Dichloroethene	8.3	25	2.2	< 0.58	**12**	< 0.58	< 0.58	**20**	**28**	**39**	**18**	**27**	**1,600**	< 9.2	< 1.7
Tetrachloroethene	41	82	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	3.4	7.9	1.2 J	2.9 J	< 0.93	< 9.4	< 1.7
trans-1,2-Dichloroethene	83	250	< 0.62	1.1	< 0.62	< 0.62	< 0.62	< 0.62	1.1	10	< 0.62	< 2.7	21	< 10	< 1.9
Trichloroethene	2.0	4.0	< 0.72	**2.1**	1.3	< 0.72	< 0.72	**2.5**	**9.4**	**96**	< 0.72	**25**	**970**	< 13	< 2.4
Vinyl chloride	1.6	27	**4**	< 0.46	**18**	< 0.46	< 0.46	**24**	**75**	**63**	**19**	**5.6 J**	**890**	< 10	< 1.8

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-6 NA 11/23/2021	SL-6 NA 12/16/2021	SL-6 NA 1/12/2022	SL-6 NA 1/19/2022	SL-6 NA 1/31/2022	SL-6 NA 2/15/2022	SL-6 NA 2/23/2022	SL-6 NA 3/1/2022	SL-6 NA 3/8/2022	SL-6 NA 3/15/2022	SL-6 NA 3/22/2022	SL-6 NA 3/31/2022	SL-6 NA 4/5/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 2.1	< 2.3	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	2.2	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60
1,4-Dioxane	5.1	24	< 1.6	< 1.7	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	0.91 J	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	8.3	25	< 1.7	< 1.8	< 0.27	< 0.27	< 0.27	< 0.58	< 0.58	1.8	< 0.58	2.3	< 0.58	< 0.58	< 0.58
Tetrachloroethene	41	82	< 1.7	< 1.9	< 0.4	< 0.4	< 0.4	< 1	< 1	3.9	< 1	< 1.0	< 1.0	1.5	< 1.0
trans-1,2-Dichloroethene	83	250	< 1.9	< 2.1	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	2	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 2.4	< 2.6	< 0.4	< 0.4	< 0.4	< 0.72	< 0.72	**2.5**	1.1	< 0.72	< 0.72	< 0.72	1.5
Vinyl chloride	1.6	27	< 1.8	< 2.0	< 0.2	< 0.2	< 0.2	< 0.46	< 0.46	**1.7**	< 0.46	1.3	< 0.46	< 0.46	< 0.46

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-6 NA 4/12/2022	SL-6 NA 4/19/2022	SL-6 NA 4/26/2022	SL-7 NA 6/10/2021	SL-7 NA 7/13/2021	SL-7 NA 10/7/2021	SL-7 NA 11/2/2021	SL-7 NA 11/23/2021	SL-7 NA 12/16/2021	SL-7 NA 1/12/2022	SL-7 NA 1/19/2022	SL-7 NA 1/31/2022	SL-7 NA 2/15/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.60	< 0.60	< 0.60	< 4.7	3.6 J	< 11	< 2.1	< 2.1	< 2.2	< 0.31	< 0.31	< 0.31	< 0.6
1,4-Dioxane	5.1	24	< 0.60	< 0.60	< 0.60	< 4.0	< 0.98	< 8.2	< 1.6	< 1.6	< 1.6	< 0.49	< 0.49	< 0.49	< 0.6
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58	< 0.58	**20**	**610**	< 8.8	< 1.6	< 1.6	< 1.8	< 0.27	< 0.27	< 0.27	< 0.58
Tetrachloroethene	41	82	< 1.0	< 1.0	< 1.0	< 3.7	2.3 J	< 9.0	< 1.7	< 1.7	< 1.8	< 0.4	< 0.4	< 0.4	< 1
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	< 0.62	< 3.7	8.6	< 9.9	< 1.9	< 1.9	< 2.0	< 0.28	< 0.28	< 0.28	< 0.62
Trichloroethene	2.0	4.0	< 0.72	< 0.72	< 0.72	**28**	**380**	< 12	< 2.3	< 2.3	**2.6 J**	< 0.4	< 0.4	< 0.4	< 0.72
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	**12**	**420**	< 9.6	< 1.8	< 1.8	< 1.9	< 0.2	< 0.2	< 0.2	< 0.46

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Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-7 NA 2/23/2022	SL-7 NA 3/1/2022	SL-7 NA 3/8/2022	SL-7 NA 3/15/2022	SL-7 NA 3/22/2022	SL-7 NA 3/31/2022	SL-7 NA 4/5/2022	SL-7 NA 4/12/2022	SL-7 NA 4/19/2022	SL-7 NA 4/26/2022	SL-8 NA 6/10/2021	SL-8 NA 7/13/2021	SL-8 NA 10/7/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.6	< 0.60	< 0.60	1.5 J	23	< 2.1
1,4-Dioxane	5.1	24	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.6	< 0.60	< 0.60	< 0.96	< 4.2	< 1.6
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	**550**	**4,100**	**390**
Tetrachloroethene	41	82	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	29	1.5	< 1.0	< 0.89	< 3.9	< 1.7
trans-1,2-Dichloroethene	83	250	0.71 J	< 0.62	0.7 J	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	4.3	58	4.4
Trichloroethene	2.0	4.0	< 0.72	< 0.72	1 J	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	**290**	**3,100**	**140**
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	**210**	**2,400**	**93**

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Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-8 NA 11/2/2021	SL-8 NA 11/23/2021	SL-8 NA 12/16/2021	SL-8 NA 1/12/2022	SL-8 NA 1/19/2022	SL-8 NA 2/1/2022	SL-8 NA 2/15/2022	SL-8 NA 2/22/2022	SL-8 NA 3/1/2022	SL-8 NA 3/8/2022	SL-8 NA 3/15/2022	SL-8 NA 3/22/2022	SL-8 NA 3/31/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 2.3	< 2.3	< 2.3	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60
1,4-Dioxane	5.1	24	< 1.7	< 1.7	< 1.7	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	8.3	25	< 1.8	< 1.8	< 1.8	< 0.27	< 0.27	< 0.27	< 0.58	1	< 0.58	< 0.58	5.2	< 0.58	< 0.58
Tetrachloroethene	41	82	< 1.8	< 1.8	< 1.8	< 0.4	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	83	250	< 2.0	< 2.0	< 2.0	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	1.7	< 0.62	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 2.5	< 2.5	< 2.5	< 0.4	< 0.4	< 0.4	< 0.72	1.3	< 0.72	1.3	0.88 J	< 0.72	< 0.72
Vinyl chloride	1.6	27	< 2.0	< 2.0	< 2.0	< 0.2	< 0.2	< 0.2	< 0.46	1.5	< 0.46	< 0.46	**10**	< 0.46	< 0.46

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-8 NA 4/5/2022	SL-8 NA 4/12/2022	SL-8 NA 4/19/2022	SL-8 NA 4/26/2022	SL-9 NA 6/10/2021	SL-9 NA 7/13/2021	SL-9 NA 10/7/2021	SL-9 NA 11/2/2021	SL-9 NA 11/23/2021	SL-9 NA 12/16/2021	SL-9 NA 1/13/2022	SL-9 NA 1/19/2022	SL-9 NA 2/1/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.60	< 0.6	< 0.60	< 0.60	7.4	44	< 12	< 2.1	< 2.2	< 2.2	< 0.31	< 0.31	< 0.31
1,4-Dioxane	5.1	24	< 0.60	< 0.6	< 0.60	< 0.60	< 1.1	< 6.5	< 8.9	< 1.6	< 1.6	< 1.6	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	8.3	25	< 0.58	1.5	< 0.58	18	**1,400**	**7,300**	**930**	< 1.7	< 1.7	< 1.7	< 0.27	< 0.27	< 0.27
Tetrachloroethene	41	82	< 1.0	< 1	1.4	1.2 J	< 1.0	< 6.1	< 9.7	< 1.7	< 1.8	< 1.8	< 0.4	< 0.4	< 0.4
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	< 0.62	< 0.62	13	**110**	13 J	< 1.9	< 2.0	< 2.0	< 0.28	< 0.28	< 0.28
Trichloroethene	2.0	4.0	1.1	< 0.72	< 0.72	< 0.72	**1,000**	**5,900**	**370**	< 2.4	< 2.4	< 2.4	< 0.4	< 0.4	< 0.4
Vinyl chloride	1.6	27	< 0.46	**2.6**	< 0.46	**19**	**310**	**4,100**	**260**	< 1.8	< 1.9	< 1.9	< 0.2	< 0.2	< 0.2

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Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-9 NA 2/15/2022	SL-9 NA 2/22/2022	SL-9 NA 3/1/2022	SL-9 NA 3/8/2022	SL-9 NA 3/15/2022	SL-9 NA 3/22/2022	SL-9 NA 3/31/2022	SL-9 NA 4/5/2022	SL-9 NA 4/12/2022	SL-9 NA 4/19/2022	SL-9 NA 4/26/2022	SL-10 NA 7/13/2021	SL-10 NA 10/7/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	33	< 11
1,4-Dioxane	5.1	24	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 6.8	< 8.2
cis-1,2-Dichloroethene	8.3	25	< 0.58	2.5	< 0.58	< 0.58	**9.7**	< 0.58	< 0.58	< 0.58	**18**	< 0.58	< 0.58	**6,900**	**1,800**
Tetrachloroethene	41	82	< 1	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	6.1	< 1.0	< 1.0	< 6.4	< 9.0
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	< 0.62	1.6	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	**91**	18 J
Trichloroethene	2.0	4.0	< 0.72	**3.2**	< 0.72	**2.1**	1.3	< 0.72	< 0.72	**2.1**	**4.3**	< 0.72	< 0.72	**5,400**	**570**
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	< 0.46	**25**	< 0.46	< 0.46	< 0.46	**25**	< 0.46	< 0.46	**3,400**	**360**

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Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-10 NA 11/2/2021	SL-10 NA 11/23/2021	SL-10 NA 12/16/2021	SL-10 NA 1/12/2022	SL-10 NA 1/19/2022	SL-10 NA 2/1/2022	SL-10 NA 2/16/2022	SL-10 NA 2/22/2022	SL-10 NA 3/2/2022	SL-10 NA 3/9/2022	SL-10 NA 3/16/2022	SL-10 NA 3/22/2022	SL-10 NA 3/31/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 2.2	< 2.2	< 2.4	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60 J
1,4-Dioxane	5.1	24	< 1.6	< 1.6	< 1.8	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60 J
cis-1,2-Dichloroethene	8.3	25	< 1.8	< 1.8	< 1.9	< 0.27	**11**	< 0.27	< 0.58	< 0.58	< 0.58	1.1	< 0.58	< 0.58	< 0.58 J
Tetrachloroethene	41	82	< 1.8	< 1.8	< 1.9	< 0.4	< 0.4	0.65 J	< 1	< 1	< 1	< 1	< 1.0	< 1.0	**51 J**
trans-1,2-Dichloroethene	83	250	< 2.0	< 2.0	< 2.2	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	0.98	< 0.62	< 0.62	< 0.62 J
Trichloroethene	2.0	4.0	< 2.4	< 2.5	< 2.6	< 0.4	0.92 J	< 0.4	< 0.72	0.73 J	< 0.72	1.4	< 0.72	< 0.72	< 0.72 J
Vinyl chloride	1.6	27	< 1.9	< 1.9	< 2.1	< 0.2	**14**	< 0.2	< 0.46	< 0.46	< 0.46	0.88	< 0.46	< 0.46	< 0.46 J

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Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-10 NA 4/5/2022	SL-10 NA 4/12/2022	SL-10 NA 4/19/2022	SL-10 NA 4/26/2022	SL-11 NA 7/13/2021	SL-11 NA 10/7/2021	SL-11 NA 11/2/2021	SL-11 NA 11/23/2021	SL-11 NA 12/16/2021	SL-11 NA 1/12/2022	SL-11 NA 1/19/2022	SL-11 NA 2/1/2022	SL-11 NA 2/16/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.60	0.95	< 0.60	< 0.60	< 1.1	< 4.5	< 2.1	< 2.2	< 2.2	< 0.31	< 0.31	< 0.31	< 0.6
1,4-Dioxane	5.1	24	< 0.60	< 0.60	< 0.60	< 0.60	1.3 J	< 3.3	< 1.6	< 1.6	< 1.6	< 0.49	< 0.49	< 0.49	< 0.6
cis-1,2-Dichloroethene	8.3	25	< 0.58	**71**	< 0.58	< 0.58	**32**	**2,100**	< 1.6	< 1.7	< 1.7	< 0.27	< 0.27	< 0.27	< 0.58
Tetrachloroethene	41	82	< 1.0	**47**	< 1.0	< 1.0	2.2 J	< 3.6	< 1.7	< 1.8	< 1.8	< 0.4	< 0.4	< 0.4	< 1
trans-1,2-Dichloroethene	83	250	< 0.62	2.2	< 0.62	< 0.62	< 0.90	24	< 1.9	< 2.0	< 2.0	< 0.28	< 0.28	< 0.28	< 0.62
Trichloroethene	2.0	4.0	1.4	**20**	< 0.72	< 0.72	**28**	**610**	< 2.3	< 2.4	< 2.4	< 0.4	< 0.4	< 0.4	< 0.72
Vinyl chloride	1.6	27	< 0.46	**140**	< 0.46	< 0.46	**19**	**390**	< 1.8	< 1.9	< 1.9	< 0.2	< 0.2	< 0.2	< 0.46

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Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-11 NA 2/22/2022	SL-11 NA 3/2/2022	SL-11 NA 3/9/2022	SL-11 NA 3/16/2022	SL-11 NA 3/21/2022	SL-11 NA 3/31/2022	SL-11 NA 4/5/2022	SL-11 NA 4/12/2022	SL-11 NA 4/19/2022	SL-11 NA 4/26/2022	SL-12 NA 7/13/2021	SL-12 NA 10/7/2021	SL-12 NA 11/2/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.6	33	< 4.4	< 2.1
1,4-Dioxane	5.1	24	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.6	< 4.0	< 3.3	< 1.6
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	0.75 J	< 0.58	< 0.58	**4,200**	**1,500**	**10**
Tetrachloroethene	41	82	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	1.2 J	< 1.0	< 1.0	< 3.7	< 3.6	< 1.7
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	81	18	< 1.9
Trichloroethene	2.0	4.0	0.73 J	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	1.1	< 0.72	**3,900**	**490**	**2.5 J**
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	1.5	< 0.46	< 0.46	**3,100**	**320**	**14**

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Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-12 NA 11/23/2021	SL-12 NA 12/10/2021	SL-12 NA 12/16/2021	SL-12 NA 1/13/2022	SL-12 NA 1/19/2022	SL-12 NA 2/1/2022	SL-12 NA 2/16/2022	SL-12 NA 2/22/2022	SL-12 NA 3/2/2022	SL-12 NA 3/9/2022	SL-12 NA 3/16/2022	SL-12 NA 3/22/2022	SL-12 NA 3/31/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 2.1	< 2.0	< 2.2	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60
1,4-Dioxane	5.1	24	< 1.6	< 1.5	< 1.6	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	8.3	25	3.0 J	< 1.6	2.5 J	2.9	0.73 J	2.8	**9.8**	7.4	**16**	**9.1**	**16**	**10**	**26**
Tetrachloroethene	41	82	< 1.7	< 1.6	2.0 J	0.71 J	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	83	250	< 1.9	< 1.8	< 2.0	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 2.4	< 2.2	< 2.5	0.43 J	< 0.4	< 0.4	< 0.72	**9.6**	< 0.72	< 0.72	< 0.72	< 0.72	**3.1**
Vinyl chloride	1.6	27	**2.3 J**	< 1.7	**4.4**	**4.5**	1.0	**2.9**	**8.3**	< 0.46	**14**	**7.1**	**11**	**11**	**52**

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Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-12 NA 4/5/2022	SL-12 NA 4/12/2022	SL-12 NA 4/19/2022	SL-12 NA 4/26/2022	SL-13 NA 7/13/2021	SL-13 NA 10/7/2021	SL-13 NA 11/2/2021	SL-13 NA 11/23/2021	SL-13 NA 12/16/2021	SL-13 NA 1/12/2022	SL-13 NA 1/19/2022	SL-13 NA 1/31/2022	SL-13 NA 2/15/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.60	< 0.60	< 0.60	< 0.60	< 1.2	< 22	< 2.1	< 2.2	< 2.2	< 0.31	< 0.31	< 0.31	< 0.6
1,4-Dioxane	5.1	24	< 0.60	< 0.60	< 0.60	< 0.60	2.9 J	< 16	< 1.6	< 1.6	< 1.6	< 0.49	< 0.49	< 0.49	< 0.6
cis-1,2-Dichloroethene	8.3	25	3.4	**66**	7.5	1.3	7.1	< 17	< 1.6	< 1.7	< 1.8	< 0.27	< 0.27	< 0.27	< 0.58
Tetrachloroethene	41	82	< 1.0	**46**	1.7	< 1.0	2.9 J	< 18	< 1.7	< 1.8	< 1.8	< 0.4	< 0.4	< 0.4	< 1
trans-1,2-Dichloroethene	83	250	< 0.62	1.4	< 0.62	< 0.62	< 0.94	< 20	< 1.9	< 2.0	< 2.0	< 0.28	< 0.28	< 0.28	< 0.62
Trichloroethene	2.0	4.0	< 0.72	**11**	**14**	< 0.72	**5.3 J**	< 24	< 2.3	< 2.4	< 2.5	< 0.4	< 0.4	< 0.4	< 0.72
Vinyl chloride	1.6	27	< 0.46	**110**	< 0.46	1.5	**3.1**	< 19	< 1.8	< 1.9	< 1.9	< 0.2	< 0.2	< 0.2	< 0.46

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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-13 NA 2/23/2022	SL-13 NA 3/1/2022	SL-13 NA 3/8/2022	SL-13 NA 3/15/2022	SL-13 NA 3/22/2022	SL-13 NA 3/31/2022	SL-13 NA 4/5/2022	SL-13 NA 4/12/2022	SL-13 NA 4/19/2022	SL-13 NA 4/26/2022	SL-14 NA 7/13/2021	SL-14 NA 10/7/2021	SL-14 NA 11/2/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 1.2	< 22	< 2.2
1,4-Dioxane	5.1	24	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	2.4 J	< 17	< 1.6
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	1.5 J	< 18	< 1.8
Tetrachloroethene	41	82	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.93	< 18	< 1.8
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	0.73 J	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.94	< 20	< 2.0
Trichloroethene	2.0	4.0	< 0.72	< 0.72	1.5	< 0.72	< 0.72	< 0.72	2.0	< 0.72	< 0.72	< 0.72	**4.0 J**	< 25	< 2.4
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	**9.1**	< 20	< 1.9

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Ford Livonia Transmission Plant
36200 Plymouth Road
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Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-14 NA 11/23/2021	SL-14 NA 12/16/2021	SL-14 NA 1/12/2022	SL-14 NA 1/19/2022	SL-14 NA 1/31/2022	SL-14 NA 2/15/2022	SL-14 NA 2/23/2022	SL-14 NA 3/1/2022	SL-14 NA 3/8/2022	SL-14 NA 3/15/2022	SL-14 NA 3/22/2022	SL-14 NA 3/31/2022	SL-14 NA 4/5/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 2.2	< 2.3	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60
1,4-Dioxane	5.1	24	< 1.7	< 1.7	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	8.3	25	< 1.8	2.5 J	< 0.27	< 0.27	< 0.27	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
Tetrachloroethene	41	82	< 1.8	< 1.9	< 0.4	< 0.4	0.41 J	< 1	< 1	< 1	< 1	< 1.0	< 1.0	1.7	< 1.0
trans-1,2-Dichloroethene	83	250	< 2.0	< 2.1	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	0.75 J	< 0.62	< 0.62	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 2.5	< 2.6	< 0.4	< 0.4	< 0.4	< 0.72	< 0.72	< 0.72	1 J	< 0.72	< 0.72	< 0.72	1.1
Vinyl chloride	1.6	27	< 1.9	**5.9**	< 0.2	< 0.2	< 0.2	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46

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Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-14 NA 4/12/2022	SL-14 NA 4/19/2022	SL-14 NA 4/26/2022	SL-15 NA 7/13/2021	SL-15 NA 10/7/2021	SL-15 NA 11/2/2021	SL-15 NA 11/23/2021	SL-15 NA 12/16/2021	SL-15 NA 1/12/2022	SL-15 NA 1/19/2022	SL-15 NA 1/31/2022	SL-15 NA 2/15/2022	SL-15 NA 2/23/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.60	< 0.60	< 0.60	< 1.2	< 9.3	< 2.1	< 2.1	< 2.3	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6
1,4-Dioxane	5.1	24	< 0.60	< 0.60	< 0.60	2.3 J	< 6.9	< 1.6	< 1.6	< 1.7	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58	< 0.58	< 1.4	< 7.4	< 1.7	< 1.7	< 1.8	< 0.27	< 0.27	< 0.27	< 0.58	< 0.58
Tetrachloroethene	41	82	< 1.0	< 1.0	< 1.0	< 0.93	< 7.6	< 1.7	< 1.7	< 1.8	< 0.4	< 0.4	< 0.4	< 1	< 1
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	< 0.62	< 0.94	< 8.3	< 1.9	< 1.9	< 2.0	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 0.72	< 0.72	< 0.72	1.9 J	< 10	< 2.4	< 2.4	< 2.5	< 0.4	< 0.4	< 0.4	< 0.72	< 0.72
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	**1.8 J**	< 8.1	< 1.8	< 1.8	< 2.0	< 0.2	< 0.2	< 0.2	< 0.46	< 0.46

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Ford Livonia Transmission Plant
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Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-15 NA 3/1/2022	SL-15 NA 3/8/2022	SL-15 NA 3/15/2022	SL-15 NA 3/22/2022	SL-15 NA 3/31/2022	SL-15 NA 4/5/2022	SL-15 NA 4/12/2022	SL-15 NA 4/19/2022	SL-15 NA 4/26/2022	SL-19 NA 11/23/2021	SL-19 NA 12/10/2021	SL-19 NA 12/16/2021	SL-19 NA 1/13/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 2.2	< 2.1	< 2.4	< 0.31
1,4-Dioxane	5.1	24	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 1.6	< 1.6	2.1 J	< 0.49
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58	< 0.58	< 0.58	0.62 J	< 0.58	< 0.58	< 0.58	< 0.58	< 1.7	< 1.7	< 1.9	< 0.27
Tetrachloroethene	41	82	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.8	< 1.7	< 1.9	< 0.4
trans-1,2-Dichloroethene	83	250	< 0.62	1.3	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 2.0	< 1.9	< 2.1	< 0.28
Trichloroethene	2.0	4.0	< 0.72	0.9 J	< 0.72	< 0.72	< 0.72	0.90 J	< 0.72	< 0.72	< 0.72	< 2.4	< 2.4	< 2.6	< 0.4
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	< 0.46	**2.7**	< 0.46	< 0.46	< 0.46	< 0.46	< 1.9	< 1.8	< 2.1	< 0.2

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Ford Livonia Transmission Plant
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Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-19 NA 1/19/2022	SL-19 NA 2/1/2022	SL-19 NA 2/16/2022	SL-19 NA 2/22/2022	SL-19 NA 3/2/2022	SL-19 NA 3/9/2022	SL-19 NA 3/16/2022	SL-19 NA 3/22/2022	SL-19 NA 3/31/2022	SL-19 NA 4/5/2022	SL-19 NA 4/12/2022	SL-19 NA 4/19/2022	SL-19 NA 4/26/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60
1,4-Dioxane	5.1	24	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60
cis-1,2-Dichloroethene	8.3	25	< 0.27	< 0.27	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
Tetrachloroethene	41	82	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1.0	< 1.0	1.9	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	83	250	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 0.4	< 0.4	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72
Vinyl chloride	1.6	27	< 0.2	< 0.2	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46

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Ford Livonia Transmission Plant
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Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-20 NA 11/23/2021	SL-20 NA 12/10/2021	SL-20 NA 12/14/2021	SL-20 NA 1/13/2022	SL-20 NA 1/18/2022	SL-20 NA 1/27/2022	SL-20 NA 2/1/2022	SL-20 NA 2/8/2022	SL-20 NA 2/15/2022	SL-20 NA 2/23/2022	SL-20 NA 2/28/2022	SL-20 NA 3/7/2022	SL-20 NA 3/14/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 2.0	< 2.2	< 2.3	< 0.31	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60
1,4-Dioxane	5.1	24	< 1.5	< 1.6	< 1.7	< 0.49	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60
cis-1,2-Dichloroethene	8.3	25	< 1.6	< 1.7	< 1.8	< 0.27	< 0.27	< 0.27	< 0.27	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
Tetrachloroethene	41	82	< 1.7	7.7	< 1.8	< 0.4	< 0.4	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1	< 1.0
trans-1,2-Dichloroethene	83	250	< 1.8	< 2.0	< 2.0	< 0.28	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 2.3	< 2.4	< 2.5	< 0.4	< 0.4	< 0.4	< 0.4	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72
Vinyl chloride	1.6	27	< 1.8	< 1.9	< 2.0	< 0.2	< 0.2	< 0.2	< 0.2	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: / Survey ID: / Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-20 NA 3/21/2022	SL-20 NA 3/29/2022	SL-20 NA 4/4/2022	SL-20 NA 4/11/2022	SL-20 NA 4/18/2022	SL-20 NA 4/25/2022	SL-21 NA 11/24/2021	SL-21 NA 12/10/2021	SL-21 NA 12/14/2021	SL-21 NA 1/14/2022	SL-21 NA 1/18/2022	SL-21 NA 1/27/2022	SL-21 NA 2/1/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 2.2	< 2.2	< 2.1	< 0.31	< 0.31	< 0.31	< 0.31
1,4-Dioxane	5.1	24	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 1.6	< 1.7	< 1.6	< 0.49	< 0.49	< 0.49	< 0.49
cis-1,2-Dichloroethene	8.3	25	**17**	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 1.7	< 1.8	< 1.7	< 0.27	< 0.27	< 0.27	< 0.27
Tetrachloroethene	41	82	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.8	< 1.8	< 1.7	< 0.4	< 0.4	< 0.4	< 0.4
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 1.9	< 2.0	< 1.9	< 0.28	< 0.28	< 0.28	< 0.28
Trichloroethene	2.0	4.0	1.2	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 2.4	< 2.5	< 2.4	< 0.4	< 0.4	0.49 J	< 0.4
Vinyl chloride	1.6	27	**13**	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 1.9	< 1.9	< 1.8	< 0.2	< 0.2	< 0.2	< 0.2

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-21 NA 2/8/2022	SL-21 NA 2/15/2022	SL-21 NA 2/23/2022	SL-21 NA 2/28/2022	SL-21 NA 3/7/2022	SL-21 NA 3/14/2022	SL-21 NA 3/21/2022	SL-21 NA 3/29/2022	SL-21 NA 4/4/2022	SL-21 NA 4/11/2022	SL-21 NA 4/18/2022	SL-21 NA 4/26/2022	SL-22 NA 11/23/2021
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 2.2
1,4-Dioxane	5.1	24	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 1.6
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	0.84	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 1.7
Tetrachloroethene	41	82	< 1	< 1	< 1	< 1	< 1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.8
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 1.9
Trichloroethene	2.0	4.0	< 0.72	**2.2**	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 2.4
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 1.9

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-22 NA 12/10/2021	SL-22 NA 12/14/2021	SL-22 NA 1/13/2022	SL-22 NA 1/18/2022	SL-22 NA 1/27/2022	SL-22 NA 2/1/2022	SL-22 NA 2/8/2022	SL-22 NA 2/16/2022	SL-22 NA 2/22/2022	SL-22 NA 2/28/2022	SL-22 NA 3/7/2022	SL-22 NA 3/14/2022	SL-22 NA 3/21/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 2.3	< 2.2	< 0.31	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60
1,4-Dioxane	5.1	24	< 1.7	2.4 J	< 0.49	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60	< 0.60
cis-1,2-Dichloroethene	8.3	25	< 1.8	< 1.7	< 0.27	< 0.27	< 0.27	< 0.27	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58
Tetrachloroethene	41	82	< 1.8	< 1.8	< 0.4	< 0.4	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1	< 1.0	< 1.0
trans-1,2-Dichloroethene	83	250	< 2.0	< 2.0	0.33 J	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 2.5	< 2.4	0.54 J	< 0.4	< 0.4	< 0.4	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72
Vinyl chloride	1.6	27	< 2.0	< 1.9	< 0.2	< 0.2	< 0.2	< 0.2	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-22 NA 3/29/2022	SL-22 NA 4/4/2022	SL-22 NA 4/11/2022	SL-22 NA 4/18/2022	SL-22 NA 4/25/2022	SL-23 NA 1/13/2022	SL-23 NA 1/19/2022	SL-23 NA 2/1/2022	SL-23 NA 2/16/2022	SL-23 NA 2/22/2022	SL-23 NA 3/2/2022	SL-23 NA 3/9/2022	SL-23 NA 3/16/2022
Volatile Organic Compounds (VOCs)															
1,1-Dichloroethene	210	610	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.31	< 0.31	< 0.31	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60
1,4-Dioxane	5.1	24	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.49	< 0.49	< 0.49	< 0.6	< 0.6	< 0.6	< 0.6	< 0.60
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58	< 0.58	< 0.58	< 0.58	< 0.27	< 0.27	< 0.27	< 0.58	1.8	< 0.58	< 0.58	< 0.58
Tetrachloroethene	41	82	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.54 J	< 0.4	< 0.4	< 1	< 1	< 1	< 1	< 1.0
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.28	< 0.28	< 0.28	< 0.62	< 0.62	< 0.62	0.97	< 0.62
Trichloroethene	2.0	4.0	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.4	< 0.4	< 0.4	< 0.72	1.4	< 0.72	1.4	< 0.72
Vinyl chloride	1.6	27	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46	< 0.2	< 0.2	< 0.2	< 0.46	< 0.46	< 0.46	< 0.46	< 0.46

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Location: Survey ID: Sample Date:	EGLE Residential SSVIAC	EGLE Nonresidential SSVIAC 12 hour exposure	SL-23 NA 3/22/2022	SL-23 NA 3/31/2022	SL-23 NA 4/5/2022	SL-23 NA 4/12/2022	SL-23 NA 4/19/2022	SL-23 NA 4/26/2022
Volatile Organic Compounds (VOCs)								
1,1-Dichloroethene	210	610	< 0.60	< 0.60 J	< 0.60	< 0.6	< 0.60	< 0.60
1,4-Dioxane	5.1	24	< 0.60	< 0.60 J	< 0.60	< 0.6	< 0.60	< 0.60
cis-1,2-Dichloroethene	8.3	25	< 0.58	< 0.58 J	**17**	**140**	< 0.58	< 0.58
Tetrachloroethene	41	82	< 1.0	< 1.0 J	< 1.0	**92**	< 1.0	< 1.0
trans-1,2-Dichloroethene	83	250	< 0.62	< 0.62 J	< 0.62	3.3	< 0.62	< 0.62
Trichloroethene	2.0	4.0	< 0.72	< 0.72 J	0.99 J	**28**	< 0.72	< 0.72
Vinyl chloride	1.6	27	< 0.46	< 0.46 J	< 0.46	**210**	< 0.46	< 0.46

See Notes on Last Page.

Table 4
Utility Corridor Off-site Stark Road Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road
Livonia, Michigan

Notes:

All results reported in µg/m^3.

Bolded	Result exceeds the EGLE unrestricted residential exposure.
Bold and shaded	Result exceeds the EGLE unrestricted residential exposure and the EGLE site-specific volatilization to indoor air criteria (SSVIAC) to evaluate vapor migration in preferential pathways developed for restricted nonresidential 12-hour workday exposure
<	Denotes not detected above reporting limit or method detection limit.

Abbreviations:

[ ]	duplicate sample result
µg/m^3	micrograms per cubic meter
EGLE	Michigan Department of Environment, Great Lakes, and Energy
ID	identification
J	estimated result
MH	manhole
NA	Not applicable
SAMH	sanitary manhole
STMH	storm manhole
SL	Sampling Location

Analytical Methods:

United States Environmental Protection Agency (USEPA) Method TO-15

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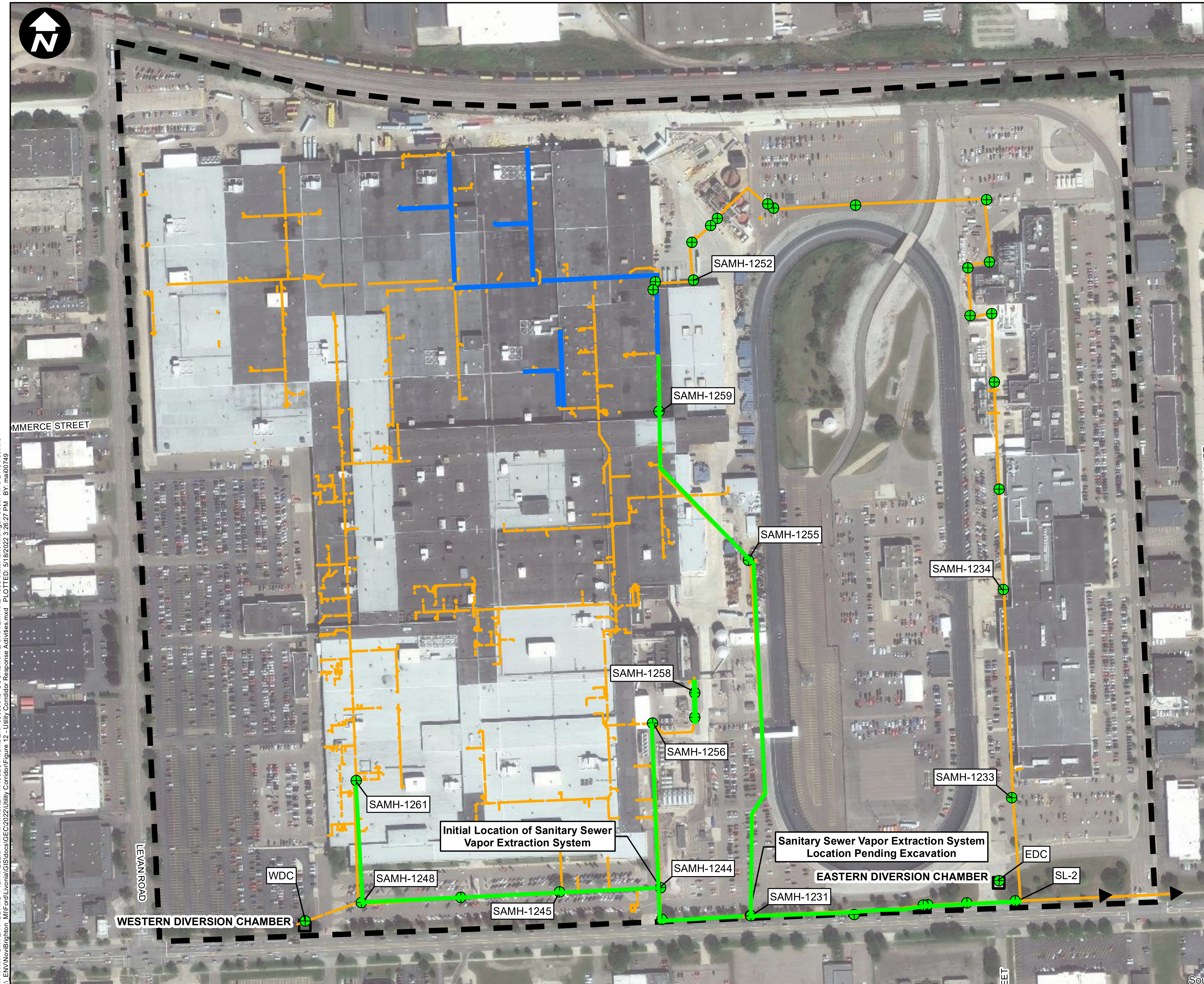
Figures



FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

UTILITY CORRIDOR RESPONSE ACTIVITIES

ARCADIS

FIGURE 1

CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
T:_ENV\NoviBrighton_MI\Ford\Livonia\GIS\docs\GEC\2022\Utility Corridor\Figure 12 - Utility Corridor Response Activities.mxd PLOTTED: 5/18/2022 3:26:27 PM BY: mai00749

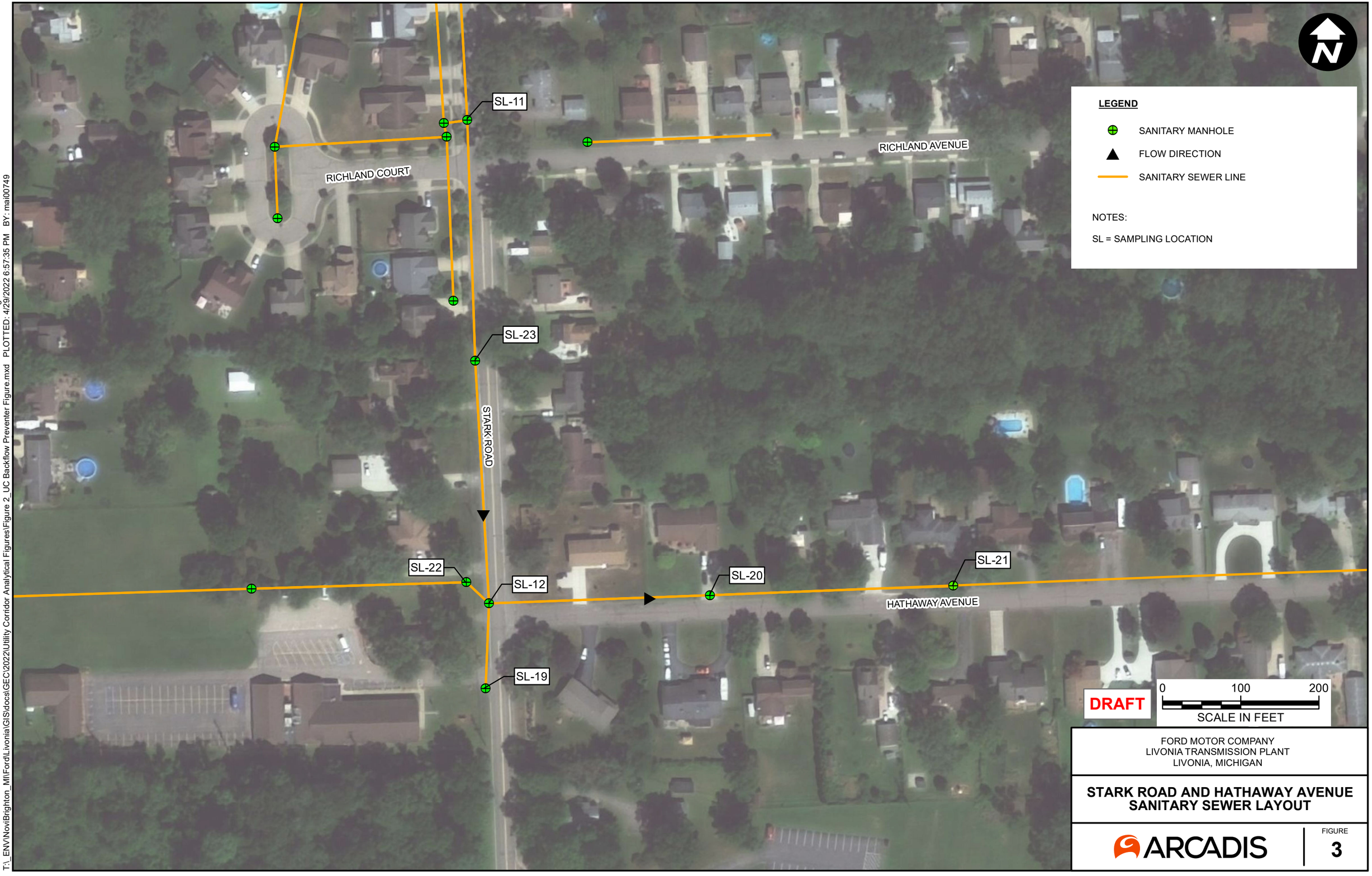
CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
T:_ENV\Novi\Brighton_MI\Ford\Livonia\GIS\docs\GEC\3Q_2021\Utility Corridor\EGLE_Report\Figure 2_On-site_and_Off-site_Sanitary_Sewer_Layout.mxd PLOTTED: 12/7/2021 5:29:41 PM BY: PSI01045

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

ON-SITE AND OFF-SITE SANITARY SEWER LAYOUT

ARCADIS

FIGURE
2



FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

STARK ROAD AND HATHAWAY AVENUE SANITARY SEWER LAYOUT

ARCADIS

FIGURE
3

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
T:_ENV\NoviBrighton_MI\Ford\Livonia\GIS\docs\GEC\2022\Utility Corridor Analytical Figures\Figure 2_UC Backflow Preventer Figure.mxd PLOTTED: 4/29/2022 6:57:35 PM BY: mai00749

LEGEND

- STORM CATCH BASIN
- SANITARY MANHOLE
- STORM MANHOLE
- STORM INLET
- SANITARY SEWER LINE
- STORM WATER LINE
- FORD PROPERTY BOUNDARY
- DOES NOT CONNECT TO PLYMOUTH/STARK SANITARY SEWER
- ? CONNECTION TO PLYMOUTH/STARK SANITARY SEWER HAS NOT BEEN VERIFIED

NOTE:
1. SEWER LINE CONNECTIONS WERE DETERMINED BASED ON VISUAL INSPECTION.

0 600 1,200
SCALE IN FEET

FORD LIVONIA TRANSMISSION PLANT

SANITARY AND STORM SEWER LINE CONNECTIONS

ARCADIS

FIGURE 4

CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30050315 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
T:_ENV\Novi\Brighton_MI\Ford\Livonia\GIS\docs\GEC\2022\Utility Corridor\Figure 9_Sanitary and Storm Sewer Lines Connection.mxd PLOTTED: 5/12/2022 2:49:52 PM BY: mai00749

NORTH **A**

SOUTH **A'**

Plymouth Road

Elmira Street

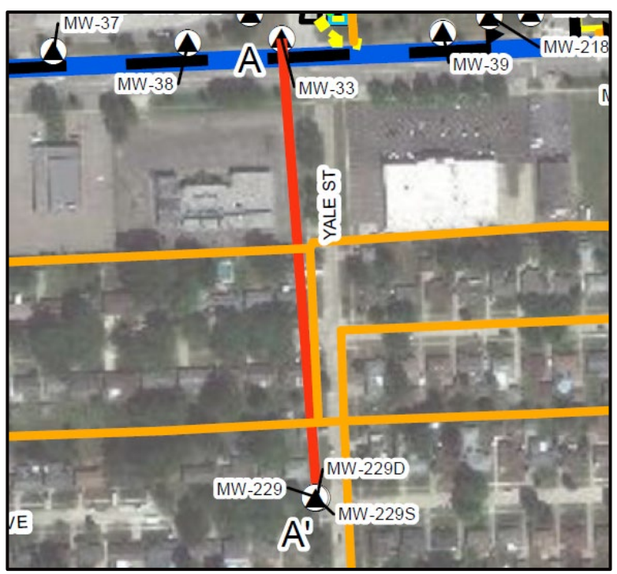
MW-33

MW-229S MW-229 MW-229D

675
670
665
660
655
650
645

Elevation (Feet Above Mean Sea Level)

Sanitary Sewer



NOTES:

1. Groundwater measurements collected between March 1, 2022 and May 3, 2022.
2. Well ground surface elevations based on survey data.
3. Subsurface utility dimensions are approximate.
4. Subsurface utility location and depth approximated based on City of Livonia drawings.

MW = Monitoring Well

Ground Surface

Boring

Approximate Water Table

Well Screen

5 (feet)

0 (feet) 65

FORD LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

UTILITY CORRIDOR CROSS SECTION A-A'

ARCADIS

FIGURE 5

5/16/2022 3:39:24 PM

NORTH
B

SOUTH
B'

Plymouth Road

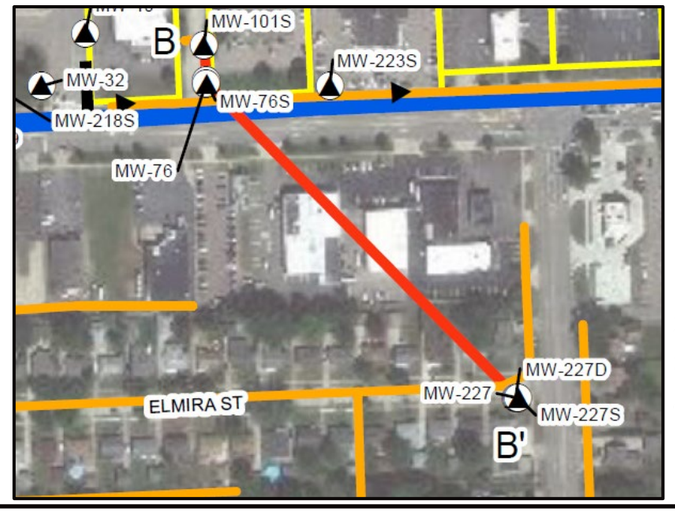
Elmira Street

MW-101S
MW-76
MW-76S
MW-227S
MW-227
MW-227D

675
670
665
660
655
650
645
640

Elevation (Feet Above Mean Sea Level)

Sanitary Sewer



NOTES:

1. Groundwater measurements collected between February 25, 2022 and May 3, 2022.
2. Well ground surface elevations based on survey data.
3. Subsurface utility dimensions are approximate.
4. Subsurface utility location and depth approximated based on City of Livonia drawings.

MW = Monitoring Well

Ground Surface

Boring

Approximate Water Table

Well Screen

5 (feet)

0 (feet) 60

FORD LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

UTILITY CORRIDOR CROSS SECTION B-B'

ARCADIS

FIGURE 6

5/16/2022 3:39:25 PM

SAMH-1231

Trichloroethene (µg/m^3)	
11/24/2021	9.3 [8.0]
12/10/2021	NS
12/14/2021	**18 [18]**
1/14/2022	**11**
1/20/2022	**11**
1/27/2022	**8**
2/1/2022	**16 [16]**
2/9/2022	**45 [44]**
2/18/2022	ND (< 0.72) [ND (< 0.72)]
2/24/2022	ND (< 0.72) [ND (< 0.72)]
3/2/2022	1.1 [0.88 J]
3/7/2022	1.5 [1.5]
3/14/2022	**7.1 [9.5]**
3/21/2022	ND (< 0.72) [ND (< 0.72)]
3/29/2022	ND (< 0.72) [1.2]
4/6/2022	1.1 [ND (< 0.72)]
4/11/2022	**45 [31]**
4/20/2022	0.86 J [ND (< 0.72)]
4/27/2022	ND (< 0.72) [ND (< 0.72)]
Vinyl Chloride (µg/m^3)	
11/24/2021	**460 [380]**
12/10/2021	NS
12/14/2021	**770 [690]**
1/14/2022	**520**
1/20/2022	**710**
1/27/2022	**550**
2/1/2022	**810 [810]**
2/9/2022	**2,300 [2,200]**
2/18/2022	4.7 [ND (< 0.46)]
2/24/2022	13 [ND (< 0.46)]
3/2/2022	**28 [65]**
3/7/2022	**39 [34]**
3/14/2022	**410 [470]**
3/21/2022	ND (< 0.46) [4.4]
3/29/2022	1.0 [16]
4/6/2022	ND (< 0.46) [17]
4/11/2022	**1,900 [1,300]**
4/20/2022	ND (< 0.46) [ND (< 0.46)]
4/27/2022	**30** [25]

SAMH-1256

Trichloroethene (µg/m^3)	
11/24/2021	NA
12/10/2021	NA
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	2.8
2/4/2022	ND (< 0.4)
2/7/2022	ND (< 0.72)
2/16/2022	**6.9**
2/22/2022	1.1
3/3/2022	ND (< 0.72)
3/7/2022	2.4
3/17/2022	3.8
3/23/2022	ND (< 0.72)
3/30/2022	1.7
4/7/2022	ND (< 0.72)
4/13/2022	2.2
4/21/2022	1.0 J
4/28/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/24/2021	NA
12/10/2021	NA
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	**160**
2/4/2022	ND (< 0.2)
2/7/2022	**86**
2/16/2022	**320**
2/22/2022	**210**
3/3/2022	**150**
3/7/2022	**250**
3/17/2022	**1,600**
3/23/2022	0.90
3/30/2022	ND (< 0.46)
4/7/2022	ND (< 0.46)
4/13/2022	0.49 J
4/21/2022	ND (< 0.46)
4/28/2022	ND (< 0.46)

SAMH-1231A

Trichloroethene (µg/m^3)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	**23**
2/4/2022	ND (< 0.4)
2/7/2022	ND (< 0.72)
2/16/2022	2.6
2/24/2022	ND (< 0.72)
3/3/2022	ND (< 0.72)
3/10/2022	ND (< 0.72)
3/17/2022	ND (< 0.72)
3/22/2022	1.8
3/30/2022	ND (< 0.72)
4/7/2022	ND (< 0.72)
4/13/2022	**110**
4/21/2022	0.82 J
4/27/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	**1,000**
2/4/2022	ND (< 0.2)
2/7/2022	0.88
2/16/2022	**91**
2/24/2022	15
3/3/2022	5.7
3/10/2022	21
3/17/2022	**30**
3/22/2022	**100**
3/30/2022	7.1
4/7/2022	12
4/13/2022	**3,900**
4/21/2022	20
4/27/2022	8.7

SAMH-1259

Trichloroethene (µg/m^3)	
11/24/2021	NA
12/10/2021	NA
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	**13**
2/4/2022	**29**
2/7/2022	**16**
2/16/2022	**21**
2/24/2022	**14**
3/3/2022	**7.4**
3/10/2022	**16**
3/16/2022	**78**
3/23/2022	**19**
3/30/2022	**72**
4/7/2022	**20**
4/13/2022	**47**
4/21/2022	**28**
4/28/2022	**96**
Vinyl Chloride (µg/m^3)	
11/24/2021	NA
12/10/2021	NA
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	**62**
2/4/2022	**830**
2/7/2022	**230**
2/16/2022	**100**
2/24/2022	**300**
3/3/2022	**160**
3/10/2022	**440**
3/16/2022	**5,800**
3/23/2022	**270**
3/30/2022	**3,200**
4/7/2022	**170**
4/13/2022	**74**
4/21/2022	**86**
4/28/2022	**350**

SAMH-1255

Trichloroethene (µg/m^3)	
11/24/2021	NA
12/10/2021	NA
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	**12**
2/4/2022	ND (< 0.4)
2/7/2022	4.0
2/16/2022	**4.5**
2/24/2022	ND (< 0.72)
3/3/2022	**6**
3/7/2022	2.3
3/17/2022	**9.2**
3/22/2022	ND (< 0.72)
3/30/2022	2.3
4/7/2022	**20**
4/13/2022	**54**
4/21/2022	**26**
4/27/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/24/2021	NA
12/10/2021	NA
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	**400**
2/4/2022	ND (< 0.2)
2/7/2022	**140**
2/16/2022	**120**
2/24/2022	27
3/3/2022	**500**
3/7/2022	**62**
3/17/2022	**820**
3/22/2022	13
3/30/2022	**250**
4/7/2022	**170**
4/13/2022	**1,100**
4/21/2022	**860**
4/27/2022	ND (< 0.46)

SL-6

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.4)
12/10/2021	NS
12/16/2021	ND (< 2.6)
1/12/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.72)
2/23/2022	ND (< 0.72)
3/1/2022	**2.5**
3/8/2022	1.1
3/15/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	1.5
4/12/2022	ND (< 0.72)
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 1.8)
12/10/2021	NS
12/16/2021	ND (< 2.0)
1/12/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.46)
2/23/2022	ND (< 0.46)
3/1/2022	**1.7**
3/8/2022	ND (< 0.46)
3/15/2022	1.3
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	ND (< 0.46)
4/12/2022	ND (< 0.46)
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-7

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.3)
12/10/2021	NS
12/16/2021	**2.6 J**
1/12/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2021	TRAFFIC
1/31/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.72)
2/23/2022	ND (< 0.72)
3/1/2022	ND (< 0.72)
3/8/2022	1.0 J
3/15/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	ND (< 0.72)
4/12/2022	ND (< 0.72)
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 1.8)
12/10/2021	NS
12/16/2021	ND (< 1.9)
1/12/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2021	TRAFFIC
1/31/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.46)
2/23/2022	ND (< 0.46)
3/1/2022	ND (< 0.46)
3/8/2022	ND (< 0.46)
3/15/2022	ND (< 0.46)
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	ND (< 0.46)
4/12/2022	ND (< 0.46)
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-13

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.4)
12/10/2021	NS
12/16/2021	ND (< 2.5)
1/12/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2021	TRAFFIC
1/31/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.72)
2/23/2022	ND (< 0.72)
3/1/2022	ND (< 0.72)
3/8/2022	1.5
3/15/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	2.0
4/12/2022	ND (< 0.72)
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 1.9)
12/10/2021	NS
12/16/2021	ND (< 1.9)
1/12/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2021	TRAFFIC
1/31/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.46)
2/23/2022	ND (< 0.46)
3/1/2022	ND (< 0.46)
3/8/2022	ND (< 0.46)
3/15/2022	ND (< 0.46)
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	ND (< 0.46)
4/12/2022	ND (< 0.46)
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-14

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.5)
12/10/2021	NS
12/16/2021	ND (< 2.6)
1/12/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2021	TRAFFIC
1/31/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.72)
2/23/2022	ND (< 0.72)
3/1/2022	ND (< 0.72)
3/8/2022	1.0 J
3/15/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	1.1
4/12/2022	ND (< 0.72)
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 1.9)
12/10/2021	NS
12/16/2021	**5.9**
1/12/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2021	TRAFFIC
1/31/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.46)
2/23/2022	ND (< 0.46)
3/1/2022	ND (< 0.46)
3/8/2022	ND (< 0.46)
3/15/2022	ND (< 0.46)
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	ND (< 0.46)
4/12/2022	ND (< 0.46)
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-15

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.4)
12/10/2021	NS
12/16/2021	ND (< 2.5)
1/12/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.72)
2/23/2022	ND (< 0.72)
3/1/2022	ND (< 0.72)
3/8/2022	0.9 J
3/15/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	0.90 J
4/12/2022	ND (< 0.72)
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 1.8)
12/10/2021	NS
12/16/2021	ND (< 2.0)
1/12/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.46)
2/23/2022	ND (< 0.46)
3/1/2022	ND (< 0.46)
3/8/2022	ND (< 0.46)
3/15/2022	ND (< 0.46)
3/22/2022	ND (< 0.46)
3/31/2022	**2.7**
4/5/2022	ND (< 0.46)
4/12/2022	ND (< 0.46)
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SAMH-1244

Trichloroethene (µg/m^3)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/14/2022	ND (< 0.4)
1/20/2022	NS
1/27/2022	**10 [7.8]**
2/1/2022	1.2
2/7/2022	ND (< 0.72)
2/16/2022	0.92 J
2/22/2022	**15**
3/3/2022	ND (< 0.72)
3/10/2022	ND (< 0.72)
3/17/2022	ND (< 0.72)
3/23/2022	**9.7**
3/30/2022	ND (< 0.72)
4/6/2022	ND (< 0.72)
4/13/2022	**13**
4/21/2022	3.1
4/28/2022	1.6
Vinyl Chloride (µg/m^3)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/14/2022	0.73
1/20/2022	NS
1/27/2022	**650 [610]**
2/1/2022	11
2/7/2022	3.2
2/16/2022	**39**
2/22/2022	**360**
3/3/2022	ND (< 0.46)
3/10/2022	ND (< 0.46)
3/17/2022	ND (< 0.46)
3/23/2022	**1,200**
3/30/2022	ND (< 0.46)
4/6/2022	ND (< 0.46)
4/13/2022	**200**
4/21/2022	**36**
4/28/2022	ND (< 0.46)

SL-8

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.5)
12/10/2021	NS
12/16/2021	ND (< 2.5)
1/12/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.72)
2/22/2022	1.3
3/1/2022	ND (< 0.72)
3/8/2022	1.3
3/15/2022	0.88 J
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	1.1
4/12/2022	ND (< 0.72)
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 2.0)
12/10/2021	NS
12/16/2021	ND (< 2.0)
1/12/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.46)
2/22/2022	1.5
3/1/2022	ND (< 0.46)
3/8/2022	ND (< 0.46)
3/15/2022	**10**
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	ND (< 0.46)
4/12/2022	**2.6**
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-9

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.4)
12/10/2021	NS
12/16/2021	ND (< 2.4)
1/13/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.72)
2/22/2022	**3.2**
3/1/2022	ND (< 0.72)
3/8/2022	**2.1**
3/15/2022	1.3
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	**2.1**
4/12/2022	**4.3**
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 1.9)
12/10/2021	NS
12/16/2021	ND (< 1.9)
1/13/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.46)
2/22/2022	ND (< 0.46)
3/1/2022	ND (< 0.46)
3/8/2022	ND (< 0.46)
3/15/2022	**25**
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	ND (< 0.46)
4/12/2022	**25**
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-2

Trichloroethene (µg/m^3)	
11/24/2021	ND (< 2.3)
12/10/2021	NS
12/14/2021	2.5 J
1/14/2022	ND (< 0.4)
1/20/2022	ND (< 0.4)
1/27/2022	ND (< 0.4)
2/1/2022	**190**
2/9/2022	ND (< 0.72)
2/18/2022	ND (< 0.72)
2/24/2022	ND (< 0.72)
3/2/2022	ND (< 0.72)
3/9/2022	ND (< 0.72)
3/14/2022	ND (< 0.72)
3/21/2022	**5.7**
3/29/2022	ND (< 0.72)
4/5/2022	ND (< 0.72)
4/11/2022	0.90 J
4/20/2022	1.0 J
4/27/2022	0.82 J
Vinyl Chloride (µg/m^3)	
11/24/2021	4.4
12/10/2021	NS
12/14/2021	**62**
1/14/2022	10
1/20/2022	4.0
1/27/2022	4.4
2/1/2022	12
2/9/2022	11
2/18/2022	2.7
2/24/2022	ND (< 0.46)
3/2/2022	0.91
3/9/2022	3.4
3/14/2022	9.5
3/21/2022	**250**
3/29/2022	5.7
4/5/2022	ND (< 0.46)
4/11/2022	1.8
4/20/2022	ND (< 0.46)
4/27/2022	ND (< 0.46)

SL-3

Trichloroethene (µg/m^3)	
11/24/2021	ND (< 2.3)
12/10/2021	ND (< 2.6)*
12/14/2021	**27**
1/14/2022	0.92 J
1/20/2022	ND (< 0.4)
1/27/2022	ND (< 0.4)
1/31/2022	ND (< 0.4)
2/8/2022	ND (< 0.72)
2/18/2022	ND (< 0.72)
2/21/2022	**17**
3/2/2022	2.1
3/7/2022	**18**
3/14/2022	ND (< 0.72 U)
3/21/2022	**31**
3/29/2022	ND (< 0.72)
4/6/2022	ND (< 0.72)
4/11/2022	ND (< 0.72)
4/20/2022	ND (< 0.72)
4/27/2022	1.1 J
Vinyl Chloride (µg/m^3)	
11/24/2021	ND (< 1.8)
12/10/2021	4.3*
12/14/2021	**480**
1/14/2022	**35**
1/20/2022	0.38 J
1/27/2022	2.7
1/31/2022	ND (< 0.2)
2/8/2022	2.2
2/18/2022	ND (< 0.46)
2/21/2022	**35**
3/2/2022	**76**
3/7/2022	**150**
3/14/2022	ND (< 0.46 U)
3/21/2022	**460**
3/29/2022	2.0
4/6/2022	ND (< 0.46)
4/11/2022	ND (< 0.46)
4/20/2022	ND (< 0.46)
4/27/2022	ND (< 0.46)

SL-16

Trichloroethene (µg/m^3)	
11/24/2021	**17**
12/10/2021	ND (< 2.4)*
12/14/2021	ND (< 2.3)
1/14/2022	ND (< 0.4)
1/20/2022	ND (< 0.4)
1/27/2022	1.9
1/31/2022	ND (< 0.4)
2/8/2022	ND (< 0.72)
2/18/2022	ND (< 0.72)
2/21/2022	**100**
3/2/2022	**4.6**
3/7/2022	**24**
3/14/2022	**8.3**
3/21/2022	ND (< 0.72)
3/28/2022	ND (< 0.72)
4/6/2022	ND (< 0.72)
4/11/2022	ND (< 0.72)
4/20/2022	ND (< 0.72)
4/27/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/24/2021	ND (< 1.8)
12/10/2021	6.5*
12/14/2021	2.9
1/14/2022	ND (< 0.2)
1/20/2022	ND (< 0.2)
1/27/2022	**35**
1/31/2022	ND (< 0.2)
2/8/2022	ND (< 0.46)
2/18/2022	ND (< 0.46)
2/21/2022	**330**
3/2/2022	**50**
3/7/2022	**260**
3/14/2022	**77**
3/21/2022	ND (< 0.46)
3/28/2022	ND (< 0.46)
4/6/2022	ND (< 0.46)
4/11/2022	5.5
4/20/2022	13
4/27/2022	ND (< 0.46)

SL-17

Trichloroethene (µg/m^3)	
11/24/2021	ND (< 2.3)
12/10/2021	3.9 J*
12/14/2021	ND (< 2.4)
1/12/2022	ND (< 0.4)
1/20/2022	ND (< 0.4)
1/27/2022	ND (< 0.4)
1/31/2022	ND (< 0.4)
2/8/2022	ND (< 0.72)
2/16/2022	ND (< 0.72)
2/21/2022	2.2
3/2/2022	**10**
3/7/2022	**22**
3/14/2022	ND (< 0.72 U)
3/21/2022	ND (< 0.72 U)
3/28/2022	ND (< 0.72)
4/6/2022	ND (< 0.72)
4/11/2022	**19**
4/20/2022	1.2
4/25/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/24/2021	ND (< 1.8)
12/10/2021	2.4 J*
12/14/2021	ND (< 1.8)
1/12/2022	ND (< 0.2)
1/20/2022	ND (< 0.2)
1/27/2022	1.3
1/31/2022	0.28 J
2/8/2022	0.71
2/16/2022	ND (< 0.46)
2/21/2022	8.1
3/2/2022	**120**
3/7/2022	**200**
3/14/2022	ND (< 0.46 U)
3/21/2022	ND (< 0.46 U)
3/28/2022	ND (< 0.46)
4/6/2022	ND (< 0.46)
4/11/2022	**280**
4/20/2022	ND (< 0.46)
4/25/2022	ND (< 0.46)

SL-18

Trichloroethene (µg/m^3)	
11/24/2021	ND (< 2.4)
12/10/2021	NS
12/14/2021	ND (< 2.3)
1/13/2022	ND (< 0.4)
1/18/2022	ND (< 0.4)
1/27/2022	ND (< 0.4)
1/31/2022	ND (< 0.4)
2/8/2022	ND (< 0.72)
2/16/2022	ND (< 0.72)
2/21/2022	3.8
2/28/2022	ND (< 0.72)
3/7/2022	**32**
3/14/2022	ND (< 0.72 U)
3/21/2022	ND (< 0.72)
3/28/2022	ND (< 0.72)
4/4/2022	0.84 J
4/11/2022	ND (< 0.72)
4/20/2022	ND (< 0.72)
4/26/2022	**8.1**
Vinyl Chloride (µg/m^3)	
11/24/2021	ND (< 1.9)
12/10/2021	NS
12/14/2021	ND (< 1.8)
1/13/2022	ND (< 0.2)
1/18/2022	ND (< 0.2)
1/27/2022	0.55
1/31/2022	ND (< 0.2)
2/8/2022	0.93
2/16/2022	ND (< 0.46)
2/21/2022	18
2/28/2022	ND (< 0.46)
3/7/2022	**350**
3/14/2022	2.9
3/21/2022	0.61
3/28/2022	ND (< 0.46)
4/4/2022	ND (< 0.46)
4/11/2022	0.62
4/20/2022	ND (< 0.46)
4/26/2022	**240**

SL-4

Trichloroethene (µg/m^3)	
11/24/2021	ND (< 2.4) [ND (< 2.3)]
12/10/2021	NS
12/14/2021	ND (< 2.4) [ND (< 2.2)]
1/13/2022	ND (< 0.4)
1/18/2022	ND (< 0.4)
1/27/2022	1.8
2/1/2022	1.3 [2.0]
2/8/2022	0.73 J [ND (< 0.62)]
2/16/2022	ND (< 0.72) [ND (< 0.72)]
2/21/2022	ND (< 0.72) [ND (< 0.72)]
2/28/2022	ND (< 0.72) [ND (< 0.72)]
3/7/2022	**13 [14]**
3/14/2022	ND (< 0.72 U) [ND (< 0.72 U)]
3/21/2022	ND (< 0.72) [ND (< 0.72)]
3/28/2022	ND (< 0.72) [ND (< 0.72)]
4/4/2022	ND (< 0.72) [ND (< 0.72)]
4/11/2022	ND (< 0.72) [ND (< 0.72)]
4/18/2022	ND (< 0.72) [ND (< 0.72)]
4/27/2022	ND (< 0.72) [ND (< 0.72)]
Vinyl Chloride (µg/m^3)	
11/24/2021	ND (< 1.9) [ND (< 1.8)]
12/10/2021	NS
12/14/2021	ND (< 1.8) [ND (< 1.8)]
1/13/2022	ND (< 0.2)
1/18/2022	ND (< 0.2)
1/27/2022	0.49 J
2/1/2022	10 [ND (< 0.2)]
2/8/2022	ND (< 0.46) [ND (< 0.46)]
2/16/2022	ND (< 0.46) [ND (< 0.46)]
2/21/2022	ND (< 0.46) [ND (< 0.46)]
2/28/2022	ND (< 0.46) [ND (< 0.46)]
3/7/2022	**150 [150]**
3/14/2022	ND (< 0.46 U) [ND (< 0.46 U)]
3/21/2022	ND (< 0.46) [ND (< 0.46)]
3/28/2022	ND (< 0.46) [ND (< 0.46)]
4/4/2022	ND (< 0.46) [ND (< 0.46)]
4/11/2022	ND (< 0.46) [ND (< 0.46)]
4/18/2022	ND (< 0.46) [ND (< 0.46)]
4/27/2022	ND (< 0.46) [ND (< 0.46)]

SL-5

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.4)
12/10/2021	NS
12/16/2021	ND (< 2.5)
1/12/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.72)
2/23/2022	ND (< 0.72)
3/1/2022	ND (< 0.72)
3/8/2022	**2.1**
3/15/2022	1.3
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	**2.5**
4/12/2022	**9.4**
4/19/2022	**96**
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 1.9)
12/10/2021	NS
12/16/2021	ND (< 2.0)
1/12/2022	1.0
1/19/2022	ND (< 0.2)
1/28/2022	TRAFFIC
1/31/2022	0.34 J
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.46)
2/23/2022	**3.7**
3/1/2022	**4.0**
3/8/2022	ND (< 0.46)
3/15/2022	**18**
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	**24**
4/12/2022	**75**
4/19/2022	**63**
4/26/2022	**19**

SL-10

Trichloroethene (µg/m^3)	
11/23/2021	ND (< 2.5)
12/10/2021	NS
12/16/2021	ND (< 2.6)
1/12/2022	ND (< 0.4)
1/19/2022	0.92 J
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.72)
2/22/2022	0.73 J
3/2/2022	ND (< 0.72)
3/9/2022	1.4
3/16/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72 J)
4/5/2022	1.4
4/12/2022	**20**
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m^3)	
11/23/2021	ND (< 1.9)
12/10/2021	NS
12/16/2021	ND (< 2.1)
1/12/2022	ND (< 0.2)
1/19/2022	**14**
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.46)
2/22/2022	ND (< 0.46)
3/2/2022	ND (< 0.46)
3/9/2022	0.88
3/16/2022	ND (< 0.46)
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46 J)
4/5/2022	ND (< 0.46)
4/12/2022	**140**
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

LEGEND

- SANITARY MANHOLE
- FLOW DIRECTION
- SANITARY SEWER LINE
- FORD PROPERTY BOUNDARY
- BLUE/BOLD TEXT — RESULT EXCEEDS THE EGLE SSVIAC

NOTES:

FIGURE SHOWS DATA FOR TRICHLOROETHENE AND VINYL CHLORIDE ONLY. FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

"ND (<0.4)", "<" - INDICATES THE VALUE IS BELOW THELABORATORY METHOD DETECTION LIMIT FOR THE ASSOCIATED SAMPLING EVENT

EGLE = DEPARTMENT OF ENVIRONMENT, GREAT LAKES & ENERGY

SSVIAC = SITE-SPECIFIC VOLATILIZATION TO INDOOR AIR CRITERIA

SAMH = SANITARY MANHOLE

SL = SAMPLING LOCATION

J = ESTIMATED RESULT

NA = NOT PART OF THE PROGRAM AT THE DATE

NS = NOT SAMPLED DUE TO WEATHER OR OTHER CONDITION

TRAFFIC = NOT SAMPLED BECAUSE TRAFFIC CONTROL WAS NOT AVAILABLE

µg/m^3 = MICROGRAMS PER CUBIC METER

[ ] = DUPLICATE SAMPLE RESULTS

* = SAMPLE COLLECTED FOLLOWING MANHOLE CLEANING

VAPOR RESULTS REPORTED IN µg/m^3. ANALYTICAL METHOD: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY TO-15.

ARESULTS FROM LOCATIONS ONSITE AND ALONG PLYMOUTH ROAD ARE COMPARED TO THE EGLE RESTRICTED NONRESIDENTIAL SSVIAC 12-HOUR WORKDAY EXPOSURE FOR TRICHLOROETHENE OF 4.0 µg/m^3 AND FOR VINYL CHLORIDE OF 27 µg/m^3. RESULTS FROM LOCATIONS ALONG STARK ROAD (INCLUDING SL-5) ARE COMPARED TO BOTH EGLE RESTRICTED NONRESIDENTIAL SSVIAC AND THE EGLE UNRESTRICTED RESIDENTIAL SSVIAC FOR TRICHLOROETHENE OF 2.0 µg/m^3 AND VINYL CHLORIDE OF 1.6 µg/m^3.

DRAFT

0 230 460
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

ONSITE AND OFFSITE VAPOR RESULTS TRICHLOROETHENE AND VINYL CHLORIDE

ARCADIS

FIGURE
7

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl PLOTTED: 5/12/2022 12:04:05 PM BY: mai00749
T:_ENV\Novi\Brighton_MI\Ford\Livonia\GIS\docs\GEC\2022\Utility Corridor Analytical Results Figures\EGLE_Report\Figure 1_202205_On-site_and_Off-site_Vapor_Results_V13.mxd

SAMH-1231	
Trichloroethene (µg/L)	
11/24/2021	ND (< 0.44) [ND (< 0.44)]
12/10/2021	NS
12/14/2021	ND (< 0.44) [0.55 J]
1/14/2022	ND (< 0.44)
1/20/2022	ND (< 0.44)
1/27/2022	NS
2/1/2022	ND (< 0.44) [ND (< 0.44)]
2/9/2022	0.64 J [0.80 J]
2/18/2022	ND (< 0.44) [ND (< 0.44)]
2/24/2022	ND (< 0.44) [ND (< 0.44)]
3/2/2022	ND (< 0.44) [ND (< 0.44)]
3/9/2022	ND (< 0.44) [ND (< 0.44)]
3/14/2022	ND (< 0.44) [ND (< 0.44)]
3/21/2022	ND (< 0.44) [ND (< 0.44)]
3/29/2022	ND (< 0.44) [ND (< 0.44)]
4/6/2022	ND (< 0.44) [ND (< 0.44)]
4/11/2022	ND (< 0.44) [ND (< 0.44)]
4/20/2022	ND (< 0.44) [ND (< 0.44)]
4/27/2022	ND (< 0.44) [ND (< 0.44)]
Vinyl Chloride (µg/L)	
11/24/2021	0.89 J [1.3]
12/10/2021	NS
12/14/2021	14 J [23 J]
1/14/2022	9.3
1/20/2022	13
1/27/2022	NS
2/1/2022	5.6 [6.4]
2/9/2022	33 [33]
2/18/2022	1.8 [2.1]
2/24/2022	1.0 [1.7]
3/2/2022	21 [22]
3/9/2022	9.6 [6.1]
3/14/2022	16 [18]
3/21/2022	14 [18]
3/29/2022	13 [14]
4/6/2022	19 [19]
4/11/2022	3.2 [7.0]
4/20/2022	18 [12]
4/27/2022	19 [4.3]

SAMH-1256	
Trichloroethene (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	NS
2/4/2022	ND (< 0.44)
2/7/2022	ND (< 0.44)
2/16/2022	ND (< 0.44)
2/22/2022	ND (< 0.44)
3/3/2022	ND (< 0.44)
3/10/2022	ND (< 0.44)
3/17/2022	ND (< 0.44)
3/23/2022	ND (< 0.44)
3/30/2022	ND (< 0.44)
4/7/2022	ND (< 0.44)
4/13/2022	ND (< 0.44)
4/21/2022	ND (< 0.44)
4/28/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	NS
2/4/2022	ND (< 0.45)
2/7/2022	1.0
2/16/2022	0.85 J
2/22/2022	ND (< 0.45)
3/3/2022	7.8
3/10/2022	22
3/17/2022	18
3/23/2022	ND (< 0.45)
3/30/2022	ND (< 0.45)
4/7/2022	ND (< 0.45)
4/13/2022	ND (< 0.45)
4/21/2022	ND (< 0.45)
4/28/2022	0.94 J

SAMH-1231A	
Trichloroethene (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	NS
2/4/2022	0.53 J
2/7/2022	1.0
2/16/2022	ND (< 0.44)
2/22/2022	2.4
3/3/2022	ND (< 0.44)
3/10/2022	0.45 J
3/17/2022	ND (< 0.88)
3/22/2022	ND (< 0.88)
3/30/2022	1.2 J
4/7/2022	ND (< 0.88)
4/13/2022	1.1 J
4/21/2022	ND (< 0.88)
4/27/2022	0.95 J
Vinyl Chloride (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	NS
2/4/2022	39
2/7/2022	75
2/16/2022	19
2/22/2022	40
3/3/2022	26
3/10/2022	18
3/17/2022	57
3/22/2022	42
3/30/2022	65
4/7/2022	36
4/13/2022	59
4/21/2022	19
4/27/2022	63

SAMH-1259	
Trichloroethene (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	NS
2/4/2022	1.6
2/7/2022	1.5
2/16/2022	0.84 J
2/24/2022	1.7
3/3/2022	1.4
3/10/2022	0.99 J
3/16/2022	1.4
3/23/2022	1.2
3/30/2022	1.9
4/7/2022	1.6
4/13/2022	3.1
4/21/2022	2.1
4/28/2022	3.6
Vinyl Chloride (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	NS
2/4/2022	3.7
2/7/2022	2.7
2/16/2022	1.6
2/24/2022	3.5
3/3/2022	2.6
3/10/2022	1.9
3/16/2022	2.9
3/23/2022	2.6
3/30/2022	6.5
4/7/2022	3.9
4/13/2022	7.4
4/21/2022	3.2
4/28/2022	6.1

SAMH-1255	
Trichloroethene (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	NS
2/4/2022	1.0
2/7/2022	1.2
2/16/2022	0.46 J
2/24/2022	1.2
3/3/2022	1.3
3/10/2022	0.87 J
3/17/2022	ND (< 0.88)
3/22/2022	ND (< 0.88)
3/30/2022	1.2 J
4/7/2022	ND (< 0.88)
4/13/2022	1.2 J
4/21/2022	ND (< 0.88)
4/27/2022	1.1 J
Vinyl Chloride (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	NA
1/20/2022	NA
1/27/2022	NS
2/4/2022	100
2/7/2022	92
2/16/2022	61
2/24/2022	68
3/3/2022	80
3/10/2022	69
3/17/2022	60
3/22/2022	63
3/30/2022	84
4/7/2022	84
4/13/2022	110
4/21/2022	33
4/27/2022	93

SL-6	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
3/1/2022	ND (< 0.44)
3/8/2022	ND (< 0.44)
3/15/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	ND (< 0.44)
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	ND (< 0.45)
12/10/2021	NS
12/16/2021	ND (< 0.45)
1/12/2022	ND (< 0.45)
1/19/2022	ND (< 0.45)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.45)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.45)
2/23/2022	ND (< 0.45)
3/1/2022	ND (< 0.45)
3/8/2022	ND (< 0.45)
3/15/2022	ND (< 0.45)
3/22/2022	ND (< 0.45)
3/31/2022	ND (< 0.45)
4/5/2022	ND (< 0.45)
4/12/2022	ND (< 0.45)
4/19/2022	ND (< 0.45)
4/26/2022	ND (< 0.45)

SL-7	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.88)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
3/1/2022	ND (< 0.44)
3/8/2022	ND (< 0.44)
3/15/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	ND (< 0.44)
4/27/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	ND (< 0.90)
12/10/2021	NS
12/16/2021	ND (< 0.45)
1/12/2022	ND (< 0.45)
1/19/2022	ND (< 0.45)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.45)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.45)
2/23/2022	ND (< 0.45)
3/1/2022	ND (< 0.45)
3/8/2022	ND (< 0.45)
3/15/2022	ND (< 0.45)
3/22/2022	ND (< 0.45)
3/31/2022	ND (< 0.45)
4/5/2022	ND (< 0.45)
4/12/2022	ND (< 0.45)
4/19/2022	ND (< 0.45)
4/27/2022	ND (< 0.45)

SL-13	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
3/1/2022	ND (< 0.44)
3/8/2022	ND (< 0.44)
3/15/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	ND (< 0.44)
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	ND (< 0.45)
12/10/2021	NS
12/16/2021	0.49 J
1/12/2022	ND (< 0.45)
1/19/2022	ND (< 0.45)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.45)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.45)
2/23/2022	ND (< 0.45)
3/1/2022	ND (< 0.45)
3/8/2022	ND (< 0.45)
3/15/2022	ND (< 0.45)
3/22/2022	ND (< 0.45)
3/31/2022	ND (< 0.45)
4/5/2022	ND (< 0.45)
4/19/2022	ND (< 0.45)
4/26/2022	ND (< 0.45)

SL-14	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
3/1/2022	ND (< 0.44)
3/8/2022	ND (< 0.44)
3/15/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	ND (< 0.44)
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	ND (< 0.45)
12/10/2021	NS
12/16/2021	ND (< 0.45)
1/12/2022	ND (< 0.45)
1/19/2022	ND (< 0.45)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.45)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.45)
2/23/2022	ND (< 0.45)
3/1/2022	ND (< 0.45)
3/8/2022	ND (< 0.45)
3/15/2022	ND (< 0.45)
3/22/2022	ND (< 0.45)
3/31/2022	ND (< 0.45)
4/5/2022	ND (< 0.45)
4/12/2022	ND (< 0.45)
4/19/2022	ND (< 0.45)
4/26/2022	ND (< 0.45)

SL-15	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
3/1/2022	ND (< 0.44)
3/8/2022	ND (< 0.44)
3/15/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/30/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	ND (< 0.44)
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	ND (< 0.45)
12/10/2021	NS
12/16/2021	ND (< 0.45)
1/12/2022	ND (< 0.45)
1/19/2022	ND (< 0.45)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.45)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.45)
2/23/2022	ND (< 0.45)
3/1/2022	ND (< 0.45)
3/8/2022	ND (< 0.45)
3/15/2022	ND (< 0.45)
3/22/2022	ND (< 0.45)
3/30/2022	ND (< 0.45)
4/5/2022	ND (< 0.45)
4/12/2022	ND (< 0.45)
4/19/2022	ND (< 0.45)
4/26/2022	ND (< 0.45)

SAMH-1244	
Trichloroethene (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/20/2022	NA
1/27/2022	NA
1/14/2022	0.69 J
2/1/2022	ND (< 0.44)
2/7/2022	ND (< 0.44)
2/16/2022	ND (< 0.44)
2/22/2022	ND (< 0.44)
3/3/2022	ND (< 0.44)
3/10/2022	ND (< 0.44)
3/17/2022	ND (< 0.44)
3/23/2022	ND (< 0.44)
3/30/2022	ND (< 0.44 J)
4/6/2022	ND (< 0.44)
4/13/2022	ND (< 0.44)
4/21/2022	ND (< 0.44)
4/28/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/20/2022	NA
1/27/2022	NA
1/14/2022	3.6
2/1/2022	ND (< 0.45)
2/7/2022	1.7
2/16/2022	ND (< 0.45)
2/22/2022	0.53 J
3/3/2022	1.4
3/10/2022	6.8
3/17/2022	8.2
3/23/2022	26
3/30/2022	11 J
4/6/2022	2.8
4/13/2022	0.48 J
4/21/2022	0.66 J
4/28/2022	5.3

SL-8	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.44)
2/22/2022	2.3
3/1/2022	ND (< 0.44)
3/8/2022	ND (< 0.88)
3/15/2022	ND (< 0.88)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	3.9
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	2.3
12/10/2021	NS
12/16/2021	1.8
1/12/2022	2.1
1/19/2022	2.2
1/28/2022	TRAFFIC
2/1/2022	3.8
2/9/2022	TRAFFIC
2/15/2022	2.2 J
2/22/2022	2.1
3/1/2022	2.2
3/8/2022	1.2 J
3/15/2022	0.90 J
3/22/2022	2.2
3/31/2022	1.8
4/5/2022	1.9
4/12/2022	3.5
4/19/2022	0.98 J
4/26/2022	1.1

SL-9	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.44)
2/22/2022	4.5
3/1/2022	ND (< 0.44)
3/8/2022	ND (< 0.88)
3/15/2022	ND (< 0.88)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	4.0
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	2.8
12/10/2021	NS
12/16/2021	2.5
1/12/2022	1.6
1/19/2022	2.5
1/28/2022	TRAFFIC
2/1/2022	2.3
2/9/2022	TRAFFIC
2/15/2022	3.2
2/22/2022	1.1
3/1/2022	1.9
3/8/2022	1.4 J
3/15/2022	0.94 J
3/22/2022	1.1
3/31/2022	2.1
4/5/2022	1.2
4/12/2022	2.5
4/19/2022	1.1
4/26/2022	2.2

SL-2	
Trichloroethene (µg/L)	
11/24/2021	ND (< 0.44)
12/10/2021	NS
12/14/2021	ND (< 0.44)
1/14/2022	ND (< 0.44)
1/20/2022	ND (< 0.44)
1/27/2022	NS
2/1/2022	27
2/9/2022	ND (< 0.44)
2/18/2022	ND (< 0.44)
2/24/2022	ND (< 0.44)
3/2/2022	ND (< 0.44)
3/9/2022	ND (< 0.44)
3/14/2022	ND (< 0.44)
3/21/2022	ND (< 0.44)
3/29/2022	ND (< 0.44)
4/6/2022	ND (< 0.44)
4/11/2022	ND (< 0.44)
4/20/2022	ND (< 0.44)
4/27/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/24/2021	2.8
12/10/2021	NS
12/14/2021	3.9
1/14/2022	6.0
1/20/2022	5.1
1/27/2022	NS
2/1/2022	2.1
2/9/2022	7.5
2/18/2022	5.3
2/24/2022	3.5
3/2/2022	1.9
3/9/2022	2.5
3/14/2022	5.6
3/21/2022	6.0
3/29/2022	6.1
4/6/2022	7.6
4/11/2022	8.7
4/20/2022	2.7
4/27/2022	1.8

SL-3	
Trichloroethene (µg/L)	
11/24/2021	ND (< 0.44)
12/10/2021	ND (< 0.44)*
12/14/2021	ND (< 0.44)
1/14/2022	2.5
1/20/2022	ND (< 0.44)
1/27/2022	NS
1/31/2022	ND (< 0.44)
2/8/2022	ND (< 0.44)
2/18/2022	1.9
2/21/2022	5.7
3/2/2022	ND (< 0.44)
3/7/2022	ND (< 0.88)
3/14/2022	ND (< 0.88)
3/21/2022	ND (< 0.44)
3/29/2022	ND (< 0.44)
4/6/2022	2.0
4/11/2022	ND (< 0.44)
4/20/2022	0.60 J
4/27/2022	1.5
Vinyl Chloride (µg/L)	
11/24/2021	2.3
12/10/2021	11*
12/14/2021	4.5
1/14/2022	ND (< 0.45)
1/20/2022	7.0
1/27/2022	NS
1/31/2022	12
2/8/2022	7.0
2/18/2022	3.7
2/21/2022	1.6
3/2/2022	0.94 J
3/7/2022	ND (< 0.90)
3/14/2022	5.5
3/21/2022	8.1
3/29/2022	11
4/6/2022	7.3
4/11/2022	5.2
4/20/2022	6.3
4/27/2022	0.49 J

SL-16	
Trichloroethene (µg/L)	
11/24/2021	ND (< 0.44)
12/10/2021	ND (< 0.44)*
12/14/2021	ND (< 0.44)
1/14/2022	ND (< 0.44)
1/20/2022	ND (< 0.44)
1/27/2022	NS
1/31/2022	ND (< 0.44)
2/8/2022	ND (< 0.44)
2/18/2022	2.5
2/21/2022	5.3
3/2/2022	ND (< 0.44)
3/7/2022	0.86 J
3/14/2022	ND (< 0.44)
3/21/2022	1.8
3/28/2022	0.86 J
4/6/2022	ND (< 0.44)
4/11/2022	ND (< 0.44)
4/20/2022	ND (< 0.44)
4/27/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/24/2021	2.1
12/10/2021	8.3*
12/14/2021	3.5
1/14/2022	4.9
1/20/2022	5.0
1/27/2022	NS
1/31/2022	4.1
2/8/2022	6.9
2/18/2022	1.3
2/21/2022	3.3
3/2/2022	1.1
3/7/2022	1.0
3/14/2022	6.5
3/21/2022	4.7
3/28/2022	6.8
4/6/2022	7.1
4/11/2022	8.1
4/20/2022	5.7
4/27/2022	8.0

SL-17	
Trichloroethene (µg/L)	
11/24/2021	ND (< 0.44)
12/10/2021	ND (< 0.44)*
12/14/2021	ND (< 0.44)
1/13/2022	ND (< 0.44)
1/20/2022	ND (< 0.44)
1/27/2022	NS
1/31/2022	1.0
2/8/2022	ND (< 0.44)
2/16/2022	ND (< 0.44)
2/21/2022	4.6
3/2/2022	ND (< 0.44)
3/7/2022	ND (< 0.88)
3/14/2022	ND (< 0.88)
3/21/2022	0.64 J
3/28/2022	0.46 J
4/6/2022	ND (< 0.44)
4/11/2022	ND (< 0.44)
4/20/2022	0.79 J
4/25/2022	2.2
Vinyl Chloride (µg/L)	
11/24/2021	12
12/10/2021	7.1*
12/14/2021	5.7
1/13/2022	3.8
1/20/2022	5.9
1/27/2022	NS
1/31/2022	3.4
2/8/2022	5.5
2/16/2022	6.2
2/21/2022	0.51 J
3/2/2022	ND (< 0.45)
3/7/2022	ND (< 0.90)
3/14/2022	5.6
3/21/2022	6.2
3/28/2022	5.3
4/6/2022	5.9
4/11/2022	6.1
4/20/2022	2.6
4/25/2022	1.8

SL-18	
Trichloroethene (µg/L)	
11/24/2021	ND (< 0.44)
12/10/2021	NS
12/14/2021	ND (< 0.44)
1/13/2022	ND (< 0.44)
1/18/2022	ND (< 0.44)
1/27/2022	NS
1/31/2022	ND (< 0.44)
2/8/2022	0.44 J
2/16/2022	ND (< 0.44)
2/21/2022	4.0
2/28/2022	1.4
3/7/2022	1.0
3/14/2022	ND (< 0.44)
3/21/2022	ND (< 0.44)
3/28/2022	ND (< 0.44)
4/4/2022	15
4/11/2022	ND (< 0.44)
4/20/2022	ND (< 0.44)
4/25/2022	1.3
Vinyl Chloride (µg/L)	
11/24/2021	1.9
12/10/2021	NS
12/14/2021	4.0
1/13/2022	5.1
1/18/2022	5.3
1/27/2022	NS
1/31/2022	7.5
2/8/2022	4.2
2/16/2022	6.3
2/21/2022	0.73 J
2/28/2022	1.9
3/7/2022	0.94 J
3/14/2022	4.2
3/21/2022	4.7
3/28/2022	5.1
4/4/2022	2.0
4/11/2022	4.0
4/20/2022	4.0
4/25/2022	2.0

SL-4	
Trichloroethene (µg/L)	
11/24/2021	ND (< 0.44) [0.54 J]
12/10/2021	NS
12/14/2021	ND (< 0.44) [ND (< 0.44)]
1/13/2022	ND (< 0.44)
1/18/2022	ND (< 0.44)
1/27/2022	NS
2/1/2022	ND (< 0.44) [0.48 J]
2/8/2022	0.70 J [0.76 J]
2/16/2022	ND (< 0.44) [ND (< 0.44)]
2/21/2022	1.2 [1.2]
2/28/2022	ND (< 0.44) [ND (< 0.44)]
3/7/2022	0.68 J [0.47 J]
3/14/2022	ND (< 0.88) [0.48 J]
3/21/2022	ND (< 0.44) [ND (< 0.44)]
3/28/2022	0.79 J [ND (< 0.44)]
4/4/2022	8.4 [8.2]
4/11/2022	4.3 [2.0]
4/18/2022	ND (< 0.44) [ND (< 0.44)]
4/27/2022	ND (< 0.44) [ND (< 0.44)]
Vinyl Chloride (µg/L)	
11/24/2021	2.9 [ND (< 0.45)]
12/10/2021	NS
12/14/2021	4.0 [2.9]
1/13/2022	3.1
1/18/2022	4.5
1/27/2022	NS
2/1/2022	4.3 [4.9]
2/8/2022	2.3 [3.0]
2/16/2022	6.6 J [7.4 J]
2/21/2022	3.0 [4.2]
2/28/2022	4.2 [6.0]
3/7/2022	1.6 [2.8]
3/14/2022	3.5 [3.2]
3/21/2022	6.4 [7.1]
3/28/2022	3.0 [4.5]
4/4/2022	1.7 [1.6]
4/11/2022	3.3 [3.8]
4/18/2022	3.7 [3.9]
4/27/2022	1.5 [1.1]

SL-5	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
1/31/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/15/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
3/1/2022	ND (< 0.44)
3/8/2022	ND (< 0.88)
3/15/2022	ND (< 0.88)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	3.9
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	1.5
12/10/2021	NS
12/16/2021	1.7
1/12/2022	1.4
1/19/2022	1.9
1/28/2022	TRAFFIC
1/31/2022	1.7
2/9/2022	TRAFFIC
2/15/2022	2.1
2/23/2022	2.7
3/1/2022	1.9
3/8/2022	ND (< 0.90)
3/15/2022	1.6 J
3/22/2022	3.3
3/31/2022	2.9
4/5/2022	2.3
4/12/2022	3.2
4/19/2022	0.90 J
4/26/2022	2.6

SL-10	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	0.49 J
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.44)
2/22/2022	4.2
3/1/2022	ND (< 0.44)
3/9/2022	0.66 J
3/16/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	3.5
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	2.3
12/10/2021	NS
12/16/2021	2.3
1/12/2022	1.0
1/19/2022	1.4
1/28/2022	TRAFFIC
2/1/2022	1.6
2/9/2022	TRAFFIC
2/16/2022	2.8 J
2/22/2022	1.5
3/1/2022	4.0
3/9/2022	1.1
3/16/2022	2.6
3/22/2022	1.6
3/31/2022	1.9
4/5/2022	1.2
4/12/2022	3.1
4/19/2022	1.1
4/26/2022	1.4

LEGEND

- SANITARY MANHOLE
- FLOW DIRECTION
- SANITARY SEWER LINE
- FORD PROPERTY BOUNDARY

NOTES:

FIGURE SHOWS DATA FOR TRICHLOROETHENE AND VINYL CHLORIDE ONLY.FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

"ND (<0.4)", "<" - INDICATES THE VALUE IS BELOW THE LABORATORY METHOD DETECTION LIMIT FOR THE ASSOCIATED SAMPLING EVENT

EGLE = DEPARTMENT OF ENVIRONMENT, GREAT LAKES & ENERGY

SAMH = SANITARY MANHOLE

SL = SAMPLING LOCATION

J = ESTIMATED RESULT

NA = NOT PART OF THE PROGRAM AT THE DATE

NS = NOT SAMPLED DUE TO WEATHER OR OTHER CONDITION

TRAFFIC = NOT SAMPLED BEACUSE TRAFFIC CONTROL WAS NOT AVAILABLE

µg/L = MICROGRAMS PER LITER

[ ] = DUPLICATE SAMPLE RESULTS

* = SAMPLE COLLECTED FOLLOWING MANHOLE CLEANING

LIQUID RESULTS REPORTED IN µg/L. ANALYTICAL METHOD: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 8260B FOR VOLATILE ORGANIC COMPOUNDS.

DRAFT

0 230 460
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

ONSITE AND OFFSITE LIQUID RESULTS TRICHLOROETHENE AND VINYL CHLORIDE

ARCADIS

FIGURE 8

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl PLOTTED: 5/11/2022 3:35:29 PM BY: mai00749
T:\ ENV\NoviBrighton MI\Ford\Livonia\GIS\docs\GEC\2022\Utility Corridor Analytical Results Figures\EGLE Report\Figure 3 202205 On-site and Off-site Liquid Results V13.mxd

RICHLAND COURT

RICHLAND AVENUE

STARK ROAD

WAY AVENUE

SL-23

Trichloroethene (µg/m³)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.72)
2/22/2022	1.4
3/2/2022	ND (< 0.72)
3/9/2022	1.4
3/16/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72 J)
4/5/2022	0.99 J
4/12/2022	**28**
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m³)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.46)
2/22/2022	ND (< 0.46)
3/2/2022	ND (< 0.46)
3/9/2022	ND (< 0.46)
3/16/2022	ND (< 0.46)
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46 J)
4/5/2022	ND (< 0.46 J)
4/12/2022	**210**
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-22

Trichloroethene (µg/m³)	
11/23/2021	ND (< 2.4)
12/10/2021	ND (< 2.5)*
12/14/2021	ND (< 2.4)
1/13/2022	0.54 J
1/18/2022	ND (< 0.4)
1/27/2022	ND (< 0.4)
2/1/2022	ND (< 0.4)
2/8/2022	ND (< 0.72)
2/16/2022	ND (< 0.72)
2/22/2022	ND (< 0.72)
2/28/2022	ND (< 0.72)
3/7/2022	ND (< 0.72)
3/14/2022	ND (< 0.72)
3/21/2022	ND (< 0.72)
3/29/2022	ND (< 0.72)
4/4/2022	ND (< 0.72)
4/11/2022	ND (< 0.72)
4/18/2022	ND (< 0.72)
4/25/2022	ND (< 0.72)
Vinyl Chloride (µg/m³)	
11/23/2021	ND (< 1.9)
12/10/2021	ND (< 2.0)*
12/14/2021	ND (< 1.9)
1/13/2022	ND (< 0.2)
1/18/2022	ND (< 0.2)
1/27/2022	ND (< 0.2)
2/1/2022	ND (< 0.2)
2/8/2022	ND (< 0.46)
2/16/2022	ND (< 0.46)
2/22/2022	ND (< 0.46)
2/28/2022	ND (< 0.46)
3/7/2022	ND (< 0.46)
3/14/2022	ND (< 0.46)
3/21/2022	ND (< 0.46)
3/29/2022	ND (< 0.46)
4/4/2022	ND (< 0.46)
4/11/2022	ND (< 0.46)
4/18/2022	ND (< 0.46)
4/25/2022	ND (< 0.46)

SL-19

Trichloroethene (µg/m³)	
11/23/2021	ND (< 2.4)
12/10/2021	ND (< 2.4)*
12/16/2021	ND (< 2.6)
1/13/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.72)
2/22/2022	ND (< 0.72)
3/2/2022	ND (< 0.72)
3/9/2022	ND (< 0.72)
3/16/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	ND (< 0.72)
4/12/2022	ND (< 0.72)
4/19/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m³)	
11/23/2021	ND (< 1.9)
12/10/2021	ND (< 1.8)*
12/16/2021	ND (< 2.1)
1/13/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.46)
2/22/2022	ND (< 0.46)
3/2/2022	ND (< 0.46)
3/9/2022	ND (< 0.46)
3/16/2022	ND (< 0.46)
3/22/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	ND (< 0.46)
4/12/2022	ND (< 0.46)
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-12

Trichloroethene (µg/m³)	
11/23/2021	ND (< 2.4)
12/10/2021	ND (< 2.2)
12/16/2021	ND (< 2.5)
1/13/2022	0.43 J
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.4)*
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.72)
2/22/2022	**9.6**
3/2/2022	ND (< 0.72)
3/9/2022	ND (< 0.72)
3/16/2022	ND (< 0.72)
3/22/2022	ND (< 0.72)
3/31/2022	**3.1**
4/5/2022	ND (< 0.72)
4/12/2022	**11**
4/19/2022	**14**
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m³)	
11/23/2021	**2.3 J**
12/10/2021	ND (< 1.7)
12/16/2021	**4.4**
1/13/2022	**4.5**
1/19/2022	1.0
1/28/2022	TRAFFIC
2/1/2022	**2.9***
2/9/2022	TRAFFIC
2/16/2022	**8.3**
2/22/2022	ND (< 0.46)
3/2/2022	**14**
3/9/2022	**7.1**
3/16/2022	**11**
3/22/2022	**11**
3/31/2022	**52**
4/5/2022	ND (< 0.46)
4/12/2022	**110**
4/19/2022	ND (< 0.46)
4/26/2022	1.5

SL-11

Trichloroethene (µg/m³)	
11/23/2021	ND (< 2.4)
12/11/2021	NS
12/16/2021	ND (< 2.4)
1/12/2022	ND (< 0.4)
1/19/2022	ND (< 0.4)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.4)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.72)
2/22/2022	0.73 J
3/2/2022	ND (< 0.72)
3/9/2022	ND (< 0.72)
3/16/2022	ND (< 0.72)
3/21/2022	ND (< 0.72)
3/31/2022	ND (< 0.72)
4/5/2022	ND (< 0.72)
4/12/2022	ND (< 0.72)
4/19/2022	1.1
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m³)	
11/23/2021	ND (< 1.9)
12/11/2021	NS
12/16/2021	ND (< 1.9)
1/12/2022	ND (< 0.2)
1/19/2022	ND (< 0.2)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.2)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.46)
2/22/2022	ND (< 0.46)
3/2/2022	ND (< 0.46)
3/9/2022	ND (< 0.46)
3/16/2022	ND (< 0.46)
3/21/2022	ND (< 0.46)
3/31/2022	ND (< 0.46)
4/5/2022	ND (< 0.46)
4/12/2022	1.5
4/19/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-21

Trichloroethene (µg/m³)	
11/24/2021	ND (< 2.4)
12/10/2021	ND (< 2.5)*
12/14/2021	ND (< 2.4)
1/14/2022	ND (< 0.4)
1/18/2022	ND (< 0.4)
1/27/2022	0.49 J
2/1/2022	ND (< 0.4)
2/8/2022	ND (< 0.72)
2/15/2022	**2.2**
2/23/2022	ND (< 0.72)
2/28/2022	ND (< 0.72)
3/7/2022	ND (< 0.72)
3/14/2022	ND (< 0.72)
3/21/2022	ND (< 0.72)
3/29/2022	ND (< 0.72)
4/4/2022	ND (< 0.72)
4/11/2022	ND (< 0.72)
4/18/2022	ND (< 0.72)
4/26/2022	ND (< 0.72)
Vinyl Chloride (µg/m³)	
11/24/2021	ND (< 1.9)
12/10/2021	ND (< 1.9)*
12/14/2021	ND (< 1.8)
1/14/2022	ND (< 0.2)
1/18/2022	ND (< 0.2)
1/27/2022	ND (< 0.2)
2/1/2022	ND (< 0.2)
2/8/2022	ND (< 0.46)
2/15/2022	ND (< 0.46)
2/23/2022	ND (< 0.46)
2/28/2022	ND (< 0.46)
3/7/2022	ND (< 0.46)
3/14/2022	ND (< 0.46)
3/21/2022	ND (< 0.46)
3/29/2022	ND (< 0.46)
4/4/2022	ND (< 0.46)
4/11/2022	ND (< 0.46)
4/18/2022	ND (< 0.46)
4/26/2022	ND (< 0.46)

SL-20

Trichloroethene (µg/m³)	
11/23/2021	ND (< 2.3)
12/10/2021	ND (< 2.4)*
12/14/2021	ND (< 2.5)
1/13/2022	ND (< 0.4)
1/18/2022	ND (< 0.4)
1/27/2022	ND (< 0.4)
2/1/2022	ND (< 0.4)
2/8/2022	ND (< 0.72)
2/15/2022	ND (< 0.72)
2/23/2022	ND (< 0.72)
2/28/2022	ND (< 0.72)
3/7/2022	ND (< 0.72)
3/14/2022	ND (< 0.72)
3/21/2022	1.2
3/29/2022	ND (< 0.72)
4/4/2022	ND (< 0.72)
4/11/2022	ND (< 0.72)
4/18/2022	ND (< 0.72)
4/25/2022	ND (< 0.72)
Vinyl Chloride (µg/m³)	
11/23/2021	ND (< 1.8)
12/10/2021	ND (< 1.9)*
12/14/2021	ND (< 2.0)
1/13/2022	ND (< 0.2)
1/18/2022	ND (< 0.2)
1/27/2022	ND (< 0.2)
2/1/2022	ND (< 0.2)
2/8/2022	ND (< 0.46)
2/15/2022	ND (< 0.46)
2/23/2022	ND (< 0.46)
2/28/2022	ND (< 0.46)
3/7/2022	ND (< 0.46)
3/14/2022	ND (< 0.46)
3/21/2022	**13**
3/29/2022	ND (< 0.46)
4/4/2022	ND (< 0.46)
4/11/2022	ND (< 0.46)
4/18/2022	ND (< 0.46)
4/25/2022	ND (< 0.46)

LEGEND

- SANITARY MANHOLE
- FLOW DIRECTION
- SANITARY SEWER LINE

BLUE/BOLD TEXT RESULT EXCEEDS THE EGLE SSVIAC

NOTES:

FIGURE SHOWS DATA FOR TRICHLOROETHENE AND VINYL CHLORIDE ONLY. FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

"ND (<0.4)", "<" - INDICATES THE VALUE IS BELOW THE LABORATORY METHOD DETECTION LIMIT FOR THE ASSOCIATED SAMPLING EVENT

EGLE = DEPARTMENT OF ENVIRONMENT, GREAT LAKES & ENERGY

SSVIAC = SITE-SPECIFIC VOLATILIZATION TO INDOOR AIR CRITERIA

SAMH = SANITARY MANHOLE

SL = SAMPLING LOCATION

J = ESTIMATED RESULT

NA = NOT PART OF THE PROGRAM AT THE DATE

NS = NOT SAMPLED DUE TO WEATHER OR OTHER CONDITION

TRAFFIC = NOT SAMPLED BEACUSE TRAFFIC CONTROL WAS NOT AVAILABLE

µg/m³ = MICROGRAMS PER CUBIC METER

[ ] = DUPLICATE SAMPLE RESULTS

* = SAMPLE COLLECTED FOLLOWING MANHOLE CLEANING

VAPOR RESULTS REPORTED IN µg/m³. ANALYTICAL METHOD: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY TO-15.

RESULTS FROM LOCATIONS ONSITE AND ALONG PLYMOUTH ROAD ARE COMPARED TO THE EGLE RESTRICTED NONRESIDENTIAL SSVIAC 12-HOUR WORKDAY EXPOSURE FOR TRICHLOROETHENE OF 4.0 µg/m³ AND FOR VINYL CHLORIDE OF 27 µg/m³. RESULTS FROM LOCATIONS ALONG STARK ROAD (INCLUDING SL-5) ARE COMPARED TO BOTH EGLE RESTRICTED NONRESIDENTIAL SSVIAC AND THE EGLE UNRESTRICTED RESIDENTIAL SSVIAC FOR TRICHLOROETHENE OF 2.0 µg/m³ AND VINYL CHLORIDE OF 1.6 µg/m³.

DRAFT

0 100 200

SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

OFFSITE VAPOR RESULTS TRICHLOROETHENE AND VINYL CHLORIDE

ARCADIS

FIGURE 9

RICHLAND COURT

RICHLAND AVENUE

STARK ROAD

HATHAWAY AVENUE

SL-23	
Trichloroethene (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.44)
2/22/2022	2.0
3/2/2022	ND (< 0.44)
3/9/2022	ND (< 0.44 J)
3/16/2022	0.59 J
3/22/2022	ND (< 0.44 J)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	3.0
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/24/2021	NA
12/10/2021	NS
12/15/2021	NA
1/13/2022	0.86 J
1/19/2022	2.3
1/28/2022	TRAFFIC
2/1/2022	1.6
2/9/2022	TRAFFIC
2/16/2022	1.8 J
2/22/2022	1.8
3/2/2022	1.9
3/9/2022	2.1 J
3/16/2022	0.85 J
3/22/2022	1.7
3/31/2022	1.6
4/5/2022	1.4
4/12/2022	2.9
4/19/2022	0.81 J
4/26/2022	0.83 J

SL-22	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	ND (< 0.44)*
12/14/2021	ND (< 0.44)
1/13/2022	ND (< 0.44)
1/18/2022	ND (< 0.44)
1/27/2022	ND (< 0.44)
2/1/2022	ND (< 0.44)
2/8/2022	ND (< 0.44)
2/16/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
2/28/2022	ND (< 0.44)
3/7/2022	ND (< 0.44)
3/14/2022	ND (< 0.44)
3/21/2022	ND (< 0.44)
3/29/2022	ND (< 0.44)
4/4/2022	ND (< 0.44)
4/11/2022	ND (< 0.44)
4/18/2022	ND (< 0.44)
4/25/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	ND (< 0.45)
12/10/2021	ND (< 0.45)*
12/14/2021	ND (< 0.45)
1/13/2022	ND (< 0.45)
1/18/2022	ND (< 0.45)
1/27/2022	ND (< 0.45)
2/1/2022	ND (< 0.45)
2/8/2022	ND (< 0.45)
2/16/2022	ND (< 0.45)
2/23/2022	ND (< 0.45)
2/28/2022	ND (< 0.45)
3/7/2022	ND (< 0.45)
3/14/2022	ND (< 0.45)
3/21/2022	ND (< 0.45)
3/29/2022	ND (< 0.45)
4/4/2022	ND (< 0.45)
4/11/2022	ND (< 0.45)
4/18/2022	ND (< 0.45)
4/25/2022	ND (< 0.45)

SL-19	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	ND (< 0.44)*
12/16/2021	ND (< 0.44)
1/13/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.44)
2/22/2022	ND (< 0.44)
3/2/2022	ND (< 0.44)
3/9/2022	ND (< 0.44)
3/16/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	ND (< 0.44)
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	ND (< 0.45)
12/10/2021	ND (< 0.45)*
12/16/2021	ND (< 0.45)
1/13/2022	ND (< 0.45)
1/19/2022	ND (< 0.45)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.45)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.45)
2/22/2022	ND (< 0.45)
3/2/2022	ND (< 0.45)
3/9/2022	ND (< 0.45)
3/16/2022	ND (< 0.45)
3/22/2022	ND (< 0.45)
3/31/2022	1.3
4/5/2022	ND (< 0.45)
4/12/2022	ND (< 0.45)
4/19/2022	ND (< 0.45)
4/26/2022	ND (< 0.45)

SL-12	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	ND (< 0.44)
12/16/2021	ND (< 0.44)
1/13/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.44)*
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.44)
2/22/2022	1.0
3/2/2022	ND (< 0.44)
3/9/2022	ND (< 0.44 J)
3/16/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	1.9
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	0.72 J
12/10/2021	ND (< 0.45)
12/16/2021	0.72 J
1/13/2022	0.66 J
1/19/2022	0.47 J
1/28/2022	TRAFFIC
2/1/2022	0.89 J*
2/9/2022	TRAFFIC
2/16/2022	2.0 J
2/22/2022	1.5
3/2/2022	0.65 J
3/9/2022	0.67 J
3/16/2022	1.3
3/22/2022	1.2
3/31/2022	ND (< 0.45)
4/5/2022	0.91 J
4/12/2022	1.4
4/19/2022	0.54 J
4/26/2022	ND (< 0.45)

SL-11	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/11/2021	NS
12/16/2021	ND (< 0.44)
1/12/2022	ND (< 0.44)
1/19/2022	ND (< 0.44)
1/28/2022	TRAFFIC
2/1/2022	ND (< 0.44)
2/9/2022	TRAFFIC
2/16/2022	ND (< 0.44)
2/22/2022	1.3
3/2/2022	ND (< 0.44)
3/9/2022	ND (< 0.44 J)
3/16/2022	ND (< 0.44)
3/22/2022	ND (< 0.44)
3/31/2022	ND (< 0.44)
4/5/2022	ND (< 0.44)
4/12/2022	ND (< 0.44)
4/19/2022	3.2
4/26/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	1.7
12/11/2021	NS
12/16/2021	1.9
1/12/2022	1.2
1/19/2022	1.1
1/28/2022	TRAFFIC
2/1/2022	1.3
2/9/2022	TRAFFIC
2/16/2022	1.7
2/22/2022	2.3
3/2/2022	3.1
3/9/2022	2.3 J
3/16/2022	2.1
3/22/2022	0.93 J
3/31/2022	1.5
4/5/2022	0.68 J
4/12/2022	2.7
4/19/2022	0.92 J
4/26/2022	2.0

SL-21	
Trichloroethene (µg/L)	
11/24/2021	ND (< 0.44)
12/10/2021	ND (< 0.44)*
12/14/2021	ND (< 0.44)
1/14/2022	ND (< 0.44)
1/18/2022	ND (< 0.44)
1/27/2022	ND (< 0.44)
1/31/2022	ND (< 0.44)
2/8/2022	ND (< 0.44)
2/15/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
2/28/2022	ND (< 0.44)
3/7/2022	0.63 J
3/14/2022	ND (< 0.44)
3/21/2022	ND (< 0.44)
3/29/2022	ND (< 0.44)
4/4/2022	ND (< 0.44)
4/11/2022	0.85 J
4/18/2022	ND (< 0.44)
4/25/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/24/2021	ND (< 0.45)
12/10/2021	1.1*
12/14/2021	ND (< 0.45)
1/14/2022	0.73 J
1/18/2022	0.84 J
1/27/2022	0.95 J
1/31/2022	ND (< 0.45)
2/8/2022	ND (< 0.45)
2/15/2022	0.95 J
2/23/2022	0.75 J
2/28/2022	0.88 J
3/7/2022	0.70 J
3/14/2022	0.92 J
3/21/2022	1.3
3/29/2022	0.50 J
4/4/2022	0.60 J
4/11/2022	1.8
4/18/2022	0.72 J
4/25/2022	0.64 J

SL-20	
Trichloroethene (µg/L)	
11/23/2021	ND (< 0.44)
12/10/2021	ND (< 0.44)*
12/14/2021	ND (< 0.44)
1/13/2022	ND (< 0.44)
1/18/2022	ND (< 0.44)
1/27/2022	0.65 J
2/1/2022	ND (< 0.44)
2/8/2022	ND (< 0.44)
2/15/2022	ND (< 0.44)
2/23/2022	ND (< 0.44)
2/28/2022	ND (< 0.44)
3/7/2022	ND (< 0.44)
3/14/2022	ND (< 0.44)
3/21/2022	ND (< 0.44)
3/29/2022	ND (< 0.44)
4/4/2022	ND (< 0.44)
4/11/2022	ND (< 0.44)
4/18/2022	ND (< 0.44)
4/25/2022	ND (< 0.44)
Vinyl Chloride (µg/L)	
11/23/2021	0.68 J
12/10/2021	0.69 J*
12/14/2021	ND (< 0.45)
1/13/2022	ND (< 0.45)
1/18/2022	1.1
1/27/2022	1.1
2/1/2022	1.1
2/8/2022	ND (< 0.45)
2/15/2022	1.0 J
2/23/2022	0.78 J
2/28/2022	ND (< 0.45)
3/7/2022	1.2
3/14/2022	0.90 J
3/21/2022	0.88 J
3/29/2022	1.2
4/4/2022	1.2
4/11/2022	2.0
4/18/2022	0.62 J
4/25/2022	0.94 J

LEGEND

- SANITARY MANHOLE
- FLOW DIRECTION
- SANITARY SEWER LINE

NOTES:

FIGURE SHOWS DATA FOR TRICHLOROETHENE AND VINYL CHLORIDE ONLY. FULL SET OF DATA CAN BE FOUND IN THE CORRESPONDING TABLES.

"ND (<0.4)", "<" - INDICATES THE VALUE IS BELOW THE LABORATORY METHOD DETECTION LIMIT FOR THE ASSOCIATED SAMPLING EVENT

EGLE = DEPARTMENT OF ENVIRONMENT, GREAT LAKES & ENERGY

SAMH = SANITARY MANHOLE

SL = SAMPLING LOCATION

J = ESTIMATED RESULT

NA = NOT PART OF THE PROGRAM AT THE DATE

NS = NOT SAMPLED DUE TO WEATHER OR OTHER CONDITION

TRAFFIC = NOT SAMPLED BEACUSE TRAFFIC CONTROL WAS NOT AVAILABLE

µg/L = MICROGRAMS PER LITER

[ ] = DUPLICATE SAMPLE RESULTS

* = SAMPLE COLLECTED FOLLOWING MANHOLE CLEANING

LIQUID RESULTS REPORTED IN µg/L. ANALYTICAL METHOD: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 8260B FOR VOLATILE ORGANIC COMPOUNDS.

DRAFT

0 100 200

SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

OFFSITE LIQUID RESULTS TRICHLOROETHENE AND VINYL CHLORIDE

ARCADIS

FIGURE 10

This document is a DRAFT document that has not received approval from EGLE. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of EGLE.

LEGEND

- SIGNED ACCESS AGREEMENTS REQUIRED
- SIGNED ACCESS AGREEMENTS RECEIVED
- PROPERTY BOUNDARIES

* - Four rounds of vapor data have been collected

NOTES:

EGLE = Michigan Department of Environment, Great Lakes, and Energy

WADSWORTH STREET

BREWSTER STREET

BOSTON POST STREET

STANDISH STREET

BELDEN COURT

STARK ROAD

PRISCILLA LANE

PLYMOUTH ROAD

WAYNE ROAD

LAUREL STREET

35400 Plymouth *
Currently coordinating inspection

35200 Plymouth
Inspection completed 3/28/2022 Dye Test completed 4/18/2022

35000 Plymouth *
Inspection completed 3/25/2022 Dye Test completed 4/21/2022

34900 Plymouth
Inspection completed 3/23/2022 Dye Test completed 4/20/2022

34850 Plymouth
Inspection completed 3/24/2022 Dye Test completed 4/19/2022

34800 Plymouth
Working with real estate manager for signed access agreement.

34706 - 34730 Plymouth
Currently coordinating inspection and dye testing

34500 Plymouth
Property owner unresponsive

34450 Plymouth
Access agreement in negotiation.

34706-34708 - Inspection scheduled for 5/18/2022
34710 -
34712 - Inspection completed 4/14/2022
34714 - Inspection scheduled for 5/19/2022
34716 - Inspection completed 4/13/2022
34718 -
34720 -
34722 - Inspection completed 4/14/2022
34728 - Inspection completed 5/10/2022
34730-34734 - Inspection completed 5/16/2022
34746 - Inspection scheduled for 5/19/2022

0 100 200
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

COMMERCIAL ACCESS AGREEMENTS

ARCADIS

FIGURE 11

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
T:_ENV\NoviBrighton_MI\Ford\Livonia\GIS\docs\GEC\2022\Utility Corridor\Figure 10_Commercial Access Agreements.mxd PLOTTED: 5/17/2022 3:44:05 PM BY: mal00749

This document is a DRAFT document that has not received approval from EGLE. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of EGLE.

RICHLAND AVENUE

RICHLAND COURT

LAUREL AVENUE

STARK ROAD

HATHAWAY AVENUE

LEGEND

- SIGNED ACCESS AGREEMENTS REQUIRED
- SIGNED ACCESS AGREEMENTS RECEIVED
- PROPERTY BOUNDARIES

NOTES:

EGLE = Michigan Department of Environment, Great Lakes, and Energy

9551 Stark
Property owner unresponsive

9552 Stark
Inspection completed 5/11/2022

9491 Stark
Inspection completed 4/05/2022

9480 Stark
Inspection completed 4/06/2022

34252 Hathaway
Inspection completed 4/12/2022

34284 Hathaway
Inspection completed 5/09/2022

9487 Stark
Inspection completed 5/11/2022

9375 Stark
Inspection scheduled 5/20/2022

34277 Hathaway
Inspection completed 3/29/2022

34247 Hathaway
Inspection completed 4/07/2022

0 100 200
SCALE IN FEET

FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

RESIDENTIAL ACCESS AGREEMENTS

ARCADIS

FIGURE
12

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
T:_ENV\NoviBrighton_MI\Ford\Livonia\GIS\docs\GEC\2022\Utility Corridor\Figure 11_Residential Access Agreements.mxd PLOTTED: 5/17/2022 3:46:42 PM BY: mai00749

Appendix A

On-Site Lateral Connection Stills

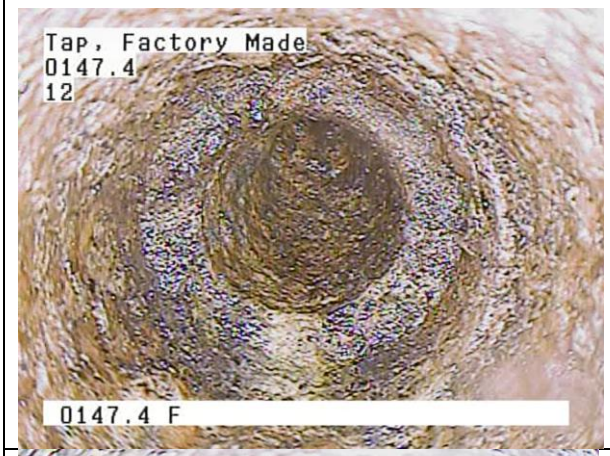
Photo Log	Pipe range	Lateral ID
	SAMH-1261 TO SAMH-1248 *(Upstream Inspection)*	147.4’ TOP (12oc)
	SAMH-1261 TO SAMH-1248 *(Upstream Inspection)*	148.7’ TOP (12oc)
	SAMH-1261 TO SAMH-1248 *(Upstream Inspection)*	182.6’ TOP (12oc)

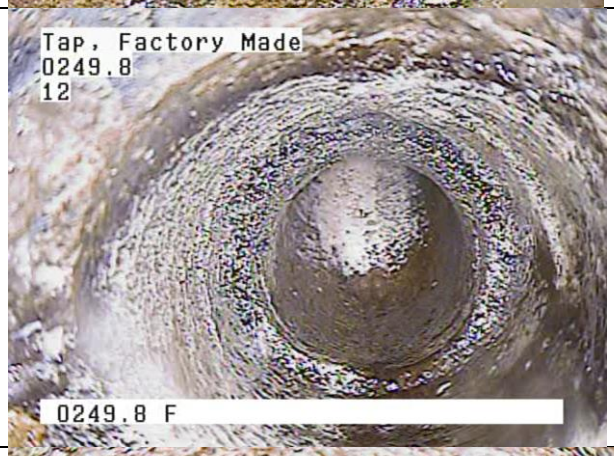
Photo Log	Pipe range	Lateral ID
	SAMH-1261 TO SAMH-1248 *(Upstream Inspection)*	233.7’ TOP (12oc)
	SAMH-1261 TO SAMH-1248 *(Upstream Inspection)*	249.8’ TOP (12oc)
	SAMH-1261 TO SAMH-1248 *(Upstream Inspection)*	286.0’ TOP (12oc)

Photo Log	Pipe range	Lateral ID
	SAMH-1244 TO SAMH-1245	20.5’ LEFT (9oc)
	SAMH-1244 TO SAMH-1245	22.9’ LEFT (9oc)
	SAMH-1244 TO SAMH-1245	56.1’ TOP (12oc)

Photo Log	Pipe range	Lateral ID
	SAMH-1244 TO SAMH-1245	92.8’ TOP (12oc)
	SAMH-1244 TO SAMH-1245	156.8’ LEFT (10oc)
	SAMH-1244 TO SAMH-1245	175.3’ TOP (12oc)

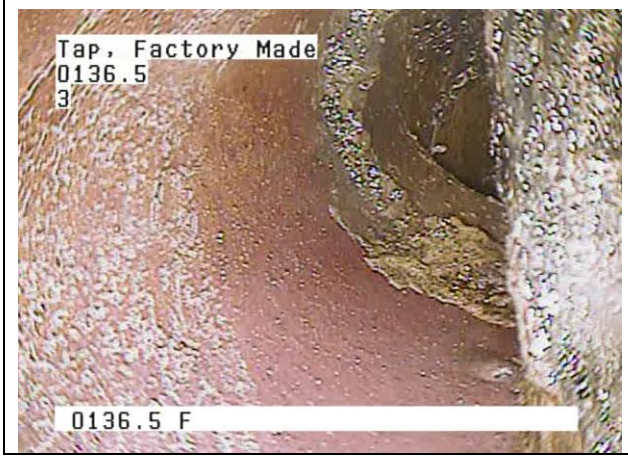
Photo Log	Pipe range	Lateral ID
	SAMH-1244 TO SAMH-1245	239.0’ TOP (12oc)
	SAMH-1256 TO SAMH-1244	126.9’ TOP (11oc)
	SAMH-1256 TO SAMH-1244	136.5’ RIGHT (3oc)

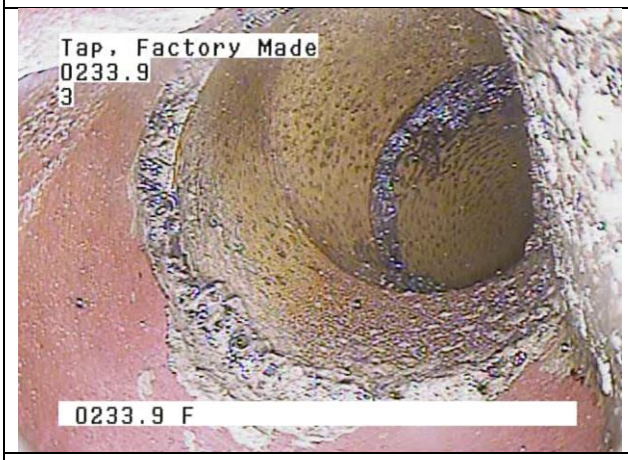
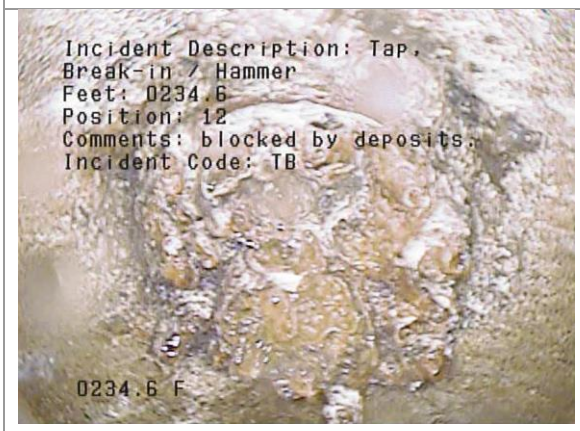
Photo Log	Pipe range	Lateral ID
	SAMH-1256 TO SAMH-1244	233.9’ RIGHT (3oc)
	SAMH-1256 TO SAMH-1244	247.6’ TOP (12oc)
	SAMH-1256 TO SAMH-1244	298.2’ RIGHT (3oc)

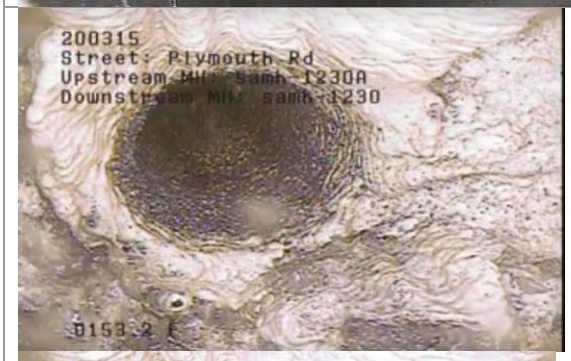
Photo Log	Pipe range	Lateral ID
	SAMH-1256 TO SAMH-1244	356.1’ TOP (12oc)
	SAMH-1258 TO SAMH-1257	19.1’ RIGHT (3oc)
	SAMH-1233A TO SAMH-1233	218.6’ LEFT (10oc)

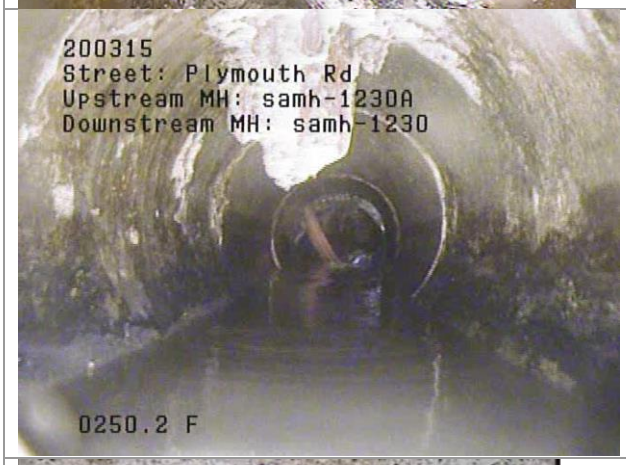
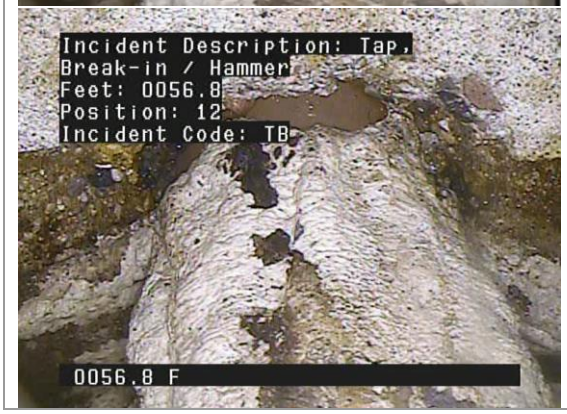
Photo Log	Pipe range	Lateral ID
	SAMH-1234 TO SAMH-1233A	227.1’ LEFT (10oc)
	SAMH-1234 TO SAMH-1233A	290.2’ RIGHT (3oc)
	SAMH 1232 TO SAMH 1231	7.6’ TOP (12oc)

	SAMH 1232 TO SAMH 1231	101.8’ TOP (12oc)
	SAMH 1232 TO SAMH 1231	153.4’ TOP (12oc)
	SAMH 1232 TO SAMH 1231	199.6’ TOP (12oc)
	SAMH 1229 TO SAMH 1228 (SL-2)	37.6’ TOP (1oc)

 	SAMH 1229 TO SAMH 1228 (SL-2)	132.7'- TOP (12oc)
	SAMH 1229 TO SAMH 1228 (SL-2)	178.9'- TOP (12oc)
	SAMH 1229 TO SAMH 1228 (SL-2)	234.6'- TOP (12oc)

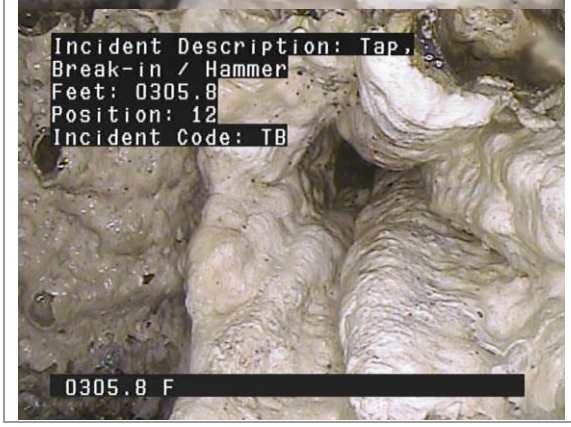
	SAMH 1231 TO SAMH 1230A	88.1’ TOP (12oc)
	SAMH 1231 TO SAMH 1230A	133.5’ TOP (12oc)
	SAMH 1231 TO SAMH 1230A	234.6’ TOP (12oc)
	SAMH 1230A TO SAMH 1230	101.3’ TOP (12oc)

		
 	SAMH 1230A TO SAMH 1230	153.2’ TOP (12oc)
	SAMH 1230A TO SAMH 1230	204.7’ TOP (11oc)

		
	SAMH 1230A TO SAMH 1230	250.2’ TOP (12oc)
 	SL 2 TO SAMH 1228A	56.8’ TOP (12oc)

 	SL 2 TO SAMH 1228A	82.0’ TOP (12oc)
 	SL 2 TO SAMH 1228A	107.9’ TOP (12oc)

 	SL 2 TO SAMH 1228A	157.9’ TOP (12oc)
	SL 2 TO SAMH 1228A	208.5’ TOP (12oc)

 	SL 2 TO SAMH 1228A	259.9’ TOP (12oc)
 	SL 2 TO SAMH 1228A	305.8’ TOP (12oc)

Appendix B

Off-Site Lateral Connection Stills

OFFSITE LATERAL CONNECTIONS - PLYMOUTH ROAD, STARK ROAD, and HATHAWAY AVENUE of FORD TRANSMISSION PLANT

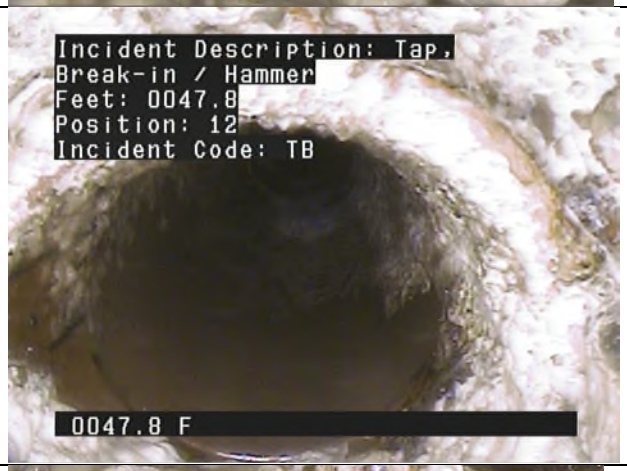
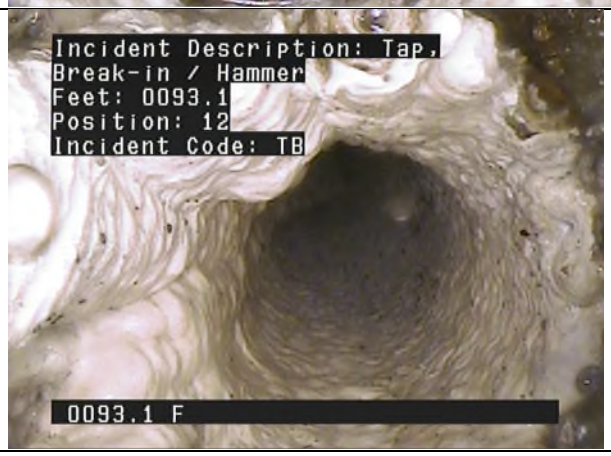
Photo log	Pipe range	Lateral ID
	SL-3 TO SL-16	6.6’ TOP
	SL-3 TO SL-16	47.8’ TOP
	SL-3 TO SL-16	93.1’ TOP

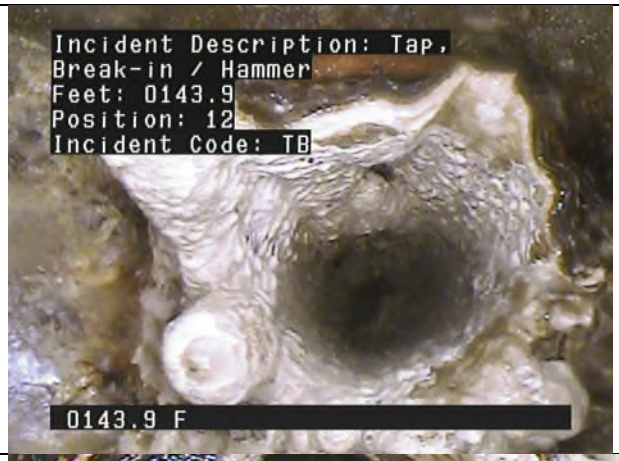
Photo log	Pipe range	Lateral ID
	SL-3 TO SL-16	143.9’ TOP
	SL-3 TO SL-16	194.9’ TOP
	SL-3 TO SL-16	245.6’ TOP

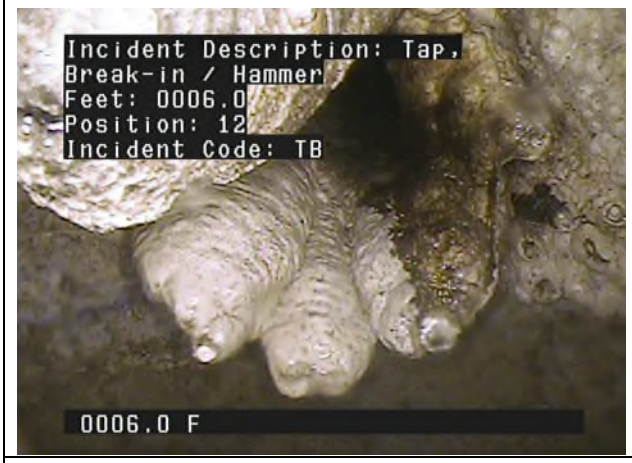
Photo log	Pipe range	Lateral ID
	SL-3 TO SL-16	291.4’ TOP
	SL-16 TO SL-17	6.0’ TOP
	SL-16 TO SL-17	46.6’ TOP

Photo log	Pipe range	Lateral ID
	SL-16 TO SL-17	93.8’ TOP (12oc)
	SL-16 TO SL-17	144.6’ TOP
	SL-16 TO SL-17	172.4’ TOP

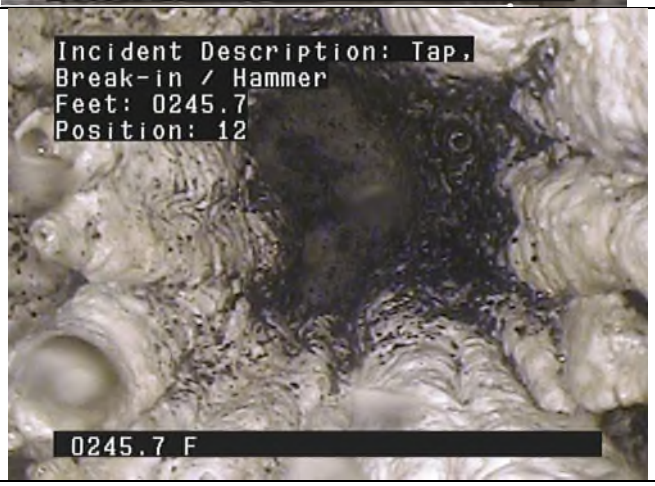
Photo log	Pipe range	Lateral ID
	SL-16 TO SL-17	193.3’ TOP
	SL-16 TO SL-17	245.7’ TOP
	SL-17 TO SL-18	20.7’ TOP

Photo log	Pipe range	Lateral ID
	SL-17 TO SL-18	123.7’ TOP
	SL-17 TO SL-18	171.1’ TOP
	SL-17 TO SL-18	266.0’ TOP

Photo log	Pipe range	Lateral ID
	SL-17 TO SL-18	278.0’ TOP
	SL-18 TO SL-3D	10.6’ TOP
	SL-18 TO SL-3D	61.9’ TOP

Photo log	Pipe range	Lateral ID
	SL-18 TO SL-3D	109’ TOP
	SL-18 to SL-3D	158.9’ TOP
	SL-18 to SL-3D	210.3’ TOP

Photo log	Pipe range	Lateral ID
	SL-18 TO SL-3D	260.1’ TOP
	SL-18 TO SL-3D	305.7’ TOP
	SL-3D TO SL-4	39.2’ TOP

Photo log	Pipe range	Lateral ID
	SL-3D TO SL-4	136.9’ TOP
	SL-3D TO SL-4	188.6’ TOP
	SL-3D TO SL-4	241.3’ TOP

Photo log	Pipe range	Lateral ID
	SL-3D TO SL-4	270.2’ TOP
	SL-4 TO SL-5	4.8’ TOP
	SL-4 TO SL-5	57.9’ TOP

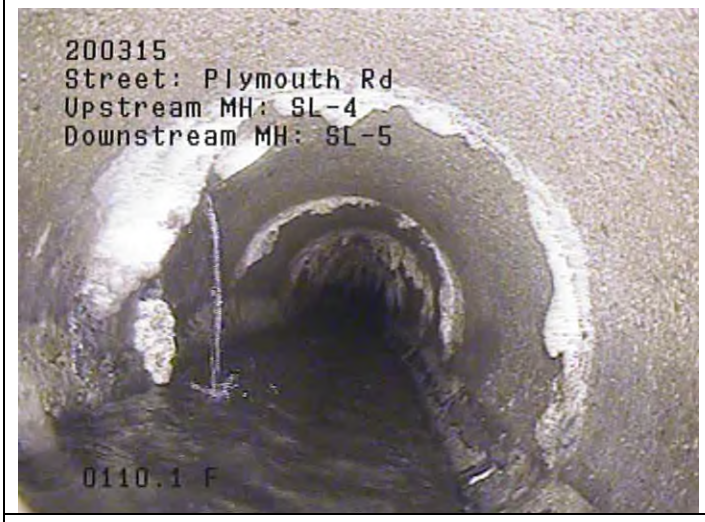
Photo log	Pipe range	Lateral ID
	SL-4 TO SL-5	105.9’ TOP
	SL-4 TO SL-5	110.1’ LEFT
	SAMH-1228A TO SL-3	32.8’ TOP

Photo log	Pipe range	Lateral ID
	SAMH-1228A TO SL-3	83.5’ TOP
	SAMH-1228A TO SL-3	134.6’ TOP
	SAMH-1228A TO SL-3	159.9’ TOP

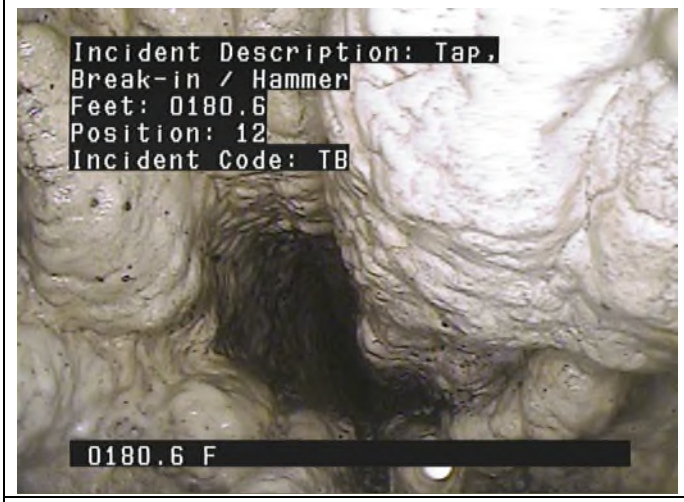
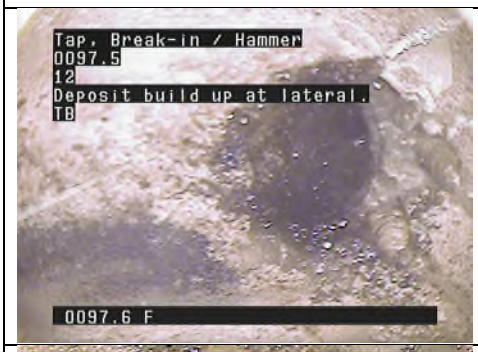
Photo log	Pipe range	Lateral ID
	SAMH-1228A TO SL-3	180.6’ TOP
	SAMH-1228A TO SL-3	205.7’ TOP
	SAMH-1228A TO SL-3	234.9’ TOP

Photo log	Pipe range	Lateral ID
	SAMH-1228A TO SL-3	280.8’ TOP
 	SL 23 TO SL 12	13.4’ TOP (capped connection @ 11oc)
 	SL 23 TO SL 12	14.6’ TOP (11oc)
	SL 23 TO SL 12	57.7’ TOP (capped connection @ 12oc)
	SL 23 TO SL 12	102.5’ LEFT (10oc)

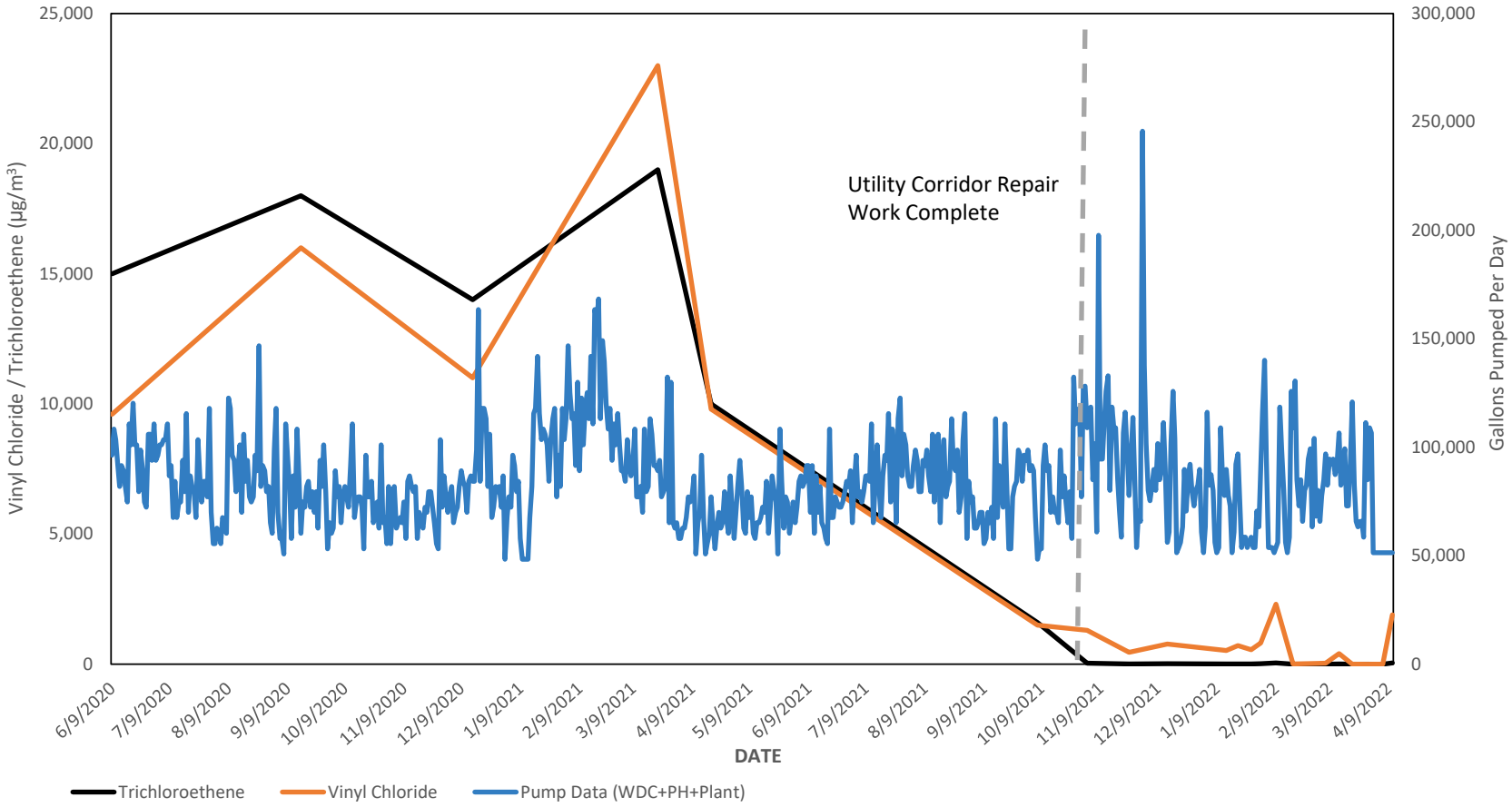
Photo log	Pipe range	Lateral ID
	SL 23 TO SL 12	106.4’ TOP (12oc)
	SL 23 TO SL 12	154.9’ TOP (12oc)
	SL 23 TO SL 12	207.6’ TOP (11oc)
	SL 23 TO SL 12	297.5’ RIGHT (2oc)
	SL 12 TO SL 20	72.1’ TOP (12oc)

Photo log	Pipe range	Lateral ID
	SL 12 TO SL 20	97.6’ TOP (12oc)
	SL 12 TO SL 20	232.6’ TOP (12oc)
	SL 12 TO SL 20	258.4’ TOP (12oc)
	SL 19 TO SL 12	8.7’ LEFT (10oc)

Appendix C

Analytical Trend Graphs

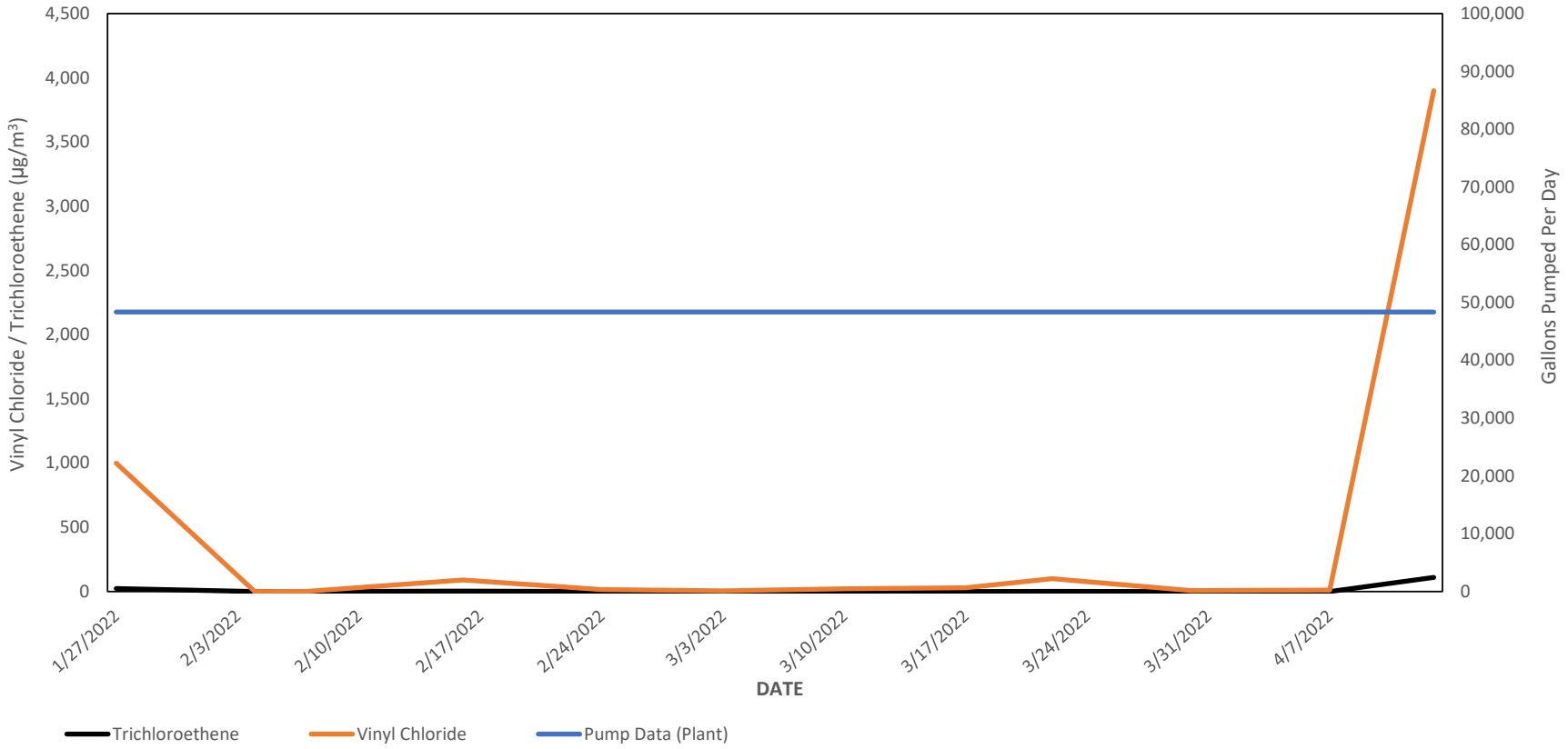
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SAMH-1231
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

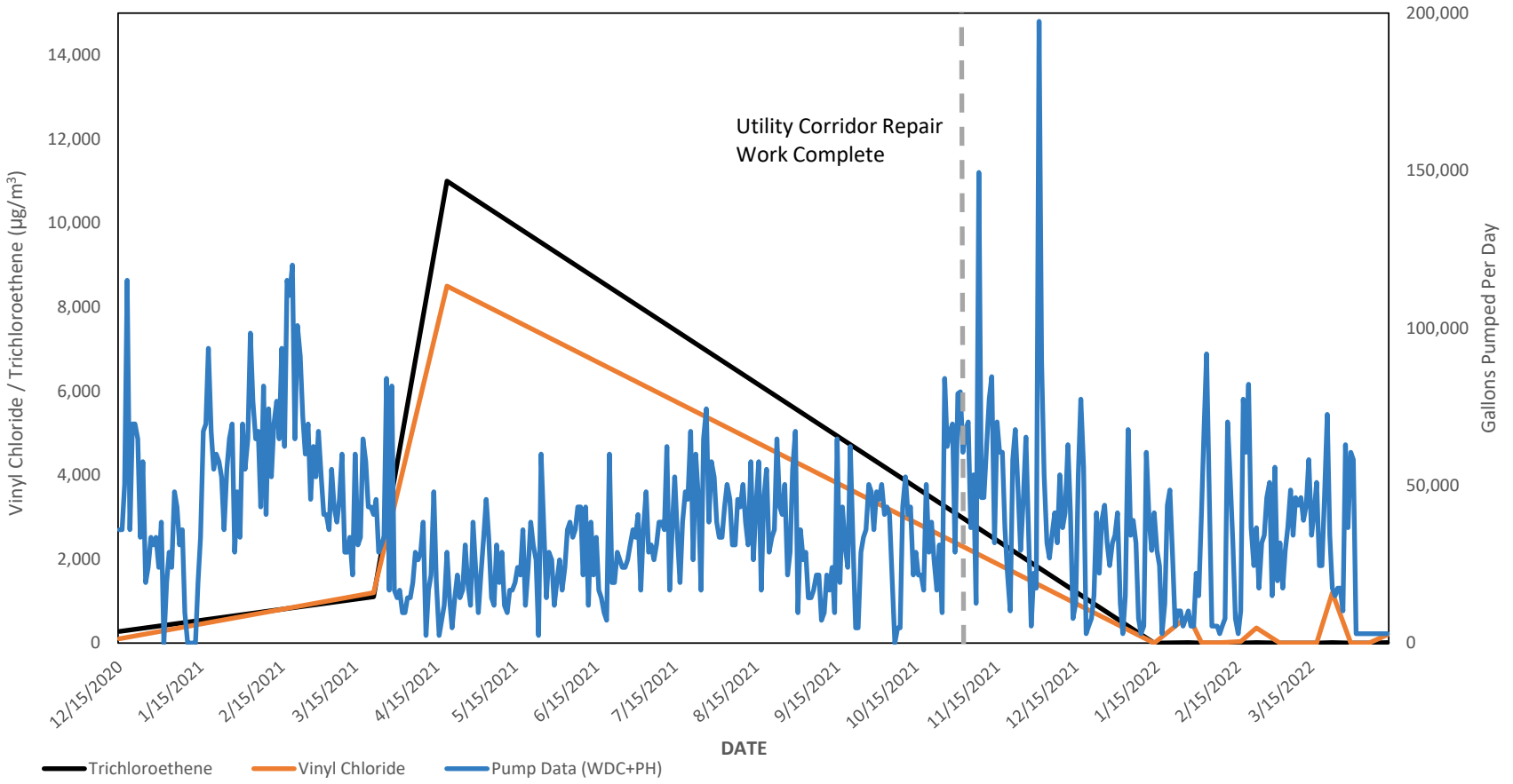
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"
2. Results shown are post utility corridor rehabilitation

Appendix C
SAMH-1231A
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

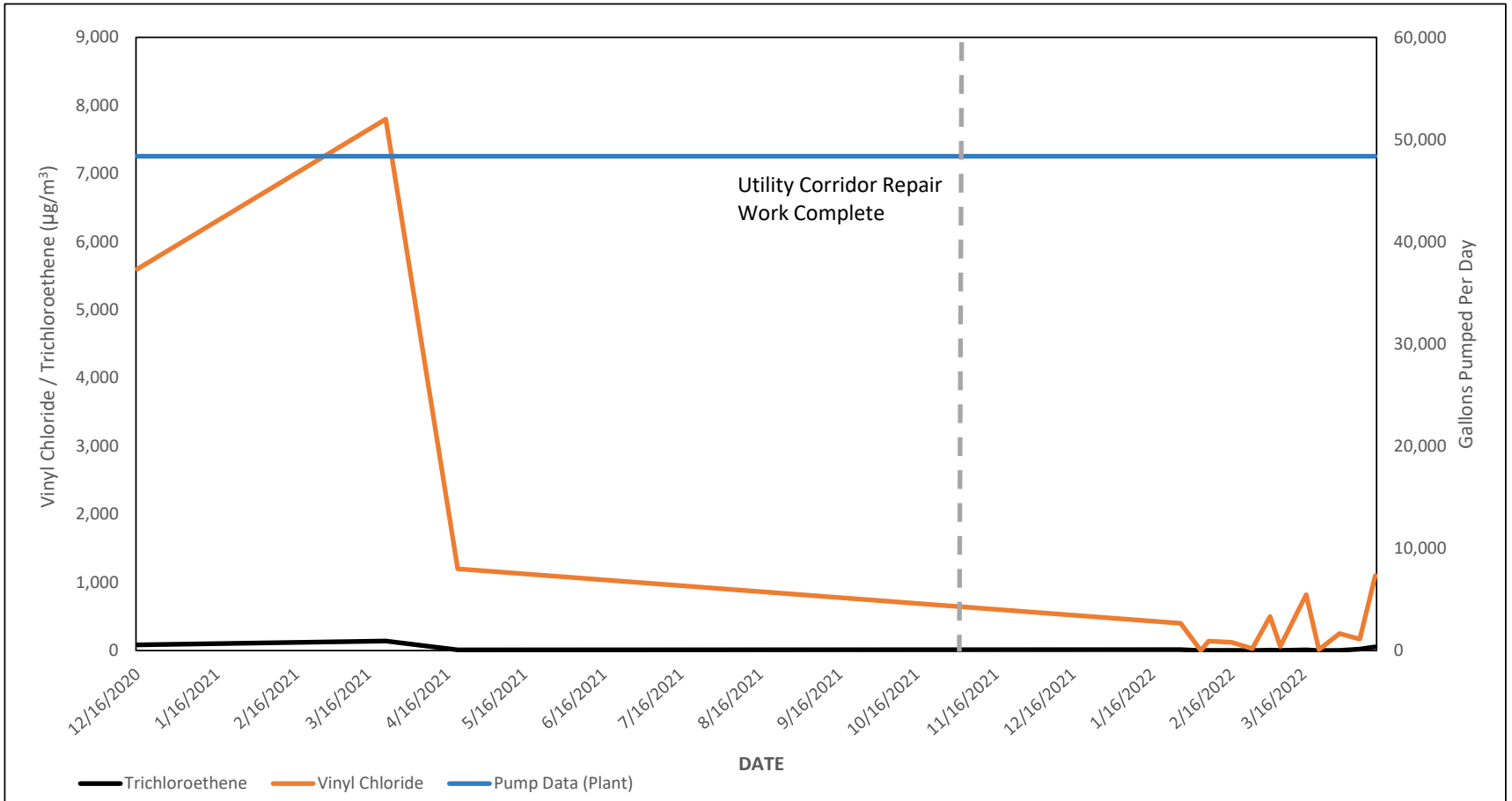
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SAMH-1244
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

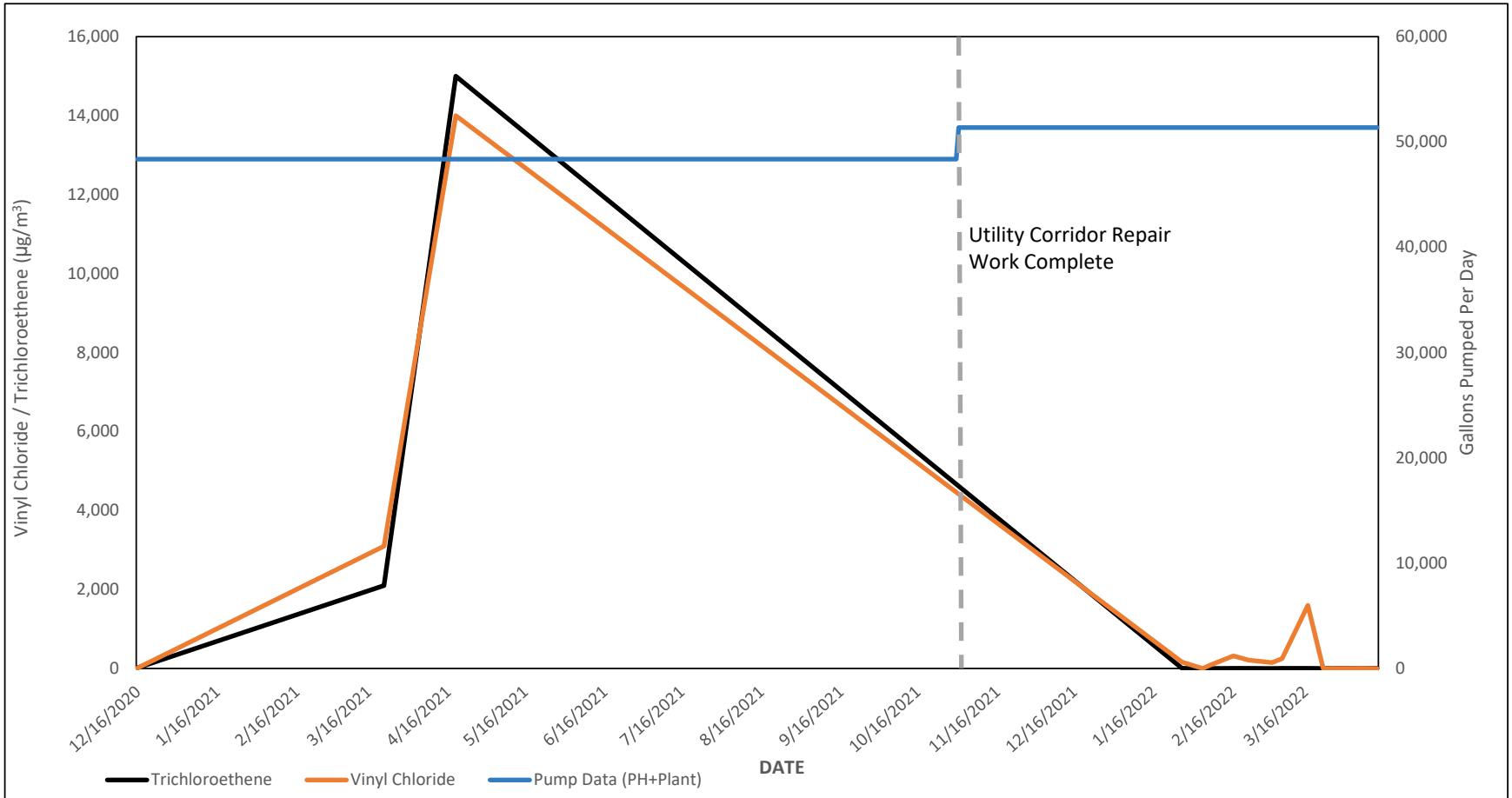
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SAMH-1255
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

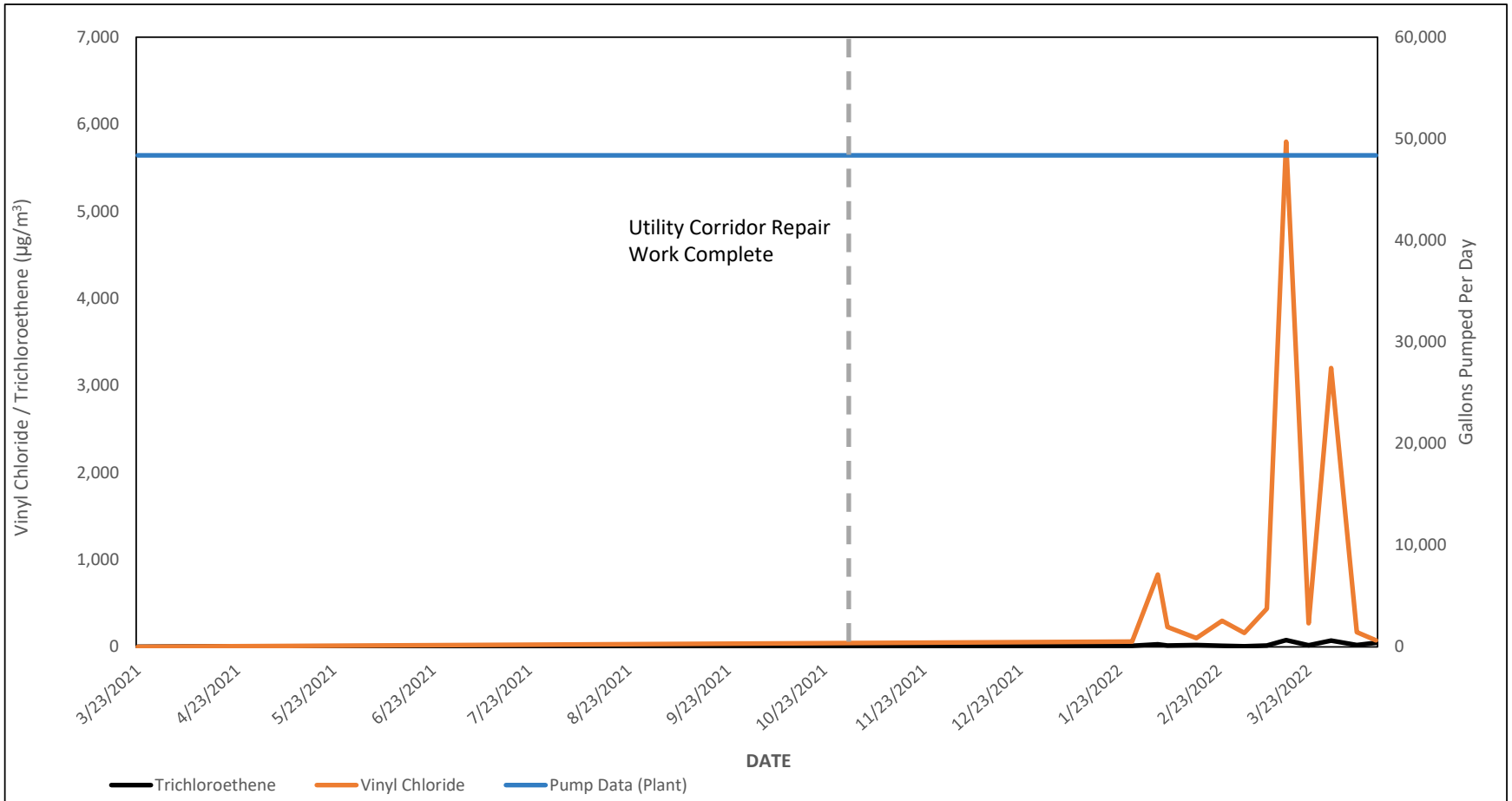
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SAMH-1256
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

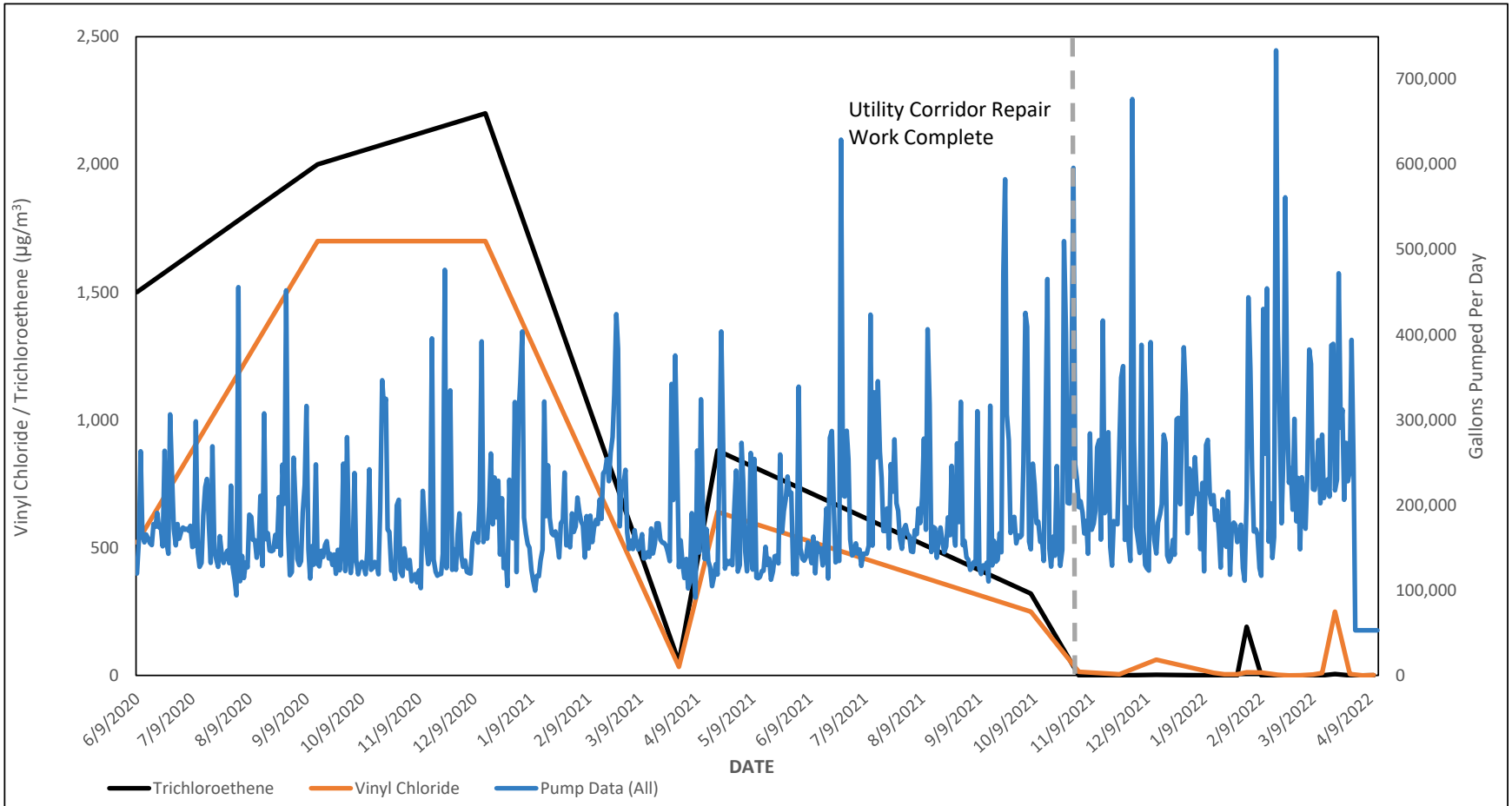
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SAMH-1259
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

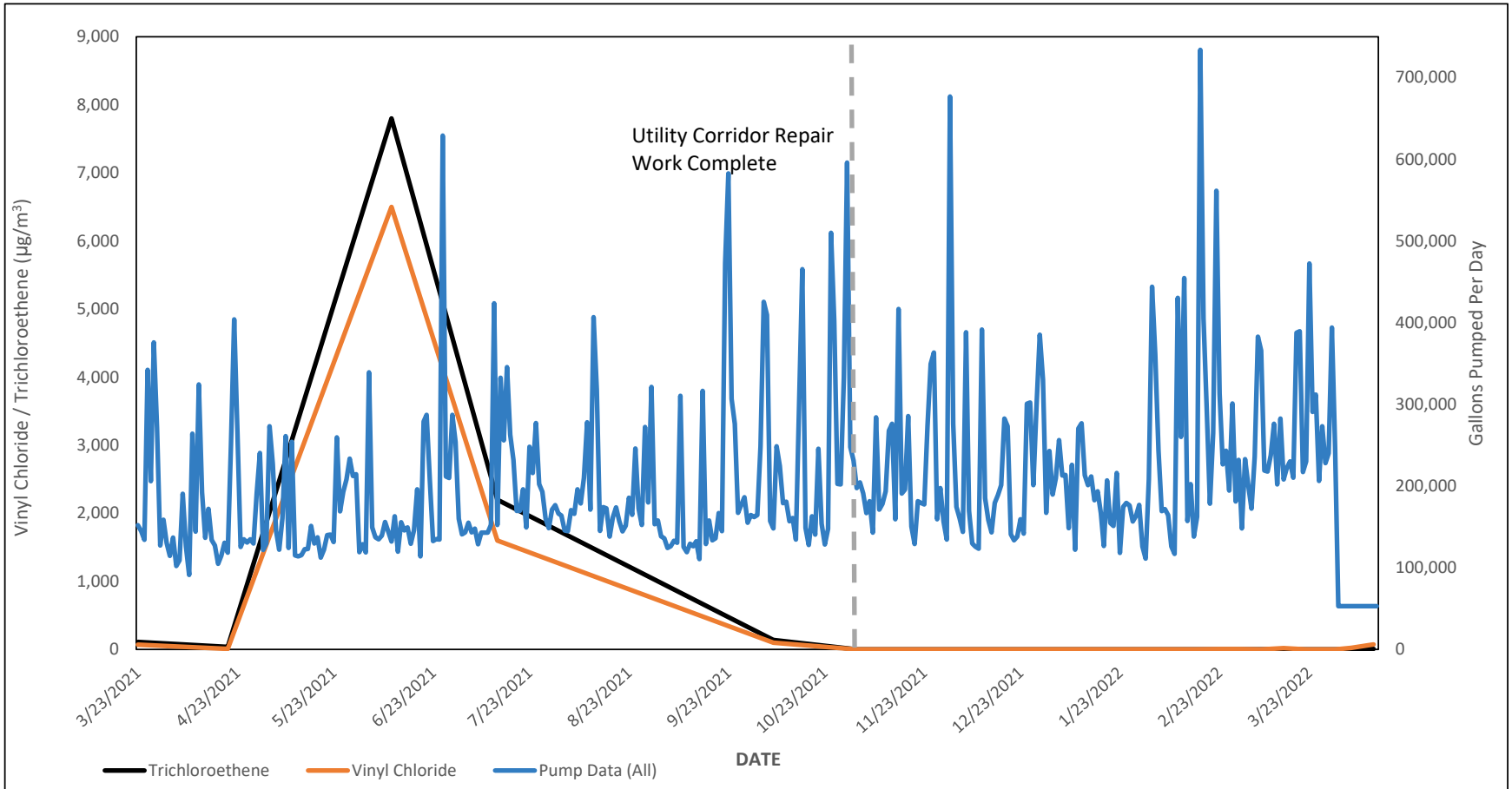
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-2
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

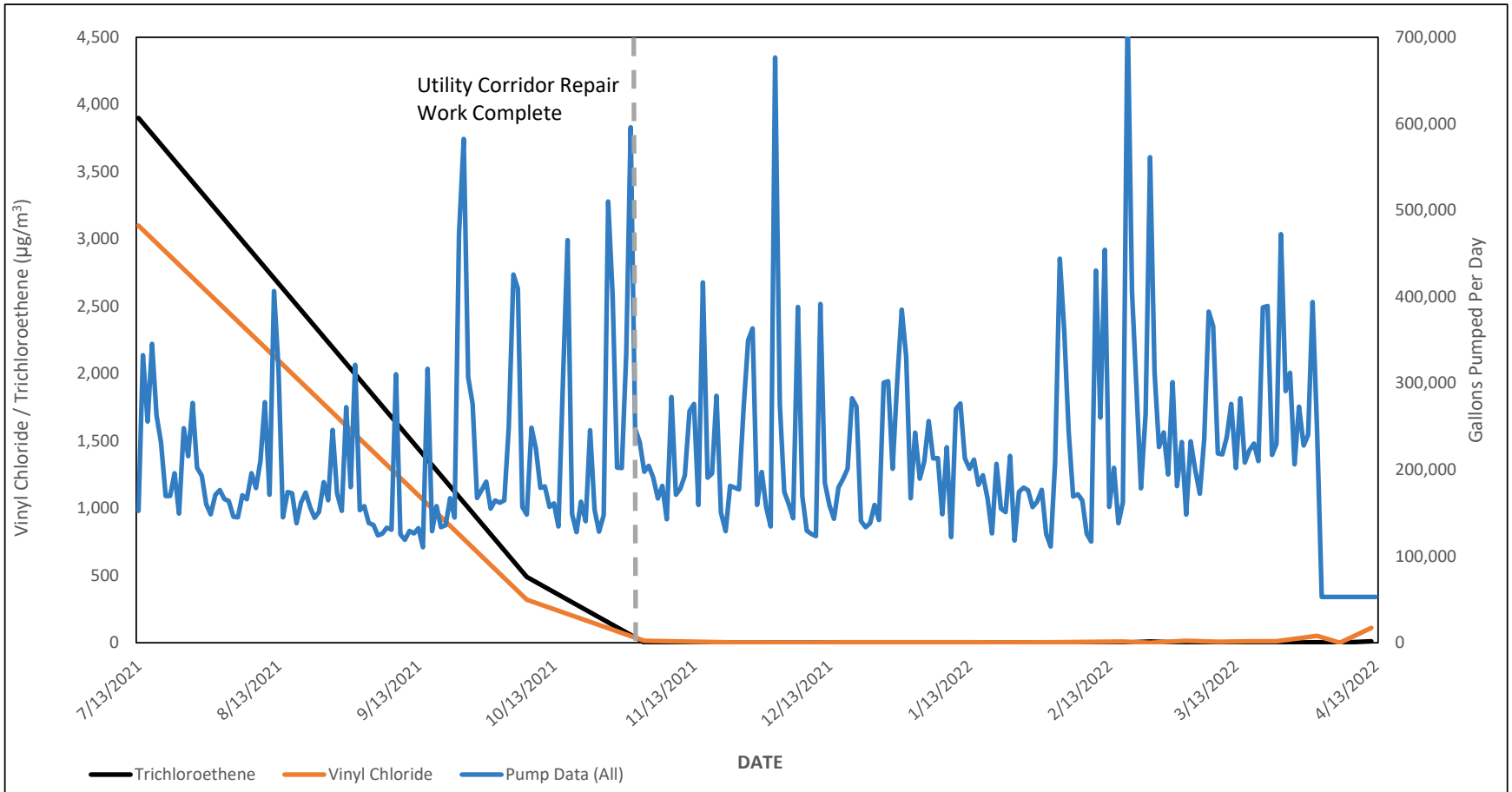
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-5
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

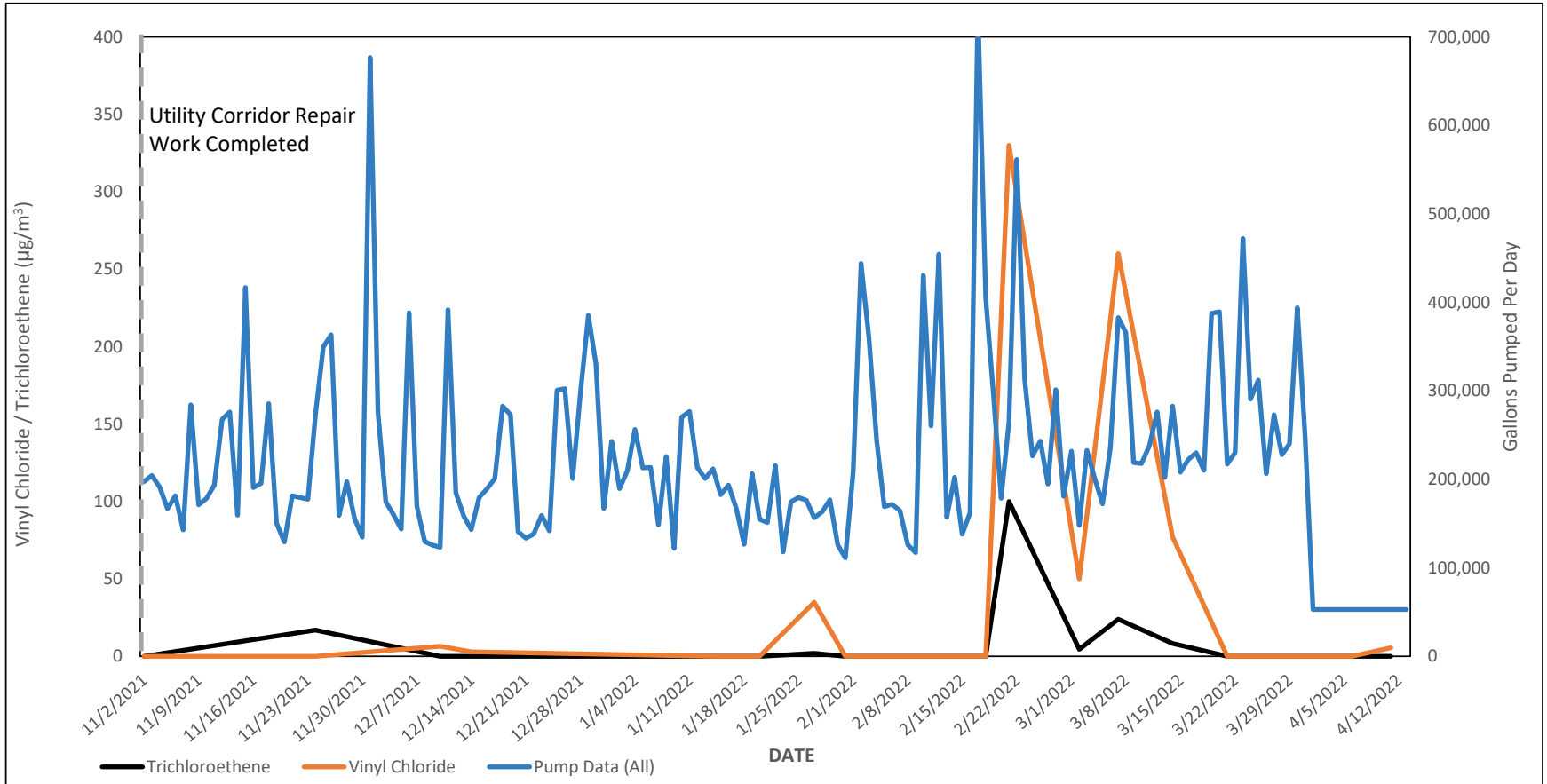
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-12
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

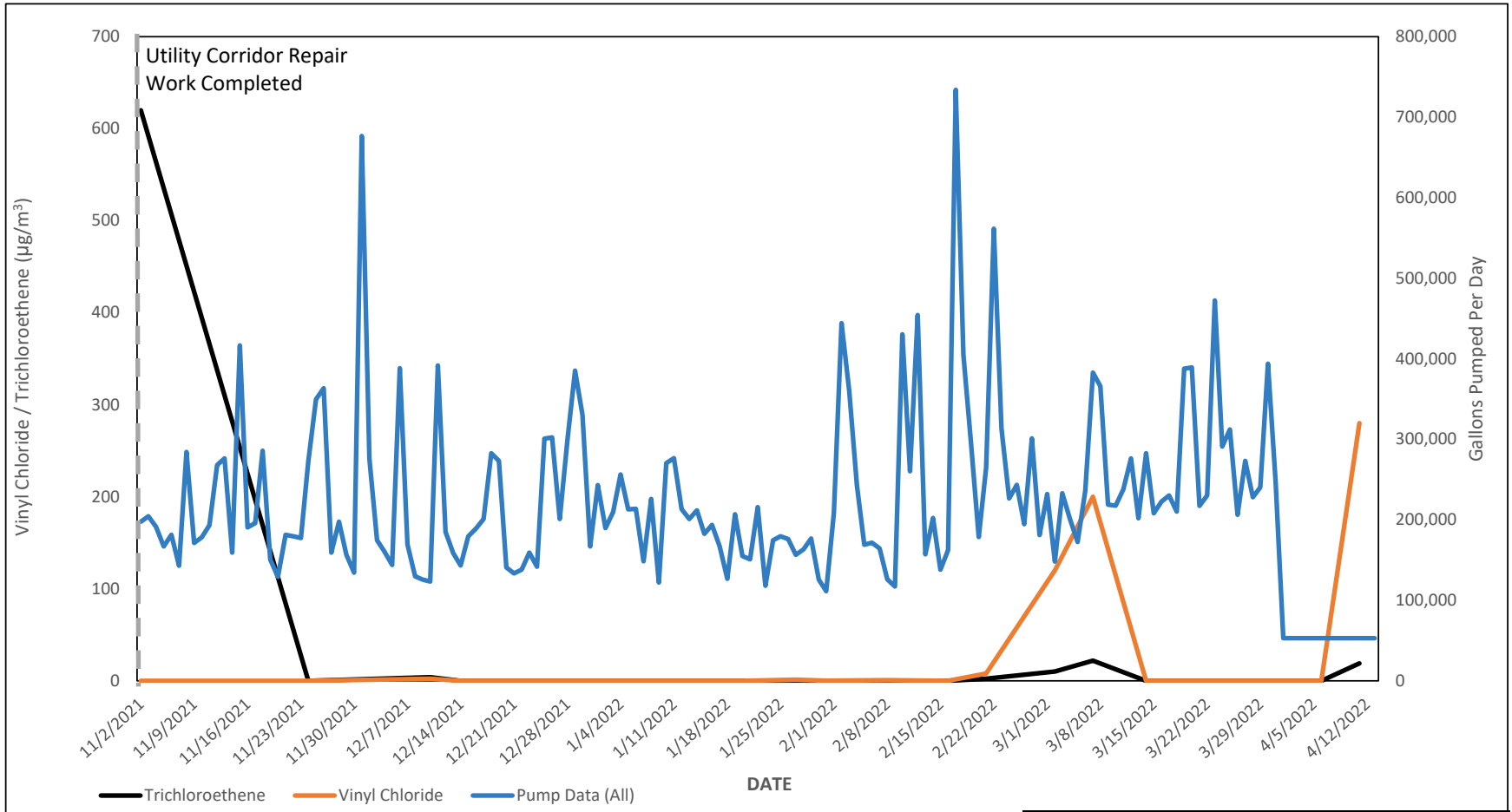
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-16
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

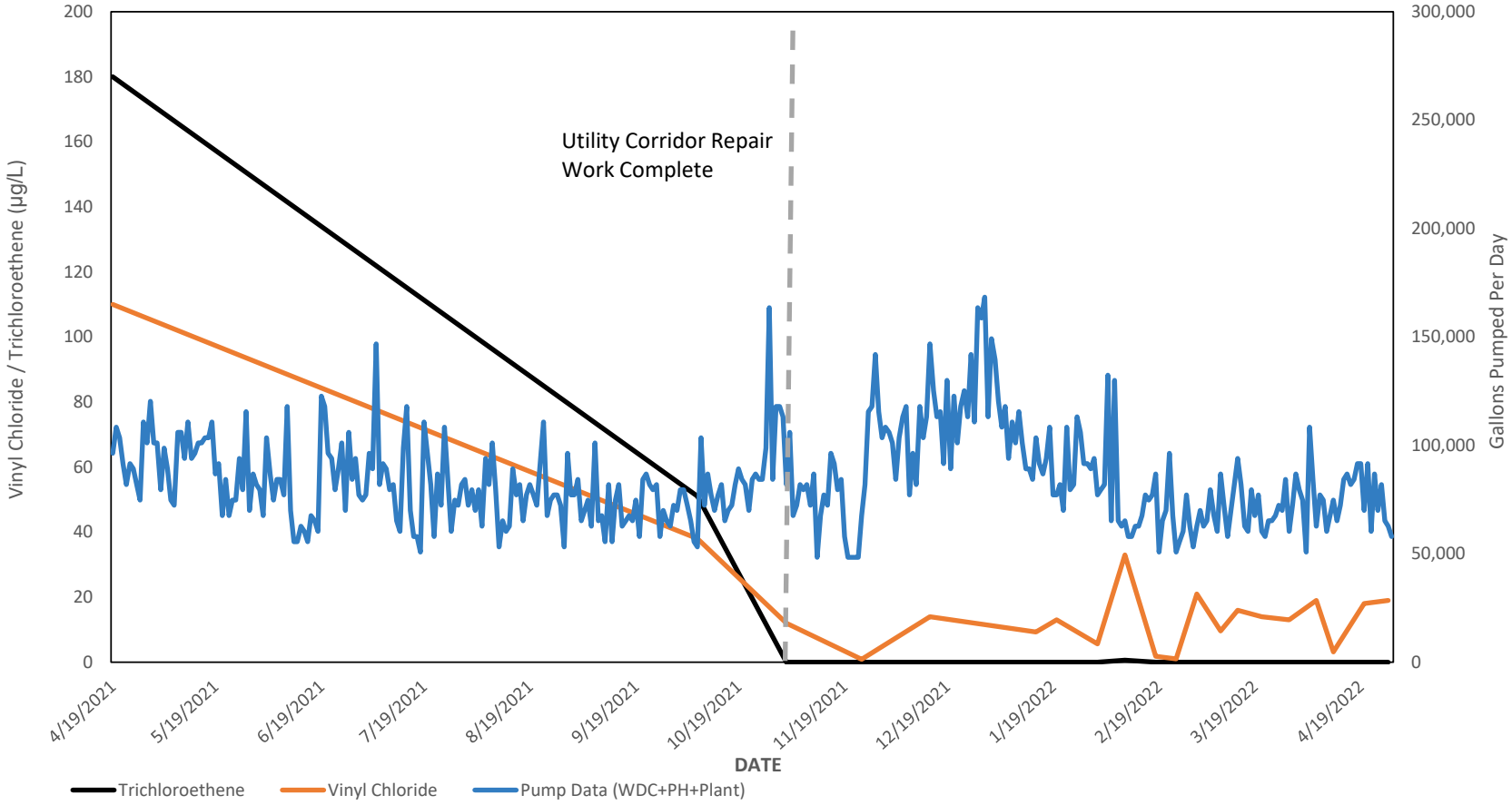
Vapor Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-17
May-22
Utility Corridor Vapor Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

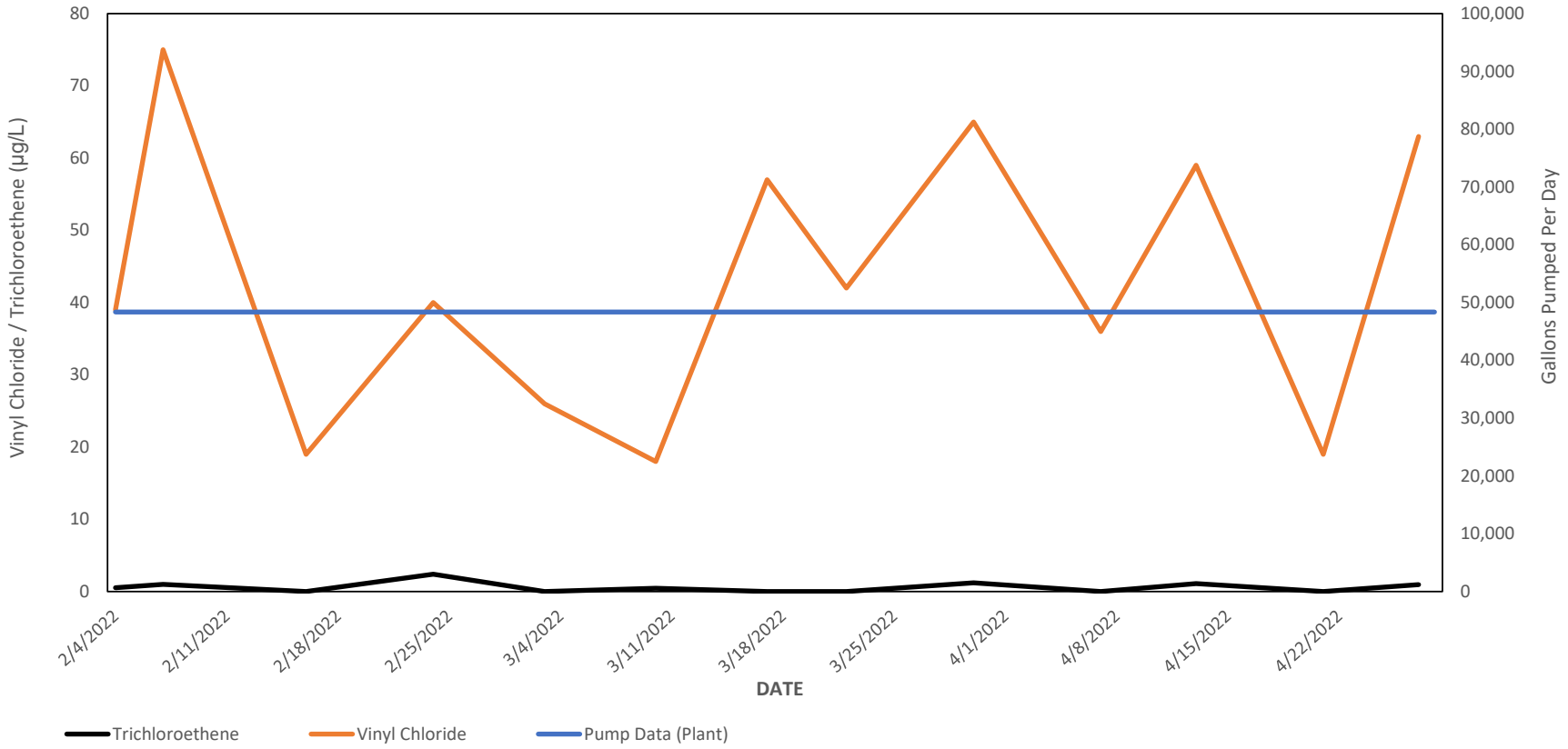
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SAMH-1231
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

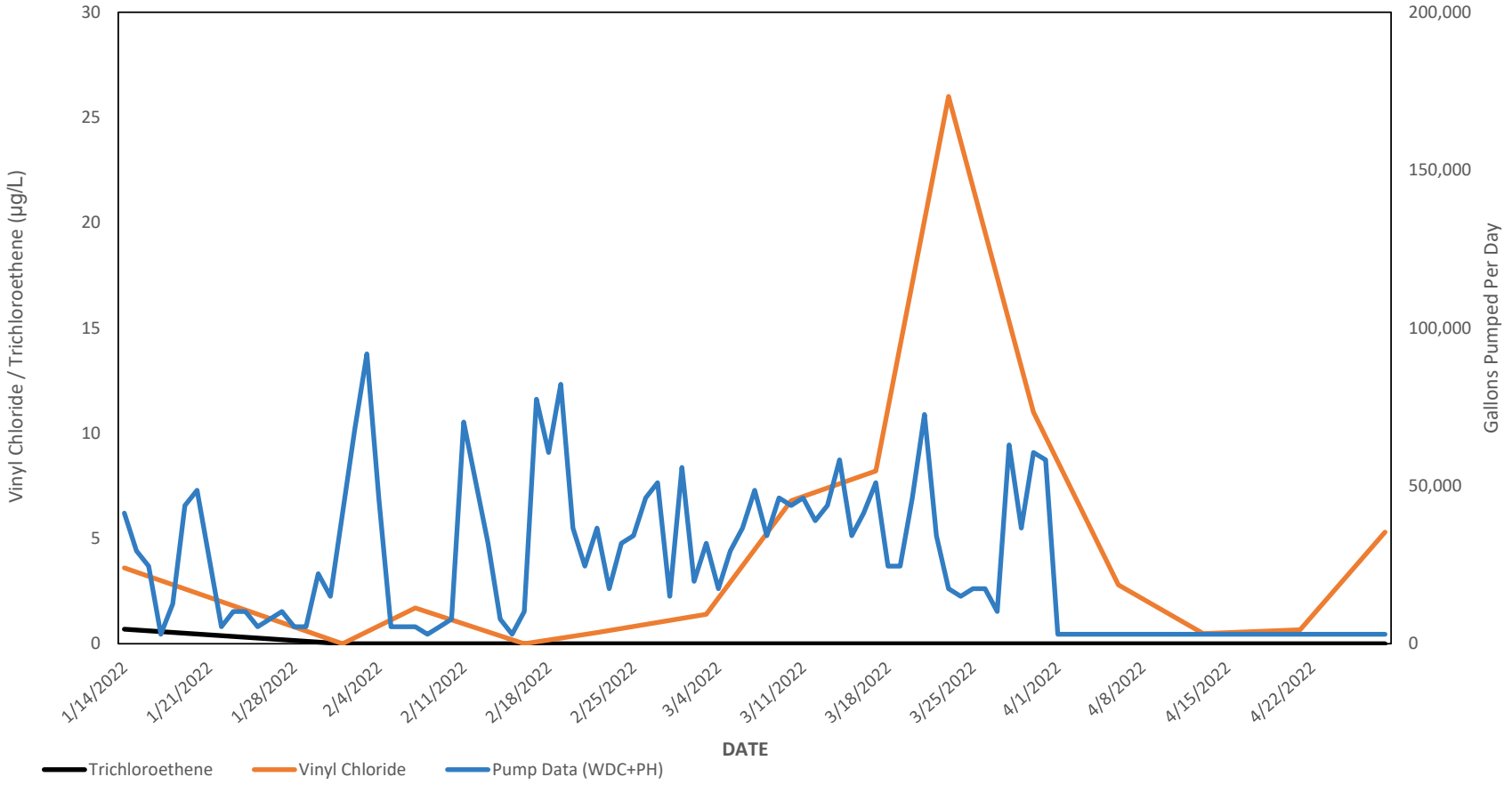
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"
2. Results shown are post utility corridor rehabilitation

Appendix C
SAMH-1231A
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

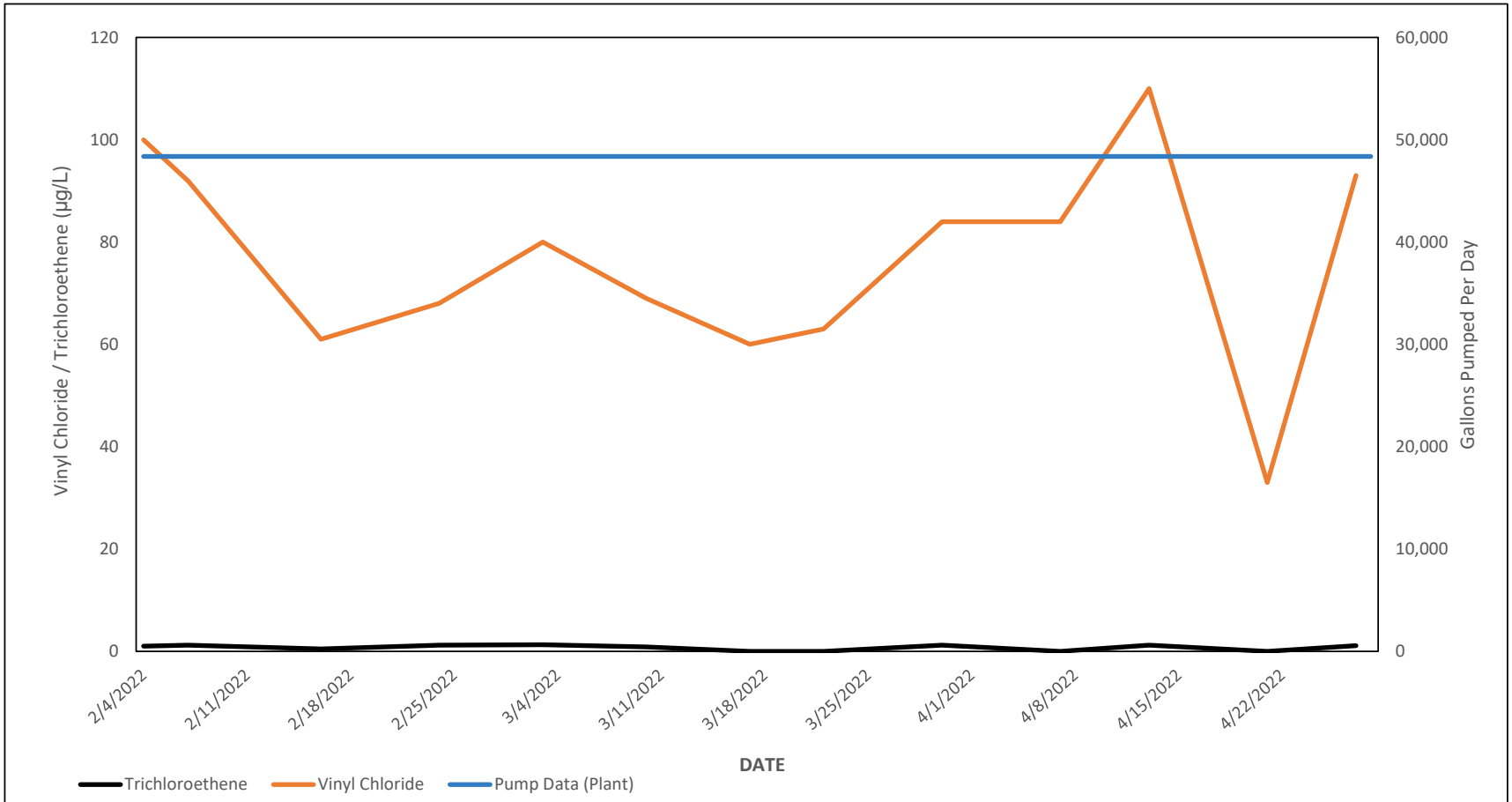
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"
2. Results shown are post utility corridor rehabilitation

Appendix C
SAMH-1244
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

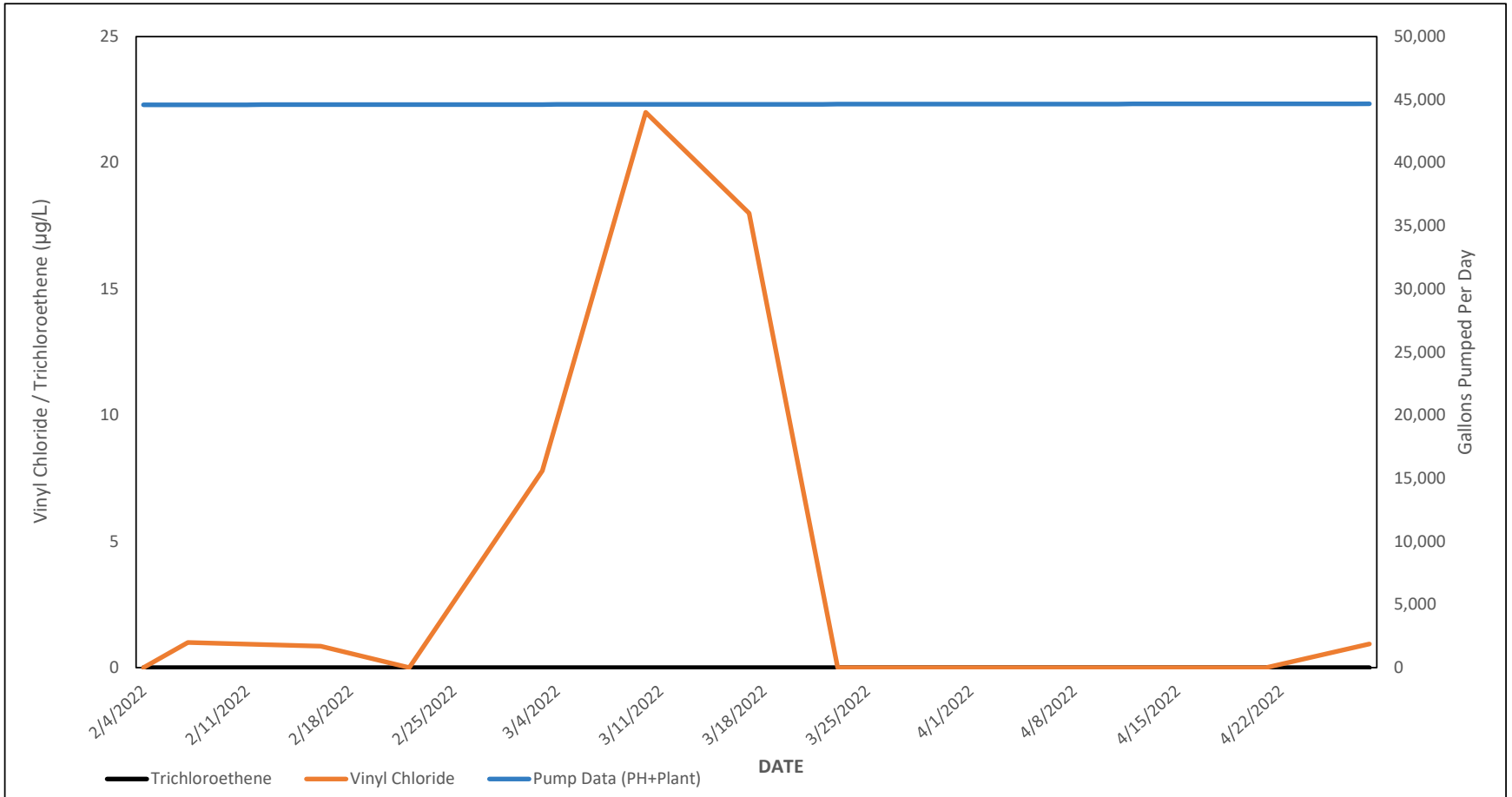
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"
2. Results shown are post utility corridor rehabilitation

Appendix C
SAMH-1255
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

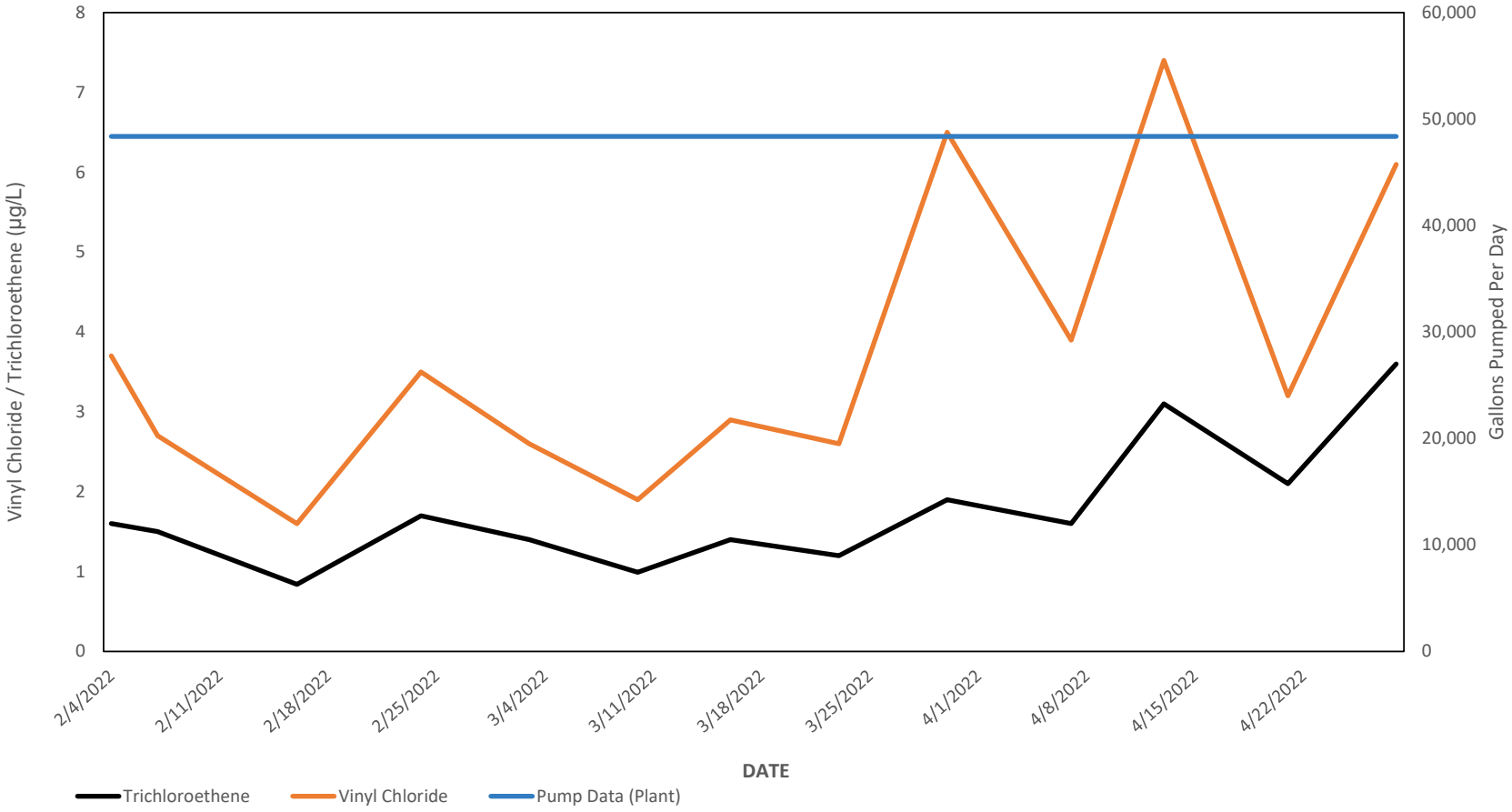
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"
2. Results shown are post utility corridor rehabilitation

Appendix C
SAMH-1256
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

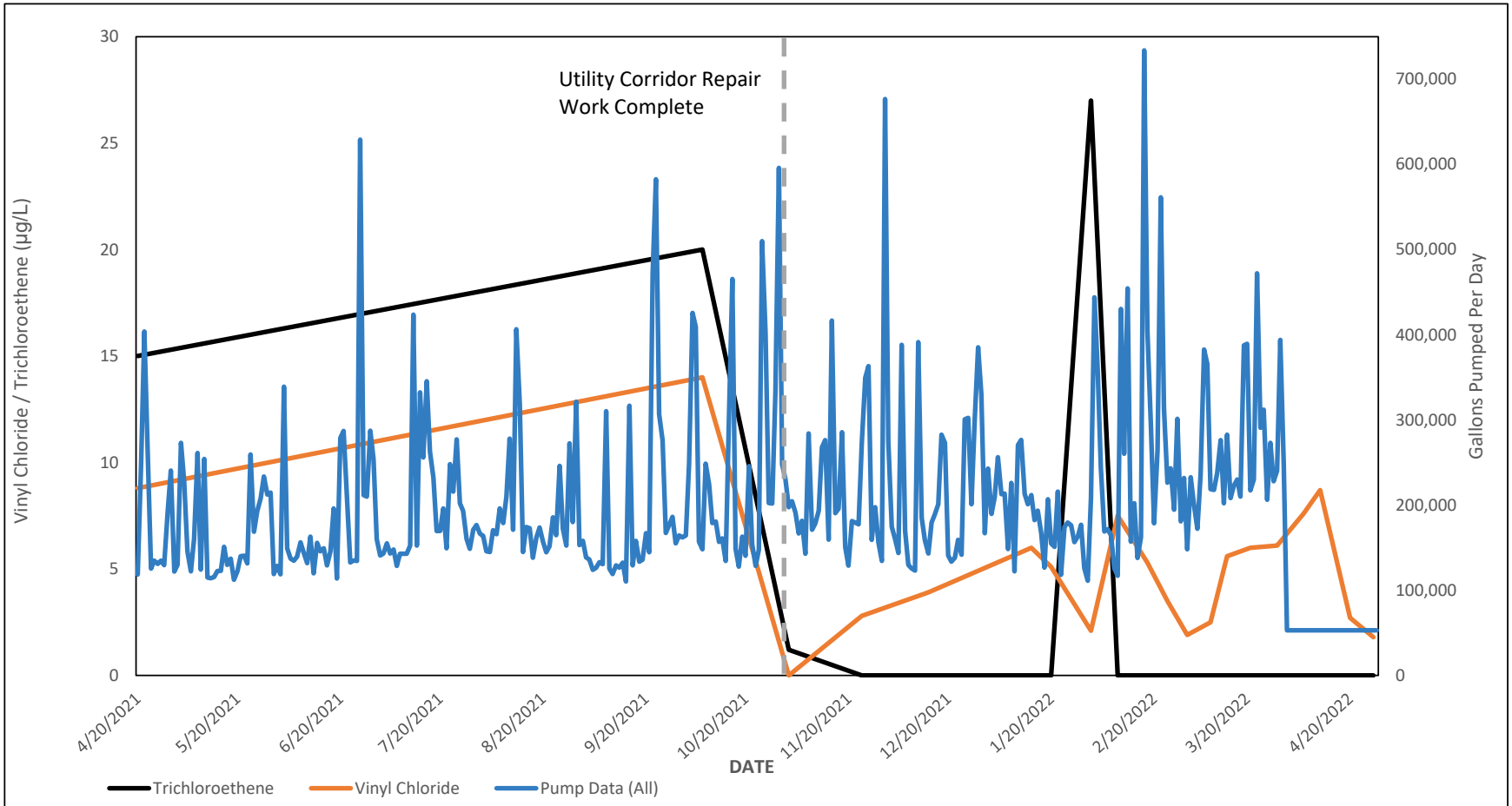
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"
2. Results shown are post utility corridor rehabilitation

Appendix C
SAMH-1259
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

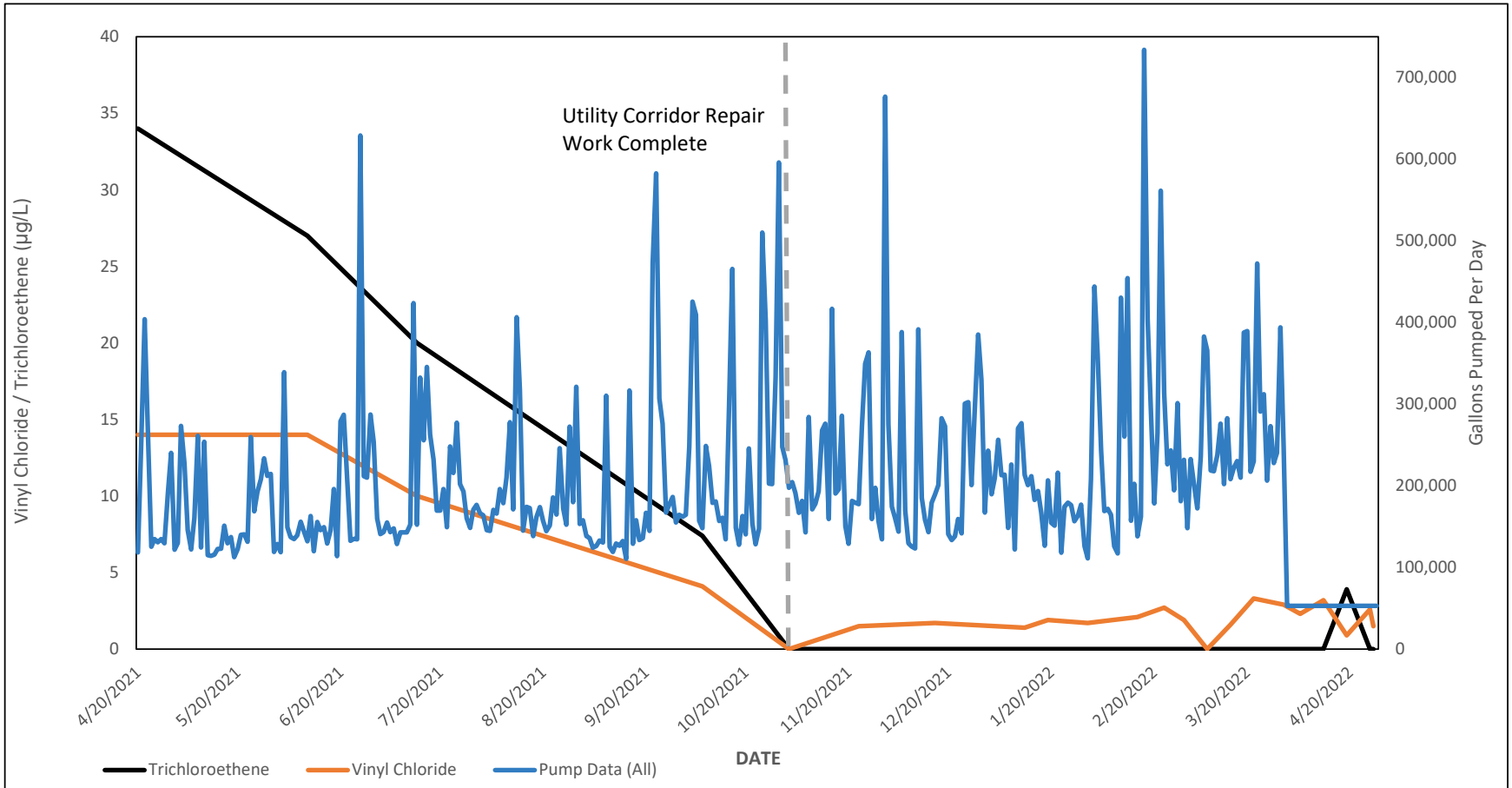
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-2
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

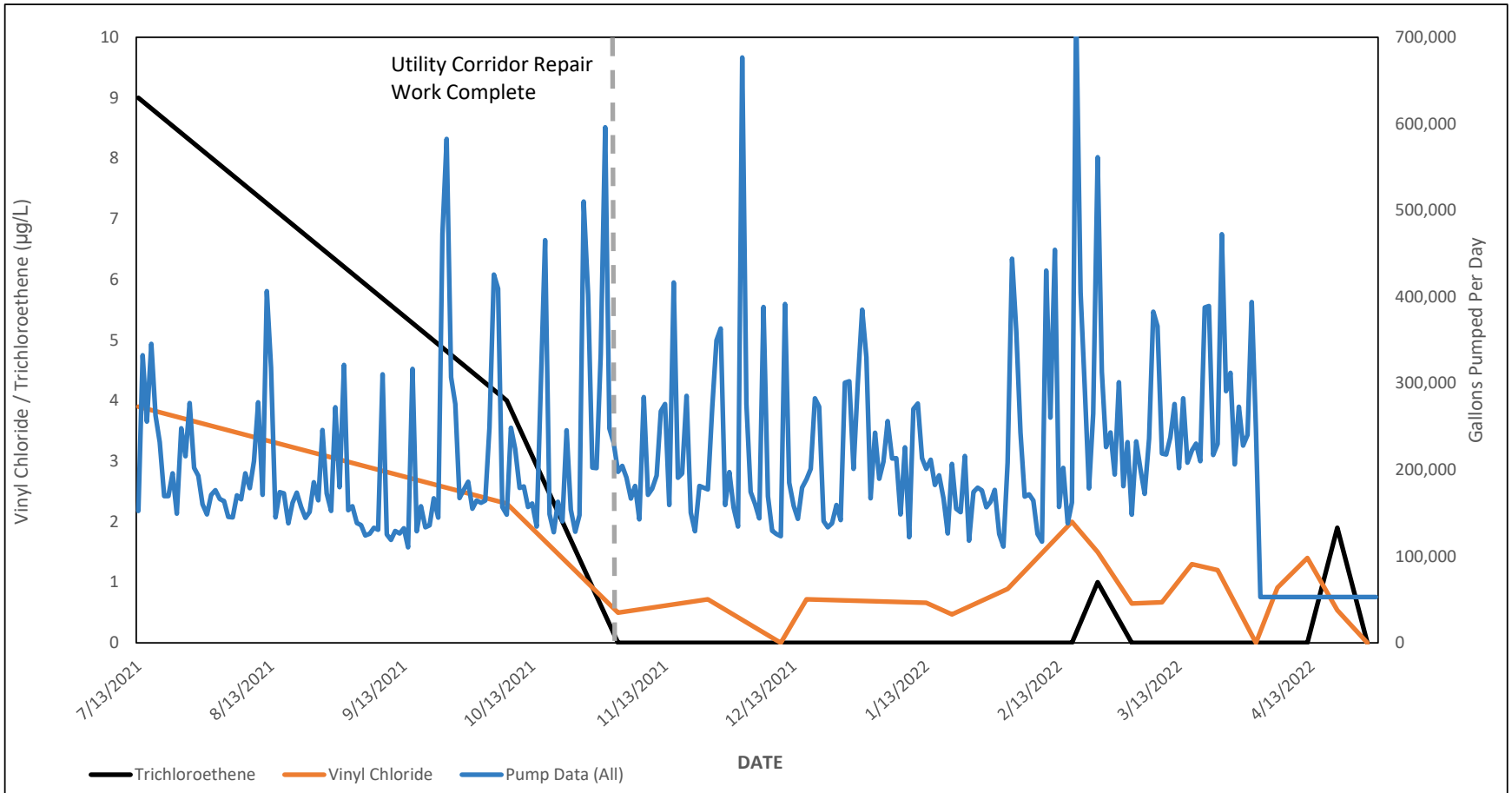
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-5
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

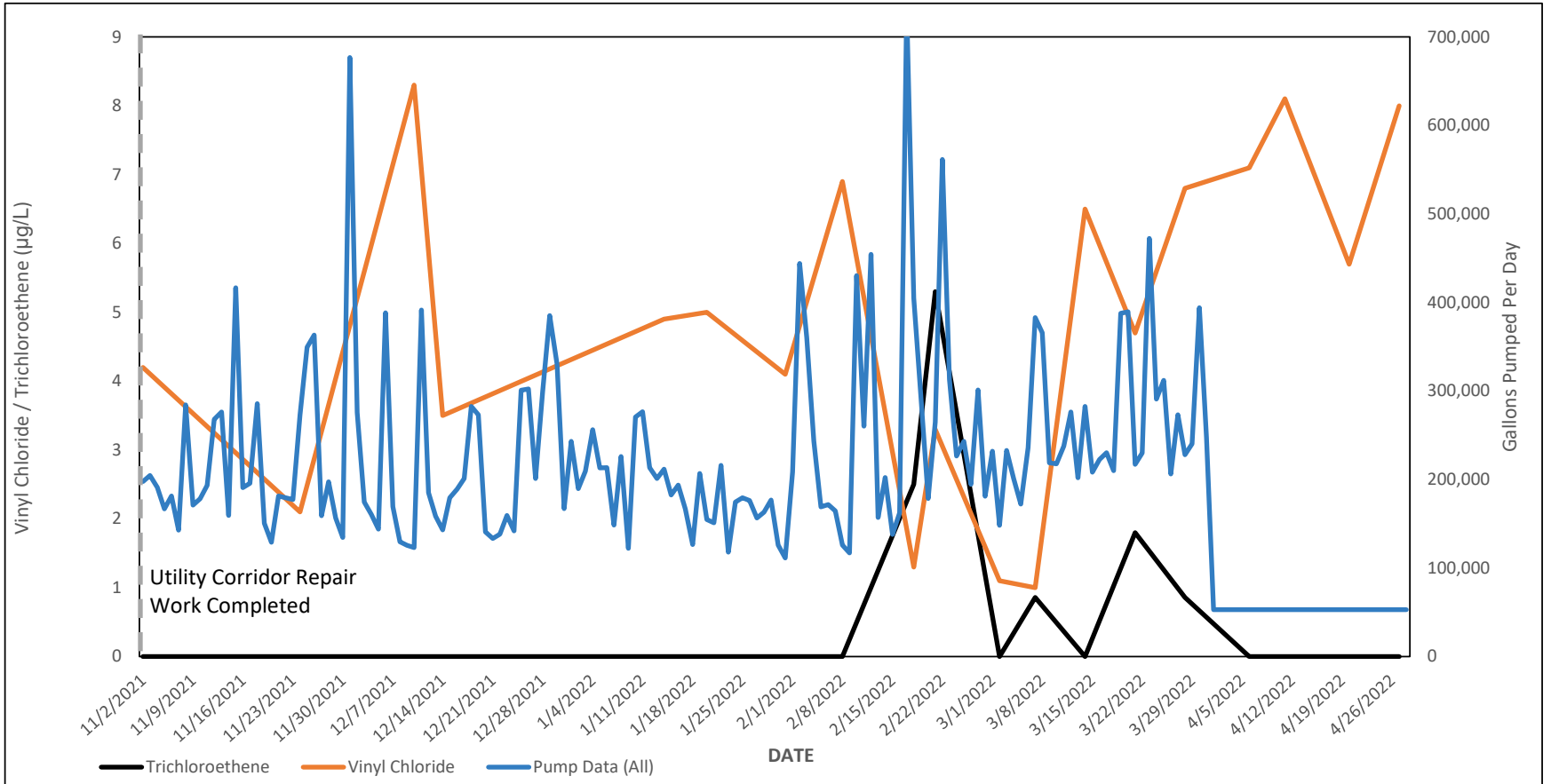
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-12
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

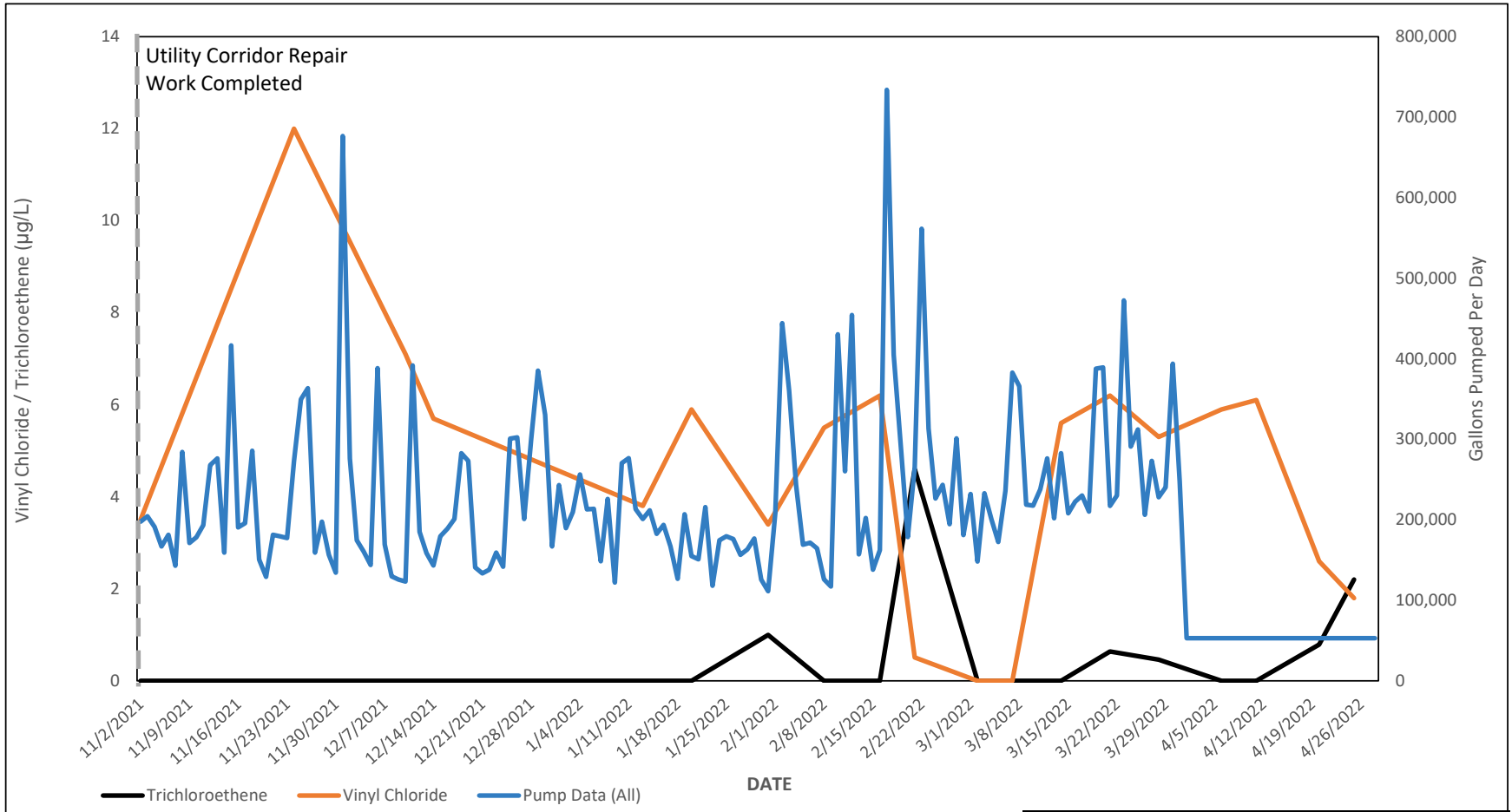
Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-16
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

Liquid Analytical Trend Graph



Note:
1. Non Detects are reported to "0"

Appendix C
SL-17
May-22
Utility Corridor Liquid Analytical Results
Ford Livonia Transmission Plant
36200 Plymouth Road,
Livonia, Michigan

Appendix D

Communication Log

Appendix D
Commercial and Residential Communication Log

Commercial / Residential	Site Address (Livonia, MI 48150)	Parcel #	Property Owner	Date AA Sent (no expiration)	Date AA Signed by Property Owner	Communication Log / Notes	Date and Time of Plumber Inspection
Residential	9551 Stark	130-01-0044-002	ANDERS REBECCA / BUCKNER JOHN	3/3/2022 3/24/2022 4/19/2022		3/18/2022 - Arcadis spoke to the property owner at their house to discuss the access agreement. The resident had questions which Arcadis (Kris Hinskey) addressed. The resident appreciated the clarification and would discuss with her husband. Arcadis will follow up with the resident on Thursday March 24, 2022 if no agreement has been signed. 3/24/2022 - Arcadis met with the property owner to discuss gaining access to complete the plumbing inspection of the home. The resident is still hesitant to allow Arcadis to complete this inspection. Arcadis identified a clean out that was in the yard and asked if there was work completed on the sanitary line and he said yes. The property owner asked if we could evaluate this location instead of going into the house. Arcadis indicated we would still need your approval to investigate that location. He indicated that he will discuss with his wife and get back to us soon. 4/12/22 - Arcadis knocked on door, no answer. 4/21/2022 - Arrived at the property at 130 PM and there was no answer at the home. Returned back to the home at 6:00 PM and no answer at the home.	
Residential	9491 Stark	131-99-0033-003	BIDWELL RICHARD / CHAU T	3/3/2022	3/24/2022	3/18/2022 - Arcadis spoke to the property owner at there house to discuss the access agreement. The resident indicated that her son did have questions regarding the agreement, but she would let her son discuss. Arcadis explained that out of an abundance of caution the state (EGLE) is requesting for Ford to complete the plumbing assessment. Kris Hinskey gave the resident his number to call and address any questions. Arcadis will follow up with the resident on Thursday March 24, 2022 if no agreement has been signed. 3/24/2022 - Arcadis met with the property owner to discuss any questions the resident may have. Signed access agreement provided to Arcadis. 3/28/2022 - Arcadis called and left a message regarding the scheduling of the plumbing inspection. 3/29/2022 - Arcadis called spoke with the homeowner to set up the plumbing inspection for 4/5/2022 at 9:30AM.	4/5/2022 at 9:30am
Residential	9487 Stark	131-99-0034-002	WILLIAM K TAYLOR JR	3/3/2022 3/24/2022 4/19/2022 4/21/2022	4/21/2022	3/18/2022 - Arcadis spoke to the property owner at there house to discuss the access agreement. The property owner initially indicated that they did not want to sign the agreement, because more information was needed. Kris Hinskey explained that he could answer the property owner's questions. The property owner indicated that the timing was not good and if we could come back at a later time. An additional door to door visit will be conducted on Thursday March 24, 2022 both in the morning and afternoon. An additional door to door visit will be conducted on Thursday March 24, 2022 both in the morning and afternoon if the AA has not been signed. 3/24/2022 - Arcadis met with the property owner to discuss and questions the resident may have. The property owner indicated that he is not signing the agreement and to stop bothering him for access. 4/21/2022 - Kris Hinskey met with the property owner to discuss the access agreement. Property owner agreed to access and signed the agreement. 4/27/2022 - Arcadis called and left a message regarding the scheduling of the plumbing inspection. 5/2/2022 - Arcadis called and left a message regarding the scheduling of the plumbing inspection. 5/4/2022 - Arcadis called and spoke with the property owner. The plumbing inspection is scheduled for 5/11/2022 at 10AM.	5/11/2022 at 10am

Commercial / Residential	Site Address (Livonia, MI 48150)	Parcel #	Property Owner	Date AA Sent (no expiration)	Date AA Signed by Property Owner	Communication Log / Notes	Date and Time of Plumber Inspection
Residential	9375 Stark	131-99-0035-001	PARKVIEW BAPTIST CHURCH	3/3/2022 3/24/2022 4/12/2022 4/19/2022	4/25/2022	3/18/2022 - Arcadis knocked on the door and there was no response. An additional door to door visit will be conducted on Thursday March 24, 2022 both in the morning and afternoon. 3/24/2022 - Arcadis met the property owner to discuss the access agreement and address any questions/concerns from the resident. The owner's questions were discussed and indicated that he would like to take the weekend to review and will provide Arcadis a signed AA if he didn't have any questions. 4/12/22 - Teen answered door, left access agreement with him w/ Theresa's card and asked if parents could contact Arcadis regarding access agreement. 4/21/2022 - Kris Hinskey discussed the access agreement with the assistant pastor's wife. She indicated that they did receive the letter but her husband is out of town for business. She indicated that they were just staying at the house and that the church needs to decide to provide access to the home. She indicated that she will notify her husband of the document. Kris Hinskey to follow up with the head pastor of the Church. 4/27/2022 - Arcadis called and left a message regarding the scheduling of the plumbing inspection. 5/2/2022 - Arcadis called and left a message regarding the scheduling of the plumbing inspection. 5/4/2022 - Arcadis called and left a message regarding the scheduling of the plumbing inspection. 5/9/2022 - Arcadis received a voicemail from the property owner returning a message to schedule the inspection. 5/9/2022 - Arcadis called and spoke with the property owner to schedule the plumbing inspection for 5/16/2022 at 9AM. 5/14/2022 - Arcadis recieved a voice mail from the property owner requesting a change in the date for the plumbing inspection. 5/14/2022 - Arcadis called and spoke witht he property owner to reschedule the plumbing inspection. Arcadis offered Friday 5/20, but would need to confirm availability with the plumber. 5/16/2022 - Arcadis called and left a message stating that the plumber had availability during the morning of 5/16/2022. 5/17/2022 - The property owner called Arcadis and rescheduled the plumbing inspection for Friday 5/20/2022 at 9AM.	5/20/2022 9AM
Residential	9552 Stark	129-01-0098-000	DONALD/LINDA KOMOS	3/3/2022 3/24/2022 4/19/2022	4/21/2022	3/18/2022 - Arcadis knocked on the door and there was no response. An additional door to door visit will be conducted on Thursday March 24, 2022 both in the morning and afternoon. 3/24/2022 - Arcadis met with the property owner to discuss any questions the resident may have. Signed access agreement provided to Arcadis. 3/25/20022 - Property owner called Arcadis and rescinded access agreement. The property owner is preparing to sell their home and does not want anyone inside or outside until after sale. 4/21/2022 - Kris Hinskey met with the property owner to discuss the access agreement. Property owner agreed to access and signed the agreement. 4/26/2022 - Arcadis called and left a message regarding the scheduling of the plumbing inspection. 4/27/2022 - Arcadis recieved a call from the homeowner to schedule the plumbing inspection. The inspection is scheduled for 5/11/2022 at 1PM. The homeowner requested that during the plumbing inspection toilets are not to be removed. The homeowner did not want any damage done to the recently replaced toilets or tile floors in the bathrooms.	5/11/2022 at 1:00pm
Residential	3/3/2022 3/24/2022 4/19/2022 4/21/2022	132-02-0024-002	FURMAN RONALD	3/3/2022	3/24/2022	3/18/2022 - Arcadis knocked on the door and there was no response. An additional door to door visit will be conducted on Thursday March 24, 2022 both in the morning and afternoon. 3/24/2022 - Arcadis met with the property owner to discuss any questions the resident may have. Signed access agreement provided to Arcadis. 3/28/2022 - Arcadis called and left a message regarding the scheduling of the plumbing inspection. 3/29/2022 - Arcadis called spoke with the homeowner to set up the plumbing inspection for 4/6/2022 at 9:30AM. 3/29/2022 - The homeowner called Arcadis back to schedule the plumbing inspection for 4/6/2022 at 11AM.	4/6/2022 at 11:00am

Commercial / Residential	Site Address (Livonia, MI 48150)	Parcel #	Property Owner	Date AA Sent (no expiration)	Date AA Signed by Property Owner	Communication Log / Notes	Date and Time of Plumber Inspection
Residential	34284 Hathaway	132-02-0025-002	IRVIN JAMES / APRIL R	3/3/2022 4/19/2022	4/21/2022	3/4/2022 - Received a voicemail from James Irvin requesting for someone to call him back because he was not comfortable providing access inside his property. Mr. Irvin called Kris Hinskey at 5:33 PM to discuss the access agreement. Kris Hinskey explained that EGLE was requiring Ford to inspect the plumbing inside the home as an extra precaution due to potential vapors in the sanitary. Mr. Irvin said he needed time to review the access agreement and will get back to us. 3/18/2022 - Arcadis met the property owner in his driveway to discuss the access agreement that had been provided to the property owner to gain access for the plumbing survey. Property owner wanted to understand why a plumbing investigation. Arcadis explained that out of an abundance of caution the state (EGLE) is requesting for Ford to complete the plumbing assessment. The resident understood the request and indicated that they will sign and return to Arcadis. Arcadis will follow up with the resident on Thursday March 24, 2022 if no agreement has been signed. 3/24/2022 - Property owner will not allow access into the property to complete the inspection and is asking for a revised access agreements that allows access only to the outside of the property to investigate the lateral connecting his home to the sanitary sewer on Hathaway. 4/12/22 - Arcadis rang the doorbell, no answer. Kris Hinskey returned to the home at 530 PM. Mr. Irvin answered the door and indicated that he will agree to give Ford access to inspect the plumbing. 4/27/2022 - Arcadis called and spoke with Mr. Irvin, the plumbing inspection is scheduled for 5/9/2022 at 11:00am.	5/9/2022 at 11:00am
Residential	34277 Hathaway	132-02-0026-002	BALDWIN ROBERT / BARBARA	3/3/2022	3/18/2022	3/18/2022 - Arcadis met the property owner in the driveway to discuss the access agreement that was provided to the resident on March 4, 2022. The property owner indicated that they were not clear why access was being requested. Arcadis explained that out of an abundance of caution the state (EGLE) is requesting for Ford to complete the plumbing assessment. The resident understood and signed the access agreement. Arcadis is currently coordinating the plumbing assessment. 3/23/2022 - Arcadis left two voice messages for the property owner to get the plumbing inspection scheduled. 3/24/2022 - Arcadis called and spoke with the property owner, the plumbing inspection is schedule for 3/29/2022 at 11AM.	3/29/2022 at 11:00am
Residential	34252 Hathaway	132-02-0024-001	CRYSTAL CREEK / MIKE BROWN	3/3/2022	3/23/2022	3/18/2022 - Arcadis arrived at the property and the property is a home health facility. The nurse called the property owner (Stacy) to discuss the reason for the visit. Arcadis (Kris Hinskey) explained that out of an abundance of caution the state (EGLE) is requesting for Ford to complete the plumbing assessment. Stacy requested to leave the access agreement and Kris Hinskey' s phone number and will call if there is any questions. Arcadis will follow up with the resident on Thursday March 24, 2022 if no agreement has been signed. 3/23/2022 - Gregory Barton (property owner's attorney) contacted Kris Hinskey to discuss the purpose of the access agreement. Mr. Hinskey explained that EGLE is requesting a plumbing survey to determine if there is any deficiencies in the plumbing. Mr. Hinskey explained that EGLE would like the survey completed as soon as possible and any expenses related to the plumbing services would be at no expense to the property owner. Mr. Barton indicated that he will contact his client and get the documents signed and sent to Arcadis. 3/28/2022 - Arcadis called and left a message for the property owner to schedule the plumbing inspection. 4/7/2022 - Arcadis called and spoke with the group home manager to schedule the plumbing inspection for 4/12/2022 at 9:30am	4/12/2022 at 9:30am

Commercial / Residential	Site Address (Livonia, MI 48150)	Parcel #	Property Owner	Date AA Sent (no expiration)	Date AA Signed by Property Owner	Communication Log / Notes	Date and Time of Plumber Inspection
Residential	34247 Hathaway	132-02-0026-001	MORRISON DANNY/SHIRLEY	3/3/2022	3/18/2022	3/8/2022 - Received a voicemail from Shirley Morrison indicating that her husband had signed the access agreement but would like to rescind the agreement until they review and complete additional homework. Kris Hinskey called Mrs. Morrison and left a message. A subsequent text message followed indicating to text only. Kris Hinskey replied and reiterated that if they had any questions to please call, text, or email. 3/14/2022 - Kris Hinskey received a call from property owner and immediately hung up after I answered. I called back and left a message. 15 minutes I called back again and the property owner indicated she accidently called me on mistake. She also requested for the access agreement that they signed was to be rescinded as both her and her husband are elderly and want to make sure they are safe if someone enters their home. I told the property owner that I would be coming door to door on 3/18/2022 to address and questions or concerns. 3/18/2022 - Arcadis met with the property owner to address any questions from the resident about the access agreement. Once the questions were addressed the resident agreed to the plumbing inspection. 3/23/2022 - Arcadis called and left two voice messages for the property owner to get the plumbing inspection scheduled. 3/24/2022 - Arcadis called and left a message to schedule the plumbing inspection. 3/30/2022 - Arcadis called and spoke with the homeowner, the plumbing inspection is scheduled for 4/7/2022 at 10AM.	4/7/2022 at 10:00am
Commercial	34900 Plymouth	111-01-0010-000	34900 PLYMOUTH ROAD LLC	6/29/2021	7/12/2021	3/16/2022 - Arcadis called and spoke with the property owner. The plumbing inspection is set up for 3/23/2022 at 10:30AM. 3/24/2022 - Arcadis called and spoke with the property owner. A follow up visit is scheduled for 3/29/2022 to make plumbing repairs and to conduct a further inspection. 4/8/2022 - Arcadis called and left a message to schedule the dye test on the plumbing fixtures. 4/11/2022 - Arcadis called and spoke with property owner, the dye test is scheduled for 4/20/2022 at 10:30am.	3/23/2022 10:30am dye test: 4/20/2022
Commercial	34850 Plymouth	111-01-0008-000	WINKAL HOLDINGS, LLC	6/29/2021	7/16/2021	3/16/2022 - Called and spoke with the property owner to set up the plumbing inspection. The property owner needed to contact the tenant to confirm the date and time. Arcadis sent an email to follow up on scheduling a date and time for plumbing inspection. Received a response the same day, indicating that 3/24/2022 will work for the inspection. After contacting the plumber, a time of 10:30am on 3/24/2022 was decided and communicated with the property owner. 4/11/2022 - Arcadis called and left a message to schedule the dye test at the property. Arcadis sent an email to follow up and scheduled the dye test for 4/18/2022 at 1:00pm.	3/24/2022 10:30am dye test: 4/18/2022
Commercial	34800 Plymouth	111-01-0006-000	TSC Holdings LLC	6/29/2021 9/15/2021 3/3/2022 4/13/2022		3/24/2022 - Arcadis visited the property and asked if the employee that was currently working at the location had a number for the property owner. The employee indicated that she didn't and is not provided that information. Through further research Arcadis believes that a working phone number has been found and will contact the property owner. 3/28/2022 - Spoke to Jalal Jameel and he indicated that he is no longer the owner and has sold the property. 4/12/22 - Arcadis visited the property and spoke to an employee at the front desk. He indicated the property had been sold in the fall and the new owner's address is TSC Holdings LLC. 25734 Ann Arbor Trail, Dearborn Heights, MI 48127. 4/21/2022 - At the real estate managers request Kris Hinskey visited the property to get verbal approval from the tenant to assess the properties plumbing. The tenant indicated that he had no issues and indicated that one wash tub, two bathrooms, and 1 floor drain was present at the property. Kris Hinskey notified the real-estate manager that the tenant had no issue with the plumbing inspection. The real estate manager indicated that he will notify his client. 5/16/2022 - Kris Hinskey spoke to the realestate manager and again reminded him that we need a signed access agreement before we can coordinate with the tenant at the property to complete the plumbing inspection. The real estate manager requested that I send the access agreement directly to him and he will get his client to	

Commercial / Residential	Site Address (Livonia, MI 48150)	Parcel #	Property Owner	Date AA Sent (no expiration)	Date AA Signed by Property Owner	Communication Log / Notes	Date and Time of Plumber Inspection
Commercial	34706 -34730 Plymouth	111-01-0002-000	J & M LIVONIA LLC	6/29/2021 9/15/2021 3/3/2022 3/25/2022	3/26/2022	3/24/2022 - Property owners phone number has been identified and Arcadis will contact to discuss the agreement. 3/28/2022 - Left a message with potential property owner. 4/5/2022 - Arcadis called and left a message with the property owner for contact information on the tenants. 4/6/2022 - Arcadis called and left a message with the property owner for contact information on the tenants. 4/7/2022 - Arcadis emailed the property owner for contact information on the tenants. The property owner replied via email.	Currently coordinating with tenants
	34706-34708 Plymouth		Shawarma Palace			4/27/2022 - Arcadis called and left a message. 5/4/2022 - Arcadis called and left a message. 5/10/2022 - Arcadis called and left a message. 5/12/2022 - Arcadis called and left a message. 5/12/2022 - Arcadis received a call from the tenant to schedule the plumbing inspection for 5/18/2022 at 10:30AM.	5/18/2022 10:30AM
	34710 Plymouth		China Moon			4/27/2022 - Arcadis called and left a message. 5/4/2022 - Arcadis called and left a message. 5/10/2022 - Arcadis called and left a message. 5/12/2022 - Arcadis called and left a message.	
	34712 Plymouth		DMG Nails			4/11/2022 - Arcadis called and spoke with the tenant. The plumbing inspection was scheduled for 4/14/2022 at 1:00PM.	4/14/2022 1:00pm
	34714 Plymouth		S&K Staffing			4/11/2022 - Arcadis called and left a message. 4/13/2022 - Arcadis called and left a message. 4/27/2022 - Arcadis called and left a message. 5/2/2022 - Arcadis called and left a message. 5/4/2022 - Arcadis called and left a message. 5/10/2022 - Arcadis called and left a message. 5/11/2022 - Arcadis recieved a call from the tenant office receptionist. The plumbing inspection is scheduled for 5/19/2022 at 1PM.	5/19/2022 1PM
	34716 Plymouth		Sharpex Hair Salon			4/11/2022 - Arcadis called and left a message. 4/12/2022 - Tenant called Arcadis back. The plumbing inspection was scheduled for 4/13/2022 at 10:00AM.	4/13/2022 10:00am
	34718 Plymouth		Elcoyote Loko Mexican			4/11/2022 - Arcadis called and left a message. 4/27/2022 - Arcadis call and was unable to leave a message, the phone number is not in service.	
	34720 Plymouth		Tubby's			4/11/2022 - Arcadis called and left a message. 4/27/2022 - Arcadis called and left a message. 5/2/2022 - Arcadis called and left a message. 5/4/2022 - Arcadis called and left a message. 5/10/2022 - Arcadis called and left a message. 5/12/2022 - Arcadis called and left a message.	

Commercial / Residential	Site Address (Livonia, MI 48150)	Parcel #	Property Owner	Date AA Sent (no expiration)	Date AA Signed by Property Owner	Communication Log / Notes	Date and Time of Plumber Inspection
	34722-34726 Plymouth		KSI Kitchen			4/11/2022 - Arcadis called and spoke with the tenant. The plumbing inspection was scheduled for 4/14/2022 at 8:45AM.	4/14/2022 8:45am
	34728 Plymouth		Sound Advise Hearing			4/11/2022 - Arcadis called and left a message. 4/13/2022 - Arcadis called and left a message. 4/27/2022 - Arcadis called and left a message. 5/2/2022 - Arcadis called and left a message. 5/4/2022 - Arcadis called and spoke with tenant. The plumcing inspection is scheduled for 5/10/2022 at 9AM.	5/10/2022 9:00am
	34730-34734 Plymouth		Pure Chiropractor			4/11/2022 - Arcadis called and left a message. 4/13/2022 - Arcadis called and left a message. 4/27/2022 - Arcadis called and left a message. 5/2/2022 - Arcadis called and left a message. 5/4/2022 - Arcadis called and left a message. 5/7/2022 - Arcadis received a voice mail from the tenant retruning a message. 5/9/2022 - Arcadis called and spoke with the tenant. The plumbing inspection is scheduled for 5/16/2022 during the two hour break when they do not have patients, 1-3PM.	5/16/2022 1-3PM
	34746 Plymouth		ABC Liquor Tobacco			4/11/2022 - Arcadis called phone number supplied by property owner for the tenant, the number is not in service. 5/10/2022 - Arcadis called and left a message. 5/11/2022 - Arcadis called and spoke with the tenant to schedule the plumbing inspection. The inspection is scheduled for 5/19/2022 at 10AM.	5/19/2022 10AM
Commercial	34500 Plymouth	111-01-0001-001	MOSS/WALKON INC	6/29/2021 9/15/2021 3/3/2022 3/25/2022 4/19/2022		3/24/2022 - Arcadis visited the property and asked if the employee that was currently working at the location had a number for the property owner. The employee indicated that she didn't and is not provided that information. Through further research Arcadis believes that a working phone number has been found and will contact the property owner. 3/28/2022 - Arcadis spoke to the property owner and confirmed that Mr. Walkon owns the property. Mr. Walkon requested that the access agreement to be sent to 3890 Brookside Dr. Bloomfield Hills, MI. Updated current contact number. 4/20/2022 - Kris Hinskey called the owner of the property to determine if he would sign the access agreement. Once Mr. Hinskey introduced himself to Mr. Walkon, he immediately hung up. 5/13/2022 - Sharon Walkon contact contacted Kris Hinskey to to inform them that they own the property but do not own the building. Therefore they could provide access to the property but a different contact will need to provide access to the building. New contact is Donna Macri 973-496-7986 donna.macri@avisbudget.com 5/16/2022 - Kris Hinskey called Donna Macri and left a message.	
Commercial	34450 Plymouth	111-01-0001-002	STANTON,DAVID J & ASOOC	6/29/2021 3/3/2022 3/24/2022 4/19/2022 4/21/2022		3/24/2022 -Revised access agreement has been provided to the property owner's attorney which is currently under review. Ford and Arcadis are continuing to negotiate access based on the current scope of work. 3/28/2022 - Spoke to the property owner's attorney to discuss the access agreement. The attorney is currently reviewing with her client and will circle back with Arcadis with a sequence of initial plumbing inspection. 4/21/2022 - Revised access agreement per the property owner's request. The attorney indicated that she would discuss the revised access agreement and will get back with us.	
Commercial	35000 Plymouth	111-99-0003-000	EDWARD C. BROWN / BILL BROWN FORD	6/29/2021	7/2/2021	3/16/2022 - Arcadis emailed the property owner to set up the plumbing inspection. An email was received to set up the plumbing inspection for 3/25/2022. 3/17/2022 - Arcadis emailed the property owner to confirm the plumbing inspection for 3/25/2022 at 10:30AM. 4/11/2022 - Arcadis emailed the building manger to schedule the dye test. The building manger replied and the dye test is scheduled for 4/21/2022 at 9:00am.	3/25/2022 9:00 am Dye test: 4/21/2022 9:00am

Appendix D
Commercial and Residential Communication Log

Commercial / Residential	Site Address (Livonia, MI 48150)	Parcel #	Property Owner	Date AA Sent (no expiration)	Date AA Signed by Property Owner	Communication Log / Notes	Date and Time of Plumber Inspection
Commercial	35200 Plymouth	111-02-0032-000	DAB PLYMOUTH LLC	Access Received per Attorney	Access Received per Attorney	3/21/2022 - Arcadis called the property owner and left a message to schedule the plumbing inspection. 3/23/2022 - Arcadis received a call from the building manager to set up the plumbing inspection. The inspection is set up for 3/28/2022 at 9AM. 4/7/2022 - Arcadis called and left a message to schedule the dye test. 4/12/2022 - Arcadis received a call to from the building manager to schedule the dye test for 4/18/2022. 4/14/2022 - Arcadis called and left a message to reschedule the dye test for 4/19/2022. 4/15/2022 - Arcadis called and left a message to reschedule the dye test for 4/19/2022.	3/28/2022 9:00 am Dye test:4/19/2022 9:00am
Commercial	35400 Plymouth	111-02-0001-000	JC PROPERTIES LLC	Access Received per Attorney	Access Received per Attorney	3/24/2022 - Arcadis drove by the property. The property is under construction and appears to be transitioning into a multi-tenant property. Arcadis will continue to reach out to the property owner to understand what activities are being done to the building and where existing and new sanitary connections are being implemented.	Currently in Coordination

Appendix E

Plumber Inspection Report

Etchen Commercial Plumbing
37637 Five Mile Rd. #256
Livonia, MI 48154-1543

Field Report

Number: FR11175

Date: 5/18/2022

Bill To:

Arcadis Property Management

Job Location:

Sound Advice Hearing
34728 Plymouth Rd.
Livonia, MI, 48150

PO Number	Terms	Customer #	Sales Rep.	Technician	Type of Work
Q.C.	c.o.d.	11175	Andy E.	B,J	report

Date	Description of Work	Quantity	Price	Amount
5/10/2022	Building inspection for vapors.			
	Inspect all p-traps for sinks.			
	All traps wetted.			
	Pull and reset toilet in back of building. Install new wax ring. Return to normal service.			
	Sewer camera inspection and locate main line.			
	Could not locate main line for sewer, due to main line travels through adjoining tenant space.			
	No vapors detected, while technicians on site.			

Etchen Commercial Plumbing
37637 Five Mile Rd. #256
Livonia, MI 48154-1543

Field Report

Number: FR11176

Date: 5/18/2022

Bill To:

Arcadis Property Management

Job Location:

Residential Property
34284 Hathaway St.
Livonia, MI, 48150

PO Number	Terms	Customer #	Sales Rep.	Technician	Type of Work
Q.C.	c.o.d.	11176	Andy E.	B,J	report

Date	Description of Work	Quantity	Price	Amount
5/9/2022	Inspection of plumbing for building to detect for faults allowing vapors to enter.			
	Inspect all plumbing sinks, and utility tub, and floor drains for wetted traps.			
	All traps wetted.			
	Video inspect main line and video and locate main sewer line.			
	Confirm all fixtures drains lead to same main line.			
	Pull and reset toilet in basement. Install new wax ring seal.			
	Pull and reset toilet off of dining room. Install new wax ring.			
	Pull and reset toilet off hallway. Install new wax ring.			
	No vapors detected, while technicians on site.			
	Plumbing connections are water tight.			

Etchen Commercial Plumbing
37637 Five Mile Rd. #256
Livonia, MI 48154-1543

Field Report

Number: FR11187

Date: 5/18/2022

Bill To:

Arcadis Property Management

Job Location:

Residential Property
9487 Stark Rd.
Livonia, MI, 48150

PO Number	Terms	Customer #	Sales Rep.	Technician	Type of Work
Q.C.	c.o.d.	11187	Andy E.	B,J	report

Date	Description of Work	Quantity	Price	Amount
5/11/2022	Building inspection for vapors.			
	Inspect all floor drains, and sink drains, and bathtub drains.			
	All traps in home is wetted.			
	Pull and reset half bath toilet off of hallway. Install new wax ring and sealant at base of toilet.			
	Pull and reset toilet at end of hallway. Install new wax ring and sealant at base of toilet.			
	Return toilets to service and inspect for leaks, none.			
	Sewer camera inspection and locate main line to city tap.			
	No vapors detected, while technicians on site.			

Etchen Commercial Plumbing
37637 Five Mile Rd. #256
Livonia, MI 48154-1543

Field Report

Number: FR11188

Date: 5/18/2022

Bill To:

Arcadis Property Management

Job Location:

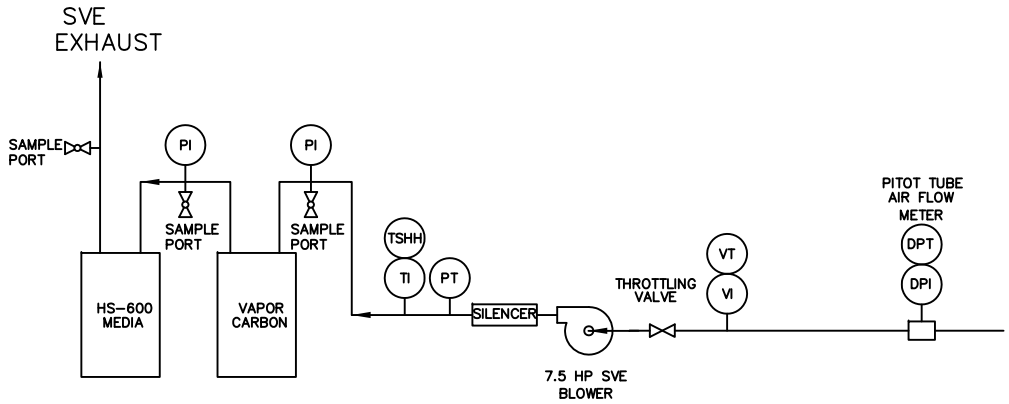
Residential Property
9552 Stark Rd.
Livonia, MI, 48150

PO Number	Terms	Customer #	Sales Rep.	Technician	Type of Work
Q.C.	c.o.d.	11188	Andy E.	B,J	report

Date	Description of Work	Quantity	Price	Amount
5/11/2022	Building inspection for vapors.			
	Inspect all sinks, floor drains, and shower drains.			
	All traps are wetted.			
	Did not pull any toilets as part of inspection at this time.			
	Sewer camera inspect main sewer line and locate.			
	No vapors detected, while technicians on site.			

Appendix F

SSVE Piping and Instrumentation Diagram



V	VACUUM	I	INDICATOR
P	PRESSURE	FQI	FLOW QTY IND. (TOTALIZER)
S	SWITCH	FRI	FLOW RATE INDICATOR
L	LIQUID LEVEL OR LOW	T	TEMPERATURE

MK ENVIRONMENTAL INC.

DATE:	DRAWN BY:	JOB NUMBER	DRAWING NUMBER
5/12/22	EHT	222527B	

ARCADIS SEWER PILOT
LIVONIA, MI

Appendix G

Utility Corridor Backflow Preventer Work Plan

Ford Motor Company

UTILITY CORRIDOR BACKFLOW PREVENTER WORK PLAN

Livonia Transmission Plant

This document is a DRAFT document that has not received approval from the Michigan Department of Environmental, Great Lakes, and Energy (EGLE). This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of the EGLE.

May 18, 2022

UTILITY CORRIDOR BACKFLOW PREVENTER WORK PLAN

Livonia Transmission Plant

Kris Hinskey
Certified Project Manager II

Rob Uppencamp
Principle Scientist

Adam Richmond
Project Geological Specialist

Prepared for:
Ford Motor Company
Environmental Quality Office
Fairlane Plaza North
290 Town Center Drive, Suite 800
Dearborn, Michigan 48126

Prepared by:
Arcadis of Michigan, LLC
28550 Cabot Drive
Suite 500
Novi, Michigan 48377
Tel 248 994 2240

Our Ref.:
30080642

Date:
May 18, 2022

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FIGURES

APPENDICES

ACRONYMS AND ABBREVIATIONS

Arcadis	Arcadis of Michigan, LLC
City	City of Livonia
COC	constituent of concern
DCE	dichloroethylene
EGLE	Michigan Department of Environmental, Great Lakes, and Energy
Ford	Ford Motor Company
LTP	Livonia Transmission Plant
PCE	tetrachloroethylene
RI	Remedial Investigation
SSVIAC	Site-Specific Volatilization to Indoor Air Criteria
TCE	trichloroethene
VC	vinyl chloride
Work Plan	Utility Corridor Backflow Preventer Work Plan
$\mu g/m^3$	micrograms per cubic meter

1 INTRODUCTION

Arcadis of Michigan, LLC (Arcadis) has prepared the following Utility Corridor Backflow Preventer Work Plan (Work Plan) on behalf of Ford Motor Company (Ford) for the Livonia Transmission Plant (LTP) site (the site). The on-site and off-site layout of the utility corridor assessment completed to date is included on **Figure 1** and **Figure 2**. This Work Plan describes the Remedial Investigation (RI) activities that will be used to comprehensively assess the potential exposure pathway via the utility corridors in accordance with the Consent Decree effective July 27, 2017 (No: 2:1712372-GAD-RSW) and satisfies Section 6.7a response activity plan for conducting an RI.

The activities outlined in this Work Plan will address the comments provided by the Michigan Department of Environmental, Great Lakes, and Energy (EGLE) in the letters dated June 2, 2021, November 9, 2021, February 11, 2022, and April 13, 2022. In these letters, EGLE requested that Ford perform a pathway evaluation for compliance for any structures connected to the impacted sanitary sewer corridor. For structures connected to the impacted sanitary sewer corridor, EGLE encouraged Ford to examine if an exterior vapor trap is present within the sanitary sewer lateral that connects the main sanitary sewer line to the structure, and if present, to sample the vapor between the exterior vapor trap and the structure to evaluate compliance. If no exterior vapor trap is present, EGLE stated in the letters that Ford must determine if indoor plumbing is protective of vapor migration.

To satisfy these requests, in the memos dated March 4, 2022 (Arcadis 2022a) and April 1, 2022 (Arcadis 2022b), Arcadis provided EGLE with a progress update on the plumbing inspections completed at off-site commercial and residential properties that are connected to the impacted sewer corridor where access had been granted. In the memo dated March 4, 2022, Ford had committed to take legal action to pursue access in order to complete a plumbing inspection if a property owner refused to sign the access agreement by April 1, 2022. Subsequently, Ford and Arcadis met with EGLE (Jeanne Schlaufman and Matt Williams) on March 24, 2022 and proposed an alternate technical solution to taking legal action. This alternate solution consists of installing a backflow preventer (i.e. exterior vapor trap) on the sanitary lateral in the right-of-way pending the property owners approval. The March 24, 2022 meeting attendees agreed that Ford and Arcadis would continue to pursue the feasibility of the backflow preventers including reviewing vapor migration prevention and maintenance requirements and discussing installation feasibility with the City of Livonia (City).

This Work Plan details the activities that will be completed for the installation and monitoring of backflow preventers at off-site commercial and residential properties that are connected to the impacted sanitary sewer corridor. Given the ongoing cooperative access discussions and this potential alternate technical solution, Ford is postponing initiation of any legal action to pursue access until a later date.

2 SCOPE OF WORK

2.1 Backflow Preventer and Sample Port Installation

2.1.1 Permitting and Notification of Work

Upon receiving approval of this Work Plan, Ford and Arcadis will communicate the process for installing the backflow preventer and provide a proposed installation schedule to the owners of properties that have provided access and have agreed for the backflow preventers to be installed. A permit application with the City will be requested by the licensed plumber to install backflow preventers on each active lateral on each property that has

signed an access agreement. The requested permit will be granted for the installation of the backflow preventer in an area outside of the City right-of-way.

2.1.2 Utility Locate

At each applicable property, Arcadis will coordinate a utility locate utilizing multiple services. A utility locate request will be submitted to Michigan's MISS DIG 811 for the marking of all below-grade utilities on the property. The plumber will identify the depth and location of the sanitary sewer lateral between the sewer main and the building utilizing a depth finding tool placed in the lateral from a sewer cleanout. In addition, a private utility locate company will be contracted to scan the planned excavation area using ground penetrating radar and electromagnetic induction to identify the presence of below grade utilities near the sanitary sewer lateral. Arcadis will compile information from all these activities and develop a site utility figure. Utilities defined on the figure will include natural gas, water, sewer, stormwater, electric, and communication lines.

Following the completion of the utility locate, Arcadis will determine the feasibility of excavation to expose the sanitary lateral and install the backflow preventer based on the proximity of buried utilities. Arcadis will develop design drawings used for the installation of the backflow preventer. If the backflow preventer is unable to be safely installed due to the proximity of utilities, Arcadis will discuss next steps and alternative options with EGLE.

2.1.3 Installation Procedure

Following the identification and marking of all below-grade utilities, an excavation plan will be developed. The excavation plan will identify a suitable location to avoid impacting or damaging neighboring utilities to the sanitary sewer lateral. A planned approximate excavation depth will have been determined from the utility location scans and the sanitary sewer lateral scan. To reduce the depth of the excavation at the lateral, the excavation area will be placed closer to the building where the lateral is at its shallowest depth. The location of the excavation will be unique for each property based on multiple characteristics:

- the presence of adjacent or perpendicular subsurface utilities,
- the presence of a driveway or a parking lot,
- the presence of landscaping, and
- property owner requests.

The licensed plumber can utilize multiple excavation methods to avoid utility strikes. These methods include soft digging, air knifing, hand clearance, and mechanical excavation. Once the approved excavation plan is agreed upon by all parties, the licensed plumber will complete the excavation to the sanitary sewer lateral exposing a length of the lateral pipe. Prior to cutting the lateral pipe, work will be coordinated with the property owner to temporarily stop the discharge of wastewater that would flow through the lateral, for example sinks or toilets. Two cuts will be made in the lateral pipe providing sufficient distance to install all components of the backflow preventer and cleanout.

Installation of a vapor sample port will be included with the installation of the backflow preventer. The sample port will be tapped into the sanitary sewer lateral pipe located up gradient from the backflow preventer. ¼-inch polyethylene tubing will be installed in a protective PVC pipe adjacent to the access riser of the backflow preventer. The tubing will be accessible at the surface inside the well vault. The tubing will have a stainless-steel fitting that will connect to a SUMMA® canister for collecting an air vapor sample.

The conceptual design of an installed backflow preventer is illustrated on **Figure 3**. Components of the backflow preventer include the backflow preventer flapper valve, access riser, cleanout located upstream, vapor sample

port, and a flush mount well vault for access at the surface. The flush mount well vault will be selected based on site conditions and placement. If it is installed in a driveway or parking lot, a heavy-duty traffic rated well vault will be installed. The manufacturer provided product specification sheets for two available backflow preventers are provided in **Appendix A**. Both products are available for installation; the specific backflow preventer installed may differ based on availability of supplies and the diameter of the sanitary sewer lateral.

2.1.4 Final Inspection and Quality Assurance

After installation of the backflow preventer and ancillary components, the plumber will inspect and test the flapper valve. Water will be discharged from the building's plumbing fixtures, and the backflow valve will be observed visually or by using a remotely operated camera to ensure the valve functions correctly. Once the proper functioning of the backflow preventer valve has been verified, the plumber will schedule an inspection with the City Building Department. The inspection needs to occur before backfilling of the excavation can begin. The City engineer will conduct an overall inspection of the backflow preventer, including inspection of the access riser and the sanitary cleanout (if installed with backflow preventer). Once the inspection has been completed and passed, the plumbing company will backfill the exaction. The City permit will be closed out and provided to the property owner if requested. Site restoration activities will be scheduled to repair disturbed surfaces to their previous conditions.

Following the completion of the installation and restoration activities, the first year of monitoring and sampling of the sample port conducted by Arcadis will begin. During the first year, quarterly inspections and sampling will be completed and scheduled with the property owner. Arcadis will conduct four quarterly backflow preventer inspections by a licensed plumber followed immediately by collecting vapor samples from the installed vapor collection sample port. The inspections by the plumber will ensure that the backflow preventer valve is operating effectively, creating a seal, and preventing sewer vapors from reaching the building. Once each inspection confirms that the backflow preventer is maintaining a seal, Arcadis will collect a grab vapor air sample using a 1-liter SUMMA ® canister for TO-15 analysis of site-specific constituents of concern (COCs). Further information on the sampling plan is discussed in sections below.

2.2 Post-Installation Activities

2.2.1 Backflow Preventer Maintenance

To ensure the continued functioning of the backflow preventer flapper valve, the manufacturer recommends the completion of annual maintenance by a plumber. Arcadis will coordinate with the property owner and the licensed plumber to complete the first annual inspection and maintenance visit. The property owner will be responsible for subsequent annual maintenance. A Michigan licensed plumber will complete the following as part of the first annual inspection and maintenance visit:

- Visually inspect the backflow preventer flapper valve; use a remote operated camera, if necessary
- Remove any blockages with a drain snaking tool or flushing technique
- Remove the flapper valve
- Inspect the hinge and flapper valve rubber seals for damage or wear
- Replace the rubber seals, if necessary
- Reinstall the flapper valve
- Test the movement of the flapper valve to ensure it is not impeded

- Replace the entire flapper valve, if necessary
- Ensure the flapper valve is seated fully on the hinge
- Flush and clean the flapper valve
- Test and monitor the functioning of the flapper valve by running water from inside the building

Operation instructions and backflow preventer documentation will be provided to each property owner. As-built record drawings, construction documents, construction photographs, a site-specific figure, manufacture documents, a maintenance plan, and operational guidance from the plumber will be included in this documentation.

The plumber cautions the future use of a drain snaking tool or use of a mechanical cutting auger to clear the lateral to remedy future blockages. The use of these devices can cause damage to the backflow flapper valve. If these mechanical methods are needed for future maintenance of the sewer lateral, a plumber can temporarily remove the backflow flapper valve to prevent damage. The property owner will need to coordinate mechanical maintenance with a plumber to avoid damaging the backflow preventer.

2.2.2 Sample Port Vapor Sampling

Grab vapor samples will be collected from sample ports installed upstream of the backflow preventer (structure side) to evaluate for compliance of the sewer vapor in the sewer lateral between the structure and backflow preventer.

Prior to collecting each grab vapor sample from the sample port, a licensed plumber will complete an inspection on the backflow preventer valve. The inspection will verify that the flapper valve installed within the backflow preventer is closed and functioning properly. Maintenance and repairs will be made by the plumber prior to sampling, if necessary. Also prior to sampling, Arcadis will verify with the property owner that no waste is being discharged from the structure into the sanitary sewer lateral(s). Sample port locations will also be screened with a Landtec GEM 2000 to determine if methane is present prior to sampling.

A grab vapor sample will be collected by attaching the tubing connected to the sample port to 1-liter SUMMA® canisters. To improve the confidence in measured concentrations, one duplicate soil gas sample will be collected and analyzed for the same parameters as the parent sample. The duplicate sample will be collected by connecting two canisters together with a tee so that they have the same intake port. One duplicate will be collected per sampling event and submitted blind to the laboratory.

Quarterly sampling (four total rounds of sampling) of each backflow preventer sample port will be completed and will capture the variability of site-related COCs in the sewer vapor.

3 LABORATORY ANALYSIS

All vapor samples will be submitted to Pace Analytical Services in East Longmeadow, MA and analyzed by United States Environmental Protection Agency Method TO-15 for the site-related COCs, including 1,1-dichloroethylene (1,1-DCE), trichloroethene (TCE), cis-1,2-dichloroethylene (cis-1,2-DCE), trans-1,2-dichloroethylene (trans-1,2-DCE), 1,4-dioxane (1,4-D), tetrachloroethylene (PCE), and vinyl chloride (VC).

Analytical results will be reported in concentration units of micrograms per cubic meter ($\mu g/m^3$). The target detection limits for COCs in vapor are defined in the Site-Specific Volatilization to Indoor Air Criteria (SSVIAC) to evaluate vapor migration in preferential pathways provided by EGLE on September 11, 2020.

4 DATA EVALUATION AND REPORTING

Upon receipt of the vapor data from the backflow preventer sample ports, the data will be validated to determine the appropriateness and usability and then provided to EGLE. Data will be compared to the SSVIAC provided by EGLE on September 11, 2020 to evaluate vapor migration in preferential pathways.

Once the quarterly sampling of each backflow preventer sample port has been completed and the data has been evaluated, Arcadis will determine if the backflow preventers are functioning properly (all sample results below SSVIAC and review of the plumbing reports) or if additional measures are necessary (sample results above SSVIAC) to isolate the impacted sanitary sewer corridor from each connected structure.

5 SCHEDULE

Installation of the backflow preventers and sample ports will be dependent on the timing of approval of this Work Plan, permitting and access, securing installation contractors, and the weather.

Ford and Arcadis respectfully request a timely review and discussion of this Work Plan so that the proposed work can be executed as soon as possible.

6 REFERENCES

Arcadis. 2022a. Memo: Utility Corridor Assessment – Response to EGLE Letter Dated February 11, 2022 and Scope of Work for offsite Utility Corridor Assessment, 36200 Plymouth Road, Livonia, Wayne County, Michigan, Consent Decree No 2:1712372GAD-RSW (CJ), Site ID No.: 82002970. March 4.

Arcadis. 2022b. Memo: Utility Corridor Assessment Update, 36200 Plymouth Road, Livonia, Wayne County, Michigan, Consent Decree No 2:1712372GAD-RSW (CJ), Site ID No.: 82002970. April 1.

FIGURES

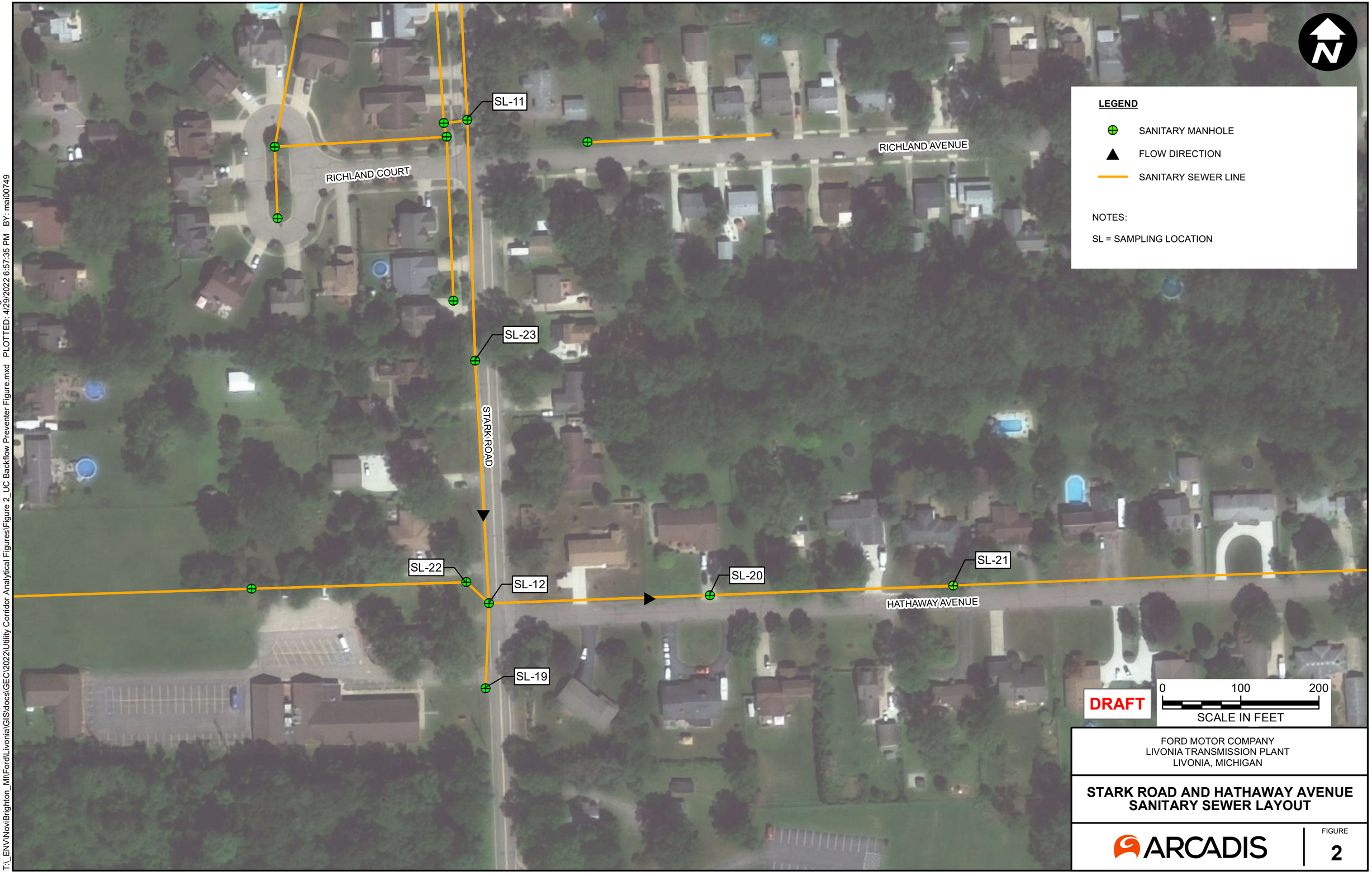
FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

ON-SITE AND OFF-SITE SANITARY SEWER LAYOUT

ARCADIS

FIGURE 1

CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
T:_ENV\NoviBrighton_MI\Ford\Livonia\GIS\docs\GEC\3Q_2021\Utility Corridor\EGLE_Report\Figure 2_On-site_and_Off-site_Sanitary_Sewer_Layout.mxd PLOTTED: 12/7/2021 5:29:41 PM BY: PSI01045



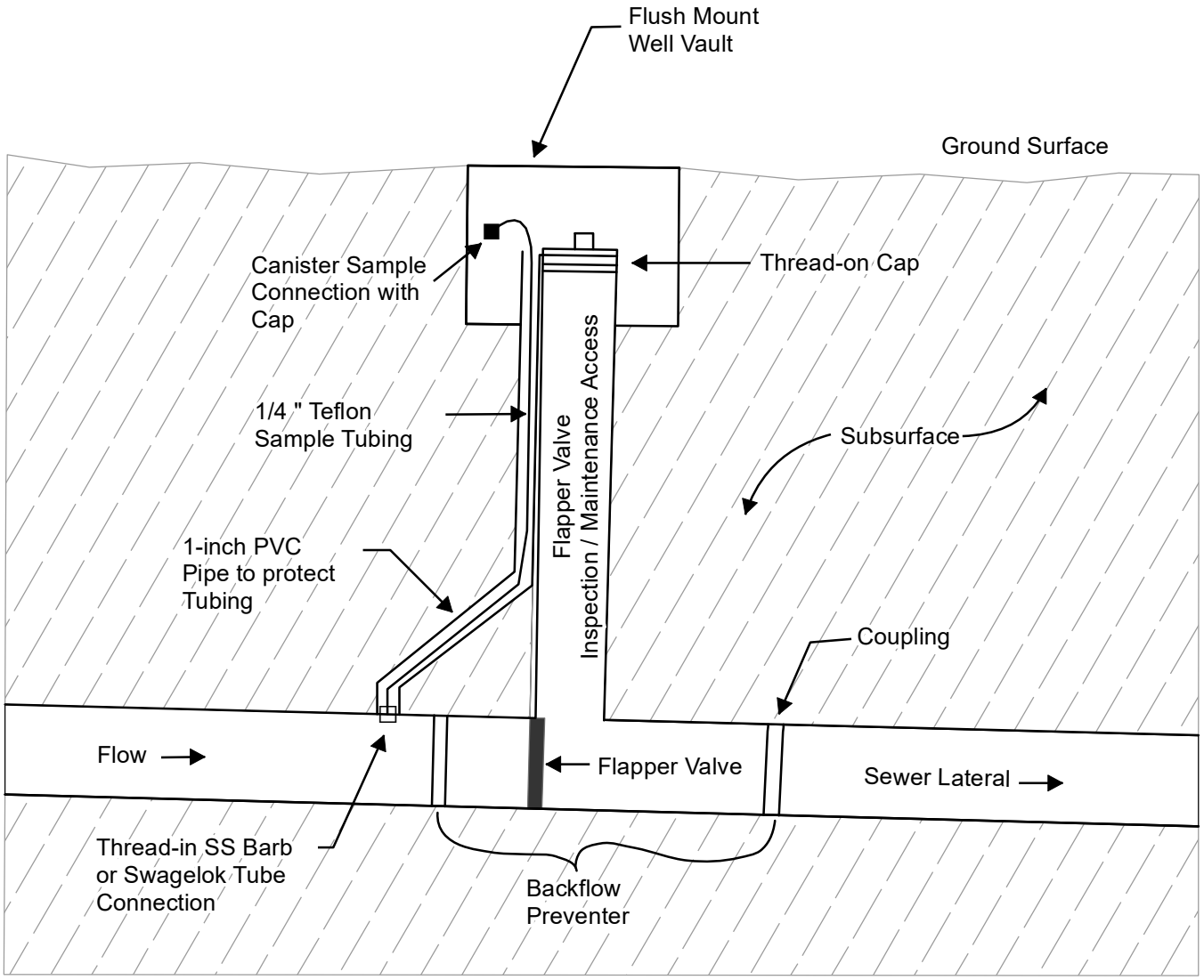
FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

STARK ROAD AND HATHAWAY AVENUE SANITARY SEWER LAYOUT

ARCADIS

FIGURE
2

CITY: NOVI DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30080642 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet
T:_ENV\NoviBrighton_MI\Ford\Livonia\GIS\docs\GEC\2022\Utility Corridor Analytical Figures\Figure 2_UC Backflow Preventer Figure.mxd PLOTTED: 4/29/2022 6:57:35 PM BY: mai00749



FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

BACKFLOW PREVENTER CONCEPTUAL DESIGN

ARCADIS

FIGURE
3

APPENDIX A

Manufacturer Product Specification Sheets for Backflow Preventers

LEGEND®
PLUMBING • INDUSTRIAL • COMMERCIAL • HYDRONICS

www.legendvalve.com
800-752-2082

SUBMITTAL SHEET

JOB NAME	ITEM TAG
JOB LOCATION	PART NUMBER
CONTRACTOR	DATE
ENGINEER APPROVAL	DATE

PVC BACKWATER VALVE

S-640 & S-641

The stepped body design places the inlet socket-end higher than the outlet, promoting the correct drop-per-foot and improving flow efficiency.

Heavy-duty Acme-threaded access lid can be removed using the end of a dimensional 2" x 4" board of correct length, to ease clean-out or repair.**

Lid and flapper are equipped with an O-ring or gasket seal, assuring a positive seal-out of sewer gasses.

Designed for horizontally-installed, low-or-no pressure gravity-flow DWV systems only. Not suitable for upward-flow vertical installations or pressurized systems.

Model S-640 is available in nominal pipe sizes 1-1/2" to 6", solvent-weld. Note: a piece of 10"SDR 35 pipe cut to desired length, can be used as an access sleeve on the 6" S-640.

Model S-641 includes a 16" access sleeve with cap and is available in nominal pipe sizes 2", 3" and 4".

**Nominal sizes 3",4" & 6" only.

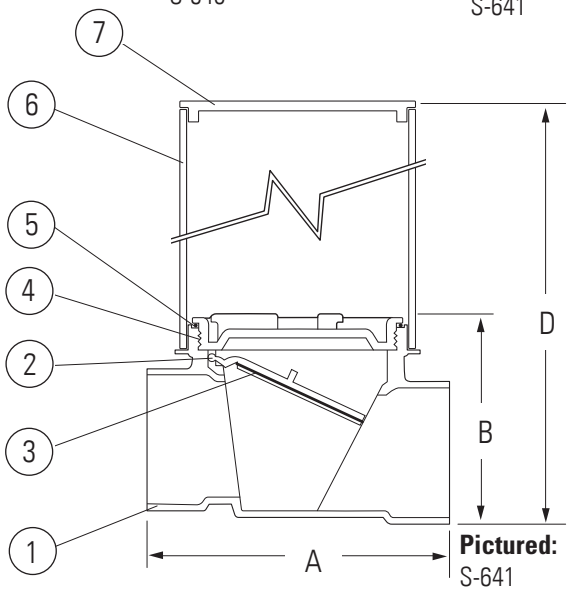
Pictured:
S-640

Pictured:
S-641

Working Pressure, Non Shock (PSI)
4.3 psi (10 ft. of head) operating pressure
25 psi max test pressure

MATERIAL SPECIFICATION

	PART	MATERIAL	SPECIFICATION
1	Body	PVC	ASTM D1784
2	Flapper	PVC	ASTM D1784
3	Flapper seal	Neoprene rubber	Commercial grade
4	Llid	PVC	ASTM D1784
5	Lid O-ring	Neoprene rubber	Commercial grade
6	Access sleeve*	PVC	ASTM D1784
7	Access sleeve cap*	PVC	ASTM D1784

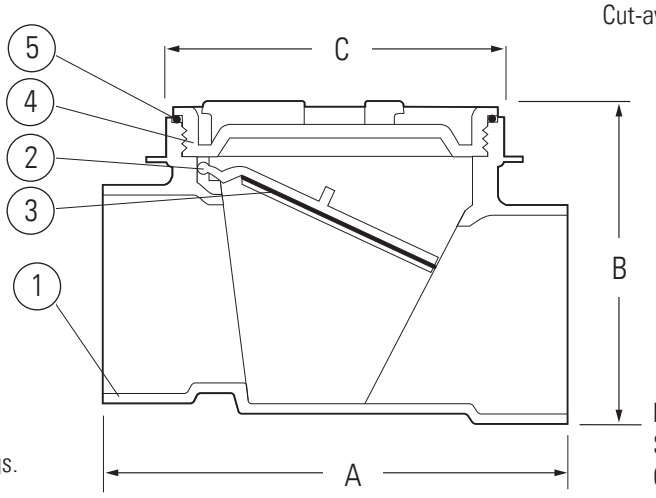


Pictured:
S-641
Cut-away

DIMENSIONS - Inch

Size	A	B	C	D*
1-1/2"	4.18	4.38	4.22	-
2"	4.54	4.38	4.22	20.00
3"	7.47	5.85	5.18	20.85
4"	9.88	7.00	7.00	21.60
6"	15.18	10.00	10.00	-

Model S-641 only.



Pictured:
S-640
Cut-away

Certifications/Listings:
International Plumbing Code (IPC).
Uniform Plumbing Code (UPC).

Standards:
ASTM D2665: PVC Plastic Drain, Waste, and Vent Pipe and Fittings.
ASME A112.14.1: Backwater Valves

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Novi
Michigan 48377
Phone: 248 994 2240

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