

SUBJECT

Utility Corridor Assessment –
Notification of Response Activities and Update Memo
36200 Plymouth Road, Livonia, Wayne County
Consent Decree No 2:1712372-GAD-RSW (CJ)
Site ID No.: 82002970

TO

Mr. Mike Neller, EGLE
Ms. Jeanne Schlaufman, EGLE

DATE

July 31, 2023

OUR REF

30144174

COPIES TO

Mr. Todd Walton, Ford
Mr. Chuck Pinter, Ford

NAME

Kris Hinskey – Arcadis of Michigan, LLC

On behalf of Ford Motor Company (Ford), this memorandum (memo) has been prepared by Arcadis of Michigan, LLC (Arcadis) for the Livonia Transmission Plant (LTP) site (the site). This memo satisfies the request in the June 8, 2023 letter from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) which states Ford shall notify EGLE when response activities will be implemented. Below details the current status of the response activities.

Stark Road

As of July 17, 2023, two rounds of monthly vapor samples have been collected from sanitary sewer sample locations on Stark Road. Per the EGLE letter dated June 8, 2023, response activities are to be undertaken along Stark Road in the event that analytical results from two consecutive rounds of monthly vapor samples exceed the residential site-specific volatilization to indoor air criteria (SSVIAC) at any manhole location along Stark Road. Analytical results from the vapor samples collected along Stark Road are provided on **Figure 1**. These results indicate two consecutive rounds of vapor sampling with exceedances of the residential SSVIAC at multiple manhole locations. The section below details response activities for Stark Road.

Response Activity Schedule for Stark Road

- July 21, 2023 – 35 access agreements were sent to residents along Stark Road who have not already granted access to the residential structure or have not already had a plumbing inspection completed. As of July 24, 2023, no access agreements have been received from the July 21, 2023 mailing.
- Cleaning and Lateral Identification –
 - August 1, 2023 – Cleaning and lateral identification along the Stark Road sanitary sewer from sanitary sewer sample locations SL-4 to SL-8
 - August 2, 2023 – Cleaning and lateral identification along the Stark Road sanitary sewer from sanitary sewer sample locations SL-8 to SL-29
 - August 3, 2023 – Cleaning and lateral identification along the Stark Road sanitary sewer from sanitary sewer sample locations SL-29 to SL-12
 - August 4, 2023 – Additional day for cleaning and lateral identification along the Stark Road sanitary sewer if needed.
- Week of August 21, 2023 – Collect post cleaning vapor samples from Stark Road sanitary sewer sample locations SL-4, SL-8, SL-9, SL-10, SL-11, SL-12, SL-22, SL-23, SL-26, SL-27, and SL-29.

Mr. Mike Neller
Michigan Department of Environment, Great Lakes, and Energy
July 31, 2023

Hathaway Avenue

On July 14, 2023 Arcadis on behalf of Ford submitted a *Utility Corridor Assessment – Notification of Response Activities for Hathaway Avenue and Sanitary Sewer Vapor Extraction System Hardwire* memorandum. Since the submittal of the memorandum the following response activities have taken place.

- July 7, 2023 – 33 access agreements were sent to residents along Hathaway Avenue who have not already granted access to the residential structure or have not already had a plumbing inspection completed. Attached is **Figure 2** with current access agreement status.
- July 28, 2023 – 11 of 33 access agreements have been received, below details the status of each:
 - Inspection complete - no plumbing deficiencies identified and no further action:
 - 33569 Hathaway
 - 33550 Hathaway
 - 34101 Hathaway
 - Inspections were scheduled for this week, but due to the power loss on Hathaway, the plumbing inspections are currently being rescheduled:
 - 33421 Hathaway
 - 33501 Hathaway
 - 33601 Hathaway
 - 33635 Hathaway
 - 33934 Hathaway
 - Homeowner canceled inspection due to positive covid test and will reschedule following recovery and once power has been restored:
 - 34069 Hathaway
 - Homeowner canceled plumbing inspection and rescinded access:
 - 33636 Hathaway
 - Inspection complete, but additional follow up is required. The property owner is currently renovating the home and additional capping of sink and toilet connections will be needed. Currently the homeowners are on vacation and will reach out to Arcadis upon their return:
 - 33838 Hathaway

Week of July 17, 2023 – Arcadis oversaw the cleaning and lateral identification of approximately 2,650 linear feet of sanitary sewer on Hathaway Avenue between Stark and Farmington Road. From sanitary sewer location SL-32 to SL-34, refer to **Figure 3** for location, the liquid level in the pipe began to increase. The liquid level continued to increase downstream from sanitary sewer location SL-34 to SL-35A and lateral identification was unable to be determined between sanitary sewer sample location SL-34 through SL-35B due to the camera being submerged. Based on the video collected there appears to be a potential restriction in the Farmington Road sanitary sewer system downstream of sanitary sewer sample location SL-35B, in which the City of Livonia will need to determine the cause and remedy.

Mr. Mike Neller
Michigan Department of Environment, Great Lakes, and Energy
July 31, 2023

Refer to the pictures below indicating the increased liquid level.



Normal Condition – Less than 10% full

Liquid Level Increased – 50% full by SL-34 and increased downstream

Arcadis contacted the City of Livonia on July 27, 2023 to discuss the increase liquid level in the Hathaway sanitary sewer to determine potential causes. Therefore, post-cleaning vapor samples for Hathaway Avenue will not be collected until the cause of the high liquid level between sanitary sewer location SL-34 through SL-35B can be determined.

Ford continues to work diligently and collaboratively with EGLE to address the response activities outlined in the June 8, 2023 and June 28, 2023 EGLE letters and is committed to completing the activities outlined in this memo.

Enclosures:

- Figure 1 – Stark Road Vapor Sample Results
- Figure 2 – Residential Access Agreements
- Figure 3 – Hathaway Avenue Vapor Sample Results

Figures

CITY: Novi; DIV: ENV; DR: MG; PIC: R. ELLIS; PM: K. HINSKEY; PROJECT NUMBER: 30090642; COORDINATE SYSTEM: NAD, 1983 StatePlane Michigan South FIPS 2113 Feet Intl; T: ENV\NewBrighton_Mi\Ford\Livonia\GIS\Docs\GEC\2022\Utility_Corridor_Sampling_Locations_Comprehensive_V1.mxd; PLOTTED: 7/24/2023 7:38:55 PM; BY: ps01045

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LEGEND

- SURVEY POINTS**
- SANITARY MANHOLE AND SAMPLING LOCATION
 - SANITARY MANHOLE
 - STORM MANHOLE
 - CHAMBER
 - STORM CATCH BASIN
 - ▲ FLOW DIRECTION
 - STORM WATER LINE
 - SANITARY SEWER LINE
 - PROPERTY BOUNDARY

BLUE/BOLD TEXT RESULT EXCEEDS THE EGLE SSVIAC

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

J = ESTIMATED RESULT

µg/m³ = MICROGRAMS PER CUBIC METER

SSVIAC = SITE-SPECIFIC VOLATILIZATION TO INDOOR AIR CRITERIA

RESULTS ARE COMPARED TO THE EGLE UNRESTRICTED RESIDENTIAL SSVIAC FOR CIS-1,2-DICHLOROETHYLENE OF 8.3 µg/m³, TETRACHLOROETHYLENE OF 41 µg/m³, TRICHLOROETHYLENE OF 2.0 µg/m³, AND VINYL CHLORIDE OF 1.6 µg/m³

ALL SAMPLES ANALYZED BY UNITED STATES ENVIRONMENTAL PROTECTION AGENCY METHOD TO-15.

[] = DUPLICATE SAMPLE RESULTS

EGLE = MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, & ENERGY



FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

STARK ROAD VAPOR SAMPLE RESULTS



SL-4	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	NS
7/17/2023	ND (<0.58) [ND (<0.58)]
Tetrachloroethene (µg/m³)	
6/22/2023	NS
7/17/2023	ND (<1.0) [ND (<1.0)]
Trichloroethene (µg/m³)	
6/22/2023	NS
7/17/2023	ND (<0.72) [ND (<0.72)]
Vinyl Chloride (µg/m³)	
6/22/2023	NS
7/17/2023	ND (<0.46) [ND (<0.46)]

SL-5	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	30
7/17/2023	NS
Tetrachloroethene (µg/m³)	
6/22/2023	1.2 J
7/17/2023	NS
Trichloroethene (µg/m³)	
6/22/2023	3.4
7/17/2023	NS
Vinyl Chloride (µg/m³)	
6/22/2023	15
7/17/2023	NS

SL-9	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	12
7/17/2023	12
Tetrachloroethene (µg/m³)	
6/22/2023	ND (<1.0)
7/17/2023	ND (<1.0)
Trichloroethene (µg/m³)	
6/22/2023	1.8
7/17/2023	2.0
Vinyl Chloride (µg/m³)	
6/22/2023	4.2
7/17/2023	5.6

SL-8	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	2.0
7/17/2023	ND (<0.58)
Tetrachloroethene (µg/m³)	
6/22/2023	ND (<1.0)
7/17/2023	ND (<1.0)
Trichloroethene (µg/m³)	
6/22/2023	ND (<0.72)
7/17/2023	ND (<0.72)
Vinyl Chloride (µg/m³)	
6/22/2023	0.74
7/17/2023	ND (<0.46)

SL-26	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	ND (<0.58)
7/17/2023	ND (<0.58)
Tetrachloroethene (µg/m³)	
6/23/2023	ND (<1.0)
7/17/2023	ND (<1.0)
Trichloroethene (µg/m³)	
6/23/2023	ND (<0.72)
7/17/2023	ND (<0.72)
Vinyl Chloride (µg/m³)	
6/23/2023	ND (<0.46)
7/17/2023	ND (<0.46)

SL-27	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	ND (<0.58)
7/17/2023	ND (<0.58)
Tetrachloroethene (µg/m³)	
6/23/2023	ND (<1.0)
7/17/2023	ND (<1.0)
Trichloroethene (µg/m³)	
6/23/2023	ND (<0.72)
7/17/2023	ND (<0.72)
Vinyl Chloride (µg/m³)	
6/23/2023	ND (<0.46)
7/17/2023	ND (<0.46)

SL-10	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	ND (<0.58)
7/17/2023	ND (<0.58)
Tetrachloroethene (µg/m³)	
6/22/2023	ND (<1.0)
7/17/2023	ND (<1.0)
Trichloroethene (µg/m³)	
6/22/2023	ND (<0.72)
7/17/2023	ND (<0.72)
Vinyl Chloride (µg/m³)	
6/22/2023	ND (<0.46)
7/17/2023	ND (<0.46)

SL-29	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	56
7/17/2023	1.4
Tetrachloroethene (µg/m³)	
6/22/2023	ND (<1.0)
7/17/2023	ND (<1.0)
Trichloroethene (µg/m³)	
6/22/2023	6.4
7/17/2023	ND (<0.72)
Vinyl Chloride (µg/m³)	
6/22/2023	32
7/17/2023	0.72

SL-23	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	20
7/17/2023	31
Tetrachloroethene (µg/m³)	
6/22/2023	ND (<1.0)
7/17/2023	4.5
Trichloroethene (µg/m³)	
6/22/2023	2.9
7/17/2023	3.8
Vinyl Chloride (µg/m³)	
6/22/2023	7.3
7/17/2023	ND (<0.46)

SL-22	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	ND (<0.58)
7/17/2023	3.2
Tetrachloroethene (µg/m³)	
6/23/2023	83
7/17/2023	2.0
Trichloroethene (µg/m³)	
6/23/2023	1.1 J
7/17/2023	0.73 J
Vinyl Chloride (µg/m³)	
6/23/2023	ND (<0.46)
7/17/2023	3.2

SL-12	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	57
7/17/2023	65
Tetrachloroethene (µg/m³)	
6/22/2023	14
7/17/2023	6.5
Trichloroethene (µg/m³)	
6/22/2023	3.7
7/17/2023	7.8
Vinyl Chloride (µg/m³)	
6/22/2023	30
7/17/2023	62

SL-11	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	2.3
7/17/2023	30
Tetrachloroethene (µg/m³)	
6/22/2023	ND (<1.0)
7/17/2023	5.0
Trichloroethene (µg/m³)	
6/22/2023	ND (<0.72)
7/17/2023	3.9
Vinyl Chloride (µg/m³)	
6/22/2023	0.75
7/17/2023	21

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LEGEND

- SANITARY MANHOLE
 - SANITARY SEWER LINE
 - ACCESS DENIED BY PROPERTY OWNER
 - SIGNED ACCESS AGREEMENTS REQUIRED
 - SIGNED ACCESS AGREEMENTS RECEIVED
 - INSPECTION COMPLETE. NO FURTHER ACTION REQUIRED
 - INSPECTION COMPLETE. FOLLOW UP VISIT REQUIRED.
 - PROPERTY BOUNDARIES
- * = PROPERTY UNDEVELOPED. ACCESS NOT REQUIRED.

NOTES:

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

¹ Access agreements received from these locations in 2022 were resent in June and/or July 2023 due to homeowner responsiveness to plumbing inspection scheduling attempts.

² Property owner requested to reschedule plumbing inspection.

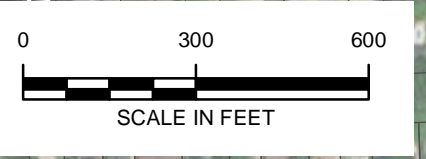
³ Property owner rescinded access.

Total number of Access agreements sent in June/July 2023: 77

Number of properties that have provided a signed access agreement and granted access: 10

Number of scheduled inspections: 0

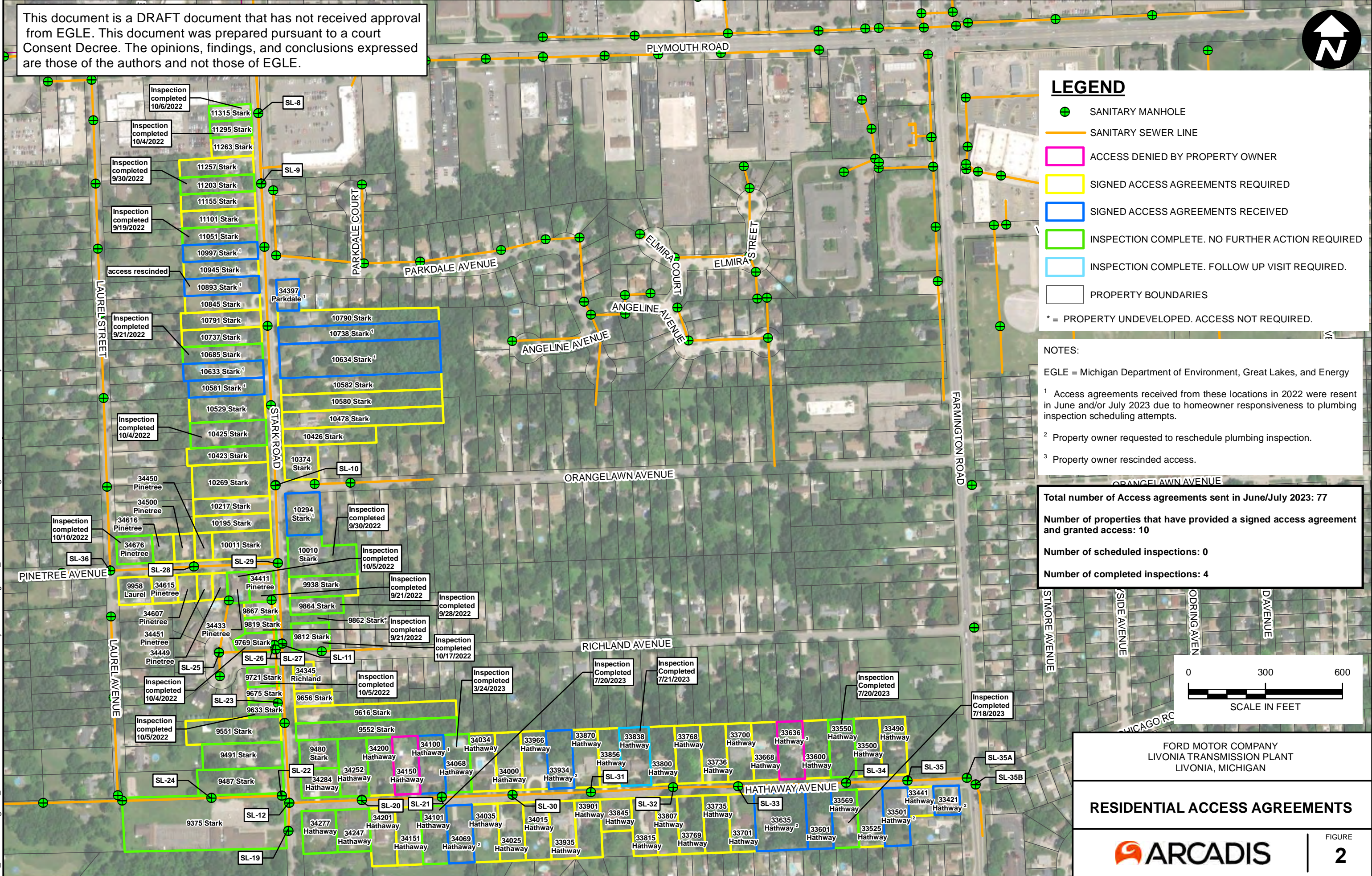
Number of completed inspections: 4



FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

RESIDENTIAL ACCESS AGREEMENTS

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\Novi\Brighton_MIFordLivonia\GISdocs\GEC2023\Utility Corridor\Figure 1_Residential Access Agreements - North of Hathaway.mxd PLOTTED: 7/28/2023 12:11:21 PM BY: sbi01179



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LEGEND

- SANITARY MANHOLE
- LATERAL CONNECTIONS
- ✖ CAPPED LATERAL CONNECTIONS
- ▲ FLOW DIRECTION
- SANITARY SEWER LINE

BLUE/BOLD TEXT RESULT (OR DUPLICATE) EXCEEDS THE EGLE SSVIAC.

NOTES:
FIGURE SHOWS DATA FOR CIS-1,2-DICHLOROETHYLENE, TETRACHLOROETHYLENE, TRICHLOROETHYLENE, 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

SL = SAMPLING LOCATION

µg/m³ = MICROGRAMS PER CUBIC METER

[] = DUPLICATE SAMPLE RESULTS

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

RESULTS ARE COMPARED TO THE EGLE UNRESTRICTED RESIDENTIAL SSVIAC FOR CIS-1,2-DICHLOROETHYLENE OF 8.3 µg/m³, TETRACHLOROETHYLENE OF 41 µg/m³, TRICHLOROETHYLENE OF 2.0 µg/m³, AND VINYL CHLORIDE OF 1.6 µg/m³.

SL-21	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	64
6/28/2023	17
Tetrachloroethene (µg/m³)	
6/23/2023	37
6/28/2023	27
Trichloroethene (µg/m³)	
6/23/2023	7.6
6/28/2023	2.7
Vinyl Chloride (µg/m³)	
6/23/2023	41
6/28/2023	11

SL-30	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	52 [48]
6/28/2023	41
Tetrachloroethene (µg/m³)	
6/23/2023	48 [46]
6/28/2023	52
Trichloroethene (µg/m³)	
6/23/2023	5.4 [5.4]
6/28/2023	5.9
Vinyl Chloride (µg/m³)	
6/23/2023	ND (< 0.46) [28]
6/28/2023	ND (< 0.46)

SL-32	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	39
6/28/2023	35
Tetrachloroethene (µg/m³)	
6/23/2023	41
6/28/2023	42
Trichloroethene (µg/m³)	
6/23/2023	5.3
6/28/2023	5.6
Vinyl Chloride (µg/m³)	
6/23/2023	23
6/28/2023	22

SL-34	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	32
6/28/2023	16
Tetrachloroethene (µg/m³)	
6/23/2023	29
6/28/2023	27
Trichloroethene (µg/m³)	
6/23/2023	5.4
6/28/2023	2.9
Vinyl Chloride (µg/m³)	
6/23/2023	22
6/28/2023	ND (< 0.46)

SL-35A	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	4.1
6/28/2023	34
Tetrachloroethene (µg/m³)	
6/23/2023	19
6/28/2023	100
Trichloroethene (µg/m³)	
6/22/2023	1.1
6/28/2023	8.7
Vinyl Chloride (µg/m³)	
6/22/2023	3.1
6/28/2023	24

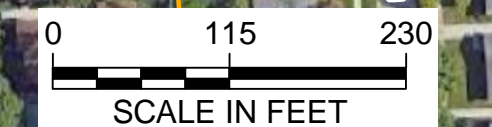
SL-20	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	67 [49]
6/28/2023	43 [42]
Tetrachloroethene (µg/m³)	
6/23/2023	21 [17]
6/28/2023	50 [51]
Trichloroethene (µg/m³)	
6/23/2023	51 [39]
6/28/2023	6.9 [6.3]
Vinyl Chloride (µg/m³)	
6/23/2023	48 [ND (< 0.46)]
6/28/2023	ND (< 0.46) [ND (< 0.46)]

SL-31	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	43
6/28/2023	36
Tetrachloroethene (µg/m³)	
6/23/2023	56
6/28/2023	43
Trichloroethene (µg/m³)	
6/23/2023	5.4
6/28/2023	5.9
Vinyl Chloride (µg/m³)	
6/23/2023	24
6/28/2023	ND (< 0.46)

SL-33	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	34
6/28/2023	38
Tetrachloroethene (µg/m³)	
6/23/2023	32
6/28/2023	52
Trichloroethene (µg/m³)	
6/23/2023	5.2
6/28/2023	6.2
Vinyl Chloride (µg/m³)	
6/23/2023	ND (< 0.46)
6/28/2023	20

SL-35	
cis-1,2-Dichloroethene (µg/m³)	
6/23/2023	28
6/28/2023	3.4
Tetrachloroethene (µg/m³)	
6/23/2023	52
6/28/2023	7.0
Trichloroethene (µg/m³)	
6/23/2023	5.7
6/28/2023	ND (< 0.72)
Vinyl Chloride (µg/m³)	
6/23/2023	17
6/28/2023	ND (< 0.46)

SL-35B	
cis-1,2-Dichloroethene (µg/m³)	
6/22/2023	ND (< 0.58)
6/28/2023	2.4
Tetrachloroethene (µg/m³)	
6/22/2023	ND (< 1.0)
6/28/2023	2.8
Trichloroethene (µg/m³)	
6/22/2023	ND (< 0.72)
6/28/2023	ND (< 0.72)
Vinyl Chloride (µg/m³)	
6/22/2023	ND (< 0.46)
6/28/2023	0.76



FORD MOTOR COMPANY
LIVONIA TRANSMISSION PLANT
LIVONIA, MICHIGAN

HATHAWAY AVENUE VAPOR SAMPLE RESULTS

FIGURE
3