



Wood Environment & Infrastructure Solutions, Inc.
521 Byers Road, Suite 204
Miamisburg, Ohio 45342
USA

T: (937) 859 3600
F: (937) 859 7951

www.woodplc.com

9 May 2022

Mr. Joshua Keller
Environmental Manager
Indiana Department of Environmental Management
100 North Senate Ave.
Indianapolis, IN 46204-2251

**RE: Remediation Completion Report Response to Comments
4366 North Old US Highway 31, Rochester, Indiana
Facility Cleanup ID 7100149
Wood Project Number 3359-15-1040**

Dear Mr. Keller:

Wood Environment and Infrastructure Solutions, Inc. (Wood) submitted a Remediation Completion Report (RCR) to the Indiana Department of Environmental Management (IDEM) for the Textron, Inc. site located at 4366 North Old US Highway 31 in Rochester, Indiana. This letter provides responses to comments provided by IDEM regarding the RCR in the correspondence dated February 15, 2022.

IDEM Comment 1. Review of the qualitative groundwater analytical data indicates an overall pattern of decreasing to no apparent trends in contaminant concentrations following the final in-situ injection event of 2017. However, there are a few exceptions, i.e., vinyl chloride concentrations in monitoring well MW-17, as well as isolated areas where chlorinated volatile organic compound (cVOC) concentrations remain above applicable screening levels.

Wood Response to IDEM Comment #1 – While the Mann-Kendall trend analysis indicated an increasing trend for vinyl chloride in MW-17, this trend resulted from a historical high concentration of 3.8 micrograms per liter (ug/L) four sampling events ago. As stated in the Remediation Completion Report (RCR), the presence of vinyl chloride in MW-17 since 2019 is likely due to dechlorination of trichloroethene (TCE) and dichloroethene (DCE). Both TCE and DCE at MW-17 demonstrate decreasing trends, and therefore it is likely that vinyl chloride trend will subsequently exhibit a decreasing trend. As evidence of this, the concentrations of vinyl chloride have decreased each of the last three sampling events, and the remaining vinyl chloride in MW-17 (2.0 micrograms per kilogram [ug/kg]) no longer exceeds the IDEM criteria.

As acknowledged in IDEM's comment and in the RCR, chlorinated volatile organic compound (VOC) concentrations in isolated areas remain above applicable criteria; however, as acknowledged in the RCR and by IDEM the remaining overall groundwater contaminant plume is decreasing and stable.

IDEM Comment 2. Figures illustrating the horizontal and vertical extents of contamination above applicable screening levels for all impacted media must be provided for review, per RCG Section 3.11.

Mr. Joshua Keller
Indiana Department of Environmental Management
9 May 2022
Page 2 of 2

Wood Response to IDEM Comment #2 – Attached are nine Figures (1-9) presenting the horizontal and vertical extents of VOCs exceeding the applicable screening levels. The Figures present the concentrations of (TCE), cis-1,2 DCE and vinyl chloride in each of the overburden water bearing units identified at the Site, (shallow, intermediate, and deep).

IDEM Comment 3. The proposed continued annual groundwater monitoring and reporting to evaluate groundwater contaminant plume behavior and the need for continued environmental restrictive covenants (ERCs) is acceptable. However, in addition to sampling of the proposed 41 groundwater monitoring wells, groundwater monitoring wells MW-21 (40.2), MW-27 (nested), and MW-57 (38) must be added to the groundwater monitoring well sampling network. Each annual groundwater monitoring event must take place in a specific quarter, ideally the same quarter each year. The report documenting the activities of each annual groundwater monitoring event must be submitted within 60 days following completion of each event.

Wood Response to IDEM Comment #3 – As requested by IDEM Wood will add the MW-27 wells and MW-57(38) to the annual sampling program. Wood disagrees with the request to add well MW-21(40.2) to the annual sampling network. MW-21(40.2) was sampled four times historically as part of delineation of the groundwater contaminant plume and had no exceedances of IDEM criteria, demonstrating that the groundwater contaminant plume does not extend to that area south of the Site. Based on the lack of criteria exceedance MW-21(40.2) was removed from the sampling program with IDEM concurrence in 2010. Furthermore, the MW-9 series of wells upgradient of MW-21(40.2) has recently been part of the annual groundwater monitoring program and the last four sampling events the analytical results from these wells were less than detection limits.

Wood will perform the annual groundwater monitoring events in the third calendar quarter each year and submit the findings in a summary report. The most recent 2021 annual monitoring event was completed in November 2021, the results of which were presented in a report dated 5 May 2022.

If you have any questions or comments following your review of this correspondence, please call our office at 937-859-3600.

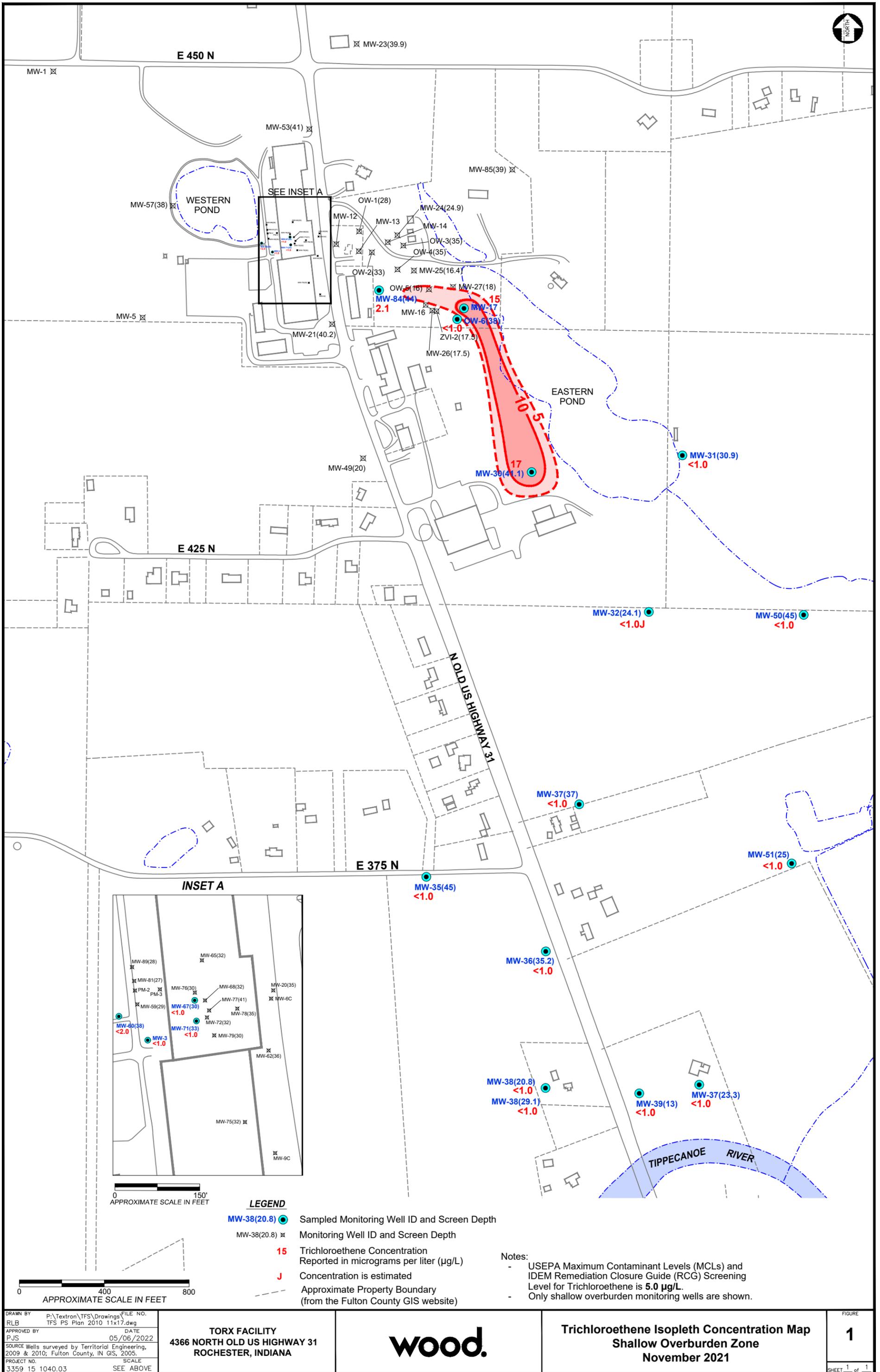
Sincerely,
Wood Environment & Infrastructure Solutions, Inc.


Paul J. Stork
Project Manager


K. Joe Deatherage, PE
Senior Engineer

Attachments - Iso-concentration Figures 1-9

cc: Jamison Schiff, Textron, Inc

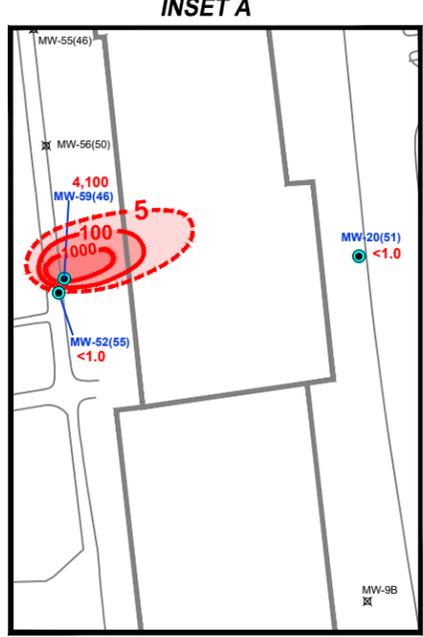
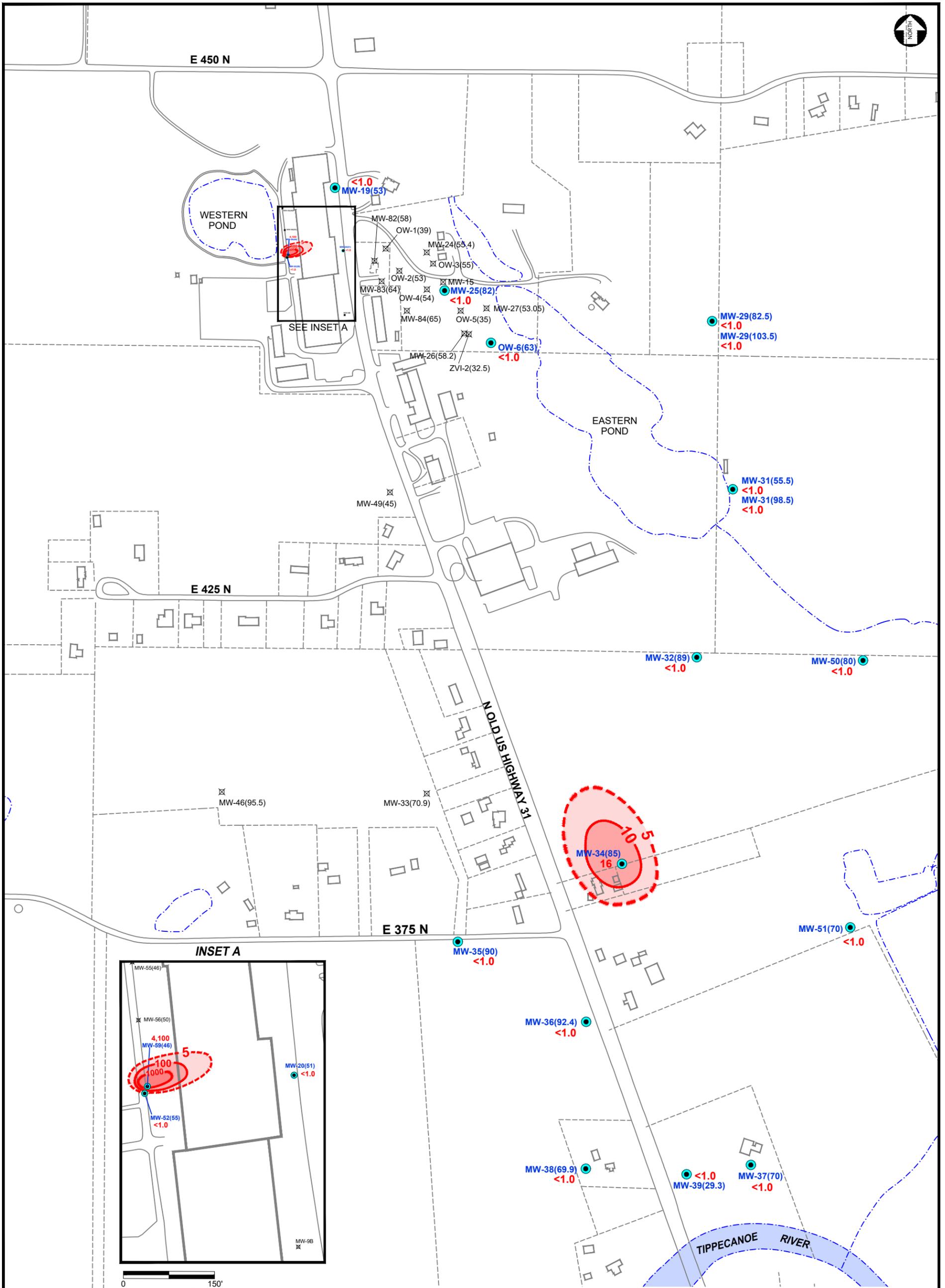


DRAWN BY P:\Textron\FFS\Drawings\FILE NO.
 RLB TFS PS Plan 2010 11x17.dwg
 APPROVED BY DATE
 PJS 05/06/2022
 SOURCE Wells surveyed by Territorial Engineering,
 2009 & 2010; Fulton County, IN GIS, 2005.
 PROJECT NO. SCALE
 3359 15 1040.03 SEE ABOVE

TORX FACILITY
 4366 NORTH OLD US HIGHWAY 31
 ROCHESTER, INDIANA



Trichloroethene Isopleth Concentration Map
 Shallow Overburden Zone
 November 2021



0 150'
APPROXIMATE SCALE IN FEET

0 400 800
APPROXIMATE SCALE IN FEET

LEGEND

- MW-38(69.9) Sampled Monitoring Well ID and Screen Depth
- ⊗ MW-38(69.9) Monitoring Well ID and Screen Depth
- 16 Trichloroethene Concentration Reported in micrograms per liter (µg/L)
- - - - - Approximate Property Boundary (from the Fulton County GIS website)

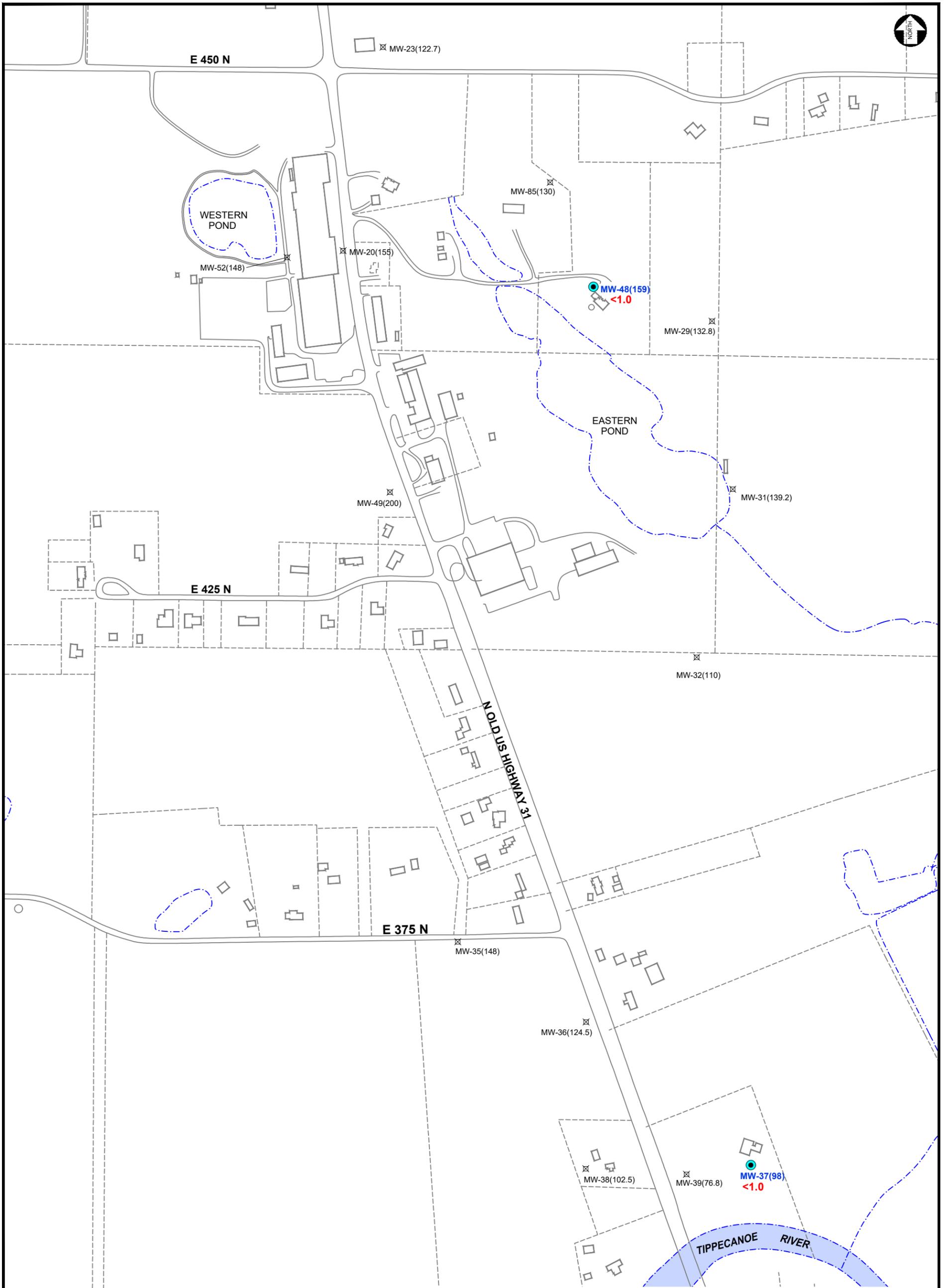
- Notes:
- USEPA Maximum Contaminant Levels (MCLs) and IDEM Remediation Closure Guide (RCG) Screening Level for Trichloroethene is 5.0 µg/L.
 - Only intermediate overburden monitoring wells are shown.

DRAWN BY P:\Tetron\F\Drawings\FILE NO.
RLB TFS PS Plan 2010 11x17.dwg
APPROVED BY DATE
PJS 05/06/2022
SOURCE Wells surveyed by Territorial Engineering, 2009 & 2010; Fulton County, IN GIS, 2005.
PROJECT NO. SCALE
3359 15 1040.03 SEE ABOVE

TORX FACILITY
4366 NORTH OLD US HIGHWAY 31
ROCHESTER, INDIANA



Trichloroethene Isopleth Concentration Map
Intermediate Overburden Zone
November 2021



LEGEND

- MW-37(98) Sampled Monitoring Well ID and Screen Depth
- ⊗ MW-38(102.5) Monitoring Well ID and Screen Depth
- <1.0 Trichloroethene Concentration Reported in micrograms per liter (µg/L)
- - - Approximate Property Boundary (from the Fulton County GIS website)

Notes:

- USEPA Maximum Contaminant Levels (MCLs) and IDEM Remediation Closure Guide (RCG) Screening Level for Trichloroethene is **5.0 µg/L**.
- Only deep overburden monitoring wells are shown.



DRAWN BY P:\Textron\FIS\Drawings\FILE NO.
 RLB TFS PS Plan 2010 11x17.dwg
 APPROVED BY DATE
 PJS 05/06/2022
 SOURCE Wells surveyed by Territorial Engineering,
 2009 & 2010; Fulton County, IN GIS, 2005.
 PROJECT NO. SCALE
 3359 15 1040.03 SEE ABOVE

TORX FACILITY
 4366 NORTH OLD US HIGHWAY 31
 ROCHESTER, INDIANA

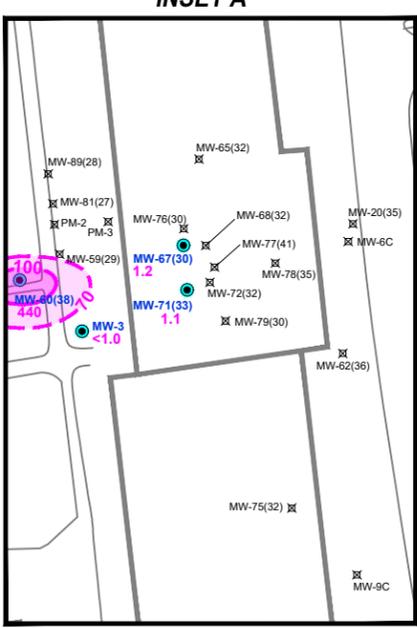
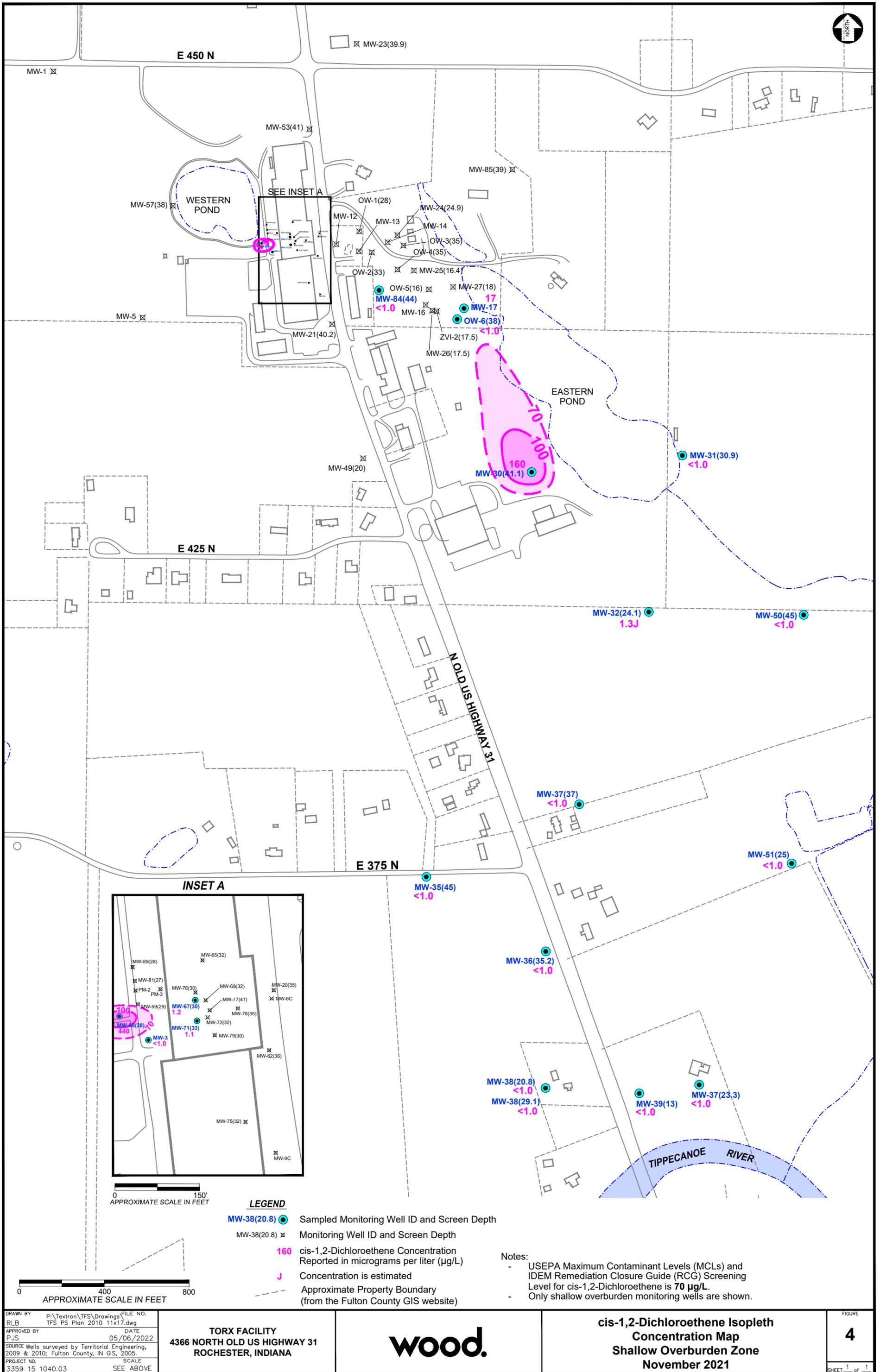


Trichloroethene Concentration Map
 Deep Overburden Zone
 November 2021

FIGURE

3

SHEET 1 of 1



LEGEND

- MW-38(20.8) ● Sampled Monitoring Well ID and Screen Depth
- MW-38(20.8) ✕ Monitoring Well ID and Screen Depth
- 160 cis-1,2-Dichloroethene Concentration Reported in micrograms per liter (µg/L)
- J Concentration is estimated
- - - - - Approximate Property Boundary (from the Fulton County GIS website)

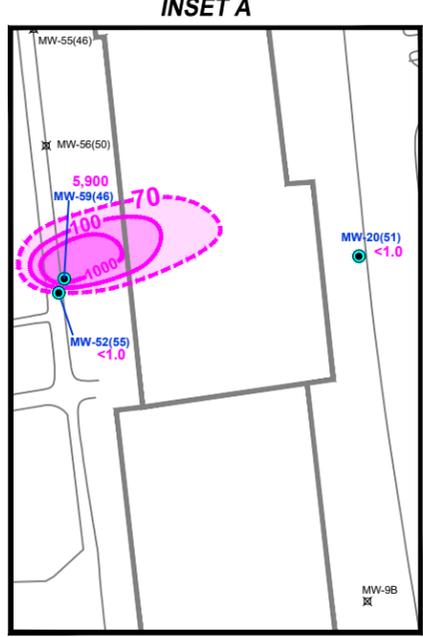
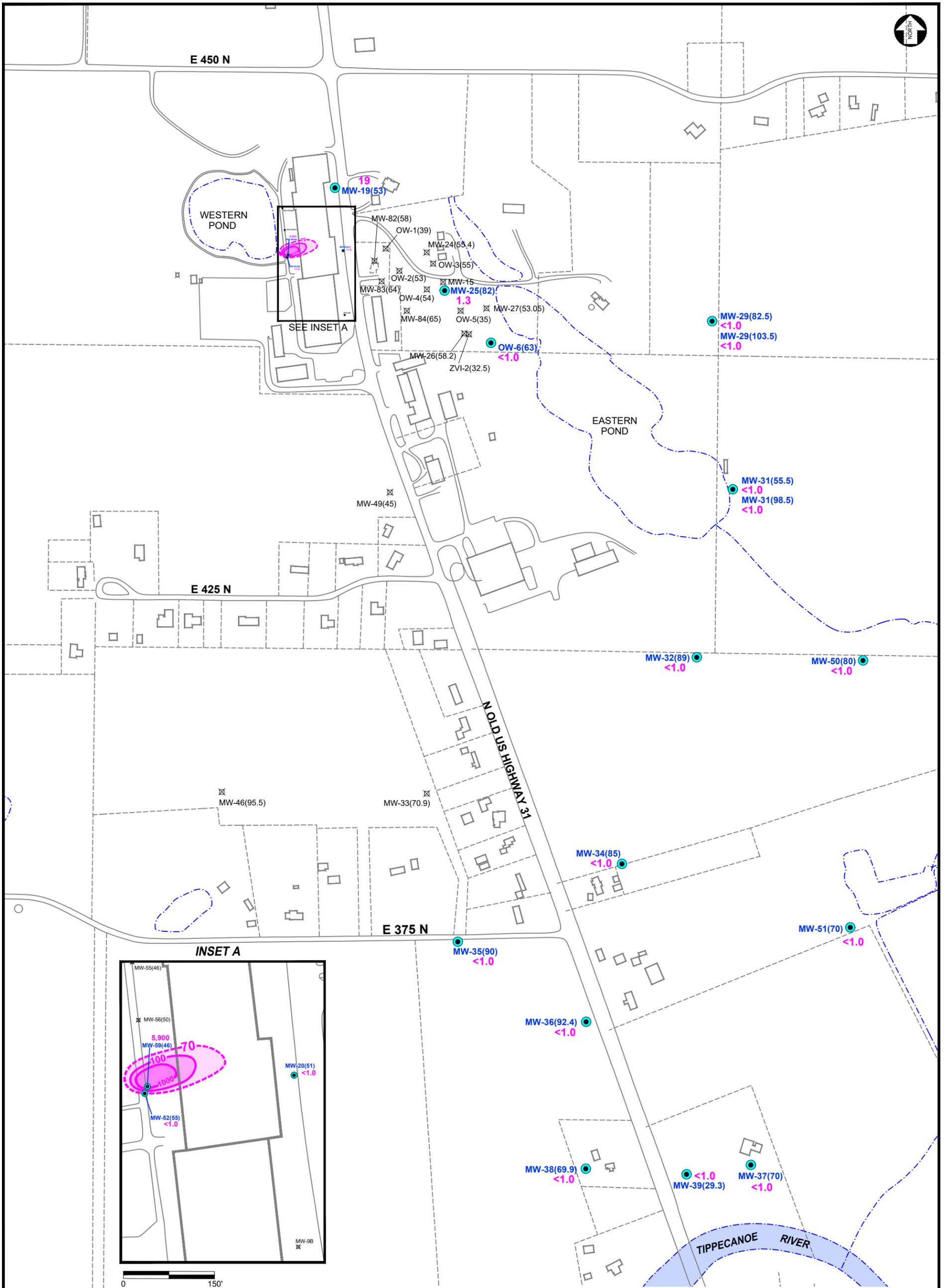
- Notes:**
- USEPA Maximum Contaminant Levels (MCLs) and IDEM Remediation Closure Guide (RCG) Screening Level for cis-1,2-Dichloroethene is 70 µg/L.
 - Only shallow overburden monitoring wells are shown.

DRAWN BY P:\Textron\FIS\Drawings\FILE NO.
 RLB TFS PS Plan 2010 11x17.dwg
 APPROVED BY DATE
 PJS 05/06/2022
 SOURCE Wells surveyed by Territorial Engineering,
 2009 & 2010; Fulton County, IN GIS, 2005.
 PROJECT NO. SCALE
 3359 15 1040.03 SEE ABOVE

TORX FACILITY
 4366 NORTH OLD US HIGHWAY 31
 ROCHESTER, INDIANA



**cis-1,2-Dichloroethene Isopleth
 Concentration Map
 Shallow Overburden Zone
 November 2021**



LEGEND

- MW-38(69.9) Sampled Monitoring Well ID and Screen Depth
- ⊗ MW-38(69.9) Monitoring Well ID and Screen Depth
- 19 cis-1,2-Dichloroethene Concentration Reported in micrograms per liter (µg/L)
- - - - - Approximate Property Boundary (from the Fulton County GIS website)

Notes:

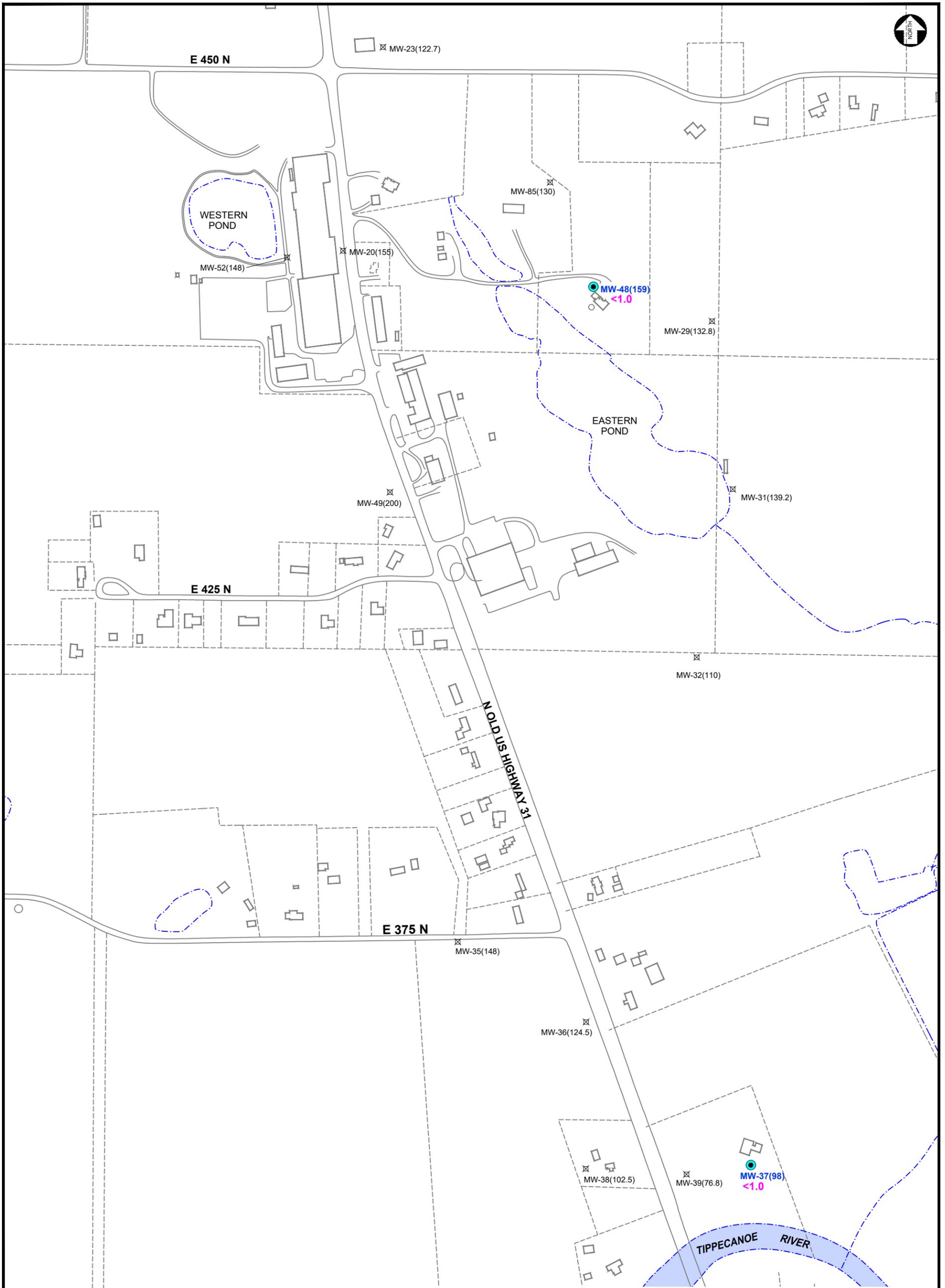
- USEPA Maximum Contaminant Levels (MCLs) and IDEM Remediation Closure Guide (RCG) Screening Level for cis-1,2-Dichloroethene is **70 µg/L**.
- Only intermediate overburden monitoring wells are shown.

DRAWN BY P:\Textron\FIS\Drawings\FILE NO.
 RLB TFS PS Plan 2010 11x17.dwg
 APPROVED BY DATE
 PJS 05/06/2022
 SOURCE Wells surveyed by Territorial Engineering,
 2009 & 2010; Fulton County, IN GIS, 2005.
 PROJECT NO. SCALE
 3359 15 1040.03 SEE ABOVE

TORX FACILITY
 4366 NORTH OLD US HIGHWAY 31
 ROCHESTER, INDIANA



cis-1,2-Dichloroethene Isoleth
Concentration Map
Intermediate Overburden Zone
November 2021



LEGEND

- MW-37(98) Sampled Monitoring Well ID and Screen Depth
- ⊗ MW-38(102.5) Monitoring Well ID and Screen Depth
- <math><1.0</math> cis-1,2-Dichloroethene Concentration Reported in micrograms per liter ($\mu\text{g/L}$)
- - - Approximate Property Boundary (from the Fulton County GIS website)

Notes:

- USEPA Maximum Contaminant Levels (MCLs) and IDEM Remediation Closure Guide (RCG) Screening Level for cis-1,2-Dichloroethene is **70 $\mu\text{g/L}$** .
- Only deep overburden monitoring wells are shown.



DRAWN BY P:\Textron\FIS\Drawings\FILE NO.
 RLB TFS PS Plan 2010 11x17.dwg
 APPROVED BY DATE
 PJS 05/06/2022
 SOURCE Wells surveyed by Territorial Engineering,
 2009 & 2010; Fulton County, IN GIS, 2005.
 PROJECT NO. SCALE
 3359 15 1040.03 SEE ABOVE

TORX FACILITY
 4366 NORTH OLD US HIGHWAY 31
 ROCHESTER, INDIANA

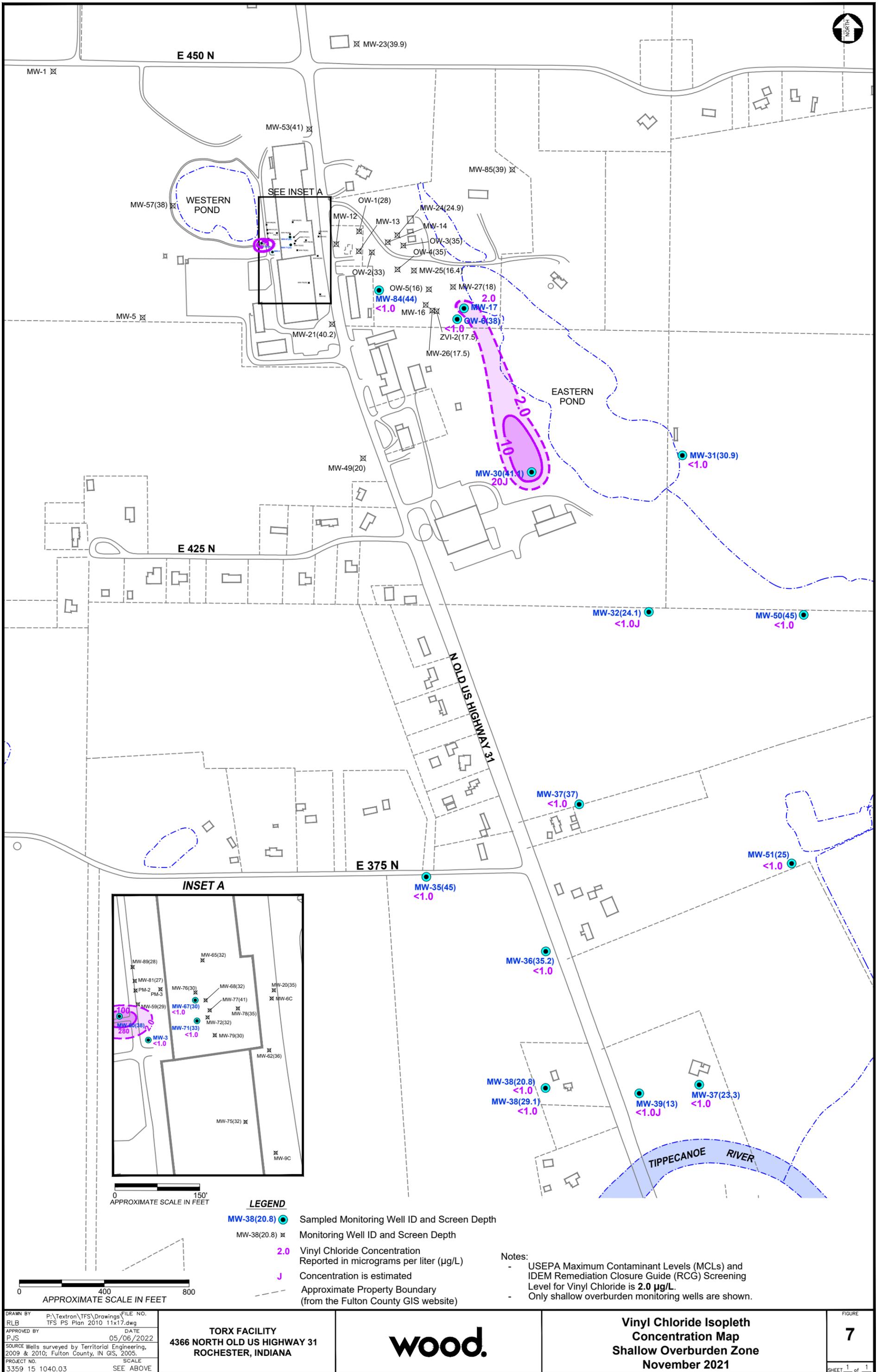


cis-1,2-Dichloroethene Concentration Map
 Deep Overburden Zone
 November 2021

FIGURE

6

SHEET 1 of 1



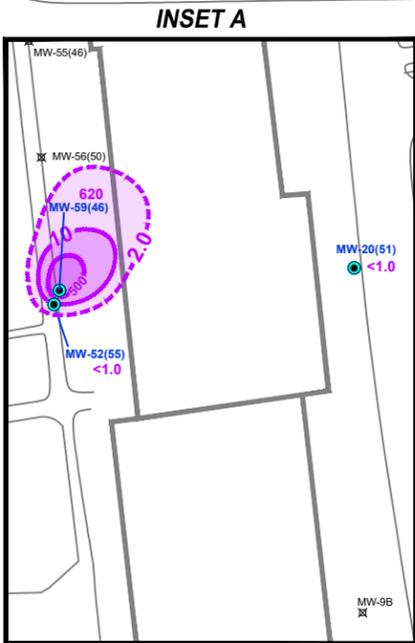
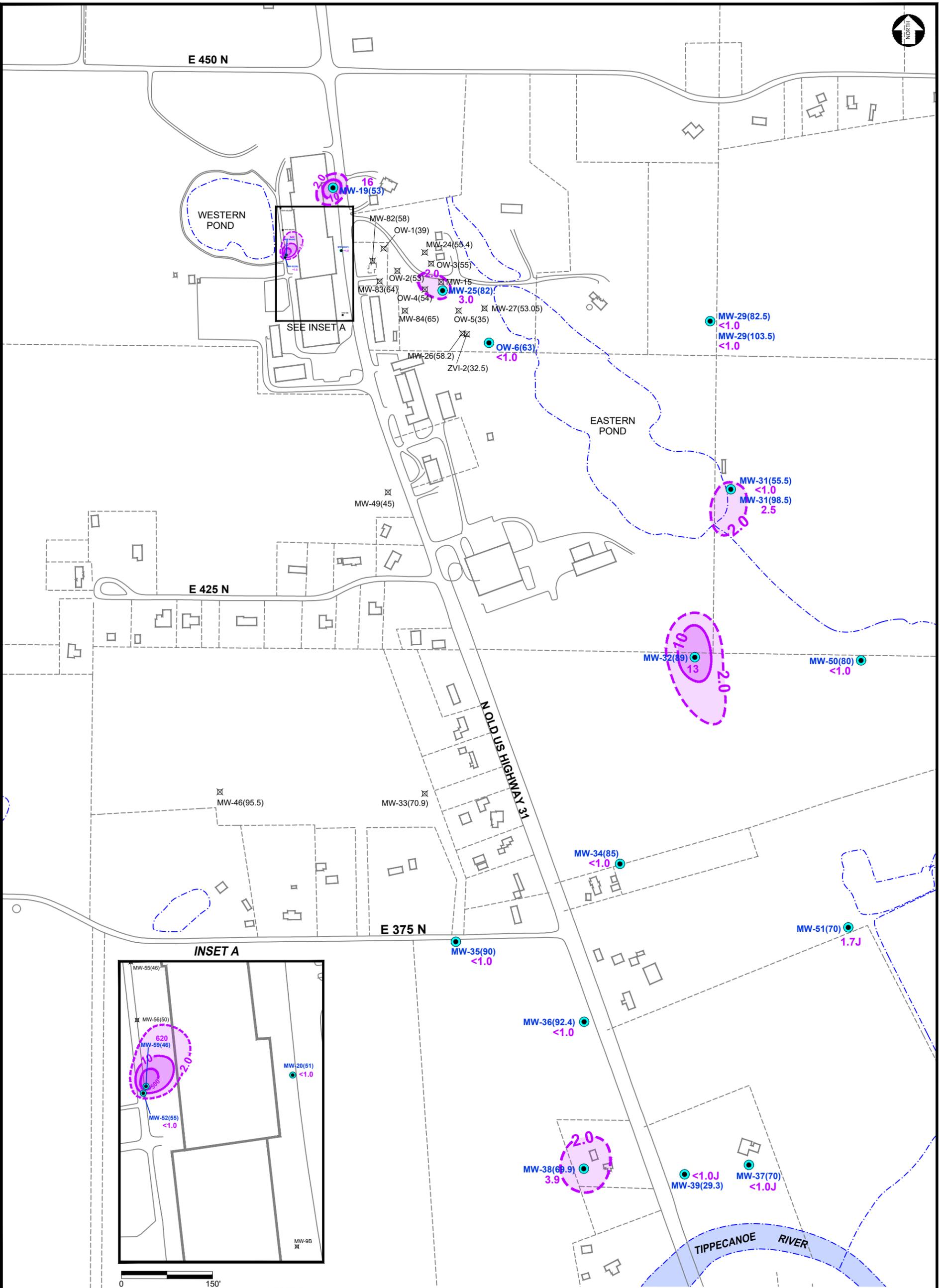
DRAWN BY P:\Textron\FIS\Drawings\FILE NO.
 RLB TFS PS Plan 2010 11x17.dwg
 APPROVED BY DATE
 PJS 05/06/2022
 SOURCE Wells surveyed by Territorial Engineering,
 2009 & 2010; Fulton County, IN GIS, 2005.
 PROJECT NO. SCALE
 3359 15 1040.03 SEE ABOVE

TORX FACILITY
 4366 NORTH OLD US HIGHWAY 31
 ROCHESTER, INDIANA



**Vinyl Chloride Isopleth
 Concentration Map
 Shallow Overburden Zone
 November 2021**

FIGURE
7
 SHEET 1 of 1



0 150'
APPROXIMATE SCALE IN FEET

LEGEND

- MW-38(69.9) Sampled Monitoring Well ID and Screen Depth
- ⊗ MW-38(69.9) Monitoring Well ID and Screen Depth
- 3.0 Vinyl Chloride Concentration Reported in micrograms per liter (µg/L)
- J Concentration is estimated
- - - - - Approximate Property Boundary (from the Fulton County GIS website)

Notes:

- USEPA Maximum Contaminant Levels (MCLs) and IDEM Remediation Closure Guide (RCG) Screening Level for Vinyl Chloride is 2.0 µg/L.
- Only intermediate overburden monitoring wells are shown.

0 400 800
APPROXIMATE SCALE IN FEET

DRAWN BY P:\Textron\FIS\Drawings\FILE NO.
RLB TFS PS Plan 2010 11x17.dwg
APPROVED BY DATE
PJS 05/06/2022
SOURCE Wells surveyed by Territorial Engineering,
2009 & 2010; Fulton County, IN GIS, 2005.
PROJECT NO. SCALE
3359 15 1040.03 SEE ABOVE

TORX FACILITY
4366 NORTH OLD US HIGHWAY 31
ROCHESTER, INDIANA

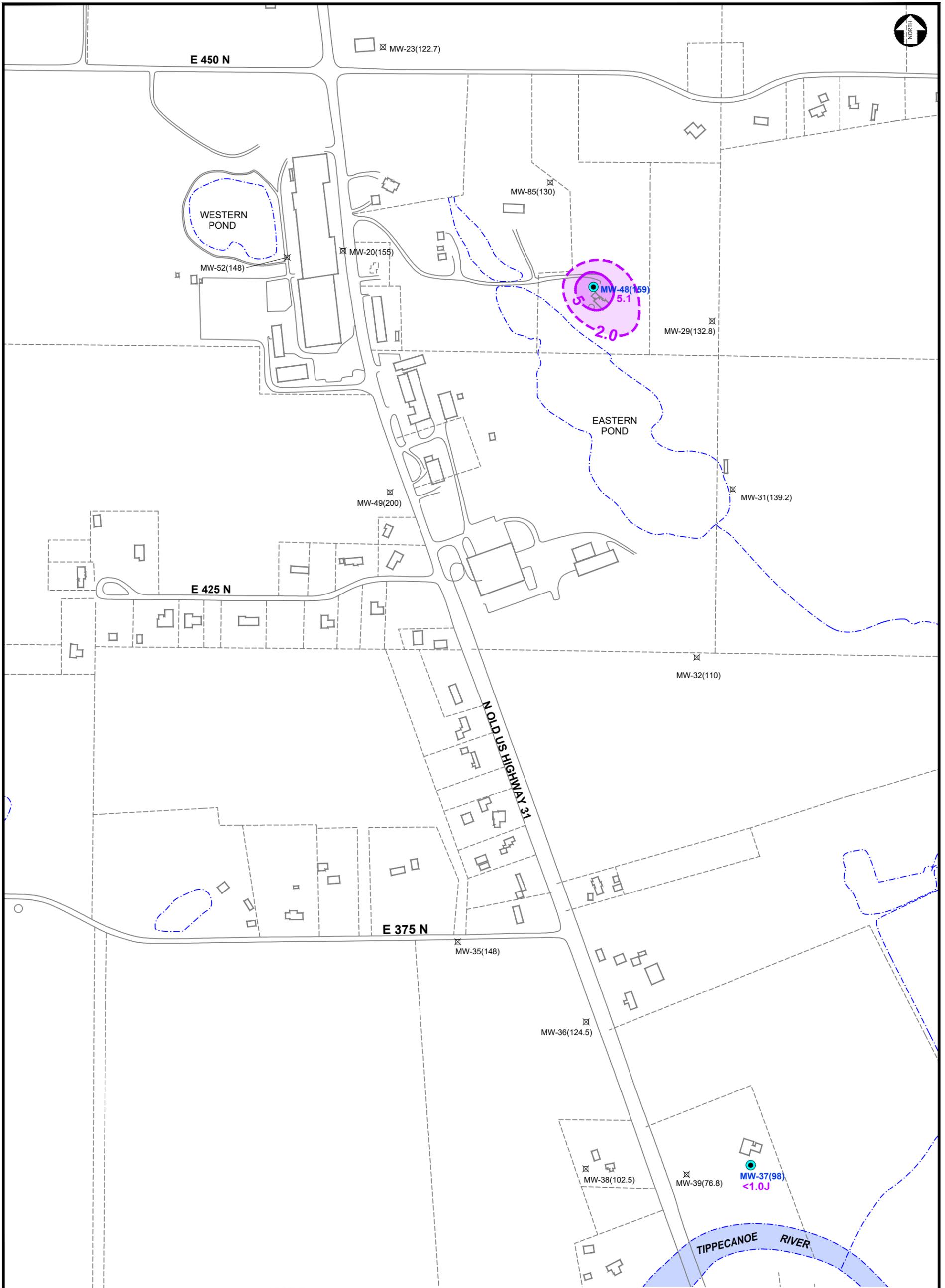


Vinyl Chloride Isopleth
Concentration Map
Intermediate Overburden Zone
November 2021

FIGURE

8

SHEET 1 of 1



LEGEND

- MW-37(98) Sampled Monitoring Well ID and Screen Depth
- ⊗ MW-38(102.5) Monitoring Well ID and Screen Depth
- 5.1 Vinyl Chloride Concentration Reported in micrograms per liter (µg/L)
- J Concentration is estimated
- - - - - Approximate Property Boundary (from the Fulton County GIS website)

Notes:

- USEPA Maximum Contaminant Levels (MCLs) and IDEM Remediation Closure Guide (RCG) Screening Level for Vinyl Chloride is 2.0 µg/L.
- Only deep overburden monitoring wells are shown.



DRAWN BY P:\Textron\FIS\Drawings\FILE NO.
 RLB TFS PS Plan 2010 11x17.dwg
 APPROVED BY DATE
 PJS 05/06/2022
 SOURCE Wells surveyed by Territorial Engineering,
 2009 & 2010; Fulton County, IN GIS, 2005.
 PROJECT NO. SCALE
 3359 15 1040.03 SEE ABOVE

TORX FACILITY
 4366 NORTH OLD US HIGHWAY 31
 ROCHESTER, INDIANA



**Vinyl Chloride Isopleth
 Concentration Map
 Deep Overburden Zone
 November 2021**

FIGURE

9

SHEET 1 of 1