

# FORD MOTOR COMPANY TWIN CITIES ASSEMBLY PLANT

## INTERIM RESPONSE ACTION PLAN Canadian Pacific Rail Property

November 2017

A large, solid orange geometric shape, resembling a stylized triangle or a section of a larger triangle, is positioned in the bottom right corner of the page. It is composed of two overlapping triangles, creating a complex, angular form. A thin white line runs diagonally through the shape, and a thin white horizontal line crosses it near the bottom.

## INTERIM RESPONSE ACTION PLAN

Canadian Pacific Property  
Twin Cities Assembly Plant  
St. Paul, Minnesota



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Our Ref.:  
MN000634.0001  
Date:  
November 9, 2017

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## 1 INTRODUCTION

This Interim Response Action Plan (IRAP) provides a description of a portion of the environmental corrective actions which will be implemented by Arcadis U.S., Inc. (Arcadis), on behalf of Ford Motor Company (Ford), at the Twin Cities Assembly Plant (TCAP; Site) in St. Paul, Minnesota (Figure 1). These corrective actions will be implemented to address soil impacts identified during due diligence investigations completed in Former Fill Areas A&B from January 2016 through April 2016. This IRAP specifically addresses the portion of Former Fill Areas A/B on Canadian Pacific property and is restricted to address soil impacts only. Remediation of Former Fill Areas A/B on the TCAP property is addressed in the Interim Response Action Plan – Consolidated Impact Areas (Arcadis 2016a).

## 2 SCOPE AND REMEDIAL OBJECTIVES

This IRAP was developed to provide detail on the proposed corrective actions within Former Fill Areas A&B on Canadian Pacific property. A detailed summary of the initial investigation, methodology, and analytical results can be found in the Comprehensive Phase II Site Investigation Report – Soil Addendum (December 2016b).

As discussed in detail below, the remedial actions of this IRAP will include excavation of impacted soil, screening of excavated soil using a photo ionization detector (PID), visual inspections of all excavated and exposed soil, confirmation analytical sampling to ensure the removal of impacted soil is complete and backfilling of excavations. Analytical results from soil samples taken during the trench investigation (Table 1) indicate concentrations of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals that exceed Minnesota Pollution Control Agency (MPCA) Tier I Soil Reference Values (SRVs).

The objective of the remedial actions proposed is to excavate and dispose of all soils containing non-organic debris and/or exceeding MPCA Tier I SRVs to levels below residential criteria. Supplemental excavation will be based on the magnitude and extent of residual VOC contamination, the depth of the excavation, groundwater impacts, and other situation-specific considerations.

This plan was prepared in accordance with MPCA guidance documents.

## 3 PROPOSED REMEDIAL ACTIONS

The proposed remedial action for the impacted area on Canadian Pacific property is the excavation of impacted soil and off-site disposal at a properly permitted landfill. The anticipated approximate extent of excavated soil is shown in gray on Figure 2. The actual extent of excavated soil will be determined by field screening and analytical results as discussed below.

Remedial actions will consist of excavation and field screening of soil to a depth of un-impacted soil or bedrock, whichever is shallower. Confirmation samples will be taken from soil left in place. In the event that final excavation limits reach bedrock, base confirmation soil samples will not be collected. Analytical results will be compared to MPCA Tier 1 Residential/Recreational SRVs.

Monitoring, inspection, documentation, analytical sampling and surveying of all excavations will be completed during excavation activities as discussed in the sections below.

### 3.1 Field Screening of Excavated Soil

An Arcadis representative will be present during soil excavation activities to monitor and inspect the soil as it is removed. The soil will be field screened with a PID (11.7 eV lamp) at a frequency of one for every 10 cubic yards and monitored for visual/olfactory indications of impacts including odors, staining, free-product and/or non-organic debris. The screening frequency will be reduced to one for every 25 cubic yards in areas of known impacted soil. PID screening of excavated soil will be completed in accordance with MPCA Petroleum Brownfields Program Guidance Document 4-04 *Soil Sample Collection and Analysis Procedures*.

Excavated soil will be separated based on the following criteria:

- Soil with observed PID readings below 10 parts per million (ppm) and without any visual or olfactory indication of impacts will be stockpiled for re-use as backfill at its respective location.
- Soil with observed PID readings above 10 ppm and/or visual/olfactory indication of impacts will be segregated for off-site removal.

Stockpiled soil that is impacted or is to be considered for re-use as backfill will be sampled in accordance with the procedures listed in Section 3.4.

Excavations will be extended until the sidewall soil does not exhibit PID readings above 10 ppm or any visual or olfactory indications of impacts.

### 3.2 Confirmation Analytical Sampling

Following impacted soil removal, base and sidewall confirmation samples will be collected to verify that remaining soil is below applicable standards. The confirmation samples will be analyzed for each of the constituents previously encountered within the impacted area and will be compared to MPCA Tier 1 SRVs and Tier 1 SLVs (for VOCs only) as applicable.

Confirmation sampling frequency will be completed in accordance with the table below:

| Square Feet of Excavation Floor Area | Minimum Number of Confirmation Samples             |
|--------------------------------------|--|
| Less than 500                        | 2 base and 4 sidewall                              |
| 500 to <1,000                        | 3 base and 5 sidewall                              |
| 1,000 to <1,500                      | 4 base and 6 sidewall                              |
| 1,500 to <2,000                      | 5 base and 7 sidewall                              |
| 2,000 to <2,500                      | 5 base and 8 sidewall                              |
| 2,500 to <3,000                      | 6 base and 8 sidewall                              |
| 3,000 to <4,000                      | 6 base and 9 sidewall                              |
| 4,000 to <6,000                      | 7 base and 1 sample per 45 lineal feet of sidewall |
| 6,000 to <8,500                      | 8 base and 1 sample per 45 lineal feet of sidewall |
| 8,500 to <10,890 (.25 acres)         | 9 base and 1 sample per 45 lineal feet of sidewall |
| Greater than 10,890                  | Use Guidance Below                                 |

The following guidance is to be used when excavation floor areas exceed 10,890 square feet:

| Floor Acreage | Square Feet      | Base Grid Interval | Sidewall Samples            |
|---------------|------------------|--------------------|-----------------------------|
| .25 – 3.0     | 10,890 – 130,680 | 15 – 30 Feet       | 1 sample per 45 lineal feet |
| 3.0 and over  | 130,680 +        | 30 Feet plus       | 1 sample per 45 lineal feet |

When sampling the sidewalls of excavations that exceed five feet in depth, the sidewall sampling locations will be staggered in the vertical plane. If excavations are vertically completed to bedrock, base sampling will not be completed; sidewall samples will still be collected in accordance with the table above. If perched groundwater is encountered during excavations, confirmation samples will be collected only from the soil above the saturated zone.

### 3.3 Water Sampling and Management

If perched groundwater is encountered during soil excavation a water sample will be collected for characterization purposes only. No groundwater recovery or remediation is anticipated as part of this work.

If perched groundwater is encountered during a remedial excavation which limits the removal of remaining impacted soil at depth (without dewatering), MPCA staff will be contacted to discuss whether dewatering and continued soil excavation is warranted in that circumstance.

### 3.4 Stockpile Management

#### Soil Designated for Off-Site Disposal

All excavated soil requiring off-site disposal will be relocated to a designated on-site staging area. The stockpile will be placed on a minimum of 6-mil reinforced plastic and covered with securely anchored 10-mil reinforced plastic. Excavated soil designated for off-site disposal will be at a Ford-approved and MPCA-permitted off-site facility.

Prior to disposal, excavated soil will be sampled for waste characterization. Samples will be analyzed consistent with the receiving facility requirements. In the absence of receiving facility requirements, samples will be analyzed for total metals, Toxic Characteristic Leaching Procedure (TCLP) metals, VOCs, SVOCs, GRO, DRO, and polychlorinated biphenyls (PCBs). The number of samples required for waste characterization will also be dictated by the receiving facility.

#### Soil Designated for On-Site Reuse

Excavated soil that does not exhibit PID readings over 10 ppm and does not show visual or olfactory indication of impacts will be stockpiled for re-use on-site. Prior to stockpiled soil being used as backfill material it will be sampled for the constituents found in exceedance during the due diligence as listed in Section 2.

## Stockpile Sampling Frequency

The number of samples will be dependent on the excavated soil volume as specified in the table below, which is consistent with MPCA Petroleum Remediation Program Guidance Document 4-04 Soil Sample Collection and Analysis Procedures.

| Cubic Yards of Soil   | Number of Grab Samples |
|-----------------------|------------------------|
| Less than 50          | 1                      |
| 51-500                | 2                      |
| 501-1,000             | 3                      |
| 1,001-2,000           | 4                      |
| 2,001-4,000           | 5                      |
| Each additional 2,000 | One additional sample  |

## 3.5 Backfilling

Excavated areas will be backfilled and returned to the original grade of the surrounding area after removal of impacted soil. Excavations will be backfilled using non-impacted soil removed from the excavation, Class 5 backfill material created during the site decommissioning, non-impacted soil obtained from other portions of the Site, and/or an approved off-site borrow source.

If possible, excavations will not be backfilled until sidewall and base analytical samples confirm all impacted soil has been removed. However, excavations may be backfilled prior to receiving analytical results if needed to allow for safe Site access, to avoid a safety hazard associated with an open excavation in a high traffic area, and/or to prevent accumulation of stormwater. Ford acknowledges that this backfill material may have to be disposed off-Site if confirmatory samples indicate the extent of impacts have not been removed and additional excavation is required.

## 3.6 Dust Control

Construction activities are not expected to produce excessive dust, however, a water truck will be utilized to mitigate dust generated during on-site truck movement if needed.

## 3.7 Documentation and Surveying

Arcadis will photo document each excavation and have the final lateral and vertical extents of each excavation surveyed. Excavation extents will be surveyed for X and Y (ground surface) coordinates referencing the National Geodetic Vertical Datum of 1929 (NGVD 29) and North American Datum of 1983 (NAD 83).



### **3.8 Construction Contingency Plan**

If unexpected conditions are encountered during soil excavation, work will be stopped and the area will be isolated until the conditions can be fully characterized and appropriate safety precautions and sampling procedures can be put in place.

#### **3.8.1 Unexpected Debris**

If unexpected debris (bricks, metal pieces, etc.) are encountered that cannot be easily separated from the surrounding soil, the soil will be removed and properly disposed of off-Site.

#### **3.8.2 Unidentified Waste**

If unidentified wastes, including drums or underground storage tanks, are encountered during soil excavation, work in the area will be stopped and the area will be secured until the wastes can be characterized and appropriate safety measures can be put in place. Any unidentified waste will be properly disposed off-Site following characterization. In instances where a drum or tank is discovered the MPCA will be contacted for further guidance.

#### **3.8.3 Unidentified Utilities**

If any unidentified utilities are encountered during excavation, work will be stopped in the area until the utility is identified and evaluated to determine if it is in use and if there is any immediate safety or environmental hazard to human health. If the utility is no longer in use it will be determined by appropriate Ford and City of St. Paul personnel if removal is required. If the utility is active, the response plan will be modified to either reroute the utility or work around it.

#### **3.8.4 Additional Soil Removal**

Upon receipt of analytical results of the confirmation samples from each consolidated impact area, Arcadis will review the results to determine if additional soil needs to be removed to meet applicable regulatory standards. If confirmation samples exceed applicable regulatory standards, additional soil from the sample location will be removed. After additional impacted soil is removed, confirmation samples will be re-collected from the areas where additional soil was removed. The new confirmation samples will be analyzed only for those criteria that exceeded an applicable regulatory standard during the initial round of confirmation sampling.

## **4 REPORTING**

Actions discussed in this IRAP will be documented in the field and reported in a Response Action Implementation Report. That report will include a summary of all field observations (e.g., PID screening values, visual and olfactory observations, volume of soil removed) as well as confirmation sample analytical results, surveyed extents of the excavation and final placement of all excavated soil that was reused on-site.

## 5 SCHEDULE

Excavation of contaminated soils and successive backfilling and restoration are expected to be completed during the 2018 calendar year, pending approval by the MPCA.

## 6 REFERENCES

Arcadis. 2016a. Interim Response Action Plan – Consolidated Impact Areas, Twin Cities Assembly Plant, St. Paul, Minnesota. October 7.

Arcadis. 2016b. Phase II Comprehensive Site Investigation Report – Soil Addendum, Twin Cities Assembly Plant, St. Paul, Minnesota. December 19.

MPCA. 2008. Guidance Document 4-04, Soil Sample Collection and Analysis Procedures. September. Available online at: <https://www.pca.state.mn.us/sites/default/files/c-prp4-04.pdf>.

# TABLES



Table 1  
Former Fill Areas A/B (CP Property) - Analytical Exceedances  
Ford Motor Company - Twin Cities Assembly Plant  
966 Mississippi River Boulevard  
St. Paul, Minnesota



| Location<br>Sample Name<br>Sample Date<br>Depth Interval | Units | Tier 1<br>Residential<br>SRVs | Soil Leaching<br>Values | TRENCH-07_010<br>TRENCH-07_010_5-6(20160202)<br>2/2/2016<br>5-6 | TRENCH-07_150<br>TRENCH-07_150_7-8(20160202)<br>2/2/2016<br>7-8 | TRENCH-07_300<br>TRENCH-07_300_2-3(20160222)<br>2/22/2016<br>2-3 | TRENCH-07_330<br>TRENCH-07_330_3-4(20160322)<br>3/22/2016<br>3-4 | TRENCH-07_330<br>TRENCH-07_330_5-6(20160322)<br>3/22/2016<br>5-6 | TRENCH-08_00<br>TRENCH-08_00_8-9(20160208)<br>2/8/2016<br>8-9 | TRENCH-09_00<br>TRENCH-09_00_4-5(20160209)<br>2/9/2016<br>4-5 |
|--|-------|-------------------------------|-------------------------|---|---|--|--|--|---|---|
| VOCs   |       |                               |                         |   |   |  |  |  |   |   |
| 1,1,2-Trichloroethane                                    | mg/kg | 9                             | 0.013634352             | 0.13 J  | 26  | < 0.3  | < 0.34   | < 0.35   | < 3.2   | < 0.32  |
| 1,2,4-Trimethylbenzene                                   | mg/kg | 8                             | 2.744504429             | 0.022 J   | 430   | < 0.3  | < 0.34   | < 0.35   | < 3.2   | < 0.32  |
| 1,3,5-Trimethylbenzene                                   | mg/kg | 3                             | 2.732695461             | < 0.25  | 160   | < 0.3  | < 0.34   | < 0.35   | < 3.2   | < 0.32  |
| Benzene  | mg/kg | 6                             | 0.017237181             | < 0.25  | < 25  | < 0.3  | < 0.34   | < 0.35   | < 3.2   | < 0.32  |
| Dichloromethane  | mg/kg | 97                            | 0.01664908              | < 0.25  | < 25  | < 0.3  | 0.54   | 0.55   | < 3.2   | < 0.32  |
| Ethylbenzene   | mg/kg | 200                           | 1.048040824             | < 0.25  | 33  | < 0.3  | < 0.34   | < 0.35   | < 3.2   | < 0.32  |
| Hexachloro-1,3-butadiene                                 | mg/kg | 6                             | 0.037267798             | < 0.25  | < 25  | < 0.3  | < 0.34   | < 0.35   | < 3.2   | < 0.32  |
| Isopropylbenzene   | mg/kg | 30                            | 9.462561616             | 0.11 J  | 19 J  | < 0.3  | < 0.34   | < 0.35   | 1.7 J   | < 0.32  |
| m,p-Xylene   | mg/kg | 45                            | NS                      | 0.023 J   | 130   | < 0.3  | < 0.34   | < 0.35   | < 3.2   | < 0.32  |
| Naphthalene  | mg/kg | 10                            | 4.467565234             | 0.4   | 91  | < 0.3  | 2.8  | < 0.35   | < 3.2   | < 0.32  |
| N-Butylbenzene   | mg/kg | 30                            | NS                      | 0.097 J   | 34  | < 0.3  | < 0.34   | < 0.35   | 4   | < 0.32  |
| N-Propylbenzene  | mg/kg | 30                            | NS                      | 0.19 J  | 27  | < 0.3  | < 0.34   | < 0.35   | 2.4 J   | < 0.32  |
| o-Xylene   | mg/kg | 45                            | NS                      | < 0.25  | 3.7 J   | < 0.3  | < 0.34   | < 0.35   | < 3.2   | < 0.32  |
| sec-Butylbenzene   | mg/kg | 25                            | NS                      | 0.15 J  | 25  | < 0.3  | < 0.34   | < 0.35   | 4.6   | < 0.32  |
| SVOCs  |       |                               |                         |   |   |  |  |  |   |   |
| 2-Methylnaphthalene                                      | mg/kg | 100                           | **                      | 0.043 J   | 6.7 J   | 0.013 J  | 0.7 J  | < 0.4  | 2.7 J   | 0.0043 J  |
| Naphthalene  | mg/kg | 10                            | **                      | 0.37 J  | 69  | 0.037 J  | 2.5  | < 0.4  | 1.1 J   | 0.011 J   |
| Total Metals   |       |                               |                         |   |   |  |  |  |   |   |
| Antimony   | mg/kg | 12                            | **                      | < 1.2 J   | 8.1   | 110  | 2.0  | < 0.96   | 670   | 23  |
| Arsenic  | mg/kg | 9                             | **                      | 5.7   | 4.0   | 6.4  | 4.7  | 4.5  | 6.8   | 4.8   |
| Barium   | mg/kg | 1100                          | **                      | NA  | NA  | NA   | 79   | 46   | NA  | NA  |
| Cadmium  | mg/kg | 25                            | **                      | 0.15 J  | 0.21  | 12   | 0.30   | 0.13 J   | 0.65  | 1.4   |
| Copper   | mg/kg | 100                           | **                      | 12  | 18  | 47   | 13   | 15   | 21  | 19  |
| Lead   | mg/kg | 300                           | **                      | 15  | 16  | 310  | 21   | 2.9  | 280   | 95  |
| Vanadium   | mg/kg | 50*                           | **                      | NA  | NA  | NA   | 14   | 13   | NA  | NA  |

General Notes:  
= Above Tier 1 Residential SRVs  
*Italics* = Above Soil Leaching Values  
< = not detected  
\* = Values are MPCA-approved residential screening values based on typical background concentrations  
\*\* = SLVs not applicable for metals and PAHs at this site  
Acronyms and Abbreviations:  
J = estimated value (outside of detection limits)  
mg/kg = milligram/kilogram  
NA = not analyzed  
NS = no standard

Table 1  
Former Fill Areas A/B (CP Property) - Analytical Exceedances  
Ford Motor Company - Twin Cities Assembly Plant  
966 Mississippi River Boulevard  
St. Paul, Minnesota

| Location<br>Sample Name<br>Sample Date<br>Depth Interval | Units | Tier 1<br>Residential<br>SRVs | Soil Leaching<br>Values | TRENCH-09_40<br>TRENCH-09_40_2-3(20160209)<br>2/9/2016<br>2-3 | TRENCH-10_00<br>TRENCH-10_00_3-4(20160222)<br>2/22/2016<br>3-4 | TRENCH-10_20<br>TRENCH-10_20_1-2(20160222)<br>2/22/2016<br>1-2 | TRENCH-11_00<br>TRENCH-11_00_4-5(20160222)<br>2/22/2016<br>4-5 | TRENCH-11_015<br>TRENCH-11_015_5-6(20160322)<br>3/22/2016<br>5-6 | TRENCH-12_00<br>TRENCH-12_00_12-13(20160222)<br>2/22/2016<br>12-13 |
|--|-------|-------------------------------|-------------------------|---|--|--|--|--|--|
| VOCs   |       |                               |                         |   |  |  |  |  |  |
| 1,1,2-Trichloroethane                                    | mg/kg | 9                             | 0.013634352             | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | < 14   |
| 1,2,4-Trimethylbenzene                                   | mg/kg | 8                             | 2.744504429             | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | 320  |
| 1,3,5-Trimethylbenzene                                   | mg/kg | 3                             | 2.732695461             | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | < 14   |
| Benzene  | mg/kg | 6                             | 0.017237181             | < 0.25  | 0.058 J  | < 0.37   | < 0.31   | < 0.38   | < 14   |
| Dichloromethane  | mg/kg | 97                            | 0.01664908              | < 0.25  | < 0.28   | 0.12 J   | < 0.31   | 0.61   | < 14   |
| Ethylbenzene   | mg/kg | 200                           | 1.048040824             | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | 14   |
| Hexachloro-1,3-butadiene                                 | mg/kg | 6                             | 0.037267798             | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | < 14   |
| Isopropylbenzene   | mg/kg | 30                            | 9.462561616             | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | 22   |
| m,p-Xylene   | mg/kg | 45                            | NS                      | < 0.25  | 0.023 J  | < 0.37   | < 0.31   | < 0.38   | < 14   |
| Naphthalene  | mg/kg | 10                            | 4.467565234             | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | 17   |
| N-Butylbenzene   | mg/kg | 30                            | NS                      | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | 14   |
| N-Propylbenzene  | mg/kg | 30                            | NS                      | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | 30   |
| o-Xylene   | mg/kg | 45                            | NS                      | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | < 14   |
| sec-Butylbenzene   | mg/kg | 25                            | NS                      | < 0.25  | < 0.28   | < 0.37   | < 0.31   | < 0.38   | 28   |
| SVOCs  |       |                               |                         |   |  |  |  |  |  |
| 2-Methylnaphthalene                                      | mg/kg | 100                           | **                      | < 0.38  | 0.076 J  | < 0.41   | 0.13 J   | < 0.41   | 1.4 J  |
| Naphthalene  | mg/kg | 10                            | **                      | 0.0052 J  | 0.34 J   | 0.0055 J   | 0.04 J   | < 0.41   | 7  |
| Total Metals   |       |                               |                         |   |  |  |  |  |  |
| Antimony   | mg/kg | 12                            | **                      | 29  | 220  | 0.75 J   | 30   | 0.84 J   | 2.7  |
| Arsenic  | mg/kg | 9                             | **                      | 2.7   | 34   | 5.5  | 5.4  | 4.1  | 3.7  |
| Barium   | mg/kg | 1100                          | **                      | 78  | NA   | NA   | NA   | 86   | NA   |
| Cadmium  | mg/kg | 25                            | **                      | 0.23  | 38   | 0.16 J   | 1.7  | 0.14 J   | 0.14 J   |
| Copper   | mg/kg | 100                           | **                      | 4.4   | 570  | 21 J   | 28   | 16   | 9.9  |
| Lead   | mg/kg | 300                           | **                      | 6.4   | 9200   | 10 J   | 210  | 8.6  | 9.6  |
| Vanadium   | mg/kg | 50*                           | **                      | 14  | NA   | NA   | NA   | 32   | NA   |

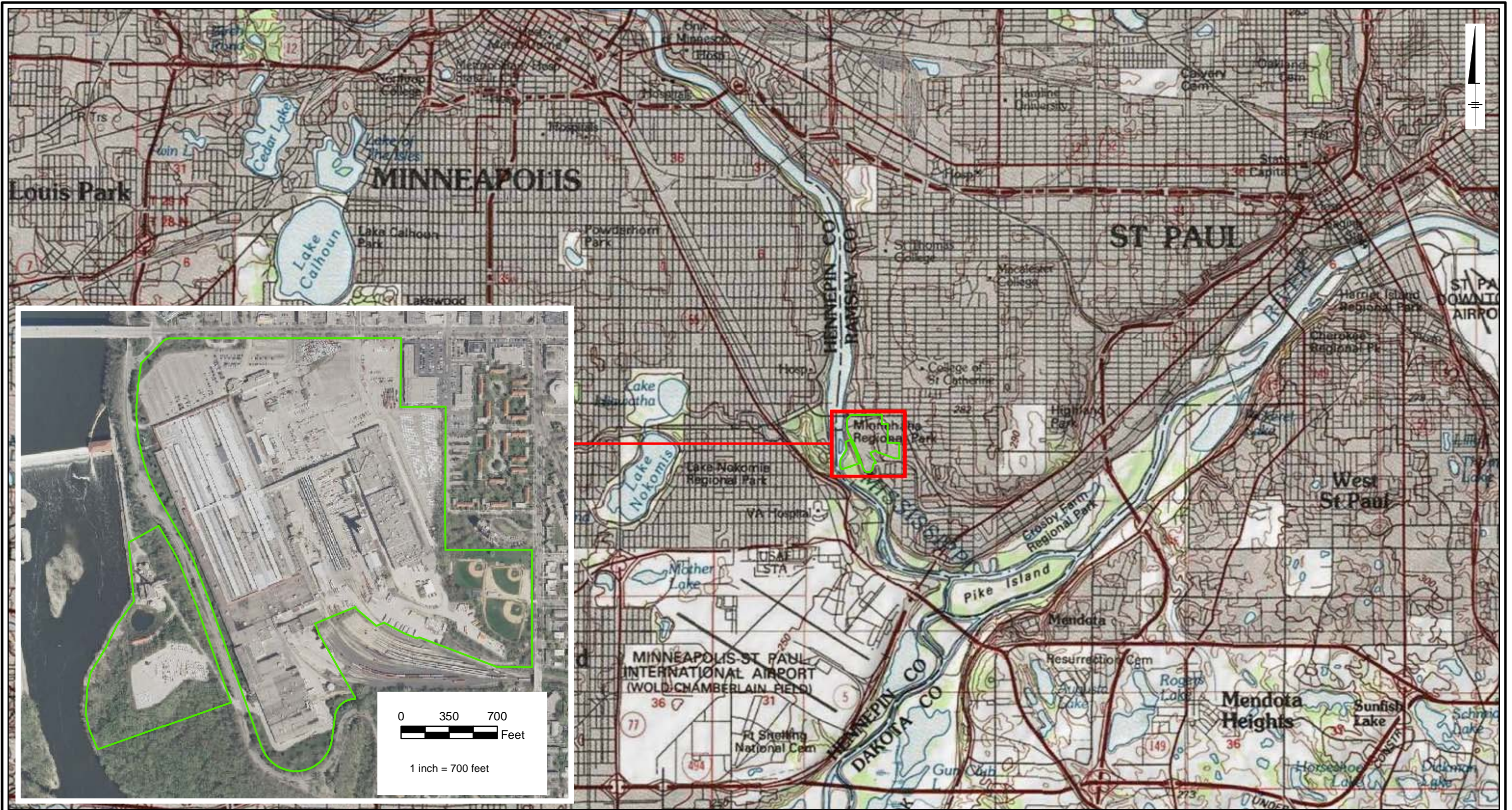
General Notes:  
= Above Tier 1 Residential SRVs  
*Italics* = Above Soil Leaching Values  
< = not detected  
\* = Values are MPCA-approved residential screening values based c  
\*\* = SLVs not applicable for metals and PAHs at this site  
Acronyms and Abbreviations:  
J = estimated value (outside of detection limits)  
mg/kg = milligram/kilogram  
NA = not analyzed  
NS = no standard

# FIGURES





CITY: Minneapolis, MN DB: MGrass PM: BZinda  
Project: MN000593  
Document Path: Z:\GIS\PROJECTS\ENV\Ford\Range\ArcMap\2016\2016-04\Fig1\_Site\_Location\_Topo.mxd



LEGEND:

— Ford Property Boundary

NOTES:

Imagery Source: MnGeo WMS service, 2010 color 7-county  
<http://geoint.lmic.state.mn.us/cgi-bin/wms/> Accessed 4/26/2016

Topographic Map Source:  
© 2007 National Geographic Society

0 1 2  
Miles  
1 inch = 1 mile



Twin Cities Assembly Plant  
Ford Motor Company  
St. Paul, Minnesota

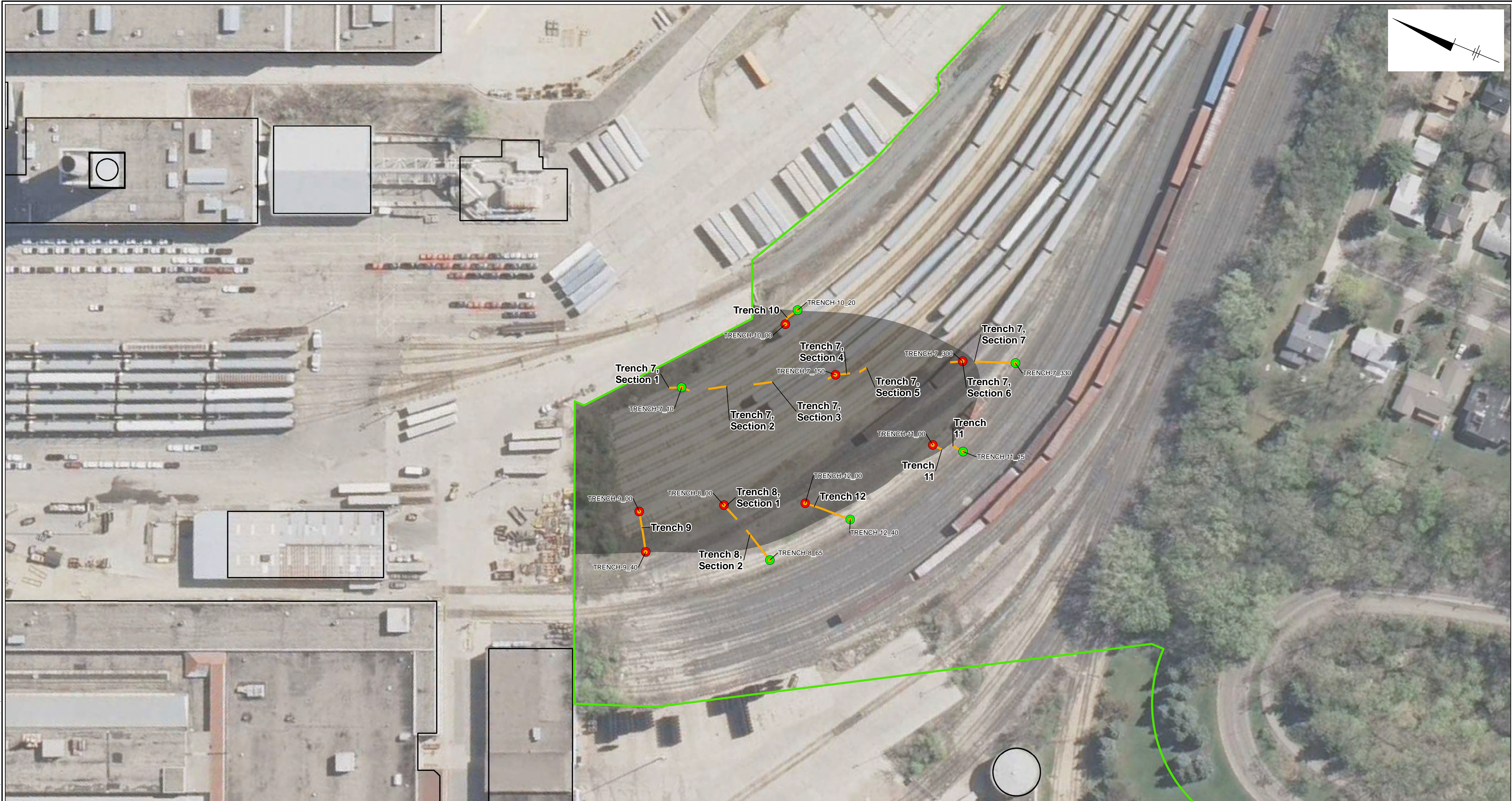
Site Location / Property Layout



FIGURE  
1




CITY: Minneapolis, MN DB: MG LD: AR  
TCAP:   
Document Path: Z:\GIS\Projects\ ENV\Ford\Trenches 20170918.mxd



LEGEND:

- Soil Exceedance of MPCA Tier 1 Residential SRVs
- No Soil Exceedance of MPCA Tier 1 Residential SRVs
- Trench Sample
- Trench Location
- Former Buildings
- Ford Property Boundary
- Consolidated Impact Area

NOTES:  
Imagery Source: MnGeo WMS service, 2010 color 7-county  
<http://geoint.lmic.state.mn.us/cgi-bin/wms?>



Twin Cities Assembly Plant  
Ford Motor Company  
St. Paul, Minnesota

**Areas A/B Trenching - CP Property**




FIGURE  
**2**



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