Ms. Shanna Schmitt and
Ms. Stacey Hendry-Van Patten
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Dear Ms. Schmitt and Ms. Hendry-Van Patten:

This letter report provides the Site-Wide Contingency Plan (Contingency Plan) that will be utilized by on-site contractors at the Ford Motor Company Twin Cities Assembly Plant (TCAP; Site), during the course of demolition activities. This Contingency Plan is in support of the previously submitted and approved Environmental Contingency Plan – Underground Storage Tank (UST) Removal, and therefore does not consider the potential encounter of USTs (ARCADIS 2013a). The decommissioning, structural demolition, subsurface removals and abandonment, and Site restoration are scheduled to continue through 2017. All tasks incorporated within the scope of the demolition activities will be completed by licensed contractors and overseen by Ford personnel. In response to these activities, ARCADIS has prepared this Contingency Plan to address environmental concerns that may arise.

Site Location

The Site is located at 966 South Mississippi River Boulevard in St. Paul, Ramsey County, Minnesota at the approximate easting coordinate 484562.5 meters (m) and northing coordinate 4973822.5 m. The Site is located in a mixed industrial-, commercial-, and residential-use area on the eastern shore of the Mississippi River, along the east and west sides of South Mississippi River Boulevard, south of Ford Parkway and west of South Cleveland Avenue, in St. Paul, Minnesota (Figure 1).
Site Background

Operations at the Site formerly consisted of the assembly and painting of light duty trucks (Ford Ranger) using parts manufactured off-Site. Assembly processes included welding, metal cleaning, painting and curing, windshield and trim installation and preparation of the vehicles for final delivery. In addition, a wastewater treatment plant and steam plant operated at the Site and was associated with the former assembly operations. Manufacturing operations at the Site ceased on December 16, 2011 and demolition activities commenced on June 10, 2013.

From 2007 to the present, environmental assessments, remedial action, and subsurface investigations have been completed at the Site to determine potential impacts in soil and groundwater from former operations and Features. These activities included:

- A Phase I Environmental Site Assessment completed in 2007 to identify Features and obtain information regarding environmental activities and conditions at the Site (ARCADIS 2007a).
- Soil investigations and a Surface Soil Risk Assessment completed in 2007 to evaluate the Potential Battery Waste Disposal Area (Feature 139), located east of the plant (ARCADIS 2007b; 2007c).
- Remedial action for the Potential Battery Waste Disposal Area (Feature 139) completed in 2008 (ARCADIS, 2008).
- An initial and supplemental Phase II investigation of the Site exterior (outside building footprint) completed in June and July 2007 (ARCADIS 2007d) and between August and November 2011 and October 2012 (ARCADIS 2013b), respectively.
- An initial Phase II investigation of the Site interior completed in August 2010 and continued in May and June of 2012.

To facilitate implementation of this Contingency Plan, the Site footprint was divided into 11 Focus Areas (FAs) as shown on Figure 2. The FA boundaries were developed with consideration of Features identified in the Phase I, historical environmental concerns, as well as use and construction sequence of infrastructure.

As demolition activities expose subsurface soils and Features, all data collected to date, including identified Features and locations of soil and groundwater exceedances, will be utilized in the implementation of this Contingency Plan and has been illustrated for each FA on Figures 3 through 11. FA-08 and FA-10 have been excluded as they will not be affected by demolition activities. Additionally, in
preparation of the removal of existing infrastructure, all Features identified during the 2007 Phase I ESA were surveyed to allow investigation to be completed after concrete slab removal.

**Contingency Plan**

**Environmental Monitoring Plan**

Throughout demolition activities, subsurface soil and potentially perched groundwater will be exposed. A Ford-approved designated environmental representative will oversee the excavation or removal of any soil, infrastructure, and utilities removed as part of demolition scope of work. During the course of these removals, monitoring and inspection of the removed and exposed soil will be completed and documented consistent with the details in Attachment 1. Soil will be screened with a photo-ionization detector (PID, 11.7 eV lamp) and visually inspected for indication of the presence and extent of potential impacts. Furthermore, the field screening will be utilized to segregate any excavated soil for future sampling in accordance with the MPCA-approved Case Specific Beneficial Use Determination (CSBUD) for the determination of potential re-use on-site or off-site disposal (Golder Associates, 2012).

Field screening will be conducted a minimum of once for every 10 cubic yards of excavated soil, with the implementation of more frequent screening if any of the following are observed:

- a change in stratigraphy or other areas of transition;
- excavations are extended in proximity to an identified Feature; or
- to delineate areas with visual impacts or high PID readings.

If less than 10 cubic yards are removed and none of the aforementioned criteria are met, a minimum of one sample will be collected for field screening.

After excavation is complete, exposed soil on the excavation sidewalls will be screened once for every 25 lateral feet at 4-foot vertical intervals from below the ground surface (i.e. 0 to 4, 4 to 8, etc.). Additionally, exposed soil will be screened once for every 100 square feet along the excavation base. Screening of soil with the PID will be conducted in accordance with MPCA Petroleum Remediation Program Guidance Document 4-04 *Soil Sample Collection and Analysis Procedures*. To ensure the viability of field screening results, the PID will be calibrated twice daily (morning and early afternoon).
Field screening will also include sampling exposed soil with a petroleum sheen test if visual impacts are observed. The petroleum sheen test will be conducted in accordance with MPCA Petroleum Remediation Program Guidance 4-04.

On-Site Screening Criteria

Excavated soil will be characterized consistent with MPCA Petroleum Remediation Program Guidance Document 3-01, 5-01, and 5-03:

- Soils with observed PID readings below 10 ppm will be replaced within the excavated area.
- Soils with observed PID readings above 10 ppm will be segregated, staged, and evaluated in accordance with the CSBUD.

These screening criteria are based on residential and recreational land development standards for re-use on-site. In addition, if visual impacts are observed in exposed soil, a petroleum sheen test will be conducted in accordance with MPCA Petroleum Remediation Program Guidance 4-04. Sheen tests typically identify one of two results:

- **Droplets of product or a rainbow sheen**: this indicates the soil is most likely petroleum saturated. This soil will be segregated separately and staged in preparation for off-site disposal at an MPCA approved facility. Confirmation samples will be collected for characterization and a plan for additional corrective action may be required.
- **No droplets of product or a rainbow sheen**: this indicates the soil is not petroleum saturated and may be segregated as noted above based on PID readings.

Excavated Soil

Excavated soil designated for off-site disposal in accordance with the CSBUD and will be sampled for waste characterization. Samples will be analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), Resource Conservation and Recovery Act (RCRA) metals, Toxic Characteristic Leaching Procedure (TCLP) lead, cyanide, gasoline range organics (GRO), and diesel range organics (DRO). 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:
<table>
<thead>
<tr>
<th>Cubic yards of soil</th>
<th>Number of grab samples</th>
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</thead>
<tbody>
<tr>
<td>Less than 50</td>
<td>1</td>
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<tr>
<td>51-500</td>
<td>2</td>
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<tr>
<td>501-1000</td>
<td>3</td>
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<tr>
<td>1001-2000</td>
<td>4</td>
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<tr>
<td>2001-4000</td>
<td>5</td>
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<tr>
<td>Each additional 2,000</td>
<td>One additional sample</td>
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</tbody>
</table>

**Sidewall and Excavation Base**

As stated above, excavation sidewalls and base will be monitored whenever soil is exposed in support of demolition activities. If soil screening results from the newly exposed soil indicate potential impacts through field screening results (PID greater than 10 ppm) or visual and olfactory indicators, appropriate samples will be collected from the exposed sidewalls or base. The confirmation samples will be analyzed for, at a minimum, GRO and DRO and compared to the MPCA limit of 100 mg/kg for unregulated fill.

If excavated soils have elevated PID readings but do not have any indication of petroleum impacts, confirmation samples will also be analyzed for VOCs. If unexpected conditions, wastes, debris, clinkers, tar product, staining, etc. or any contaminated media are encountered during the excavation, confirmation samples will be analyzed for RCRA metals, TCLP lead, cyanide, and SVOCs. If excavated soils have any indication of oily wastes, samples will be analyzed for PCBs. Samples will be collected after removing approximately 1 foot of soil from the area to ensure a representative sample is collected.

Soil screening samples and samples collected for laboratory analysis will be labeled in accordance with MPCA Guidance Document 3-01. The areal location of each sample will be marked on a map or recorded using a handheld GPS.

Further removal activities will be suspended and the area will be isolated until conditions can be fully characterized and appropriate safety precautions put in place. Furthermore, the following personnel will be notified:

- MPCA Petroleum Brownfields Program staff: 651.296.6300
- MPCA VIC Program staff: 651.296.6300
- State Duty Office: 651.649.5451
Following notification and written approval from the MPCA VIC and PB program staff, all soil will remain in place and the area will be included for investigation as part of the concurrently occurring Subsurface Investigation – Work Element 1 (ARCADIS 2013c).

**Free Product**

If free product is encountered during soil excavation, work in the area will be stopped and the area will be secured. Notification will be given to the MPCA and the State Duty Officer noted above within 24 hours of the discovery. A plan will be developed for further characterization of the area.

**Unidentified Waste**

If unidentified wastes 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. Notification will be given to the MPCA and Staff Duty Officer as noted above. A removal plan will be developed prior to initiating further activities.

**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 hazard to human health. If the utility is no longer in use it will be removed from the site. If the utility is active and must be left in place, soil screened above 10 ppm will be removed surrounding the utility trench. If excavation to meet this standard exceeds 150 cubic yards of soil, a vapor barrier will be placed in the utility trench in accordance with MPCA Petroleum Remediation Program Guidance 5-03.

**On-Site Staging and Off-Site Disposal**

Any soil requiring on-site staging for off-site disposal or re-use will be relocated to the designated staging area. The stockpile will be placed on 6-mil reinforced plastic overlaying the concrete surface and covered with securely anchored 10-mil reinforced plastic. The stockpile(s) will remain covered until removed from the Site. Excavated soil designated for off-site disposal will be disposed of at a Ford-approved and MPCA-permitted off-site facility.
Documentation

Soil characteristics for all excavated soil (including PID screening results, quantity, depth, location, petroleum sheen test results) as well as samples collected for laboratory analysis (confirmation and waste samples) will be documented utilizing the Soil Removal Tracking form in Attachment 1. In addition, if field observations (i.e. presence of free product or product sheen, and PID screening results) demonstrate petroleum contaminated soil was excavated, the General Excavation Report Worksheet (MPCA Guidance Document 3-02) will be completed and submitted to MPCA VIC and PB staff. Furthermore, upon completion of subsurface demolition activities, a Contingency Plan Implementation Summary Report will be provided to the MPCA.

Conclusion

We appreciate your assistance with this project. If you have questions or need additional information, please call Angharad Pagnon of ARCADIS at your convenience.

Sincerely,

ARCADIS U.S., Inc.

[Signatures]

Angharad Pagnon
Project Environmental Specialist

Ryan Oesterreich
Project Engineer, PE, PG

Copies:
Mr. Charles Pinter, Ford Motor Company, Dearborn, Michigan
Mr. John Meyers, Ford Twin Cities Assembly Plant, St. Paul, Minnesota
References


Figures
NOTES:
1) This Figure is not to be used for completing Land Splits, Land Unit Development, Plats, or generating new Tax Identification numbers.
2) The Figure is not to be used for any Real Estate Planning or Discussion purposes.
3) This Figure is to be used for obtaining Certificates of Completion during the environmental investigation/remediation process only.
4) Imagery Source: MnGeo WMS service, 2010 color 7-county
Twin Cities Assembly Plant
Ford Motor Company
St. Paul, Minnesota

FIGURE 3

LEGEND:

- Monitoring Well
- Soil Boring
- Focus Area
- Hand Auger
- Ford Property Boundary
- Feature
- MPCA Tier 1 Residential SRV Exceedance or MPCA Tier 2 Industrial SRV Exceedance
- MDH HRL/HBV/RAA or EPA Arsenic MCL Exceedance

NOTES:

AMW = ARCADIS Monitoring Well
ASB = ARCADIS Soil Boring
EPA = Environmental Protection Agency
HBV = Health Based Value
HRL = Health Risk Limit
MCL = Maximum Contaminant Level
MDH = Minnesota Department of Health
MPCA = Minnesota Pollution Control Agency
RAA = Risk Assessment Advice
SRV = Soil Reference Value

Imagery Source: MnGeo WMS service, 2010 color 7-county
http://geo.int.lmic.state.mn.us/cgi-bin/wms? Accessed 6/10/2013

Focus Area 1 - North Parking Lot Area

- FORMER TEST TRACK
- FORMER LOCATION OF GASOLINE & DIESEL USTS - REMOVED 1993
- FORMER CONVOY UST
- FORMER LOCATION OF GASOLINE AND DIESEL FUEL UNDERGROUND PIPING
- FORMER FUEL OIL UST (CLOSED IN PLACE)
- FORMER FUEL OIL UST
Focus Area 2 - Open LUST Releases

NOTES:

AMW = ARCADIS Monitoring Well
ASB = ARCADIS Soil Boring
EPA = Environmental Protection Agency
HBV = Health Based Value
HRL = Health Risk Limit
MCL - Maximum Contaminant Level
MDH = Minnesota Department of Health
MPCA = Minnesota Pollution Control Agency
RAA = Risk Assessment Advice
SRV = Soil Reference Value

Imagery Source: MnGeo WMS service, 2010 color 7-county
NOTES:  
AMW = ARCADIS Monitoring Well  
ASB = ARCADIS Soil Boring  
EPA = Environmental Protection Agency  
HBV = Health Based Value  
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MCL = Maximum Contaminant Level  
MDH = Minnesota Department of Health  
MPCA = Minnesota Pollution Control Agency  
RAA = Risk Assessment Advice  
SRV = Soil Reference Value  

Imagery Source: MnGeo WMS service, 2010 color 7-county  
Focus Area 5 - Paint Shop

NOTES:

AMW = ARCADIS Monitoring Well
ASB = ARCADIS Soil Boring
EPA = Environmental Protection Agency
HBV = Health Based Value
HRL = Health Risk Limit
MCL = Maximum Contaminant Level
MDH = Minnesota Department of Health
MPCA = Minnesota Pollution Control Agency
RAA = Risk Assessment Advice
SRV = Soil Reference Value

Imagery Source: MnGeo WMS service, 2010 color 7-county

1. FORMER TEST TRACK
108. HYDRAULIC LIFTS
108. PHOSPHATE SYSTEM TRENCH
108. SLUDGE PITS
108. FORMER SULFURIC ACID AST

LEGEND:

Monitoring Well
Soil Boring
Focus Area
Hand Auger

MPCA Tier 1 Residential SRV Exceedance or MPCA Tier 2 Industrial SRV Exceedance
MDH HRL/HBV/RAA or EPA Arsenic MCL Exceedance
**LEGEND:**

- Monitoring Well
- Soil Boring
- Focus Area
- Hand Auger
- Sump
- MPCA Tier 1 Residential SRV Exceedance or MPCA Tier 2 Industrial SRV Exceedance
- MDH HRL/HBV/RAA or EPA Arsenic MCL Exceedance

**NOMES:**

- AMW = ARCADIS Monitoring Well
- ABB = ARCADIS Soil Boring
- EPA = Environmental Protection Agency
- HBV = Health Based Value
- HRL = Health Risk Limit
- MCL = Maximum Contaminant Level
- MDH = Minnesota Department of Health
- MPCA = Minnesota Pollution Control Agency
- RAA = Risk Assessment Advice
- SRV = Soil Reference Value
- MAV = ARCADIS Monitoring Well
- ASB = ARCADIS Soil Boring

**Imagery Source:** MnGeo WMS service, 2010 color 7-county
http://geo.int.lmic.state.mn.us/cgi-bin/wms? Accessed 6/10/2013

**Focus Area 6 - Former Hazardous Waste Storage and Disposal Areas**

- 1. FORMER TEST TRACK
- 8. FORMER HAZARDOUS WASTE STORAGE AREA
- 35. WASTE SOLVENT USTs
- 37. SOLVENT UST UNDERGROUND PIPING
- 113. TRANSFORMER #23 A & B
- 114. TRANSFORMER #24A & B
- 120. PAINT SLUDGE PIT SUMP
- 121. SLUDGE PITS

**NOTES:**

- 1 inch = 200 feet
- CITY: Minneapolis, MN   DB: MGress   PM: Bryan Zinda
- Project MN000593
- Path: G:\GIS\Projects\Ford Ranger\ArcMap\2013\2013-07\Const_Cont_Plan_v1\CC_FA6_Locations_20130711.mxd
Focus Area 7 - Railroad Tracks

LEGEND:
- Monitoring Well
- Soil Boring
- Ford Property Boundary
- Focus Area
- MPCA Tier 1 Residential SRV Exceedance or MPCA Tier 2 Industrial SRV Exceedance
- MDH HRL/HBV/RAA or EPA Arsenic MCL Exceedance

NOTES:
- AMW = ARCADIS Monitoring Well
- ABB = ARCADIS Soil Boring
- EPA = Environmental Protection Agency
- HBV = Health Based Value
- HRL = Health Risk Limit
- MCL = Maximum Contaminant Level
- MDH = Minnesota Department of Health
- MPCA = Minnesota Pollution Control Agency
- RAA = Risk Assessment Advice
- SRV = Soil Reference Value

Imagery Source: MnGeo WMS service, 2010 color 7-county
Focus Area 9 - Main Assembly Building (Specific to Residential Cleanup)

NOTES:
- AMW = ARCADIS Monitoring Well
- ASB = ARCADIS Soil Boring
- EPA = Environmental Protection Agency
- HBV = Health Based Value
- HRL = Health Risk Limit
- MCL = Maximum Contaminant Level
- MDH = Minnesota Department of Health
- MPCA = Minnesota Pollution Control Agency
- RAA = Risk Assessment Advice
- SRV = Soil Reference Value

- Former location of gasoline and diesel fuel underground piping
- Former brake fluid UST
- Unleaded gasoline USTs
- Former railroad spur
- Bascale bridge
- Former plating operations
- Former pit
- Former engine line drain pit
- Former liquid collection trench
- Oil/water separator
- Fluid fill area

LEGEND:
- Monitoring Well
- Soil Boring
- Hand Auger
- Ford Property Boundary
- Focus Area
- Feature

Imagery Source: MnGeo WMS service, 2010 color 7-county
FIGURE 11
1 inch = 130 feet

Focus Area 11 - Wastewater Treatment Plant

LEGEND:
- Monitoring Wall
- Soil Boring
- Focus Area
- AMW = ARCADIS Monitoring Well
- AIB = ARCADIS Soil Boring
- EPA = Environmental Protection Agency
- HBV = Health Based Value
- HRL = Health Risk Limit
- MCL = Maximum Contaminant Level
- MDH = Minnesota Department of Health
- MPCA = Minnesota Pollution Control Agency
- RAA = Risk Assessment Advice
- SRV = Soil Reference Value

NOTES: AMW = ARCADIS Monitoring Well
AIB = ARCADIS Soil Boring
EPA = Environmental Protection Agency
HBV = Health Based Value
HRL = Health Risk Limit
MCL = Maximum Contaminant Level
MDH = Minnesota Department of Health
MPCA = Minnesota Pollution Control Agency
RAA = Risk Assessment Advice
SRV = Soil Reference Value

Imagery Source: MnGeo WMS service, 2010 color 7-county
<table>
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<th>Identification Generated</th>
<th>Focus Area</th>
<th>Historical Features</th>
<th>General Location Description</th>
<th>Dimensions</th>
<th>Weight (lbs)</th>
<th>Odor</th>
<th>Colour</th>
<th>Field Screening Results</th>
<th>Staging Location</th>
<th>Sample IDs</th>
<th>Laboratory Analysis (TCLP, etc)</th>
<th>Soil Classification [Reuse, Disposal (Haz. Non-Haz.)]</th>
<th>Disposal Method</th>
<th>Date Removed</th>
<th>Notes</th>
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