

## Internal Memo

**Date:** December 21, 2022

**To:** Michelle Waters  
Office of Environmental Stewardship, Environmental Investigation Unit

**From:** Jill Keefe  
Office of Environmental Stewardship, Environmental Investigation Unit

**From:** 612-257-1987

**RE:** **Conveyance 2022-0017 – OES review**

C.S. 0205 (47=156) 623 Parcel 216

NW quadrant of TH 47 and 40<sup>th</sup> Avenue NE, Columbia Heights, Anoka County (the Conveyance Parcel)

## Introduction

It is important to know if a property is contaminated prior to selling or leasing a property, so that the condition of the property at the time of sale or lease is documented, and this information can be disclosed to a purchaser/lessee. In November 2022, MnDOT's consultant reviewed the following information to determine if there are any contamination concerns for the Conveyance Parcel:

- Minnesota Pollution Control Agency (MPCA) database regarding known contaminated sites.
- Minnesota Department of Agriculture (MDA) database regarding known contaminated sites.
- Minnesota Department of Health (MDH) Minnesota Well Index (MWI) database regarding known water wells.
- MnDOT Conveyance Parcel File Information
- MnDOT Environmental Files
- Aerial Photographs
- Topographic maps
- MnDOT Right of Way (ROW) maps

## Location

The Conveyance Parcel consists of one undeveloped parcel measuring approximately 14,161 square feet and located at the southwest quadrant of Trunk Highway (TH) 47 (also known as University Avenue NE) and 40<sup>th</sup> Avenue NE in Columbia Heights, Anoka County. The Conveyance Parcel is bounded to the north by 40<sup>th</sup> Avenue NE with residential development beyond, to the east by TH 47 ROW with TH 47 and commercial and residential development beyond, to the south by an undeveloped parcel with residential development beyond, and to the west by residential development. The surrounding area is a mixture of residential and commercial development.

## MnDOT Conveyance Parcel File

A review of the MnDOT Conveyance Parcel File was completed. The Conveyance Parcel was acquired in 1964-65 through condemnation proceedings for TH 47 improvements. At the time of acquisition, Parcel 216 was undeveloped and measured 27,400 square feet. No evidence of wells associated with the Conveyance Parcel were included in the file. No information included in the MnDOT Conveyance Parcel File indicates soil or groundwater impacts to the Conveyance Parcel.

## Historical Maps and Photographs

A review of topographic maps covering the Conveyance Parcel and surrounding area was completed for the years 1902, 1921, 1954, 1959, 1969, 1973, 1981, 1986, 1993, 2013, 2016 and 2019. No structures are depicted at the Conveyance Parcel through 1993. A road or driveway is depicted along the west side of the Conveyance Parcel from 1973 through 1993. The 2013 through 2019 maps only show topography, roads and waterways; therefore, no specific features are depicted on or in the vicinity of the Conveyance Parcel. Roads border the Conveyance Parcel to the north and east on all of the maps. Scattered structures typical of dwellings are depicted in the surrounding area through 1921. The surrounding area is shaded as to depict urban development from 1954 through 1993.

A review of aerial photographs of the Conveyance Parcel and surrounding area was completed for the years 1938, 1945, 1947, 1957, 1960, 1965, 1972, 1977, 1985, 1991, 1997, 2005, 2008, 2011, 2017, 2020, and 2022. The Conveyance Parcel was undeveloped and covered with vegetation through 1965 with some ground disturbance present in 1938 and 1945. A dirt trail or road is apparent extending from the intersection of 40<sup>th</sup> Avenue NE and TH 47 towards the Conveyance Parcel in 1945. Since 1972, a road or driveway is apparent extending south from 40<sup>th</sup> Avenue NE and bisecting the Conveyance Parcel; the remainder of the Conveyance Parcel is covered with vegetation. Roads border the Conveyance Parcel to the north and east on all of the photographs. 40<sup>th</sup> Avenue NE adjacent to the north has expanded by 1945. TH 47 adjacent to the east has expanded by 1972. The surrounding area is progressively developed for residential and commercial uses with a gasoline station visible in the northeast quadrant of TH 47 and 40<sup>th</sup> Avenue NE from 1991 through 2011.

A review of MnDOT ROW maps for the Conveyance Parcel and surrounding area was completed. The ROW maps are typically undated. ROW Map 6-90, updated as recently as 2018, depicted a dump in the southwest quadrant of TH 47 and 40<sup>th</sup> Avenue NE. The boundary of the dump was not depicted and the labeling of the dump appeared to be east of the Conveyance Parcel. A small ice house was also depicted but was not located on the Conveyance Parcel. Dwellings are depicted in the surrounding area as well as two gasoline stations further to the south of the Conveyance Parcel.

## MnDOT Environmental Files

A search of MnDOT Office of Environmental Stewardship files was completed. The following environmental documents were reviewed:

- *Limited Phase I Environmental Site Assessment, Trunk Highway 47, Minneapolis and Columbia Heights, Minnesota, State Project Number: 2726-74*, prepared by Braun Intertec, dated July 20, 2015 (2015 Phase I ESA)

- *Phase II Environmental Site Assessment, Trunk Highway 47, Minneapolis and Columbia Heights, Minnesota, State Project Number 2726-74*, prepared by Braun Intertec, dated December 5, 2016 (2016 Phase II ESA)
- *Construction Monitoring Summary Letter, Trunk Highway 47 (University Avenue), Minneapolis and Columbia Heights, Minnesota, State Project No.: 2726-74*, prepared by Braun Intertec, dated January 10, 2019 (2019 ConMon)

#### 2015 Phase I ESA

The 2015 Phase I ESA was prepared for MnDOT in preparation for the reconstruction of TH 47. The assessment was prepared using MnDOT's modified version of the Phase I ESA standard practice for environmental site assessments. Based on the results, the Conveyance Parcel was not listed as a Site of Environmental Concern. A former filling station (Site 3 – Commercial Building at 4001 University Avenue NE) located in the northeast quadrant of TH 47 and 40<sup>th</sup> Avenue NE was identified as a Medium Potential for Contamination due to its past use and reported petroleum tank releases; a former filling station (Site 5 – Sarna's Classic Grill at 3939 University Avenue NE) located in the southeast quadrant of TH 47 and 40<sup>th</sup> Avenue NE was identified as a Medium Potential for Contamination due to its past use and reported petroleum tank releases; and a former commercial property (Site 8 – Former Root Equipment at 3930 University Avenue NE) located adjacent south of the Conveyance Parcel was identified as a High Potential for Contamination due to the site being identified as a Potential Voluntary Investigation & Cleanup Program site.

#### 2016 Phase II ESA

The 2016 Phase II ESA was prepared in preparation for the TH 47 reconstruction project to investigate areas along TH 47 for the potential presence of subsurface contamination as identified in the 2015 Phase I ESA. Groundwater was not encountered at a terminus depth of 10 feet below ground surface (bgs) in any of the soil borings completed during the 2016 Phase II ESA. The closest soil boring to the Conveyance Parcel (Boring B-1) was completed approximately 150 feet to the southeast on the west side of TH 47 adjacent to Site 8 (adjacent south of the Conveyance Parcel). Evidence of debris including glass, bituminous and concrete was encountered at depths between 5 and 10 feet. No volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), or metals were detected at concentrations exceeding their soil reference values (SRVs) or soil leaching values (SLVs). Diesel range organics (DRO) and gasoline range organics (GRO) were not detected at concentrations exceeding laboratory reporting limits.

#### 2019 ConMon

The 2019 ConMon was prepared for MnDOT to summarize environmental construction monitoring activities along TH 47. The activities were limited to the northeast quadrant of TH 47 and 27<sup>th</sup> Avenue NE, which was located more than a mile south of the Conveyance Parcel.

#### **MPCA and MDA Regulatory Database Review**

A review of the MPCA and MDA databases of known contaminated sites was completed. No MPCA or MDA sites were mapped on the Conveyance Parcel. No MDA release sites were mapped on or within 500 feet of the Conveyance Parcel. The following MPCA sites were mapped or measured within 500 feet of the Conveyance Parcel:

- Root Equipment, located at 3930 University Avenue NE, formerly located adjacent south-southwest of the Conveyance Parcel, is a brownfields site (BF0001551) and Voluntary Investigation & Cleanup Program (VIC) site (VP29280).

Based on a review of the MPCA files for BF0001551 and VP29280, the site had been developed since at least 1918, when the former main site building was constructed. One additional building was constructed in 1954, and two additional buildings were constructed in the 1970s. The site was historically occupied by a trucking company. From 1977 to 2006, the site was occupied by Root Equipment Supply Company, which sold electrical supplies and did electrical repair and electrical salvaging work. Surficial mercury and polychlorinated biphenyls (PCBs) in the main building were cleaned-up in 2007, after the site sold to a redeveloper, but no redevelopment occurred. Unpermitted dumping followed in 2009 and 2010, and the main site building burned down in 2010. Approximately nine tons of mercury and PCB contaminated ash and debris was disposed off-site in 2010. Four used oil drums were removed from the site and properly disposed of in 2010.

A Phase II ESA was completed at the site in 2012 in association with VP29280 consisting of the advancement of 20 soil probes and 11 trenches. Probes GP-12 and GP-20 were completed within 15 feet of the south and southwest borders of the Conveyance Parcel, respectively, to depths of 8 feet. Test Trench TR-7 was completed to a depth of 6 feet approximately 15 feet south of the Conveyance Parcel. Groundwater was not encountered in GP-12, GP-20 or TR-7 or in any of the other borings that were completed to a depth of 40 feet bgs. Shallow soil samples were collected and analyzed for VOCs, PCBs, DRO, asbestos and RCRA metals. The results of the Phase II indicated the presence of metals, PCBs, and petroleum constituents in near-surface soils at the site. Arsenic, barium, lead and PCBs exceeded residential SRVs in several locations (the highest arsenic concentration was detected along the east side of the site) and lead and PCBs exceeded industrial SRVs in one location each. Specifically for GP-12, GP-20 and TR-7, various metals were detected in soil at concentrations less than their SRVs and DRO was detected in GP-20 (0-2') at a concentration of 113 milligrams/kilograms (mg/kg).

A subsurface investigation was conducted in 2019 in association with BF0001551. Soil samples were collected and analyzed for arsenic, barium and/or lead, PCBs and DRO. Four soil vapor samples were collected and analyzed for VOCs. Groundwater was not encountered in any soil borings that were completed to depths up to 40 feet bgs. Soil samples (C-2C, C-2A and C-5A) were collected within 15 feet of the south and southwest borders of the Conveyance Parcel. Hotspot 3 was identified in the area of GP-20 from the 2012 Phase II ESA. DRO was detected in C-2A and C-2C with the concentration in C-2C at 126 mg/kg. Residual DRO was detected in the base and sidewalls samples from the excavation of C-2C and in the north and south sidewalls of the excavation of Hotspot 3. Lead was detected in C-5A at a concentration less than its SRVs; a composite soil sample from grid 5 (south of the Conveyance Parcel) had a lead concentration greater than its residential SRV. DRO was detected in the north and south sidewalls of Hotspot 3 at concentrations up to 39 mg/kg. Petroleum-related VOCs were detected in soil vapor. The closest soil vapor sampling location (VP-2 approximately 45 feet south of the Conveyance Parcel) had benzene at a concentration that exceeded its residential intrusion screening value (ISV) and 1,3-butadiene at a concentration that exceeded its industrial ISV.

A Response Action Plan (RAP) dated November 22, 2019 was approved by the MPCA in a letter dated July

16, 2020. Response actions were completed at the site and were described in a RAP Implementation Report dated September 16, 2022. Approximately 744 cubic yards of contaminated soil intermixed with debris were excavated from the site and disposed of at permitted landfills. The extent of excavation around C-2C and Hotspot 3 was to the southwest border of the Conveyance Parcel. Soil confirmation samples were collected from the sidewalls of the remedial excavation at Hotspot 11 (approximately 300 feet south of the Conveyance Parcel) and analyzed for arsenic, the contaminant of concern at that location. Soil confirmation samples were collected from the base of each of the four former buildings and analyzed for arsenic, lead, PCBs, and DRO. Confirmation samples indicate that residual contamination does not pose a risk to human health or the environment. The MPCA subsequently approved the RAP Implementation report. The MPCA issued a No Further Action Determination for Soil letter on December 5, 2022 for BF0001551.

- Meilke Petroleum/Conoco, 3955 University Avenue NE, formerly located approximately 275 feet east of the Conveyance Parcel across TH 47, is a tank site (four removed petroleum USTs) and a closed petroleum tank release site (Leak #1534 and #14828).

#### *Leak #1534*

Based on a review of the MPCA file for Leak #1534, a petroleum tank release was reported on August 31, 1989 following the advancement of two soil borings. Six soil borings (boring B4 was located closest to the Conveyance Parcel, approximately 225 feet to the east, and was located southwest of the tank basin and pump islands) were advanced in January 1990 to depths ranging from 21 to 41.5 feet and were screened for organic vapors with a photoionization detector (PID). PID readings ranging from 0 to 170 parts per million (ppm) were recorded. Soil contamination appeared to be limited to the glacial till. Two soil samples were collected from the soil borings and submitted for laboratory analysis for benzene, ethylbenzene, toluene and xylene (BETX), methyl tert-butyl ether (MTBE), and total hydrocarbons (TPH) as gasoline. The shallower samples showed moderately low to high levels of contamination while the deeper samples showed zero to low levels of contamination (BETX, MTBE and TPH as gasoline were detected in the soil sample collected from B4 (19.5-20.5') with the highest concentration being TPH as gasoline at 1,500 micrograms/kilogram). The horizontal extent of soil contamination appeared to be limited to the area around the tank basins and near the building (which may be related to a former waste oil tank that was removed in 1986). The subsurface data indicated that contamination was restricted by clayey soils between 14.5 and 26.5 feet bgs. Water bearing sand lenses exist in the glacial till at depths of 20 to 35 feet (the water table was estimated to be at a depth of approximately 75 feet). Water samples were collected from three of the soil borings. BETX, MTBE and TPH were detected in the groundwater samples (BETX, MTBE and TPH as gasoline were detected in the groundwater sample collected from B4 with the highest concentration being TPH as gasoline at 1,100 micrograms/liter (ug/l)). Tanks tightness tests were conducted on the four tanks at the site (one 3,000-gallon diesel UST, two 3,000-gallon gasoline USTs and one 6,000-gallon gasoline UST) on September 5, 1991; all systems passed the tightness testing. The file was closed by the MPCA on November 14, 1991.

#### *Leak #14828*

Based on a review of the MPCA file for Leak #14828, a petroleum tank release was reported on June 27, 2002 following a Phase II ESA of the site. Five soil borings were advanced on June 27, 2002 (borings GP-1 and GP-3 were advanced along the west side of the site approximately 225 feet east of the Conveyance

Parcel). Soil and groundwater samples collected from the borings revealed elevated levels of contaminants (DRO, GRO, and BETX); none of these parameters were detected in the soil samples collected from GP-1 and GP-3 and DRO and BETX were detected in the groundwater sample collected from GP-1 with the highest concentration being DRO at 120 parts per billion (ppb). Four USTs were removed on August 15, 2002 from the north portion of the site. The tank excavation was completed to a depth of 10 feet. Water was encountered at depths ranging from approximately 10 feet to 24 feet (was likely a perched water table). Associated piping ran in a westerly direction from the tank basin towards the pump islands and was also removed. Petroleum impacted soils were encountered during removal of the tanks. Additional investigation was conducted in October 2002 to define the extent of the soil and groundwater impacts. Two soil borings (GP-6 and GP-7) were advanced to depths of 25 feet in order to define the vertical and horizontal extent of the release to the northeast (these two borings were advanced along the east side of Lookout Place, which appears to be within or adjacent to the northeast corner of the site). Groundwater was encountered in one of the soil borings at a depth of 17 feet. Soil samples were collected from both borings and analyzed for DRO, GRO and BETX with detectable concentrations of petroleum constituents with slightly elevated DRO and GRO concentrations in the sample from Soil Boring GP-6 (22-24'). A groundwater sample was collected from GP-7 for analysis of DRO, GRO and VOCs. GRO was detected at a concentration of 51 ug/l and benzene at a concentration of 1.5 ug/l. The leak site was closed by the MPCA on December 12, 2002.

Another subsurface investigation was conducted in May 2006 in preparation of redevelopment of the site into a restaurant. Seven borings were advanced (boring GP-6 was advanced along the west side of the site approximately 225 feet east of the Conveyance Parcel) and soil and groundwater samples were collected for analysis of DRO, GRO, BETX, MTBE, polynuclear aromatic hydrocarbons (PAHs) and/or VOCs. No parameters were detected in soil sample GP-6 (0-1'); a groundwater sample was not collected from GP-6. Soil and groundwater contamination appeared to be limited to the area surrounding the former gasoline station (the northern portion of the site with groundwater impacts extending below 40th Avenue NE). Three soil vapor samples were collected approximately 250 east of the Conveyance Parcel; various petroleum and non-petroleum VOCs were detected in all of the soil vapor samples with benzene exceeding is chronic health risk value in one sample. Response actions were completed. Impacted soil resulting from utility trenching, grading, or installation of the new building foundations was not encountered. DRO was detected in a soil sample collected from beneath a hydraulic lift but at a concentration below action levels. The MPCA issued a Completion of Voluntary Response Actions for Petroleum Contamination letter on March 8, 2007 for Leak #14828.

- University Food & Fuel, 4001 University Avenue NE, formerly located approximately 300 feet northeast of the Conveyance Parcel across TH 47 and 40<sup>th</sup> Avenue NE, is a tank site (two removed gasoline USTs) and a closed petroleum tank release site (Leak #11531 and #17042).

*Leak #11531*

Based on a review of the MPCA file for Leak #11531, a petroleum tank release was reported on July 11, 1998 based on field results of seven soil borings (P-1 through P-7) advanced on July 10, 1998 to depths up to 82 feet bgs. Groundwater was not encountered in any of the borings; the estimated depth to groundwater was 107 feet bgs. Boring P-7 was the closest to the Conveyance Parcel, approximately 260 feet to the northeast and to the southwest of the tank basin. Three additional borings (TB-1 through TB-3) were advanced in October 1998. Boring TB-3 was the closest to the Conveyance Parcel, approximately

280 feet to the northeast and to the south-southwest of the tank basin. The USTs (two 10,000-gallon gasoline) were located approximately 300 feet northeast of the Conveyance Parcel. Soil samples were collected from all of the borings and analyzed for BETX, GRO, DRO and/or MTBE. None of these parameters were detected in soil sample P-7 (5'). Toluene, ethylbenzene, xylene, MTBE and GRO were detected in soil sample TB-3 (23') with the highest concentration being GRO at 270 mg/kg. None of the parameters were detected in soil sample TB-3 (80-82'). Based on the laboratory analytical data, the highest concentration of petroleum hydrocarbon impacted soil appeared to extend from 15 to 23 feet bgs in the vicinity of the USTs. Based on the analytical results, the MPCA closed the file on September 24, 1999.

The file also contained a Minnesota Duty Officer Report dated November 7, 2013 that stated a release was reported following the removal of two 10,000-gallon gasoline USTs. Perched water was encountered in the tank basin. Stained soils were observed and petroleum odors were present. The highest PID vapor reading was 1,222 ppm, which was detected in a soil sample collected from the north end of the east tank. No additional information was provided.

#### *Leak #17042*

Based on a review of the MPCA file for Leak #17042, a release was reported on September 20, 2007 based on the results of a Phase II ESA. Five borings (GP-1 through GP-5) were advanced in September 2007. Three additional borings (GP-6 through GP-8) were advanced in January 2008. The borings were completed to depths up to 36 feet bgs; groundwater was not encountered. Boring GP-8 was the closest to the Conveyance Parcel, approximately 250 feet to the northeast and to the west of the tank basin. Borings GP-4 and GP-7 were completed approximately 20 to 25 feet further from the Conveyance Parcel and to the south of the tank basin. Five soil vapor sampling locations were also completed with the closest (VP-5) being just north of GP-8. Soil samples were collected from the eight soil borings and were analyzed for BETX, GRO, MTBE and/or VOCs.

No parameters were detected in soil samples GP-8 (2'), GP-8 (36'), GP-4 (30') and GP-7 (36'). GRO was detected at a concentration of 5.6 mg/kg in soil sample GP-4 (21'). Ethylbenzene, xylene, GRO and several other petroleum VOCs were detected in soil sample GP-7 (24') with 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene exceeding their Tier 1 SRVs. The soil impacts were defined vertically and horizontally at the site around the tank basin. Several VOCs were detected in the soil vapor sample collected from VP-5 with the benzene concentration within the action level range. It was recommended that additional soil vapor investigation be conducted. An additional soil vapor sample (VP-6) was collected south of the adjoining building to the north (approximately 400 feet northeast of the Conveyance Parcel) in May 2008 and several VOCs were detected. Based on the additional investigation, file closure was requested. The MPCA closed the file on July 22, 2008. The file also contained the same Minnesota Duty Officer Report dated November 7, 2013.

Based on the available information, there was no documentation that indicated the identified contamination associated with the reported releases has impacted the Conveyance Parcel; however, no investigation activities were conducted on the Conveyance Parcel.

## **MDH MWI Database Review**

A review of the MWI did not identify any wells registered to, or plotted at, the Conveyance Parcel.

### **Findings**

These findings are prepared for internal MnDOT decision making and are not to be relied upon by any prospective purchasers as environmental due diligence.

Based on the available information, there may be residual soil contamination on the Conveyance Parcel associated with historic land use on the adjoining property to the south-southwest (residual DRO contamination was detected in sidewalls samples collected from excavations that abutted the southwest portion of the Conveyance Parcel). The Office of Environmental Stewardship recommends that MnDOT proceed with conveyance of the Conveyance Parcel; however, the environmental information that MnDOT has regarding the Conveyance Parcel should be shared in any sales agreement. It is also recommended that any final sales language state that the Conveyance Parcel is sold “as is”.

Please let me know if you have questions or would like additional information.

cc: File