

## Fact Sheet

### Notification of Environmental Investigation and Cleanup

**31-01 Broadway  
(aka Cameo Cleaners / Neat Cleaners)  
31-01 Broadway  
(Block 2306, Lot 9)  
Fair Lawn, Bergen County, New Jersey  
NJDEP PI No. G000060372**

**January 29, 2018**

**Update October 17, 2018**

*In accordance with New Jersey Department of Environmental Protection (NJDEP) regulations for “Notification and Public Outreach” (N.J.A.C. 7:26C-1.7(I)), 31-01 Broadway is required to provide information relating to environmental conditions and remedial activities being conducted at the above referenced site.*

#### **Site Description and Current Operations**

The Cameo Pro-Tecna-Clean and Neat Cleaners site (the “Site”) is located at 31-01 Broadway in Fair Lawn, Bergen County, New Jersey. The approximately 0.25 acre parcel is identified by the Borough of Fair Lawn Tax Assessor as Block 2306, Lot 9.

The Site is currently developed with a single-story two-tenant commercial building that is located on the central portion of the parcel. The onsite building consists of approximately 3,000 sq. ft. of area, and is serviced by public utilities. Neat Cleaners (a drycleaning and laundry service) and Cameo Pro-Tecna-Clean (Cameo; commercial rug/drapery cleaning service) are currently tenants and operate at the Site. Neat Cleaners currently utilizes green hydrocarbon solvent dry cleaning machine. The Cameo leasehold contains a dry cleaning machine that is operated on a limited basis and utilizes a bromide-based cleaning solvent. The building is surrounded on three sides by asphalt-paved parking areas and one side is a gravel covered parking area.

The site is located in a commercial/residential area. The northerly adjacent property is a ball field and playground for the Warren Point Elementary School (30-07 Broadway). The easterly adjacent property is a commercial office building identified as Citizens First Funding (31-11 Broadway). The southerly adjacent property, beyond Broadway (Route 4), is a Valley National Bank (31-00 Broadway) and 7-Eleven (31-28 Broadway). The westerly adjacent property is an automobile service station identified as Friendly Tire and Auto Center, and includes a residence (30-09 Broadway).

#### **Historical Operations**

Available aerial photographs indicate the Site was developed sometime between 1931 and 1953. Available information indicates that the current building was constructed in 1950. Cameo

Fabricare reportedly operated onsite from 1979 to 1983; Cameo Cleaners operated from 1983 to 2004; and Neat Cleaners has operated onsite from 2004 to present.

### **Site Background and Contaminants of Concern**

On October 17, 2000, a 550-Gallon No. 2 Fuel Oil underground storage tank (UST) was removed from the Site. Petroleum odors and stained soils were noted and the NJDEP was contacted; NJDEP Case No. 00-10-17-1312-01 was subsequently assigned. Impacted soils were excavated and disposed. Post-excavation soil samples identified no elevated total petroleum hydrocarbon (TPH) concentrations. On December 3, 2001, a UST Closure/RIR was submitted to the NJDEP to obtain a no further action (NFA) determination for Case No. 00-10-17-1312-01; however, on June 30, 2003, the NJDEP noted an elevated tetrachloroethene (PCE) concentration in the waste characterization soil sample collected from the soil stockpile; additional soil and GW investigations were then required by the NJDEP.

Since the initial discovery of the PCE soil impact, site and remedial investigations have identified the following areas of concern (AOCs):

1. AOC-1: Former 550-Gallon No. 2 Fuel Oil UST; NFA anticipated.
2. AOC-2: Rear Loading Area – Soil impacts: PCE identified (0.659 ppm to 7.2 ppm), trichloroethene (TCE) identified (non-detect to 0.546 ppm), and trans-1,2-DCE identified (non-detect to 0.191 ppm). PCE soil impacts of 630 ppm may have been identified; however the reliability of the data could not be confirmed. Groundwater impacts: PCE and TCE above criteria (refer to AOC-9). Soil and groundwater investigations ongoing.
3. AOC-3: Roof Leaders – Soil impacts: PCE identified (0.659 ppm to 200 ppm), TCE identified (non-detect to 0.546 ppm), and trans-1,2-DCE identified (non-detect to 0.191 ppm). Groundwater impacts: PCE and TCE above criteria (refer to AOC-9). Soil and groundwater investigations ongoing.
4. AOC-4: Blowdown Piping – Soil Impacts: PCE identified (0.659 ppm to 200 ppm), TCE identified (non-detect to 0.546 ppm), and trans-1,2-DCE identified (non-detect to 0.191 ppm). Groundwater impacts: PCE and TCE above criteria (refer to AOC-9). Soil and groundwater investigations ongoing.
5. AOC-5a: Former Dry Cleaning Machines – Soil impacts: PCE identified (non-detect to 33 ppm) and TCE (0.018 ppm and 0.15 ppm). Soil and groundwater investigations ongoing.
6. AOC-5b: Out of Service Dry Cleaning Machine – Soil impacts: PCE (0.098 ppm and 0.1 ppm). Soil and groundwater investigations ongoing.
7. AOC-6: Drum Storage / Chemical Storage Areas – Specific environmental concerns have not been identified to date.
8. AOC-7: Building Floor Drains - Specific environmental concerns have not been identified to date.
9. AOC-8: Stormwater Catch Basin and Sewer Line – Soil impacts: PCE (from 0.83 ppm to 26 ppm), TCE (from non-detect to 5.1 ppm), and cis-1,2- DCE (from non-detect to 29 ppm) identified. Groundwater impacts: PCE, TCE, and cis-1,2-DCE above criteria (refer to AOC-9). Soil and groundwater investigations ongoing.

10. AOC-9: Groundwater – Shallow groundwater impacts: PCE (from 11 ppb to 680 ppb), TCE (from non-detect to 110 ppb), and cis-1,2- DCE (from non-detect to 160 ppb). Bedrock groundwater impacts: PCE (46 ppb) and TCE (5.2 ppb). Benzene (4 ppb) was also identified above criteria. PCE (1,200 ppb) and TCE (9 ppb) were reported; however the reliability of the data could not be confirmed. Soil and groundwater investigations ongoing.
11. AOC-10: Vapor Intrusion - August 17, 2017 PCE (13,000 ug/m<sup>3</sup>) and TCE (740 ug/m<sup>3</sup>) were detected in the sub-slab soil gas above NJDEP Non-Residential SGSLs set at 2,400 ug/m<sup>3</sup> and 150 ug/m<sup>3</sup>, respectively. PCE was detected in the indoor air (87 ug/m<sup>3</sup>) at a concentration above NJDEP's Non-Residential Indoor Air Screening Level (IASL), and TCE (110 ug/m<sup>3</sup>) was detected in the indoor air above the NJDEP Non-Residential RAL set at 18 ug/m<sup>3</sup>. Case No. 17-09-06-1258-59 assigned. September 19, 2017 an interim remedial action was implemented. November 6, 2017 a VI mitigation system was (VIMS) installed. December 7, 2017 confirmation VI sampling conducted. TCE (64 ug/m<sup>3</sup>) detected in indoor air above the NJDEP Non-Residential RAL (18 ug/m<sup>3</sup>). VIMS determined to be operating as designed; residual indoor air source identified. No additional actions currently recommended. Additional confirmatory indoor air VI sampling will be undertaken once the source is identified and removed.

### **Groundwater Investigation Summary**

Overburden groundwater monitor wells were installed at the Site between November 17, 2017 and November 20, 2017. Groundwater samples were collected from Site monitor wells, previously installed Friendly monitor wells, and previously installed monitor wells at the Warren Point Elementary School (WPES) between December 4, 2017 and December 7, 2017.

#### **31-01 Broadway/ Block 2306, Lot 9**

Six (6) groundwater monitor wells were sampled at the Site between December 6, 2017 and December 8, 2017, including the shallow bedrock monitor well. PCE was identified at concentrations ranging from 3.14 ppb to 133 ppb. TCE was identified at concentrations ranging from non-detect to 17.6 ppb. Cis-1,2-DCE was identified at concentrations ranging from non-detect to 90.7 ppb. Vinyl chloride was not identified above the laboratory MDLs in any Site well. The chlorinated volatile organic compound (CVOC) impacts exceed both the NJDEP Ground Water Quality Standards (GWQS) and in some cases also the NJDEP Vapor Intrusion Ground Water Screening Levels (VIGWSLs).

Based on current groundwater contour information, further onsite delineation of the CVOC groundwater impact in the bedrock groundwater zone was required. On January 31 and February 1, 2018 Practical installed one (1) permanent bedrock monitor well, designated MW-1D, to 100 ft. bgs. The location of MW-1D was chosen based on the elevated CVOC concentrations previously identified in groundwater within the southerly corner of the Site. Monitor well MW-1D was sampled by Practical on August 28, 2018. The groundwater sample was analyzed for TCL VOC+TICs. Results of analysis identified PCE at 0.558 ppb, below the GWQS set at 1 ppb.

No further vertical delineation groundwater investigation is currently required.

Offsite delineation of the groundwater impact in the overburden zone is outlined below.

Onsite concerns regarding the VIGWSL exceedances are being addressed as outlined above (refer to the AOC-10 discussion).

#### **Friendly Tire and Auto Center / Block 2301, Lots 3, 4, 5, 6, and 7**

Eight (8) groundwater monitor wells were sampled at the Friendly site between December 4, 2017 and December 8, 2017. PCE was identified at concentrations ranging from non-detect to 482 ppb. TCE was identified at concentrations ranging from non-detect to 355 ppb. Cis-1,2-DCE was identified at concentrations ranging from non-detect to 264 ppb. Vinyl chloride was identified at concentrations ranging from non-detect to 40.8 ppb. The CVOC impacts exceed both the NJDEP GWQS and in some cases also the NJDEP VIGWSLs.

Based on current groundwater contour information, further delineation of the CVOC groundwater impact is required. Concerns regarding the VIGWSL exceedances were addressed as outlined below.

#### **Warren Point Elementary School / Block 2301, Lot 1 and Lot 2**

Three (3) groundwater monitor wells were sampled at the WPES between December 4, 2017 and December 8, 2017. PCE was identified at concentrations ranging from non-detect to 10.4 ppb. TCE was identified at concentrations ranging from non-detect to 3.86 ppb. Cis-1,2-DCE was identified at concentrations ranging from non-detect to 8.02 ppb. Vinyl chloride was identified at concentrations ranging from non-detect to 24.0 ppb. The CVOC impacts exceed both the NJDEP GWQS and in some cases also the NJDEP VIGWSLs.

Based on current groundwater contour information, further delineation of the CVOC groundwater impact was required.

Two (2) groundwater monitor wells were installed by Practical at the WPES, designated MW-14 and MW-15, targeting the same overburden water-bearing zone as the monitor wells installed previously. MW-14 was installed near the entrance to the older portion of the school building, along 30<sup>th</sup> Street. MW-15 was installed along the easterly WPES property boundary, north of the Site. MW-14 was determined to be hydrologically downgradient of the subject Site, and hydrologically downgradient of the WPES building. The groundwater sample collected on August 28, 2018 identified no CVOCs above laboratory MDLs. MW-15 was determined to be hydrologically sidegradient of the subject Site. The groundwater sample collected on August 28, 2018 identified PCE (5.25 ppb) above the GWQS set at 1 ppb.

Based on current groundwater contour information, further delineation of the CVOC groundwater impact is required to the north of MW-15.

Concerns regarding the VIGWSL exceedances were addressed as outlined below.

**31-11 Broadway / Block 2306, Lot 8**

One (1) groundwater monitor well was installed by Practical at the 31-11 Broadway on July 19, 2018, designated MW-16, targeting the same overburden water-bearing zone as the monitor wells installed at the Site. MW-16 was installed near the corner of 32<sup>nd</sup> Street and Broadway, east of the Site.

MW-16 was determined to be hydrologically upgradient of the Site. The groundwater sample collected on August 28, 2018 identified no CVOCs above laboratory MDLs. Based on the recent August 2018 groundwater data obtained for the 31-11 property, the easterly limit of the CVOC groundwater impact is defined at MW-16, near 32<sup>nd</sup> Street. The CVOC plume appears to be migrating in a southwesterly direction. No further easterly overburden groundwater delineation is currently required.

**Valley National Bank, 31-00 Broadway / Block 2207, Lots 84 and 85**

Two (2) groundwater monitor wells were installed by Practical at the 31-00 Broadway on July 19, 2018, designated MW-17 and MW-18, targeting the same overburden water-bearing zone as the monitor wells installed at the Site. MW-17 was installed across Broadway south of the Site, and MW-18 was installed across Broadway southeast of the Site.

MW-17 was determined to be hydrologically upgradient of the subject Site. The groundwater sample collected on August 27, 2018 identified no CVOCs above the NJDEP GWQSs. MW-18 was determined to be hydrologically downgradient of the subject Site. The groundwater sample collected on August 28, 2018 identified PCE (17.6 ppb) above the GWQS set at 1 ppb. The CVOC plume appears to be migrating in a southwesterly direction. Based on the recent August 2018 groundwater data obtained for the 31-00 property, the southerly limit of the CVOC groundwater impact is defined at MW-17. However, additional horizontal delineation of the PCE impact at MW-18 is required in the southerly direction.

**CVS, 29-00 Broadway / Block 3204.01, Lot 1.01**

One (1) groundwater monitor well was installed by Practical at the 29-00 Broadway on July 18, 2018, designated MW-19, targeting the same overburden water-bearing zone as the monitor wells installed at the Site. MW-19 was installed across Broadway southwesterly of the Site, near the corner of 30<sup>th</sup> Street and Broadway.

MW-19 was determined to be hydrologically downgradient of the Site. The groundwater sample collected on August 27, 2018 identified PCE (3.03 ppb), above the NJDEP GWQS set at 1 ppb. The CVOC plume appears to be migrating in a southwesterly direction. Based on the recent August 2018 groundwater data obtained for the 29-00 property, additional horizontal delineation of the PCE impact at MW-19 is required in the southerly and westerly directions.

## **Vapor Intrusion Investigation Summary (Offsite)**

### **Friendly Tire and Auto Center / Block 2301, Lots 3, 4, 5, 6, and 7**

The Friendly Tire and Auto Center (Friendly Tire) and a residential apartment are located at a property adjacent southwest of the Site. General auto repair work is undertaken at the site, and the property once contained gasoline and waste oil USTs.

Sampling Date: August 30 and 31, 2017 - PCE (13,000 ug/m<sup>3</sup>, 26,000 ug/m<sup>3</sup>, and 26,000 ug/m<sup>3</sup>) and TCE (2,500 ug/m<sup>3</sup>, 2,700 ug/m<sup>3</sup>, and 160 ug/m<sup>3</sup>) were detected in the sub-slab soil gas at concentrations above NJDEP's Non-Residential SGSs set at 2,400 ug/m<sup>3</sup> and 150 ug/m<sup>3</sup>, respectively. In addition, TCE (7 ug/m<sup>3</sup>) was detected in the indoor air at a concentration above NJDEP's Non-Residential IASL (3 ug/m<sup>3</sup>). These findings indicated that vapor intrusion of TCE was likely occurring at the Friendly Tire site and actions were needed.

Interim Remedial Action: November 16, 2017 – As a measure to minimize impact to the public, an interim remedial action was implemented on November 16, 2017 via the caulking of cracks in the floor and walls of the repair shop to reduce the level of vapors inside the Friendly Tire portion of the building.

Sampling Date: November 29, 2017 - Confirmation VI sampling was conducted to ensure the remediation was effective and collect samples round during the heating season (i.e., between November 1 and March 31). PCE (7 ug/m<sup>3</sup>) and TCE (2 ug/m<sup>3</sup> and 3 ug/m<sup>3</sup>) were detected in the indoor air; however, at concentrations that do not exceed the NJDEP's Non-Residential IASLs set at 47 ug/m<sup>3</sup> and 3 ug/m<sup>3</sup>, respectively. These findings indicated vapor intrusion is not occurring within the Friendly Tire leasehold, and that the interim remedial action was successful in reducing the TCE vapors inside the building to below action levels.

The first through fifth year of Long Term Monitoring will include annual inspections of the building and the collection of indoor air samples, anticipated to be undertaken each December. For the sixth year and beyond, an annual inspection of the building will be completed each December and sampling of the indoor air during the heating season will be undertaken every five (5) years.

### **Residence, 30-09 Broadway / Block 2301, Lots 3, 4, 5, 6, and 7**

The rear (northwesterly) portion of the Friendly Tire building contains a residential apartment, located at the property adjacent southwest of the Site. The apartment contains ground floor, basement, and first floor living spaces.

Sampling Date: August 30 and 31, 2017 - PCE (17,000 ug/m<sup>3</sup> and 12,000 ug/m<sup>3</sup>) and TCE (3,500 ug/m<sup>3</sup> and 1,200 ug/m<sup>3</sup>) were detected in the sub-slab soil gas at concentrations above NJDEP's Residential SGSs set at 470 ug/m<sup>3</sup> and 27 ug/m<sup>3</sup>, respectively. PCE (4 ug/m<sup>3</sup>) was detected in the indoor air; however, at a concentration that does not exceed the NJDEP's Residential IASL set at 9 ug/m<sup>3</sup>.

Sampling Date: December 7, 2017 - This sampling was conducted to follow up VI testing performed on August 31, 2017. An interim remedial action was implemented on November 16, 2017 via caulking of cracks in the concrete slab and foundation walls of the auto repair shop. The supplemental sampling was undertaken for two (2) reasons: 1. to complete VI sampling during the heating season; and 2. to ensure the remediation was effective. PCE (8 ug/m<sup>3</sup>) was detected in the indoor air; however, at a concentration that does not exceed the NJDEP's Residential IASL set at 9 ug/m<sup>3</sup>. These findings indicate vapor intrusion is not occurring within the residence.

The first through fifth year of Long Term Monitoring will include annual inspections of the building and the collection of an indoor air sample, anticipated to be undertaken each December. For the sixth year and beyond, an annual inspection of the building will be completed each December and sampling of the indoor air during the heating season will be undertaken every five (5) years.

### **Warren Point Elementary School / Block 2301, Lot 1 and Lot 2**

The Warren point Elementary School (WPES) property is adjacent north of the 31-01 Broadway site and the Friendly Tire auto service site; however, the school building is located beyond the 100 ft. radius of the subject Site. As part of the Receptor Delineation, a VI investigation was undertaken with preliminary sampling at the closest portion of the school building on August 16 and 17, 2017.

Sampling Date: August 16 and 17, 2017 - PCE (810 ug/m<sup>3</sup>) was detected in the sub-slab soil gas at a concentration above NJDEP's Residential SGSLS set at 470 ug/m<sup>3</sup>. PCE (2 ug/m<sup>3</sup>) was detected in the indoor air; however, at a concentration that does not exceed the NJDEP's Residential IASL set at 9 ug/m<sup>3</sup>. Although these findings indicated that vapor intrusion was not occurring at the WPES at that time, due to the elevated level of site-related contamination in the sub-slab soil gas at the WPES, additional sampling of the indoor air was needed during the heating season.

Sampling Date: November 9 and 11, 2017 - This sampling was conducted to follow up VI testing performed in August 2017. The supplemental sampling was undertaken for two (2) reasons: 1. to complete comprehensive VI sampling of the building; and 2. to complete VI sampling during the heating season. PCE (non-detect to 170 ug/m<sup>3</sup>) and TCE (non-detect to 3 ug/m<sup>3</sup>) were reported in the sub-slab soil gas at concentrations below the NJDEP Residential SGSLSs set at 470 ug/m<sup>3</sup> and 27 ug/m<sup>3</sup>, respectively. PCE was detected in one (1) indoor air sample at 2 ug/m<sup>3</sup>, at a concentration below the NJDEP Residential IASL set at 9 ug/m<sup>3</sup>. TCE was not detected in the indoor air above laboratory MDLs. These findings indicated that vapor intrusion is not occurring at the WPES, and therefore no additional vapor intrusion testing is required at this time.

After the first year of Long Term Monitoring, annual inspections of the WPES building will be undertaken each November. Sampling of the indoor air during the heating season will be

undertaken every five (5) years; the next indoor air sampling will be undertaken in November 2022.

### **Summary of Steps Taken to Mitigate Impacts to the Public**

Below are the steps taken to investigate and/or mitigate the impacts outlined above, along with the operating status of each remedial component:

- A groundwater monitor well network was installed to monitor groundwater quality at and downgradient of the Site;
- Additional groundwater monitor wells are proposed to delineate the groundwater impact;
- A vapor intrusion mitigation system has been installed at the Site;
- A vapor intrusion interim remedial action was undertaken at the Friendly Tire and Auto Center, which addressed the Vapor Concern identified; and,
- A long term monitoring and maintenance program is in place where applicable.

### **Contact Information**

Documentation associated with the remedial activities outlined above, including findings reports and analytical sample results, are available through the NJDEP. Additional information regarding CVOCs is available through the following online resources:

PCE: <https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=48>  
<http://www.nj.gov/health/eoh/rtkweb/documents/fs/1810.pdf>

TCE: <https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=30>  
<http://www.nj.gov/health/eoh/rtkweb/documents/fs/1890.pdf>

cis-1,2-DCE: <https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=82>  
<http://www.nj.gov/health/eoh/rtkweb/documents/fs/0653.pdf>

Vinyl Chloride: <https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=51>  
<http://www.nj.gov/health/eoh/rtkweb/documents/fs/2001.pdf>

For additional information or to obtain a copy of the complete fact sheet for this site, please contact Practical Environmental Solutions, LLC, Andreas W. Eisenberger, LSRP, at 908-835-2510.