

United States Environmental Protection Agency
Region III
POLLUTION REPORT

Date: Saturday, February 8, 2014
From: Michael Towle, On-Scene Coordinator

To: Dustin Armstrong, PADEP SERO

Subject: Pipe System/Source Removal (On-going)
Metro Container Corporation
2nd & Price Street, Trainer, PA
Latitude: 39.8249606
Longitude: -75.3990472

POLREP No.:	61	Site #:	032H
Reporting Period:	02/02/14 - 02/08/14	D.O. #:	
Start Date:	9/30/2013	Response Authority:	CERCLA
Mob Date:	9/30/2013	Response Type:	Time-Critical
Demob Date:		NPL Status:	NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:	PAD044545895	Contract #	
RCRIS ID #:			

Site Description

The Site is comprised of two tax parcels located south of the intersection of West 2nd Street and Price Street in the Borough of Trainer, Delaware County, Pennsylvania. For more than 100 years, the property has been used exclusively for industrial and commercial purposes, including petroleum storage, paraffine manufacturing, carbon disulfide manufacturing, and steel and fiber drum reconditioning. The parcels are currently owned by an entity that did not conduct the original operations at the Site and occupied by an entity involved in industrial painting. The Site is surrounded by a chain-link fence and covers an estimated 10.4 acres. Refer to POLREP 50 for more detailed background information.

A. The Metro Container Corporation Site was listed to the National Priorities List on March 15, 2012. See POLREP 50 for background information considered in the removal site evaluation leading to current removal actions.

B. The Site was the subject of a Removal Action initiated by EPA in June 1988 and completed by Potentially Responsible Parties pursuant to an EPA Order. The primary goals of the Removal Action were to address contaminated liquids pooled at the Site and migrating from the Site towards Stoney Creek alongside the Site and removal of thousands of drums containing residuals. The Removal Action was restarted in 1990 to address drums unearthed during investigations at the Site. The investigations were conducted in response to learning of drum burial activities during legal proceedings.

C. On August 26, 2013, EPA Region III approved an Action Memorandum for a Time-Critical Removal Action pursuant to Section 104(a) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA), determining it is appropriate and necessary to mitigate threats posed by the release and threatened release of hazardous substances from the Site. A Removal Action ceiling of \$4,051,100, of which \$3,923,600 is from the Regional Removal Allowance, was approved by Region III. The Removal Action generally entails the elimination of migration pathways (buried pipes), removal of soils impacted by greater than 50 parts per million PCBs and high concentrations of NAPL, and threats posed by the historic crushed drum area. Actions will be consistent with future anticipated remedial actions and will contribute to the efficient performance of any future remedial action.

D. The Site includes multiple systems of underground pipes and other drainage systems. The pipes are of unknown purpose. Two of these pipes are known to have discharged unknown substances directly into Stoney Creek for unknown reasons. The removal of these systems which convey hazardous substances are the subject of the initial removal actions.

Current Activities

A. In order to more thoroughly document features and pipes encountered during this removal action, designations for the numerous features and pipes were established. Figure 1-P61, which uses a 1965

aerial photograph as a base map, identifies the location of several key features encountered at the Site and discussed in POLREPs to date. Figure 2-P61 is a sketch of pipes encountered during excavations discussed in this POLREP at and around the two-chambered basin and the L-shaped concrete feature (hereafter "Feature D" and "Feature E," respectively). In earlier POLREPs, Feature D was known as the "western feature" while Feature E was known as the "eastern feature." In addition, a catch basin observed during a July 1990 investigation was also uncovered during excavations. This catch basin was described during the 1990 investigation as the "drop box" and will be referenced hereafter as "Feature F." The pipes around these features are discussed in more detail in Action Item "C." The figures are attached to this POLREP and available in the "Images" section.

B. Continued to excavate piping systems associated with and in the vicinity of the two-chambered concrete basin and L-shaped concrete feature located within Grids 13, 14, 19, and 20. Feature D and Feature E are present on aerial photographs from 1937 through 1965. Neither feature was present on the next earlier site map from 1917 (a Sanborn Fire Insurance Map) or a later aerial photograph from 1970. A description of the portion of Feature E uncovered during previous periods was reported in POLREP #60 (see Action Items "A" and "B"). The feature was completely uncovered during excavations for piping systems during this reporting period. The size of the feature is approximately 55 feet (north-south) by 12 feet. The southern section of the feature, the lower part of the L shaped portion, is about 25 feet wide and is generally open. The central section is comprised of a vault, tank pad, and small network of walls of unknown purpose, all located within an area approximately 12 feet (north-south) by 15 feet. The vault is located in the northeastern portion of the southern, 25-foot-wide section. The vault is 6 feet (north-south) by 4 feet by 6 feet deep. The walls on the northern half of the vault are the same height as those of the feature, while the walls on the southern half of the vault are 2 feet lower and approximately the same level as the floor of the southern half. A mass of formed concrete believed to be a former pump pad is located northwest of and adjacent to the vault. A network of walls is located west of the vault and south of the tank pad. Excavations dug during this period revealed that the northern section of the feature was separated into an eastern and western subsection by a concrete wall. As described in POLREP #59, the eastern subsection was divided into even smaller sections by several concrete walls oriented north-south. It was further discovered that the concrete walls in the middle of each smaller sections was roughly cut or broken away down to the floor level, where a 6-inch cast iron pipe trending east-west was located. The western subsection was an open pit with no additional interior walls. All of the floors within Feature E contained black pudding-like sludge to varying degrees. Timber fragments, concrete and brick debris, pipe sections, metal pieces, and drum and container carcasses, all mixed with soil, were present at a depth greater than 2 feet and extending downward into and mixing with the sludge. The northern wall of Feature D extended east and connected to Feature E, where a concrete pad approximately 5 feet square at the level of the top of the walls was located. Feature F is located outside of the walls of Feature E, immediately north of the vault. The walls of Feature F were constructed of chimney concrete block arranged in a 5-foot by 5-foot square and reinforced with vertical rebar posts cemented into the blocks. Feature G appears to be a single-story structure approximately 30 feet by 30 feet that may have been used as a pump house, although the exact purpose of the structure is unknown. The construction of the structure, including any subsurface foundations, is also unknown.

C. Approximately 30 pipes associated with Features D, E, and F have been identified to date. Many of the pipes were found containing oily material or other liquid wastes, and found to be leaking at points of deterioration or at joints. Unless noted otherwise, pipes identified at the eastern, northern, and southern sides of the complex containing Features D and E are suspected to have carried fluids toward the complex, while pipes on the western side of the complex and between the features are suspected to have carried fluids toward the west. No pipe sections were removed beyond the limit of excavations (see Figure 1-P61). In the short term, additional excavation and removal of pipes to the west of the limit of excavations is expected to occur. Due to the complex nature of features and pipe systems in this area, the possibility exists that additional pipes or pipe segments remain.

- Pipe A is a 4-inch metal pipe located about 3 to 4 feet below the current ground surface. The pipe trends east-west immediately north of and adjacent to the northern walls of Features D and E. The westernmost end of this pipe was cut. The easternmost extent of this pipe is unknown, and was cemented shut. The pipe was empty and not completely removed.
- Pipe B is a 4-inch pipe consisting of possible asbestos-containing cement sections and joints of various types, including flexible PVC couplings. The pipe is located about 5 to 6 feet below the current ground surface. It extends from the eastern wall of the Feature E and trends to the north-northeast to an unknown location. The easternmost extent of this pipe is unknown. The pipe The OSC suspects the pipe to be related to old sanitary discharge. The pipe was cemented shut.
- Pipes C1 and C2 are two parallel 6-inch cast iron pipes with flange joint connections located beneath Features D and E at a depth of approximately 7 to 8 feet below the current ground surface. The pipes are located approximately 10 feet south of the northern wall of Feature C, under the deep portion of the feature. The pipes trend approximately west, parallel to the north and south walls of Feature D. A

formed, square notch in which the pipes were laid was present at the base of the foundation of Feature E. These pipes trend easterly from Feature E and then turn south-southeast towards the main building. These pipes were removed to the eastern and western limit of excavations and cemented shut. The easternmost and westernmost extent of these pipes is unknown. These pipes contained oily sludge throughout. In addition, a 3- or 4-inch metal pipe was located adjacent to C1 and C2 under Feature E, and between Feature D and E. The full extent of this pipe is unknown.

- Pipes Z1 and Z2 are 6-inch square, thin-walled metal pipes associated with Feature F located approximately 2 feet below the existing ground surface and above the concrete walls of Features D and E. Pipe Z1 extends approximately 50 feet westward from Feature F, crossing over the central portion of Feature E and the extreme northwestern corner of Feature D. The western end of Pipe Z1 is sleeved inside the eastern end of the 12 inch green PVC pipe (Pipe D1) (see Action Item “D” in POLREP #59). A section of 4-inch metal pipe believed to be related to historic storm drainage enters Pipe Z1 from the south immediately east of the Z1/D1 junction through a rough-cut opening. This pipe aligns to the south with and is suspected to be Pipe N (as discussed in a later bullet). Pipe Z1 and Z2 contained a mixture of soil and black sludge. Pipe Z1 was removed in entirety. Pipe Z2 was exposed eastward to the limit of excavations and cemented shut. The easternmost extent of this pipe is unknown.

- Pipes D1 and D2 are 12-inch, sea foam-green PVC pipes associated with Feature F. Pipe D1 extends from the triple junction westward until it outfalls in Stoney Creek. Pipe D2 extends from the drop box southeast toward the boiler room area. Pipe D1 is only partially filled with soil and minor amounts of debris and was left in place for now. Pipe D2 is full of oily material and was cemented shut at the eastern limit of excavations.

- Pipes E and G are east-west trending pipes located east of Feature E at a depth of 3 to 4 feet below the current ground surface. Pipe E is located east of the vault, while Pipe G is located several feet to the south, east of the pit in the southern section of Feature E. These pipes include segments constructed of suspected asbestos-containing cement. Pipe E trends westward toward Feature E before turning north at the outside of the west wall. The pipe trends northward for a few feet before turning west and under Feature F. Upon removal of Feature F, the end of Pipe E was found degraded and in several small sections under Feature F. Pipe G trends westward before turning upward and ending in a vertical Y-shaped junction. Both pipes were cemented shut at the eastern limit of excavations near the cemented ends of C1, C2, and Z.

- Pipe F is a 4-inch steel pipe located about 2 feet below the current ground surface, overlying and trending parallel to Pipe E. It did not appear to contain contaminated contents and was cemented at the eastern limit of excavations.

- Pipes H and I are located south of the southeastern corner of Feature E. Pipe H is a 4-inch metal pipe located about 4 to 5 feet below the current ground surface. Pipe J is a continuation of H. Pipe I is an 8-inch steel pipe located about 3 to 4 feet below the ground surface. Pipe L is a continuation of Pipe I. Both pipe sets were empty and are believed to have been used historically as water supply lines. The eastern and southern extent of both pipe sets were cemented shut at the limit of excavations. Utility tracing activities suggest that both pipe sets trend to the southwest, although the results are uncertain.

- Pipe K is an 8-inch metal pipe located about 4 feet below the current ground surface south of the southeastern corner of Feature E. The pipe trends northwest from the southern limit of excavations before turning 45 degrees and trending north. The pipe appears to trend southward beyond the limit of excavations toward the main building. A T-joint is located a few feet south of the southwestern corner of Feature E. Pipe K continues north into the southern wall of Feature E, while the other pipe in the junction is designated Pipe P.

- Pipe P is an 8-inch metal pipe located 4 to 5 feet below the current ground surface that trends westward along the southern side of Features D and E from the T-joint with Pipe K. Two T-joints are located along Pipe P in the vicinity of Feature G. The pipes trending from the lower section of the joints, collectively described as Pipe O. Both pipes bend upward and terminate below the ground surface. This pipe system (Pipe P jointing off into Pipe O) released black, oily material with a strong solvent odor several times during the excavation. The soil around and immediately to the east of Pipe O near a flange was highly contaminated by oily material. Pipe P continues westward beyond Pipe O. At the southwestern corner of Feature D, Pipe P appears to be encased in concrete or brick.

- Pipe Y is an asphalt-coated metal pipe located in the bottom of the south wall of the vault in Feature E. The pipe extends southward below the southern section of Feature E prior to turning 45 degrees toward the southeast. This pipe was electrically traced toward the southwest. ERRS personnel manually probed the pipe and found it trends southeast toward the main building. When discovered, the pipe contained a wooden plug at its northern end; the plug was replaced after the inspection. The pipe was left in place.

- Pipe X is a 4-inch metal pipe located about 3 feet below the ground surface south of Feature E. The pipe trends south toward the main building. Electrical tracing suggests the pipe may bend 45 degrees toward the southeast for an estimate 20 or 30 feet before bending back 45 degrees toward the south. The pipe was plugged at the limit of excavations.

- Pipe M is a 6-inch metal pipe located approximately 3 to 4 feet below the current ground surface near the southeastern corner of Feature D. The pipe elbowed from the eastern wall of Feature D and then

turned south. This pipe was found to contain oily material and was cemented shut near the limit of excavations.

- Pipe N is a 4-inch metal pipe located 1 to 2 feet below the current ground surface south of Feature D and east of Feature G. The pipe trends south-southeast from the vicinity of the south-central wall of Feature D before splitting into two different pipes near the limit of excavations. The eastern and western portions of the pipe south of the junction are designated Pipe N1 and N2, respectively. The northernmost extent of Pipe N is believed to be the southern pipe in the triple junction on the north side of Feature D that includes Pipes D1 and Z1 (see fourth bullet). None of Pipe N, N1, or N2 appeared to convey contamination and were not cemented shut at the limit of excavations.

- Pipes AA1, AA2, and AA3 are three 2-inch gray PVC pipes located near the southeastern corner of and south of Feature D. The pipes were located approximately 2 to 3 feet below the current ground surface, above the walls of Feature D. The pipes were set in light brown quarter-inch angular gravel and spaced about a foot apart from one another. The pipes had an east-west trend south of Feature D and curved northward across the southwestern corner of Feature D. At the approximate point where the pipes entered Feature D, a square pit was found full of oily sludge along with two crushed drums containing oily sludge. The pipes trend westward toward Feature B (the “concrete basin” as outlined in the Action Memorandum; also see Figure 1-P61). The western/southern extent of the pipes is unknown.

- Pipe Q is a 6-inch metal pipe located about 3 feet below the current ground surface that entered Feature D from the south. The pipe is located west of and trends north-south adjacent to Feature G. It contained a very fluid black material with a strong solvent odor. The pipe was cemented shut at the southern limit of excavations.

- Pipe R is an 8-inch thin-walled metal pipe which contained a highly viscous yellow liquid. Pipe R was discovered at a depth of about 6 feet (3 feet below Pipe Q). The pipe was cemented shut at the limit of excavations.

- Pipe S is a 6-inch metal pipe located about 4 feet below the current ground surface between Feature D and Feature G. The pipe was observed in the southern excavation wall. The pipe entered the excavation south of the southeast corner of Feature D and trended westward. At the point it entered the excavation, the pipe bent approximately 45 degrees toward the southeast and the main building. The pipe contained black oily liquid. The pipe was cemented shut at the limit of excavations.

- Pipe T is a 4-inch terra cotta pipe that angled towards the south wall of Feature D from the area of the manufacturing building. This pipe conveyed black material and was cemented shut at the limit of excavations.

- Pipe U is an 8-inch metal pipe which is believed to be the discharge pipe from the deep end of Feature D. The pipe is approximately 7 to 8 feet below the current ground surface. The pipe trends westward towards Stoney Creek.

- Pipe V is a 6-inch pipe which threaded to a 3-inch pipe along the southern wall of Feature D. The pipe is located about 3 to 4 feet below the ground surface. It heads westerly towards Stoney Creek, trending parallel to Pipe P. The OSC is not sure where this pipe originates, but it is believed to have been part of Pipe Q.

D. On January 29, 2014, an underground utility-locating subcontractor was on site to trace and mark out the direction and origin points of 19 pipes (pipes designated A, B, C1, C2, D2, E, F, G, H, I, J, K, L, M, N/N1/N2, O, P, X) (note some pipes have more than a single letter as two ends were exposed on two separate excavation walls). ERRS supported the pipe tracing operations. START utilized GPS to record the location of piping. Due to the abundant quantity of iron-containing pipes, in addition to other ferrous scrap metal present in the subsurface, tracing activities using metal detection were only moderately successful. The investigation encountered the greatest interference where individual ferrous pipe systems crisscrossed and where buried scrap metal was present.

E. The ERRS contractor conducted limited dewatering operations on a daily or more frequent basis in order to facilitate the subsequent removal of pipes/drainage systems. A consistent volume of clean water entered the excavations above the water table, regardless of current and recent precipitation. The water typically entered the excavations from the northeast. This water often mixed with ground water, which in the vicinity was highly contaminated and frequently contained oily sheens and NAPL. Water in excavations that contained oily sheen or NAPL was pumped to 20,000-gallon holding tanks for future disposal.

F. ERRS was directed to remove the floor of the deep portion of the basin in order to remove the underlying sludge-filled pipes (Pipes C1 and C2). A hole was located in the eastern wall connecting to a concrete feature containing oily sludge. The oily sludge in the feature was removed and solidified. Both pipes continue westward past the basin. The western wall of the basin was found to have a hole from which Pipe U headed westward.

G. Air monitoring was conducted during operations for particulates, volatile organic compounds, carbon monoxide, hydrogen sulfide, lower explosive limit, and oxygen percentage.

H. Award was given for the offsite disposal of non-TSCA regulated soils previously excavated and placed in stockpiles. Currently awaiting disposal facility approval.

Planned Removal Actions

Refer to POLREP 51 for a description of the planned actions.

Next Steps

- A. Continue excavations of source areas and removal of buried historic drainage systems.
- B. Review submitted bids and award subcontract for the offsite disposal of TSCA regulated wastes removed from excavations.

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