

**United States Environmental Protection Agency
Region III
POLLUTION REPORT**

Date: Saturday, May 10, 2014
From: Michael Towle, On-Scene Coordinator
To: Dustin Armstrong, PADEP SERO

Subject: Pipe System Removal (West Side of Main Building)
Metro Container Corporation
2nd & Price Street, Trainer, PA
Latitude: 39.8249606
Longitude: -75.3990472

POLREP No.:	73	Site #:	032H
Reporting Period:	05/04/2014-05/10/2014	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. ERRS continued excavations west of the main building to locate and remove suspected historic underground structures and associated pipe systems. Work was conducted in primarily in Grid 35, and

extended into minor portions of Grids 30 and 40. Several features and pipes were discovered at the west side of the main building in the vicinity of the concrete trench outfall. The approximate location of the features and pipes discovered or encountered are presented on Figure 1-P73 (attached to this POLREP and also present in the "Documents" section of the webpage). Descriptions of the features and pipes are presented below:

- Feature I is a concrete pad that appears to be a ramp to the large bay opening (a smaller bay opening providing access to the current sand storage room is present farther to the south). The pad extends the width of the opening, and out and slightly down 6 feet to the west. The pad is about 4 inches thick and is located about 6 inches bgs. The pad was left in place after inspection.
- Feature J is a concrete pad located west of the ramp that appears to have served as a base for ASTs. The pad is about 4 inches thick with the top surface located approximately 2.5 feet bgs. The area is 10 feet by 10 feet, with the eastern edge located approximately 10 feet west of the bay opening. This pad contains four equally spaced square concrete posts, each about 14 inches by 14 inches by 18 inches high. No piping was identified around the perimeter of the pad in excavations dug to the native clay layer. The pad was left in place after inspection.
- Features K1 and K2 are two concrete basins or drop boxes that appear to have been closed with concrete. The boxes are located adjacent to the main building and north of the large bay opening. The boxes were box approximately 6 feet by 6 feet in area, and about 3.5 to 4 feet high. The top of each box was about 2 feet bgs. The boxes appear connected or immediately adjacent to the foundation of the main building in a similar fashion to the drop box found at the southern bay opening to the current sand storage room (see Action Item "B" in POLREP #72). The southern side of the southern box (Feature K1) is located next to the northern end of the large bay entrance, and the space between the boxes is 7 feet wide. A gray clay or bentonite was present along the outside of the box walls in places. A yellowish oil-like substance was present locally between the clay and the boxes. The boxes were left in place after inspection due to uncertainty regarding the structural integrity of the building. The northern box is designated as Feature K2.
- Feature L is a 2-foot by 2-foot catch basin constructed primarily of numerous stacked 4- to 6-inch-tall pre-formed, rebar-reinforced concrete rings. The feature was found centered about 14 feet west of the main building and 7 feet west of the north side of the large bay opening. Portions of the rings were broken and deteriorated. Several pipes entered or exited the feature. The top and bottom of the catch basin were 2.5 and 7 feet bgs, respectively. A 2-foot-square steel grate was located on top of the catch basin. The catch basin was filled with sludge and soils in and around the basin contained a significant quantity of NAPL. The structure and associated soils were removed after inspection.
- Feature M is a 10-foot by 10-foot concrete slab about 5 inches thick and 6 inches bgs. The southeast corner of the slab is located about 14 feet from the main building and 18 feet from the northern side of the large bay opening. No pipes or other structures were found associated with the slab. The historical function of Feature M is unknown. The slab was left in place after inspection.
- Feature N is a 40-inch by 43-inch by 14-inch deep formed steel basin found about 8 feet west of the northwest corner of the building where the building adjoins the covered open-air space currently used to conduct sand-blasting. The basin was covered by steel grate that was located about 6 inches bgs. The basin was clean and empty, and removed after inspection.
- Feature O is a double-chambered, flagstone-walled basin filled containing oily water and NAPL initially discovered in December 2013. The basin is topped by an unsecured concrete-reinforced cover. The western chamber was pumped of liquids and that half of the structure, with the exception of the cover, was removed for disposal in December 2013. Refer to Action Item "G" in POLREP #58 for more information regarding the discovery of this feature and removal of the western chamber. During this reporting period, the top of the cover, located about 3 feet bgs, was identified to re-establish its position relative to the other features currently being discovered and investigated. The 4-inch-diameter opening on top of the cover over the eastern chamber was measured to be 20 feet west of the west side of Feature M; the east side of the chamber complex is about 15 feet west of Feature M. The eastern chamber and liquids therein remain in place and will be addressed in the near future.
- Pipe NN is a 4-inch terra cotta pipe trending east-west and perpendicular to the west side of the main building. The pipe was located vertically about 4.5 feet bgs and between Features K1 and K2, 3 feet north of and perpendicular to the north side of Feature K1. The pipe was filled with a light mustard-yellow solid sludge and dark yellowish-brown translucent oily, slightly viscous liquid. The sludge was friable under moderate pressure in hand, and broke into particles the texture of a coarse sand. The liquid was intermixed with the sludge. The pipe was uncovered to the east within 3 feet of the building foundation, and appears to extend to the east under the building to an unknown location. The west extent of the pipe was not observed. The pipe trended west directly toward the center of Feature L and fragments of terra cotta were found in the excavation between the building and Feature L. An entry point into Feature L was not identified, possibly because Pipe NN did not historically enter Feature L or due to the locally deteriorated condition of Feature L. After inspection, the pipe was closed with absorbent pads and hydraulic cement at the eastern end of the excavation. Sludge and liquid remains in the pipe.
- Pipe OO is a 3-inch-diameter metal pipe with flange fittings that trends from Feature K2 to the northwest in a series of sections and elbow fittings at various directions and depths. The southern extent

of the pipe is a 90-degree elbow fitting that opens upward and bends horizontally toward the north. The 90-degree elbow is located over the top of Feature K2, with the bottom of the elbow (and this section of the pipe) at a depth of approximately 2 feet bgs. From the elbow, the pipe extends across the top of and beyond Feature K2 toward the north for about 8 feet, slightly pitching downward about 1 foot over this length. The pipe then turns 45 degrees toward the northwest for 2 feet to a flange fitting, then turns in an offset fitting 45 degrees downward for 2 feet followed by a 45-degree turn upward to another flange coupling, and continues horizontally in a concrete culvert for at least an additional 2 feet to the extent of the excavation. A pipe of identical construction is located immediately to the northeast within the same culvert (see Pipe SS later in this POLREP). Pipe OO was deteriorated and pitted locally along the bottom side. The discovered section of pipe up to the culvert was removed. Upon uncovering the pipe northwest of the offset fitting containing the two 45-degree elbows, a significant volume of oily water containing NAPL discharged from the pipe. The pipe was bent upward at the northwest extent of the excavation to temporarily mitigate additional liquid from discharging. Any remaining sections of Pipe OO will be investigated during subsequent actions.

- Pipe PP is a 12-inch-diameter terra cotta pipe that extends from Feature L approximately to the north and under the open-air space currently used to conduct sand-blasting. The pipe trends north-south at an acute angle to the west side of the main building (facing in a northerly direction, a line drawn parallel to the west side of the main building has an azimuth of 325 degrees; Pipe PP has an azimuth of 340 degrees). The pipe contained oily water and NAPL. The pipe is 6 feet bgs and appears pitched to direct liquids from an unknown location to the south toward Feature L. After inspection, the pipe was removed from Feature L north to the point where it began to pass under the open-air space used for sand-blasting. The pipe was closed with absorbent pads and hydraulic cement at the northern extent of the excavation.

- Pipe QQ is a 15-inch-diameter terra cotta pipe that extends from Feature L approximately to the west for 56 feet. The pipe was comprised of 3-foot straight bell sections installed to direct flow toward the west (the bell fittings were located on the eastern side of each section). The pipe was about 5.5 feet bgs at Feature L and was full of oily liquid and NAPL throughout its length. From Feature L, the pipe extended 10 feet toward the west along a line perpendicular to the west side of the main building before bending about 10 degrees toward the south. The pipe continued at this bearing for about 40 feet before bending back to trend again perpendicular to the west side of the main building for an additional 6 feet. At this point, the pipe was found cracked and filled with soil. The excavation was widened by approximately five feet on both sides of the projected trend of the pipe and for an additional 20 feet beyond the cracked section, but additional portions of the pipe were not identified. The entire length of the pipe was removed after inspection.

- Pipe RR is a 5-foot-length of 4-inch-diameter gray Schedule 80 PVC pipe found beneath the extreme southeast corner and eastern edge of Feature M. The pipe was located about 5 feet bgs and contained oily water with LNAPL and a sheen; sludge was present in the bottom quarter of the pipe. The pipe was oriented north-south and trended directly toward Feature L. No connection to Feature L was observed, possibly due to the deteriorated condition of Feature L or because the pipe was never connected to Feature L. Fragments of gray Schedule 80 PVC were identified in the excavation between the south side of Feature M and Feature L. No evidence of this pipe was found in the excavation to the north of Feature M, although that excavation was limited in extent during this reporting period. The identified section of this pipe was removed after inspection.

- Pipe SS is a 3-inch-diameter metal pipe that appears identical in construction to Pipe OO. The pipe trends from Feature K2 to the northwest in a series of sections and elbow fittings at various directions and depths. The southern extent of the pipe is a 90-degree elbow fitting that opens upward adjacent to and outside of the north side of Feature K2. Unlike Pipe OO, Pipe SS does not cross over the top of Feature K2. Pipe SS bent upward at about 3 feet bgs (about 1 foot lower than Pipe OO). From the elbow, the pipe extends horizontally north for about 4 feet before mimicking precisely the path of Pipe OO, turning 45 degrees toward the northwest for 2 feet to a flange fitting, then turning in an offset fitting 45 degrees downward for 2 feet followed by a 45-degree turn upward to a flange coupling, and continuing horizontally in a concrete culvert for at least an additional 2 feet to the extent of the excavation. Pipe SS is located northeast of Pipe OO in the culvert. As with Pipe OO, Pipe SS was deteriorated and pitted locally along the bottom side. The pipe discharged a significant volume of oily water containing NAPL during excavation. The pipe was broken off at a flange fitting. Any remaining sections of Pipe SS will be investigated during subsequent actions.

- Pipe TT is a 4-inch-diameter white ceramic pipe with a brown coating trending east-west and perpendicular to the west side of the main building. The pipe was located 3 feet bgs and north of Feature K2, appearing to trend beneath the building about 1 foot north of the point where the building and open-air covered area meet. The pipe was filled with a black, generally solid sludge that was friable under light pressure in hand. No liquids were observed in the pipe. The pipe was uncovered to the east within 3 feet of the building foundation, and appears to extend to the east under the building foundation to an unknown location. The west extent of the pipe was not observed. The pipe was easily broken with a shovel. No ceramic pipe fragments were observed in the adjacent excavations, although it is possible the pipe could have been overlooked due to the poor integrity of its composition. The sludge remains in the pipe that

extends under the building.

- Pipe UU is a north-south trending steel pipe estimated at 8 inches in diameter. The pipe is located approximately 45 feet west of and parallel to the west side of the main building. The pipe was observed only in the excavation of Pipe QQ. The extent of Pipe UU is unknown beyond the observed section. The pipe remains in place and will be inspected during future actions. (Note: Pipe UU is presented on Figure 1-P73 but not labeled. The pipe is shown in the excavation of Pipe QQ approximately at the midpoint between the rail spur and the west end of Pipe QQ.)

- Pipes VV1 and VV2 are 2-inch-diameter and 1.5-inch-diameter steel pipes that trend east-west along the southern boundary of Grid 35. The pipes extend from a location about 10 feet west of the southern side of the large bay opening west for 45 feet to the southwestern corner of Grid 35. The pipes were located about 2 feet bgs on the east end and about 3 feet bgs at the western end. The pipes did not contain waste, but were locally deteriorated on the bottom. The extent of the pipes beyond each end of the excavation is unknown (the pipes may have been encountered and removed between the eastern end of the excavation and the main building earlier in the removal action). Two 1-inch-diameter steel pipes that contained electrical wire in places were also present adjacent to Pipes VV1 and VV2. Two gray Schedule 80 PVC pipes, one 2 inches in diameter and one 3 inches, were observed trending from the western end of the excavation to the southeast for 6 feet. The pipes were 2.5 feet bgs and appeared broken at both ends. No liquid or waste was present in the pipes.

B. A volume of soil in the eastern portion of Grid 35 centered at ConocoPhillips direct-push test borehole location 05-MET-109 was removed concurrently with excavations for the pipe systems (see Action Item “A”) and staged as TSCA-regulated waste. Analytical results indicated that nearly the entire soil profile down to but not including the native olive-gray clay was contaminated with PCBs above 50 ppm. The estimated volume of soil that was targeted for removal was 420 tons (30 feet by 30 feet by 9 feet deep). However, due to the presence of the foundation of the main building within this area, the planned volume to be removed was reduced to 210 tons (30 feet by 15 feet by 9 feet deep). The presence of many underground features (see Action Item “A” above) within the planned excavation area further reduced the volume removed.

C. The sludge material in Pipe NN was collected as a solid sample and submitted for VOC, SVOC and PCB analyses to determine disposal options.

D. As requested by the OSC, ERRS installed two temporary wells along the western wall of the former drum recycling building. The wells are positioned in the vicinity of the large bay opening near the head/invert of a pipe that originated near the trenches cut into the building floor and discharged into a sump/separator. The wells were installed during backfilling of excavations to allow the OSC to evaluate if NAPL and other product is leaching out from under the building. The OSC noted a large amount of NAPL in this area. Total depth of the wells is about 5 to 6 feet bgs.

E. Disposal of non-TSCA-regulated debris continued this week. A total of 16 loads of non-TSCA regulated debris with an estimated weight of 369.11 tons was disposed of at the Republic Conestoga Landfill located in Morgantown, Pennsylvania. Disposal occurred as follows:

- On 5/4/14, three truckloads with an estimated weight of 65.35 tons were hauled out for off-site disposal.
- On 5/5/14, three truckloads with an estimated weight of 74.26 tons were taken for off-site disposal.
- On 5/6/14, three truckloads with an estimated weight of 67.81 tons were taken for off-site disposal.
- On 5/7/14, five truckloads with an estimated weight of 107.75 tons were taken for off-site disposal.
- On 5/8/14, two truckloads with an estimated weight of 53.94 tons were taken for off-site disposal.

F. Began off-site disposal of ground water temporarily stored in 21,000-gallon steel storage containers. The ground water was pumped from excavations during the response action and stored in the containers. Laboratory analyses indicates the water is not characteristically hazardous material. One of the three tanks currently present on site, containing over seventeen thousand (17,070) gallons of ground water, was transferred into tanker trucks and shipped under manifest to Environmental Recovery Corporation in Lancaster, Pennsylvania. The water was transported in three separate shipments.

G. ERRS imported loads of clean fill and 2A modified stone to serve as backfill in completed excavations.

H. Air monitoring was conducted adjacent to operations for particulates, volatile organic compounds, carbon monoxide, hydrogen sulfide, lower explosive limit, and oxygen percentage. The monitoring was conducted to ensure worker safety. No health and safety limits were exceeded in the work areas.

Next Steps

A. Excavate remaining PCB-impacted areas in Grids 39 and 40.

B. Identify and excavate remaining buried pipe systems in the vicinity of the west end of the main building.

C. Continue off-site disposal of staged solid and liquid wastes.

Disposition of Wastes

Waste Stream	Quantity	Manifest #	Disposal Facility
Non-RCRA, non-DOT-regulated material (soil and debris)	3,966.73 tons (estimated)	Various (176 shipments)	Republic Conestoga Landfill, Morgantown, Pennsylvania
TSCA-regulated PCB remediation waste	2,902.98 tons (estimated)	Various (123 shipments)	Heritage Environmental Services Landfill, Roachdale, Indiana
Non-hazardous liquid waste (purged ground water)	17,070 gallons (estimated)	Various (3 shipments)	Environmental Recovery Corporation, Lancaster, Pennsylvania

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