



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

AUG 26 2013

SUBJECT: Request for Funding and Exemption from the \$ 2 Million Statutory Limit for a Removal Action at the Metro Container Corporation Superfund Site (EPA ID PAD044545895) Trainer, Delaware County, Pennsylvania

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TO: Dave Wright, Associate Director
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I. PURPOSE

The purpose of this Action Memorandum is to request funding and document approval for a Time-Critical Removal Action at the Metro Container Corporation Superfund Site (Site), located within the Borough of Trainer, Delaware County, Pennsylvania. The Site has been finalized on the National Priorities List (NPL) and is located at and in the vicinity of the intersection of West 2nd Street and Price Street.

The On-Scene Coordinator (OSC) anticipates that more than \$2 Million will be needed to address the threats defined herein. The OSC determines and documents herein, in coordination with the Remedial Project Manager (RPM) for the Site, that the Site meets the consistency exemption criteria in Section 104(c)(1)(C) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA), as further discussed within this Action Memorandum¹.

Based upon information obtained from the removal site evaluation, and upon consideration of the factors in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), the OSC has determined that a Time-Critical Removal Action, pursuant to Section 104(a) of CERCLA, is appropriate and necessary to mitigate threats posed by the release and threatened release of hazardous substances from the Site. The OSC's evaluation of Site conditions indicates that actions including removal of significant sources of hazardous substances at the Site are required to mitigate the ongoing release and threatened release of hazardous substances from the Site. The development of this proposal for such actions has been coordinated with the RPM and such actions are recommended in advance of the completion of anticipated investigation activities and response action selection by the EPA Region 3 Remedial Program. A Removal Action Project Ceiling of \$4,051,100, of which \$3,923,600 is from the Environmental Protection Agency (EPA) Regional Removal Allowance, is necessary to mitigate the threats identified in this Action Memorandum.

¹ Authority to approve removal action beyond the \$2 Million and/or 12 Month statutory limitation pursuant to the "Consistency Waiver" set forth in Section 104(c)(1)(C) of CERCLA, 42 U.S.C. §9604(c)(1)(C), has been delegated, subject to such approval of the AA/OSWER as may be required, to the Associate Director, Office of Preparedness and Response, Region III Hazardous Site Cleanup Division pursuant to Delegation 14-2.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site Evaluation

A removal site evaluation completed in June 2013, by the On-Scene Coordinator in accordance with the NCP, 40 C.F.R. §300.410, identified a release and threatened release of hazardous substances from several source areas at a portion of the Site referred to herein as the “Metro Property” (see Section II, A.2 below). These sources are generally located in loosely defined areas on the Metro Property as follows:

- **Former Impoundment Area:** An impoundment used for over 30 years to store a variety of liquid wastes (identified as “Area A” on Attachment A); this source area includes one or more pipes, culverts, and sumps through which wastes flowed from the main building.
- **Former Concrete Basin Area:** A highly contaminated soil area in which a reportedly unlined concrete-walled basin and its earthen secondary containment, former structures of uncertain purpose, and hundreds of waste sludge drums were previously located (identified as “Area B” on Attachment A); material within the basin was removed during the previous Removal Action and replaced with clean fill, although surrounding soils appear to have been left in place; also may be associated with the pipes, culverts, and sumps described above.
- **Crushed Drum Area:** An area of crushed drums containing residual hazardous substances and other unknown materials known through both magnetic anomalies identified through surface geophysical methods and a very limited number of test trenches excavated during past investigations (identified as “Area C” on Attachment A); includes any other areas where buried drums or drum carcasses are identified, including other Source Areas.
- **PCB Soil Area:** An area of shallow and deep soil contaminated locally by elevated concentrations of PCBs (identified as “Area D” on Attachment A); regions of high PCB concentrations within this area were identified through partial subsurface characterizations conducted during past investigations, and may be of greater extent than depicted on Attachment A.

These areas will furthermore collectively be referred to as the “Source Areas.” The aerial extent of individual Source Areas are approximate and likely vary from the extent outlined in Attachment A. All sources are located in the subsurface. The Source Areas contain elevated concentrations of hazardous substances. Non-aqueous phase liquids (NAPL) and sludge resulting from historical operations at the Site have also been found. Hazardous substances releasing from the Source Areas into the environment include PCBs, pesticides, polycyclic aromatic hydrocarbons (PAHs)(e.g., benzo(a)pyrene), volatile organic compounds (VOCs)(e.g., toluene), semi-volatile organic compounds (SVOCs)(e.g., trichlorobenzene), pesticides (e.g., chlordane), and inorganic elements (e.g., lead).

As described above, multiple independent systems of underground pipes exist beneath the Metro Property. One or more systems that outfall to Stoney Creek and are known to have historically discharged wastewater appear associated with the Former Impoundment Area and Former Concrete

Basin Area. One pipe system (a storm sewer) installed by the current owner is known to receive storm water and snowmelt through concrete catch basins throughout the Metro Property and discharge to Stoney Creek. The construction and condition of the pipe systems, and therefore the potential for hazardous substances to enter the pipes and migrate, is unknown.

2. Physical Location

The Metro Container Corporation Site consists of (1) approximately 11 acres of land currently owned by Trainer Industries, LLC located at 2nd and Price Streets in the Borough of Trainer, Delaware County, Pennsylvania (Delaware County Folio Nos. 46-00-00444-00 and 46-00-00445-00), where chemical production and, later, drum reclamation and recycling activities occurred from the 1920s through the late 1980s (“Metro Property”), and (2) all locations to which hazardous substances or pollutants and contaminants have migrated from the Metro Property. Site-related contaminants have been detected outside the Metro Property in areas which include Stoney Creek and tidal mudflats adjacent to the Delaware River. The Site, of which the Metro Property is a part, is listed on the NPL and will be the subject of a Remedial Investigation. The Removal Action proposed in this Action Memorandum involves certain contamination on the Metro Property portion of the Site. The Metro Property is currently occupied by Service Painting, Inc.

The area surrounding the Metro Property is predominantly industrial or commercial, but a residential area exists along Price and West 2nd Streets north of the Metro Property within the Borough of Trainer and the City of Chester. The Metro Property is generally bound by a commercial and residential area to the north, a scrap metal recovery business to the east, railroad operations to the south and a refinery to the west. Stoney Creek (also referenced in historic records as “Stoney Run” or “Stony Creek”) forms the western boundary of the Metro Property and flows south to the Delaware River. With the exception of the western boundary, the Metro Property is surrounded by a chain-link fence and security gate that is closed during non-working hours.

The Delaware River and a portion of Stoney Creek abutting the Metro Property are within the intertidal zone. At low tide, the mouth of Stoney Creek at the Delaware River is approximately 1,500 feet from the Metro Property. The refinery west of the Metro Property continually releases a high volume of non-contact cooling water to Stoney Creek through a guard basin. The flow rate of Stoney Creek immediately downstream of the guard basin is several times greater than the upstream flow rate.

3. Site Characteristics

The Metro Property is currently occupied by an operating business. Most of the important historical features or operations discussed herein and related to the Source Areas described elsewhere in the document have been filled or decommissioned and covered by a layer of dirt and stone upon which the operating business’ equipment and materials are now staged.

For more than 100 years, the Metro Property has been used exclusively for industrial and commercial purposes. Historical surveys indicate the Metro Property was once occupied by the former Delaware Oil Works in the 1890s. By 1913, process buildings and dozens of tanks owned by Manufacturers Paraffine Company were present.

In 1920, Stauffer Chemical Corporation (Stauffer) began manufacturing carbon disulfide at the Metro Property. Stauffer constructed numerous buildings and above-ground storage tanks on the Metro

Property in support of their operations. These buildings were used by subsequent owners. Some of these buildings are present today, including a two-story brick and mortar reclaiming building (or “oven” building), the main office building, and locker room building. The reclaiming building has been divided into many smaller rooms. An aerial photograph from 1953 depicts a rectangular feature along Stoney Creek. The feature is at the position of a concrete basin used as a containment system for tanks which are visible within the basin in later aerial photographs. The 1953 aerial photograph also depicts small sumps through which waste liquids from the facility were likely transferred. The impoundment is first visible on an aerial photograph from 1959 located immediately west of the sumps. In Site records, the small sumps are described as the “screen box” and “settling tank,” while the impoundment is commonly identified as a “disposal lagoon.” EPA does not have information to indicate that the sumps or impoundment was constructed with an impermeable liner or in a manner that would prevent infiltration or migration of liquid contents. Stauffer ceased operations in 1959.

In 1963, steel drum recycling and reconditioning operations began at the Metro Property and continued through 1988 under several different owners, including: Joseph A. Reis Company (1963-1969), Universal Container Corporation (1969-1983), and Metro Container Corporation (1983-1989). At the peak of drum recycling operations at the Metro Property, approximately 450,000 drums were processed annually. The various drum recyclers received drums containing residual quantities of paints, petroleum products, and other materials, including hazardous substances from various clients. The drums were off-loaded onto a loading dock and transferred into the main reclaiming building via a conveyor belt. Once inside, the drums were emptied of residual material, cleaned using caustics and other liquids, stripped of paint using acids, rinsed, and repainted. Wastewater from this process was directed to the impoundment through pipes or trenches. At least one pipe system conveyed liquid wastes from the reclaiming building directly into Stoney Creek. A small building appears at the location of the sumps in the 1970s. Some wastewater effluent was discharged to the Delaware County Regional Water Quality Control Authority (DelCORA) sanitary sewer system through a permit issued in 1971. An aerial photograph from 1975 suggests that the impoundment was being filled and that the liquid was being conveyed to the concrete basin.

Pennsylvania Department of Environmental Resources (PADER; currently Pennsylvania Department of Environmental Protection, or PADEP) inspection reports indicate that untreated liquid wastes in the impoundment were regularly being discharged to Stoney Creek. Under consistent pressure from PADER, the impoundment was filled between 1982 and March 1985. It appears the liquid and oily sludge wastes in the lagoon were merely covered with soil or other fill material.

Prior to filling of the impoundment, Site operators began to use the concrete basin as part of the wastewater aeration process. Aerial photographs from 1965 and 1970 show tanks lying in the containment basin. But, an aerial photograph in 1975 shows the containment basin to be full of liquid and a connection between the concrete basin and the sumps. Beginning in 1986, PADER reports indicate that the concrete basin was being used to contain untreated liquid wastes and sludges. The concrete basin covered an area of 1,000 square feet and was 13 feet deep. Secondary containment around the basin consisted of mounded dirt. An inspection at this time noted that 8 to 9 feet of sludge in the basin covered liquid wastes with a pH of 13. The volume of liquid wastes and sludges generated at this time appear to have been greater than the capacity of the basin, as inspection reports identify releases to Stoney Creek by overtopping of the basin walls and secondary containment. In 1987, DelCORA suspended the discharge permit due to frequent violations.

Also in this time period, inspection reports began to note the presence of drums filled with untreated liquid wastes and sludges stored throughout the relatively flat western portion of the Metro Property. The reports surmised that the use of emptied drums to store wastes and sludges was implemented due to a lack of capacity for wastewater in the basin. Thousands of drums were observed overtopping and releasing liquid wastes and sludges directly to the ground. Standing oily liquid wastes were present within an earthen berm surrounding the concrete basin. The bermed containment area was unlined, permitting infiltration of liquids. The integrity of the concrete basin is also unknown; deep soils surrounding the concrete basin are impacted by hazardous substances.

In addition to issues with liquid and sludge wastes, historical inspection reports identify the burial of drums reportedly crushed as part of recycling process in shallow trenches on the northern and northwestern portion of the Metro Property and along Stoney Creek. The principal periods of burial appear to have occurred in or about 1972 and 1985, and included burial of crushed and discarded drums below the ground water table.

In 1988, EPA initiated a Removal Action at the Metro Property which was ultimately completed by a group of Potentially Responsible Parties under an Administrative Order on Consent. See Section II.B for details regarding this action. From 1989 through 2000, the Metro Property was inactive. In 2001, Trainer Industries, LLC purchased the property through a sheriff's deed. The property has been used by Service Painting, Inc. until present to store supplies and materials associated with its industrial painting business as well as to perform sandblasting and painting.

4. Release or Threatened Release of Hazardous Substances into the Environment

Sources of Hazardous Substances at the Site

Hazardous substances are located throughout the Metro Property. The Source Areas, as described in Section II.A.1 of this document, are the principal sources which are releasing hazardous substances to the environment. These areas are on the western portion of the Metro Property, as outlined on Figure 1 in Attachment A.

Types and Concentration of Hazardous Substances Present

Sampling and analysis of subsurface soil, ground water, and sediment conducted at the Metro Property by EPA and others since 2005 confirm the presence of high concentrations of PCBs, pesticides, PAHs, and other organic compounds and inorganic elements. The most heavily contaminated soils encountered to date at the Metro Property are associated with the source areas identified in this Action Memorandum. Test excavations, soil cores, and ground water samples collected in the Source Areas have revealed the presence of NAPL, sludge, and the highest concentrations of hazardous substances identified on the Metro Property. The area of NAPL and sludge generally exists beneath the area formerly containing the impoundment and concrete basin and extending east to the western wall of the building; this is the area in which the drums containing sludge ("sludge drum storage area") were located. The NAPL and sludge also extends to Stoney Creek; seeps are evident.

The PCBs identified in soil at the Metro Property include Aroclor-1248, Aroclor-1254, and Aroclor-1260. The highest concentration of total PCBs identified in soil to date was 1,300 milligrams per kilogram (mg/kg). Elevated PCBs concentrations are predominantly located on the northern and northwestern portion of the Metro Property adjacent to Stoney Creek. Elevated PCBs also exist in the

area of the NAPL near the former impoundment. The soil in this area includes organic contaminants which may facilitate the migration of PCBs in the environment (e.g., VOCs and SVOCs); ground water in this area contains elevated PCBs indicating that mobilization of this contaminant is occurring.

The pesticides identified in soil at the Metro Property at elevated concentrations include (maximum concentrations presented) dieldrin (2.70 mg/kg), chlordane (27.1 mg/kg), dichlorodiphenyl-dichloroethane (DDD)(52.2 mg/kg), and dichlorodiphenyltrichloroethane (DDT)(32.5 mg/kg). Elevated pesticide concentrations were predominantly located on the northern and northwestern portion of the Metro Property adjacent to Stoney Creek.

The PAHs identified in soil at the Metro Property at elevated concentrations include (maximum concentrations presented) benzo(a)anthracene (1000 mg/kg), benzo(a)pyrene (990 mg/kg), benzo(b)fluoranthene (370 mg/kg), dibenzo(a,h)anthracene (330 mg/kg), indeno(1,2,3-cd)pyrene (210 mg/kg), chrysene (1,300 mg/kg), benzo(k)fluoranthene, 1-methylnaphthalene, and naphthalene. PAHs in soil were predominantly present at and in the vicinity of the former impoundment and concrete basin along with NAPL.

Inorganic elements identified in soil at the Metro Property at elevated concentrations include (maximum concentrations presented) arsenic (92.1 mg/kg), lead (19,300 mg/kg), and mercury (24.0 mg/kg). The majority of the elevated arsenic concentrations were located south of the concrete holding tank in the footprint of the former impoundment and concrete basin. The elevated concentrations of lead and mercury also occurred within the footprint of the former disposal lagoon.

Dissolved-phase ground water plumes of these organic contaminants are found at the Metro Property, generally originating in the vicinity of the former impoundment concrete basin areas and migrating toward Stoney Creek. The concentration of total PCBs in ground water in the area of the former impoundment adjacent to Stoney Creek is 122,000 micrograms per liter (µg/L). In addition, these plumes include (maximum concentrations presented) benzo(a)anthracene (4,100 µg/L), benzo(a)pyrene (3,400 µg/L), benzo(b)fluoranthene (2,400 µg/L), dibenzo(a,h)anthracene (2,200 µg/L), indeno(1,2,3-cd)pyrene (1,500 µg/L), chrysene (6,400 µg/L), benzo(k)fluoranthene (2,400 µg/L), and naphthalene (6,400 µg/L), among others. These concentrations are indicative of the presence of NAPL, and given the proximity to Stoney Creek, are expected to be a continual source of contamination to ground water and surface water if the contaminated soil and source material in the sources is not addressed. Along with the NAPL, soils in this area contain VOCs (e.g., toluene) and SVOCs (e.g., trichlorobenzene) which may facilitate the migration of the PCBs into the ground water.

Description of Release into the Environment

The Source Areas are adjacent to and connected to Stoney Creek and further downstream, to the Delaware River. The release of hazardous substances from the Source Areas occurs through pipe connections and seeps directly into Stoney Creek as well as from ground water discharge. Some of the contaminated soils are relatively shallow (e.g., less than 2 feet), may migrate into Stoney Creek via erosion during storm events, and may be exposed to human receptors in the future.

The Source Areas were identified through a review of operational history and sampling conducted by the EPA as part of pre-Remedial investigation and removal site evaluation, and in investigations conducted by parties previously interested in acquiring the Metro Property. Although the removal site evaluation considered analytical data from throughout the Metro Property, the OSC herein

proposes removal activities at locations on the Metro Property to address high concentrations of hazardous substances releasing from the Source Areas. Some of the hazardous substances present at the Metro Property (e.g., PCBs) can bioaccumulate in the fatty tissue of organisms within the nearby environment. These organisms (e.g., fish and shellfish) are part of the food chain and ultimately pose a threat to human receptors through ingestion pathways. Fish consumption advisories for the Delaware River and tidal tributaries, which include Stoney Creek, have been established by the Commonwealth of Pennsylvania due to the presence of PCBs in fish.

Volume Estimate

The volume of soil highly contaminated with hazardous substances, NAPL, and waste at the Metro Property is estimated as follows:

- Former Impoundment Area and Former Concrete Basin Area: 7300 yd³;
- Crushed Drum Area and PCB Soil Area: 6000 cubic yards (yd³); the number or volume of drum carcasses within the soil is not known.

5. NPL Status

The Metro Container Corporation Site was promulgated to the National Priorities List on March 15, 2012. Removal actions at this Site are not expected to impede any future investigations or remedial actions. The OSC has coordinated with the RPM on the development of the actions proposed herein and expects to continue such coordination during implementation of such actions.

B. Other Actions to Date

A Removal Action was initiated by EPA in 1988 and completed in 1990 by a group of Potentially Responsible Parties (PRPs) under an Administrative Order on Consent (AOC). The earlier Removal Action included the installation of a perimeter fence, construction of a temporary retaining wall to prevent off-site migration of contaminants, and disposal of contaminated rainwater. Over 6,000 tons of sludge, contaminated soils, and drum wastes were removed. At the time, the concrete basin and drums (in the “sludge drum storage area,” as outlined in Figure 1 of Attachment A) were being used by the drum recyclers to store untreated liquid wastes and sludges, and were a primary cause of the releases that led to the response actions. As part of the Removal Action, the concrete basin was drained of liquid wastes and sludges, cleaned, filled with layers of impermeable soils, covered with clean soil, and seeded with vegetation. The soils immediately adjacent to the basin walls, including the footprint of the secondary containment, were removed. All pipes entering the concrete basin were capped. The sumps through which liquid wastes previously flowed were cleaned and filled with concrete. However, since the impoundment had been filled by 1988 and the footprint was not visible, the contaminated soils and sludges associated with this source were not identified and addressed as part of the Removal Action. Additionally, although the standing liquid wastes in the concrete basin area were drained, the contaminated soils underlying and in the vicinity of the basin were not removed.

In 1990, EPA Criminal Investigation Division excavated and removed 25 buried drums from the Metro Property. The location of these buried drums is not presented herein.

In 2000, Pennoni Associates, Inc. completed an investigation of the Metro Property on behalf of Trainer Industries. Numerous hazardous substances were identified in soils and ground water as well as

in the sediments of adjacent Stoney Creek. The investigation included the installation of ground water monitoring wells and a geophysical investigation of the subsurface of a limited portion of the Metro Property. Notable is the description of a “water-filled ditch” heading westward from the buildings toward the location of the former impoundment. This ditch is located at the position of a buried pipe which formerly conveyed liquids to the former impoundment and is visible on an aerial photograph from 1990.

In November 2005, MWH Americas, Inc. (MWH) completed a report that extensively characterized the nature and extent of contamination present on the Metro Property in connection with the potential acquisition of the Metro Property by ConocoPhillips Company. The report identified numerous pipes of unknown origin and seeps entering Stoney Creek from the Metro Property; subsurface soil contaminated with NAPL, sludges, and very high concentrations of PCBs; dissolved ground water plumes of PCBs, PAHs, pesticides, VOCs, and inorganic elements; and buried crushed drums, flyash, and sludge. The majority of the contaminated soil and ground water was found on the western portion of the Metro Property, with the highest concentrations appearing near, but not exclusive to, the Source Areas. The report also identified the presence of PCBs, PAHs, pesticides, and inorganic elements in sediments of Stoney Creek and the Delaware River at concentrations above Regional ecological screening levels. MWH identified a connection between the contaminants found in ground water and soils on the Metro Property and those contaminants identified in Stoney Creek.

The 2005 assessment activity by MWH included an evaluation of the potential for buried drums throughout the majority of the Metro Property. Several areas of potential drum burial were identified using surface geophysics, and four test trenches were subsequently excavated. One trench in the northwestern area of the Metro Property was found to contain numerous crushed drums (with residual contents) and drum lids. Another trench was found to contain a crushed drum, concrete foundation, and an unknown pipe. A third trench was found to contain a 15-inch steel pipe which is believed to be the pipe which conveyed liquids from the building to the sumps and impoundment.

Removal site evaluations were completed by EPA in March 2000, November 2007, and April 2009. The March 2000 evaluation focused on a search using geophysical methods for potential buried drums in a limited area of the Metro Property. The November 2007 removal site evaluation was conducted in part to confirm the analytical results generated by the 2005 MWH report. The April 2009 removal site evaluation focused on sediment concentrations in the Delaware River at the mouth of Stoney Creek, and included the analysis of 209 PCB congeners.

In July 2010, EPA conducted limited soil sampling at the Metro Property and replicated sediment sampling conducted in 2009 in support of Hazard Ranking System (HRS) screening for potential listing on the NPL. The various investigations identified a correlation between the congeners found at the Metro Property and those identified in sediment samples.

C. State and Local Authorities’ Roles

The Site is currently an EPA-lead NPL Site. The OSC and RPM are coordinating activities associated with the assessment and evaluation of the Site with PADEP. Local authorities have no current role in Removal or Remedial activities at the Site. The OSC and RPM will continue to coordinate proposed response actions with State and Local authorities.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Site investigative studies indicate that several sources and migration pathways from the Metro Property are present. The subsurface soils of the Former Impoundment Area and Former Concrete Basin Area on the Metro Property contain PCBs, NAPL, sludges, locally alkaline pH conditions, and high concentrations of numerous hazardous substances. Distinct plumes of ground water containing PCBs, PAHs, pesticides, VOCs, and inorganic elements emanate from these areas and are being released to Stoney Creek and the Delaware River. Soils located primarily in the northwestern portion of the Metro Property adjacent to Stoney Creek locally contain PCBs at concentrations well over 100 mg/kg and crushed drums containing unknown residual materials. The presence of NAPL and organic compounds (e.g., toluene, trichlorobenzene) increases the likelihood that PCBs may desorb from soil particles and migrate and release to Stoney Creek and the Delaware River. Hazardous substances released at and from the Metro Property may bioaccumulate in the food chain. Bioaccumulation poses a threat to migratory birds, upper trophic predatory species, and to human receptors ingesting aquatic organisms such as fish, turtles, shellfish, and crustaceans in the contaminated environment; the Delaware River is known to be used for such purposes. Actions to eliminate certain migration pathways (e.g., pipes), high hazard sources (e.g., crushed drums containing residual material), and high concentrations of PCBs at the Metro Property will significantly reduce migration of high levels of hazardous substances.

The environment and habitat of ecological receptors (i.e., creek/river sediment) is threatened by PCBs, pesticides, PAHs, and inorganic elements at levels that may bioaccumulate in aquatic organisms and thus pose a threat to humans ingesting contaminated fish and/or turtles. Currently, certain species harvested recreationally from the Delaware River Estuary and tidal tributaries, including Stoney Creek, are subject to a fish consumption advisory issued by the Commonwealth of Pennsylvania due to the potential concentrations of PCBs in fish. Additionally, birds and other aquatic predators gather fish from Stoney Creek and the Delaware River within the area of the Site.

Promulgated federal or State criteria for sediment contamination levels intended for the protection of aquatic organisms (and subsequent human receptors) do not exist. To determine if threats are posed to ecological receptors, EPA instead relies upon a comparison between site-specific contaminant levels and “screening guideline” levels developed from contaminant- and organism-specific toxicity testing. The “screening guideline” levels identify benchmark sediment contaminant levels at which toxicity testing has established a likelihood of adverse biological effects to exposed aquatic organisms. EPA Region 3 uses a concentration of 0.0598 mg/kg as a screening benchmark for PCBs, and 0.19 mg/kg for high molecular weight PAHs for aquatic receptors in freshwater sediment. Occurrences of these substances at concentrations exceeding these screening benchmarks will likely result in adverse effects to aquatic organisms. The concentrations of hazardous substances in the soil, ground water, and fluids such as NAPL are well above these benchmark levels.

The surface or shallow soils at the Metro Property also pose a direct threat to human receptors through incidental ingestion or inhalation in an industrial setting. The EPA Region 3 screening level (RSL) for the three PCBs Aroclors identified at the Metro Property in industrial soil is 0.74 mg/kg. PCBs at concentrations greater than the RSL were in approximately 75% of the samples collected from the western portion of the Metro Property. At ten locations, the concentrations were two to four orders of magnitude greater than the RSL. At seven locations, the concentrations of PCBs were greater than 100 mg/kg. The pesticides at the Metro Property within the area of concern were above their respective RSLs. The following PAHs were also found at two orders of magnitude above their RSL:

benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. Finally, arsenic was found at one order of magnitude, and lead and mercury were found at two orders of magnitude above their respective RSLs. The shallow soil is also able to migrate into Stoney Creek during storm flows.

Section 300.415 of the NCP, 40 C.F.R. §300.415, identifies factors to be considered in determining the appropriateness of a removal action. Paragraphs (b) (2) (i), (ii), (iv), and (viii) apply to the need for response at the Site as follows.

§300.415 (b)(2)(i) “Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;”

EPA guidelines indicate that concentrations of PCBs in excess of approximately 74 mg/kg in the soil subject to industrial use may pose unacceptable cancer risk (e.g., greater than 1×10^{-4} excess cancer risk) to exposed receptors. PCBs and PAHs are present in soils at the Metro Property inclusive of shallow soil, with PCB concentrations in soil up to 1,300 mg/kg. Ground water near and down gradient of the Former Impoundment Area, Former Concrete Basin Area, and Crushed Drum Area also contains very high concentrations of dissolved-phase contaminants and NAPL, which serves as a long-term source of ground water contamination and may act to mobilize PCBs. The PCBs migrate from the Source Areas to Stoney Creek through discharge of ground water, or where ground water can enter through cracks or openings exist, via underground pipes. The hazardous substances migrating from the Metro Property are found in the sediments of Stoney Creek.

Contaminated sediment in Stoney Creek and the Delaware River is available for use as habitat to aquatic organisms and other wildlife which use the tidal sediment areas, e.g., mudflats at the mouth of Stoney Creek in the Delaware River. For example, numerous migratory birds such as herons use the mudflat for fishing and feeding purposes at low tide. These are submerged during high tides and serve as aquatic habitat for numerous fish and other species. PCB- and PAH-contaminated sediment is thus potential habitat for a variety of ecological receptors, such as fish, shellfish and birds. PCBs and PAHs are known to accumulate in the tissues of exposed organisms. The exposed organisms are then available for consumption by humans in the food chain. PCBs generally bioaccumulate in exposed organisms; as such, hazardous substances at the Site pose a threat to human populations through the food chain.

§ 300.415 (b)(2)(ii) “Actual or potential contamination of drinking water supplies or sensitive ecosystems;”

Sediments contaminated with PCBs and PAHs have been identified in tidal mudflat areas of Stoney Creek and the Delaware River. Despite the industrialization of much of the surrounding area, this environment is habitat to a wide variety of aquatic and terrestrial organisms, including migratory birds and anadromous fish. Tidally exposed contaminated sediment provides ground for feeding birds such as herons and ducks. The submerged sediment provides habitat for bottom feeding fish and other lower trophic species known to be present near the Site. Pipes, seeps, and baseflow discharge of ground water contaminated with PCBs and PAHs enter Stoney Creek adjacent to the Metro Property. Samples collected in soils at the Site and sediments of Stoney Creek downstream to the mouth at the Delaware River suggest the contaminants are attributable to the Site. The contamination of the sediment in the available habitat and on-going releases from the Metro Property indicate the food chain is actively being impacted.

§ 300.415 (b)(2)(iv) “High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;”

Limited sampling of surface soil at the Metro Property indicates levels of PCBs and other hazardous substances that may migrate through surface water into Stoney Creek. These soils may migrate from the Metro Property during storm events. In addition to posing a threat to human receptors via incidental ingestion and inhalation of surface soil, these hazardous substances which exist at high concentrations in the Source Areas pose a current and potential threat to aquatic receptors (and hence humans through the food chain). Hazardous substances at high concentrations in deeper soils at the Metro Property may also migrate through the pipes and discharge directly to Stoney Creek.

§ 300.415 (b)(2)(viii) “Other situations or factors that may pose threats to public health or welfare of the United States or the environment; ”

Previous investigations at the Metro Property have identified buried drums. Additionally, previous operators of the Metro Property reportedly admitted that drums were indeed buried there. The contents and location of these drums are unknown. The location of the buried drums is predicted by geophysical surveys conducted by a prospective purchaser in 2005 and subsequently verified at at least two locations. The presence and contents of these drums present a potentially high hazard situation, an unknown situation (since drum contents are not known) and may be contributing to the high concentrations of hazardous substances migrating from the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response actions outlined in this Action Memorandum, may present an imminent and substantial endangerment to the public health, welfare, or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

The Removal Action proposed herein is intended to eliminate certain migration pathways (e.g., pipes) on the Metro Property which facilitate migration of hazardous substances into the environment. Additionally, the Removal Action includes the removal of soils at the Metro Property contaminated by high concentrations of PCBs and soils contaminated by high concentrations of NAPL which facilitate the migration of PCBs from the Metro Property through the ground water and seeps. Finally, the Removal Action intends to eliminate threats posed by the Crushed Drum Area at the Metro Property. Each of these actions will facilitate the overall environmental investigation and remedial activity planned by EPA at this Site.

These actions are expected to cost more than \$2 Million. The Site meets the criteria for exemption from the Statutory Limits identified at Section 104(c)(1)(C) of CERCLA. The Removal Action will contribute to the efficient performance of a future remedial action since it will quickly reduce the sources and concentrations of hazardous substances that may need to be addressed in the remedial action. Since the scope of any future remedial action will be reduced, its likely costs will be reduced.

The Removal Action will be consistent with any remedial action. The Removal Action will not result in the placement of covers or constructed features of any type to inhibit future remedial actions.

The Removal Action will result in the permanent removal of high levels of hazardous substances in the Source Areas currently releasing from the Site. The Removal Action will thus eliminate certain migration pathways from the Site, reduce the scope of a future remedial action, and provide for an immediate reduction of threat posed to human health or the environment.

VI. PROPOSED ACTIONS AND COSTS

The actions proposed in this Funding Request are intended to remove certain sources of contamination and remove or modify conveyances (e.g., pipes, culverts, sumps) in order to minimize migration of hazardous substances within and from the Site. The actions will not result in the complete removal of hazardous substances from the Metro Property. Instead, the response action focuses on high concentrations of hazardous substances (primarily PCBs and the PAHs found commingled with the PCBs) at the Metro Property along with high concentrations of NAPL which may facilitate the further migration of PCBs into and through the environment.

A. Proposed Actions

1. Mobilize/demobilize personnel and equipment.
2. Implement facilities and measures necessary to prevent access to the Source Areas by trespassers.
3. Implement erosion and sedimentation control features (e.g., silt fencing and vegetative cover) to minimize migration of hazardous substances from the Source Areas during implementation of the Removal Action.
4. Implement water management controls and actions, which may include (among other things) construction of berms and trenches and pumping and temporary collection and containment of potentially contaminated water, to minimize the migration of storm water into and from the Source Areas during performance of the Removal Action.
5. Treat waters accumulated as a result of #4, above, and discharge such waters to the local sewage treatment plant or, if such discharge is not feasible, dispose of waters off-Site in accordance with CERCLA 121(d)(3) and 40 C.F.R. §300.440.
6. Prepare and maintain temporary storage for hazardous substances generated during the Removal Action.
7. Locate, excavate, and remove pipes, drains, and related features (including surrounding soils impacted by pipes, drains, and related features) in and around the Source Areas through which hazardous substances may migrate. If a particular feature through which hazardous substances may migrate cannot be removed (e.g., active storm drain), investigate the cause or reason for the migration of hazardous substances into such feature (e.g., crack or interconnection) and repair the feature or takes steps to prevent hazardous substances from entering such feature.

8. Locate, excavate, and remove buried drums, drum carcasses, their contents and surrounding soils impacted by drum contents (e.g., as by NAPL) in and around the Source Areas.
9. Except as provided herein, excavate, and remove soil contaminated with PCBs in and around the Source Areas such that
 - (i) total PCB concentrations in remaining soils to a depth of 11 feet contain less than 50 mg/kg at any location in the subsurface (i.e., below 1 foot);
 - (ii) total PCB concentrations in remaining surface soils in the Source Areas (i.e., soils within the upper 1 foot of the surface) contain less than 25 mg/kg; and
 - (iii) total PCB concentration in remaining soils in the Source Areas containing NAPL contain less than 25 mg/kg.

Excavation to remove PCBs shall not compromise the stability of any structure. Excavation below the depth of underground water shall be dependent upon the ability to control movement of water into the excavated area as determined by the OSC.

10. Segregate excavated soils and debris based upon PCBs concentration (i.e., greater than 25 or 50 mg/kg) and the presence of NAPL.
11. Manage excavated soils and debris such that migration of water into or from the soils and debris is minimized.
12. Backfill excavated areas. Soils and debris such as brick, block, or rubble which contains PCBs less than 25 mg/kg and no evidence of NAPL may be used to backfill excavated areas.
13. Grade and cover backfill and remaining soil in a manner which re-establishes flow patterns existing at the time the Removal Action was initiated and promotes sheetflow of storm waters towards Stoney Creek.
14. Dispose off-site the hazardous substances (e.g., contaminated water, drums, drainage features, and PCBs, or NAPL-contaminated soils) removed pursuant to #7, #8, and #9, above, and other wastes associated with the Removal Action, in accordance with CERCLA 121(d)(3) and 40 C.F.R 300.440. Activities may include sampling, bulking, consolidating, drumming, pumping, or otherwise handling the hazardous wastes, hazardous substances, liquids, and wastes to ensure that they are properly transported.
15. Conduct continued removal site evaluation and sampling and/or analytical activities necessary to support the Removal Action.
16. Remove security measures installed pursuant to #2, above.

B. Contribution to Remedial Performance

The proposed Removal Action is not expected to be inconsistent with or hinder any Remedial Actions at the Site and will contribute to the efficient performance of any future remedial action. Remedial actions for the Site have not yet been selected. The proposed Removal Action will address

ongoing and direct releases of hazardous substances into the environment. Additionally, the Removal Action will address the mobilization of PCBs into the environment by removing high concentrations of this hazardous substance and removing nearby and commingled soils highly contaminated with NAPL. Finally, the proposed Removal Action will address unknown hazards and threats posed by the Crushed Drum Area. Implementation of the proposed Removal Action will therefore reduce the scope and cost of any future remedial action.

C. Compliance with ARARs

The Removal Action will attain applicable or relevant and appropriate requirements (ARARs) to the extent practicable given the exigencies of the situation. The OSC requested that PADEP provide any potential ARARs in an electronic message dated June 12, 2013. PADEP identified proposed ARARs in an electronic message dated June 24, 2013. Potential ARARs for this Removal Action may include federal Clean Water Act Ambient Water Quality Standards (relating to discharges to surface water); federal Clean Water Act effluent limitations (relating to discharges of treated water from a point source); Pennsylvania erosion control regulations (relating to erosion and sedimentation control activities); and Pennsylvania storm water management requirements (relating to measures needed to control storm water runoff). This list is not comprehensive; inclusion in this list does not constitute a determination by EPA that such requirements are in fact ARARs for the Removal Action.

D. Estimated Costs

The proposed distribution of funding is as follows:

Extramural Costs	Total
Regional Allowance Costs: (ERRS contractors and subcontractors)	\$ 3,923,600
Other Extramural Costs Not Funded from the Regional Allowance: START Contractor	\$ 127,500
TOTAL REMOVAL ACTION PROJECT CEILING	\$ 4,051,100

VII. EXPECTED CHANGE IN SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If no action is taken or the action is delayed to address the Source Areas as described in this Action Memorandum, hazardous substances from the Source Areas will continue to release into the environment and present an imminent and substantial endangerment to the public health, welfare, or the environment.

VIII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues pertaining to the Site.

IX. ENFORCEMENT

The EPA Region III Office of Enforcement has been provided with all background information available regarding this Removal Action to pursue enforcement actions pertaining to the Site. The Confidential Enforcement Addendum is included as Attachment B.

The total EPA costs for this Removal Action based upon full-cost accounting practices that will be eligible for cost recovery are estimated to be \$ 7,419,116.²

Direct Extramural Costs	\$ 4,051,100
Direct Intramural Costs	\$ 160,000
Total, Direct Costs	\$ 4,211,100
Indirect Costs (76.18 % x Direct Costs)	\$ 3,208,016
Estimated EPA Costs for a Removal Action	\$ 7,419,116

²Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

X. RECOMMENDATION

This Action Memorandum decision document represents the recommended Removal Action for the Metro Container Corporation Superfund Site in Trainer, Delaware County, Pennsylvania, developed in accordance with CERCLA as amended, and not inconsistent with the NCP. Conditions at the Site meet the NCP Section 300.415(b)(2) factors for a removal and the CERCLA Section 104(c)(1)(C) consistency exemption from the \$2 Million limitation, and I recommend your approval of the Removal Action and \$2 Million exemption. The total project ceiling will be \$ 4,015,100. Of this, an estimated \$ 3,923,600 comes from the Regional Removal Allowance.


Action by the Approving Official:

This Action Memorandum represents the selected Removal Action for continuing the Removal Action at the Metro Container Corporation Superfund Site in Trainer, Delaware County, Pennsylvania, developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the Site.

Pursuant to Section 113(k) of CERCLA, 42 U.S.C. 9613(k) and EPA Delegation No. 14-22, I hereby establish the documents identified in Attachment C hereto as the Administrative Record supporting the issuance of the Action Memorandum.

I have reviewed the above-stated facts and based upon those facts and the information compiled in the documents described above, I hereby determine that the release or threatened release of hazardous substances at and/or from the Site presents or may present an imminent and substantial endangerment to the public health or welfare or to the environment. I concur with the Removal Action at the Metro Container Corporation Superfund Site as outlined in the Action Memorandum and the exemption of this action from the \$2 million limitation on Removal Actions under CERCLA Section 104(c)(1)(C).

APPROVED: _____


Dave Wright, Associate Director
Office of Preparedness and Response
EPA Region 3

DATE: _____

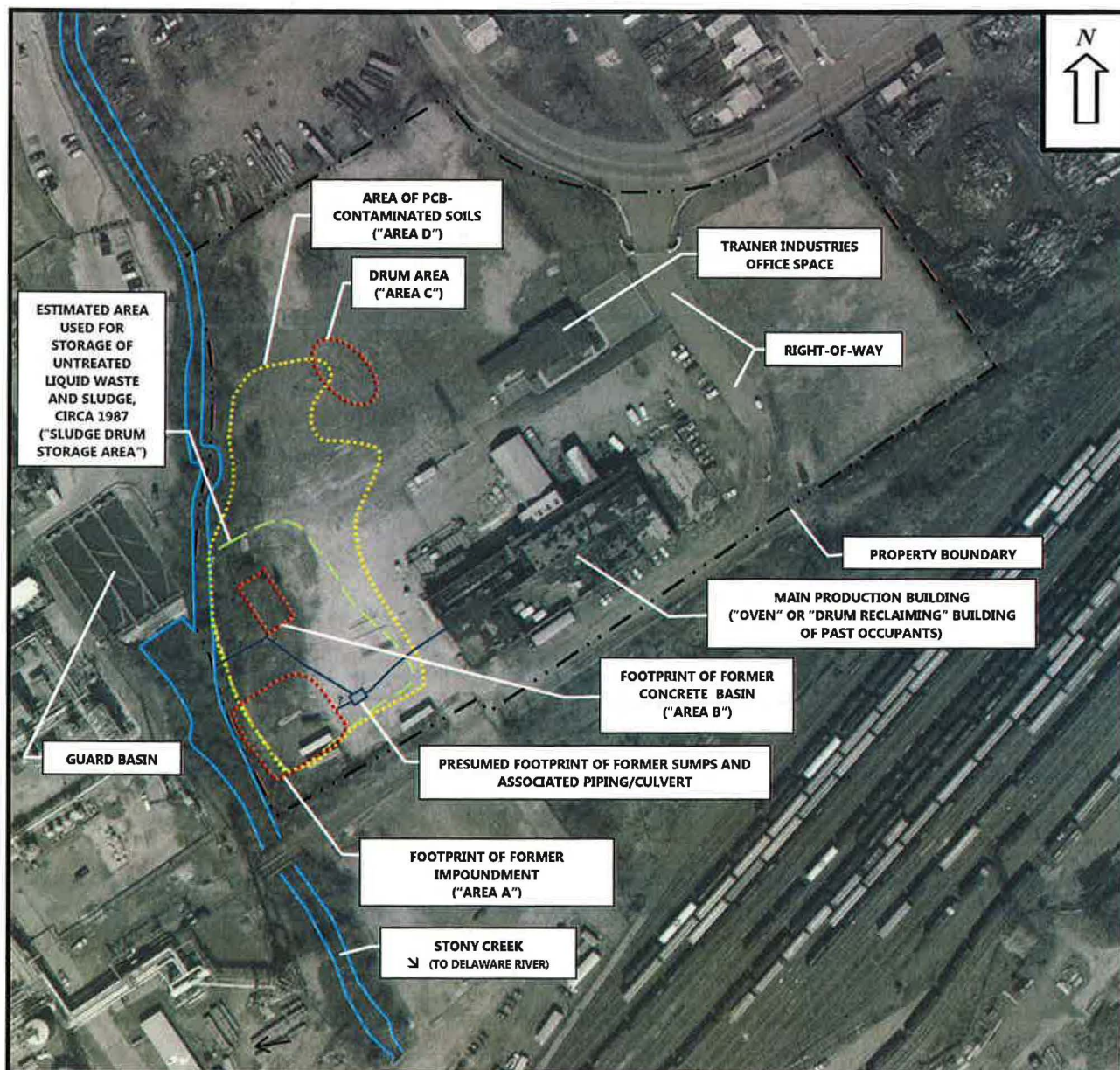
8/26/13

Attachments:

- A. Site Map
- B. Enforcement Confidential Memo
- C. Administrative Record documents

ATTACHMENT A

SITE MAP



Note: Extents of Area C and Area D are approximate based on analytical results and test trenching, respectively, and outlined in greater detail in Administrative Record documents. Magnetic anomalies suggest Area D may be more expansive than depicted.

**FIGURE 1
SITE MAP**

**METRO CONTAINER CORPORATION SUPERFUND SITE
TRAINER, DELAWARE COUNTY, PENNSYLVANIA**

(SCALE 1:1,900)

ATTACHMENT B
ENFORCEMENT CONFIDENTIAL MEMORANDUM

[Reserved/Confidential.]

ATTACHMENT C

LIST OF ADMINISTRATIVE RECORD DOCUMENTS

- [1] Buchman, M.F. 2008. NOAA Screening Quick Reference Tables, NOAA OR&R Report 08-1, Seattle, WA, Office of Response and Restoration Division, National Oceanic and Atmospheric Administration, 34p.
- [2] ConocoPhillips Company. 2005. "Site Characterization Report, Trainer Industries, LLC/Former Metro Container Corporation, Trainer, Pennsylvania." Prepared by MWH Americas, Inc. November 11.
- [3] U.S. Environmental Protection Agency. 1989. "Federal On-Scene Coordinator's Report, Metro Container Site, Trainer, Delaware County, Pennsylvania, CERCLA Removal Action/RP Takeover, September 19, 1988 through June 2, 1989."
- [4] U.S. Environmental Protection Agency. 2006. Region III BTAG Marine Screening Benchmarks. <http://www.epa.gov/reg3hwmd/risk/eco/btag/sbv/marine/screenbench.htm>. July. Page accessed August 1, 2013.
- [5] U.S. Environmental Protection Agency. 2006. Region III BTAG Freshwater Screening Benchmarks. <http://www.epa.gov/reg3hwmd/risk/eco/btag/sbv/fw/screenbench.htm>. August. Page accessed August 1, 2013.
- [6] U.S. Environmental Protection Agency. 2007. "Trip Report for the Metro Container Site." Prepared by Tetra Tech EM Inc. EPA Contract No. EP-S3-05-02.
- [7] U.S. Environmental Protection Agency. 2009. "Final Trip Report for the Metro Container 2008 Sediment Sampling Event." Prepared by Tetra Tech EM Inc. EPA Contract No. EP-S3-05-02.
- [8] U.S. Environmental Protection Agency. 2010. "Final Trip Report, June 2010 Soil and Sediment Sampling Event, Metro Container Site, Trainer, Delaware County, Pennsylvania." Prepared by Weston Solutions, Inc. EPA Contract No. EP-S3-10-05.
- [9] U.S. Environmental Protection Agency. 2013. "Pollution Report 50, Metro Container Corporation NPL Site, 2nd and Price Street, Trainer, Delaware County, PA 19061." July 10.
- [10] U.S. Environmental Protection Agency. 2013. Regional Screening Levels (RSL) for Industrial Soil. http://www.epa.gov/reg3hwmd/risk/human/rb-/concentration_table/Generic_Tables/docs/indsoil_sl_table_01run_MAY2013.pdf. July. Page accessed August 1, 2013.
- [11] U.S. Environmental Protection Agency. 2013. Regional Screening Levels (RSL) for Soil to Groundwater. http://www.epa.gov/reg3hwmd/risk/human/rb-/concentration_table/Generic_Tables/docs/soil2gw_sl_table_01run_MAY2013.pdf. August. Page accessed August 1, 2013.