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RACER TRUST

GROUNDWATER REMEDIAL ACTION WORK PLAN AND CORRECTIVE MEASURES STUDY PROPOSAL

Former Hyatt Clark Industries Site
Clark, New Jersey
ISRA Case No. E87769
Program Interest No. 001205

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1 INTRODUCTION

On behalf of Revitalizing Auto Communities Environmental Response Trust (RACER Trust), Arcadis U.S., Inc. (Arcadis) has prepared this Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal (RAWP/CMSP) for the former Hyatt Clark Industries Site, located in Clark, New Jersey (the Site). The site location is shown on **Figure 1**. RACER Trust is conducting remediation at the Site pursuant to a 1989 Administrative Consent Order (ACO under the Environmental Cleanup and Responsibility Act/Industrial Site Recovery Act [ECRA/ISRA] Case No. 87769) entered into by General Motors Corporation (GMC) with the New Jersey Department of Environmental Protection (NJDEP) and a 2010 bankruptcy settlement agreement (Settlement Agreement) between MLC, the U.S. Environmental Protection Agency (USEPA), and the State of New Jersey, dated October 20, 2010. On March 31, 2011, as stipulated in the Settlement Agreement, the Site real property assets and cleanup funding were transferred to the RACER Trust. The bankruptcy settlement transferred the responsibility for remedial cleanup to RACER Trust.

The Site is under traditional oversight by the NJDEP because of its obligations under the RCRA. However, NJDEP required RACER Trust to hire a Licensed Site Remediation Professional (LSRP) for remediation of the Site, which was not accounted for in the Remediation Cost Estimate Summary (RCES) for the Site. Accordingly, RACER Trust and NJDEP agreed that LSRP expenses would be funded through the Agency Oversight funding task established in the RCES because of the associated reduction in NJDEP oversight resources.

Arcadis has prepared this RAWP/CMSP in accordance with the NJDEP Technical Requirements for Site Remediation (TRSR), New Jersey Administrative Code (N.J.A.C.) 7:26E. A copy of the required Traditional Oversight Report Certification Form is provided **Appendix A**. A copy of the Case Inventory Document (CID) and CID Figure are provided in **Appendix B**.

1.1 On-Site Soil Remedial Action

The RAWP for Soil was submitted in October 1998 and approved by NJDEP in February 1999. The remedial action for soil consisted of the excavation and off-site disposal of impacted soil and installation of a 30-acre multi-layer cap system that was completed in April 2000. The cap system engineering control was complimented with the soil cover system installed as part of redevelopment of the Site into a golf course. These systems effectively mitigate the Direct Contact and Impact to Ground Water (IGW) pathways by containing and stabilizing contaminants. Before installation of the cap system, several areas of the Site were subject to remedial action via direct excavation of soil and off-site disposal. A Deed Notice was filed with Union County in November 2002. On March 7, 2014, NJDEP issued a Soil Remedial Action Permit for the Deed Notice and engineering control. RACER has prepared and submitted Annual Post-Construction Site Inspection Reports and Biennial Certification Monitoring Reports, as required by the Deed Notice and the permit, respectively. The limits of the cap system, installed before golf course construction, are shown on **Figure 2**. The Toxic Substance Control Act (TSCA) requirements for on-site PCB impacts were satisfied through a risk-based disposal plan, which was approved by USEPA in a letter dated September 3, 2002,

1.2 Off-Site Soil Remedial Action

PCBs were detected in soil along the inactive rail line which is located immediately south of the site. The PCBs extend onto a small area of a commercial property immediately south of the inactive rail line. In 2005, GM conducted a soil remedial action that included removal of approximately 200 cubic yards of soil impacted with the highest polychlorinated biphenyl (PCB) levels encountered along the inactive rail line. Supplemental off-site investigations of PCB-impacted soil occurred, and the extent of the off-site PCB-impacted area has been delineated. Although this RAWP/CMSP is for groundwater, supplemental remedial action for soil is necessary to address off-site PCB impacts. The remedial action will be conducted to achieve USEPA and NJDEP requirements as described in the Self Implementing Cleanup and Disposal Plan (SICDP). For completeness and for reference, a copy of the SICDP and USEPA approval letter is provided in **Appendix D**

2 SUMMARY OF THE FINDINGS AND RECOMMENDATIONS FROM THE GROUNDWATER REMEDIAL INVESTIGATION

Remedial Investigation (RI) activities for groundwater impacts have been performed at the Site from 1988 through 2019. A network of on-site and off-site monitoring wells has been installed in the overburden, shallow bedrock, and deep bedrock. The monitoring well locations are shown on **Figure 2**. Multiple rounds of quarterly, semi-annual, and annual groundwater monitoring were conducted from 1988 through 2019. Data collected as part of the RI have been used to characterize the shallow (overburden and shallow bedrock) and deep bedrock geology, hydrogeology, groundwater quality, and the fate and transport of constituents of concern (COCs).

The scopes of work and results of the RI have been reported in previous submittals. Most recently, the NJDEP approved the Groundwater Remedial Investigation Report (Arcadis 2016) in a letter dated November 20, 2019. The following sections provide a summary of the RI findings and recommendations.

2.1 Free Product – AOC 12A

The section summarizes the remedial investigation of free product and the interim remedial measures implemented to recover free product.

2.1.1 Free Product Investigation and Pilot Tests

A comprehensive remedial investigation of free product was conducted in phases. The results of the investigation are summarized on **Figure 3**. The initial phases that began in 1988 included drilling 136 soil borings and installing 15 monitoring wells. Product was observed in three monitoring wells. In 1994, the extent of product was investigated by drilling 55 slotted auger borings in areas around monitoring wells that contained free product. Borings were first drilled adjacent to the wells, then radially outward until product was no longer observed in the slotted augers. Free product was observed at 24 of the 55 slotted auger boring locations. At most locations, the product thicknesses observed were less than 0.01 foot. Product thicknesses exceeding 0.05 foot were observed in the central and southwest-central portion of the Site.

In 1995, four soil borings were drilled in overburden to further delineate product extent where the greatest product thicknesses were observed in slotted augers. Continuous bedrock cores were also collected at three soil boring locations to determine the physical characteristics of the bedrock and to evaluate if product was present in bedrock.

In 1996, three bedrock observation wells and 14 overburden observation wells were installed to further delineate product in overburden and bedrock, establish an observation well network for monitoring product-bearing zones, and collect data for design of a product recovery system. The observation well locations and depths were based on the collective results of all previous phases of investigation. Product in overburden was prevalent under the southwest-central portion of the Site. Product in bedrock was concentrated under the central portion of the Site. Four product samples were collected from the observation wells to characterize the physical and chemical properties of the product. The product varied in visual appearance from a dark brown viscous product to a brown product. Based on the analytical results, the product is similar to AW Machine Oil 22 and heat transfer oil (specific gravity of 0.88).

In 1997, product recovery pilot tests were conducted using total fluids pumping and vacuum enhanced recovery (VER). The pilot tests were performed to address the following objectives:

- Evaluate the effectiveness of depressing the groundwater table as a means of increasing product recovery.
- Evaluate product recovery rates by comparing historical data (manual skimming) to the pilot test results (total fluids pumping and VER).
- Evaluate the effectiveness of VER as a means of enhancing product recovery.
- Collect data to assist in developing a full-scale product recovery system.

Total-fluids-pumping pilot tests were performed in 12 wells using a pneumatic total fluids pump to extract both product and groundwater. Recovery was achieved in wells located in the central and southwest-central portions of the Site. The pilot tests demonstrated that wells located in remote areas (MW-15, MW-20, and OW-34) did not produce recoverable amounts of product.

Vacuum enhanced recovery (VER) pilot tests were also conducted in two wells. The results of the VER pilot test demonstrated that product recovery rates remained the same or increased slightly compared to total-fluids-pumping. Based on these results, total-fluids-pumping was selected as the technology for the product recovery system because of its effectiveness and ability to implement.

In 1999, six overburden test wells and six bedrock test wells were installed in the southwest-central portion of the Site to further delineate and recover product. Each well was pilot tested using total fluids pumping to determine if the well would produce recoverable amounts of product. Based on the results of the pilot testing, seven additional overburden test wells and 11 additional bedrock test wells were installed in the central and southwest-central portions of the Site. These wells were installed, and pilot tested using the same procedures as the initial six wells. Four overburden wells and five bedrock wells produced recoverable amounts of product. These wells were connected to the product recovery system. Nine wells were abandoned, and 12 were kept as piezometers and product monitoring points.

In 2012, three overburden wells (OW-84, OW-85, and OW-86S) and one shallow bedrock well (OW-86D) were installed to supplement the existing network of wells and borings used to delineate free product. In

addition, an overburden well (OW-34R) was installed to complement existing well OW-34 because its screened interval does not straddle the water table. Wells OW-84, OW-85, and OW-86S do not contain product. Well OW-86D was product free until a small amount of product was observed in 2019. Well OW-34R contained product shortly after installation. The product in wells OW-86D and OW-34R is recovered via sorbent socks.

The distribution of free product in groundwater is within the site boundaries, primarily limited to the southwest-central portion of the Site. The locations of the free product occurrence in groundwater, the free product delineation boundary, and the observation well network layout are shown on **Figure 3**.

2.1.2 Free Product Recovery IRMs

The initial product recovery efforts involved product skimming. Total fluids product recovery was then implemented through an interim system, and then a final system was incorporated concurrent with the soil remedial action and redevelopment of the Site. The progression of work associated with product recovery is summarized in this section.

2.1.2.1 Initial Product Recovery

From 1992 through 1996, a product skimming system was used to recover product from six overburden and three bedrock wells. Approximately 2,500 gallons of product were recovered from product skimming. Initial product recovery data and the pilot test results were used to develop the plan for the interim product recovery (IPR) system.

In 1997, the IPR system began recovering product from a network of six wells in the central and southwest central portions of the Site and one well in the eastern portion of the Site. In 1999, nine wells, located in the central and west central portion of the Site, were added to the IPR system. One well located in the eastern portion of the Site was removed because it no longer produced or contained product. The system included total fluids product recovery from nine overburden wells and six shallow bedrock wells. In April 2001, operation of the IPR system was terminated to allow for construction of the Final Product Recovery (FPR) system and building.

2.1.2.2 Final Product Recover System

The FPR System includes total fluids pumping from 16 wells: nine overburden wells (OW-22, OW-25M, OW-27, OW-28S, OW-29, OW-47, OW-49, OW-58, and OW-66) and seven shallow bedrock wells (OW-28D, OW-52D, OW-53D, OW-58D, OW-59D, OW-75D, and OW-77D). The piping for the FPR System (fluids and compressed air) was installed below grade and above the cap system liner. The total fluids piping is secondarily contained. Piping from the 16 wells is routed to two distribution boxes that house valves and connections. Piping from the distribution boxes lead to the treatment building located in the western portion of the Site near the golf course maintenance area. The layout of the recovery wells, piping, and distribution boxes is shown on **Figure 4.**

The FPR treatment system is inside the treatment building and includes an equalization tank, oil/water separator and wet well unit, oil skimmer, product tank, bag filters, anthracite clay unit, and two granular activated carbon units. Product separated in the oil/water separator is stored in a 1,000-gallon, double-walled, steel aboveground storage tank. Product is also stored in a separate 3,000-gallon steel

aboveground storage tank. A 9,000-gallon polyethylene storage tank holds the treated groundwater before discharge. The process and instrumentation diagram for the FPR system is shown on **Figure 5**

The treated effluent from this system is discharged to the on-site irrigation/infiltration system (**Figure 6**) through New Jersey Pollutant Discharge Elimination System (NJPDES) discharge permit (Permit No. NJ8000352), issued for the Site on November 4, 2004. In accordance with the permit, grab samples are collected quarterly from the influent and effluent sample ports for the analysis of total manganese using USEPA Method 200.7 and permit-specific volatile organic compounds (VOCs). The monitoring data are reported in Semi-annual Influent/Effluent Monitoring reports, which are submitted to NJDEP.

Within the zone of capture, the recovery system has effectively contained free-phase product. The FPR system has been operating for approximately 21 years. To date, approximately 63,000 gallons of product have been recovered from the Site. The product recovery rate during the initial year of operation exceeded 15 gallons per day. The current product recovery rate is approximately 4 to 5 gallons per day. The free product recovery results are presented in **Table 1**. The system has remained operational over the past 21 years with regular maintenance and system carbon/clay changeouts.

2.1.2.3 Passive Product Recovery

Several wells located outside the direct influence of the recovery system contain minimal amounts of free product, which is managed using in-well sorbent socks to recover product (**Figure 2**). Based on product recovery testing, the quantity and recoverability of free-phase product from these wells is significantly less than wells within the zone of capture. Currently, these wells are periodically gauged (typically monthly, access permitting) and the socks are replaced as needed. The gauging data for 2018 and 2019 are presented in **Table 2.**

2.1.3 Product Sampling and Characterization

In 1991, product samples were collected from Wells MW-15 and MW-22. Chlorinated VOCs (CVOCs) and PCBs were detected in these product samples. In 1996, additional product samples were collected from wells OW-25M, OW-28S, OW-28D, and OW-29. CVOCs were not detected in these product samples.

The free product sample from Well MW-15 contained the highest concentrations of CVOCs. Interim remedial measures successfully removed product from the well to the point where MW-15 is product-free. Post-IRM sampling of MW-15 shows no CVOC or VOC dissolved-phase impacts in groundwater.

The product sample from Well MW-22 contained one CVOC (1,1-dichloroethene [1,1-DCE]) and benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds. Groundwater samples were not collected from Well MW-22 (or its replacement well OW-22) because the well contains product. Groundwater samples from wells located near well MW-22 (OW-24, OW-26S, OW-25S, and OW-46) were periodically sampled during the semi-annual groundwater monitoring events when they did not contain free product. Samples from these wells contain trace to non-detect concentrations of CVOCs in groundwater.

In response to NJDEP's Remedial Investigation Report (RIR) comments, product samples from wells OW-22, OW-25M, and OW-28D and the FPR system product holding tank were collected in December 2017 and analyzed for VOCs and PCBs. Collection of a product sample from wells OW-28S and OW-29

was attempted, but OW-29 did not contain product, and the product/water level in OW-28S was not accessible because it was below the downhole pump assembly associated with the FPR system.

CVOCs typically detected in groundwater at the Site were not detected in the 2017 product samples. BTEX, chlorinated benzene compounds, bromomethane, chloromethane, and isopropyl benzene were the primary compounds detected in the 2017 product samples. The concentrations ranged from 0.1 to 3.9 milligrams per kilogram (mg/kg). The analytical reporting limits for the 2017 product analysis were typically an order-of-magnitude less than the reporting limits for the 1991 and 1996 samples. PCBs were detected in the 2017 product samples at concentrations ranging from 34.8 to 388 mg/kg. The PCB concentration range is comparable to the 1991 and 1996 product samples. The product analytical results are presented in **Table 3**.

Based on the historical and recent product sampling results, and groundwater quality data from wells within and adjacent to the product area, the petroleum free-phase product is not a source of dissolved-phase CVOCs in groundwater and, generally, not a significant source of dissolved-phase impacts to groundwater.

2.2 Groundwater – AOC 12B

The scope of work for the investigation of dissolved-phase groundwater impacts and hydrogeology of the overburden and bedrock are presented in the following sections. The groundwater quality results for the overburden and shallow bedrock are shown on **Figure 7,** and the groundwater quality results for the deep bedrock are shown on **Figure 8**.

The groundwater investigation culminated in an understanding of the fate and transport of dissolved-phase impacts considering the high-rate and long-duration pumping of three former on-site production wells and two former off-site production wells (located at the former U.S. Gypsum facility), the off-site sources of dissolved-phase impacts, the structural hydrogeologic framework of the bedrock, and the deep bedrock groundwater extraction/reinjection system located near the Site, adjacent to one of the off-site sources. This understanding formed the basis of the Conceptual Site Model and provided the framework for delineating the site-related dissolved-phase plume and establishing (by the NJDEP) the groundwater Classification Exception Area.

2.2.1.1 Initial Investigation

As part of the initial phases of work, conducted from 1988 through 1995, 23 monitoring wells were installed and sampled. The initial investigation was focused primarily on defining the overburden groundwater quality and investigating the extent of free product. The primary constituents detected in the overburden groundwater were CVOCs. The highest concentrations of CVOCs were detected in the southwestern portion of the Site.

2.2.1.2 Groundwater Remedial Investigation

A groundwater RI was conducted from 1995 through 1996. The groundwater RI included installing and sampling three shallow bedrock wells to investigate shallow bedrock groundwater quality. In addition, 17 free product observation wells were installed to further delineate product extent beneath the Site. Observation wells that did not contain free product were sampled for groundwater quality. The primary

constituents detected in the overburden and the shallow bedrock were CVOCs. Consistent with the results of the initial investigation, the highest concentrations of CVOCs were detected in the southwestern portion of the Site.

2.2.1.3 Supplemental Groundwater Remedial Investigation

A supplemental groundwater RI was conducted in 1997. The work included installation of four overburden and five shallow bedrock wells. The wells further delineated VOC-impacted groundwater in overburden and bedrock. To assess the natural attenuation potential in groundwater, samples from select wells were analyzed for biogeochemical parameters. The work also included sampling of two U.S. Gypsum production wells, located southeast of the Site (across Raritan Road), to evaluate groundwater quality in the vicinity of the Site. The investigation further delineated VOC-impacted groundwater in overburden and shallow bedrock.

2.2.1.4 Off-Site Overburden Monitoring Well Installations

In response to the results of a groundwater investigation conducted by others on a property adjacent to and southwest of the Site, which showed elevated concentrations of VOCs in samples collected from temporary monitoring wells, six off-site overburden wells (MW-40 through MW-45) were installed and sampled in 1998. CVOCs were detected in these well at concentrations greater than standards.

2.2.1.5 Deep Bedrock Investigation

In 1998, a deep bedrock investigation was conducted to investigate the hydrogeology and groundwater quality of deeper portions of the bedrock. The investigation included tasks that characterized the bedrock structural framework (i.e., strike and dip of bedding) and evaluated its influence on groundwater flow.

The investigation included drilling of three pilot holes that were installed to 350 feet below land surface (bls) to accommodate bedrock coring, geophysical logging, selective-zone sampling, specific capacity testing, water level monitoring, and well installation in the deep bedrock. Information collected from the pilot holes was used to select intervals for deep bedrock monitoring wells. Seven deep bedrock wells were installed with screen intervals that coincided with selective-zone sampling intervals where both groundwater impacts and transmissivity were elevated.

To characterize groundwater quality and determine groundwater flow direction in the deep bedrock, groundwater samples and water level measurements were collected from newly installed wells.

2.2.1.6 Supplemental Deep Bedrock Investigation

The objective of the supplemental deep bedrock investigation was to provide additional groundwater quality and hydraulic data along the strike and dip of the deep bedrock. The investigation included installation of three pilot holes, including one pilot hole near the former production well HCI-3. Pilot holes were installed to depths of 350 to 500 feet bls to accommodate geophysical logging, selective-zone sampling, water level monitoring, and well installation in the deep bedrock.

Information collected from the pilot holes was used to select intervals for monitoring wells. The objectives of the wells were to characterize the groundwater quality and provide water elevation data for the deep

bedrock. Three deep bedrock wells were installed with screen intervals that coincided with selective-zone sampling intervals where both groundwater impacts and transmissivity were elevated.

2.2.1.7 Off-Site Deep Bedrock Investigation

Additional investigation of deep bedrock groundwater included installation of two off-site deep bedrock monitoring wells, which were drilled to a depth of approximately 350 feet bls, followed by downhole geophysical logging, selective-zone packer testing, and installation of a FLUTe® multi-port monitoring systems in the boreholes. These wells were used to characterize upgradient groundwater quality in the deep bedrock and further define groundwater flow direction in deep bedrock.

2.2.1.8 Groundwater Monitoring

Site-wide semi-annual groundwater monitoring was initiated in 1994 and was reduced to annual groundwater monitoring in September 2010. Groundwater quality was monitored in the overburden, shallow bedrock, and deep bedrock. On-site and off-site monitoring wells were included in the program. Groundwater samples were analyzed for VOCs and PCBs. Each event included water level and product thickness measurements.

2.2.1.9 Kerry Groundwater Extraction/Reinjection System

The Kerry facility is located adjacent to one of the off-site source sites (the former AT&T Submarine Systems site, a known source of background CVOC contamination to bedrock groundwater). Both sites are located upgradient of the Hyatt-Clark Site. The Kerry facility's non-contact cooling water system comprises three 300-foot-deep wells (one used for extraction, two for reinjection). Records indicate that the system operates continuously, with only periodic downtime. The widespread distribution of the AT&T VOC plume appears to be the consequence of the forced injection into deep bedrock by the neighboring Kerry injection wells, the lateral spreading to the Hyatt-Clark Site associated with anisotropy in the bedrock, and then the ambient flow through bedrock. This conclusion is supported by the results of sampling, conducted by the NJDEP, of the Kerry extraction well. The sampling results showed VOC impacts coming on to the Hyatt Clark Site are consistent with the groundwater impacts from the AT&T site.

2.2.1.10 Nature and Extent of Groundwater Impacts

The principal COCs in groundwater are CVOCs, chiefly, the compounds tetrachloroethene (PCE), trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and several daughter products formed from these compounds. The daughter products are frequently a major component of the VOC mixture detected at the Site. The daughter products include cis-1,2-dichloroethene (cis-1,2-DCE), vinyl chloride, 1,1-dichloroethene (1,1-DCE), and 1,1-dichloroethane (1,1-DCA).

The apparent primary origin of CVOCs detected in shallow groundwater is the former maintenance building and drum storage area formerly located near the southwestern portion of the Site (**Figure 2**). No significant unsaturated zone concentrations of CVOCs were found anywhere on the Site. However, the drum storage area and maintenance building were known to manage CVOC-containing materials, and this area corresponds with the highest concentrations of CVOCs detected in shallow groundwater.

Results of off-site RI activities indicate the presence of substantial off-site sources of CVOCs to the shallow and deep bedrock aquifer, confirmed by off-site groundwater sampling results and monitoring results from multiple current and former industrial properties in the vicinity of the Site. Groundwater conditions in the Site area are complex. Investigation results show that Hyatt Clark's contribution to an area-wide comingled VOC plume is significantly smaller compared to off-site sources, both in terms of source mass and geographic distribution.

The groundwater investigation culminated in an understanding of the fate and transport of dissolved-phase impacts considering the high-rate and long-duration pumping of three former on-site production wells and two former off-site production wells (located at the former U.S. Gypsum facility), the off-site sources of dissolved-phase impacts, the structural hydrogeologic framework of the bedrock, and the deep bedrock groundwater extraction/reinjection system located near the Site, adjacent to one of the off-site sources. This understanding formed the basis of the Conceptual Site Model and provided the framework for delineating the site-related dissolved-phase plume. As part of the RI, a Classification Exception Area/Well Restriction Area (CEA/WRA) for the Site groundwater impacts was established, by the NJDEP, to serve as an institutional control to protect potential receptors from exposure to constituents in groundwater at concentrations greater than the Ground Water Quality Criteria (GWQC).

2.3 PCBs in Off-Site Soil

In 2005, a soil remedial action was conducted on the Conrail Bloodgood railroad track property located off site adjacent to the southwest Site boundary. The remedial action consisted of excavation and off-site disposal of soil exhibiting PCB impacts greater than 50 mg/kg. In December 2016 and January 2017, additional soil borings were advanced to further delineate the PCB-impacted area to the NJDEP Residential Direct Contact Soil Remediation Standards. A full discussion of the results and findings of this work is provided in **Appendix C** and summarized in **Section 3.0**.

2.4 Receptor Evaluation and Conceptual Site Model

This section presents a summary of the receptor evaluation and the conceptual site model, which were fully presented in the remedial investigation report and several meetings with the NJDEP case team.

2.4.1 Receptor Evaluation

As part of the RI, a land use, vapor intrusion, groundwater, and ecological Receptor Evaluation (RE) was conducted. The RE is summarized in this section.

2.4.1.1 Land Use

The Site is situated in a mixed commercial, light industrial, and residential setting. Current land use at the Site is recreational, considering the Site's redevelopment into the Hyatt Hills Golf Complex. The land use within 200 feet of the Site includes residential and mixed commercial and industrial. Sensitive populations/uses (i.e., residential) are identified within 200 feet of the Site. However, there are no complete pathways for the Site's COCs to these receptors. The existing on-site engineering control (multi-layer impermeable cap system) and institutional control (Deed Notice) are effective in protecting human health and the environment.

2.4.1.2 Vapor Intrusion

Vapor intrusion (VI) investigations were conducted in the U.S. Gypsum administration building, a commercial building located southwest of the Site, and the Hyatt Hills Golf Complex clubhouse building located on the Site. The VI sampling results showed that the groundwater to sub-slab soil gas pathway is not complete in that groundwater is not impacting the quality of sub-slab soil gas. As such, the VI pathway is incomplete.

2.4.1.3 Groundwater

No private potable or irrigation wells are located within the 0.5-mile well search radius. Consequently, no sampling of potable or non-potable use wells was conducted. Empirical data from the RI and the fate-and-transport modeling characterized the nature and extent of groundwater impacts, which, combined with the results of the groundwater RE, show that the groundwater ingestion pathway is not complete.

2.4.1.4 Ecological

The ecological evaluations conducted for the Site did not indicate the need for an ecological investigation. There are no threatened or endangered species in the immediate vicinity of the Site, nor are there any significant populations of terrestrial game species. In addition, the soil remedial action (cap system) eliminates direct exposure pathways. The Rahway River is located approximately 2,000 feet to the southeast of the Site. The fate-and-transport analysis conducted for the CEA demonstrates that Hyatt Clark-sourced impacts will naturally attenuate before reaching the Rahway River. Therefore, the groundwater to surface water pathway is incomplete.

2.4.2 Conceptual Site Model

The receptor evaluation, summarized in the previous section, serves as a conceptual site model (CSM) for sources, pathways, and potential receptors. Only when all three components are present can receptors be exposed to COCs. As discussed in the previous section, either the pathway is incomplete, or a receptor is not present. Therefore, there is no exposure to the Site's COCs.

A conceptual model for groundwater was developed based on the remedial investigation findings to facilitate a better understanding of groundwater flow, the fate and transport of the Site's COCs, and contributions to groundwater impacts from upgradient off-site sources.

Dissolved CVOCs sourced from the former Hyatt Clark Site are present in a complex, commingled overburden and bedrock plume, to which the former AT&T Submarine Systems site appears to be the most significant source. Historical industrial water-supply pumping, which largely contained the Hyatt Clark-sourced plume, contributed to spreading of the AT&T plume and explains, along with the extraction and reinjection at the Kerry facility, the current broad distribution of CVOC impacts in bedrock in the site vicinity.

Although the extent of CVOC-impacted groundwater in the site vicinity has not been fully delineated, the nature and extent of the Hyatt Clark-sourced CVOCs in groundwater have been characterized. The bedrock groundwater impacts sourced from the Hyatt Clark Site have migrated southeast from the on-site source areas, drawn in that direction by the U.S. Gypsum supply wells (between 1988 and 2010) and more recently under the natural gradient toward the Rahway River. As discussed above, Hyatt Clark-

sourced impacts will naturally attenuate before reaching the River. Based on the fate-and-transport analysis and the CSM, the extent and future transport patterns of bedrock groundwater impacted by Hyatt Clark sources are understood sufficiently to conclude that there are no complete human health or ecological pathways.

3 SUPPLEMENTAL SOIL REMEDIAL INVESTIGATION FOR OFF-SITE PCB DELINEATION

In December 2016 and January 2017, soil borings were advanced to further delineate the PCB-impacted area. Soil samples were collected to horizontally and vertically delineate the PCB impacts to the NJDEP Residential Direct Contact Soil Remediation Standard of 0.2 mg/kg. Samples were collected from intervals ranging from 0 to 0.5 ft bgs to 8.5 to 9.0 ft bgs.

Due to the exceedances of the NJDEP Impact to Groundwater (IGW) standards, samples for Synthetic Precipitation Leaching Procedure (SPLP) were used to develop an SSIGW SRS. Six locations that exhibited a high range of PCB concentrations were resampled/reanalyzed for total PCBs and analyzed using the SPLP method. A full discussion of the results and findings of this work is provided in **Appendix C.**

Based on the historic and recent sampling results, the horizontal and vertical extents of the PCB soil impacts have been delineated to the NJDEP SRS of 0.2 mg/kg. In addition, an SSIGW SRS of 50.7 mg/kg for PCBs was developed. These results have been used to develop the remedial action plan for the PCB impact in this area.

4 REMEDIAL ACTION PLAN AND CORRECTIVE MEASURES STUDY

This section describes the plan for remedial action and includes information on the evaluation of corrective measures for product and groundwater. The corrective measures evaluation was based on the results and findings of the product interim remedial measures, product recovery pilot tests, and the groundwater RI.

4.1 Free Product – AOC 12A

Based on the findings and recommendations of the RI, Area of Concern (AOC) 12A - Free Product requires remedial action. Previous remedial actions (interim remedial actions) for free product in groundwater included product recovery via total-fluids pumping, skimming, and sorbent socks.

As discussed in **Section 2.1.1**, product recovery pilot tests were conducted using total-fluids pumping and VER. The pilot tests were performed to evaluate the feasibility and effectiveness of these technologies to recover product from the groundwater. The results of the VER pilot test demonstrated that product recovery rates remained the same or increased only slightly compared to total-fluids pumping. As a result, total-fluids pumping was selected as the technology for the product recovery system because of its effectiveness and implementability.

As discussed in **Section 2.1.2**, total-fluids product recovery was initially implemented through the IPR system. Data and knowledge gained through the construction and operation/maintenance of the IPR system was used to design the FPR system, which was installed as part of the soil remedial action and redevelopment of the Site. The FPR system includes total-fluids pumping from nine overburden wells and seven shallow bedrock wells. The FPR system has been operating effectively for approximately 21 years. The system has remained operational with regular maintenance. The proposed remedial action for AOC 12A – Free Product is product recovery and containment through the continued operation and maintenance of the current FPR system.

The remedial action for AOC 12A - Free Product will also include passive product recovery from wells located outside the direct influence of the FPR system that contain minimal free product thicknesses. Product from these wells will be recovered with sorbent socks. **Section 2.1.2.3** discusses monitoring and sock maintenance from these wells. If the socks in any of these wells become product saturated over short periods of time, indicating that recovery with socks is no longer practical, the conditions will be evaluated and a determination will be made to potentially connected the well(s) to the FPR system for total fluids product recovery.

4.2 Groundwater – AOC 12B

Based on the findings and recommendations of the RI, AOC 12B - Groundwater requires remedial action. As discussed in the following sections, the proposed remedial action for dissolved-phase groundwater impacts is monitored natural attenuation (MNA). However, the NJDEP maintains that the on-going natural attenuation processes cannot be considered an MNA remedial action when measurable free product remains in wells. As a result, the MNA remedial action will be implemented after free product is addressed. In the interim, a groundwater monitoring program (presented in **Section 6**) will be implemented to ensure that MNA continues to be the appropriate remedial action for the dissolved-phase groundwater impacts. The CEA/WRA for the site groundwater impacts will continue to serve as an institutional control to mitigate potential receptor exposure to constituents of concern in groundwater.

4.2.1 Monitored Natural Attenuation Evaluation

Groundwater monitoring data was evaluated based on the NJDEP MNA Technical Guidance (Guidance) to determine if MNA is an appropriate remedy for dissolved-phase groundwater impacts at the Site. MNA was evaluated using the primary lines of evidence presented in the Guidance. Based on the favorable results for the primary lines of evidence, secondary and tertiary lines of evidence were not evaluated.

4.2.1.1 Primary Lines of Evidence

MNA effectiveness is determined by confirming that contaminant concentrations are decreasing with time, and the groundwater plume is stable or decreasing in size (NJDEP 2012). Arcadis' evaluation was focused on plume behavior, statistical tests, and contaminant trends for site COCs, 1,1-DCE, cis-1,2-DCE, PCE, TCE, vinyl chloride, and total CVOCs.

4.2.1.2 Contaminant Trends and Statistical Tests

According to the Guidance, COC trends can be determined using calculated or graphed trends, comparison of measured values, or set values when contaminants were not detected. Arcadis conducted the MNA evaluation by graphing the eight most recent available data points for each well and conducting Mann Kendall (MK) trend analyses and coefficient of variance analysis. Non-detect values were set to a common value less than the minimum detected value (65 percent of the minimum detected value) in accordance with the USEPA Unified Guidance (USEPA 2009). The trend analyses and statistical tests were performed only for COCs with at least one detection greater than 10 times the NJDEP Ground Water Quality Criteria (GWQC). For the statistical test, the recent eight rounds of data were used.

The MK test was performed to assess if there was a statistically significant upward or downward trend of a given COC at a 95 percent confidence interval. If the MK test showed no trend, the coefficient of variance (CV) was calculated for the dataset. If the calculated CV was equal to or less than unity, the MK no-trend result can be used to support a stable trend hypothesis. The calculated CV for all no-trend dataset was less than unity, except for 1,1-DCE in monitoring well MW-38.

The following trends were calculated for each COC:

- PCE concentrations were decreasing at five out of 16 evaluated wells. The remaining wells showed stable concentrations (no trend).
- TCE concentrations were decreasing at six out of 22 evaluated wells and increasing at one well (MW-9). The remaining wells showed stable concentrations (no trend).
- Cis-1,2-DCE concentrations were stable (no trend) at all evaluated wells.
- 1,1-DCE concentrations were decreasing at five out of 16 evaluated wells. The remaining wells showed stable concentrations (no trend), except for MW-38, in which the calculated CV was skewed higher than unity due to an anomalous data point.
- Vinyl chloride concentrations were stable (no trend) at all seven evaluated wells.
- Total CVOC concentrations were decreasing at five out of 18 evaluated wells and increasing at one well (MW-9). The remaining wells showed stable concentrations (no trend).

The only well found to have increasing concentrations (MW-9) is located near the centerline of the plume. Sampling of overburden/bedrock well MW-9 was terminated in 2002 because it was improperly constructed (well screen was not installed 10 feet into competent bedrock), and shallow bedrock well MW-9B was installed near MW-9 as a replacement. Well MW-8 monitors overburden near MW-9B. Both MW-9B and MW-8 show stable to decreasing trends. Well MW-9 will be abandoned.

Results of the trend analysis are presented in **Table 3**. The trend charts and results of the statistical tests are shown on **Figure 9** and **Figure 10** and presented in **Table 4**.

4.2.1.3 Plume Behavior

According to the Guidance, for the plume to be considered stable or shrinking, groundwater COC concentrations along the contaminant path must remain stable or declining over time, and COC concentrations in the sentinel well must remain less than the ground water quality standards.

Based on the most recent available data from each well, the most downgradient wells on the Site included in this evaluation (MW-37B2 and MW-37B3) showed decreasing concentrations. As discussed in the previous section, groundwater concentrations in all wells except MW-9, located near the centerline of the plume, are either stable or decreasing. Based on this data, the plume has been determined to be stable.

4.2.1.4 Conclusions

Based on the RI report, the extent of the plume has been delineated and determined to be stable. The MNA evaluation shows that groundwater impacts and the extent of the groundwater plume are stable to decreasing, and MNA is an appropriate remedial action for dissolved-phase groundwater impacts.

4.3 PCBs in Offsite Soil

Soil excavation is the proposed remedial action for off-site PCB impacts. The objective of the remedial action is to excavate all soil with PCB concentrations greater than NJDEP Residential Direct Contact Soil Remediation Standard (RDCSRS) for total PCBs of 0.2 mg/kg. The investigation results for soil samples that exceeded the NJDEP RDCSRS are shown on (**Figure 11**). The estimated area of excavation, which is approximately 10,000 square feet as shown on **Figure 12**, will extend to 8.5 feet bls and yield approximately 1,400 cubic yards of soil. This impacted soil will be excavated and transported off site to a licensed disposal or recycling facility. An isolated location containing PCB concentrations greater than 50 mg/kg (centered around boring location SL-19) will be excavated to 1.5 feet bls, yielding approximately 35 cubic yards. This soil will be managed for disposal as a Toxic Substances Control Act (TSCA)-regulated PCB waste. As necessary, sloping/stepping will be used to prevent the collapse of sidewalls. Erosion and sediment control, groundwater and stormwater management, odor, and dust control will be implemented as necessary during excavation.

Following soil removal, post-excavation samples will be collected to demonstrate the efficacy of the remedial action. If the excavation limits extend to a clean soil boring location, a post-excavation sample will not be collected. The excavation will be backfilled with licensed quarry/mine material imported from an off-site source. Transportation and disposal records and backfill documentation will be recorded and maintained in the project file and included in the Remedial Action Report (RAR).

To address TSCA regulations presented in Title 40 of the Code of Federal Regulations (40 CFR) Part 761.61(a), a self-implementing cleanup and disposal notification (Notification) has been prepared and submitted to USEPA. A copy of the Notification and the USEPA approval letter is provided in **Appendix D.** The remedial action will be performed to satisfy the requirements of both the USEPA and NJDEP requirements for an unrestricted use remedy.

5 REMEDIATION STANDARDS

The applicable remediation standards are as follows:

- Residential and Non-Residential Direct Contact Soil Remediation Standards per N.J.A.C. 7:26D and 7:26E

- Default Impact to Ground Water Soil Screening Levels and Site-Specific Impact to Ground Water Soil Remediation Standards per N.J.A.C. 7:26:D and 7:26E
- Ground Water Quality Standards per N.J.A.C. 7:9C; specifically, the GWQC listed therein.
- PCB remediation waste cleanup standard per 40 CFR Part 761.61(a)(4)(i)(A).

6 POST-REMEDIATION MONITORING PLAN

Performance monitoring of the FRP system will continue in accordance with the NJPDES discharge permit (Permit No. NJ8000352). In accordance with the permit, grab samples are collected quarterly from the influent and effluent sample ports for analysis of total manganese and permit-specific VOCs. The monitoring data are reported in Semi-annual Influent/Effluent Monitoring reports, which will be submitted to NJDEP. The analytical results will be reported in the Influent/Effluent Monitoring Report table **(Table 6)**. Average daily product recovery rates will also be reported.

The wells used to recover product with sorbent socks will be gauged monthly (access permitting), and socks will be replaced as needed.

During the free product remedial action, dissolved-phase impacts to groundwater will be monitored biennially. The monitoring program (presented in **Table 7**), to include 35 on-site monitoring wells, will monitor groundwater quality in overburden, shallow bedrock, and deep bedrock. Each monitoring event will include a synoptic round of water-level and product thickness measurements. When wells that contain product become product free for more than a year, they will be sampled during the next monitoring event for dissolved phase constituents (VOCs and PCBs). The sampling results will be evaluated in the context of overall monitoring program and a determination will be made, in consultation with the NJDEP if the well provides value and should be added to the monitoring program. Monitoring will be conducted in accordance with TRSR N.J.A.C. 7:26E. Following each monitoring event, the analytical results and the water-level and product thickness measurements will be reported to NJDEP. Ultimately, the monitoring program will be included in the remedial action permit to be issued at the conclusion of the remedial action phase.

7 PERIMETER AIR MONITORING

The need for perimeter air monitoring will be based on the results of air monitoring conducted in the exclusion zone during remedial action. The air monitoring requirements will be specified in a site-specific Health and Safety Plan (HASP) to be prepare in accordance with applicable Occupational Safety and Health Administration (OSHA) regulations. The HASP will also specify action levels that indicate the potential for off-site exposure to particulate VOCs, which would trigger the need for perimeter air monitoring.

Particulates and VOCs will be monitored in the exclusions zone (i.e., around the perimeter of each excavation) during excavation. Measurements will be taken and recorded in accordance with the HASP using portable calibrated instruments.

8 PERMITS, FILL USE, AND SITE RESTORATION PLAN

As part of the pre-remedial action planning for the off-site PCB-impacted soil removal, Arcadis will define the area of disturbance, including access, support, and lay-down areas, for the area subject to excavation and prepare a Soil Erosion and Sediment Control Plan as necessary. During the removal, live backfilling will occur to prevent any health and safety concerns. The fill use plan is to backfill excavations with licensed quarry/mine material as defined in the NJDEP Fill Material Guidance for SRP Sites. Site restoration will be accomplished by backfilling the excavation to grade. Currently, these areas are covered with earthen/gravel cover material and asphalt. The backfill will be selected to conform with the current cover conditions. Asphalt areas will be restored to current condition. All utilities within the area will remain in place.

A New Jersey Pollutant Discharge Elimination System - Discharge to Ground Water (NJPDES-DGW) permit application will be prepared and submitted to the Department to renew the existing permit associated with the effluent discharge associated with the FPR system.

The application for a Groundwater Remedial Action Permit (RAP) will be submitted to the NJDEP upon completion of the remedial action, but no later than the submittal time of the Remedial Action Report.

9 REMEDIAL ACTION SCHEDULE

The general remedial action schedule is outlined as follows:

- Free Product Recovery – ongoing as part of the remedial action.
- Excavation Permitting and Planning Activities – ongoing as part of the pre-remedial action planning.
- Mobilization – planned for 2020.
- Excavation, Off-Site Disposal, and Backfill of PCB impacted Area – completion anticipated within 2020.
- Demobilization and Restoration – upon completion of field activities for the remedial action.
- Submittal of the RAR to the NJDEP – Planned to be submitted on or before May 7, 2021 (RAR Regulatory Timeframe)

10 CONTAMINANTS OF EMERGING CONCERN EVALUATION

Contaminants of emerging concern (COECs) were evaluated based on information in the Site Evaluation Submission (SES) (BCM 1988), an understanding of site operations, and findings of the RI. The following COECs were evaluated.

- Per- and Polyfluoroalkyl Substances (PFAS), specifically Perfluorononanoic Acid (PFNA), Perfluorooctanoic acid (PFOA), and Perfluorooctanesulfonic acid (PFOS)
- Perchlorate

- 1,2,3-trichloropropane (TCP)

COEC 1,4-Dioxane was not evaluated because it was previously detected in groundwater at concentrations greater than standards. Monitoring for 1,4-Dioxane will continue as part of the proposed groundwater monitoring program (Section 6) and it will be addressed consistent with the other VOC constituents of concern.

10.1 Per- and Polyfluoroalkyl Substances (PFAS)

RACER evaluated the potential for materials stored and used at the Site to have contained PFAS and the potential pathways to the environment. RACER also evaluated the historical manufacturing operations and the likelihood that operations would have used PFAS-containing materials. The evaluation indicated the following:

- Aqueous film forming foam(s) (AFFF) was not used or stored at the site;
- Chemical inventory review did not identify materials or chemicals known to contain PFAS;
- Oils used at the Site did not include aviation hydraulic oils, which reportedly are considered to potentially contain PFAS;
- Metal plating operations at the site had little or no overlap with the timeframes where PFAS containing mist suppressants were generally used in the industry.

Based on the COEC evaluation, further action for PFAS is not warranted.

10.2 Perchlorate and 1,2,3-Trichloropropane (TCP)

Manufacturing activities or materials related to storage or use of perchlorate and TCP were not identified in the SES. Based on the information reviewed, these compounds do not appear to have been utilized at the Site. No further evaluation of perchlorate and TCP is warranted.

11 REFERENCES

New Jersey Department of Environmental Protection (NJDEP). 2012. Monitored Natural Attenuation Technical Guidance. March 1.

United States Environmental Protection Agency (USEPA). 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guidance. March.

Arcadis. 2016. March 2016 Groundwater Remedial Investigation Report

BCM 1988, Hyatt Clark Industries, Inc. Site Evaluation Submission

TABLES

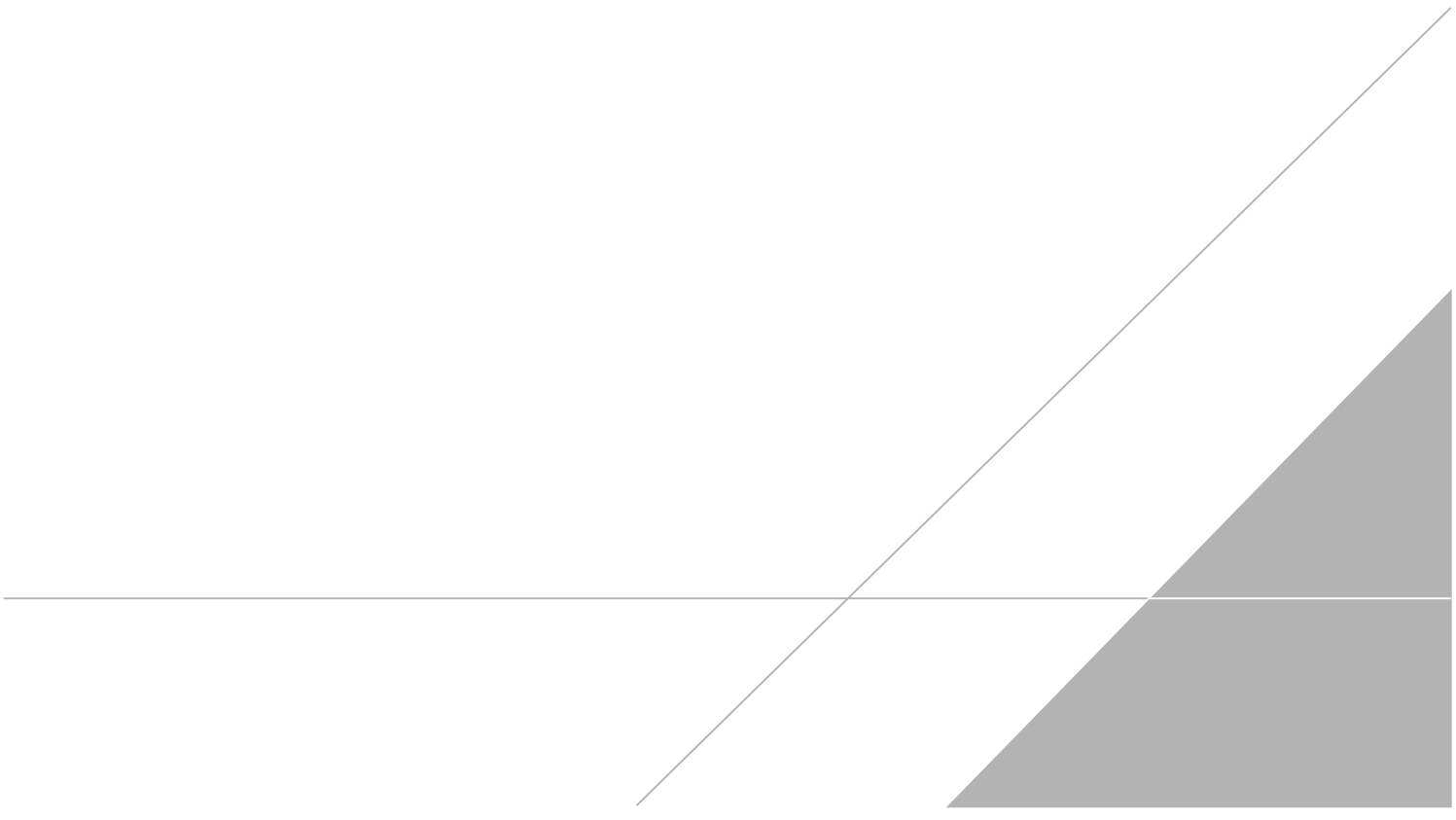
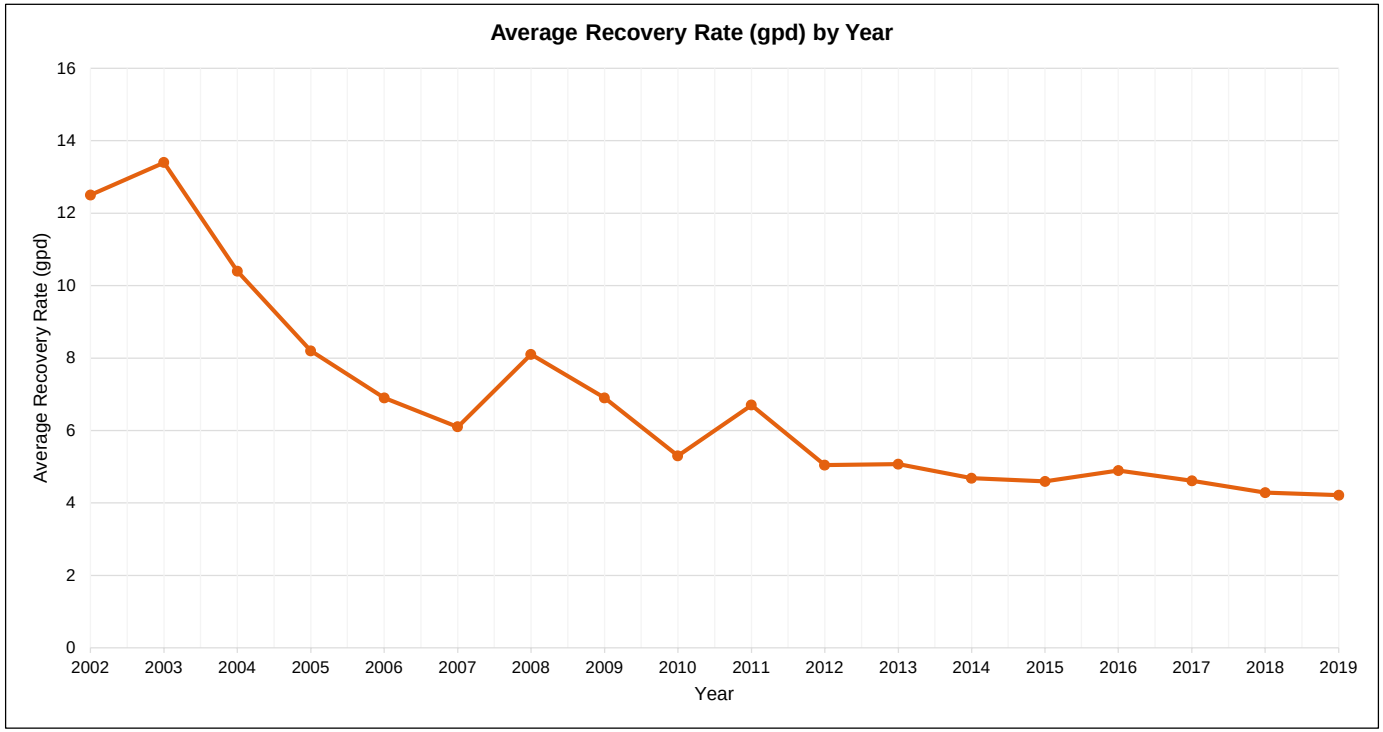


Table 1
FPR System Product Recovery Data
Former Hyatt Clark Industries Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Year	Average Product Recovery Rate (gpd)
2002	12.5
2003	13.4
2004	10.4
2005	8.2
2006	6.9
2007	6.1
2008	8.1
2009	6.9
2010	5.3
2011	6.7
2012	5.0
2013	5.1
2014	4.7
2015	4.6
2016	4.9
2017	4.6
2018	4.3
2019	4.2



Note:

gpd gallons per day

Table 2
Product Gauging Results - 2018, 2019, and 2020
Former Hyatt Clark Industries Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	1/22/2018		2/12/2018		5/1/2018		6/5/2018		9/5/2018	
	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments
OW-34R	0.00	Replaced Sock	0.00	Replaced Sock	0.00	Replaced Sock	0.00	Replaced Sock	0.00	Replaced Sock
OW-34	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Replaced Sock	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-84	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-85	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
MW-20	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Replaced Sock
OW-65	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-25S	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-25D	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Replaced Sock
OW-26S	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-46	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Replaced Sock	0.00	Sock saturated 5% or less.
OW-24	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-82D	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-86S	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry
MW-15	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-32D	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-86D	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
MW-3D	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW26M	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Replaced Sock

"--- No sock deployed.
Socks are replaced due to product saturation and/or biological fouling.

Table 2
Product Gauging Results - 2018, 2019, and 2020
Former Hyatt Clark Industries Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	10/16/2018		12/11/2018		1/15/2019		2/5/2019		4/3/2019	
	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments
OW-34R	0.00	Replaced Sock	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less. Replaced Sock	0.00	Replaced Sock
OW-34	0.00	Replaced Sock	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-84	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-85	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
MW-20	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less. Replaced Sock	0.00	Sock saturated 5% or less.
OW-65	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-25S	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-25D	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-26S	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-46	0.00	Replaced Sock	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less. Replaced Sock	0.00	Sock saturated 5% or less.
OW-24	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-82D	0.00	Replaced Sock	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-86S	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry
MW-15	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-32D	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-86D	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
MW-3D	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW26M	0.00	Replaced Sock	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.

"---
Socks are replac

Table 2
Product Gauging Results - 2018, 2019, and 2020
Former Hyatt Clark Industries Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	5/28/2019		7/23/2019		8/13/2019		9/25/2019		10/29/2019	
	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments
OW-34R	0.00	Replaced Sock	0.00	Sock Saturated 50%	0.00	Sock Saturated 90%	0.00	Replaced Sock	0.00	Replaced Sock
OW-34	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5 to 10%.	0.00	Sock saturated 5 to 10%.
OW-84	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-85	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
MW-20	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5 to 10%.	0.00	Sock saturated 5 to 10%.
OW-65	0.00	Replaced Sock	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-25S	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-25D	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Replaced Sock	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-26S	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-46	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Replaced Sock
OW-24	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---
OW-82D	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	Sheen	Sock saturated 5 to 10%.
OW-86S	0.00	Dry	NM		0.00	Dry	0.00	Dry	0.00	Dry
MW-15	0.00	---	NM	---	0.00	---	0.00	---	0.00	---
OW-32D	0.00	---	NM	---	0.00	---	0.00	---	0.00	---
OW-86D	0.00	---	NM	---	Sheen	---	0.15	---	0.18	---
MW-3D	0.00	---	NM	---	0.00	---	0.00	---	0.00	---
OW26M	Sheen	Replaced Sock	Sheen	Replaced Sock	0.00	Sock saturated 5 to 10%.	0.00	Sock saturated 5 to 10%.	Sheen	Replaced Sock

"---
Socks are replac

Table 2
Product Gauging Results - 2018, 2019, and 2020
Former Hyatt Clark Industries Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	12/10/2019		1/28/2020		2/18/2020	
	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments	Product Thickness (feet)	Comments
OW-34R	0.00	Replaced Sock	0.00	Replaced Sock	0.00	Replaced Sock
OW-34	0.00	Sock saturated 5 to 10%.	0.00	Replaced Sock	0.00	Sock saturated 5% or less.
OW-84	0.00	---	0.00	---	0.00	---
OW-85	0.00	---	0.00	---	0.00	---
MW-20	0.00	Sock saturated 5 to 10%.	0.00	Replaced Sock	0.00	Sock saturated 5% or less.
OW-65	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-25S	0.00	---	0.00	---	0.00	---
OW-25D	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-26S	0.00	---	0.00	---	0.00	---
OW-46	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.
OW-24	0.00	---	0.00	---	0.00	---
OW-82D	0.00	Sock saturated 5 to 10%.	0.00	Replaced Sock	0.00	Sock saturated 5% or less.
OW-86S	0.00	Dry	0.00	Dry	0.00	Dry
MW-15	0.00	---	0.00	---	0.00	---
OW-32D	0.00	---	0.00	---	0.00	---
OW-86D	0.15	---	0.20	---	0.22	Deployed Sock
MW-3D	0.00	---	0.00	---	0.00	---
OW26M	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.	0.00	Sock saturated 5% or less.

"---
Socks are replac

Table 3
Analytical Results for Product (LNAPL) Samples
Former Hyatt Clark Industries Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Location ID		MW-15	MW-22	MW-22	OW-25M	OW-28S	OW-28D	OW-29	FPR System Product Tank	OW-22	OW-25M	OW-28D
Sample Date		9/6/1991	9/6/1991	10/10/1991	5/23/1996	5/23/1996	5/23/1996	5/23/1996	12/18/2017	12/18/2017	12/18/2017	12/18/2017
Matrix	Units	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
Analytes Detected in Product												
1,1-Dichloroethane	mg/kg	17	1.1 J	0.9 J					< 0.75 U	< 0.68 U	< 0.75 U	< 0.75 U
1,1-Dichloroethene	mg/kg	7.5	ND (2.5)	ND (1.3)					< 0.5 U	< 0.45 U	< 0.5 U	< 0.5 U
1,2,3-Trichlorobenzene	mg/kg								< 2.5 U	**0.39 J**	< 2.5 U	< 2.5 U
1,2,4-Trichlorobenzene	mg/kg								< 2.5 U	**0.22 J**	< 2.5 U	< 2.5 U
1,4-Dichlorobenzene	mg/kg								< 2.5 U	**0.1 J**	< 2.5 U	< 2.5 U
1,1,1-Trichloroethane	mg/kg	3.5	ND (2.5)	ND (1.3)					< 0.5 U	< 0.45 U	< 0.5 U	< 0.5 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg				18 JB	20 JB	21 JB	24 JB	< 5 U	< 4.5 U	< 5 U	< 5 U
Acetone	mg/kg				16 JB	16 JB	ND (12)	ND (12)	< 18 U	< 16 U	< 18 U	< 18 U
Benzene	mg/kg	ND (2.5)	2.8	2.5					< 0.5 U	< 0.45 U	**1.5**	**0.33 J**
Bromomethane (Methyl bromide)	mg/kg								**0.31 J**	**1.2**	**0.7 J**	**0.45 J**
Chloromethane (Methyl chloride)	mg/kg								< 2.5 U	**0.35 J**	**0.26 J**	< 2.5 U
Cyclohexane	mg/kg								< 10 U	< 9.1 U	**0.26 J**	< 10 U
Ethylbenzene	mg/kg	ND (2.5)	2.2 J	1.5					**0.25 J**	< 0.45 U	**0.94**	**0.32 J**
Isopropyl benzene	mg/kg								**0.34 J**	**0.17 J**	**0.3 J**	**0.26 J**
m&p-Xylene	mg/kg				5.2 J	4.2 J	3.2 J	3 J	**0.71 J**	< 0.91 U	**2.2**	**1.4**
Methyl cyclohexane	mg/kg								< 2 U	< 1.8 U	**0.21 J**	**0.16 J**
o-Xylene	mg/kg								**0.59 J**	**0.18 J**	**1.7**	**0.92 J**
Styrene	mg/kg								< 1 U	< 0.91 U	**0.73 J**	< 1 U
Tetrachloroethene	mg/kg	0.56 J	ND (2.5)	ND (1.3)					< 0.5 U	< 0.45 U	< 0.5 U	< 0.5 U
Toluene	mg/kg	ND (2.5)	5.9	4.3	6 JB	ND (12)	ND (12)	ND (12)	**1.2**	< 0.68 U	**0.43 J**	< 0.75 U
Xylene (total)	mg/kg								**1.3 J**	**0.18 J**	**3.9**	**2.3 J**
Phenanthrene	mg/kg				3.9 J	3.3 J	3 J	3.9 J				
Aroclor-1242 (PCB-1242)	mg/kg	400	160	130	47	28	41	97	100	388	< 3.95 U	34.8
Aroclor-1248 (PCB-1248)	mg/kg										85.2	
Product Physical Characteristics												
Color					Dark Brown	Honey Brown	Honey Brown	Honey Brown				
Viscosity (cSt at 100°F)	cSt at 100°F				23.11	22.84	23.03	22.55				
Specific Gravity (at 15°C)	at 15°C				0.8789	0.8787	0.8772	0.8789				
Primary VOCs Detected in Groundwater at the Site												
1,4-Dioxane	mg/kg								< 50 U	< 45 U	< 50 U	< 50 U
Tetrachloroethene	mg/kg								< 0.5 U	< 0.45 U	< 0.5 U	< 0.5 U
Trichloroethene	mg/kg								< 0.5 U	< 0.45 U	< 0.5 U	< 0.5 U
1,1-Dichloroethane	mg/kg								< 0.75 U	< 0.68 U	< 0.75 U	< 0.75 U
1,1-Dichloroethene	mg/kg								< 0.5 U	< 0.45 U	< 0.5 U	< 0.5 U
1,1,1-Trichloroethane	mg/kg								< 0.5 U	< 0.45 U	< 0.5 U	< 0.5 U
Other VOC Constituents of Interest												
Trichlorofluoromethane (CFC-11)	mg/kg								< 2.5 U	< 2.3 U	< 2.5 U	< 2.5 U

Notes:
°C = degrees Celsius
°F = degrees Fahrenheit
LNAPL = light non-aqueous phase liquid
mg/kg = milligrams per kilogram
ND = not detected
VOC = volatile organic compound

Table 4
Summary of Data Trends
Former Hyatt Clark Industires Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	1,1-Dichloroethene	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	Total CVOCs
MW-8	Stable	Stable	Stable	Stable	Stable	Stable
MW-9	Stable	--	Stable	Increasing	--	Increasing
MW-9B	Decreasing	Stable	--	Decreasing	Stable	Stable
MW-10B	Stable	--	Stable	Decreasing	Stable	Stable
MW-10B2	Stable	--	Decreasing	Decreasing	--	Decreasing
MW-10B3	--	--	Stable	Stable	--	Stable
MW-11	--	--	--	Stable	--	--
MW-11B	Stable	--	--	Stable	--	Stable
MW-20	Stable	Stable	Stable	Decreasing	Stable	Stable
MW-21	Stable	--	Stable	Stable	Stable	Stable
MW-31B2	Stable	--	Stable	Decreasing	--	Stable
MW-31B3	Decreasing	--	Decreasing	Decreasing	--	Decreasing
MW-37B2	Decreasing	--	Decreasing	Stable	--	Decreasing
MW-37B3	Decreasing	--	Decreasing	Stable	--	Decreasing
MW-38	Stable	--	Decreasing	Stable	Stable	Stable
MW-38B	Decreasing	--	Stable	Stable	Stable	Decreasing
MW-41	--	--	Stable	--	--	--
MW-85B3	Stable	--	--	Stable	--	Stable
MW-86B3	--	--	--	Stable	--	--
MW-87B2	Stable	--	Stable	Stable	--	Stable
MW-87B3	--	--	Stable	Stable	--	Stable
MW-87B4	--	--	--	Stable	--	--
MW-87B5	--	--	--	Stable	--	--

Notes:
CVOC: chlorinated volatile organic compound
-- : not evaluated
Increasing trends are shown in red font.
Decreasing trends are shown in green font.

Table 5
Mann Kendall Statistics Summary
Former Hyatt Clark Industires Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	Constituents	> 10X Exceedance	Most Recent Concentration, ug/L	Significant Trend	Coefficent of Variance	Degradation Rate, day^{-1}
MW-8	PCE	Y	24	Stable	0.2890	--
	TCE	Y	23	Stable	0.3372	--
	Cis-1,2-DCE	N	51	Stable	0.3267	--
	VC	Y	12	Stable	0.4225	--
	1,1-DCE	Y	55	Stable	0.4169	--
	Total CVOCs	--	165	Stable	0.3446	--
MW-9	PCE	Y	0.8	Stable	0.7967	--
	TCE	Y	47	Increasing	--	0.0135
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	0.0335
	1,1-DCE	Y	10	Stable	0.6706	--
	Total CVOCs	--	57.8	--	--	0.0628
MW-9B	PCE	Y	3.3	Decreasing	--	-0.0030
	TCE	Y	32	Decreasing	--	-0.0326
	Cis-1,2-DCE	Y	450	Stable	0.1911	--
	VC	Y	250	Stable	0.319	--
	1,1-DCE	Y	14	Decreasing	--	-0.0050
	Total CVOCs	--	749.3	Decreasing	--	-0.0929
MW-10B	PCE	Y	20	Stable	0.3074	
	TCE	Y	32	Decreasing	--	-0.0109
	Cis-1,2-DCE	--	--	--	--	--
	VC	Y	13	Stable	0.1837	--
	1,1-DCE	Y	55	Stable	0.2323	--
	Total CVOCs	--	120	Stable	0.2205	--
MW-10B2	PCE	Y	8.4	Decreasing	--	-0.0040
	TCE	Y	150	Decreasing	--	-0.0587
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	Y	10	Stable	0.264	--
	Total CVOCs	--	168.4	Decreasing	--	-0.0638
MW-10B3	PCE	Y	4.5	Stable	0.1552	--
	TCE	Y	180	Stable	0.0858	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	--	--	--	--	--
	Total CVOCs	--	184.5	Stable	0.0860	--

Table 5
Mann Kendall Statistics Summary
Former Hyatt Clark Industires Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	Constituents	> 10X Exceedance	Most Recent Concentration, ug/L	Significant Trend	Coefficent of Variance	Degradation Rate, day^{-1}
MW-11	PCE					
	TCE	Y	17	Stable	0.1385	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	--	--	--	--	--
	Total CVOCs	--	--	--	--	--
MW-11B	PCE	--	--	--	--	--
	TCE	Y	22	Stable	0.1503	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	Y	0.8	Stable	0.3628	--
	Total CVOCs	--	22.8	Stable	0.1552	--
MW-20	PCE	N	5	Stable	0.7238	--
	TCE	Y	2.6	Decreasing	--	-0.0558
	Cis-1,2-DCE	Y	220	Stable	0.7063	--
	VC	Y	460	Stable	0.3201	--
	1,1-DCE	Y	ND	Stable	0.8734	--
	Total CVOCs	--	692.6	Stable	0.5616	--
MW-21	PCE	Y	8.1	Stable	0.2426	--
	TCE	N	3.1	Stable	0.2708	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	N	1	Stable	0.4854	--
	1,1-DCE	N	1.7	Stable	0.5058	--
	Total CVOCs	--	13.9	Stable	0.2361	--
MW-31B2	PCE	Y	47	Stable	0.1691	--
	TCE	Y	270	Decreasing	--	-0.0495
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	Y	42	Stable	0.2788	--
	Total CVOCs	--	359	Stable	0.1289	--
MW-31B3	PCE	Y	10	Decreasing	--	-0.0086
	TCE	Y	190	Decreasing	--	-0.0278
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	Y	10	Decreasing	--	-0.0089
	Total CVOCs	--	210	Decreasing	--	-0.0524

Table 5
Mann Kendall Statistics Summary
Former Hyatt Clark Industires Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	Constituents	> 10X Exceedance	Most Recent Concentration, ug/L	Significant Trend	Coefficent of Variance	Degradation Rate, day^{-1}
MW-37	PCE	--	--	--	--	--
	TCE	--	--	--	--	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	4.4	Stable	0.1646	--
	1,1-DCE	--	--	--	--	--
	Total CVOCs	--	7.4	Increasing	--	0.0004
MW-37B	PCE	--	1	Stable	0.2145	--
	TCE	Y	9.7	Stable	0.1489	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	1	Stable	0.2939	--
	1,1-DCE	--	2.4	Decreasing	--	-0.0023
	Total CVOCs	--	14.1	Stable	0.1811	--
MW-37B2	PCE	Y	32	Decreasing		-0.0109
	TCE	Y	130	Stable	0.0791	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	Y	19	Decreasing	--	-0.0095
	Total CVOCs	--	181	Decreasing	--	-0.0196
MW-37B3	PCE	Y	12	Decreasing	--	-0.0133
	TCE	Y	150	Stable	0.1416	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	Y	14	Decreasing	--	-0.0089
	Total CVOCs	--	176	Decreasing	--	-0.0396
MW-38	PCE	Y	5.5	Decreasing		-0.0208
	TCE	Y	6	Stable	0.2340	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	Y	19	Stable	0.1958	--
	1,1-DCE	Y	16	Stable	2.06	--
	Total CVOCs	--	46.5	Stable	0.2463	--
MW-38B	PCE	Y	26	Stable	0.483	--
	TCE	Y	15	Stable	0.3668	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	Y	12	Stable	0.4067	--
	1,1-DCE	Y	31	Decreasing	--	-0.0133
	Total CVOCs	--	84	Decreasing	--	-0.0318

Table 5
Mann Kendall Statistics Summary
Former Hyatt Clark Industires Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	Constituents	> 10X Exceedance	Most Recent Concentration, ug/L	Significant Trend	Coefficent of Variance	Degradation Rate, day^{-1}
MW-41	PCE	Y	11	Stable	0.5891	--
	TCE	--	--	--	--	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	N	ND	Stable	0.4629	--
	1,1-DCE	--	--	--	--	--
	Total CVOCs	--	12	Stable	0.3863	--
MW-85B3	PCE	--	--	--	--	--
	TCE	Y	45	Stable	0.5558	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	Y	4.9	Stable	0.6533	--
	Total CVOCs	--	49.9	Stable	0.5139	--
MW-86B3	PCE	--	--	--	--	--
	TCE	Y	94	Stable	0.4979	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	--	--	--	--	--
	Total CVOCs	--	--	--	--	--
MW-87B2	PCE	Y	74	Stable	0.6519	--
	TCE	Y	220	Stable	0.5742	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	Y	7.4	Stable	0.5481	--
	Total CVOCs	--	301.4	Stable	0.5954	--
MW-87B3	PCE	Y	9.3	Stable	0.5505	--
	TCE	Y	79	Stable	0.5963	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	--	--	--	--	--
	Total CVOCs	--	88.3	Stable	0.5749	--
MW-87B4	PCE	--	--	--	--	--
	TCE	Y	130	Stable	0.5180	--
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	--	--	--	--	--
	Total CVOCs	--	--	--	--	--

Table 5
Mann Kendall Statistics Summary
Former Hyatt Clark Industires Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well ID	Constituents	> 10X Exceedance	Most Recent Concentration, ug/L	Significant Trend	Coefficent of Variance	Degradation Rate, day^{-1}
MW-87B5	PCE	--	--	--	--	--
	TCE	Y	58	Decreasing	--	-0.0733
	Cis-1,2-DCE	--	--	--	--	--
	VC	--	--	--	--	--
	1,1-DCE	--	--	--	--	--
	Total CVOCs	--	--	--	--	--

Notes:
Statistical tests performed using the eight most recent data points.
-- = Not applicable or not available
CVOC = Chlorinated volatile organic compound
DCE = Dichloroethane
PCE = Perchloroethylene
TCE = Trichloroethylene
ug/L = Microgram per liter
VC = Vinyl chloride
Y = Yes
N = No

TABLE 6
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF REMEDIATION MANAGEMENT& RESPONSE
RESPONSIBLE PARTY REMEDIATION ELEMENT

PERMITTEE NAME/ADDRESS:
_Former Hyatt Clark Industries, Inc. Site_____
_1300 Raritan Road_____
_Clark, New Jersey_07066_____

NJPDES No:_**NJ8000352**_____
ISRA Case No:_**E87769**_____
REPORTING MONTH/YEAR_____
DATES OF SAMPLING_____

INFLUENT/EFFLUENT MONITORING REPORT

Field Parameter	**Influent**	**Effluent**	**Percent Removal**
Flow Rate.			
Volume of water discharged during monitoring period.			

Sample ID:	**SP-1**	**SP-7**	**Percent Removal (%)**	**SP-1**	**SP-7**	**Percent Removal (%)**
Date Sampled:						
Matrix:	**Influent**	**Effluent**		**Influent**	**Effluent**	
Units:	**µg/L**	**µg/L**		**µg/L**	**µg/L**	
Parameter						
Total Metals						
Manganese						
Volatile Organics						
Benzene						
Chlorobenzene						
1,1-Dichloroethane						
1,1-Dichloroethene						
cis-1,2-Dichloroethene						
Ethylbenzene						
Methyl tertiary butyl ether (MTBE)						
Tertiary butyl alcohol						
Tetrachloroethene						
Toluene						
Trichloroethene						
o,m,p-Xylenes						

NOTES:

1. Percent removal was only calculated if the compound was detected in the effluent sample.

2. Qualifiers

J - Detected below practical quantitation limit (PQL) or estimated concentration due to a quality control (QC) exceedance. Concentration given is an approximation.
U - Not detected. Number given is the method detection limit.
UJ - Not detected. PQL is an approximation due to a QC exceedance.
MB - Found in Method Blank.
TB -Found in Trip Blank.

_____ _____
Arcadis U.S., Inc. Date
On Behalf of The RACER Trust

Table 7
Biennial Groundwater Monitoring Program
Former Hyatt Clark Industries Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well Identification	Sampling Parameters			Comments
	VOCs	PCBs	1,4- Dioxane	
On-Site Overburden Monitoring Wells				
MW-1	X		X	Background monitoring well
MW-10	X		X	Background monitoring well
MW-8	X		X	Source zone monitoring well
MW-15	X		X	Source zone monitoring well
MW-19	X		X	Source zone monitoring well
MW-20	X		X	Source zone monitoring well
MW-21	X		X	Source zone monitoring well
MW-12	X	X	X	Downgradient plume monitoring well
MW-18	X	X	X	Downgradient plume monitoring well
MW-37	X		X	Downgradient plume monitoring well
MW-38	X		X	Downgradient plume monitoring well
On-Site Shallow Bedrock Monitoring Wells				
MW-1B	X		X	Background monitoring well
MW-9B	X		X	Source zone monitoring well
MW-36B	X		X	Downgradient plume monitoring well
MW-37B	X		X	Downgradient plume monitoring well
MW-38B	X		X	Downgradient plume monitoring well
OW-32D	X	X	X	Source zone monitoring well
On-Site Deep Bedrock Monitoring Wells				
MW-10B	X		X	Source zone monitoring well
MW-10B2	X		X	Source zone monitoring well

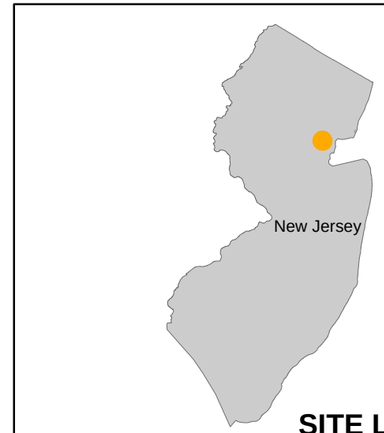
Table 7
Biennial Groundwater Monitoring Program
Former Hyatt Clark Industries Site
Clark, New Jersey
Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal

Well Identification	Sampling Parameters			Comments
	VOCs	PCBs	1,4- Dioxane	
MW-10B3	X		X	Source zone monitoring well
MW-86B3	X		X	Background monitoring well
MW-31B2	X		X	Source zone monitoring well
MW-31B3	X		X	Source zone monitoring well
MW-37B2	X		X	Downgradient plume monitoring well
MW-37B3	X		X	Downgradient plume monitoring well
MW-84	X		X	Downgradient plume monitoring well
MW-85B3	X		X	Downgradient plume monitoring well
Off-Site Overburden Monitoring Wells				
MW-40	X		X	Downgradient plume monitoring well
MW-41	X		X	Downgradient plume monitoring well
MW-42	X		X	Downgradient plume monitoring well
MW-43	X		X	Downgradient plume monitoring well
MW-44	X		X	Downgradient plume monitoring well
MW-45	X		X	Downgradient plume monitoring well
Off-Site Deep Bedrock Monitoring Wells*				
MW-87	X		X	Background monitoring well
MW-88	X		X	Background monitoring well

VOCs Volatile organic compounds.
PCBs Polychlorinated biphenyls.

* The off-site deep bedrock monitoring wells are equipped with FLUTe multiport sampling systems. These upgradient wells will be included in the monitoring program for the first two monitoring events.

FIGURES



SITE LOCATION

LEGEND:

- SITE LOCATION
- MUNICIPAL BOUNDARY

0 400 800 Feet

GRAPHIC SCALE

NOTE:

1. AUGUST 5, 2013 IMAGERY OBTAINED FROM ESRI IMAGE SERVICE.

FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY
REMEDIAL ACTION WORK PLAN/
CORRECTIVE MEASURES STUDY PROPOSAL

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

City: syr Div/Group: swg Created By: j.rapp Last Saved By: jrapp
Hyatt- Clark, NJ (NJ000298.0032.00006)
Q:\GeneralMotors\Clark\RIR\mxd\SiteLocationMap1.mxd 1/18/2016 9:04:10 PM

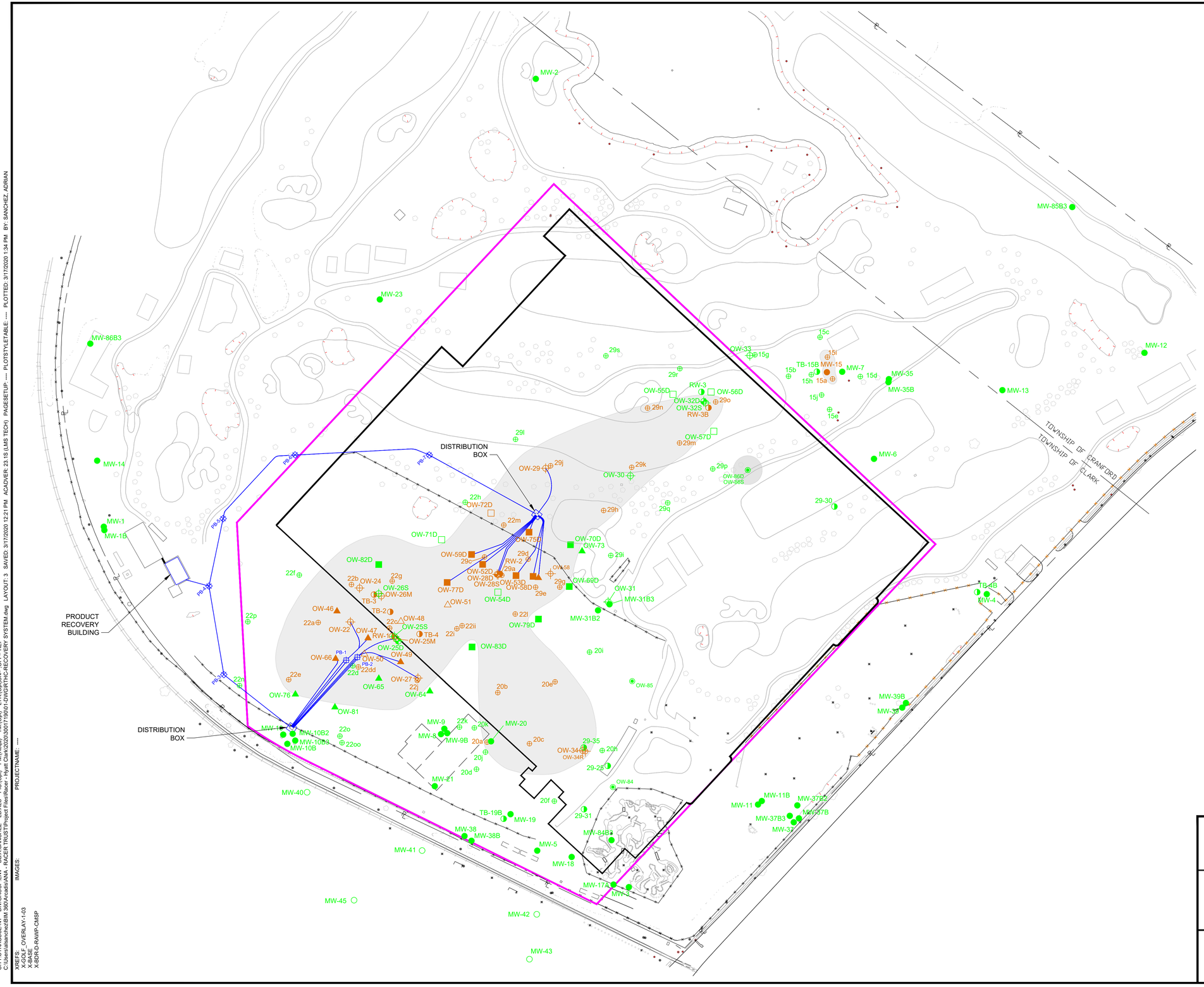
FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY

REMEDIAL ACTION WORK PLAN/
CORRECTIVE MEASURES STUDY PROPOSAL

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- TOWNSHIP BOUNDARY
- FENCE
- RAILROAD TRACKS
- LIMITS OF CAP SYSTEM
- FORMER BUILDING LIMIT
- SLOTTED AUGER BORING
- SOIL BORING
- OFF-SITE MONITORING WELL
- MONITORING WELL
- LNAPL DELINEATION MONITORING WELLS (2012)
- OVERBURDEN OBSERVATION WELL
- BEDROCK OBSERVATION WELL
- ABANDONED OVERBURDEN WELL
- ABANDONED BEDROCK WELL
- GREEN — NO PRODUCT IN SOIL OR GROUNDWATER
- BROWN — PRODUCT IN SOIL OR GROUNDWATER
- PRODUCT AREA
- FPR SYSTEM PIPING (LOCATIONS ARE APPROXIMATE)
- PB-1 — PULL BOX

0 100' 200'
APPROXIMATE SCALE IN FEET

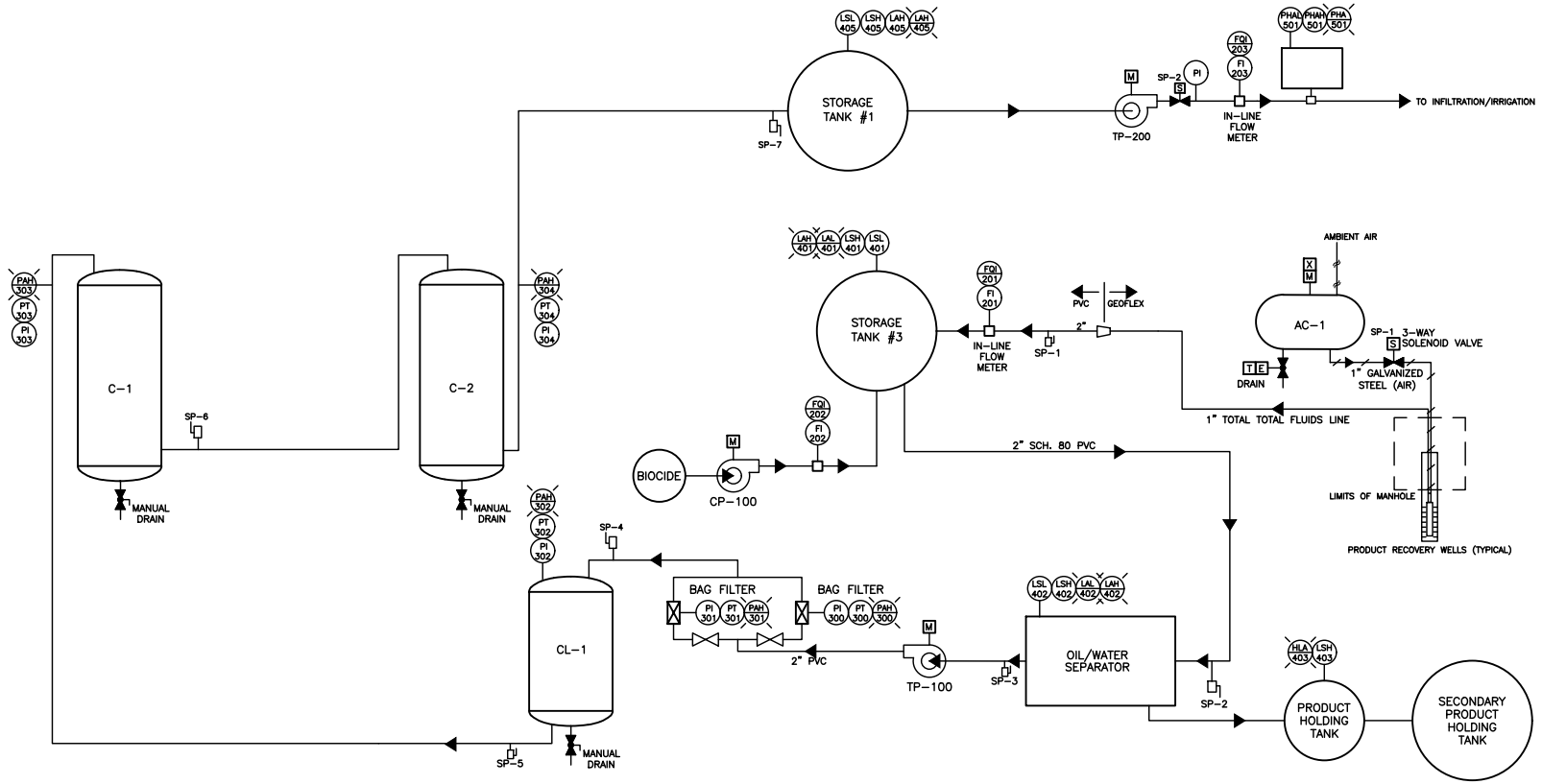
FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY
REMEDIAL ACTION WORK PLAN/ CORRECTIVE MEASURES STUDY PROPOSAL

PRODUCT DELINEATION DETAIL

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY:SYRACUSE-NY DIV/GROUP:ENV DB:A.SANCHEZ LD:ALS PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\alsanchez\BIM 360\Arcadis\ANA - RACER TRUST\Project Files\Racer - Hyatt Clark\2020\30017190\1-DWG\RTHC-RECOVERY SYSTEM.dwg LAYOUT: 3 SAVED: 3/17/2020 12:21 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 3/17/2020 1:34 PM BY: SANCHEZ, ADRIAN
XREFS:
X-GOLF_OVERLAY-1-03
X-BASE
X-BSRVD-RAWP-CMSP
IMAGES:
PROJECTNAME: ----



SAMPLE PORTS

SP1	INFLUENT
SP2	AFTER STORAGE TANK #3
SP3	AFTER OIL/WATER SEPARATOR
SP4	AFTER BAG FILTER
SP5	AFTER ANTHRACITE/CLAY UNIT
SP6	AFTER LEAD CARBON UNIT
SP7	AFTER LAG CARBON UNIT

NOTES:

AC-1 AIR COMPRESSOR

1. DESCRIPTION OF TANKS ARE AS FOLLOWS:

CL-1	ANTHRACITE CLAY
C-1, C-2	GRANULAR ACTIVATED CARBON
E-1, E-2	ION-EXCHANGE (MANGANESE)

FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY

REMEDIAL ACTION WORK PLAN/ CORRECTIVE MEASURES STUDY PROPOSAL

FPR SYSTEM PROCESS AND INSTRUMENTATION DIAGRAM

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY:SYRACUSE-NY DIV/GROUP:ENV DB:A.SANCHEZ LD:ALS PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
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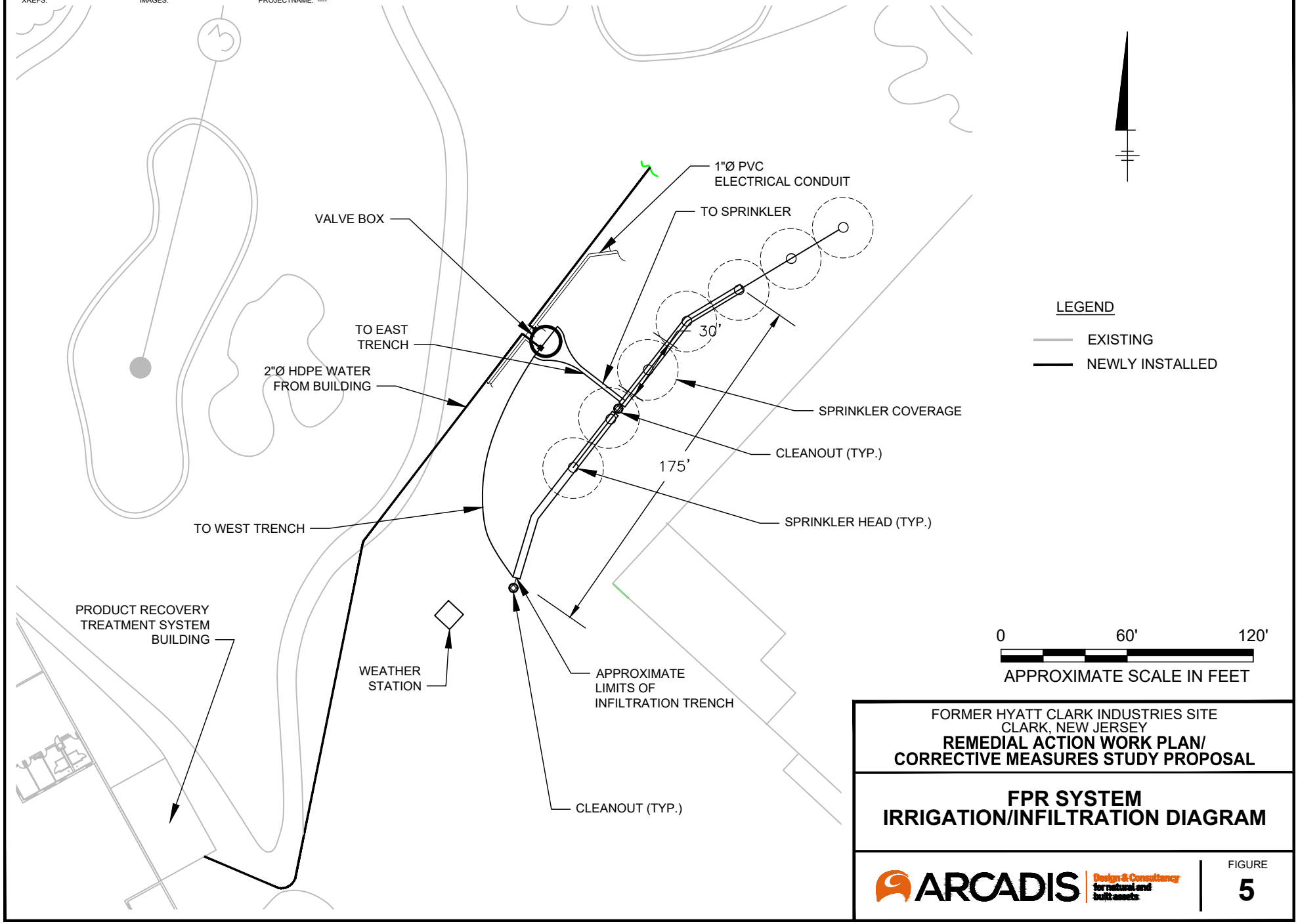


FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY

REMEDIAL ACTION WORK PLAN/
CORRECTIVE MEASURES STUDY PROPOSAL

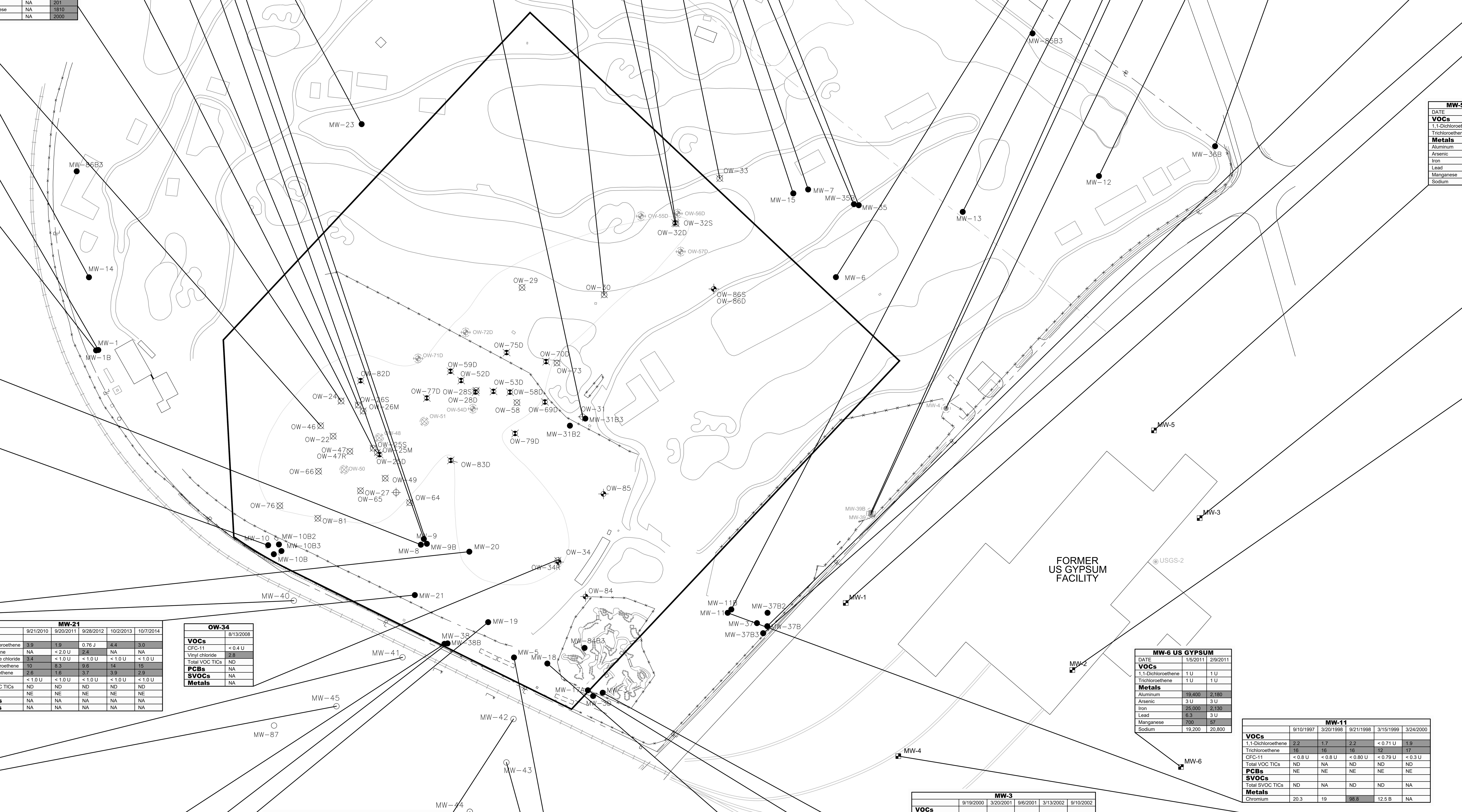
FPR SYSTEM IRRIGATION/INFILTRATION DIAGRAM

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5

FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY
REMEDIAL ACTION WORK PLAN/ CORRECTIVE MEASURES STUDY PROPOSAL

OVERBURDEN AND SHALLOW BEDROCK GROUNDWATER ANALYTICAL RESULTS



OW-25D

	3/20/1998	9/23/1998	3/16/1999	3/27/2000	9/20/2000
VOCs					
Benzene	10	14	9.9	12	9.8
Chloroethane	10 R	16 J	< 0.81 U	17	31
CFC-11	< 0.80 U	< 0.80 U	< 0.79 U	< 0.3 U	< 0.3 U
Total VOC TICs	ND	ND	ND	ND	1.2
PCBs	NE	NE	NE	NE	NE
SVOCs					
bis(2-Ethylhexyl)phthalate	12 J	7.2	< 5.6 UB	NA	NA
Total SVOC TICs	ND	ND	ND	NA	NA
Metals					
Thallium	< 3.2 U	2.52 B	< 0.88 U	NA	NA

MW-9

	3/9/2001	3/12/2001	9/10/2001	3/15/2002	9/16/2002
VOCs					
1,1-Dichloroethane	13	NA	56	33	38
1,1-Dichloroethene	3.8	NA	13	11	10 J
Tetrachloroethene	1.9	NA	10	6	< 0.8 U
Trichloroethene	20	NA	19	35	47
CFC-11	< 0.3 U	NA	< 0.3 U	NA	< 1 U
Vinyl chloride	25	NA	36	49	83
Total VOC TICs	ND	NA	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals					
Manganese	NA	1860	NA	3970	NA

OW-32S

	3/19/1998	9/18/1998	9/21/1998	3/16/1999	3/27/2000
VOCs					
CFC-11	< 0.80 U	< 0.8 U	NA	< 0.79 U	< 0.3 U
Total VOC TICs	ND	ND	NA	ND	ND
PCBs					
Total PCBs	0.21	0.62	1.4	0.37	ND
SVOCs					
2,4-Dimethylphenol	1700 E	11	NA	56 J	NA
Nitrobenzene	< 1.0 U	4.6	NA	15	NA
Phenol	29000 E	1.8	NA	< 0.45 UJ	NA
Total SVOC TICs	ND	ND	NA	ND	NA
Metals					
Arsenic	138	NA	8.40	7.89	NA
Beryllium	2.65 B	NA	< 0.195 UB	0.240 BC	NA
Lead	20.1	NA	0.790 B	NA	NA
Nickel	167	NA	13.8	10.5	NA

OW-33

	3/22/2000	9/18/2000	3/15/2001	9/5/2001	9/11/2002
VOCs					
CFC-11	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 1 U
Total VOC TICs	ND	NA	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	NA	NA	NA	NA	NA
Metals	NE	NE	NE	NE	NE

MW-39B

	9/16/2010	9/13/2011	9/26/2012	10/3/2013	8/27/2014
VOCs					
Trichloroethene	4.4	4.8	4.4	4.8	3.9
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-39

	3/3/2009	9/10/2009	9/16/2010	9/13/2011	8/27/2014
VOCs					
Trichloroethene	3.9	4.1	3.0	2.5	2.1
CFC-11	< 0.4 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

GWQS LEGEND

Constituent	GWQS (ug/L)
VOCs	
1,1,1-Trichloroethane	30
1,1-Dichloroethane	50
1,1-Dichloroethene	1
1,2-Dichloroethane	2
1,4-Dioxane	0.4
Benzene	1
Carbon tetrachloride	1
CFC-11	2000
Chloroethane	5
cis-1,2-Dichloroethene	70
Methylene chloride	3
Tetrachloroethene	1
trans-1,2-Dichloroethene	100
Trichloroethene	1
Vinyl chloride	1
SVOCs	
2,4-Dimethylphenol	100
bis(2-Ethylhexyl)phthalate	3
Indeno(1,2,3-cd)pyrene	0.2
Nitrobenzene	6
Phenol	2000
Metals	
Aluminum	200
Antimony	6
Arsenic	3
Beryllium	1
Cadmium	4
Chromium	70
Cobalt	100
Iron	300
Lead	5
Manganese	50
Nickel	100
Sodium	50000
Thallium	2
Zinc	2000
PCBs	
Total PCBs	0.5

OW-26S

	10/7/1996	3/25/1997	8/14/2008	9/18/2009	9/19/2011
VOCs					
CFC-11	< 0.80 U	< 0.80 U	< 0.4 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	4.6	177.8	8
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	ND	ND	NA	NA	181
Metals					
Aluminum	NA	NA	NA	NA	870
Antimony	8.75	7.38 J	NA	NA	< 10.0 U
Arsenic	65.0	27.9 J	NA	NA	9.3
Chromium	< 9.92 UC	1.32 B	NA	NA	486
Iron	NA	NA	NA	NA	19400
Lead	11.0	10.3 J	NA	NA	7.5
Manganese	NA	NA	NA	NA	2050
Nickel	7.88 CJ	27.1	NA	NA	245
Thallium	< 7.07 U	3.63 B	NA	NA	< 10.0 U

MW-9B

	9/20/2010	9/20/2011	9/25/2012	10/1/2013	10/7/2014
VOCs					
1,1-Dichloroethane	140	80	110	89	77
1,1-Dichloroethene	38	15	17	15	9.8
1,4-Dioxane	NA	17	28	NA	NA
cis-1,2-Dichloroethene	850 D	530	580	630	570
Tetrachloroethene	13	8.6	7.5	7.1	5.2
trans-1,2-Dichloroethene	540 D	420	490	540	440
Trichloroethene	130	59	49	51	41
CFC-11	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl chloride	370	160	170	220	160
Total VOC TICs	6.1	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

OW-32D

	9/16/2011	10/1/2012	10/2/2012	10/8/2013	10/8/2014
VOCs					
CFC-11	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	NA	ND	ND
PCBs					
Total PCBs	ND	ND	NA	ND	39
SVOCs					
Total SVOC TICs	27	53	NA	65	ND
Metals					
Aluminum	274	NA	145 J	2160	< 50.0 U
Arsenic	4.5 J	NA	< 5.0 U	5.3	2.3 J
Iron	1850	NA	1880	3780	< 150 U
Lead	< 5.0 U	NA	< 5.0 U	8.3	< 1.5 U
Manganese	993	NA	3240	3600	3040

MW-15

	9/20/2010	9/16/2011	9/27/2012	10/9/2013	10/2/2014
VOCs					
1,1-Dichloroethene	1.6	1.1	0.70 J	0.90 J	0.73 J
1,4-Dioxane	NA	11	7.8	< 50 U	< 50 U
Chloroethane	22	12	7.6	9.8	< 1.0 U
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	26	ND	ND
PCBs					
Total PCBs	1.8	ND	ND	ND	ND
SVOCs					
Total SVOC TICs	ND	9.4	170	11	ND
Metals					
Aluminum	< 200 UB	187 J	425	119 J	148 J
Iron	302	351	2850	183	< 150 U
Manganese	2520	2310	2330	2580	2440

MW-13

	9/21/2011	10/2/2012	10/9/2013	10/9/2014
VOCs				
CFC-11	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND
PCBs	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA
Metals	NA	NA	NA	NA

MW-4

	9/16/2010	9/13/2011	9/25/2012	10/3/2013	8/27/2014
VOCs					
Trichloroethene	1.1	1.1	1.1	1.0	0.98 J
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-11B

	9/10/1997	3/20/1998	9/22/1998	3/15/1999	3/24/2000
VOCs					
1,1-Dichloroethene	< 1.1 U	< 1.1 U	2.0	< 0.71 U	0.8
Trichloroethene	22	23	27	21	22
CFC-11	< 0.8 U	< 0.8 U	< 0.80 U	< 0.79 U	< 0.3 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
bis(2-Ethylhexyl)phthalate	< 4.2 UB	1.5	24 B	< 2.1 UB	NA
Total SVOC TICs	ND	ND	ND	ND	NA
Metals					
Chromium	229	473	1020	1440	NA
Nickel	30.6 CJ	67.4	212	211 J	NA
Thallium	< 2.25 U	< 3.2 U	< 0.88 U	2.46 B	NA

MW-12

	9/15/2010	9/15/2011	9/27/2012	10/4/2013	10/2/2014
VOCs					
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

OW-25S

	8/14/2008	9/18/2009	9/19/2011	10/9/2014
VOCs				
Chloroethane	16	15	< 1.0 U	< 1.0 U
CFC-11	< 0.4 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	18.6	45	ND	ND
PCBs	NE	NE	NE	NE
SVOCs				
Total SVOC TICs	NA	NA	183.3	NA
Metals				
Arsenic	NA	NA	22.0	NA
Iron	NA	NA	9800	NA
Lead	NA	NA	6.2	NA
Manganese	NA	NA	1320	NA
Sodium	NA	NA	84100	NA

MW-23

	3/15/2001	9/5/2001	3/12/2002	9/11/2002	9/22/2005
VOCs					
CFC-11	< 0.3 U	< 0.3 U	NA	< 1 U	< 10 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-7

	9/5/2008	9/11/2009	9/17/2010	9/16/2011	9/27/2012
VOCs					
1,4-Dioxane	NA	NA	NA	< 2.0 U	2.2
Trichloroethene	1.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	< 0.4 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs					
Total PCBs	ND	ND	ND	ND	1.2
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-36B

	9/15/2010	9/15/2011	9/25/2012	10/4/2013	9/30/2014
VOCs					
1,4-Dioxane	NA	< 2.0 U	2.0	NA	NA
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

OW-30

	9/12/1997	3/19/1998	9/18/1998	3/9/1999	3/21/2000
VOCs					
CFC-11	< 0.80 U	< 0.80 U	< 0.8 U	< 0.79 U	< 0.3 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	ND	ND	ND	ND	NA
Metals					
Arsenic	8.61	12.4	2.83 B	3.04 B	NA
Lead	3.11	5.57	1.15 B	NA	NA

MW-6

	9/11/1997	3/19/1998	9/16/1998	3/11/1999	3/23/2000
VOCs					
1,1-Dichloroethene	< 1.1 U	4.2	3.3	2.3	3.2
CFC-11	< 0.80 U	< 0.80 U	< 0.8 U	< 0.79 U	< 0.3 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	ND	ND	ND	ND	NA
Metals					
Arsenic	< 0.62 U	< 2.05 U	3.6 B	5.75	NA
Beryllium	< 1.10 BCU	< 0.225 U	< 1.64 UB	2.50 CJ	NA
Lead	1.22 B	5.72	8.31	12.5 J	NA

MW-35B

	9/21/2000	3/14/2001	9/7/2001	3/14/2002	9/12/2002
VOCs					
1,1-Dichloroethene	3.9	4.4	5	5	5 J
Methylene chloride	< 1.5 U	4.4	< 2.6 U	< 1 U	< 1 U
CFC-11	< 0.3 U	< 0.3 U	< 0.3 U	NA	< 1 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-37B

	9/17/2010	9/15/2011	9/26/2012	10/2/2013	10/1/2014
VOCs					
1,1-Dichloroethene	6.3	5.5	5.9	8.0	4.9
1,4-Dioxane	NA	12	13	NA	< 50 U
Carbon tetrachloride	2.1	2.8	2.6	3.0	1.2
Trichloroethene	12	13	13	15	13
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals					
Aluminum	120 J	364	327	118 J	57.0 J
Iron	78.0 J	1060	310	109 J	< 150 U
Manganese	4.5 J	191	17.5	11.1 J	< 10.0 U

OW-46

	8/14/2008	3/6/2009	9/16/2009	9/19/2011
VOCs				
Benzene	1.2	1.1	0.94 J	< 1.0 U
Chloroethane	83	87	58	< 1.0 U
Trichloroethene	< 0.4 U	< 0.4 U	0.81 J	5.8
CFC-11	< 0.4 U	< 0.4 U	< 1.0 U	< 1.0 U
Vinyl chloride	0.8	< 0.2 U	0.74 J	2.3
Total VOC TICs	ND	ND	ND	ND
PCBs				
Total PCBs	NA	ND	1.6	26
SVOCs				
bis(2-Ethylhexyl)phthalate	NA	1.6	55	7.3 J
Indeno(1,2,3-cd)pyrene	NA	< 0.082 U	0.22 J	< 2.3 U
Total SVOC TICs	NA	ND	ND	879
Metals				
Aluminum	NA	NA	NA	554
Arsenic	NA	7.9	39.8	3.8 J
Beryllium	NA	< 0.30 U	3.7	< 2.0 U
Chromium	NA	1.6 J	1480	3.5 J
Iron	NA	NA	NA	3480
Lead	NA	< 2.7 U	71.4	< 5.0 U
Manganese	NA	NA	NA	152
Nickel	NA	18.4 J	779	< 40.0 U
Zinc	NA	6.6 J	3850	476

OW-24

	9/18/2009	9/21/2011
VOCs		
CFC-11	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND
PCBs	NE	NE
SVOCs		
Total SVOC TICs	NA	ND
Metals		
Aluminum	NA	67900
Arsenic	NA	50.9
Beryllium	NA	3.9
Cadmium	NA	5.6
Chromium	NA	3480
Cobalt	NA	158
Iron	NA	122000
Lead	NA	201
Manganese	NA	1810
Nickel	NA	2000

MW-2

	9/10/1997	3/23/1998	9/15/1998	3/10/1999	3/21/2000
VOCs					
CFC-11	< 0.80 U	< 0.80 U	< 0.8 U	< 0.79 U	< 0.3 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	ND	ND	ND	ND	NA
Metals					
Arsenic	< 0.62 U	< 2.05 U	< 1.53 U	3.32 B	NA

MW-35

	3/27/2000	9/21/2000	3/14/2001	9/7/2001	9/12/2002
VOCs					
1,1-Dichloroethene	2.4	< 0.3 U	1.7	< 0.3 U	< 1 U
Methylene chloride	< 0.8 U	< 1.7 U	4.2	< 1.1 U	< 1 U
CFC-11	< 0.3 U	< 0.3 U	< 0.3 U	< 0.3 U	< 1 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs					
Total PCBs	0.77	ND	0.51	ND	0.36
SVOCs	NA	NA	NA	NA	NA
Metals					
Manganese	3680	NA	NA	NA	NA

MW-37

	9/17/2010	9/14/2011	9/26/2012	10/2/2013	10/1/2014
VOCs					
Trichloroethene	2.8	2.9	2.9	2.9	3.2
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

OW-31

	9/12/1997	3/20/1998	9/16/1998	3/9/1999	3/21/2000
VOCs					
CFC-11	< 0.80 U	< 0.80 U	< 0.8 U	< 0.79 U	< 0.3 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	ND	ND	ND	ND	NA
Metals	NE	NE	NE	NE	NE

MW-1 US GYPSUM

DATE	1/5/2011	2/9/2011	7/15/2011	9/13/2011
VOCs				
1,1-Dichloroethene	1 U	1 U	NA	NA
Trichloroethene	3.4			
4.6				
NA	NA			
Metals				
Aluminum	35,300	3,380		
NA	NA			
Arsenic	6 U			
3 U	3 U	3 U		
Iron	44 500			
3,460				
NA	NA			
Lead	16.2			
3 U	NA	NA		
Manganese	1,470			
106				
NA	NA			
Sodium	59,500			
57,400				
NA	NA			

MW-14

	9/9/1997	3/18/1998	9/15/1998	3/9/1999	3/21/2000
VOCs					
CFC-11	< 0.8 U	< 0.8 U	< 0.8 U	< 0.79 U	< 0.3 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	ND	ND	ND	ND	NA
Metals	NE	NE	NE	NE	NE

MW-1

	9/14/2010	9/14/2011	9/25/2012	10/1/2013	10/7/2014
VOCs					
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-1B

	9/14/2010	9/14/2011	9/25/2012	10/1/2013	10/7/2014
VOCs					
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-5 US GYPSUM

DATE	1/5/2011	2/9/2011
VOCs		
1,1-Dichloroethene	1 U	1 U
Trichloroethene	1 U	1 U
Metals		
Aluminum	477	1,710
Arsenic	3 U	3 U
Iron	359	1,630
Lead	3 U	3 U
Manganese	86.5	160
Sodium	42,000	38,200

MW-3 US GYPSUM

DATE	1/5/2011	2/9/2011	7/15/2011	9/13/2011
VOCs				
1,1-Dichloroethene	1 U	1 U	NA	NA
Trichloroethene	1 U	1 U	NA	NA
Metals				
Aluminum	2,090	6,840	NA	NA
Arsenic	3 U	4.6	4	3 U
Iron	2,170	6,060	NA	NA
Lead	3 U	3	NA	NA
Manganese	59	116	NA	NA
Sodium	59,300	57,500	NA	NA

MW-8

	9/20/2010	9/20/2011	9/25/2012	10/1/2013	10/7/2014
VOCs					
1,1,1-Trichloroethane	800 D	470	450	390	440
1,1-Dichloroethane	800 D	460	560	410	410
1,1-Dichloroethene	140	49	56	55	63
1,2-Dichloroethane	11	6.7	6.2	5.9	6.4
1,4-Dioxane	NA	24 J	45 D	NA	NA
Benzene	1.4	0.76 J	0.92 J	< 2.0 U	0.87 J
Chloroethane	78	20	22	18	24
cis-1,2-Dichloroethene	77	34	44	39	65
Tetrachloroethene	69	33	35	33	52
Trichloroethene	41	17	22	18	32
CFC-11	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U
Vinyl chloride	22	6.4	8.0	7.5	12
Total VOC TICs	5.3	8.93	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-2 US GYPSUM

DATE	1/5/2011	2/9/2011
VOCs		
1,1-Dichloroethene	10.7	8.8
Trichloroethene	2.3	2.1
Metals		
Aluminum	605	2,100
Arsenic	3 U	3 U
Iron	488	1,980
Lead	3 U	3 U
Manganese	16.6	46.9
Sodium	50,700	45,900

MW-10

	9/15/2010	9/13/2011	9/26/2012	10/1/2013	9/30/2014
VOCs					
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-20

	9/21/2010	9/20/2011	9/25/2012	10/1/2013	10/7/2014
VOCs					
1,1-Dichloroethane	99	28	82	70	53
1,1-Dichloroethene	26	0.81 J	5.9	< 5.0 U	4.9
1,4-Dioxane	NA	3.6	13	NA	NA
cis-1,2-Dichloroethene	1700	94	600 J	1100	560
Tetrachloroethene	< 5.0 U	1.4	< 2.0 U	< 5.0 U	0.72 J
trans-1,2-Dichloroethene	220	37	240	230	150
Trichloroethene	100	6.5	19	53	14
CFC-11	< 5.0 U	< 1.0 U	< 2.0 U	< 5.0 U	< 2.0 U
Vinyl chloride	800	310	340	630	430
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	400.5	46	ND	10.5	9.9
Metals					
Aluminum	626 BJ	92.9 J	596	< 200 U	< 200 U
Chromium	7.3 J	476	9.2 J	< 10.0 U	< 10.0 U
Iron	795	2670	890	274	146 J
Lead	4.70 J	< 5.0 U	8.4	< 5.0 U	< 5.0 U
Manganese	3680	3560	4310	4490	3990
Nickel	25.4 J	302	27.5 J	22.3 J	17.8 J

MW-40

	9/14/2010	9/15/2011	9/27/2012	10/3/2013	10/1/2014
VOCs					
Tetrachloroethene	1.2	1.7	2.1	1.3	1.3
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-21

	9/21/2010	9/20/2011	9/28/2012	10/2/2013	10/7/2014
VOCs					
1,1-Dichloroethene	3.9	1.9	0.76 J	4.4	3.0
1,4-Dioxane	NA	< 2.0 U	2.4	NA	NA
Methylene chloride	3.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	10	8.3	9.6	14	15
Trichloroethene	2.6	1.6	3.7	3.9	2.9
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

OW-34

	8/13/2008
VOCs	
CFC-11	< 0.4 U
Vinyl chloride	2.8
Total VOC TICs	ND
PCBs	NA
SVOCs	NA
Metals	NA

MW-41

	9/14/2010	9/15/2011	9/27/2012	10/3/2013	10/6/2014
VOCs					
1,1-Dichloroethene	2.4	1.4	2.9	2.4	0.52 J
Tetrachloroethene	29	20	40	31	11
Trichloroethene	1.2	0.96 J	1.0	1.2	0.66 J
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-6 US GYPSUM

DATE	1/5/2011	2/9/2011
VOCs		
1,1-Dichloroethene	1 U	1 U
Trichloroethene	1 U	1 U
Metals		
Aluminum	19,400	2,180
Arsenic	3 U	3 U
Iron	25,000	2,130
Lead	6.3	3 U
Manganese	700	57
Sodium	19,200	20,800

MW-11

	9/10/1997	3/20/1998	9/21/1998	3/15/1999	3/24/2000
VOCs					
1,1-Dichloroethene	2.2	1.7	2.2	< 0.71 U	1.9
Trichloroethene	16	16	16	12	17
CFC-11	< 0.8 U	< 0.8 U	< 0.80 U	< 0.79 U	< 0.3 U
Total VOC TICs	ND	NA	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	ND	NA	ND	ND	NA
Metals					
Chromium	20.3	19	98.8	12.5 B	NA

MW-45

	9/12/2007	9/3/2008	9/9/2009	9/14/2010	9/20/2011
VOCs					
Tetrachloroethene	1.3	2.4	2.6	1.9	1.7 J
Trichloroethene	< 0.4 U	5.6	< 1.0 U	< 1.0 U	< 1.0 UJ
CFC-11	< 0.4 U	< 0.4 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Total VOC TICs	ND	ND	ND	ND	5.3
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-3

	9/19/2000	3/20/2001	9/6/2001	3/13/2002	9/10/2002
VOCs					
Benzene	< 0.4 U	1.2	< 0.4 U	< 0.4 U	< 0.8 U
Methylene chloride	< 1.1 U	< 1.1 U	< 1.1 U	5	< 1 U
CFC-11	< 0.3 U	< 0.3 U	< 0.3 U	NA	< 1 U
Total VOC TICs	ND	12	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-42

	9/14/2010	9/15/2011	9/27/2012	10/3/2013	10/6/2014
VOCs					
1,1-Dichloroethene	2.1	< 1.0 U	1.7	2.0	1.3
1,4-Dioxane	NA	< 2.0 U	30	NA	NA
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-4 US GYPSUM

DATE	1/5/2011	2/9/2011
VOCs		
1,1-Dichloroethene	1 U	1 U
Trichloroethene	1 U	1 U
Metals		
Aluminum	1,040	425
Arsenic	3 U	3 U
Iron	1,040	347
Lead	3 U	3 U
Manganese	434	317
Sodium	23,100	27,000

MW-38

	9/14/2011	9/27/2012	10/2/2013	9/30/2014
VOCs				
Tetrachloroethene	25	37	26	22
Trichloroethene	8.6	11	11	8.3
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND/ND	ND
PCBs	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA
Metals	NA	NA	NA	NA

MW-38B

	9/15/2010	9/14/2011	10/1/2012	10/2/2013	9/30/2014
VOCs					
1,1-Dichloroethene	50	28	41	34	31
1,4-Dioxane	NA	44 J	69 D	NA	NA
Tetrachloroethene	46	29	41	10	26
Trichloroethene	16	13	17	12	15
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	20	15	14	24	12
Total VOC TICs	ND	ND	5.5	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-5

	9/19/2000	3/20/2001	9/6/2001	3/13/2002	9/10/2002
VOCs					
1,1-Dichloroethene	< 0.3 U	1.3	1.5	1 J	< 1 U
CFC-11	< 0.3 U	< 0.3 U	< 0.3 U	NA	< 1 U
Vinyl chloride	< 0.2 U	1.7	< 0.2 U	2 J	< 0.7 UJ
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-17A

	9/14/2010	9/16/2011	9/28/2012	10/3/2013	9/30/2014
VOCs					
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-19

	9/21/2010	9/21/2011	9/28/2012	10/1/2013	10/2/2014
VOCs					
1,1-Dichloroethene	6.7	2.1	2.6	5.1	2.1
1,4-Dioxane	NA	15	21	NA	< 50 U
Tetrachloroethene	1.4	< 1.0 U	0.60 J	2.2	0.49 J
Trichloroethene	3.1	2.0	3.9	6.2	3.7
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	3.1	9.2	12	4.5	8.5
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NE	NE	NE	NE	NE
SVOCs					
Total SVOC TICs	3.9	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-44

	9/14/2010	9/20/2011	9/27/2012	10/3/2013	10/8/2014
VOCs					
Tetrachloroethene	< 1.0 U	1.6	1.6	2.1	2.1
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-43

	9/14/2010	9/15/2011	9/27/2012	10/3/2013	10/1/2014
VOCs					
Tetrachloroethene	2.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs	NA	NA	NA	NA	NA
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

MW-18

	9/14/2010	9/14/2011	9/28/2012	10/2/2013	9/30/2014
VOCs					
1,1-Dichloroethene	1.8	1.5	1.8	2.7	1.8
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	ND	ND	ND	ND	ND
PCBs					
Total PCBs	1.89	1.8	0.54	1.5	ND
SVOCs	NA	NA	NA	NA	NA
Metals	NA	NA	NA	NA	NA

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- TOWNSHIP BOUNDARY
- FENCE
- RAILROAD TRACKS
- LIMITS OF CAP SYSTEM
- MONITORING WELL
- OFFSITE MONITORING WELL
- BEDROCK WELL
- OVERBURDEN WELL
- US GYPSUM GROUNDWATER SAMPLING LOCATION
- FORMER USG INDUSTRIAL SUPPLY WELL
- NE NO EXCEEDANCE
- NA NOT ANALYZED
- ND NOT DETECTED
- ABANDONED LOCATIONS
- PRODUCT AREA

NOTES:

1. THIS FIGURE INCLUDES GROUNDWATER MONITORING RESULTS FOR THE LAST FIVE SAMPLING EVENTS FOR ALL OVERBURDEN AND SHALLOW BEDROCK WELLS
2. LOCATIONS OF OFFSITE FORMER US GYPSUM FACILITY MONITORING WELLS (MW-1 THROUGH MW-6) AND SAMPLING RESULTS ARE FROM FIGURE 3-1 OF THE ROUX ASSOCIATES, INC. REMEDIAL INVESTIGATION REPORT UNITED STATES GYPSUM COMPANY PI NUMBER 025861, DATED APRIL 15, 2011

0 100 200 300
SCALE IN FEET

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

MW-86B3

DATE	9/16/2009	9/20/2010	9/19/2011	10/2/2012	10/7/2013	10/7/2014
VOCs						
1,1-Dichloroethene	**5.6**	**5.9**	**3.2**	**3.4/3.4**	**5.1**	**3.2**
1,4-Dioxane	NA	NA	**2.4**	**4.8/4.2**	NA	NA
Tetrachloroethene	**5.1**	**5**	**4.7**	**5.0/5.2**	**6**	**4.8**
Trichloroethene	**120**	**120**	**99**	**100/100**	**110**	**110**
CFC-11	17	21	10	13/14	15	12
PCBs	NE	NE	NE	NE	NE	NE

MW-87B

DATE	3/23/2009	9/9/2009	9/15/2010	9/22/2011	10/3/2012	10/2/2013	10/1/2014
VOCs							
1,1-Dichloroethene	< 0.5 U	< 1.0 U	0.23 J	0.57 J	**1.4**	< 1.0 U	< 1.0 U
Tetrachloroethene	< 0.4 U	< 1.0 U	< 1.0 U	0.76 J	**1.2**	0.52 J	< 1.0 U
Trichloroethene	< 0.4 U	0.42 J	0.57 J	**2.5**	**14**	**6.5**	0.6 J
CFC-11	< 0.4 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	< 0.2 U	< 1.0 U	< 1.0 U	< 1.0 U	**7.1**	**5.5**	< 1.0 U

MW-87B2

DATE	3/23/2009	9/9/2009	9/15/2010	9/22/2011	10/3/2012	10/2/2013	10/1/2014
VOCs							
1,1-Dichloroethene	**13**	**13**	**9.4**	**4.1**	**2.7**	**10**	**7.4**
1,4-Dioxane	NA	NA	NA	**3.6**	**7.2**	NA	< 50 U
Tetrachloroethene	**61**	**71**	**73**	**11**	**8.9**	**78**	**74**
Trichloroethene	**260**	**260**	**200**	**69**	**75**	**210**	**220**
CFC-11	6.5	4.1	3.3	1.3	< 1.0 U	2.9	3.4
Vinyl chloride	< 0.2 U	< 1.0 U	< 1.0 U	< 1.0 U	0.19 J	**1.1**	0.52 J

MW-87B3

DATE	3/23/2009	9/9/2009	9/15/2010	9/22/2011	10/3/2012	10/2/2013	10/1/2014
VOCs							
1,1-Dichloroethene	**9.9**	**9.2**	**8.5**	**2.3**	**5.1**	**7.9**	**3.6**
1,4-Dioxane	NA	NA	NA	< 2 U	**7.4**	NA	< 50 U
Tetrachloroethene	**17**	**19**	**17**	**3.1**	**5.5**	**14**	**9.3**
Trichloroethene	**210**	**220**	**200**	**41**	**110**	**150**	**79**
CFC-11	32	18	18	3.1	7.3	14	10
Vinyl chloride	< 0.2 U	< 1.0 U	< 1.0 U	< 1.0 U	**7.2**	**12**	**19**

MW-87B4

DATE	3/23/2009	9/9/2009	9/15/2010	9/22/2011	10/3/2012	10/2/2013	10/1/2014
VOCs							
1,1-Dichloroethene	**7**	**2.7**	**5.7**	**6.2**	**4.1**	**6.6**	**3.9**
1,4-Dioxane	NA	NA	NA	**3.9**	**7.3**	NA	< 50 U
Tetrachloroethene	**6.7**	**2.7**	**5.5**	**4.9**	**2.5**	**4.6**	**3.8**
Trichloroethene	**180**	**76**	**150**	**110**	**95**	**160**	**130**
CFC-11	28	6.5	15	5.8	6.1	16	12
Vinyl chloride	< 0.2 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	**6.6**	**8.2**

MW-87B5

DATE	3/23/2009	9/9/2009	9/15/2010	9/22/2011	10/3/2012	10/2/2013	10/1/2014
VOCs							
1,1-Dichloroethene	**7.2**	**6.3**	**4.9**	**6.2**	**2.7**	**5.2**	**3.3**
1,4-Dioxane	NA	NA	NA	< 2 U	**7.1**	NA	< 50 U
cis-1,2-Dichloroethene	6.2	5.4	5.2	4.3	4.7	**150**	56
Tetrachloroethene	**5.6**	**5.2**	**5**	**2.8**	**1.2**	**1.3**	**1.4**
Trichloroethene	**190**	**180**	**140**	**110**	**78**	**32**	**58**
CFC-11	30	14	14	6	2.4	6.9	9.8
Vinyl chloride	< 0.2 U	< 1.0 U	< 1.0 U	< 1.0 U	0.20 J	**6.8**	**14**

MW-10B

DATE	9/11/2009	9/15/2010	9/13/2011	10/2/2012	10/3/2013	9/30/2014
VOCs						
1,1-Dichloroethane	**120**	**97**	**90**	**94**	**110**	**94**
1,1-Dichloroethene	**100**	**82**	**69**	**110**	**110**	**73**
1,2-Dichloroethane	**7.6**	**6**	**6.3**	**7**	**6.8**	**7.3**
1,4-Dioxane	NA	NA	**46 J**	**51**	NA	NA
Tetrachloroethene	**66**	**69**	**62**	**85**	**66**	**58**
Trichloroethene	**63**	**52**	**48**	**62**	**56**	**50**
CFC-11	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	**17**	**19**	**11**	**17**	**15**	**13**

MW-10B2

DATE	9/11/2009	9/15/2010	9/13/2011	9/26/2012	10/3/2013	10/6/2014
VOCs						
1,1-Dichloroethene	**12/13**	**12**	**8.8**	**12**	**20**	**14**
1,4-Dioxane	NA/NA	**NA**	**14**	**27**	NA	NA
Tetrachloroethene	**22/24**	**23**	**18**	**20**	**22**	**17**
Trichloroethene	**310/340**	**280**	**230**	**270**	**310**	**240**
CFC-11	5.4/5.8	6.1	3.3	4.3	5.9	5.1
Vinyl chloride	**1.7/1.8**	**2.7**	**1.4**	**2.7**	**3.2**	**2.4**

MW-10B3

DATE	9/11/2009	9/15/2010	9/13/2011	10/1/2012	10/1/2013	10/2/2014
VOCs						
1,1-Dichloroethene	**7.6**	**5.6**	**4.5**	**6.2**	**6.2**	**4.6**
1,4-Dioxane	NA	NA	**9.7**	**7**	NE	< 50 U
Tetrachloroethene	**6.7**	**6.6**	**5.6**	**7.6**	**7**	**5.9**
Trichloroethene	**220**	**190**	**170**	**190**	**210**	**190**
CFC-11	21	21 J	13	22	20	17

MW-85B3

DATE	9/14/2009	9/16/2010	9/19/2011	10/2/2012	10/8/2013	10/3/2014
VOCs						
1,1-Dichloroethene	**14**	**9.5**	0.98 J	**6.1/6.2**	**9**	**5.6**
1,4-Dioxane	NA	NA	< 2 U	**9.9/11**	< 50 U	< 50 U
Tetrachloroethene	**2.1**	**1.4**	< 1.0 U	**1.1/1.1**	**1.5**	**1.5**
Trichloroethene	**57**	**39**	**4.3**	**34/33**	**45**	**45**
CFC-11	**7.9**	**4**	< 1.0 U	**4.1/4.2**	**5.7**	**5.1**
Vinyl chloride	0.40 J	0.78 J	< 1.0 U	0.60 J/0.61 J	**1.1**	1
PCBs	NE	NE	NE	NE	NE	NE

MW-31B2

DATE	9/15/2009	9/21/2010	9/20/2011	9/25/2012	10/8/2013	10/7/2014
VOCs						
1,1-Dichloroethene	**57**	**83**	**45**	**49**	**75**	**51**
1,2-Dichloroethene	**2.2**	**2.3**	1.6	1.9	1.9	2
1,4-Dioxane	NA	NA	**31**	**41 J**	NA	NA
Tetrachloroethene	**59**	**77**	**71**	**62**	**72 J**	**62**
Trichloroethene	**420**	**380 D**	**380**	**380**	**390**	**320**
CFC-11	4.1	6.4	3	2.9	4.1	3.1
Vinyl chloride	**6.8**	**9.3**	**5.5**	**5.8**	**8.4**	**7**
PCBs	NE	NE	NE	NE	NE	NE

MW-31B3

DATE	9/16/2009	9/16/2010	9/21/2011	10/1/2012	10/4/2013	10/8/2014
VOCs						
1,1-Dichloroethene	**32**	**24**	**17**	**24**	**17**	**12/12**
1,4-Dioxane	NA	NA	**11**	**14**	NA	< 50 U/< 50 U
Tetrachloroethene	**29**	**25**	**16**	**27**	**17**	**13/12**
Trichloroethene	**280**	**210**	**190**	**250**	**240**	**200/190**
CFC-11	13	12	11	21	20	15/14
PCBs	NE	NE	NE	NE	NE	NE

MW-88B1

DATE	10/9/2013	9/30/2014
VOCs		
1,1-Dichloroethene	**4.1**	**1.3**
Tetrachloroethene	**19**	**7.9**
Trichloroethene	**620**	**220**
CFC-11	6.4	1.9

MW-88B2

DATE	10/9/2013	9/30/2014
VOCs		
1,1-Dichloroethene	**6.4**	**4.2/4.3**
Tetrachloroethene	**6.8**	**7.4/6.8**
Trichloroethene	**200**	**170/160**
CFC-11	19	15/15

MW-88B3

DATE	10/9/2013	9/30/2014
VOCs		
1,1-Dichloroethene	**4.9**	**3.5**
Tetrachloroethene	**6.3**	**6.2**
Trichloroethene	**130**	**110**
CFC-11	18	14

MW-88B4

DATE	10/9/2013	9/30/2014
VOCs		
1,1-Dichloroethene	**2.6**	**1.8**
Trichloroethene	**20**	**16**
CFC-11	6.7	5.3

MW-37B2

DATE	3/4/2009	9/14/2009	9/17/2010	9/14/2011	9/26/2012	10/2/2013	10/1/2014
VOCs							
1,1-Dichloroethene	**44**	**38**	**34**	**19**	**23**	**32**	**23**
1,4-Dioxane	NA	NA	NA	**14**	**21**	NA	< 50 U
Carbon tetrachloride	**1.7**	**2.3**	**1.9**	**1.6**	**1.3**	**1.2**	0.97 J
Tetrachloroethene	**55**	**59**	**55**	**43**	**41**	**42**	**38**
Trichloroethene	**130**	**150**	**130**	**120**	**140**	**150**	**130**
CFC-11	3.4	6.1	5.4	5.2	5.6	9	7.1
PCBs	NE	NE	NE	NE	NE	NE	NE

MW-37B3

DATE	3/4/2009	9/14/2009	9/17/2010	9/14/2011	9/26/2012	10/2/2013	10/1/2014
VOCs							
1,1-Dichloroethene	**31**	**40**	**31**	**21**	**16**	**28**	**17**
1,4-Dioxane	NA	NA	NA	**11**	**13**	NA	< 50 U
Tetrachloroethene	**39**	**48**	**38**	**33**	**26**	**25**	**20**
Trichloroethene	**190**	**250**	**210**	**200**	**200**	**220**	**190**
CFC-11	5.8	11	9.4	8.4	8	15	12
PCBs	NE	NE	NE	NE	NE	NE	NE

LEGEND:

- APPROXIMATE SITE BOUNDARY
- DEEP BEDROCK WELL
- **NE** NO EXCEEDANCES
- **NA** NOT ANALYZED

0 300’ 600’

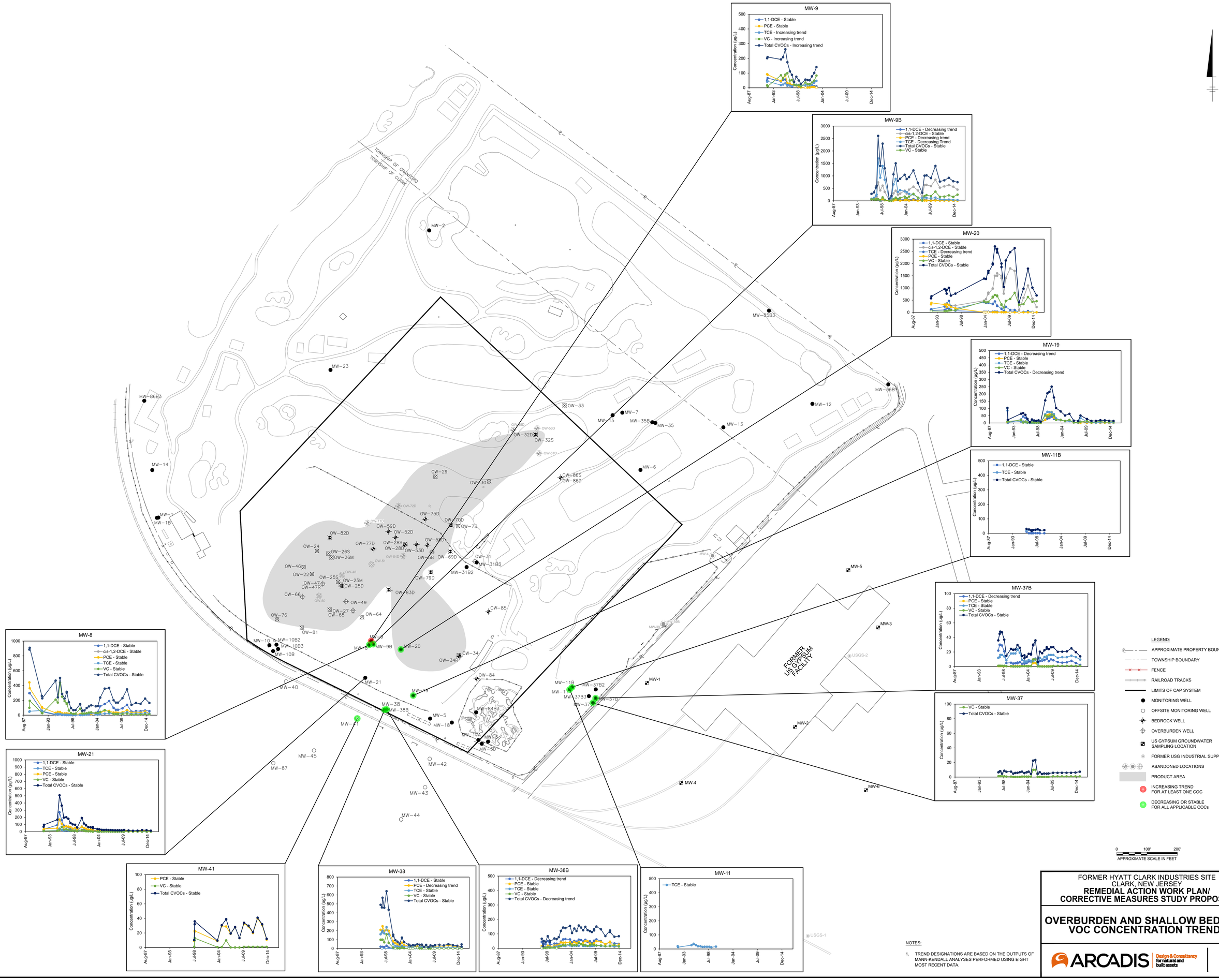
GRAPHIC SCALE

FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY
REMEDIAL ACTION WORK PLAN/ CORRECTIVE MEASURES STUDY PROPOSAL

DEEP BEDROCK GROUNDWATER ANALYTICAL RESULTS 2009 - 2014

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7



NOTES:

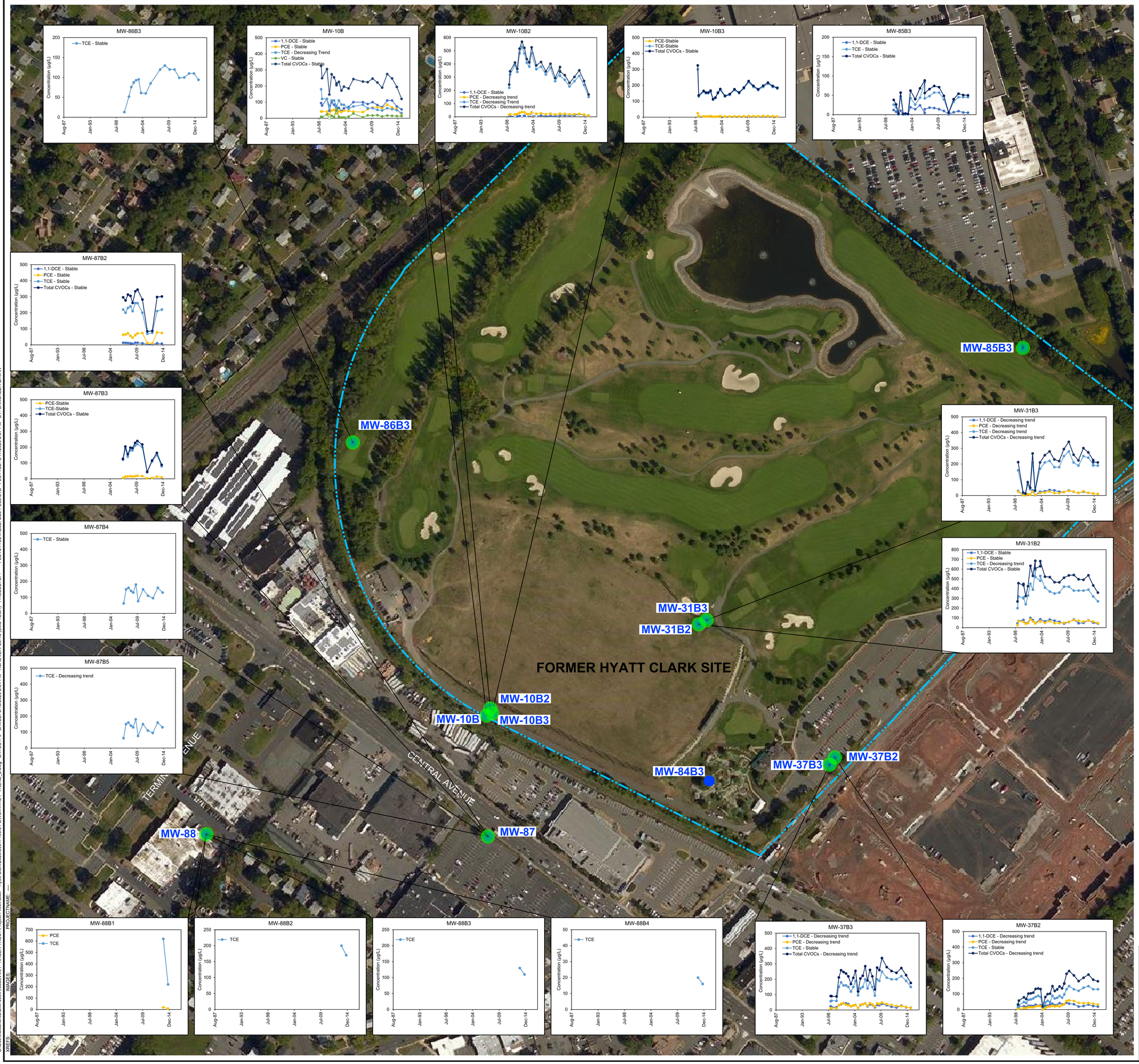
1. TREND DESIGNATIONS ARE BASED ON THE OUTPUTS OF MANN-KENDALL ANALYSES PERFORMED USING EIGHT MOST RECENT DATA.

FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY
REMEDIAL ACTION WORK PLAN/ CORRECTIVE MEASURES STUDY PROPOSAL

OVERBURDEN AND SHALLOW BEDROCK VOC CONCENTRATION TRENDS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 8



LEGEND:

- APPROXIMATE SITE BOUNDARY
- DEEP BEDROCK WELL
- DECREASING OR STABLE FOR ALL APPLICABLE COCs

NOTES:

1. TREND DESIGNATIONS ARE BASED ON THE OUTPUTS OF MANN-KENDALL ANALYSES PERFORMED USING EIGHT MOST RECENT DATA.

0 100' 200'
APPROXIMATE SCALE IN FEET

FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY

REMEDIAL ACTION WORK PLAN/ CORRECTIVE MEASURES STUDY PROPOSAL

DEEP BEDROCK VOC CONCENTRATION TRENDS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 9

SL-25			
Depth (ft)	0-0.5	1.5-2	1.5-2
Date	2/14/2005	2/14/2005	12/6/2016
Total PCBs	**8.3**	**20.2**	**10.5**

SL-19			
Depth (ft)	0-0.5	0.0-0.5	1.5-2
Date	1/10/2005	12/6/2016	1/10/2005
Total PCBs	**19.4**	**50.7**	**9.6**

SL-1B		
Depth (ft)	1.5-2	3.5-4
Date	6/9/2004	6/30/2005
Total PCBs	**89**	**3.39**

SL-2B					
Depth (ft)	1.5-2	3.5-4	5.5-6	6.5-8	8.5 - 9.0
Date	6/9/2004	6/30/2005	6/30/2005	6/30/2005	12/6/2016
Total PCBs	**92**	**116**	**0.8**	**0.56**	0.0222 J

SL-17				
Depth (ft)	0-0.5	0-2	1.5-2	3.5-4
Date	1/10/2005	1/10/2005	1/10/2005	6/30/2005
Total PCBs	**64**	**64**	**48**	**6**

SL-18					
Depth (ft)	0-0.5	1.5-2	3.5-4	5.5-6	6.5-8
Date	1/10/2005	1/10/2005	6/30/2005	6/30/2005	6/30/2005
Total PCBs	**630**	**29**	**102**	**0.48**	0.077 U

SL-26		
Depth (ft)	0-0.5	1.5-2
Date	2/14/2005	2/14/2005
Total PCBs	0.081 U	0.079 U

SL-11			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	8/20/2004	8/20/2004	6/30/2005
Total PCBs	**84**	**40**	**4**

SL-13						
Depth (ft)	0-0.5	1.5-2	3.5-4	5.5-6	6.5-8	8.5-9.0
Date	12/16/2004	12/16/2004	6/30/2005	6/30/2005	6/30/2005	12/6/2016
Total PCBs	**107**	**840**	**79**	**0.92**	**0.34**	0.00654 J

SL-21				
Depth (ft)	0-0.5	1.5-2	3.5-4	3.5-4.0
Date	2/14/2005	2/14/2005	6/30/2005	12/6/2016
Total PCBs	**18**	**2.5**	**10.2**	0.00184 U

SL-33		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**2.15**	**1.43**

SL-14			
Depth (ft)	0-0.5	1.5-2	1.5-2
Date	12/16/2004	12/16/2004	12/6/2016
Total PCBs	**11.6**	**16.7**	**18.5**

SL-09			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	8/20/2004	8/20/2004	6/30/2005
Total PCBs	**29**	**49**	**0.81**

SL-12		
Depth (ft)	0-0.5	1.5-2
Date	12/16/2004	12/16/2004
Total PCBs	**23**	**4.8**

SL-22		
Depth (ft)	0-0.5	1.5-2
Date	2/14/2005	2/14/2005
Total PCBs	**6.6**	**0.69**

SL-42		
Depth (ft)	0-0.5	1.5-2.0
Date	12/11/2009	12/11/2009
Total PCBs	**4.7**	0.035 J

SL-3B		
Depth (ft)	1.5-2	3.5-4
Date	6/9/2004	6/30/2005
Total PCBs	**1070**	**30.7**

SL-23			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	2/14/2005	2/14/2005	6/30/2005
Total PCBs	**28**	**74**	**16.5**

SL-44	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.145

SL-06		
Depth (ft)	0-0.5	1.5-2
Date	8/20/2004	8/20/2004
Total PCBs	**33**	**25**

SL-27		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**0.097**	**4.4**

SL-34		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	0.078 U	0.076 U

SL-05		
Depth (ft)	0-0.5	1.5-2
Date	8/20/2004	8/20/2004
Total PCBs	**39**	**38**

SL-24			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	2/14/2005	2/14/2005	6/30/2005
Total PCBs	**8.2**	**2.8**	0.085 U

SL-31		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**4.3**	0.15

SL-4B	
Depth (ft)	1.5-2
Date	6/9/2004
Total PCBs	**30.8**

SL-28		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**2.03**	**1.48**

SL-32		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**3.6**	**4.09**

SL-29		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**4.5**	**5.4**

SL-46				
Depth (ft)	0.0 - 0.5	1.5 - 2.0	2.0 - 2.5	2.5 - 3.0
Date	12/6/2016	12/6/2016	12/6/2016	12/6/2016
Total PCBs	0.00192 U	0.022 J	0.0129 J	0.0018 U

SL-38		
Depth (ft)	0-0.5	1.5-2.0
Date	12/11/2009	12/11/2009
Total PCBs	**0.51**	0.021 J

SL-41					
Depth (ft)	0-0.5	1.5-2.0	2.0 - 2.5	3.5-4.0	5.5-6.0
Date	12/11/2009	12/11/2009	12/6/2016	12/11/2009	12/11/2009
Total PCBs	**0.73**	**0.4**	0.00188 U	0.077 U	0.075 U

SL-52	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	**0.449**

SL-20			
Depth (ft)	0-0.5	0.0-0.5	1.5-2
Date	1/10/2005	12/6/2016	1/10/2005
Total PCBs	**5.5**	**19.3**	**0.32**

SL-52A	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	**0.389**

SL-52B	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.027

SL-15			
Depth (ft)	0-0.5	0-0.5	1.5-2
Date	12/16/2004	12/6/2016	12/16/2004
Total PCBs	**22.5**	**6.1**	**0.8**

SL-37	
Depth (ft)	3.5-4
Date	6/30/2005
Total PCBs	0.078 U

SL-36	
Depth (ft)	3.5-4
Date	6/30/2005
Total PCBs	0.12

SL-48	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.0354 J

SL-49	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.00209 U

SL-51				
Depth (ft)	0.0 - 0.5	1.5 - 2.0	2.0 - 2.5	2.5 - 3.0
Date	12/6/2016	12/6/2016	12/6/2016	12/6/2016
Total PCBs	**0.286**	0.0212 J	0.0116 J	0.00502 J

SL-10				
Depth (ft)	0-0.5	1.5-2	3.5-4	
Date	8/20/2004	8/20/2004	6/30/2005	
Total PCBs	**205**	**86**	**10.1**	

SL-47	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.0105 J

SL-07			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	8/20/2004	8/20/2004	6/30/2005
Total PCBs	**22.8**	**13.3**	**4**

SL-35			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	6/30/2005	6/30/2005	6/30/2005
Total PCBs	0.082 U	**0.48**	**3.4**

SL-51A	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.109

SL-40				
Depth (ft)	0-0.5	1.5-2.0	3.5-4.0	5.5-6.0
Date	12/11/2009	12/11/2009	12/11/2009	12/11/2009
Total PCBs	**0.999 J**	0.049 J	0.081 U	0.076 U

SL-16		
Depth (ft)	0-0.5	1.5-2
Date	12/16/2004	12/16/2004
Total PCBs	**1.25**	**5.3**

SL-39				
Depth (ft)	0-0.5	1.5-2.0	3.5-4.0	5.5-6.0
Date	12/11/2009	12/11/2009	12/11/2009	12/11/2009
Total PCBs	**1.15**	0.027 J	0.059 J	0.077 U

SL-43		
Depth (ft)	0-0.5	1.5-2.0
Date	12/11/2009	12/11/2009
Total PCBs	**1.32**	0.09

SL-30			
Depth (ft)	0-0.5	1.5-2	2-2.5
Date	3/21/2005	3/21/2005	12/6/2016
Total PCBs	**4.8**	**1.34**	0.0126 J

NOTES:
1. Orange shading indicates a total PCB concentration exceeding the 50 ppm USEPA.
2. **Bold** values indicate a total PCB concentration exceeding the 0.2 ppm cleanup standard NJDEP.
3. Blue highlighted - Total PCBs removed IN 2005
4. Aerial obtained from Google Earth Pro, June 2015.
5. Abbreviations:
- PCB = Polychlorinated biphenyls
- ft = feet
- mg/kg = PPM = milligrams per kilogram = parts per million
- J = an estimated concentration
- U = PCBs were not detected

LEGEND:

- Soil Boring
- Cap Area
- 2005 EXCAVATION AREA
- Property Boundary
- Current Features
- Fence
- Railroad

SOIL BORING CONCENTRATION KEY:

- Non Detected and or <0.2 mg/kg At Any Depth
- Detections >0.2 mg/kg and <50 ppm At One or More Depths
- Detections >50ppm At One or More Depths

0 40 80

SCALE IN FEET

FORMER HYATT CLARK INDUSTRIES
1300 RARITAN RD, CLARK, NJ
REMEDIAL ACTION WORK PLAN/
COORECTIVE MEASURES STUDY PROPOSEAL

TOTAL PCB CONCENTRATIONS

ARCADIS

FIGURE
10

DIV/GROUP: ENV/MDV DB: akens LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISProjects_ENV\Hyatt Clark\MXDs\Self-Implementing WP\HyattClark_PCB concentrations.mxd DATE: 2/25/2020 2:10:37 PM

DIV/GROUP: ENV/MDV DB: akens LD: PIC: PM: TM:
PROJECT: PATH: Z:\GIS\Projects_ENV\Hyatt Clark\MXDs\Self-Implementing WP\HyattClark_ExcavUpdateVerifSamplerev2.mxd DATE: 3/5/2020 1:24:56 PM

LEGEND:

- Soil Boring
- Proposed Verification sample
- 25'x25' Grid
- 2005 Excavation Area
- Area of Interest
- Cap Area
- Property Boundary
- Current Features
- Fence
- Railroad
- Overhead Wire
- Gas Line
- Pole
- Electric Box
- Electric Meter
- Gas Marker
- Non-Detected and or <0.2 mg/kg At Any Detections
- Detections >0.2 mg/kg and <50 ppm At One or More Depth
- Detections >50ppm At One or More Depths
- Clean Fill from 0-4.0 ft bgs. No Analytical Data Below 4.0 ft bgs
- Excavate from 0-1.5 ft bgs (TSCA) Excavate from 1.5-2.5 ft bgs non-TSCA
- Excavate 0-1.0 ft bgs
- Excavate 0-2.5 ft bgs
- Excavate 0-4.5 ft bgs
- Excavate 0-6.5 ft bgs
- Excavate 0-8.5 ft bgs

NOTES:
1. Aerial obtained from Google Earth Pro, June 2015.

0 25 50
SCALE IN FEET

FORMER HYATT CLARK INDUSTRIES SITE
CLARK, NEW JERSEY
REMEDIAL ACTION WORK PLAN/ CORRECTIVE MEASURES STUDY PROPOSAL

EXCAVATION AREAS AND VERIFICATION SAMPLING LOCATIONS

ARCADIS

FIGURE 11

APPENDIX A

Traditional/Direct Oversight Report Certification Form

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

TRADITIONAL/DIRECT OVERSIGHT REPORT CERTIFICATION FORM

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Former Hyatt Clark Industries Site

List All AKAs:

Street Address: 1300 Raritan Road

Municipality: Clark (Township Borough or City)

County: Union Zip Code: 07066

Program Interest (PI) Number(s): 001205 Case Tracking Number(s): ISRA Case No. E87769

SECTION B. REPORT INFORMATION

Report Name: Remedial Action Work Plan and Corrective Measures Study Proposal

Report Date:

Case Type:

☒ **RCRA GPRA 2020** ☐ **CERCLA/NPL** ☐ **USDOD** ☐ **USDOE** ☐ **Direct Oversight**

☐ **Other** (explain):

SECTION C. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: see below

Representative First Name: Robert Representative Last Name Hare

Title: Cleanup Manager (IL, IN, KS, MO, NJ, WI)

Phone Number: (313) 486-2908 Ext: Fax:

Mailing Address: 500 Woodward Avenue, Suite 2650

City/Town: Detroit State: MI Zip Code: 48266

Email Address: rhare@racertrust.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Date: 9-24-2020

Name/Title: ROBERT W. HARE, CLEANUP MGR.

SECTION D. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: 575494

First Name: Christopher Last Name: Motta

Phone Numbers: (201) 398-4380 Ext.: _____ Fax: _____

Mailing Address: 17-17 Route 208, Suite 290

Municipality: Fair Lawn State: New Jersey Zip Code: 07410

Email Address: christopher.motta@arcadis.com

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

(1) I certify, as a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C-1 et seq. to conduct business in New Jersey, that for the remediation described in this submission, and all attachments included in this submission, I personally: Managed, supervised, or performed the remediation conducted at this site that is described in this submission, and all attachments included in this submission; and/or periodically reviewed and evaluated the work performed by other persons that forms the basis for the information in this submission; and/or completed the work of another site remediation professional, licensed or not, after having: (1) reviewed all available documentation on which I relied; (2) conducted a site visit and observed the then-current conditions and verified the status of as much of the work as was reasonably observable; and (3)concluded, in the exercise of my independent professional judgment, that there was sufficient information upon which to complete any additional phase of remediation and prepare workplans and reports related thereto.

(2) I certify:

- *That I have read this submission and all attachments to this submission;*
- *That in performing the professional services as the licensed site remediation professional for the entire site or each area of concern, I adhered to the professional conduct standards and requirements governing licensed site remediation professionals provided in N.J.S.A. 58:10C-16;*
- *That the remediation conducted at the entire site or each area of concern, that is described in this submission and all attachments to this submission, was conducted pursuant to and in compliance with the remediation requirements in N.J.S.A. 58:10C-14.c;*
- *That the remediation described in this submission, and all attachments to this submission, was conducted pursuant to and in compliance with the regulations of the Site Remediation Professional Licensing Board at N.J.A.C. 7:26I; and*
- *That the information contained in this submission and all attachments to this submission is true, accurate, and complete.*

(3) I certify, when this submission includes a response action outcome, that the entire site or each area of concern has been remediated in compliance with all applicable statutes, rules, and regulations and is protective of public health and safety and the environment.

(4) I certify that no other person is authorized or able to use any password, encryption method, or electronic signature that the Board or the Department have provided to me.

(5) I certify that I understand and acknowledge that:

- *If I knowingly make a false statement, representation, or certification in any document or information I submit to the Department I may be subject to civil and administrative enforcement pursuant to N.J.S.A. 58:10C-17.a.1(a)through (f) by the Board, including but not limited to license suspension, revocation, or denial of renewal; and*
- *If I purposely, knowingly, or recklessly make a false statement, representation, or certification in any application, form, record, document or other information submitted to the Department or required to be maintained pursuant to the Site Remediation Reform Act, I shall be guilty, upon conviction, of a crime of the third degree and shall, notwithstanding the provisions of subsection b. of N.J.S.2C:43-3, be subject to a fine of not less than $5,000 nor more than $75,000 per day of violation, or by imprisonment, or both.*

(6) I certify that I have read this certification prior to signing, certifying, and making this submission.

LSRP Signature:  Date: 09/24/2020

LSRP Name: Christopher J. Motta

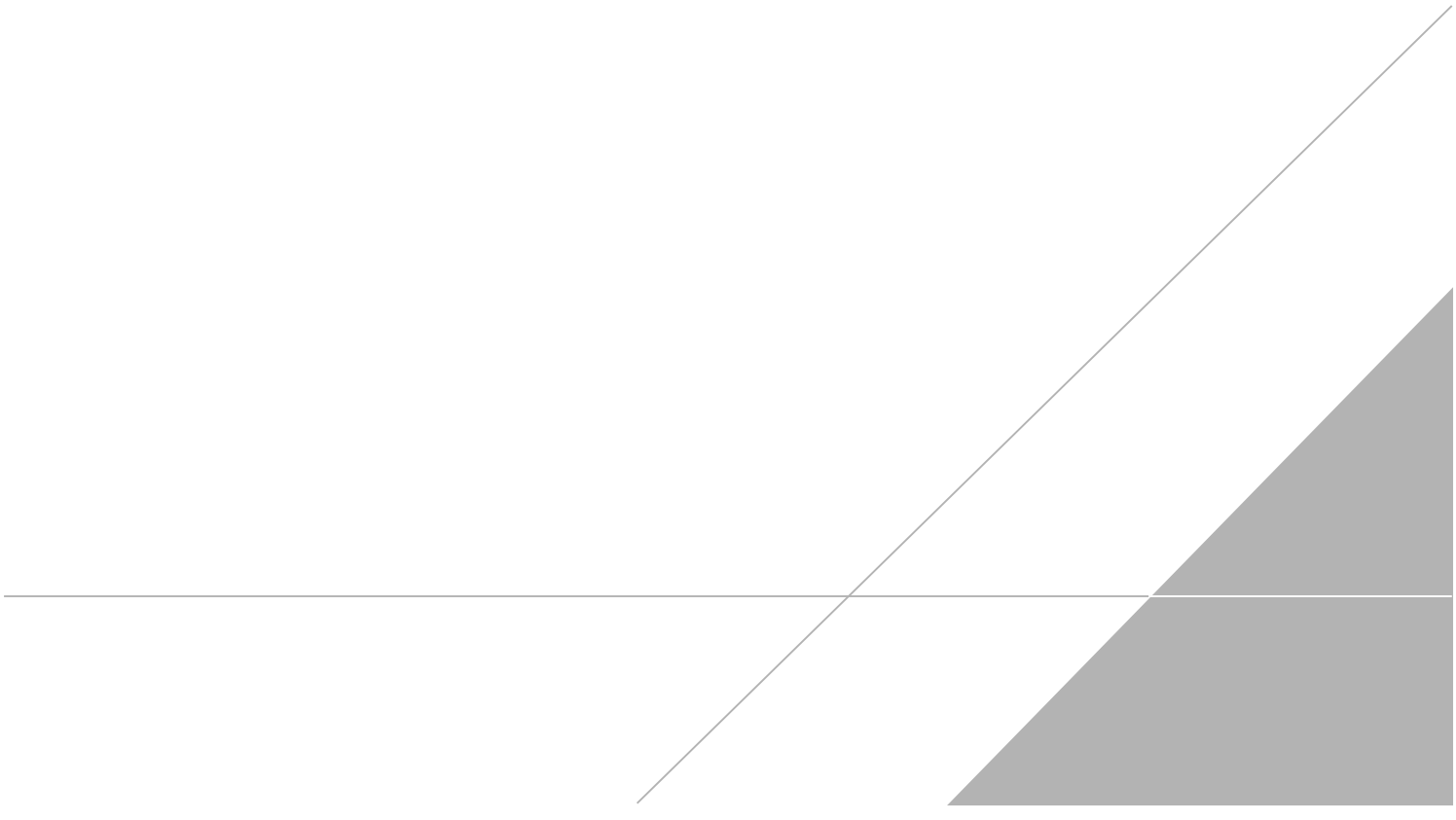
Company Name: Arcadis U.S., Inc.

Completed forms should be sent to:

Assigned Case Manager
Bureau of Case Management
Site Remediation Program
NJ Department of Environmental Protection
401-05F
PO Box 420
Trenton, NJ 08625-0420

APPENDIX B

Case Inventory Document



Case Name: Former Hyatt Clark Industries Site

PI #: 001205

IMPORTANT: *1) Do not delete or copy and paste across multiple columns because it can disrupt hidden equations.*

2) If pasting from a Word document, use the Paste option: ***Match Destination Formatting***

3) If the text turns ***red*** *you have exceeded the character limit for that column*

Case Inventory Document Version 1.4 02/23/17

AOC ID	AOC Type	AOC Description	Confirmed Contamination	AOC Status	Status Date	Incident #	DEP AOC Number	Contaminated Media	Contaminants of Concern	Additional Contaminants of Concern	Additional Contaminants of Concern	Applicable Remediation Standard	Exposure Route	Additional Exposure Route	RA Type	Additional RA Type	Additional RA Type	Was an Order of Magnitude Evaluation Conducted?	Activity
AOC-1	Storage tank and appurtenance - State or Federal Regulated underground storage tank	Two 5,500 gal Unleaded UST's (removed). One 1,000 gal Gasoline UST (removed).	Yes	NFA-A DEP Issued (Restricted Use)	3/12/2003			Soil	BN + PCBs	TPHC	Metals	Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)	Ingestion/Dermal	Inhalation	Capping	Excavation			September 1994 - USTs excavated, contaminants of concern (COCs) found in post-excavation samples above applicable criteria. April 2000 - Cap installed. September 2002 - Deed Notice (DN) approved. November 2002 - DN filed (recorded).
AOC-2	Storage tank and appurtenance - State or Federal Regulated underground storage tank	One 1,000 gal Leaded Gasoline UST (removed)	No	NFA-A DEP Issued (Unrestricted Use)	12/15/1998			None				Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)			No Remedial Action				September 1994 - UST excavated, no exceedances of applicable criteria in post-excavation samples. December 1998 - NFA granted.
AOC-3	Storage tank and appurtenance - State or Federal Regulated underground storage tank	One 1,000 gal Diesel UST (removed)	Yes	NFA-A DEP Issued (Restricted Use)	11/13/2002			Soil	Metals + PAHs	PCBs		Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)	Ingestion/Dermal	Inhalation	Capping	Excavation			September 1994 - USTs excavated, contaminants of concern (COC) found in post-excavation samples and surrounding borings at concentrations above applicable criteria. Shallow contaminated soils were excavated and placed beneath capped area as per NJDEP approval. April 2000 - Cap installed. September 2002 - DN approved. November 2002 - DN filed. An unrestricted use remedial action for the offsite PCB impacts to soil are proposed in this RAWP. Excavation and off-site disposal is the proposed remedial action.
AOC-4	Other areas of concern - Electrical transformer and capacitor	Transformer Pad Station No. 5 (removed). Two 3,000, Three 30,000, Two 12,500, Two 10,000 gal No.6 Fuel Oil ASTs (removed). Chip Pit Area. Eighteen 5,800 gal. Oil ASTs (removed). Unpaved Scrap Pile Area. Maintenace Storage Building (removed). Paved Drum Storage Area (RCRA Closure Area). Two 20,000 gal Waste Oil ASTs (RCRA Closure Area). Three 45,000 gal Settling ASTs. West Side Bldg. RCRA Waste Pile. RCRA Cosure Area. Primary Transformer Substation.	Yes					Soil	TPHC	VO + BN	Metals + PCBs	Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)	Ingestion/Dermal	Inhalation	Capping	Excavation			October 1994 - USTs removed. October 2005 - Excavation completed to remove PCB at concentrations greater than 50 mg/kg. April 2000 - Cap installed. September 2002 - DN recorded. November 2002 - DN filed. DN for Conrail property required after delineation is complete.
AOC-5	Storage and staging area - Storage pad and area	Three 750,000 gal Waste Water Treatment ASTs. Waste Oil AST (removed) (RCRA Closure Area). West Rail Siding (removed). North of Road, Propane Storage. Rail Siding and Chip Hopper. New Drum Storage Pad. Rear Access Road. Drainage Swale. Northern Use Area. Parshall Flume.	Yes	NFA-A DEP Issued (Restricted Use)	9/30/2002			Soil	TPHC	VO + BN	Metals + PCBs	Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)	Ingestion/Dermal	Inhalation	Capping	Excavation			ASTs removed. Excavation completed to remove soil with total petroleum hydrocarbons (TPH) greater than 10,000 parts per million (ppm). April 2000 - Cap installed. September 2002 - DN approved. November 2002 - DN filed.
AOC-6	Other areas of concern - Any area suspected of containing contaminants	Area Under Building Slab. Former Chip House (removed). Pang Born Room (removed).	Yes	NFA-A DEP Issued (Restricted Use)	3/1/2003			Soil	TPHC	Metals + PCBs	BN	Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)	Ingestion/Dermal	Inhalation	Capping				April 2000 - Cap installed. September 2002 - DN approved. November 2002 - DN filed.
AOC-7	Other areas of concern - Other discharge area	Compactor East Side of Building (removed)	No	NFA-A DEP Issued (Unrestricted Use)	4/15/1990			None				Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)			No Remedial Action				1988 - Two samples collected and analyzed for TPHC. No exceedances of applicable criteria.
AOC-8	Other areas of concern - Any area suspected of containing contaminants	Skim Pits	Yes	NFA-A DEP Issued (Restricted Use)	3/1/2003			Soil	BN			Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)	Ingestion/Dermal	Inhalation	No Remedial Action				Polycylic aromatic hydrocarbons (PAHs) detected at concentrations greater than the residential direct contact soil cleanup criteria (RDCSCC). September 2002 - DN approved. November 2002 - DN filed.
AOC-9	Storage tank and appurtenance - Loading and unloading area	East Parking Lot	Yes	NFA-A DEP Issued (Restricted Use)	3/1/2003			Soil	Metals + PAHs	VO		Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)	Ingestion/Dermal	Inhalation	Capping	Excavation			Soil with beryllium, methylene chloride, and PAHs detected at concentrations greater than applicable criteria were excavated during golf course pond excavations and reused beneath cap. April 2000 - Cap installed. September 2002 - DN approved. November 2002 - DN filed.
AOC-10	Drainage system and area - Building sump and pit	Butler Sump Area	No	NFA-A DEP Issued (Unrestricted Use)	3/1/2003			None				Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)							1988 - Two samples collected and analyzed for TPHC, volatile organic compounds (VOCs), base neutrals (BNs), pesticides, metals, and polychlorinated biphenyls. No exceedances of applicable criteria.
AOC-11	Other areas of concern - Any area suspected of containing contaminants	MW-10 and MW-14	No	No Sampling Trigger	8/4/1993							Soil Cleanup Criteria (MUST have RAW approved for AOC prior to 12/2/2008)							This area of concern (AOC) was eliminated, per the 08/04/1993 NJDEP letter.

Case Name: Former Hyatt Clark Industries Site

PI #: 001205

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3) If the text turns ***red*** *you have exceeded the character limit for that column*

Case Inventory Document Version 1.4 02/23/17

AOC ID	AOC Type	AOC Description	Confirmed Contamination	AOC Status	Status Date	Incident #	DEP AOC Number	Contaminated Media	Contaminants of Concern	Additional Contaminants of Concern	Additional Contaminants of Concern	Applicable Remediation Standard	Exposure Route	Additional Exposure Route	RA Type	Additional RA Type	Additional RA Type	Was an Order of Magnitude Evaluation Conducted?	Activity
AOC-12	Environmental media - Media Ground water	Groundwater	Yes	RAW	11/1/2015			Ground Water	VO + EPH			Remediation Standards	Ground Water		Pump & Treat				The proposed remedial action for AOC 12A – Free Product is product recovery and containment through the continued operation and maintenance of the current Free Product Recovery (FPR) system. Monitored natural attenuation (MNA) remedial action for dissolved-phase impacts will be implemented after free product is addressed. In the interim, a groundwater monitoring program will be implemented to ensure that MNA continues to be the appropriate remedial action for the dissolved-phase groundwater impacts. The CEA/WRA for the site groundwater impacts will continue to serve as an institutional control to mitigate potential receptor exposure to constituents of concern in groundwater.
AOC-13	Environmental media - Media Air	Vapor Intrusion	Yes	RI	11/1/2015			Ground Water	VO			Remediation Standards	Inhalation		No Remedial Action				Thirteen (13) sub-slab soil gas samples were collected from three buildings. VOC concentrations did not exceed the soil gas screening levels. Further VI investigation of these buildings is not warranted.

APPENDIX C

Supplemental Soil Remedial Investigation Report for Off-Site PCB Delineation (include laboratory reports and EDD submittals and data validation)

ARCADIS Design & Consultancy for natural and built assets

RACER Trust

SOIL INVESTIGATION REPORT FOR SUPPLEMENTAL OFF-SITE PCB DELINEATION

ISRA Case No. E87769 – Former Hyatt Clark Industries Site, Clark, New Jersey

March 2020

SOIL INVESTIGATION REPORT FOR SUPPLEMENTAL OFF-SITE PCB DELINEATION

ISRA Case No. E87769 – Former Hyatt Clark Industries Site, Clark, New Jersey

Prepared for:

RACER Trust

Prepared by:

Arcadis U.S., Inc.

17-17 Route 208 North, Suite 290

Fair Lawn

New Jersey 07410

Tel 201 797 7400

Fax 201 797 4399

Our reference:

NJ000289.0039

Date:

March 2020

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FIGURES

ATTACHMENT

1. INTRODUCTION

This report presents the results of a supplemental investigation conducted at the off-site, polychlorinated biphenyl (PCB) impacted area located directly south of the Former Hyatt Clark Industries Site (Site) in Clark, New Jersey. The impacted area is coincident with a portion of an inactive rail line located immediately southwest of the site and a small portion of a commercial property immediately south of the inactive rail line. The objective of the investigation was to further delineate PCB impacts to soil and calculate a site-specific impact-to-ground-water soil remediation standard (SSIGW SRS) for PCBs. The results are being reported in support of the remedial action proposed in the Groundwater Remedial Action Work Plan and Corrective Measures Study Proposal (RAWP/CMSP). A site plan showing the off-site PCB-impacted area is presented as **Figure 1**.

1.1 Background

Initial investigation activities were conducted along the inactive rail line in 2004, 2005, and 2009. The sample analytical results from these investigations are presented in **Table 1** and shown on **Figure 2.** In 2005, General Motors Company (GM) conducted a soil remedial action that included removal of approximately 200 cubic yards of soil impacted with the highest PCB levels encountered along the inactive rail line. PCB concentrations within the excavation area ranged from 0.69 to 1,070 milligram per kilogram (mg/kg) . The remedial action consisted of excavation and off-site disposal of PCB-impacted soil within the limits shown on **Figure 2**. The remedial action was reported to the New Jersey Department of Environmental Protection (NJDEP) in Progress Report No. 5, dated December 2005 (prepared by URS Corporation). As part of the Remedial Investigation (RI) and as reported in the 2016 RIR, the nature and extent of the PCB impacts that remain were characterized using extrapolation and application of the conceptual site model for the soil.

The findings and recommendations of the supplemental investigation, which was conducted in 2016 and 2017, are presented in this report.

2. TECHNICAL OVERVIEW

Reliability of data and implementation of the investigation are discussed in this section.

2.1 Reliability of Data

Laboratory analytical data produced as part of the investigation were reviewed for completeness and technical compliance. If any data were determined not to be complete and/or technically compliant, the data reviewer referred to the NJDEP data validation documents for assistance. Organic results were reviewed using the criteria specified in NJDEP Standard Operating Procedure (SOP) 5.A.13. Where applicable, the review of the data packages included checking the following: chain-of-custody forms, holding times, blank contamination, spike recoveries, surrogate recoveries, internal standards, calibrations within quality control (QC) limits, interference check recoveries/serial dilution check samples,

precision of duplicate analyses, and laboratory control samples. Electronic data deliverables and an electronic copy of the laboratory reports (including data review summaries) are provided in **Attachment A**.

2.2 Investigation Implementation

In December 2016 and January 2017, soil borings were advanced to further delineate the PCB-impacted area. Soil samples from boring locations SL-2B, SL-13, SL-21, SL-30, SL-41, SL-44, SL-46, SL-47, SL-48, SL-49, SL-51, SL-51A SL-52, SL-52A, and SL-52B were collected to horizontally and vertically delineate the PCB impacts to the NJDEP Residential Direct Contact Soil Remediation Standard (RDCSRS) of 0.2 mg/kg. Samples were collected from intervals ranging from 0 to 0.5 feet below ground surface (ft bgs) to 8.5 to 9.0 ft bgs.

Due to the exceedances of the NJDEP Impact to Ground Water (IGW) soil screening levels, samples for Synthetic Precipitation Leaching Procedure (SPLP) were used to develop a SSIGW SRS. Six locations that exhibited a high range of PCB concentrations (SL-14, SL-15, SL-19, SL-20, SL-21, and SL-25) were resampled/reanalyzed for total PCBs and analyzed using the SPLP method.

3. FINDINGS AND RECOMMENDATIONS

The initial investigation results combined with the supplemental investigation results demonstrate that PCB soil impacts have been horizontally and vertically delineated to the NJDEP RDCSRS of 0.2 mg/kg, which is the most stringent remediation standard. The sample results are presented in **Table 1** and shown on **Figure 2.** The vertical delineation and delineation in each of the cardinal directions are described below.

- Vertical (central) : SL-2B and SL-13 exhibited PCB concentrations less than SRS at 8.5 to 9.0 ft bgs. These sample locations provide vertical delineation in the area where the deepest impacts are observed.
- East: Sample locations SL-49, SL-51A, and SL-52B exhibited PCB concentrations less than SRS and provided horizontal delineation to the east. Sample locations SL-30 and SL-43 provide vertical delineation to the east where PCB concentrations are less than SRS at 2.0 to 2.5 and 1.5 to 2.0 ft bgs, respectively.
- South: Sample locations SL-47 and SL-48 exhibited PCB concentrations less than SRS and provided horizontal delineation to the south. Sample locations SL-40 and SL-39 provide vertical delineation to the south where PCB concentrations are less than SRS at 1.0 to 1.5 ft bgs.
- West: Sample location SL-44 exhibited PCB concentrations less than SRS and provided horizontal delineation to the west. Sample location SL-42 provides vertical delineation to the west where PCB concentrations less than SRS at 1.5 to 2.0 ft bgs.
- North: The Site is located directly north of the off-site PCB-impacted area. The on-site soil impacts have been characterized as part of the soil remedial investigation. Furthermore, the on-site remedial action for soil consists of an engineering control (cap system) and institutional control (Deed Notice) that addresses PCB-impacted soil.

In addition to delineation, a SSIGW SRS was developed for PCBs. SSIGW SRS were developed using the NJDEP SPLP. Six locations that exhibited a high range of PCB concentrations were resampled/reanalyzed for total PCBs and analyzed using the SPLP method. The SPLP results are presented in **Table 2,** and the NJDEP SPLP spreadsheet is provided in **Attachment B**. The SPLP spreadsheet shows that all samples passed, and that the SSIGW SRS is based on the highest total PCB soil concentration of 50.7 mg/kg.

4. CONCLUSIONS

A total of 131 soil samples were collected from 52 soil boring locations along the inactive rail line and an adjacent commercial property to determine the nature and extent of the off-site PCB-impacted area located directly south of the Site. The horizontal and vertical extent of the PCB-impacted soil has been delineated to the NJDEP RDCSRS of 0.2 mg/kg. In addition, an SSIGW SRS of 50.7 mg/kg for PCBs was developed. The results of the initial investigation and supplemental investigation are sufficient to evaluate remedial action alternatives and develop a RAWP/CMSP for the PCB-impacted area.

TABLES

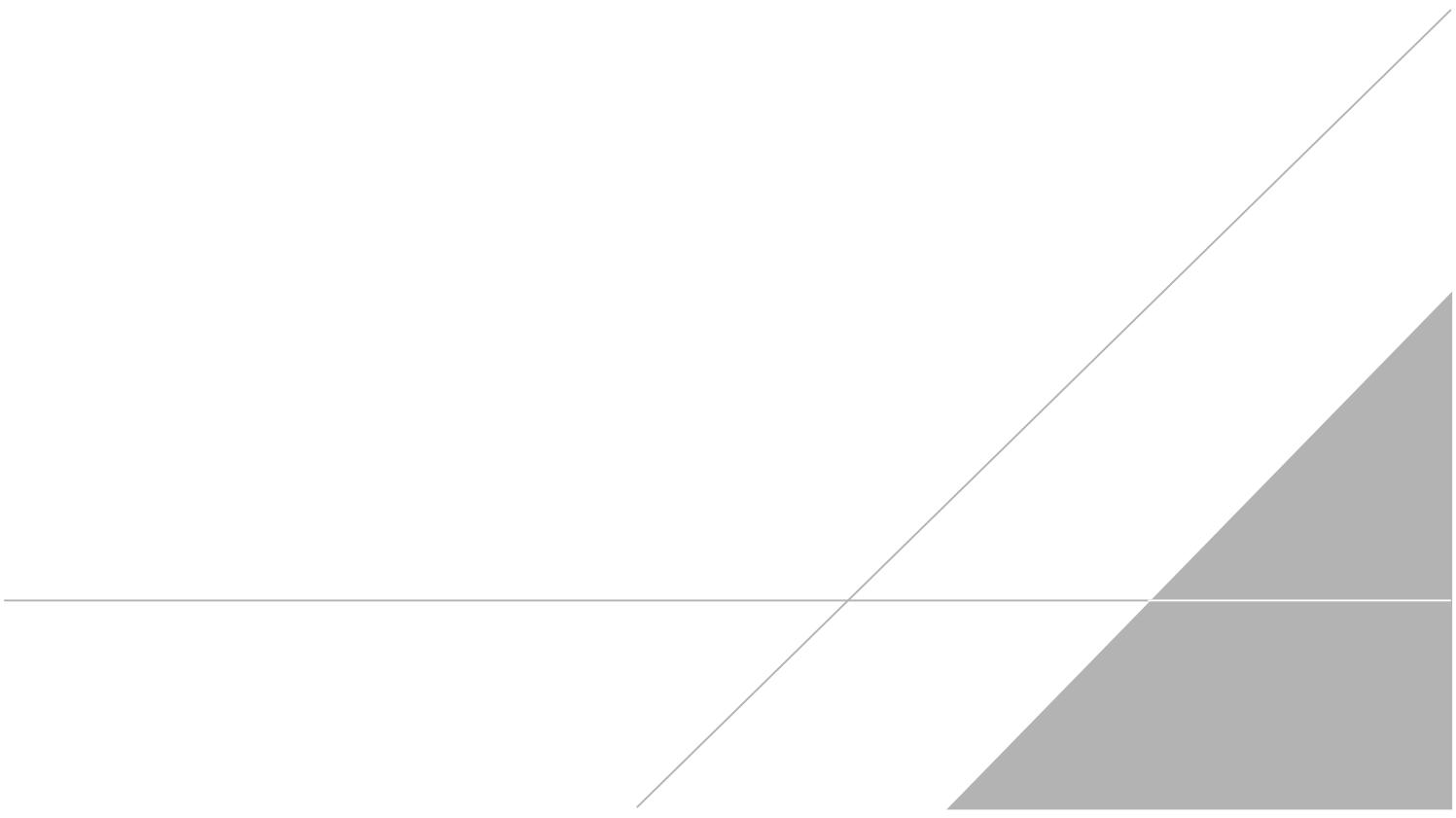


Table 1
Soil Analytical Results for PCBs (ppm)

Former Hyatt Clark Industries
Clark, NJ

Sample ID	Depth (feet)	Date Collected	Total PCBs
SL-1B	1.5-2	6/9/2004	**89**
	3.5-4	6/30/2005	**3.39**
SL-2B	1.5-2	6/9/2004	**92**
	3.5-4	6/30/2005	**116**
	5.5-6	6/30/2005	**0.8**
	6.5-8	6/30/2005	**0.56**
	8.5 - 9.0	12/6/2016	0.0222 J
SL-3B	1.5-2	6/9/2004	**1070**
	3.5-4	6/30/2005	**30.7**
SL-4B	1.5-2	6/9/2004	**30.8**
SL-05	0-0.5	8/20/2004	**39**
	1.5-2	8/20/2004	**38**
SL-06	0-0.5	8/20/2004	**33**
	1.5-2	8/20/2004	**25**
SL-07	0-0.5	8/20/2004	**22.8**
	1.5-2	8/20/2004	**13.3**
	3.5-4	6/30/2005	**4**
SL-09	0-0.5	8/20/2004	**29**
	1.5-2	8/20/2004	**49**
	3.5-4	6/30/2005	**0.81**
SL-10	0-0.5	8/20/2004	**205**
	1.5-2	8/20/2004	**86**
	3.5-4	6/30/2005	**10.1**
SL-11	0-0.5	8/20/2004	**84**
	1.5-2	8/20/2004	**40**
	3.5-4	6/30/2005	**4**
SL-12	0-0.5	12/16/2004	**23**
	1.5-2	12/16/2004	**4.8**
SL-13	0-0.5	12/16/2004	**107**
	1.5-2	12/16/2004	**840**
	3.5-4	6/30/2005	**79**
	5.5-6	6/30/2005	**0.92**
	6.5-8	6/30/2005	**0.34**
	8.5-9.0	12/6/2016	0.00654 J
SL-14	0-0.5	12/16/2004	**11.6**
	1.5-2	12/16/2004	**16.7**
	1.5-2	12/6/2016	**18.5**
SL-15	0-0.5	12/16/2004	**22.5**
	0-0.5	12/6/2016	**6.1**
	1.5-2	12/16/2004	**0.8**
SL-16	0-0.5	12/16/2004	**1.25**
	1.5-2	12/16/2004	**5.3**
SL-17	0-0.5	1/10/2005	**64**
	0-2	1/10/2005	**64**
	1.5-2	1/10/2005	**48**
	3.5-4	6/30/2005	**6**
SL-18	0-0.5	1/10/2005	**630**
	1.5-2	1/10/2005	**29**
	3.5-4	6/30/2005	**102**
	5.5-6	6/30/2005	**0.48**
	6.5-8	6/30/2005	0.077 U

Table 1
Soil Analytical Results for PCBs (ppm)

Former Hyatt Clark Industries
Clark, NJ

Sample ID	Depth (feet)	Date Collected	Total PCBs
SL-19	0-0.5	1/10/2005	**19.4**
	0.0-0.5	12/6/2016	**50.7**
	1.5-2	1/10/2005	**9.6**
SL-20	0-0.5	1/10/2005	**5.5**
	0.0-0.5	12/6/2016	**19.3**
	1.5-2	1/10/2005	**0.32**
SL-21	0-0.5	2/14/2005	**18**
	1.5-2	2/14/2005	**2.5**
	3.5-4	6/30/2005	**10.2**
	3.5-4.0	12/6/2016	0.00184 U
SL-22	0-0.5	2/14/2005	**6.6**
	1.5-2	2/14/2005	**0.69**
SL-23	0-0.5	2/14/2005	**28**
	1.5-2	2/14/2005	**74**
	3.5-4	6/30/2005	**16.5**
SL-24	0-0.5	2/14/2005	**8.2**
	1.5-2	2/14/2005	**2.8**
	3.5-4	6/30/2005	0.085 U
SL-25	0-0.5	2/14/2005	**8.3**
	1.5-2	2/14/2005	**20.2**
	1.5-2	12/6/2016	**10.5**
SL-26	0-0.5	2/14/2005	0.081 U
	1.5-2	2/14/2005	0.079 U
SL-27	0-0.5	3/21/2005	**0.097**
	1.5-2	3/21/2005	**4.4**
SL-28	0-0.5	3/21/2005	**2.03**
	1.5-2	3/21/2005	**1.48**
SL-29	0-0.5	3/21/2005	**4.5**
	1.5-2	3/21/2005	**5.4**
SL-30	0-0.5	3/21/2005	**4.8**
	1.5-2	3/21/2005	**1.34**
	2-2.5	12/6/2016	0.0126 J

Table 1
Soil Analytical Results for PCBs (ppm)

Former Hyatt Clark Industries
Clark, NJ

Sample ID	Depth (feet)	Date Collected	Total PCBs
SL-31	0-0.5	3/21/2005	**4.3**
	1.5-2	3/21/2005	0.15
SL-32	0-0.5	3/21/2005	**3.6**
	1.5-2	3/21/2005	**4.09**
SL-33	0-0.5	3/21/2005	**2.15**
	1.5-2	3/21/2005	**1.43**
SL-34	0-0.5	3/21/2005	0.078 U
	1.5-2	3/21/2005	0.076 U
SL-35	0-0.5	6/30/2005	0.082 U
	1.5-2	6/30/2005	**0.48**
	3.5-4	6/30/2005	**3.4**
SL-36	3.5-4	6/30/2005	0.12
SL-37	3.5-4	6/30/2005	0.078 U
SL-38	0-0.5	12/11/2009	**0.51**
	1.5-2.0	12/11/2009	0.021 J
SL-39	0-0.5	12/11/2009	**1.15**
	1.5-2.0	12/11/2009	0.027 J
	3.5-4.0	12/11/2009	0.059 J
	5.5-6.0	12/11/2009	0.077 U
SL-40	0-0.5	12/11/2009	**0.999 J**
	1.5-2.0	12/11/2009	0.049 J
	3.5-4.0	12/11/2009	0.081 U
	5.5-6.0	12/11/2009	0.076 U
SL-41	0-0.5	12/11/2009	**0.73**
	1.5-2.0	12/11/2009	**0.4**
	2.0 - 2.5	12/6/2016	0.00188 U
	3.5-4.0	12/11/2009	0.077 U
	5.5-6.0	12/11/2009	0.075 U
SL-42	0-0.5	12/11/2009	**4.7**
	1.5-2.0	12/11/2009	0.035 J
SL-43	0-0.5	12/11/2009	**1.32**
	1.5-2.0	12/11/2009	0.09
SL-44	0.0 - 0.5	12/6/2016	0.145
SL-46	0.0 - 2.0	12/6/2016	0.00192 U
	1.5 - 2.0	12/6/2016	0.022 J
	2.0 - 2.5	12/6/2016	0.0129 J
	2.5 - 3.0	12/6/2016	0.0018 U
SL-47	0.0 - 0.5	12/6/2016	0.0105 J
SL-48	0.0 - 0.5	12/6/2016	0.0354 J
SL-49	0.0 - 0.5	12/6/2016	0.00209 U
SL-51	0.0 - 0.5	12/6/2016	**0.286**
	1.5 - 2.0	12/6/2016	0.0212 J
	2.0 - 2.5	12/6/2016	0.0116 J
	2.5 - 3.0	12/6/2016	0.00502 J
SL-51A	0.0 - 0.5	12/6/2016	0.109
SL-52	0.0 - 0.5	12/6/2016	**0.449**
SL-52A	0.0 - 0.5	12/6/2016	**0.389**
SL-52B	0.0 - 0.5	12/6/2016	0.027

Notes:
1. Samples collected by Arcadis on the dates indicated.
2. Concentrations reported in miligrams per kilogram, which are equivalent to parts per million (ppm).
3. Duplicate sample results are presented in brackets [ ].
4. J = Estimate value.
5. U = The analyte was analyzed for but not detexted. The value preceding the U indicates the detection limit.
6. Bold values indicate a total PCB concentration exceeding the 2 ppm New Jersey Department of Environmental Protection Residential Direct Contact Soil Cleanup Crit
7. Blue shading indicate the soil at this sample location has been excavated and trasnported offsite for disposal.
8. Orange Shading indicate a total PCB concentration exceeding the 50 ppm USEPA cleanup criteria for low-occupancy.

FIGURES

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: akens LD: PIC: PM: TM:
PROJECT PATH: Z:\GISProjects_ENV\Hyatt Clark\MXDs\Self-Implementing WP\HyattClark_SiteLocationMap.mxd DATE: 10/21/2019 2:49:05 PM

LEGEND:

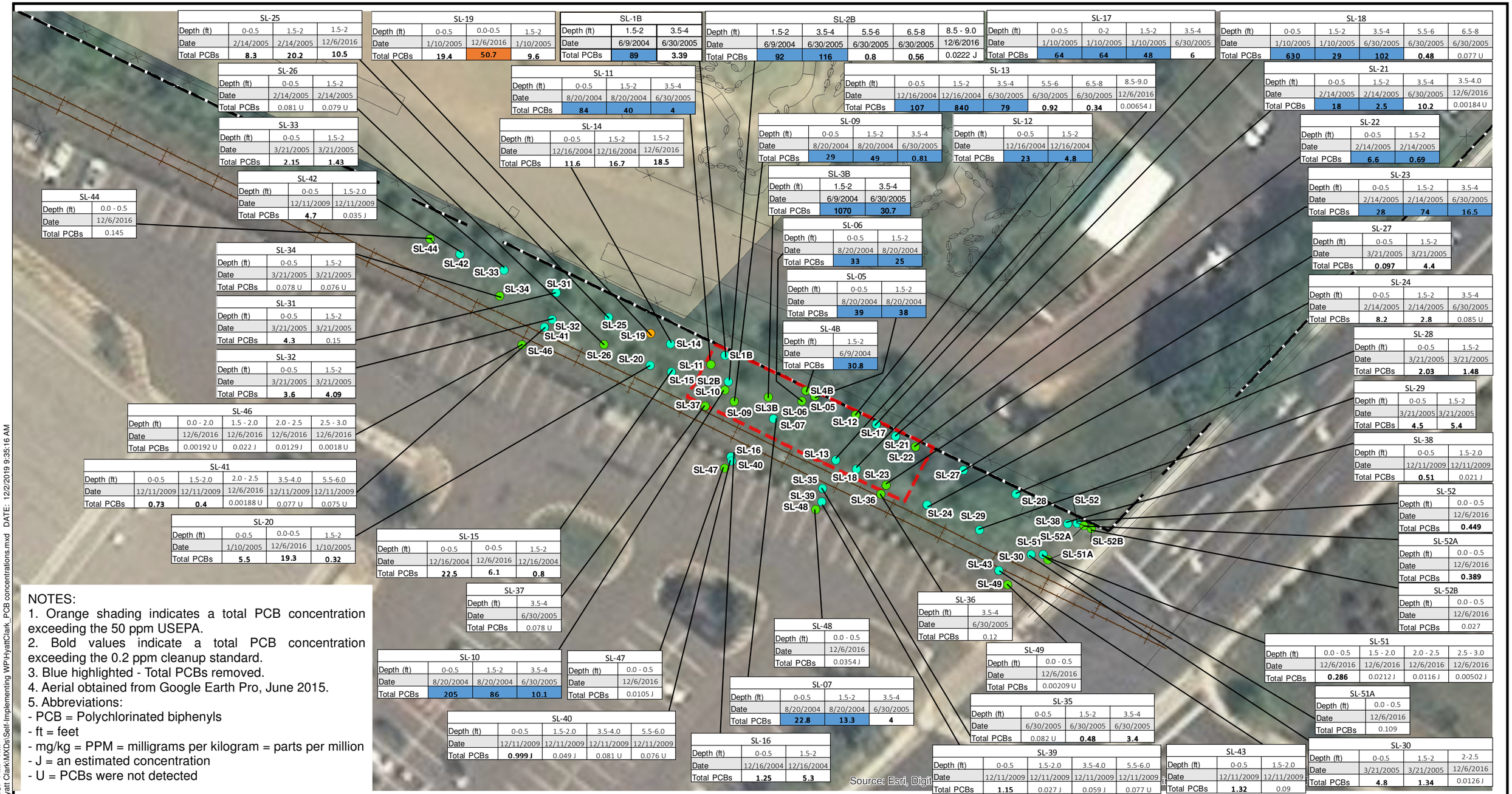
- Parcel Boundary
- Site Location

FORMER HYATT CLARK INDUSTRIES
1300 RARITAN RD
CLARK, NJ
SELF-IMPLEMENTING WORK PLAN

SITE LOCATION MAP

ARCADIS

FIGURE
1



NOTES:
1. Orange shading indicates a total PCB concentration exceeding the 50 ppm USEPA.
2. Bold values indicate a total PCB concentration exceeding the 0.2 ppm cleanup standard.
3. Blue highlighted - Total PCBs removed.
4. Aerial obtained from Google Earth Pro, June 2015.
5. Abbreviations:
- PCB = Polychlorinated biphenyls
- ft = feet
- mg/kg = PPM = milligrams per kilogram = parts per million
- J = an estimated concentration
- U = PCBs were not detected

LEGEND:

- Soil Boring
- Cap Area
- 2005 EXCAVATION AREA
- Property Boundary
- Current Features
- Fence
- Railroad
- Water Feature

SOIL BORING CONCENTRATION KEY:

- Non Detected and or <0.2 mg/kg At Any Depth
- Detections >0.2 mg/kg and <50 ppm At One or More Depths
- Detections >50ppm At One or More Depths

0 40 80
SCALE IN FEET

FORMER HYATT CLARK INDUSTRIES
1300 RARITAN RD
CLARK, NJ
SELF-IMPLEMENTING WORK PLAN

TOTAL PCB CONCENTRATIONS

ARCADIS

FIGURE
2

DIV/GROUP: ENV/MDV DB: akens LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISProjects_ENV\Hyatt Clark\MXDs\Self-Implementing WP\HyattClark_PCB concentrations.mxd DATE: 12/2/2019 9:35:16 AM

ATTACHMENT B

NJDEP SPLP Spreadsheet, V3.1, November 2013

Case name/area of concern:	GM Hyatt Offsite PCBs
Case number:	
Sampling date:	12/6/2016
Contaminant:	Polychlorinated biphenyls (PCBs)
CAS No:	1336-36-3
Water solubility (mg/L)	7.00E-01
Aqueous reporting limit (µg/L):	5.00E-01
Soil reporting limit (mg/kg):	3.00E-02
Health-based GWQC (µg/L)	2.00E-02
DAF (20, or site-specific if approved):	20
Leachate Criterion (µg/L):	5.00E-01 adjusted from 0.4
Henry's law constant (dimensionless):	1.07E-01

CALCULATE SITE SPECIFIC IGW STANDARD

Reset Spreadsheet

Print Results

Instructions

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWQC

Print to file

Exit

NOTE:

USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples
Do not enter samples with soil concentrations at or below the reporting limit
When leachate concentration is non-detect, enter the aqueous reporting limit
Enter site-specific dilution-attenuation factor (DAF) if desired

Data entry cells (do not skip rows)
Optional data entry
Calculated or locked cells
Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SL-21 (3.5-4.0)	0.1	2	0.00184	0.000035	4.23					52551.4	0.04	0.00	PASS
SL-25 (1.5-2.0)	0.1	2	10.5	0.000949	8.82					########	0.00	0.00	PASS
SL-15 (0.0-0.5)	0.1	2	6.1	0.00175	7.98					########	0.00	0.00	PASS
SL-20 (0.0-0.5)	0.1	2	19.3	0.00242	5.72					########	0.00	0.00	PASS
SL-19 (0.0-0.5)	0.1	2	50.7	0.00532	3.13					########	0.00	0.01	PASS
SL-14 (1.5-2.0)	0.1	2	18.5	0.00862	9.65					########	0.00	0.01	PASS

SPLP RESULTS for

OPTION 1a: All adjusted leachate concentrations are below the leachate criterion

REMEDIATION STANDARD = 50.7 mg/kg

OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard
EVERYTHING PASSED, OPTION 1b NOT VALID

OPTION 2: Remediation standard using site-specific Kd value
Kd ratio = 210.54, USE MINIMUM Kd
Kd USED FOR CALCULATING STANDARD = 52551.43 L/kg
result before rounding = 26.2758 mg/kg
REMEDIATION STANDARD = 26 mg/kg

OPTION 3: Remediation standard using linear regression
Number of points = 1
(points were eliminated because leachate concentrations were not above the aqueous reporting limit)
Less than three points with leachate concentrations above the aqueous reporting limit
LINEAR REGRESSION CANNOT BE CONDUCTED

APPENDIX D

Approved Self-Implementing Cleanup and Disposal Plan

Mr. Pete Lopez
Regional Administrator
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

Arcadis U.S., Inc.
17-17 Route 208 North
Suite 290
Fair Lawn
New Jersey 07410
Tel 201.797.7400
Fax 201.797.4399
www.arcadis.com

ENVIRONMENT

Subject:
Self-Implementing Cleanup and Disposal Notification for RACER Trust
PCB Remediation Waste
Former Hyatt Clark Industries Site
Clark, New Jersey
Facility EPA ID#: NJD002457174

Date:
April 30, 2020

Contact:
John Messinger

Phone:
201.398.4372

Email:
john.messinger
@arcadis.com

Our reference:
30017190

Dear Mr. Lopez:

On behalf of the Revitalizing Auto Communities Environmental Response Trust (RACER Trust), this letter presents a self-implementing cleanup and disposal notification (Notification) for polychlorinated biphenyl (PCB) remediation waste. The waste will be generated during remedial action to be conducted on portions of an inactive Conrail Corporation (Conrail)-owned railroad right-of-way (rail line) and a commercial property (142 Central Avenue, Clark, New Jersey 07066) that are located adjacent to the former Hyatt Clark Industries site (the site [**Figure 1**]). This Notification has been prepared in accordance with the Toxic Substances Control Act (TSCA) regulations presented in Title 40 of the Code of Federal Regulations (40 CFR) Part 761.61(a). A Certification Statement which contains information required under 40 CFR 761.61(a)(3)(i)(E) is provided in **Attachment A** to this Notification.

PCBs have been detected in soil (maximum depth of 8 feet) along the inactive rail line which is located immediately south of the site. The PCBs extend onto a small area of a commercial property immediately south of the inactive rail line. RACER Trust intends to conservatively remediate total PCB concentrations to meet the New Jersey Department of Environmental Protection (NJDEP) Residential Direct Contact Soil Cleanup Criteria (RDCSCC) of 0.2 parts per million (ppm), thus accommodating an unrestricted use remedy for the properties.

The following sections provide additional background information, soil sample results, and the cleanup and disposal plan.

1. BACKGROUND INFORMATION

The former Hyatt Clark Industries site is located at 1300 Raritan Road in Clark, Union County, New Jersey. The site is situated in a mixed commercial and light industrial area, with the inactive Conrail-owned rail line located immediately to the south.

Historical operations at the former facility consisted of the manufacture of hard rubber products, such as steering wheels and door handles, and anti-friction roller bearings for the automotive and railroad industries. Raw materials included multiple grades of alloy steels and bronze alloy castings. Manufacturing processes included hot forming, machining, heat treating, quenching, drawing, tumbling, deburring, and assembly.

The original plant was constructed in 1938 by the Inland Manufacturing Division of General Motors (GM) and consisted of a main building and supporting facilities. Subsequent expansion of the main manufacturing building by the Hyatt Bearings Division of GM occurred in 1944, 1950, 1952, and 1967. In 1981, ownership of the plant was transferred from GM to Hyatt Clark industries, an employee-owned company. Hyatt Clark Industries declared bankruptcy in 1987, and plant operations ceased in August 1987.

In 1989, site ownership reverted to GM. At that time, GM entered into an Administrative Consent Order (ACO) with the NJDEP to conduct investigation and remedial activities pursuant to the New Jersey Industrial Site Recovery Act (ISRA). In addition to ISRA, the Site has closure obligations under RCRA. On-site soil remedial activities were completed and the site was redeveloped as a golf course in 2002. On-going remediation activities for groundwater at and in the vicinity of the site are being conducted in accordance with the New Jersey ISRA requirements. RACER Trust now has responsibility for ongoing and future remedial activities at the site.

2. SOIL SAMPLE RESULTS

A total of 131 soil samples were collected from 52 soil boring locations along the inactive rail line and the adjacent commercial property were and analyzed for total PCBs using USEPA SW-846 Method 8082 **(Table 1)**. The soil sample locations and analytical results are shown on **Figure 2**.

Initial investigation activities were conducted along the inactive rail line during 2004 and 2005. In 2005, GM conducted a soil remedial action that included removal of approximately 200 cubic yards of soil impacted with the highest PCB levels encountered along the inactive rail line. PCB concentrations within the excavation area ranged from 0.69 to 1,070 ppm. The remedial action consisted of excavation and offsite disposal of PCB-impacted soil within the limits shown on **Figure 2**. The remedial action was reported to NJDEP in Progress Report No. 5, dated December 2005 (prepared by URS Corporation).

Additional soil samples were collected along the inactive rail line and commercial property in 2009 and 2016 to delineate the limits of PCB-impacted soil to the 0.2 ppm NJDEP RDCSCC.

3. PROPOSED SELF-IMPLEMENTING CLEANUP AND DISPOSAL PLAN

RACER Trust intends to conservatively remove all soil from the two off-site properties that contain total PCBs at concentrations greater than the NJDEP 0.2 ppm target remediation standard, which is less than

the 1 ppm PCB cleanup goal for bulk PCB remediation waste as presented in 40CFR Part 761.61(a). The proposed self-implementing PCB cleanup and disposal plan is described in the following sections.

Soil Excavation

Soil containing total PCBs at concentrations greater than 0.2 ppm will be removed and transported for off-site disposal. Details of the limits of these excavations and their associated depths are shown on **Figure 3**. Proposed soil excavation and disposal activities will be conducted in accordance with the following:

- Mobilization and site preparation activities. These activities include marking the limits of the excavation areas, identifying subsurface utilities, designating equipment and material staging areas, assembly of a temporary decontamination area for equipment, providing containment for decontamination wash water/storm water (as needed), and installation of erosion and sedimentation controls.
- PCBs were detected at a concentration exceeding 50 ppm at only one sample location (from the 0 to 0.5-foot interval at soil boring SL-19). The field limits of the soil excavation areas and boundaries of TSCA-regulated PCB waste (waste exceeding 50 ppm PCBs) will be established using GPS survey methods. The boundaries will be based on the existing surveyed boring locations described above and shown on **Figure 2**. The soil excavation areas, proposed depth of each excavation area, and limits of TSCA-regulated PCB waste are shown on **Figure 3**.
- Clearing trees and aboveground vegetation within and immediately adjacent to the planned excavation areas. After being felled, tree trunks and limbs will be removed from the excavation areas without being dragged through soil, using an excavator or skid steer. Tree trunks and limbs will then be chipped and placed in roll offs or directly loaded into dump trailers for off-site disposal as non-PCB waste. All below grade roots and root mass within the excavation areas will be removed and disposed of with excavated soils, based on the in-situ concentration of PCBs in soil samples.
- Excavation of approximately 1,393 cubic yards (cy) (2,090 tons) of soil with a total PCB concentration less than 50 ppm of PCBs. RACER Trust anticipates that excavated soil with PCB concentrations less than 50 ppm will either be directly loaded into dump trailers for off-site disposal or placed in a staging area that meets the requirements of 40 CFR Part 761.65(c)(9) for temporary storage prior to being loaded for off-site transport and disposal. In order to profile the excavated soil for disposal, RACER Trust may perform additional in-situ waste characterization, if required by the designated disposal facility.
- Excavating approximately 35 cy (53 tons) of soil with a total PCB concentration equal to or greater than 50 ppm. Soil with PCB concentrations equal to or greater than 50 ppm will be managed as a TSCA-regulated PCB waste and will either be directly-loaded into lined dump trailers (separately from soil that contains less than 50 ppm PCBs) or stockpiled separately in an area that meets the requirements of 40 CFR Part 761.65(c)(9) for temporary storage prior to being loaded for off-site disposal. Groundwater is not expected to be encountered due to the planned shallow depth of the excavations. In the event of precipitation during excavation, soil removal activities may be suspended to allow surface water to either infiltrate or be removed from excavations. If necessary, any water pumped from the excavation will be transferred to an on-site storage tote or tank for characterization and disposal as discussed below in the equipment decontamination section.

Following completion of the excavation activities, RACER Trust will collect post-excavation verification samples for laboratory analysis from the bottom of the excavation areas as described below. Upon reaching the proposed depth of each excavation area, post-excavation samples will be collected to a depth of approximately 0.5 feet into the remaining (unexcavated) soil. After post-excavation verification samples indicate that soil cleanup objectives have been achieved, the excavation areas will be backfilled to existing grade using fill materials obtained from an off-site borrow source (such as quarry/mine material from a licensed mine). Areas disturbed by the remediation activities will be seeded and mulched. Erosion and sedimentation controls will remain in place until a vegetative cover is established.

RACER Trust anticipates that soil remediation activities will begin during the summer of 2020 and will require approximately four weeks to complete.

Post-Excavation Verification Sampling

RACER Trust proposes to collect post-excavation verification samples as shown on **Figure 3**. Approximately 25 post-excavation samples will be collected from an overall excavation area of approximately 9,900 square feet, which provides a sample density of approximately one sample per every approximately 400 square feet of excavation area. The actual sample locations have been selected to target each area of different excavation depth, using a 20-foot by 20-foot sampling grid area across the larger uniform sampling areas. Excavation limits will extend horizontally to locations of site characterization soil samples than are less than the soil cleanup objective (less than 0.2 ppm total PCBs). Additional post-excavation sidewall samples will be collected as needed to provide a final sidewall sample spacing of approximately one sample per every 30 feet along the excavation perimeter. The post-excavation samples will be submitted for laboratory analysis for total PCBs using USEPA SW-846 Method 8082.

Each post-excavation verification sample will be collected as an individual discrete sample. Analytical results for discrete samples will be compared to soil cleanup objectives. If any of the samples contain PCBs at a concentration exceeding 0.2 ppm (the target cleanup objective), additional rounds of excavation and sampling will be performed until the target cleanup objectives have been met.

Disposal

Wastes and cleaning materials generated by the remedial action will be managed in accordance with PCB remediation waste disposal requirements established under TSCA regulations. Wastes containing PCBs at concentrations equal to or greater than 50 ppm, based on in-place sampling results (or non-porous surfaces with surface PCB concentrations exceeding 10 µg/100 cm2), will be transported for off-site disposal as a TSCA-regulated PCB waste at a TSCA-permitted chemical waste landfill or a RCRA-permitted Subtitle C landfill. Wastes containing PCBs at concentrations less than 50 ppm, based on in-place sampling results (or non-porous surfaces with surface PCB concentrations equal to or less than 10 µg/100 cm2), will be managed as non-TSCA-regulated waste and will be transported for disposal at a municipal solid waste landfill (Subtitle D facility). PCB-containing liquid waste generated by excavation and/or decontamination activities covered under this Notification will either be disposed of as a TSCA-regulated PCB waste or treated, if necessary, in accordance with the PCB decontamination standards presented in 40 CFR 761.79.

Decontamination Procedures for Soil Handling Equipment

During implementation of the remedial action, equipment decontamination will be required prior to:

- Moving equipment from a TSCA-regulated excavation area into the remedial action support zone.
- Using equipment (excavator, front end loader, or other vehicle) that was previously used to handle TSCA-regulated material, to handle materials containing less than 50 ppm PCBs.
- Demobilizing equipment that was used to excavate or manage TSCA and non-TSCA-regulated materials from the Site.

Prior to managing materials containing less than 50 ppm PCBs, or moving from the TSCA excavation area into the remedial action support zone, all equipment that was previously used to excavate or handle TSCA-regulated material will be moved to a temporary decontamination pad (to be located in the work area) where the equipment will be cleaned via dry scraping and pressure washers to remove bulk material that could potentially contain PCBs. In situations where equipment is being re-positioned from a TSCA-regulated work area to a work area where PCB concentrations are less than 50 ppm, it will be necessary to decontaminate the entire piece of equipment, including tracks and equipment body. In situations where tracking of TSCA-regulated waste is not a concern, only the equipment surfaces that were previously in contact with TSCA-regulated waste will be decontaminated. Equipment will be triple-rinsed and visually inspected to confirm the removal of adhered soil or other materials. All solid waste materials generated by decontamination of equipment that was used to handled TSCA-regulated waste will be collected and managed as TSCA-regulated PCB waste for disposal purposes. All water generated by decontamination activities shall be captured in a tote or poly tank for disposal and/or treatment as described above.

Prior to demobilization from the Site, construction equipment used to excavate or handle TSCA and non-TSCA-regulated waste will be moved from the work area (contamination zone) to a decontamination pad (located in the contaminant reduction zone) where the equipment will be cleaned via dry scraping and pressure washers to remove bulk material that could potentially contain PCBs. Equipment will be triple-rinsed and visually inspected to confirm the removal of adhered soil or other materials. All solid waste materials generated by the decontamination of equipment that was previously used to handle TSCA-regulated waste will be collected and disposed of as TSCA-regulated PCB waste. Soil waste materials generated by the decontamination of equipment that was used to handle non-TSCA-regulated waste will be collected for disposal as either a TSCA or non-TSCA waste based on waste characterization sampling results. All water generated by decontamination activities shall be captured in a tote or poly tank for disposal and/or treatment as described above.

After the equipment is cleaned and prior to demobilization from the Site, standard PCB wipe samples (10-centimeter [cm] by 10-cm, as defined in 40 CFR Part 761.123) will be collected from surfaces of the equipment that would have been in primary contact with the soil in the excavation areas (i.e., excavator bucket, excavator tracks, and excavator underbody). Wipe samples will be collected at a frequency of one sample per every 100 square feet of equipment surface area, with a maximum of three samples for any individual piece of equipment. The wipe samples will be submitted for laboratory analysis in accordance with USEPA SW-846 Method 8082. If PCBs are detected for any of the wipe samples at concentrations equal to or exceeding 10 µg/100 cm2, the portion of the equipment represented by that sample will be pressure washed again and additional samples will be collected until acceptable wipe

sample results are achieved. After acceptable wipe sampling results are obtained for the equipment, it will be demobilized from the job site.

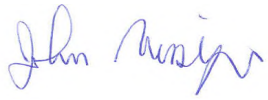
4. CONCLUSION

The self-implementing cleanup and disposal activities described in this Notification are appropriate for the two off-site properties. The proposed self-implementing activities are technically sound and protective of human health and the environment. RACER Trust requests that the USEPA approve the self-implementing cleanup and disposal activities described herein.

Please do not hesitate to contact me at 201-398-4372 or by e-mail at john.messger@arcadis.com if you have questions.

Sincerely,

Arcadis U.S., Inc.



John Messinger
Certified Project Manager 2

Copies:

Robert Hare, RACER Trust
Benny Conetta, USEPA Region 2
Michael C. Jones, Arcadis

Enclosures:

Tables

1 Soil Analytical Results for PCBs

Figures

1 Site Location Map

2 Total PCB Concentrations

3 Excavation Areas and Verification Sampling Locations

Attachments

A Certification Statement

Table 1
Soil Analytical Results for PCBs (ppm)
Former Hyatt Clark Industries
Clark, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Sample ID	Depth (feet)	Date Collected	Total PCBs
SL-1B	1.5-2	6/9/2004	**89**
	3.5-4	6/30/2005	**3.39**
SL-2B	1.5-2	6/9/2004	**92**
	3.5-4	6/30/2005	**116**
	5.5-6	6/30/2005	**0.8**
	6.5-8	6/30/2005	**0.56**
	8.5 - 9.0	12/6/2016	0.0222 J
SL-3B	1.5-2	6/9/2004	**1070**
	3.5-4	6/30/2005	**30.7**
SL-4B	1.5-2	6/9/2004	**30.8**
SL-05	0-0.5	8/20/2004	**39**
	1.5-2	8/20/2004	**38**
SL-06	0-0.5	8/20/2004	**33**
	1.5-2	8/20/2004	**25**
SL-07	0-0.5	8/20/2004	**22.8**
	1.5-2	8/20/2004	**13.3**
	3.5-4	6/30/2005	**4**
SL-09	0-0.5	8/20/2004	**29**
	1.5-2	8/20/2004	**49**
	3.5-4	6/30/2005	**0.81**
SL-10	0-0.5	8/20/2004	**205**
	1.5-2	8/20/2004	**86**
	3.5-4	6/30/2005	**10.1**
SL-11	0-0.5	8/20/2004	**84**
	1.5-2	8/20/2004	**40**
	3.5-4	6/30/2005	**4**
SL-12	0-0.5	12/16/2004	**23**
	1.5-2	12/16/2004	**4.8**
SL-13	0-0.5	12/16/2004	**107**
	1.5-2	12/16/2004	**840**
	3.5-4	6/30/2005	**79**
	5.5-6	6/30/2005	**0.92**
	6.5-8	6/30/2005	**0.34**
	8.5-9.0	12/6/2016	0.00654 J
SL-14	0-0.5	12/16/2004	**11.6**
	1.5-2	12/16/2004	**16.7**
	1.5-2	12/6/2016	**18.5**

Table 1
Soil Analytical Results for PCBs (ppm)
Former Hyatt Clark Industries
Clark, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Sample ID	Depth (feet)	Date Collected	Total PCBs
SL-15	0-0.5	12/16/2004	**22.5**
	0-0.5	12/6/2016	**6.1**
	1.5-2	12/16/2004	**0.8**
SL-16	0-0.5	12/16/2004	**1.25**
	1.5-2	12/16/2004	**5.3**
SL-17	0-0.5	1/10/2005	**64**
	0-2	1/10/2005	**64**
	1.5-2	1/10/2005	**48**
	3.5-4	6/30/2005	**6**
SL-18	0-0.5	1/10/2005	**630**
	1.5-2	1/10/2005	**29**
	3.5-4	6/30/2005	**102**
	5.5-6	6/30/2005	**0.48**
	6.5-8	6/30/2005	0.077 U
SL-19	0-0.5	1/10/2005	**19.4**
	0.0-0.5	12/6/2016	**50.7**
	1.5-2	1/10/2005	**9.6**
SL-20	0-0.5	1/10/2005	**5.5**
	0.0-0.5	12/6/2016	**19.3**
	1.5-2	1/10/2005	**0.32**
SL-21	0-0.5	2/14/2005	**18**
	1.5-2	2/14/2005	**2.5**
	3.5-4	6/30/2005	**10.2**
	3.5-4.0	12/6/2016	0.00184 U
SL-22	0-0.5	2/14/2005	**6.6**
	1.5-2	2/14/2005	**0.69**
SL-23	0-0.5	2/14/2005	**28**
	1.5-2	2/14/2005	**74**
	3.5-4	6/30/2005	**16.5**
SL-24	0-0.5	2/14/2005	**8.2**
	1.5-2	2/14/2005	**2.8**
	3.5-4	6/30/2005	0.085 U
SL-25	0-0.5	2/14/2005	**8.3**
	1.5-2	2/14/2005	**20.2**
	1.5-2	12/6/2016	**10.5**
SL-26	0-0.5	2/14/2005	0.081 U
	1.5-2	2/14/2005	0.079 U
SL-27	0-0.5	3/21/2005	**0.097**
	1.5-2	3/21/2005	**4.4**
SL-28	0-0.5	3/21/2005	**2.03**
	1.5-2	3/21/2005	**1.48**

Table 1
Soil Analytical Results for PCBs (ppm)
Former Hyatt Clark Industries
Clark, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Sample ID	Depth (feet)	Date Collected	Total PCBs
SL-29	0-0.5	3/21/2005	**4.5**
	1.5-2	3/21/2005	**5.4**
SL-30	0-0.5	3/21/2005	**4.8**
	1.5-2	3/21/2005	**1.34**
	2-2.5	12/6/2016	0.0126 J
SL-31	0-0.5	3/21/2005	**4.3**
	1.5-2	3/21/2005	0.15
SL-32	0-0.5	3/21/2005	**3.6**
	1.5-2	3/21/2005	**4.09**
SL-33	0-0.5	3/21/2005	**2.15**
	1.5-2	3/21/2005	**1.43**
SL-34	0-0.5	3/21/2005	0.078 U
	1.5-2	3/21/2005	0.076 U
SL-35	0-0.5	6/30/2005	0.082 U
	1.5-2	6/30/2005	**0.48**
	3.5-4	6/30/2005	**3.4**
SL-36	3.5-4	6/30/2005	0.12
SL-37	3.5-4	6/30/2005	0.078 U
SL-38	0-0.5	12/11/2009	**0.51**
	1.5-2.0	12/11/2009	0.021 J
SL-39	0-0.5	12/11/2009	**1.15**
	1.5-2.0	12/11/2009	0.027 J
	3.5-4.0	12/11/2009	0.059 J
	5.5-6.0	12/11/2009	0.077 U
SL-40	0-0.5	12/11/2009	**0.999 J**
	1.5-2.0	12/11/2009	0.049 J
	3.5-4.0	12/11/2009	0.081 U
	5.5-6.0	12/11/2009	0.076 U
SL-41	0-0.5	12/11/2009	**0.73**
	1.5-2.0	12/11/2009	**0.4**
	2.0 - 2.5	12/6/2016	0.00188 U
	3.5-4.0	12/11/2009	0.077 U
	5.5-6.0	12/11/2009	0.075 U
SL-42	0-0.5	12/11/2009	**4.7**
	1.5-2.0	12/11/2009	0.035 J
SL-43	0-0.5	12/11/2009	**1.32**
	1.5-2.0	12/11/2009	0.09
SL-44	0.0 - 0.5	12/6/2016	0.145
SL-46	0.0 - 2.0	12/6/2016	0.00192 U
	1.5 - 2.0	12/6/2016	0.022 J
	2.0 - 2.5	12/6/2016	0.0129 J
	2.5 - 3.0	12/6/2016	0.0018 U
SL-47	0.0 - 0.5	12/6/2016	0.0105 J
SL-48	0.0 - 0.5	12/6/2016	0.0354 J
SL-49	0.0 - 0.5	12/6/2016	0.00209 U

Table 1
Soil Analytical Results for PCBs (ppm)
Former Hyatt Clark Industries
Clark, New Jersey

Sample ID	Depth (feet)	Date Collected	Total PCBs
SL-51	0.0 - 0.5	12/6/2016	**0.286**
	1.5 - 2.0	12/6/2016	0.0212 J
	2.0 - 2.5	12/6/2016	0.0116 J
	2.5 - 3.0	12/6/2016	0.00502 J
SL-51A	0.0 - 0.5	12/6/2016	0.109
SL-52	0.0 - 0.5	12/6/2016	**0.449**
SL-52A	0.0 - 0.5	12/6/2016	**0.389**
SL-52B	0.0 - 0.5	12/6/2016	0.027

Notes:

1. Samples collected by Arcadis on the dates indicated.
2. Concentrations reported in miligrams per kilogram, which are equivalent to parts per million (ppm).
3. Duplicate sample results are presented in brackets [ ].
4. J = Estimate value.
5. U = The analyte was not detected. The value preceding the U indicates the detection limit.
6. Bold values indicate a total PCB concentration exceeding the 0.2 ppm New Jersey Department of Environmental Protection Residential Direct Contact Soil Remediation Standard
7. Blue shading indicates the soil at this sample location has been excavated and trasnported offsite for disposal.
8. Orange shading indicates a total PCB concentration exceeding the 50 ppm

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: akens LD: PIC: PM: TM:
PROJECT PATH: Z:\GISProjects_ENV\Hyatt Clark\MXDs\Self-Implementing WP\HyattClark_SiteLocationMap.mxd DATE: 10/21/2019 2:49:05 PM

LEGEND:

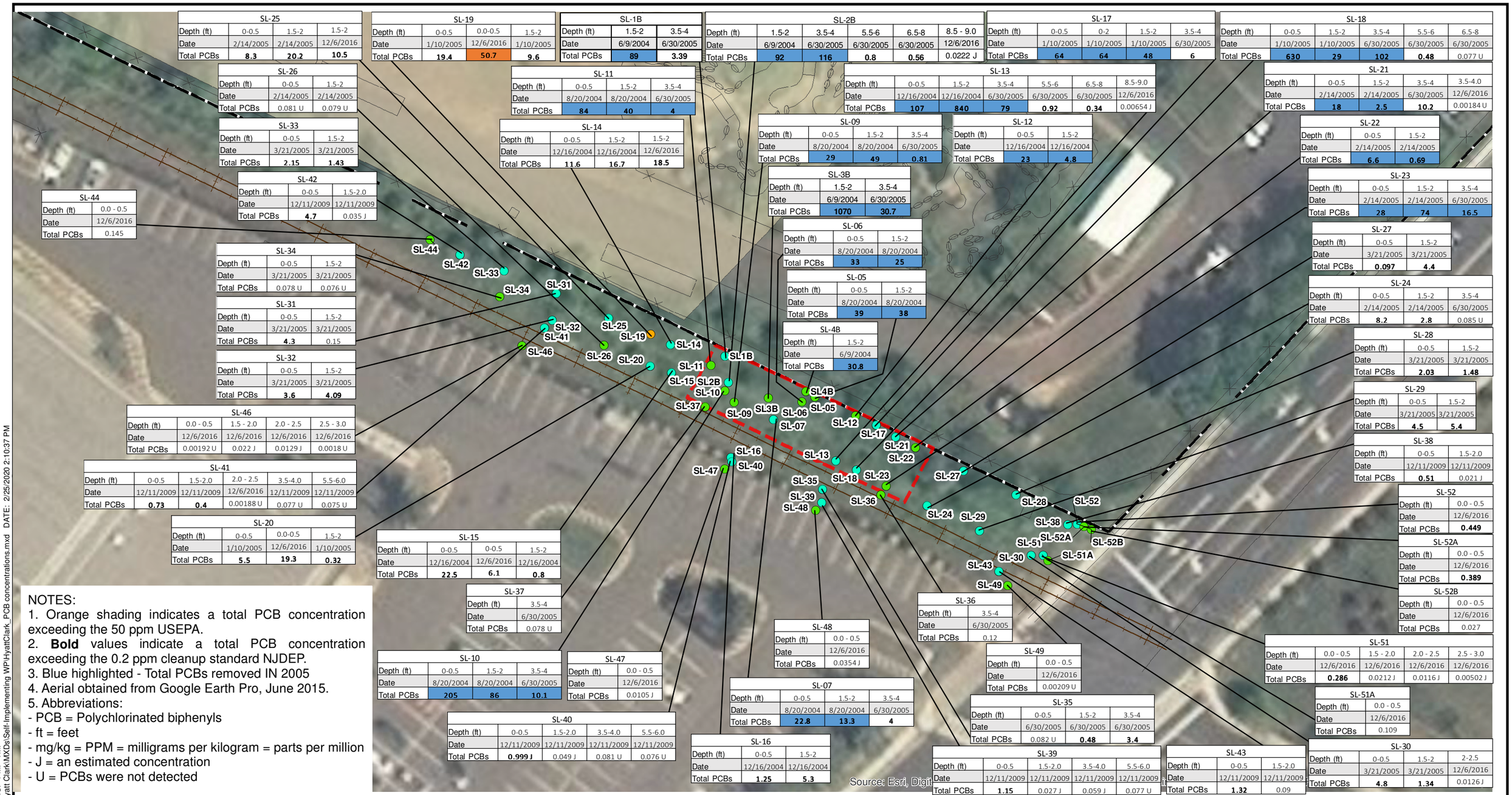
- Parcel Boundary
- Site Location

FORMER HYATT CLARK INDUSTRIES
1300 RARITAN RD
CLARK, NJ
SELF-IMPLEMENTING WORK PLAN

SITE LOCATION MAP

ARCADIS

FIGURE
1



SL-25			
Depth (ft)	0-0.5	1.5-2	1.5-2
Date	2/14/2005	2/14/2005	12/6/2016
Total PCBs	**8.3**	**20.2**	**10.5**

SL-19			
Depth (ft)	0-0.5	0.0-0.5	1.5-2
Date	1/10/2005	12/6/2016	1/10/2005
Total PCBs	**19.4**	**50.7**	**9.6**

SL-1B		
Depth (ft)	1.5-2	3.5-4
Date	6/9/2004	6/30/2005
Total PCBs	**89**	**3.39**

SL-2B					
Depth (ft)	1.5-2	3.5-4	5.5-6	6.5-8	8.5 - 9.0
Date	6/9/2004	6/30/2005	6/30/2005	6/30/2005	12/6/2016
Total PCBs	**92**	**116**	**0.8**	**0.56**	0.0222 J

SL-17				
Depth (ft)	0-0.5	0-2	1.5-2	3.5-4
Date	1/10/2005	1/10/2005	1/10/2005	6/30/2005
Total PCBs	**64**	**64**	**48**	**6**

SL-18					
Depth (ft)	0-0.5	1.5-2	3.5-4	5.5-6	6.5-8
Date	1/10/2005	1/10/2005	6/30/2005	6/30/2005	6/30/2005
Total PCBs	**630**	**29**	**102**	**0.48**	0.077 U

SL-26		
Depth (ft)	0-0.5	1.5-2
Date	2/14/2005	2/14/2005
Total PCBs	0.081 U	0.079 U

SL-11			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	8/20/2004	8/20/2004	6/30/2005
Total PCBs	**84**	**40**	**4**

SL-13						
Depth (ft)	0-0.5	1.5-2	3.5-4	5.5-6	6.5-8	8.5-9.0
Date	12/16/2004	12/16/2004	6/30/2005	6/30/2005	6/30/2005	12/6/2016
Total PCBs	**107**	**840**	**79**	**0.92**	**0.34**	0.00654 J

SL-21				
Depth (ft)	0-0.5	1.5-2	3.5-4	3.5-4.0
Date	2/14/2005	2/14/2005	6/30/2005	12/6/2016
Total PCBs	**18**	**2.5**	**10.2**	0.00184 U

SL-33		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**2.15**	**1.43**

SL-14			
Depth (ft)	0-0.5	1.5-2	1.5-2
Date	12/16/2004	12/16/2004	12/6/2016
Total PCBs	**11.6**	**16.7**	**18.5**

SL-09			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	8/20/2004	8/20/2004	6/30/2005
Total PCBs	**29**	**49**	**0.81**

SL-12		
Depth (ft)	0-0.5	1.5-2
Date	12/16/2004	12/16/2004
Total PCBs	**23**	**4.8**

SL-22		
Depth (ft)	0-0.5	1.5-2
Date	2/14/2005	2/14/2005
Total PCBs	**6.6**	**0.69**

SL-42		
Depth (ft)	0-0.5	1.5-2.0
Date	12/11/2009	12/11/2009
Total PCBs	**4.7**	0.035 J

SL-3B		
Depth (ft)	1.5-2	3.5-4
Date	6/9/2004	6/30/2005
Total PCBs	**1070**	**30.7**

SL-23			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	2/14/2005	2/14/2005	6/30/2005
Total PCBs	**28**	**74**	**16.5**

SL-44	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.145

SL-06		
Depth (ft)	0-0.5	1.5-2
Date	8/20/2004	8/20/2004
Total PCBs	**33**	**25**

SL-27		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**0.097**	**4.4**

SL-34		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	0.078 U	0.076 U

SL-05		
Depth (ft)	0-0.5	1.5-2
Date	8/20/2004	8/20/2004
Total PCBs	**39**	**38**

SL-24			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	2/14/2005	2/14/2005	6/30/2005
Total PCBs	**8.2**	**2.8**	0.085 U

SL-31		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**4.3**	0.15

SL-4B	
Depth (ft)	1.5-2
Date	6/9/2004
Total PCBs	**30.8**

SL-28		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**2.03**	**1.48**

SL-32		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**3.6**	**4.09**

SL-29		
Depth (ft)	0-0.5	1.5-2
Date	3/21/2005	3/21/2005
Total PCBs	**4.5**	**5.4**

SL-46				
Depth (ft)	0.0 - 0.5	1.5 - 2.0	2.0 - 2.5	2.5 - 3.0
Date	12/6/2016	12/6/2016	12/6/2016	12/6/2016
Total PCBs	0.00192 U	0.022 J	0.0129 J	0.0018 U

SL-38		
Depth (ft)	0-0.5	1.5-2.0
Date	12/11/2009	12/11/2009
Total PCBs	**0.51**	0.021 J

SL-41					
Depth (ft)	0-0.5	1.5-2.0	2.0 - 2.5	3.5-4.0	5.5-6.0
Date	12/11/2009	12/11/2009	12/6/2016	12/11/2009	12/11/2009
Total PCBs	**0.73**	**0.4**	0.00188 U	0.077 U	0.075 U

SL-52	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	**0.449**

SL-20			
Depth (ft)	0-0.5	0.0-0.5	1.5-2
Date	1/10/2005	12/6/2016	1/10/2005
Total PCBs	**5.5**	**19.3**	**0.32**

SL-52A	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	**0.389**

SL-52B	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.027

SL-15			
Depth (ft)	0-0.5	0-0.5	1.5-2
Date	12/16/2004	12/6/2016	12/16/2004
Total PCBs	**22.5**	**6.1**	**0.8**

SL-37	
Depth (ft)	3.5-4
Date	6/30/2005
Total PCBs	0.078 U

SL-36	
Depth (ft)	3.5-4
Date	6/30/2005
Total PCBs	0.12

SL-48	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.0354 J

SL-49	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.00209 U

SL-51				
Depth (ft)	0.0 - 0.5	1.5 - 2.0	2.0 - 2.5	2.5 - 3.0
Date	12/6/2016	12/6/2016	12/6/2016	12/6/2016
Total PCBs	**0.286**	0.0212 J	0.0116 J	0.00502 J

SL-10				
Depth (ft)	0-0.5	1.5-2	3.5-4	
Date	8/20/2004	8/20/2004	6/30/2005	
Total PCBs	**205**	**86**	**10.1**	

SL-47	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.0105 J

SL-07			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	8/20/2004	8/20/2004	6/30/2005
Total PCBs	**22.8**	**13.3**	**4**

SL-35			
Depth (ft)	0-0.5	1.5-2	3.5-4
Date	6/30/2005	6/30/2005	6/30/2005
Total PCBs	0.082 U	**0.48**	**3.4**

SL-51A	
Depth (ft)	0.0 - 0.5
Date	12/6/2016
Total PCBs	0.109

SL-40				
Depth (ft)	0-0.5	1.5-2.0	3.5-4.0	5.5-6.0
Date	12/11/2009	12/11/2009	12/11/2009	12/11/2009
Total PCBs	**0.999 J**	0.049 J	0.081 U	0.076 U

SL-16		
Depth (ft)	0-0.5	1.5-2
Date	12/16/2004	12/16/2004
Total PCBs	**1.25**	**5.3**

SL-39				
Depth (ft)	0-0.5	1.5-2.0	3.5-4.0	5.5-6.0
Date	12/11/2009	12/11/2009	12/11/2009	12/11/2009
Total PCBs	**1.15**	0.027 J	0.059 J	0.077 U

SL-43		
Depth (ft)	0-0.5	1.5-2.0
Date	12/11/2009	12/11/2009
Total PCBs	**1.32**	0.09

SL-30			
Depth (ft)	0-0.5	1.5-2	2-2.5
Date	3/21/2005	3/21/2005	12/6/2016
Total PCBs	**4.8**	**1.34**	0.0126 J

NOTES:
1. Orange shading indicates a total PCB concentration exceeding the 50 ppm USEPA.
2. **Bold** values indicate a total PCB concentration exceeding the 0.2 ppm cleanup standard NJDEP.
3. Blue highlighted - Total PCBs removed IN 2005
4. Aerial obtained from Google Earth Pro, June 2015.
5. Abbreviations:
- PCB = Polychlorinated biphenyls
- ft = feet
- mg/kg = PPM = milligrams per kilogram = parts per million
- J = an estimated concentration
- U = PCBs were not detected

LEGEND:

- Soil Boring
- Cap Area
- 2005 EXCAVATION AREA
- Property Boundary
- Current Features
- Fence
- Railroad

SOIL BORING CONCENTRATION KEY:

- Non Detected and or <0.2 mg/kg At Any Depth
- Detections >0.2 mg/kg and <50 ppm At One or More Depths
- Detections >50ppm At One or More Depths

0 40 80
SCALE IN FEET

FORMER HYATT CLARK INDUSTRIES
1300 RARITAN RD
CLARK, NJ
SELF-IMPLEMENTING WORK PLAN

TOTAL PCB CONCENTRATIONS

ARCADIS

FIGURE
2

DIV/GROUP: ENV/MDV DB: akens LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISProjects_ENV\Hyatt Clark\MXDs\Self-Implementing WP\HyattClark_PCB concentrations.mxd DATE: 2/25/2020 2:10:37 PM

NOTES:
1. AERIAL OBTAINED FROM GOOGLE EARTH PRO, JUNE 2015.
2. VERIFICATION SAMPLE LOCATIONS TO BE TAKEN AT 0 - 6 INCHES BELOW THE BOTTOM OF THE EXCAVATION SPECIFIC DEPTH (SHOWN BY THE RESPECTIVE COLOR)
3. THE VERIFICATION SAMPLE TO BE COLLECTED IN THE TSCA AREA WILL BE TAKEN AFTER THE TSCA EXCAVATION FROM 1.5 FT TO 2.0 FT BGS PRIOR TO EXCAVATING THE 1.5 FT TO 2.5 FT NON-TSCA EXCAVATION.

LEGEND:

- Soil Boring
- Proposed Verification sample
- 20'x20' Grid
- 2005 Excavation
- Area of Interest
- Cap Area
- Property Boundary
- Current Features
- Fence
- Railroad
- Overhead Wire
- Gas Line
- Pole
- Electric Box
- Electric Meter
- Gas Marker
- Non-Detected and or <0.2 mg/kg At Any Detections
- Detections >0.2 mg/kg and <50 ppm At One or More Depth
- Detections >50ppm At One or More Depths
- Clean Fill from 0-4.0 ft bgs. No Analytical Data Below 4.0 ft bgs
- Excavate from 0-1.5 ft bgs (TSCA) Excavate from 1.5-2.5 ft bgs non-TSCA
- Excavate 0-1.0 ft bgs
- Excavate 0-2.5 ft bgs
- Excavate 0-4.5 ft bgs
- Excavate 0-6.5 ft bgs
- Excavate 0-8.5 ft bgs

0 25 50
SCALE IN FEET

FORMER HYATT CLARK INDUSTRIES
1300 RARITAN RD
CLARK, NJ
SELF-IMPLEMENTING WORK PLAN

EXCAVATION AREAS AND VERIFICATION SAMPLING LOCATIONS

ARCADIS

FIGURE 3

DIV/GROUP: ENV/IMDV DB: akens LD: PIC: PM: TM:
PROJECT: PATH: Z:\GISProjects_ENV\Hyatt Clark\MXDs\Self-Implementing WP\HyattClark_ExcavUpdateVerifSamplerev3.mxd DATE: 4/15/2020 3:10:07 PM

40 CFR 761.61 Certification

In accordance with 40 CFR 761.61(a)(3)(i)(E), the undersigned owner of the property where the cleanup site is located and the party conducting the cleanup certify that all sampling plans, sampling collection procedures, sample preparation procedures, extraction procedures and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site are on file at the location indicated below and are available for EPA inspection, as set forth below.

Document Location

Arcadis U.S., Inc.

17-17 Route 208 North, Suite 290 West

Fair Lawn, New Jersey 07410

Party Conducting the Cleanup

Authorized Signature

3-17-2020

Date

Robert Hare

Name of Authorized representative (print)

RACER Trust, Cleanup Manager (IL, IN, KS, MO, NJ, WI)

Title

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

June 2, 2020

Robert Hare
RACER Trust Cleanup Manager
1505 Woodward Ave., Suite 200
Detroit, MI 48226

Re: Former Hyatt Clark Industries Site
1300 Raritan Road
Clark, Union County, New Jersey
EPA ID#: NJD002457174
Approval for Self-Implementing Cleanup and Disposal Notification PCB Remediation Waste under 40 CFR§761.61(a) and for Characterization and Verification Sampling under 40 CFR §761.61(c) and Approval for Alternative Decontamination under 40 CFR §761.79(h)

Dear Mr. Hare:

This is in response to the March 17, 2020 document and the April 30, 2020 revised document entitled "Self-Implementing Cleanup and Disposal Notification for RACER PCB Remediation Waste Site, Clark, New Jersey," prepared by Arcadis U.S. on behalf of the Revitalizing Auto Communities Environmental Response Trust (RACER Trust) for the Former Hyatt Clark Industries site. This document will be referred to as the "Application." The polychlorinated biphenyl (PCB) contamination is considered to be PCB remediation waste that is subject to the applicable cleanup levels under the federal regulations at 40 CFR §761.61(a)(4).

The proposed remedial action will be conducted on portions of an inactive Conrail Corporation-owned railroad right-of-way and an existing commercial property that are located adjacent to the former Hyatt Clark Industries site. Currently, soils with PCB concentrations of up to 50.7 parts per million (ppm) remain within the project area. The proposed remedial action calls for the excavation and offsite disposal of all soils with PCB concentrations in excess of 0.2 ppm, including 35 cubic yards of soils with PCB concentrations in excess of 50 ppm, and an additional 1,393 cubic yards with PCB concentrations between 0.2 ppm and 50 ppm.

In accordance with 40 CFR §761.61(a)(5)(i)(B)(2)(iii), soils containing PCBs at concentrations equal to or greater than 50 ppm will be transported for offsite disposal at a Toxic Substances Control Act (TSCA) permitted chemical waste landfill or a Resource Conservation and Recovery Act (RCRA) Subtitle C permitted landfill. Wastes containing PCBs at concentrations less than 50 ppm will be managed as non-TSCA regulated waste and will be transported for disposal at a municipal solid waste landfill (Subtitle D facility) in accordance with 40 CFR §761.61(a)(5)(v)(A).

With the exception of the characterization sampling requirements under Subpart N of 40 CFR §761 and the verification sampling requirements under Subpart O of 40 CFR §761, the proposed removal of PCB remediation waste meets the self-implementing cleanup and disposal requirements under 40 CFR

§761.61(a). In addition, based on the characterization and proposed verification sampling, in accordance with 40 CFR §761.61(c), the United States Environmental Protection Agency (EPA) finds that this sampling, in this proposed remediation context, is acceptable for purposes of determining compliance with the High Occupancy Area PCB cleanup standard of 1 ppm.

RACER Trust has also requested, in accordance with 40 CFR §761.79(h), approval for an alternative procedure and standard for decontamination of equipment and tools. Decontamination of all equipment will be conducted over a decontamination pad, where the equipment will be cleaned via dry scraping and pressure washers to remove bulk material that could potentially contain PCBs. Equipment will be triple rinsed and visually inspected to confirm the removal of adhered soil or other materials. Wipe samples will be collected for verification to confirm compliance with a decontamination standard of 10 micrograms per 100 square feet. EPA finds that the proposed alternative decontamination procedure and standard are acceptable for the cleanup activities that will be performed at the site.

EPA hereby approves the RACER Trust's Application, and it may proceed with the cleanup and disposal under 40 CFR §761.61(a) and (c) and the Application, subject to this Approval. This Approval also constitutes an order under the authority of Section 6 of the Toxic Substances Control Act (TSCA), 15 U.S.C. §2605. This approval only specifies the applicable requirements under TSCA and does not cite to or make any determinations regarding the requirements that may be applicable under other federal, state, or local law. TSCA disposal requirements do not supersede other, more stringent, applicable federal, state or local laws. Any deviation from these disposal facilities would require further review and approval by EPA.

Please note that this Approval does not constitute a determination by EPA that the transporters or the disposal facilities selected by the RACER Trust is authorized to conduct the activities set forth in the Application. RACER Trust is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct any such activities in accordance with all applicable Federal, State and local statutes and regulations.

Should you have any questions concerning this matter, please feel free to contact me at (212) 637-3315, or have your staff contact Jean Robert Jean of my staff at (212) 637-4136.

Sincerely,

Ariel Iglesias, Director
Land, Chemicals and Redevelopment Division

cc: Kevin Schick, NJDEP
Gwen Zervas, Section Chief (NJDEP-BCM)
John Messinger, Arcadis US Inc.