



June 1, 2018

Mr. Christopher Clark
Pharmacia LLC
235 E 42nd Street 219/05/01
New York, NY 10017

Mr. David Misky
Redevelopment Authority of the City of Milwaukee
809 N. Broadway
Milwaukee, WI 53203

Subject: Approval of the Remedial Action and Post-Removal Site Control Plan for the
Milwaukee Die Casting Company Site, 4132 N. Holton Street, Milwaukee, Wisconsin
DNR BRRTS #02-41-000023 Facility Identification (FID) #241228240

Dear Mr. Clark and Mr. Misky:

The Department of Natural Resources ("DNR") is in receipt of the Post-Removal Site Control Plan (PRSCP) that was submitted on behalf of Pharmacia LLC and Fisher Controls International LLC (the "Respondents") by Geosyntec Consultants, dated April 6, 2018. The plan was submitted to fulfill a requirement of the United State Environmental Protection Agency (U.S.EPA) Enforcement Action Memorandum (dated December 3, 2012) and Administrative Settlement Agreement and Order on Consent for Removal Action (AOC, dated March 6, 2013) for the Milwaukee Die Casting Company (MDCC) Site. The remedial action conducted as part of the U.S.EPA removal was focused on contaminated soil. Groundwater impacts were not investigated or directly targeted during the remedial action; however, some groundwater contamination was likely removed in areas where soil excavation was extended below the shallow water table (generally four-ten feet below ground surface).

This remedial action approval decision is based on the plans, data and correspondence submitted as part of the removal action, and is issued under Wis. Adm. Code ch. NR 722. The DNR Project Manager reviewed the submittals for compliance with state laws and standards. Copies of the plans, data and correspondence, and this approval, will be included in the DNR database, BRRTS on the Web (<http://dnr.wi.gov/topic/Brownfields/wrrd.html>.)

You, current and future property owners, and occupants of the former MDCC property (the "Property") must comply with the continuing obligations as explained in the conditions in this letter. Please read over this letter closely to ensure that you comply with all conditions and other on-going requirements. Provide a copy of this letter and attachments listed at the end of this letter to anyone who purchases, rents, or leases this Property from you. Certain continuing obligations also apply to affected neighboring property owners. These are identified in the Continuing Obligations Conditions section below.

Site Background

The former MDCC facility was an aluminum and zinc die casting plant that operated from 1952 (when the original building was constructed) until 1997. The facility included an approximately 70,000 square foot building (expanded in 1964) on a 3.7-acre property located approximately 500 feet west of the Milwaukee River. The MDCC Site (facility property and several affected neighboring properties) is in a mixed industrial, commercial, and residential area.

Prior to 1981, phosphate ester oil (PEO) hydraulic fluids containing polychlorinated biphenyls (PCBs) were used in the die casting operations, primarily within the eastern half of the plant building. From 1981 (possibly earlier) until the plant ceased operations, water glycol hydraulic fluids were used; however, the U.S.EPA alleged that used PCB-containing PEO remained on the facility until 1991. Waste hydraulic fluids were collected into above-ground storage tanks (ASTs) at several locations in and outside the perimeter of the plant building, while new PEO was stored in a former 5,000-gallon underground storage tank (UST) outside the northeast corner of the building. In addition, a 4,000-gallon solvent UST that contained trichloroethylene (TCE) and possibly perchloroethylene (PCE) and two 12,000-gallon heating oil USTs were formerly co-located outside the southwest corner of the building. An extensive tunnel (pipe-chase) system up to 10 feet deep was located beneath the eastern (die casting) portion of the plant building.

In 1992, MDCC initiated environmental assessment and investigation activities inside and outside the plant building. In 1997, the Wisconsin Department of Justice, at the DNR's request, prosecuted MDCC for violations of Wisconsin's spill law (Wis. Stats. § 292.11 (2)), including failure to report and failure to halt the hazardous substances discharge and take actions to restore the environment. Consequently, multiple soil and groundwater sampling investigations and partial removal of hazardous materials from inside the building were conducted.

In fall 2010, the DNR requested that the U.S.EPA begin the Superfund enforcement process, because the plant building was deteriorating and becoming increasingly unstable and dangerous for the frequent trespassers. The DNR became aware that the facility owner was deceased and had attempted to will the property to the City of Milwaukee. The Superfund enforcement process identified several Potential Responsible Parties (PRPs), or Respondents, who voluntarily entered into the AOC to conduct a time-critical Removal Action at the facility. (Key elements of the MDCC facility ownership and operational history are presented in the U.S.EPA March 3, 2013 AOC and led to identification of Pharmacia LLC and Fisher Controls International LLC as PRPs.) Subsequently, the City of Milwaukee took ownership of the tax delinquent and abandoned property.

In May and June 2011, the U.S.EPA conducted site assessment sampling on and adjacent to the facility property. Samples included soil, groundwater (from existing monitoring wells), tunnel water, sewer and tunnel sediments, building wipes and dust, air, and the contents of one remaining drum. Most of the samples exhibited elevated concentrations of PCBs, chlorinated volatile organic compounds (CVOCs), and heavy metals that exceeded federal and state standards.

In December 2011, the DNR sampled soil and storm sewer water and sediment around the perimeter of the MDCC facility, and water and sediment near the outfall of a City of Milwaukee storm sewer (#2265) that drains the Site into the Milwaukee River. High PCB concentrations (>100 milligrams/kilogram [mg/kg]) were detected in shallow soil outside the facility fence and a heavier-than-water oil containing a very high concentration of PCBs (41%) was found behind a wooden weir in a facility sewer lateral (the "mid-central lateral") connecting the MDCC building to the City storm sewer. The U.S.EPA removed oil from the mid-central lateral in February 2012, but oil continued to accumulate behind the weir until the lateral was removed by excavation in September 2013.

During 2014 and 2015, the Respondents demolished the plant building, excavated the underground tunnel and sewer/drain-tile systems, and excavated highly-contaminated soil (PCBs >100 mg/kg) to depths of up to 20 feet below the former building floor. The building, tunnel, and sewer system materials were segregated into Toxic Substances Control Act (TSCA) (PCBs >50 mg/kg) and non-TSCA wastes and disposed of in out-of-state hazardous waste and in-state non-hazardous waste landfills, respectively. An area of CVOC-contaminated soil beneath the southwest corner of the former building was excavated to the depth of groundwater (four feet below ground surface [bgs]) and laterally until concentrations were less than or equal to the regional screening levels (RSLs) for industrial properties.

The Respondents also excavated and segregated CVOC- and PCB-contaminated soil from adjacent properties to the north and east of the facility. These excavations were stopped at the shallow water table (approximately 6 feet and 4 feet bgs to the north and east, respectively) or at shallower depths where PCB concentrations of 1 mg/kg or less and/or CVOC concentrations less than or equal to residential RSLs were attained. Soil with PCB concentrations greater than 50 mg/kg was transported to the appropriate out-of-state landfill(s) and soil with CVOC concentrations greater than ten times land disposal restriction (LDR) levels was transported to an out-of-state facility for incineration and disposal. Less-contaminated soil (concentrations less than the MDCC property cleanup levels) from the adjacent properties was placed at the bottom of the excavation on the 4132 N. Holton Street (former MDCC) property.

In total, approximately 20,500 tons of PCB- and CVOC-contaminated soil were disposed of in the out-of-state hazardous waste landfill, and approximately 340 tons of CVOC-contaminated soil (>10x LDR levels) were transported to the out-of-state facility for incineration and disposal. Additional information regarding the removal action can be found in the Final Report, 2018, prepared by Geosyntec Consultants.

Following excavation, the properties to the north and east of the MDCC facility were backfilled with imported clean soil and then topsoil. The areas on the MDCC property with residual contamination were also backfilled with imported clean soil and barriers were then constructed (see attached **Figure B.2.b.1.**), as follows:

- A 2-foot engineered “Clay Cap” (10” clay over 8” clean soil, and topped with 6” topsoil) meeting TSCA requirements (40 C.F.R. 761.61(a)(7)) was constructed above the area with residual PCB concentrations greater than 25 mg/kg but less than or equal to 100 mg/kg.
- A 2-foot “Soil Cover” (18” clean soil and 6” topsoil) was installed above the surrounding area with residual PCB concentrations greater than DNR industrial direct-contact levels but less than or equal to 25 mg/kg.
- The remaining area of the facility property (with residual PCB concentrations equal to or less than DNR industrial direct-contact levels) was covered with a half foot of clean topsoil (the “Topsoil Cover”). The Site was graded during backfilling and cap construction to promote proper drainage towards the east; the “Clay Cap” and “Soil Cover” areas and facility property lines were surveyed; and the entire area was re-vegetated with a pre-determined grass seed mixture.

Enforcement Action Memorandum and Administrative Settlement Agreement and Order on Consent for Removal Action

On December 3, 2012, the U.S.EPA prepared an Enforcement Action Memorandum (Action Memo) in response to the DNR’s request for assistance with the MDCC Site. On March 6, 2013, the U.S.EPA sent an Administrative Settlement Agreement and Order on Consent for Removal Action (AOC) to the Respondents establishing, at a minimum, the following removal activities for the MDCC Site:

- develop and implement air monitoring, emergency contingency, site security, and storm water management plans;
- inspect, clean, and seal sewer laterals, and remove the mid-central lateral;
- identify and remove “free product” (waste oil containing high concentrations of PCBs) and sources of free product (e.g., under foundation, adjacent to tunnel structures, in sumps);
- excavate and dispose of off-site soils in areas...that are contaminated with PCBs and chlorinated solvents in unsaturated soils greater than residential soil regional screening levels;
- identify, remove, and properly dispose of asbestos containing materials;
- demolish the remnants of the building;
- decommission the tunnel system beneath the building in accordance with 40 CFR § 761.30(p);
- excavate and dispose of on-site unsaturated soils contaminated with chlorinated solvents greater than industrial soil regional screening levels;
- excavate and dispose of all PCB remediation waste not addressed in bullets 3 and 4 (above), based on a “*risk-based disposal*” application submitted by the Respondents and approved by the U.S.EPA pursuant to 40 C.F.R. § 761.61(C), or commence a self-implemented clean-up of all bulk PCB remediation waste with PCB concentrations greater than 100 ppm [parts per million, or mg/kg] in accordance with 40 C.F.R. § 761.61(a);
- conduct post-excavation sampling to verify clean-up in accordance with [Site] work plans;
- establish a cap for the Site and restore vegetative cover (where applicable) to minimize erosion; and
- establish institutional controls that limit future use of the property and establish cap maintenance requirements.

Public Notice of Residual Contamination and Continuing Obligations

In approving remedial actions, the DNR has authority under Wis. Stats. § 292.12 to impose limitations or conditions on a property, in accordance with rules promulgated by the department, to ensure that site conditions remain protective of public health, safety and welfare, and the environment. This letter specifies the conditions, or “continuing obligations,” with which any current or future owner of an affected property must comply to ensure that the MDCC Site does not pose a threat. Further details on actions required are found in the section Remedial Action Approval Conditions.

The MDCC Site will be included on the Bureau for Remediation and Redevelopment Tracking System (BRRTS on the Web) at <http://dnr.wi.gov/topic/Brownfields/wrrd.html>, to provide public notice of residual contamination and continuing obligations. The Site can also be viewed on the Remediation and Redevelopment Sites Map (RRSM), a map view, as a site having continuing obligations, at the same web address.

All Site information is also on file at the DNR’s Milwaukee Service Center located at 2300 N. Dr. Martin Luther King Jr. Drive, Milwaukee, WI 53212. This letter and information that was submitted can be found as a Portable Document Format (PDF) in BRRTS on the Web.

DNR approval prior to well construction or reconstruction of a water supply well is required in accordance with Wis. Adm. Code § NR 812.09 (4) (w). To obtain approval, complete and submit Form 3300-254 to the DNR Drinking and Groundwater program’s regional water supply specialist. This form can be obtained on-line at <http://dnr.wi.gov/topic/wells/documents/3300254.pdf>.

The DNR fact sheet “Continuing Obligations for Environmental Protection,” RR-819, helps to explain a property owner’s responsibility for continuing obligations on their property. The fact sheet may be obtained at <http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf>.

Compliance with the requirements of this letter is a responsibility to which the current property owner, any subsequent property owners, and affected off-source property owners must adhere. DNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter are met. If these requirements are not followed, the DNR may take enforcement action under Wis. Stats. § 292.11, to ensure compliance with the specified requirements, limitations or other conditions related to the property.

Please send any written notifications in accordance with the following requirements to:

Department of Natural Resources
Attn: Remediation and Redevelopment Program Environmental Program Associate
2300 N. Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212

Prohibited Activities

Certain activities are prohibited at the MDCC Site because maintenance of the barriers (i.e., the approved “Clay Cap”, “Soil Cover”, and “Topsoil Cover”) is intended to prevent contact with the remaining contamination. When a barrier is required, notification of the DNR is required, before making a change to the barrier, in order for the DNR to determine if further action is needed to maintain the protectiveness of the remedy employed. The following activities are prohibited on any portion of the property, as shown on the attached **Figure B.2.b.1.**, unless prior written approval has been obtained from the DNR and the U.S.EPA:

- removal of the existing Clay Cap, Soil Cover, and Topsoil Cover;
- replacement with another Clay Cap, Soil Cover, and Topsoil Cover;
- excavating or grading of the land surface;
- filling on capped or covered areas;
- plowing for agricultural cultivation;
- construction or placement of a building or other structure.
- changing the use or occupancy of the property to a residential exposure setting, which may include certain uses, such as single or multiple family residences, a school, day care, senior center, hospital or other similar residential exposure settings.

Remedial Action Approval Conditions

Industrial Soil Standards (Wis. Adm. Code § NR 722.15)

Soil PCB and CVOC contamination that meets industrial RCLs (and exceeds non-industrial RCLs) remains across the site, as shown on Figures **B.2.b.1.**, **B.2.b.2.**, and **B.2.b.3.** (attached). The affected properties may not be used or developed for a residential, commercial, agricultural, or other non-industrial use, unless prior written approval has been obtained from the DNR at least 45 days before changing the use. An investigation and remedial action to meet applicable soil cleanup standards may be required at that time. This continuing obligation applies to the former MDCC facility property and four neighboring properties, as follows:

- 4132 N. Holton St., Milwaukee, WI - Tax Key No. 2419982000
- 4132 (R) N. Holton St., Milwaukee, WI - Tax Key No. 2419978000
- 720 E. Capitol Drive, Milwaukee, WI - Tax Key No. 2419990110
- 4198 N. Holton Street, Milwaukee, WI - Tax Key No. 2410013000
- 4198 (AD) N. Holton Street, Milwaukee, WI - Tax Key No. 2419988100

Residual Groundwater Contamination (Wis. Adm. Code chs. NR 140 and NR 812)

Because the removal action did not target groundwater contamination directly, groundwater contamination greater than enforcement standards remains both on and off this contaminated property, as shown on the attached map titled "Groundwater Iso-Concentration Map [Pre-Soil Removal Action]" (**Figure B.3.b.**). If you intend to construct a new well, or subsequently reconstruct a well, you will need prior DNR approval. Other affected property owners were also notified of the presence of groundwater (and/or soil) contamination on their property. Therefore, this continuing obligation applies to the owners of the following affected properties:

- 4132 N. Holton St., Milwaukee, WI - Tax Key No. 2419982000
- 4132 (R) N. Holton Street, Milwaukee, WI - Tax Key No. 2419978000
- 720 E. Capitol Drive, Milwaukee, WI - Tax Key No. 2419990110

Residual Soil Contamination (Wis. Adm. Code § NR 722.15)

Soil contamination remains in the areas indicated on the attached maps titled "Residual Soil Contamination Map" (**Figure B.2.b.1.**), "Residual Soil Contamination Map (Off-Site East)" (**Figure B.2.b.2.**), and "Residual Soil Contamination Map (Off-Site North)" (**Figure B.2.b.3.**). If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if contamination remains. If sampling confirms that contamination is present, the property owner at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. Contaminated soil may be managed in accordance with ch. NR 718, Wis. Adm. Code, with prior DNR approval.

In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct-contact health threat to humans.

This continuing obligation applies to residual soil contamination on all affected properties:

- 4132 N. Holton St., Milwaukee, WI - Tax Key No. 2419982000
- 4132 (R) N. Holton St., Milwaukee, WI - Tax Key No. 2419978000
- 720 E. Capitol Drive, Milwaukee, WI - Tax Key No. 2419990110
- 4198 N. Holton Street, Milwaukee, WI - Tax Key No. 2410013000
- 4198 (AD) N. Holton Street, Milwaukee, WI - Tax Key No. 2419988100

Cover or Barrier (Wis. Stats. § 292.12 (2), Wis. Adm. Code § NR 722.15)

The "Clay Cap", "Soil Cover", and "Topsoil Cover" that exist in the specific locations shown on the maps in "**Attachments 1 and 2**" of the attached **Cap Maintenance Plan (CMP)** for this Site, dated April 6, 2018, shall be maintained in compliance with the maintenance plan, in order to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health. This maintenance plan is also posted on BRRTS on the Web.

The covers approved for this remedial action were designed to be protective for an industrial use setting. A cover for industrial uses may not be protective if the use of the property were to change such that certain commercial or residential exposures would apply. This may include but is not limited to single or multiple family residences, a school, day care, senior center, hospital or other similar settings. Before using this property for purposes other than industrial, you must notify the DNR and U.S.EPA at least 45 days before taking an action, to determine if additional response actions are warranted.

A request may be made to modify or replace a cover or barrier. Before removing or replacing the cover, you must notify the DNR at least 45 days before taking an action. The replacement or modified cover or barrier must be protective of the revised use of the property, and must be approved in writing by the DNR and U.S.EPA prior to implementation.

The attached CMP and inspection log (included within) are to be kept up to date. Inspections shall be conducted semi-annually (at least twice annually) and the inspection log updated, in accordance with the maintenance plan. Submit the inspection log to the DNR only upon request.

This continuing obligation applies only to the former MDCC facility property at 4132 N. Holton St., Milwaukee, WI – Tax Key No. 2419982000.

Vapor Intrusion – Future Concern

Chlorinated VOCs remain in soil and groundwater, as shown on attached **Figures B.2.b.1. and B.3.b.**, at levels that may be of concern for vapor intrusion in the future, depending on construction and occupancy of a building. There are currently no buildings at this site. Therefore, before a building is constructed, the property owner must notify DNR at least 45 days before the change. Vapor control technologies are required for construction of occupied buildings unless the property owner assesses the vapor intrusion pathway and DNR agrees that vapor control technologies are not needed.

This continuing obligation applies to the former MDCC facility property and two neighboring properties affected by residual contamination, as follows:

- 4132 N. Holton St., Milwaukee, WI - Tax Key No. 2419982000
- 4132 (R) N. Holton St., Milwaukee, WI - Tax Key No. 2419978000
- 720 E. Capitol Drive, Milwaukee, WI - Tax Key No. 2419990110

General Wastewater Permits for Construction Related Dewatering Activities

The DNR's Water Quality Program regulates point-source discharges of contaminated water, including discharges to surface waters, storm sewers, pits, or to the ground surface. This includes discharges from construction-related dewatering activities, including utility and building construction.

If the property owner or any other person plan to conduct such activities, the property owner or that person must contact that program, and if necessary, apply for the necessary discharge permit. Additional information regarding discharge permits is available at <http://dnr.wi.gov/topic/wastewater/GeneralPermits.html>. If residual soil or groundwater contamination is likely to affect water collected in a pit/trench that requires dewatering, a general permit for Discharge of Contaminated Groundwater from Remedial Action Operations may be needed. If water collecting in a pit/trench that requires dewatering is expected to be free of pollutants other than suspended solids and oil and grease, a general permit for Pit/Trench Dewatering may be needed.

In Closing

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this remedial action approval, please contact DNR project manager Steve Mueller at 414-263-8631 or StephenD.Mueller@Wisconsin.gov.

Sincerely,

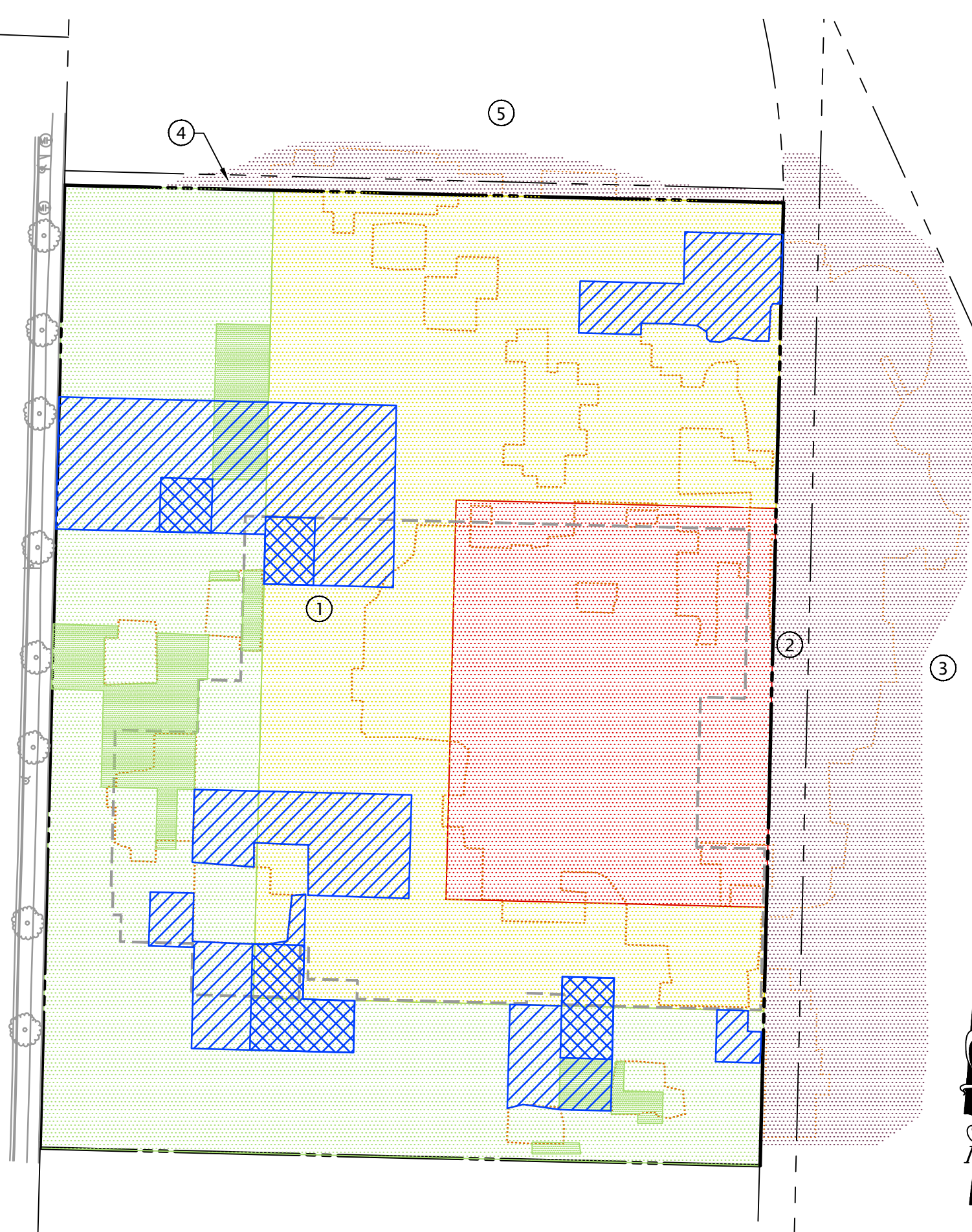


Michele R. Norman
Southeast Region Team Supervisor
Remediation & Redevelopment Program

Attachments: Figure B.2.b.1. - Residual Soil Contamination Map
Figure B.2.b.2. - Residual Soil Contamination Map (Off-Site East)
Figure B.2.b.3. - Residual Soil Contamination Map (Off-Site North)
Figure B.3.b. - Groundwater Iso-Concentration Map [Pre-Soil Removal Action]
Cap Maintenance Plan, dated April 6, 2018

cc: Jeffrey Tracy, Project Coordinator for the Respondents, BSI Professional Services
Gregory Johnson, Geosyntec Consultants
Jeremiah Johnson, Geosyntec Consultants
Robert Kondrek, U.S. Environmental Protection Agency

NORTH HOLTON STREET



- LEGEND**
- APPROXIMATE SITE PROPERTY LINE
 - APPROXIMATE ADJACENT PROPERTY LINES
 - APPROXIMATE EXTENT OF IMPACTED SOIL REMOVAL (2015)
 - APPROXIMATE FORMER BUILDING FOOTPRINT
- ESTIMATED EXTENT OF RESIDUAL PCB-IMPACTED SOIL**
- < WDNR NON-INDUSTRIAL DIRECT CONTACT RCLs [TOPSOIL COVER AREA, 6-INCH MINIMUM CLEAN TOPSOIL LAYER OVER RESIDUAL IMPACTED SOIL]
 - > WDNR NON-INDUSTRIAL DIRECT CONTACT RCLs AND ≤ WDNR INDUSTRIAL DIRECT CONTACT RCLs [TOPSOIL COVER AREA, 6-INCH MINIMUM CLEAN TOPSOIL LAYER OVER RESIDUAL IMPACTED SOIL]
 - > WDNR INDUSTRIAL DIRECT CONTACT RCLs AND ≤ 25 mg/kg [SOIL COVER AREA, 2-FOOT MINIMUM CLEAN SOIL LAYER OVER RESIDUAL IMPACTED SOIL, INCLUDING 6-INCH MINIMUM TOPSOIL LAYER] (40 CFR 761.3 "LOW OCCUPANCY AREA")
 - > 25 mg/kg AND ≤ 100 mg/kg [CLAY CAP AREA, 2-FOOT MINIMUM CLEAN SOIL LAYER OVER RESIDUAL IMPACTED SOIL, INCLUDING 10-INCH MINIMUM CLAY LAYER AND 6-INCH MINIMUM TOPSOIL LAYER] (40 CFR 761.3 "LOW OCCUPANCY AREA")
 - <1 mg/kg (APPROXIMATE EXTENT OF TOPSOIL PLACEMENT FOR RE-VEGETATION PURPOSES)
- ESTIMATED EXTENT OF RESIDUAL CVOC-IMPACTED UNSATURATED SOIL**
- > WDNR GROUNDWATER PROTECTION RCLs AND ≤ WDNR NON-INDUSTRIAL DIRECT CONTACT RCLs
 - > WDNR GROUNDWATER PROTECTION RCLs AND > WDNR NON-INDUSTRIAL DIRECT CONTACT RCLs AND ≤ WDNR INDUSTRIAL DIRECT CONTACT RCLs

IMPACTED PROPERTY OWNER INFORMATION

Property No.	Property Owner	Taxkey No.
1	Site Property - Redevelopment Authority of the City of Milwaukee (RACM)	2419982000
2	Phoenix Cudahy, LLC / Pamida Seven, LLC	2419978000
3	Scripps Media, Inc.	2419990110
4	Phoenix Cudahy, LLC	2419988100
5	Phoenix Cudahy, LLC	2410013000

- NOTES**
- CVOCs - CHLORINATED VOLATILE ORGANIC COMPOUNDS (PCE AND/OR TCE)
 - mg/kg - MILLIGRAMS PER KILOGRAM
 - PCBs - POLYCHLORINATED BIPHENYLS
 - PCE - TETRACHLOROETHENE
 - RCLs - RESIDUAL CONTAMINANT LEVELS
 - TCE - TRICHLOROETHENE
 - WDNR - WISCONSIN DEPARTMENT OF NATURAL RESOURCES



Geosyntec
consultants

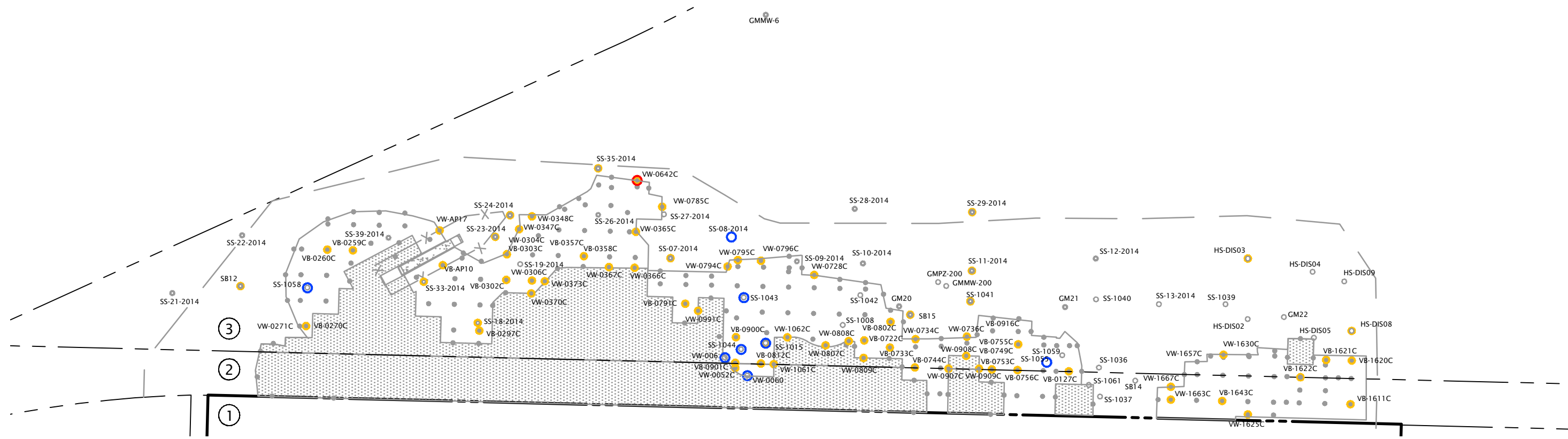
CLIENT: PHARMACIA, LLC

PROJECT: MILWAUKEE DIE CASTING COMPANY (MDCC) SITE
4132 NORTH HOLTON STREET
MILWAUKEE, WISCONSIN

TITLE: RESIDUAL SOIL CONTAMINATION MAP

PROJECT: CHW8271 FIGURE NO.: B.2.b.1. DRAWING NO.: B.2.b.1.

DATE: April 4, 2018 FILE NO.: 1804MDC908



LEGEND

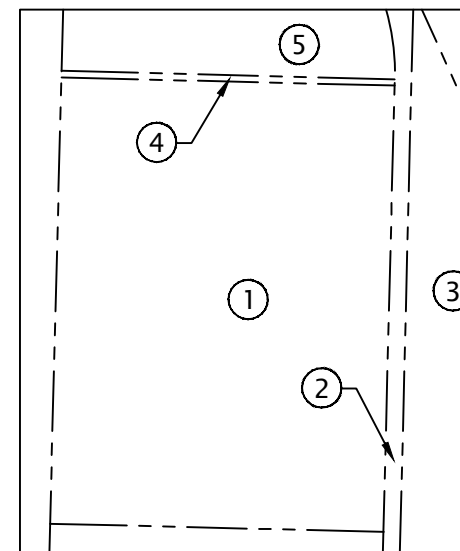
- APPROXIMATE SITE PROPERTY LINE
- APPROXIMATE ADJACENT PROPERTY LINES
- APPROXIMATE EXTENT OF TOPSOIL PLACEMENT FOR RE-VEGETATION PURPOSES
- TRANSMISSION TOWER GUY WIRE ANCHOR AREA FENCE
- SOIL REMOVAL ACTION EXTENT (RESIDUAL TOTAL PCB CONCENTRATIONS < 1 mg/kg AND RESIDUAL CVOC CONCENTRATIONS < USEPA RESIDENTIAL RSLs)
- SOIL REMOVAL ACTION EXTENT TO GROUNDWATER LEVEL (4 FEET BGS)
- POST-SOIL REMOVAL ACTION VERIFICATION SAMPLE LOCATION
- SITE INVESTIGATION SOIL SAMPLE LOCATION
- SAMPLE LOCATION WITH PCB AROCLOR CONCENTRATIONS > AROCLOR-SPECIFIC NON-INDUSTRIAL DIRECT CONTACT RCLs AND ≤ WDNr AROCLOR-SPECIFIC INDUSTRIAL DIRECT CONTACT RCLs
- SAMPLE LOCATION WITH PCB AROCLOR CONCENTRATIONS > AROCLOR-SPECIFIC INDUSTRIAL DIRECT CONTACT RCLs AND TOTAL PCB CONCENTRATION < 1 mg/kg
- SAMPLE LOCATION WITH CVOC UNSATURATED SOIL CONCENTRATIONS > WDNr GROUNDWATER PROTECTION RCLs
- PROPERTY No.

NOTES:

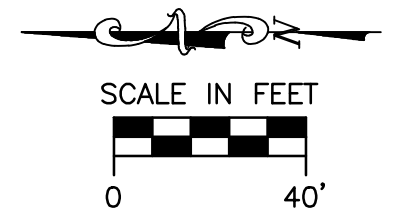
- BGS - BELOW GROUND SURFACE
- CVOCs - CHLORINATED VOLATILE ORGANIC COMPOUNDS (PCE AND/OR TCE)
- mg/kg - MILLIGRAMS PER KILOGRAM
- PCB - POLYCHLORINATED BIPHENYLS
- PCE - TETRACHLOROETHENE
- RCLs - RESIDUAL CONTAMINANT LEVELS (MARCH 2017)
- RSL - REGIONAL SCREENING LEVELS
- TCE - TRICHLOROETHENE
- USEPA - UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
- WDNR - WISCONSIN DEPARTMENT OF NATURAL RESOURCES

IMPACTED PROPERTY OWNER INFORMATION

Property No.	Property Owner	Taxkey No.
1	Site Property - Redevelopment Authority of the City of Milwaukee (RACM)	2419982000
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3	Scripps Media, Inc.	2419990110
4	Phoenix Cudahy, LLC	2419988100
5	Phoenix Cudahy, LLC	2410013000



PROPERTY LOCATION MAP
N.T.S.



Geosyntec
consultants

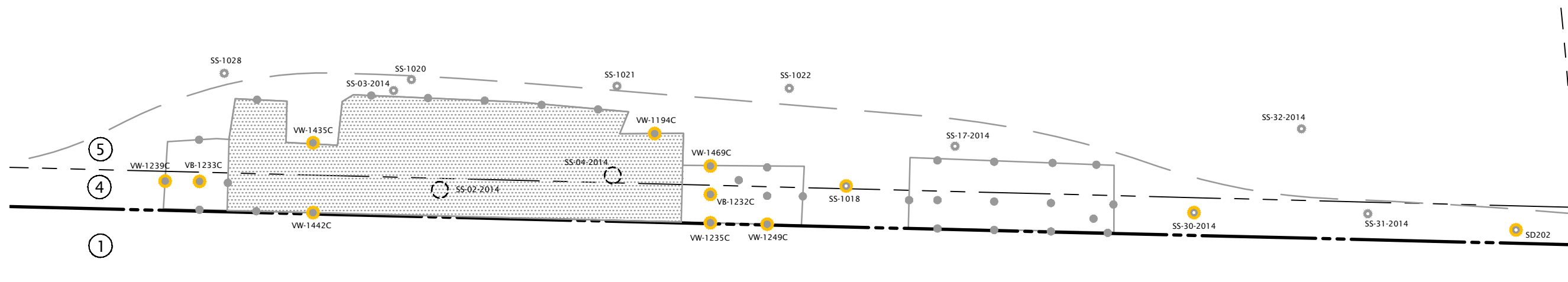
CLIENT: PHARMACIA, LLC

PROJECT: MILWAUKEE DIE CASTING COMPANY (MDCC) SITE
4132 NORTH HOLTON STREET
MILWAUKEE, WISCONSIN

TITLE: RESIDUAL SOIL CONTAMINATION MAP
(OFF-SITE EAST)

PROJECT: CHW8271 FIGURE NO.: B.2.b.2 DRAWING NO.: **B.2.b.2.**

DATE: February 14, 2018 FILE NO.: 1802MDCC906



LEGEND

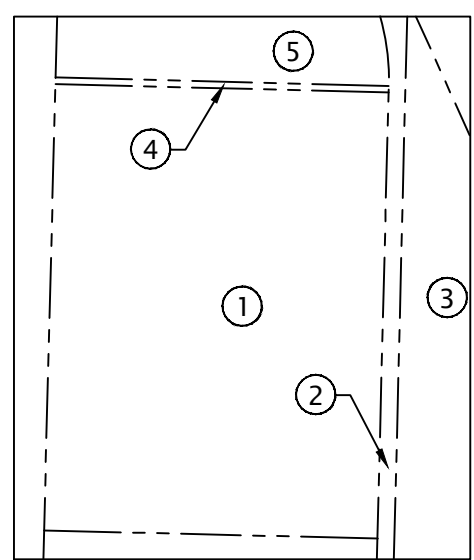
- APPROXIMATE SITE PROPERTY LINE
- APPROXIMATE ADJACENT PROPERTY LINES
- APPROXIMATE EXTENT OF TOPSOIL PLACEMENT FOR RE-VEGETATION PURPOSES
- SOIL REMOVAL ACTION EXTENT (RESIDUAL TOTAL PCB CONCENTRATION < 1 mg/kg)
- SOIL REMOVAL ACTION EXTENT TO GROUNDWATER LEVEL (6 FEET BGS)
- POST-SOIL REMOVAL ACTION VERIFICATION SAMPLE LOCATION
- SITE INVESTIGATION SOIL SAMPLE LOCATION
- SAMPLE LOCATION WITH PCB AROCLOR CONCENTRATIONS > AROCLOR-SPECIFIC NON-INDUSTRIAL DIRECT CONTACT RCLs AND ≤ WDNR AROCLOR-SPECIFIC INDUSTRIAL DIRECT CONTACT RCLs
- SITE INVESTIGATION SAMPLE LOCATION BELOW GROUNDWATER LEVEL WITH RESIDUAL PCB CONCENTRATIONS > WDNR RCLs
- PROPERTY No.

NOTES:

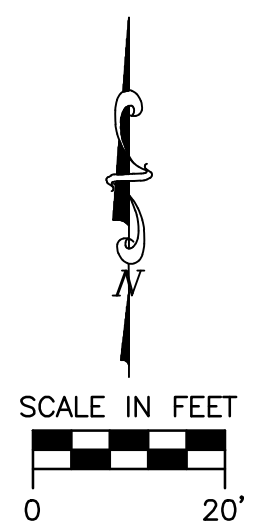
- BGS - BELOW GROUND SURFACE
- mg/kg - MILLIGRAMS PER KILOGRAM
- PCB - POLYCHLORINATED BIPHENYLS
- RCLs - RESIDUAL CONTAMINANT LEVELS (MARCH 2017)
- WDNR - WISCONSIN DEPARTMENT OF NATURAL RESOURCES

IMPACTED PROPERTY OWNER INFORMATION

Property No.	Property Owner	Taxkey No.
1	Site Property - Redevelopment Authority of the City of Milwaukee (RACM)	2419982000
2	Phoenix Cudahy, LLC / Pamida Seven, LLC	2419978000
3	Scripps Media, Inc.	2419990110
4	Phoenix Cudahy, LLC	2419988100
5	Phoenix Cudahy, LLC	2410013000



PROPERTY LOCATION MAP
N.T.S



Geosyntec
consultants

CLIENT: PHARMACIA, LLC

PROJECT: MILWAUKEE DIE CASTING COMPANY (MDCC) SITE
4132 NORTH HOLTON STREET
MILWAUKEE, WISCONSIN

TITLE: RESIDUAL SOIL CONTAMINATION MAP
(OFF-SITE NORTH)

PROJECT: CHW8271 FIGURE NO.: B.2.b.3. DRAWING NO.: **B.2.b.3.**

DATE: February 14, 2018 FILE NO.: 1802MDC906

Well ID	GMMW-1	
Screen Interval (ft bgs)	6-16	
Sample Date	6/2/2011	8/6/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-107	
Screen Interval (ft bgs)	4-14	
Sample Date	6/2/2011	8/7/2013
PCBs (ug/L)	55	110
CVOcs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	0.55 J
trans-1,2-DCE	ND	ND
VC	6.8	3.1

Well ID	GMMW-105	
Screen Interval (ft bgs)	5-15	
Sample Date	6/2/2011	8/6/2013
PCBs (ug/L)	5.2	4.7
CVOcs (ug/L)		
PCE	ND	ND
TCE	ND	1.6
cis-1,2-DCE	11	220
trans-1,2-DCE	ND	1.8
VC	11	69

Well ID	GMMW-2	
Screen Interval (ft bgs)	7-17	
Sample Date	6/1/2011	8/7/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	ND	ND
TCE	13	4.6
cis-1,2-DCE	8.8	17
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-106	
Screen Interval (ft bgs)	6-16	
Sample Date	6/2/2011	8/7/2013
PCBs (ug/L)	ND	0.45
CVOcs (ug/L)		
PCE	ND	79
TCE	7.6	45
cis-1,2-DCE	44	110
trans-1,2-DCE	ND	6.5
VC	19	55

Well ID	GMPZ-201	
Screen Interval (ft bgs)	25-30	
Sample Date	9/9/2013	9/24/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-201	
Screen Interval (ft bgs)	2-12	
Sample Date	9/9/2013	9/24/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	ND	0.87 J
TCE	0.78	3.7
cis-1,2-DCE	5.6	14
trans-1,2-DCE	0.54 J	0.85 J
VC	ND	ND

Well ID	GMMW-103	
Screen Interval (ft bgs)	4-14	
Sample Date	5/31/2011	8/6/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	490	470
TCE	130	84
cis-1,2-DCE	230	79
trans-1,2-DCE	20	3.4
VC	ND	ND

Well ID	GMMW-102	
Screen Interval (ft bgs)	4-14	
Sample Date	5/31/2011	8/5/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	ND	11
TCE	18	0.25 J
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-109	
Screen Interval (ft bgs)	4-14	
Sample Date	6/2/2011	8/6/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-101	
Screen Interval (ft bgs)	3.5-13.5	
Sample Date	6/1/2011	8/5/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-104	
Screen Interval (ft bgs)	3-13	
Sample Date	6/2/2011	8/7/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	10	34
TCE	20	91
cis-1,2-DCE	2600	1900
trans-1,2-DCE	30	17
VC	ND	250

Well ID	GMMW-4	
Screen Interval (ft bgs)	6-16	
Sample Date	6/1/2011	8/6/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-111	
Screen Interval (ft bgs)	+1-4	
Sample Date	6/1/2011	8/7/2013
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	460	60
TCE	840	110
cis-1,2-DCE	890	110
trans-1,2-DCE	85	5.6
VC	110	3.6

Well ID	GMMW-100	
Screen Interval (ft bgs)	+1-4	
Sample Date	4/6/2005	5/16/2005
PCBs (ug/L)	0.22	ND
CVOcs (ug/L)		
PCE	ND	--
TCE	ND	--
cis-1,2-DCE	ND	--
trans-1,2-DCE	ND	--
VC	ND	--

Well ID	GMMW-108	
Screen Interval (ft bgs)	4-14	
Sample Date	6/2/2011	8/7/2013
PCBs (ug/L)	12	6.1
CVOcs (ug/L)		
PCE	7.6	2.8 J
TCE	27	13
cis-1,2-DCE	460	1700
trans-1,2-DCE	11	12
VC	160	150

Well ID	GMMW-203	
Screen Interval (ft bgs)	2-12	
Sample Date	8/16/2013	
PCBs (ug/L)	ND	
CVOcs (ug/L)		
PCE	ND	
TCE	0.5	
cis-1,2-DCE	1.1	
trans-1,2-DCE	ND	
VC	ND	

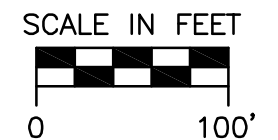
Well ID	GMMW-5	
Screen Interval (ft bgs)	5-15	
Sample Date	5/17/2005	6/1/2011
PCBs (ug/L)	ND	ND
CVOcs (ug/L)		
PCE	--	ND
TCE	--	ND
cis-1,2-DCE	--	ND
trans-1,2-DCE	--	ND
VC	--	ND

LEGEND

- APPROXIMATE SITE PROPERTY LINE
- APPROXIMATE ADJACENT PROPERTY LINES
- FORMER BUILDING FOOTPRINT
- GMMW-1 FORMER GROUNDWATER MONITORING WELL APPROXIMATE LOCATION
- ESTIMATED EXTENT OF CVOC CONCENTRATIONS > NR 140 ES [PRE-SOIL REMOVAL ACTION]
- ESTIMATED EXTENT OF PCB CONCENTRATIONS > NR 140 ES [PRE-SOIL REMOVAL ACTION]

NOTES:

- bgs - BELOW GROUND SURFACE
- BOLD & BOXED - GREATER THAN NR 140 ES
- CVOcs - CHLORINATED VOLATILE ORGANIC COMPOUNDS
- DCE - DICHLOROETHENE
- ES - ENFORCEMENT STANDARD
- ft - FEET
- J - ESTIMATED CONCENTRATION ABOVE THE METHOD DETECTION LIMIT AND BELOW THE REPORTING LIMIT
- ND - NOT DETECTED
- PCBs - POLYCHLORINATED BIPHENYLS
- PCE - TETRACHLOROETHENE
- TCE - TRICHLOROETHENE
- VC - VINYL CHLORIDE
- ug/L - MICROGRAM PER LITER



Geosyntec
consultants

CLIENT: PHARMACIA, LLC

PROJECT: MILWAUKEE DIE CASTING COMPANY (MDCC) SITE
4132 NORTH HOLTON STREET
MILWAUKEE, WISCONSIN

TITLE: GROUNDWATER ISO-CONCENTRATION MAP
[PRE-SOIL REMOVAL ACTION]

PROJECT: CHW8271 FIGURE NO.: B.3.b. DRAWING NO.: B.3.b.

DATE: December 7, 2016 FILE NO.: 1611MDCC901

CAP MAINTENANCE PLAN

Date:	April 6, 2018
Site Name:	Former Milwaukee Die Casting Company Site
Address:	4132 North Holton Street Milwaukee, Wisconsin
Property ID:	Tax Key# 241-9982-000
Legal Description:	Refer to Survey Map (Attachment 1)
WDNR ID:	BRRTS# 02-41-000023 FID# 241228240
USEPA ID:	CERCLIS ID# WIN000510552 RCRA ID# WID006102305

INTRODUCTION

This Cap Maintenance Plan (CMP) for the above referenced site (“Site”) was prepared in accordance with s. NR 724.13 (2), Wisconsin Administrative Code. The format of this CMP generally follows Wisconsin Department of Natural Resources (WDNR) Publication RR-980, dated April 2014.

Additional Site-specific information can be found in:

- The case file in the WDNR Southeast Region office and USEPA Region 5 Records Center;
- BRRTS on the Web (<http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>); and
- RR Sites Map (<http://dnrmaps.wi.gov/H5/?viewer=rrsites>).

Current and all subsequent Property Owners shall maintain a copy of this CMP and make it available to their employees or contractors conducting cap inspections and maintenance activities.

DESCRIPTIONS

Site Description

The Site is a 3.7-acre vacant, grass-covered, parcel. Site removal action activities (i.e., building, foundation, tunnel system, and sewer removal; soil removal; and capping and vegetative cover) were conducted between 2013 and 2015 in accordance with an Administrative Settlement Agreement and Order on Consent for Removal Action (AOC) with the United States Environmental Protection Agency (USEPA) for the Former Milwaukee Die Casting Site, effective date March 12, 2013.

Description of Residual Soil Impacts and Groundwater Contamination

Residual soil impacts under the Site cap systems and vegetative cover (hereafter referred to as the “Cap”) include polychlorinated biphenyls (PCBs) and chlorinated volatile organic compounds (CVOCs).

Residual PCB concentrations in soil under the Cap are depicted on **Attachment 2 (Site Cap Map)** and **Attachment 3 (Residual Soil Contamination Map)** are summarized in the following table:

Cap System	Residual Total PCB Concentration
Clay Cap	> 25 milligrams per kilogram (mg/kg) ^[1] ≤ 100 mg/kg ^[2]
Soil Cover	> 0.744 mg/kg ^[3] and ≤ 25 mg/kg ^[1]
Topsoil Cover	≤ 0.744 mg/kg ^[3]

^[1] cleanup level for bulk PCB remediation waste in low occupancy areas without a cap in accordance with 40 CFR 761.61(a)(4)(i)(B)(1)

^[2] cleanup level for bulk PCB remediation waste in low occupancy areas with a cap in accordance with 40 CFR 761.61(a)(4)(i)(B)(3)

^[3] WDNR industrial direct contact residual contaminant level (RCL) (January 2015). Note: the most conservative (lowest) WDNR Aroclor-specific RCL was utilized for total PCBs.

Residual CVOCs in soil primarily consist of tetrachloroethene (PCE) and trichloroethene (TCE). Residual PCE and TCE concentrations in soil are less than USEPA industrial regional screening levels (RSLs) (on-Site soil removal action criteria in accordance with the AOC) of 110,000 µg/kg (micrograms per kilogram) and 6,400 µg/kg, respectively. Residual PCE and TCE concentrations are also less than current WDNR industrial direct contact RCLs (June 2016) of 153,000 µg/kg and 8,810 µg/kg, respectively,

Residual PCE and TCE concentrations exceed WDNR non-industrial direct contact RCLs (30,700 µg/kg and 1,260 µg/kg, respectively) and WDNR groundwater protection RCLs (4.5

µg/kg and 3.6 µg/kg, respectively) in several areas of the Site. These areas are depicted on **Attachment 3 (Residual Soil Contamination Map)**.

Groundwater data (pre-removal action) are depicted in **Attachment 4 (Groundwater Iso-Concentration Map)**. An evaluation of groundwater quality following soil removal activities was beyond the scope of the AOC.

Cap to be Maintained

The Cap to be maintained is depicted on **Attachment 2 (Site Cap Map)**. The legal descriptions of the Cap systems are included on **Attachment 1 (Survey Map)**. The Cap systems are described in the following table:

Cap System	Description
Clay Cap	Minimum of 2 feet of clean soil, including a minimum of 10 inches of clay and 6 inches of topsoil with the remainder being “common fill”. The Clay Cap was constructed in accordance with 40 CFR 761.61(a)(7). The 10-inch clay layer properties include: a recompacted permeability < 1×10 ⁻⁷ centimeters per second, > 30 percent passing the No. 200 sieve, a liquid limit > 30, and a plasticity index > 15. The Common Fill is free of rock or gravel larger than 3 inches in any dimension and free of debris, waste, vegetation, and other deleterious matter.
Soil Cover	Minimum of 2 feet of clean soil, including 1.5 feet of common fill and 6 inches of topsoil
Topsoil Cover	Minimum of 6 inches of topsoil

The vegetative cover was established with the following seed mixture:

Minimum Ingredients	Crop Seed (%)	Weight (%)	Purity (%)	Germination (%)
Kentucky Bluegrass	26.75	30	89%	80%
Creeping Red Fescue	39.20	40	98%	85%
Annual Ryegrass	19.50	20	98%	90%
Perennial Ryegrass	9.80	10	98%	90%
Inert Matter, Weed & Crop Seeds	4.75			

Cap Purpose

The purpose of the Cap is to prevent direct contact with, and the erosion and runoff of, residual soil impacts at the Site. The Cap will function as intended unless disturbed. As an added benefit, the Clay Cap, in particular, should also reduce surface water infiltration and leaching of residual

contamination to groundwater. In addition, the properties associated with this Site must remain industrial.

Semi-Annual Cap Inspection

The Cap shall be inspected at least twice per year, at a minimum in the spring after the snow melt and during dry periods to check that desiccation cracks do not affect the integrity of the cap. The inspections shall assess the cap and vegetative cover for damage or deterioration (e.g., settling or weathering cracks, significant animal burrows, stormwater erosion rills, or lack of grass vegetation).

A log of the Cap inspections and any repairs shall be completed and maintained. A copy of the inspection log (WDNR Form 4400-305, Continuing Obligations Inspection and Maintenance Log) is included as **Attachment 5**. The log shall include a description of the condition of the Cap; recommendations for repair or maintenance; documentation of the implementation of recommended repairs or maintenance; and photographic documentation of inspection, repair, and maintenance activities. Any area where soil beneath the Cap has become exposed (e.g., grass cover disturbed, tire ruts, distressed vegetation, elevation of surface changed) shall be documented.

Copies of the inspection logs shall be maintained at the address of the property owner and submitted to WDNR by January 31 of each year following the year the caps were inspected. WDNR's guidance for electronic submittals to the Remediation and Redevelopment Program (RR-690) is included as **Attachment 6**.

Cap Maintenance

Repairs to the Cap shall be conducted as soon as practical if the annual inspection reveals excessive damage or deterioration. Minor repairs shall be conducted as soon as possible, but no later than 72 hours after discovery. Major repairs shall be conducted as soon as possible, but no later than seven (7) calendar days after discovery, unless otherwise agreed to in writing by the WDNR. The repair activities will generally include, but are not limited to, the following:

- Revegetating (mulching, reseeding, and watering) areas of sparse or dead vegetation.
- Regrading, compacting, and revegetating eroded areas.
- Plugging animal burrow holes.

Repaired Cap areas shall meet the as-constructed conditions documented in the "Cap to be Maintained" Section above.

If the Cap repair activities expose the underlying soil (i.e., contaminated soil), the repair activities shall incorporate the following considerations and requirements during implementation:

- All soil underlying the cap shall be considered impacted.
- Cap repair shall comply with all applicable local, State and Federal regulations regarding health and safety including, but not limited to, 29 CFR 1910 Occupational Safety and Health Act (OSHA) Safety and Health Standards and 29 CFR 1926 OSHA General Construction Standards.
- Cap repair activities shall be conducted in a manner that maintains segregation of underlying impacted soil from the Cap soil and prevents surface water contact with the impacted soil to the extent practical.
- If any impacted soil is generated during Cap repair, the soil shall be properly characterized, managed, transported, and disposed of in accordance with all applicable Federal, State, and local regulations and requirements.
- Stockpiling of impacted soil on the Cap shall not be conducted. If temporary stockpiling is required, impacted soil shall be placed on top of heavy-duty plastic sheeting with perimeter berms and covered with a secured tarp or plastic sheeting.

Prohibition of Activities and Notification to WDNR and USEPA Prior to Actions Affecting a Cap

The following activities are prohibited within the Cap area, unless prior written approval has been obtained from the WDNR:

- Clay Cap and Soil Cover area use other than as “low occupancy” areas, as defined in 40 CFR 761.3, and the occupancy limitations shall be maintained in perpetuity;
- construction of wells, except for monitoring purposes with pre-approval from the WDNR and USEPA;
- removal of the Cap;
- replacement of the Cap with another barrier;
- excavating, grading, or filling on the Cap;
- plowing for agricultural cultivation on the Cap;
- construction or placement of a building or other structure on the Cap; and
- any other changes to the Cap and uses of these areas that are not pre-approved by the WDNR and USEPA.

If removal, replacement or other changes to the Cap (Clay Cap, Soil Cover and/or Topsoil Cover) are considered, the WDNR and USEPA shall be contacted at least 45 days before taking

such an action, to determine whether further action may be necessary to protect human health, safety, or welfare or the environment, in accordance with NR 727.07.

Amendment or Withdrawal of CMP

This CMP shall not be amended or withdrawn without the written approval of WDNR and USEPA.

Contact Information

Property Owner: Redevelopment Authority of the City of Milwaukee
809 N. Broadway
Milwaukee, WI 53203

WDNR: Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
2300 N Dr Martin Luther King Jr Dr
Milwaukee, WI 53212

EPA: United States Environmental Protection Agency, Region 5
Emergency Response Branch, Superfund Division
77 W. Jackson Blvd.
Chicago, IL 60604

Document Prepared By: Pharmacia LLC and Fisher Controls
235 East 42nd Street, MS 235/25/01
New York, NY 10017

LOCATION MAP

Maps depicting the location and extent of the Cap (Clay Cap, Soil Cover and/or Topsoil Cover) (and the extent of the underlying residual PCB and CVOC-impacted soil) and the Site property boundaries are included as **Attachment 1 (Survey Map)**, **Attachment 2 (Site Cap Map)** and **Attachment 3 (Residual Soil Contamination Map)**.

PHOTOGRAPHS OF CAP

Photographs documenting the completed Cap condition are included in **Attachment 7**.

CONTINUING OBLIGATIONS INSPECTION AND MAINTENANCE LOG

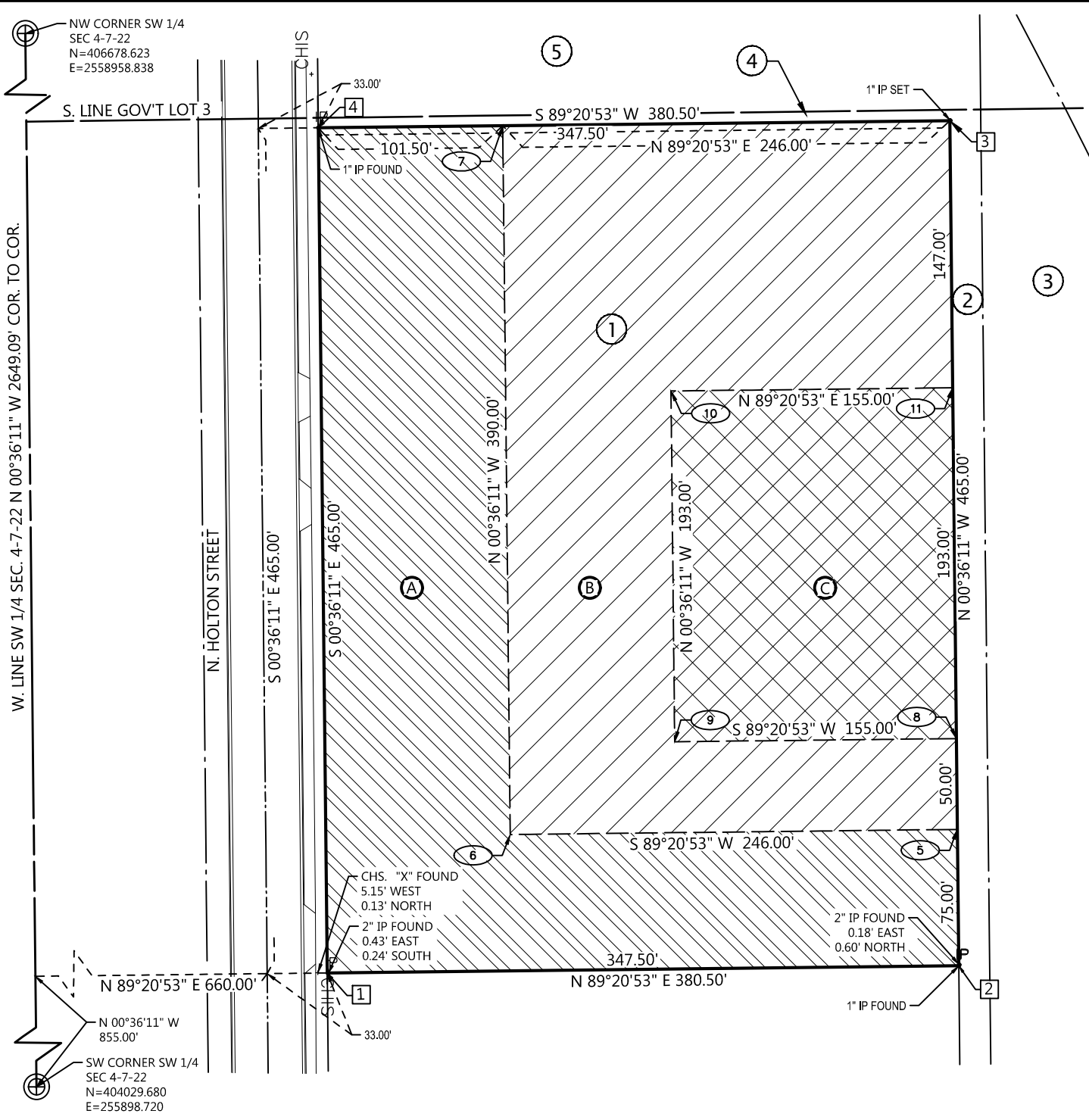
A copy of the Cap inspection and maintenance log (WDNR Form 4400-305) and guidance (RR-690) for electronic submittal of the inspection form to the WDNR are included as **Attachments 5 and 6**.

LIST OF ATTACHMENTS

- Attachment 1: Survey Map
- Attachment 2: Site Cap Map
- Attachment 3: Residual Soil Contamination Map
- Attachment 4: Groundwater Iso-Concentration Map
- Attachment 5: WDNR Form 4400-305, Cap Inspection and Maintenance Log
- Attachment 6: RR-690, WDNR Guidance for Electronic Submittals
- Attachment 7: Photographs of Site Cap

ATTACHMENT 1

Survey Map



PARCEL DESCRIPTIONS ② - ⑤

PARCEL ②
 LOTS IN SW 1/4 SEC 4-7-22 17' R.O.W. RUNNING N W'LY & S E'LY THRU LOT 3 & RUNNING N & S THRU N 620' LOT 4
 ADDRESS 4132 (R) NORTH HOLTON STREET
 TAX KEY NO. 2419978000

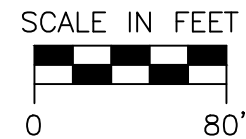
PARCEL ③
 GOVT LOTS IN SW 1/4 OF SECTION 4 T7N R22E PART LOTS 3 & 4 COM 700' N & 1462.83' E OF SW COR SD 1/4 SEC -TH NWLY 454.59'-TH NWLY ALG A CUR 99.11'-TH NWLY 273.14'-TH S 39.06'-TH S ALG ELY LI OF SPUR TRACK TO A PT 700' N OF S LI SD 1/4 SEC-TH W TO A PT 1049' E OF W LI SD 1/4 SEC-TH S 667'-TH E 575'-TH N 300'-TH NWLY 111.68'-TH NWLY ALG A CUR 309.46'-TH E 36.42' TO BEG BID #25
 ADDRESS 720 EAST CAPITOL DRIVE
 TAX KEY NO. 2419990110

PARCEL ④
 LOTS IN SW 1/4 SEC 4-7-22 PART OF LOT 3 LYING E OF SPUR TRACK & S OF PARCEL 3 OF C.S.M. #7054 BEING S 7.34' OF WLY 347.62' M/L BID #25
 ADDRESS 4198 (AD) NORTH HOLTON STREET
 TAX KEY NO. 2419988100

PARCEL ⑤
 CERTIFIED SURVEY MAP NO 7054 IN NW 1/4 OF SW 1/4 SEC 4-7-22 PARCEL 3 BID #25
 ADDRESS 4198 NORTH HOLTON STREET
 TAX KEY NO. 2410013000

EXISTING LEGEND

	PARCEL BOUNDARY		CHIS	CHISELED X
	SECTION LINE		IP	IRON PIPE/REBAR FOUND
	1/16 LINE			1" X 18" IRON PIPE SET
	EXISTING PROPERTY LINE			SECTION CORNER MONUMENT
	STREET CENTERLINE			PARCEL CORNER
	EDGE OF ASPH/CONC			CAP SYSTEM CORNER
	CONC. CURB & GUTTER			
	TOP SOIL COVER			
	SOIL COVER			
	CLAY CAP			



GENERAL NOTES

- FIELD SURVEY PERFORMED ON 1-22-16 BY TERRATEC ENGINEERING, LLC.
- BEARINGS AND COORDINATES REFERENCED TO GRID NORTH OF THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. THE WEST LINE OF THE SW 1/4 OF SECTION 4, TOWN 7 NORTH, RANGE 22 EAST BEING N 00°36'11" W.

PARCEL DESCRIPTION ①

THAT PART OF GOVERNMENT LOT 4 IN THE SW 1/4 OF FRACTIONAL SECTION 4, TOWNSHIP 7 NORTH, RANGE 22 EAST, IN THE CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:
 COMMENCING AT A POINT WHICH IS 855.00 FEET NORTH OF THE SOUTH LINE AND 660.00 FEET EAST OF THE WEST LINE OF SAID SOUTHWEST 1/4 THE SOUTHEAST CORNER OF THE WEST 1/2 OF SAID SOUTHWEST 1/4; THENCE EAST ON A LINE WHICH IS 855.00 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF SAID 1/4 SECTION, 380.50 FEET TO A POINT IN THE WEST LINE OF THE WESTERLY RIGHT OF WAY CONVEYED TO THE CHICAGO, MILWAUKEE AND ST. PAUL RAILROAD COMPANY BY DEED RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS OF MILWAUKEE COUNTY IN VOLUME 822, ON PAGE 227; THENCE NORTH ALONG SAID WEST LINE OF SAID RIGHT OF WAY 465.00 FEET TO THE NORTH LINE OF SAID LOT 4; THENCE WEST ON SAID NORTH LINE, 380.50 FEET TO A POINT 660.0 FEET EAST OF THE WEST LINE OF SAID SOUTHWEST 1/4; THENCE SOUTH ON A LINE 660.00 FEET EAST OF AND PARALLEL WITH SAID WEST LINE, 465.00 FEET TO THE POINT OF BEGINNING, EXCEPTING THE WEST 33.00 FEET FOR STREET PURPOSES.

PARCEL CONTAINS 161,587 SQ.FT. OR 3.71 ACRES.
 ADDRESS 4132 NORTH HOLTON STREET
 TAX KEY NO. 2419982000

PARCEL CAP SYSTEMS DESCRIPTIONS

- A TOPSOIL COVER**
 THAT PART OF GOVERNMENT LOT 4 IN THE SW 1/4 OF FRACTIONAL SECTION 4, TOWNSHIP 7 NORTH, RANGE 22 EAST, IN THE CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:
 COMMENCING AT THE SOUTHWEST CORNER OF THE SW 1/4 OF SECTION 4, TOWNSHIP 7 NORTH, RANGE 22 EAST; THENCE N 00°36'11" W, 855.00 FEET ALONG THE WEST LINE OF SAID SW 1/4 SECTION; THENCE N 89°20'35" E, 660.00 FEET TO THE CENTERLINE OF N. HOLTON STREET; THENCE N 89°20'35" E, 33.00 FEET TO THE EAST LINE OF N. HOLTON STREET AND THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUING N 89°20'53" E, 347.50 FEET; THENCE N 00°36'11" W, 75.00 FEET; THENCE S 89°20'53" W, 246.00 FEET; THENCE N 00°36'11" W, 390.00 FEET; THENCE S 89°20'53" W, 101.50 FEET TO THE EAST LINE OF N. HOLTON STREET; THENCE ALONG SAID EAST LINE S 00°36'11" E, 465.00 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 65,647 SQ. FT. OR 1.51 ACRES.
- B SOIL COVER**
 THAT PART OF GOVERNMENT LOT 4 IN THE SW 1/4 OF FRACTIONAL SECTION 4, TOWNSHIP 7 NORTH, RANGE 22 EAST, IN THE CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:
 COMMENCING AT THE SOUTHWEST CORNER OF THE SW 1/4 OF SECTION 4, TOWNSHIP 7 NORTH, RANGE 22 EAST; THENCE N 00°36'11" W, 855.00 FEET ALONG THE WEST LINE OF SAID SW 1/4 SECTION; THENCE N 89°20'35" E, 660.00 FEET TO THE CENTERLINE OF N. HOLTON STREET; THENCE CONTINUING N 89°20'53" E, 380.50 FEET; THENCE N 00°36'11" W, 75.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE S 89°20'53" W, 246.00 FEET; THENCE N 00°36'11" W, 390.00 FEET; THENCE N 89°20'53" E, 246.00 FEET; THENCE S 00°36'11" E, 147.00 FEET; THENCE S 89°20'53" W, 155.00 FEET; THENCE S 00°36'11" E, 193.00 FEET; THENCE N 89°20'53" E, 155.00 FEET; THENCE S 00°36'11" E, 50.00 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 66,025 SQ. FT. OR 1.52 ACRES.
- C CLAY CAP**
 THAT PART OF GOVERNMENT LOT 4 IN THE SW 1/4 OF FRACTIONAL SECTION 4, TOWNSHIP 7 NORTH, RANGE 22 EAST, IN THE CITY OF MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:
 COMMENCING AT THE SOUTHWEST CORNER OF THE SW 1/4 OF SECTION 4, TOWNSHIP 7 NORTH, RANGE 22 EAST; THENCE N 00°36'11" W, 855.00 FEET ALONG THE WEST LINE OF SAID SW 1/4 SECTION; THENCE N 89°20'35" E, 660.00 FEET TO THE CENTERLINE OF N. HOLTON STREET; THENCE CONTINUING N 89°20'53" E, 380.50 FEET; THENCE N 00°36'11" W, 125.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE S 89°20'53" W, 155.00 FEET; THENCE N 00°36'11" W, 193.00 FEET; THENCE N 89°20'53" E, 155.00 FEET; THENCE S 00°36'11" E, 193.00 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 29,915 SQ. FT. OR 0.69 ACRES.

COORDINATE TABLE

WIS. STATE PLANE COORDS, GRID NORTH, SOUTH ZONE			
PT#	N	E	
1	404892.518	2559670.676	PARCEL CORNER
2	404896.472	2560018.153	PARCEL CORNER
3	405361.446	2560013.259	PARCEL CORNER
4	405357.492	2559665.782	PARCEL CORNER
5	404971.468	2560017.364	
6	404968.668	2559771.380	
7	405358.643	2559767.275	
8	405021.465	2560016.838	
9	405019.701	2559861.848	
10	405212.691	2559859.816	
11	405214.454	2560014.806	

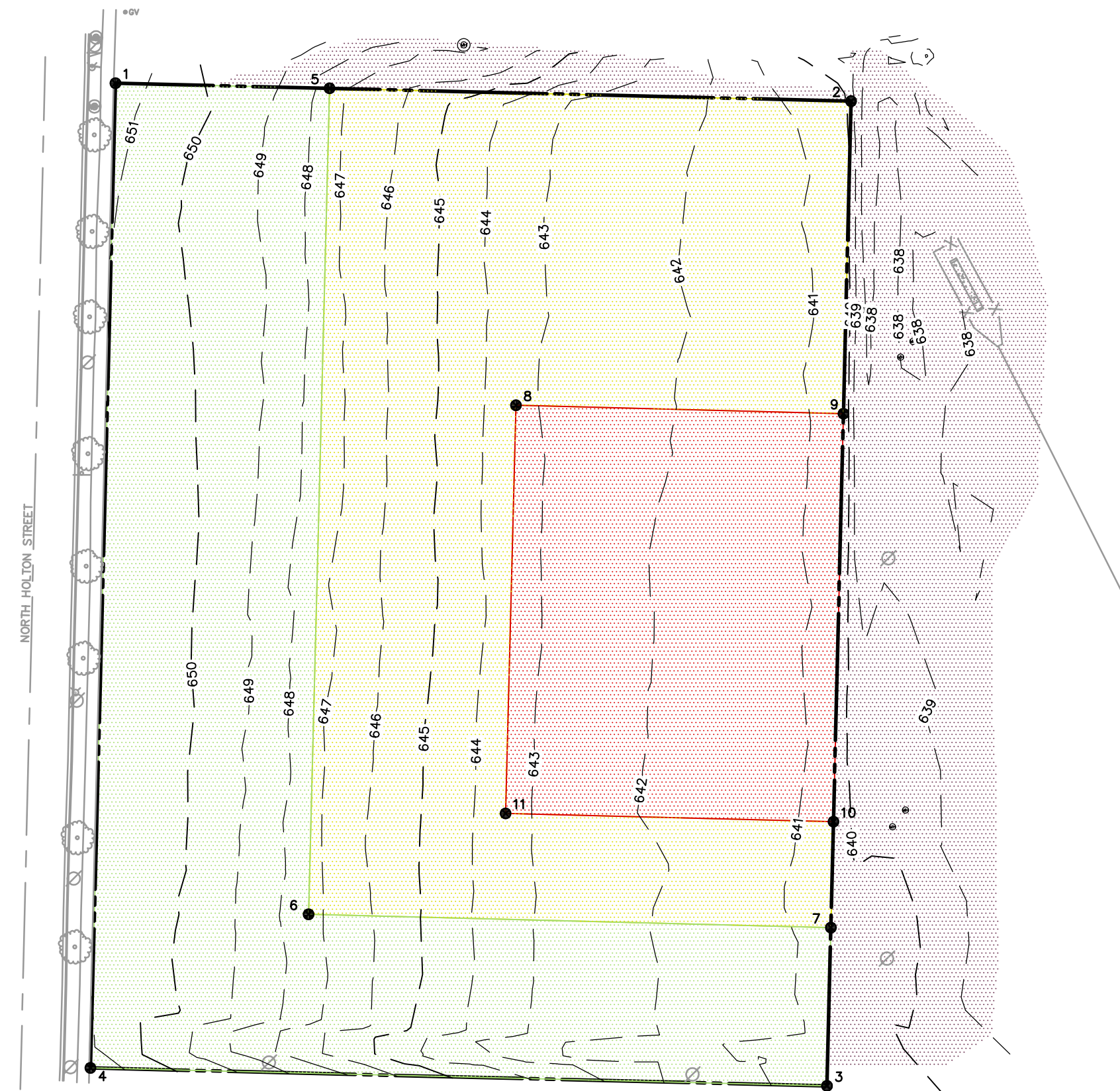
UTM 16 NORTH			
PT#	N	E	
1	15654132.364	1398860.736	PARCEL CORNER
2	15654123.787	1399208.130	PARCEL CORNER
3	15654588.636	1399220.003	PARCEL CORNER
4	15654597.212	1398872.609	PARCEL CORNER
5	15654198.763	1399210.045	
6	15654204.834	1398964.120	
7	15654594.707	1398974.078	
8	15654248.747	1399211.322	
9	15654252.5721	1399056.369	
10	15654445.509	1399061.297	
11	15654441.684	1399216.250	

Geosyntec
consultants

CLIENT:	PHARMACIA, LLC		
PROJECT:	MILWAUKEE DIE CAST COMPANY (MDCC) SITE 4132 NORTH HOLTON STREET MILWAUKEE, WISCONSIN		
TITLE:	SURVEY MAP		
PROJECT:	CHW8271	FIGURE NO.:	1
DATE:	April 2, 2018	FILE NO.:	1804Attach2
DRAWING NO.:	ATTACHMENT 1		

ATTACHMENT 2

Site Cap Map



NORTH HOLTON STREET

LEGEND

- — — — — APPROXIMATE SITE PROPERTY LINE
- — — — — EDGE OF PAVEMENT/WALK/CURB
- X — X — CHAIN LINK FENCE
- 640 — 1-FT CONTOUR LINE (FT MSL)
- ⊕ MANHOLE
- ⊕ STORM SEWER CATCH BASIN
- ⊙ UTILITY POLE
- ⊙ HYDRANT
- ⊙ TREE

- CLAY CAP:** 2-FOOT MINIMUM TOTAL THICKNESS, INCLUDING 10-INCH MINIMUM CLAY LAYER AND 6-INCH MINIMUM TOPSOIL LAYER; IN ACCORDANCE WITH 40 CFR 761.61(a)(7) AND WDNR SOIL PERFORMANCE STANDARDS (WDNR, 2013A); OVERLYING SOIL WITH PCB CONCENTRATIONS > 25 AND ≤ 100 mg/kg (40 CFR 761.3 "LOW OCCUPANCY AREA")
- SOIL COVER:** 2-FOOT MINIMUM TOTAL THICKNESS, INCLUDING 6-INCH MINIMUM TOPSOIL LAYER; IN ACCORDANCE WITH WDNR SOIL PERFORMANCE STANDARDS (WDNR, 2013A); OVERLYING SOIL WITH PCB CONCENTRATIONS > WDNR INDUSTRIAL DIRECT CONTACT RCL AND ≤ 25 mg/kg (40 CFR 761.3 "LOW OCCUPANCY AREA")
- TOPSOIL COVER:** 6-INCH MINIMUM TOPSOIL LAYER; OVERLYING SOIL WITH PCB CONCENTRATIONS ≤ WDNR INDUSTRIAL DIRECT CONTACT RCL
- APPROXIMATE EXTENT OF TOPSOIL PLACEMENT FOR RE-VEGETATION PURPOSES**

POINT No.	NORTHING	EASTING	DESCRIPTION
1	15654597.212	1398872.609	PROPERTY CORNER
2	15654588.636	1399220.003	PROPERTY CORNER
3	15654123.787	1399208.130	PROPERTY CORNER
4	15654132.364	1398860.736	PROPERTY CORNER
5	15654594.707	1398974.078	SOIL COVER CORNER
6	15654204.834	1398964.120	SOIL COVER CORNER
7	15654198.763	1399210.045	SOIL COVER CORNER
8	15654445.509	1399061.297	CLAY CAP CORNER
9	15654441.684	1399216.250	CLAY CAP CORNER
10	15654248.747	1399211.322	CLAY CAP CORNER
11	15654252.572	1399056.369	CLAY CAP CORNER

- NOTES:**
1. mg/kg - MILLIGRAMS PER KILOGRAM
 2. MSL - MEAN SEA LEVEL
 3. PCB - POLYCHLORINATED BIPHENYL
 4. RCL - RESIDUAL CONTAMINANT LEVEL
 5. WDNR - WISCONSIN DEPARTMENT OF NATURAL RESOURCES

SOURCE:
FIELD SURVEY PERFORMED BY TERRATEC ENGINEERING ON SEPTEMBER 25, 2015.



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CLIENT: PHARMACIA, LLC

PROJECT: MILWAUKEE DIE CASTING COMPANY (MDCC) SITE
4132 NORTH HOLTON STREET
MILWAUKEE, WISCONSIN

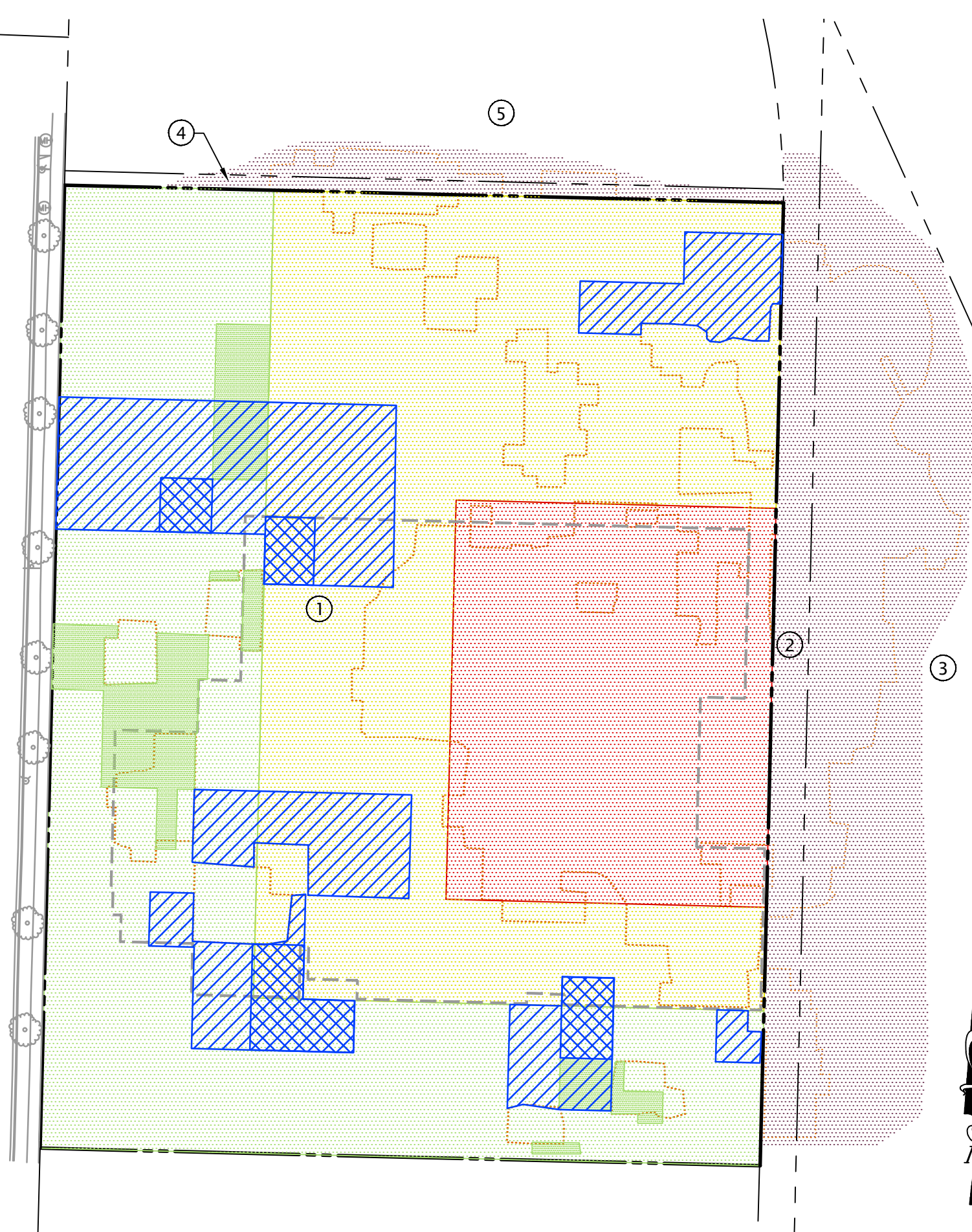
TITLE: **SITE CAP MAP**

PROJECT: CHW8271	FIGURE NO.:	DRAWING NO.:
DATE: April 4, 2018	FILE NO.: 1804MDCC908	ATTACHMENT 2

ATTACHMENT 3

Residual Soil Contamination Map

NORTH HOLTON STREET



- LEGEND**
- APPROXIMATE SITE PROPERTY LINE
 - - - APPROXIMATE ADJACENT PROPERTY LINES
 - APPROXIMATE EXTENT OF IMPACTED SOIL REMOVAL (2015)
 - APPROXIMATE FORMER BUILDING FOOTPRINT
- ESTIMATED EXTENT OF RESIDUAL PCB-IMPACTED SOIL**
- [Light Green Dotted] < WDNR NON-INDUSTRIAL DIRECT CONTACT RCLs [TOPSOIL COVER AREA, 6-INCH MINIMUM CLEAN TOPSOIL LAYER OVER RESIDUAL IMPACTED SOIL]
 - [Medium Green Dotted] > WDNR NON-INDUSTRIAL DIRECT CONTACT RCLs AND ≤ WDNR INDUSTRIAL DIRECT CONTACT RCLs [TOPSOIL COVER AREA, 6-INCH MINIMUM CLEAN TOPSOIL LAYER OVER RESIDUAL IMPACTED SOIL]
 - [Yellow Dotted] > WDNR INDUSTRIAL DIRECT CONTACT RCLs AND ≤ 25 mg/kg [SOIL COVER AREA, 2-FOOT MINIMUM CLEAN SOIL LAYER OVER RESIDUAL IMPACTED SOIL, INCLUDING 6-INCH MINIMUM TOPSOIL LAYER] (40 CFR 761.3 "LOW OCCUPANCY AREA")
 - [Red Dotted] > 25 mg/kg AND ≤ 100 mg/kg [CLAY CAP AREA, 2-FOOT MINIMUM CLEAN SOIL LAYER OVER RESIDUAL IMPACTED SOIL, INCLUDING 10-INCH MINIMUM CLAY LAYER AND 6-INCH MINIMUM TOPSOIL LAYER] (40 CFR 761.3 "LOW OCCUPANCY AREA")
 - [Grey Dotted] < 1 mg/kg (APPROXIMATE EXTENT OF TOPSOIL PLACEMENT FOR RE-VEGETATION PURPOSES)
- ESTIMATED EXTENT OF RESIDUAL CVOC-IMPACTED UNSATURATED SOIL**
- [Blue Diagonal Hatching] > WDNR GROUNDWATER PROTECTION RCLs AND ≤ WDNR NON-INDUSTRIAL DIRECT CONTACT RCLs
 - [Blue Cross Hatching] > WDNR GROUNDWATER PROTECTION RCLs AND > WDNR NON-INDUSTRIAL DIRECT CONTACT RCLs AND ≤ WDNR INDUSTRIAL DIRECT CONTACT RCLs

IMPACTED PROPERTY OWNER INFORMATION

Property No.	Property Owner	Taxkey No.
1	Site Property - Redevelopment Authority of the City of Milwaukee (RACM)	2419982000
2	Phoenix Cudahy, LLC / Pamida Seven, LLC	2419978000
3	Scripps Media, Inc.	2419990110
4	Phoenix Cudahy, LLC	2419988100
5	Phoenix Cudahy, LLC	2410013000

- NOTES**
- CVOCs - CHLORINATED VOLATILE ORGANIC COMPOUNDS (PCE AND/OR TCE)
 - mg/kg - MILLIGRAMS PER KILOGRAM
 - PCBs - POLYCHLORINATED BIPHENYLS
 - PCE - TETRACHLOROETHENE
 - RCLs - RESIDUAL CONTAMINANT LEVELS
 - TCE - TRICHLOROETHENE
 - WDNR - WISCONSIN DEPARTMENT OF NATURAL RESOURCES



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CLIENT: PHARMACIA, LLC

PROJECT: MILWAUKEE DIE CASTING COMPANY (MDCC) SITE
4132 NORTH HOLTON STREET
MILWAUKEE, WISCONSIN

TITLE: RESIDUAL SOIL CONTAMINATION MAP

PROJECT: CHW8271 FIGURE NO.: B.2.b.1. DRAWING NO.: B.2.b.1.

DATE: April 4, 2018 FILE NO.: 1804MDC908

ATTACHMENT 4

Groundwater Iso-Concentration Map

Well ID	GMMW-1	
Screen Interval (ft bgs)	6-16	
Sample Date	6/2/2011	8/6/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-107	
Screen Interval (ft bgs)	4-14	
Sample Date	6/2/2011	8/7/2013
PCBs (ug/L)	55	110
CVOCs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	0.55 J
trans-1,2-DCE	ND	ND
VC	6.8	3.1

Well ID	GMMW-105	
Screen Interval (ft bgs)	5-15	
Sample Date	6/2/2011	8/6/2013
PCBs (ug/L)	5.2	4.7
CVOCs (ug/L)		
PCE	ND	ND
TCE	ND	1.6
cis-1,2-DCE	11	220
trans-1,2-DCE	ND	1.8
VC	11	69

Well ID	GMMW-2	
Screen Interval (ft bgs)	7-17	
Sample Date	6/1/2011	8/7/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	ND	ND
TCE	13	4.6
cis-1,2-DCE	8.8	17
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-106	
Screen Interval (ft bgs)	6-16	
Sample Date	6/2/2011	8/7/2013
PCBs (ug/L)	ND	0.45
CVOCs (ug/L)		
PCE	ND	79
TCE	7.6	45
cis-1,2-DCE	44	110
trans-1,2-DCE	ND	6.5
VC	19	55

Well ID	GMPZ-201	
Screen Interval (ft bgs)	25-30	
Sample Date	9/9/2013	9/24/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-201	
Screen Interval (ft bgs)	2-12	
Sample Date	9/9/2013	9/24/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	ND	0.87 J
TCE	0.78	3.7
cis-1,2-DCE	5.6	14
trans-1,2-DCE	0.54 J	0.85 J
VC	ND	ND

Well ID	GMMW-103	
Screen Interval (ft bgs)	4-14	
Sample Date	5/31/2011	8/6/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	490	470
TCE	130	84
cis-1,2-DCE	230	79
trans-1,2-DCE	20	3.4
VC	ND	ND

Well ID	GMMW-102	
Screen Interval (ft bgs)	4-14	
Sample Date	5/31/2011	8/5/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	ND	11
TCE	18	0.25 J
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-109	
Screen Interval (ft bgs)	4-14	
Sample Date	6/2/2011	8/6/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-101	
Screen Interval (ft bgs)	3.5-13.5	
Sample Date	6/1/2011	8/5/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-104	
Screen Interval (ft bgs)	3-13	
Sample Date	6/2/2011	8/7/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	10	34
TCE	20	91
cis-1,2-DCE	2600	1900
trans-1,2-DCE	30	17
VC	ND	250

Well ID	GMMW-4	
Screen Interval (ft bgs)	6-16	
Sample Date	6/1/2011	8/6/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	ND	ND
TCE	ND	ND
cis-1,2-DCE	ND	ND
trans-1,2-DCE	ND	ND
VC	ND	ND

Well ID	GMMW-111	
Screen Interval (ft bgs)	+1-4	
Sample Date	6/1/2011	8/7/2013
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	460	60
TCE	840	110
cis-1,2-DCE	890	110
trans-1,2-DCE	85	5.6
VC	110	3.6

Well ID	GMMW-100	
Screen Interval (ft bgs)	+1-4	
Sample Date	4/6/2005	5/16/2005
PCBs (ug/L)	0.22	ND
CVOCs (ug/L)		
PCE	ND	--
TCE	ND	--
cis-1,2-DCE	ND	--
trans-1,2-DCE	ND	--
VC	ND	--

Well ID	GMMW-108	
Screen Interval (ft bgs)	4-14	
Sample Date	6/2/2011	8/7/2013
PCBs (ug/L)	12	6.1
CVOCs (ug/L)		
PCE	7.6	2.8 J
TCE	27	13
cis-1,2-DCE	460	1700
trans-1,2-DCE	11	12
VC	160	150

Well ID	GMMW-203	
Screen Interval (ft bgs)	2-12	
Sample Date	8/16/2013	
PCBs (ug/L)	ND	
CVOCs (ug/L)		
PCE	ND	
TCE	0.5	
cis-1,2-DCE	1.1	
trans-1,2-DCE	ND	
VC	ND	

Well ID	GMMW-5	
Screen Interval (ft bgs)	5-15	
Sample Date	5/17/2005	6/1/2011
PCBs (ug/L)	ND	ND
CVOCs (ug/L)		
PCE	--	ND
TCE	--	ND
cis-1,2-DCE	--	ND
trans-1,2-DCE	--	ND
VC	--	ND

LEGEND

- APPROXIMATE SITE PROPERTY LINE
- APPROXIMATE ADJACENT PROPERTY LINES
- FORMER BUILDING FOOTPRINT
- GMMW-1 FORMER GROUNDWATER MONITORING WELL APPROXIMATE LOCATION
- ESTIMATED EXTENT OF CVOC CONCENTRATIONS > NR 140 ES [PRE-SOIL REMOVAL ACTION]
- ESTIMATED EXTENT OF PCB CONCENTRATIONS > NR 140 ES [PRE-SOIL REMOVAL ACTION]

NOTES:

- bgs - BELOW GROUND SURFACE
- BOLD & BOXED - GREATER THAN NR 140 ES
- CVOCs - CHLORINATED VOLATILE ORGANIC COMPOUNDS
- DCE - DICHLOROETHENE
- ES - ENFORCEMENT STANDARD
- ft - FEET
- J - ESTIMATED CONCENTRATION ABOVE THE METHOD DETECTION LIMIT AND BELOW THE REPORTING LIMIT
- ND - NOT DETECTED
- PCBs - POLYCHLORINATED BIPHENYLS
- PCE - TETRACHLOROETHENE
- TCE - TRICHLOROETHENE
- VC - VINYL CHLORIDE
- ug/L - MICROGRAM PER LITER



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CLIENT: PHARMACIA, LLC

PROJECT: MILWAUKEE DIE CASTING COMPANY (MDCC) SITE
4132 NORTH HOLTON STREET
MILWAUKEE, WISCONSIN

TITLE: GROUNDWATER ISO-CONCENTRATION MAP
[PRE-SOIL REMOVAL ACTION]

PROJECT: CHW8271 FIGURE NO.: B.3.b. DRAWING NO.: B.3.b.

DATE: December 7, 2016 FILE NO.: 1611MDCC901

ATTACHMENT 5

WDNR Form 4400-305, Cap Inspection and
Maintenance Log

Directions: In accordance with s. NR 727.05 (1) (b) 3., Wis. Adm. Code, use of this form for documenting the inspections and maintenance of certain continuing obligations is required. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.]. When using this form, identify the condition that is being inspected. See the closure approval letter for this site for requirements regarding the submittal of this form to the Department of Natural Resources. A copy of this inspection log is required to be maintained either on the property, or at a location specified in the closure approval letter. Do NOT delete previous inspection results. This form was developed to provide a continuous history of site inspection results. The Department of Natural Resources project manager is identified in the closure letter. The project manager may also be identified from the database, BRRTS on the Web, at <http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>, by searching for the site using the BRRTS ID number, and then looking in the "Who" section.

Activity (Site) Name	BRRTS No.
----------------------	-----------

Inspections are required to be conducted (see closure approval letter): <input type="radio"/> annually <input type="radio"/> semi-annually <input type="radio"/> other – specify _____	When submittal of this form is required, submit the form electronically to the DNR project manager. An electronic version of this filled out form, or a scanned version may be sent to the following email address (see closure approval letter):
---	---

Inspection Date	Inspector Name	Item	Describe the condition of the item that is being inspected	Recommendations for repair or maintenance	Previous recommendations implemented?	Photographs taken and attached?
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N
		<input type="checkbox"/> monitoring well <input type="checkbox"/> cover/barrier <input type="checkbox"/> vapor mitigation system <input type="checkbox"/> other:			<input type="radio"/> Y <input type="radio"/> N	<input type="radio"/> Y <input type="radio"/> N

BRRTS No. _____

Activity (Site) Name _____

Continuing Obligations Inspection and Maintenance Log

Form 4400-305 (2/14)

Page 2 of 2

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Date added:

Title:

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Date added:

Title:

ATTACHMENT 6

RR-690, WDNR Guidance for Electronic Submittals



Remediation and Redevelopment Program **September 2017**

Guidance for Submitting Documents to the Remediation and Redevelopment Program

Purpose

The purpose of this guidance is to outline the appropriate format and procedures for submitting documents to the Remediation and Redevelopment Program. Wis. Admin. Code § NR 700.11(3g), and other specific provisions within Wis. Admin. Code ch. NR 700, outline the requirements for submittals, including electronic submittals. Consultants and representatives of responsible parties are required to submit one paper copy and one electronic copy of all submittals, including case closure documents. **The electronic version should be an exact duplicate of the paper version.**

Submittal Method

Paper copies should be sent to the applicable regional office. The DNR encourages submitting electronic documents via email attachment or upload to the RR Program’s FTP site, instead of CD/DVD submittal. Below is a basic breakdown of the preferred methods for submitting electronic documents.

If you are unsure as to which region documents should be submitted, review the [DNR regional map](#) or contact your project manager.

1. Under 12 megabytes – Email to DNR regional mailbox (and DNR project manager, if applicable)

- a. The RR Program recommends the following guidelines be used for email submittals, in order to assist staff in identification and timely review of documents. See Attachment A for Document Title Conventions Please zip submittals with multiple documents. Documents contained in the zip file should also use the file naming conventions in the table below..

	Open Sites	New Submittals
To	Regional mailbox and DNR Project Manager	Regional mailbox
Subject Line	BRRTS#_ActivityName <i>ex. 0233444444_SmithGarage</i>	ActivityName <i>ex. SmithGarage</i>
Email Body	Explain: the type of submittal attached, if fee was sent (if applicable), if paper copy has been sent	
Naming convention for attached files	BRRTS#_DocumentType <i>ex. 0233444444_SIRreport</i>	ActivityName_DocumentType <i>ex. SmithGarage_Phase I</i>

Regional Emails

- Northeast Region DNRRRNER@wisconsin.gov
- Northern Region DNRRRNOR@wisconsin.gov
- South Central Region DNRRRSCR@wisconsin.gov
- Southeast Region DNRRRSEER@wisconsin.gov
- West Central Region DNRRRWCR@wisconsin.gov

2. Over 12 megabytes – Upload to FTP site and send email notification

For assistance with the FTP site, please contact Sonya Rowe, (608) 261-4934, sonya.rowe@wisconsin.gov.

- a. Please zip submittals with multiple documents and upload to the FTP site. Documents within the zip file should use the naming conventions in the table on the previous page.
- b. After uploading a document to the FTP site, please email the regional mailbox with the following information in the email body content:
 - The type of submittal with proper title (see Attachment A Document Title Conventions) that was uploaded to the FTP site, the name of the file, if a fee was sent (if applicable), and to whom the paper copy was sent.
- c. To upload documents to the regional folder on the FTP site:
 1. Open the following link in your browser: <https://ftp.wi.gov/submittals/>
 2. You will be asked for a user name and password -
 - a. Enter user name: **dnr-rraccess**
 - b. Enter any password you want (**Note:** You cannot leave the password blank)
 3. Navigate to the appropriate regional folder -
 - a. <dir> NER (Northeast Region)
 - b. <dir> NOR (Northern Region)
 - c. <dir> SCR (South Central Region)
 - d. <dir> SER (Southeast Region)
 - e. <dir> WCR (West Central Region)
 4. Use the upload tool to load files to the FTP site.

Note: You cannot delete files from the FTP site or create folders.

General Notes on Submittals

Notification of Discharge – Consultants are encouraged to use the [Notification for Hazardous Substance Discharge \(Non-Emergency Only\) Form 4400-225](#) for historic discharges.

Fee Forms – Consultants are encouraged to send the appropriate [fee form \(see Fees tab\)](#), signed and scanned, electronically to the regional email box or FTP site, depending on size. **If the form is sent electronically, include a copy of the first page of the form with the mailed check.** Fees paid by check should be sent to the appropriate [regional environmental program associate](#).

Note: The regional mailboxes are only used for submittals. Any site-specific or follow-up questions should be directed to the appropriate DNR project manager.

Organization and General Instructions for Documents

1. Titles for typical reports and submittals required under Wis. Admin. Code ch. NR 700 are found in Attachment A.

2. The electronic submittal, including the sections and attachments/appendices in individual reports, should be assembled in the same order and format as the paper submittal, including case closure submittals, as specified in the Case Closure form ([4400-202](#)).
 - a. For case closure requests, the zipped folder should be organized and the contents clearly labeled so that there are individual file folders labeled:
 - Case Closure form; and
 - Seven separate file folders for each of the required attachments (e.g., Attachments A through G).
 - b. The eight file folders should include the required PDF attachments for each of those sections of the Case Closure form, along with each PDF clearly labeled with the DNR-specified title (e.g., A.1. Groundwater Analytical Tables), and organized within the file folder (e.g., Attachment A: Data Tables) in the order specified in the Case Closure form ([4400-202](#)).
 - c. **A single PDF of the entire closure packet (form and attachments) should also be included in the zip file.**
 - d. Professional certifications required per Wis. Admin. Code ch. NR 712 must be included.
 - e. An example of an acceptable closure submittal can be found at: dnr.wi.gov/topic/brownfields/documents/directory.pdf
3. Include a cover letter with reports submitted under Wis. Admin. Code ch. NR 700 that clearly lists the BRRTS/FID number; describes the title and type of submittal; and what action, if any, is requested from the RR Program.
4. Prepare visual aids, including maps, plans, drawings, fence diagrams, tables, and photographs according to the applicable portions of Wis. Admin. Code chs. NR 716 through 726.
5. Use bold and italics font on information of importance on tables and figures. Use bold font for Wis. Admin. Code ch. NR 140 groundwater enforcement standard (ES) attainments or exceedances, and italicized font for Wis. Admin. Code ch. NR 140 groundwater preventive action limit (PAL) standard attainments or exceedances.
6. Do not use shading or highlighting on the tables, figures, maps, or other documents.
7. Include the level of detection on data tables for results which are below the detection level (i.e. do not just list as no detect (ND)). Include the units on data tables. Units should be consistent with the applicable standards. Include all sample locations. Contour lines should be clearly labeled and defined.
8. Summaries of all data must include information collected by previous consultants.
9. Do not submit lab data sheets unless these have not been submitted in a previous report. Include these as a separate PDF from the narrative summary. Tabulate all data required in Wis. Admin. Code § NR 716.15(3)(c), in the format required in Wis. Admin. Code § NR 716.15(4)(e).
10. If any map or figure is not relevant to the case closure request, you must fully explain the reason(s) why and attach that explanation (properly labeled with the map/figure title).

- 11.** Provide one paper copy no larger than 11x17 inches, unless otherwise directed by the department. Maps and figures may be submitted in a larger electronic size than 11x17 inches, in a PDF readable by Adobe Acrobat Reader. However, larger-size documents must be legible when printed.

Electronic File Format

- 1.** The consultant or representative should prepare electronic PDF files for submittal. Except as outlined below for sampling results when requested, the various elements should be created in or converted to the portable document format (PDF), readable by Adobe Acrobat Reader.
- 2.** Save DNR forms using Adobe Acrobat software. This is especially important if the form will need to be edited before submittal to the DNR. Adobe Acrobat Reader can be downloaded for free at <https://get.adobe.com/reader/>.
- 3.** Electronic files shall have a minimum resolution of 300 dots per inch (dpi) to ensure legibility without creating excessive file size.
- 4.** Report submittals should not be any larger than 250 mb in size. Please split submittals into 250 mb or less files and label accordingly.
- 5.** All documents are to be legible. Providing illegible information will result in a submittal being considered incomplete until corrected.
- 6.** **Electronic files may not be locked or password protected.** This means the files can't require a password to open or edit. However, files can use a feature that makes them read only or "protected" to prevent inadvertent editing, as long as the feature can be turned off without a password.
- 7.** It is recommended that documents such as lab reports, chain of custody documents, boring logs, etc., that are received as hard copy by the consultant be scanned as PDF files. To minimize file size, PDF files should be prepared by converting directly from the original electronic versions or with black and white scans.
- 8.** When submitting site investigations under Wis. Admin. Code ch. NR 716 and O&M reports under Wis. Admin. Code ch. NR 724, it is recommended that lab data be submitted as one separate PDF, and the narrative and data summary (figures, tables, etc.) be submitted as a second separate PDF. If copies of the Phase I and II environmental site assessments are included in the Wis. Admin. Code ch. NR 716 documents, these should also be submitted as separate PDFs. Any supplemental site investigation documents should be identified as such in the file name (ex. 0233444444_SuppSIRreport).
- 9.** The department may request that the electronic copy of sampling results be submitted in a format that can be managed in software. Examples of formats that can be managed in software are spreadsheets, plain text tabular files, hypertext markup language files (HTML) and extensible markup language files (XML).
- 10.** Voluminous attachments or appendices (e.g., lab QA) may be submitted by electronic format only, if specifically approved in advance by the department.
- 11.** All documents shall be digital format versions rather than scanned versions except documents that are only available as scanned versions. Deeds and legal descriptions may be scanned versions.

Other Considerations

1. Backing up the files is essential. As a provider of documents under Wis. Admin. Code ch. NR 700, the consultant or representative is responsible for keeping a backup copy.
2. All files should be scanned to ensure they are free of viruses. The consultant's or representative's anti-virus software should be kept up-to-date.
3. If the submitted electronic file can't be read (illegible), opened, or is corrupted and unusable, then the consultant or representative will be notified and a new electronic copy is to be provided.

Contact Information

This guidance will be updated as needed. Comments on this guidance may be sent to: Jenna Soyer, (608) 267-2465, jenna.soyer@wisconsin.gov.

Assistance with uploading documents to the FTP site should be directed to the DNR [regional environmental program associate](#) or Sonya Rowe, (608) 261-4934, sonya.rowe@wisconsin.gov.

Site specific questions and follow-up should be directed to the regional DNR project manager.

This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Chief, Public Civil Rights, Office of Civil Rights, U.S. Department of the Interior, 1849 C. Street, NW, Washington, D.C. 20240.

This publication is available in alternative format (large print, Braille, etc.) upon request. Please call for more information. Note: If you need technical assistance or more information, call the Accessibility Coordinator at 608-267-7490 / TTY Access via relay - 711

Attachment A – Document Title Naming Conventions

Document Title Naming Convention	NR 700 Reference
Phase I Environmental Site Assessment	NR 750.03(2m)
Phase II Environmental Site Assessment	NR 750.03(2m)
Interim Action Report	NR 708.11(4)
Free Product Removal Report	NR 708.13
Site Investigation Work Plan	NR 716
Site Investigation Report	NR 716
Soil Management Plan	NR 718
Soil Management Exemption Request	NR 718
Site-Specific Soil Cleanup Standards	NR 720.10, NR 720.12
Determination of Soil Performance Standards	NR 720.08
Remedial Action Options Report	NR 722
Infiltration/Injection Request for GW Treatment	NR 140.28(5) and 812.05
Historic Fill Exemption Request	NR 506.085
Remedial Action Design report	NR 724
Operation & Maintenance Report	NR 724
Construction Documentation report	NR 724
Long Term Monitoring Plan	N/A
Closure Request	NR 726
Post-Closure Modification Request	NR 727

ATTACHMENT 7

Photographs of Site Cap



Photograph 1 West portion of Site, viewing south
Date June 22, 2016



Photograph 2 Central portion of Site, viewing southeast
Date June 22, 2016



Photograph 3 North and west portions of Site, viewing north
Date June 22, 2016



Photograph 4 East portion of Site, viewing south
Date June 22, 2016