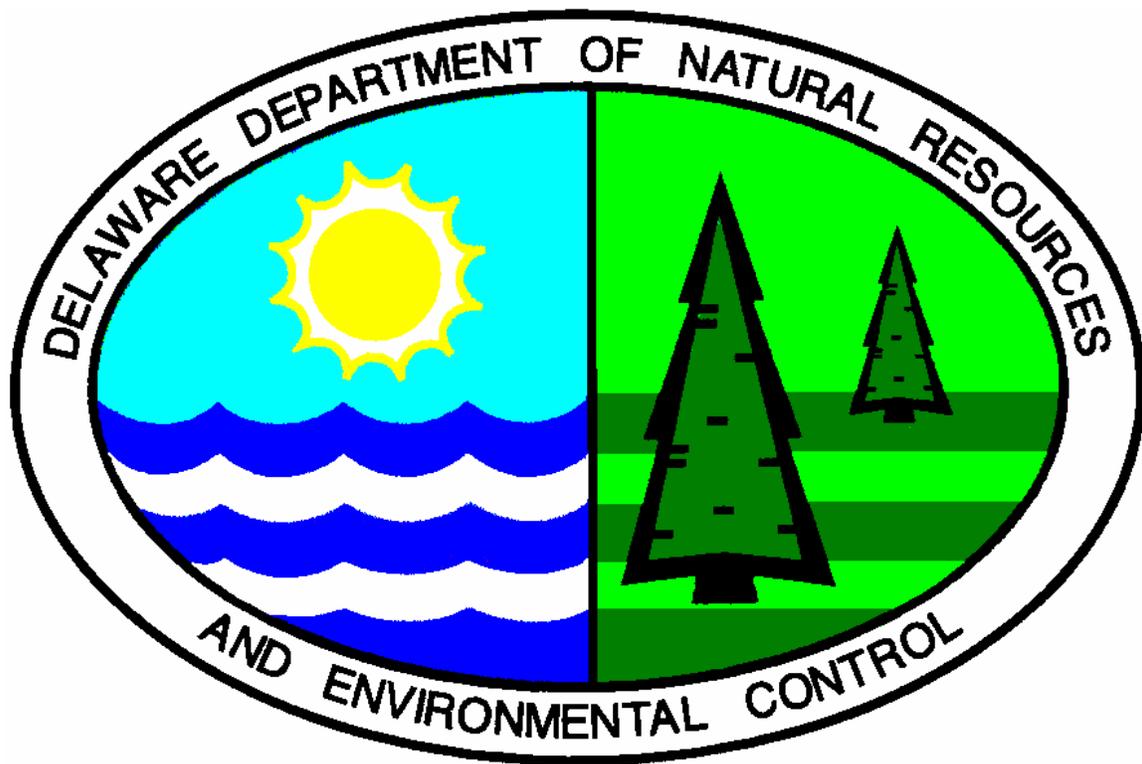


PROPOSED PLAN OF REMEDIAL ACTION

ONE RIVER PLACE HEADQUARTERS SITE

Wilmington, Delaware

DE-1309



September 2004

**Department of Natural Resources and Environmental Control
Division of Air and Waste Management
Site Investigation and Restoration Branch**

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1.0 Introduction

The One River Place Headquarters (site) is approximately 2.4 acres in size and is located at One River Place on two City of Wilmington tax parcels (Tax Parcel #26-042.00-027 and Tax Parcel #26-042.00-007). Tax Parcel #26-042.00-027 was created from a portion of the current City of Wilmington (City) Public Works Yard (Tax Parcel # 26-042.00-006) and Tax Parcel #26-042.00-007 which was owned by the former Bell's Supply south of West Street in Wilmington, New Castle County, Delaware (Figure 1 and Figure 2). In order to evaluate the environmental conditions prior to the development of the site, the Riverfront Development Corporation (RDC) and the City entered into the Department of Natural Resources and Environmental Control, Site Investigation and Restoration Branch's (DNREC-SIRB's) Voluntary Cleanup Program (VCP) under the provisions of the Delaware Hazardous Substance Cleanup Act (HSCA), 7 Del. C. Chapter 91. Through a VCP Agreement, RDC and the City agreed to investigate the potential risks posed to public health, welfare and the environment at the site. RDC and the City contracted with BrightFields, Inc. to perform a remedial investigation (RI), interim response actions (IRAs), and a feasibility study (FS) of the site pursuant to HSCA.

The objectives and the accomplishments of this environmental work were as follows:

- Document existing environmental conditions at the site. This was accomplished by collecting soil and groundwater samples to investigate the impact that historic uses of the property and the surrounding lands may have had on the property. Existing data collected during previous investigations, including soil, sediment, and groundwater samples were used to supplement the data collected.
- Identify source(s) of contaminants, if present.
- Prepare a statement of relative risk, based on the RI data, describing the impact of any environmental contaminants present given the potential use of the site.
- Evaluate whether remedial action(s) may be required at the site, and if they are, how they can be integrated with the site redevelopment and construction plan.
- Complete interim response actions as approved by DNREC.

This document is the Department's proposed plan of remedial action (proposed plan) which contains the Department's chosen remedial alternative for the site.

2.0 Organization and Contents of the Proposed Plan

DNREC issues this proposed plan under the provisions of HSCA and the Regulations Governing Hazardous Substance Cleanup (Regulations). The proposed plan presents

DNREC's assessment of the health and environmental risks posed by the site and the selection of remedial action to mitigate these risks.

In accordance with HSCA, DNREC hereby provides notice to the public and an opportunity for the public to comment on the proposed plan. At the comment period's conclusion, DNREC will review and consider all of the comments received and then DNREC will issue a final plan of remedial action (final plan). The final plan will designate the selected remedy for the site. All prior investigations of the site, as well as references to IRAs and other investigations included in the RI report, the proposed plan, and the comments received from the public, DNREC's responses to those comments, and the final plan will constitute the remedial decision record.

DNREC's proposed remedy is preliminary and a final decision will not be made until all of the comments are considered. The final remedy selected could differ from the proposed remedy based on DNREC's response to comments.

The proposed plan contains a description of the following site information:

- ? A summary of the procedures, analytical results, interim response actions and conclusions of the Remedial Investigation,
- ? A discussion of objectives,
- ? A summary of the risk assessment results, and
- ? A plan for the site's future use and maintenance.

3.0 Site Description

The One River Place Headquarters site is located adjacent to the Christina River in Wilmington, Delaware (Figure 1). The property is bordered by West Street to the north, the Wilmington Public Works Yard to the south and west, and Juniper Bank (formerly O'Brien Energy) and the Christina River to the east (Figure 2).

At the time when the RI was initiated, the site consisted of approximately 3.01 acres. As the project moved toward completion, the site boundaries were modified to be comprised of two (2) parcels consisting of approximately 2.4 acres. The two (2) parcels include: 0.88 acres of the former Bell's Supply parcel located at 301 South West Street (Tax Parcel ID# 26-042.00-007) and 1.56 acres acquired from the City of Wilmington Public Works Yard parcel located at 601 South West Street (new Tax Parcel ID# 26-042.00-027). The two (2) parcels were subdivided from existing parcels and recorded in July 2004. The 0.57 acre parcel (Tax Parcel ID# 26-042.00-028) located adjacent to Juniper Bank was part of the site when the project was initiated, and has been included as part of the site investigations, but is not part of the Riverfront Headquarters site for the purposes of this proposed plan. The parcel locations are shown on Figures 2, 3, and 4.

Based on the data collected during the RI and during geotechnical borings, the stratigraphy of the site can be divided into four basic units (surface to depth) as follows:

- ✗ Fill containing slag, brick, wood and sand with minor amounts of trash
- ✗ Marsh Deposits (Holocene)
- ✗ Columbia Formation (Pleistocene)
- ✗ Bedrock

The fill layer is primarily composed of silt and clay with some sand, gravel, and debris such as brick, slag, glass, and wood and minor amounts of waste. The fill ranges in thickness from 7 to 13 feet and overlies the native marsh deposits.

The Holocene-aged marsh deposits are gray, black, or brown stiff clay and silt containing organic vegetation, which are approximately 11 to 21 feet thick, and are underlain by the Pleistocene Columbia Formation.

The top of weathered bedrock was encountered at 42 to 48 feet below ground surface (bgs) at an elevation of 36 to 38 feet below mean sea level (msl). Competent (unweathered) bedrock was encountered at a depth of approximately 79 to 84 feet bgs (an elevation of approximately 73 to 78 feet below msl).

Groundwater was encountered at depths ranging from 4 to 9.5 feet bgs in the borings completed across the site. Seasonal groundwater fluctuation was reported to be between several inches and two feet on the adjacent (upgradient) Berger Brothers property (DE-0131), depending on rainfall (Tetra Tech, 2003).

Groundwater beneath the site is expected to flow from northwest to southeast toward the Christina River. Calculations of the horizontal gradient for the site (based on measurements collected on February 7 and March 23, 2004) showed that the gradient was fairly consistent and ranged from 0.093 to 0.011 ft/ft across the site.

The site is relatively flat and is situated on a bend of the Christina River. Preconstruction ground surface elevations ranged from approximately 10 ft to 15 ft above msl. Final site grades will be provided after construction completion. Surface water drainage discharges through two (2) routes as follows: it is either routed through stormwater catch basins and conveyances to a combined sewer outfall (CSO) located on the adjacent Public Works Yard, and then to the Christina River, or it is captured by the bioswale and slowly infiltrates and discharges to the Christina River.

The nearest designated New Castle County Water Resource Protection Area (WRPA), including wellheads or groundwater protection areas, is greater than three (3) miles from the site. The nearest surface water supply intake is greater than two (2) miles from the site and the site is not within a Critical Water Resource Area. The site is located within the Wilmington Groundwater Management Zone (GMZ), which was established by DNREC in August 2001 to prevent the installation of water supply wells in this area.

4.0 Site History

The site is located in an area of Wilmington that has been in continuous industrial use since the late 1700s. Detailed historical information on the area can be found in the following reports:

- ✂ Final Remedial Investigation Work Plan Wilmington Public Works Yard, Wilmington, Delaware (WIK, February 2001)
- ✂ O'Brien Property Brownfield Preliminary Assessment II Wilmington, Delaware (DNREC, September 1998)

The following investigation reports and information were reviewed, and detailed summaries of the investigations are included in the March 2004 Riverfront Headquarters Property Remedial Investigation report:

- ✂ Wilmington Public Works Yard DNREC BPA II – DNREC, 1997
- ✂ O'Brien Property BPA II – DNREC, 1998
- ✂ West Street Connector Transportation Improvements – WIK, 1998/99, including the West Street Connector RI, WIK 1998, the Bell's Supply Interim Technical Report (WIK, 1998) and the Additional DNREC Sampling Report (WIK, 1999)
- ✂ Christina River Pedestrian Walkway (Phases III & IV) RI/FS – EA, 1999
- ✂ Wilmington Public Works Yard Remedial Investigation – WIK, 2001
- ✂ Berger Brothers/Gates Engineering Background Information and the Berger Brothers/Gates Engineering Revised RI/ FS/ RAWP – Tetra Tech, 2003

The following additional reports were used in the preparation of the proposed plan:

- ✂ Riverfront Headquarters Property Focused Feasibility Study- Brightfields, 2004
- ✂ Wilmington Public Works Yard OU-1 [Summary Report for PCB Characterization in the Vicinity of RHQ-1- Brightfields, 2004]
- ✂ Contaminated Material and Water Management Work Plan
- ✂ Supplemental Risk Calculation (Deborah Heffernan, dated September 8, 2004, using the EPA April 2004 Risk-based Concentration (RBC) Table)

5.0 Remedial Investigation Results

The following summary of findings was prepared based on the data collected during the RI and during previous investigations at the site:

General:

- ? The site comprises an area of approximately 2.4 acres located along the Christina River in Wilmington, Delaware and prior to the initiation of interim actions was a parking lot and a portion of the City of Wilmington Public Works Yard. The proposed future site use is a six-story commercial office building, with parking lots and landscaped areas.

Soil:

- ? Boring, test pit, and well drilling logs indicate that portions of the site are filled with industrial fill (up to 13 feet thick) and underlain by marsh deposits.
- ? Twenty-two (22) soil samples were analyzed at Lancaster Laboratories for confirmatory analysis for Target Compound List volatile organic compounds (TCL VOCs), TCL semivolatile organic compounds (TCL SVOCs), TCL pesticides/polychlorinated biphenyls (PCBs), and Target Analyte List (TAL) metals and cyanide. Data from eight (8) existing samples was also used to evaluate site contaminants of concern. The results are summarized in Tables 1 through 4.
- ? Aluminum, arsenic, antimony, iron, lead, manganese, nickel, vanadium, PCBs, pesticides, and polynuclear aromatic hydrocarbons (PAHs) were detected in site soil above the Delaware Uniform Risk-Based Remediation Standards (URS) values for unrestricted use and are potential contaminants of concern based on these exceedances.
- ? Arsenic, iron, lead, benzo(a)pyrene, and PCBs were detected in site soil above the restricted use (commercial) URS and were considered potential site contaminants of concern for the risk calculations. The cumulative risk calculations indicate that exposure to the site soil poses an unacceptable carcinogenic and non-carcinogenic risk under the unrestricted use scenario, but not under a restricted use scenario.
- ? An area with elevated subsurface soil lead concentration was identified on the eastern portion of the site at a minimum of approximately 3 feet below pre-construction ground surface. Figure 3 shows the areas of elevated lead concentrations. Surface soil lead concentrations ranged from 21 to 250 mg/kg, which is below both unrestricted (residential) and restricted (commercial) use standards.

Groundwater:

- ? Four (4) new monitoring wells were installed and four (4) groundwater samples

were collected and analyzed for TCL VOCs, TCL SVOCs, TCL pesticides/PCBs, and TAL metals and cyanide.

- ? Based on groundwater elevations measured in the wells, the groundwater flow direction is toward the southeast (toward the Christina River).
- ? Iron, barium, manganese and PCB Aroclor-1260 were detected in site groundwater above the URS groundwater value. The HSCA URS for iron and manganese in groundwater are based on the EPA Secondary Drinking Water Regulations (SDWRs) which are aesthetic criteria rather than risk-based concentrations. In addition, the iron and manganese results were in the background range. Therefore, iron and manganese were not considered potential contaminants of concern. As a result, for the purpose of assessing risk to human health, only barium and PCB Aroclor-1260 were determined to be potential site contaminants of concern in the groundwater. The groundwater results are summarized in Tables 5 and 6.
- ? Routinely ingesting groundwater from the site poses an unacceptable carcinogenic and non-carcinogenic risk. However, the property is located in the pre-existing City of Wilmington GMZ, dated August 2001, where the use of groundwater is controlled by DNREC. No new public or domestic water supply wells are allowed or permitted in the area and all existing water supply wells are located further than two (2) miles from the site. However, no complete pathway for groundwater ingestion exists, nor will it exist. Therefore, the site groundwater does not pose a risk to human health under current and restricted (i.e., commercial) future use scenarios.
- ? The mass loading calculations were performed based on the February 2004 groundwater results. The mass loading calculations indicated that PCBs in site groundwater may be a potential source of PCB contamination to the Christina River. However, the PCB detection used in the mass loading calculation was from RHQ-1 and the monitoring well between RHQ-1 and the Christina River reported non-detect for PCBs. Further, any potential PCB exceedence is likely related to offsite contamination. Therefore, because transformers were previously staged at the Public Works Yard, the PCB contamination in soil and groundwater will be addressed in Operable Unit 1 of the Public Works Yard through a separate pre-existing Voluntary Cleanup Program agreement.
- ? During the February 2004 RI sampling investigation, PCBs were detected in one monitoring well, RHQ-1. The detection was above the URS groundwater value for PCBs. BrightFields conducted a supplemental PCB investigation in August 2004, including resampling the groundwater at monitoring well RHQ-1 and collecting both a filtered and an unfiltered sample. The unfiltered PCB sample reported 0.94 ug/L (which is one order of magnitude below the original detection), and the filtered sample reported non-detect. As stated above, any potential PCB

exceedence is likely related to offsite contamination. Therefore, because transformers were previously staged at the Public Works Yard, the PCB contamination in soil and groundwater will be addressed in Operable Unit 1 of the Public Works Yard through a separate pre-existing Voluntary Cleanup Program agreement.

Sediment:

- ? The site boundary is located a minimum of one hundred (100) feet west of the Christina River bank and west of the Christina River Pedestrian Walkway property (Riverwalk). During previously completed HSCA investigations, twenty-one (21) sediment samples were collected from the bank of the Christina River and six (6) river sediment samples were collected from the edge of the river below the waterline. The previous results indicate that the sediment has been sufficiently characterized during previous investigations. The area was impacted by metals and PAHs. The remedial action remedy for the Riverwalk Site (DE-1139) included sediment removal, slope stabilization and construction of the Riverwalk. These activities were performed between the site and the Christina River in accordance with the DNREC Final Plan of Remedial Action for the Christina River Pedestrian Walkway (August 1999). This remedial action adequately dealt with any contribution to contaminants in sediments from the site.

- ? The One Riverplace Headquarters site has a DNREC-approved Erosion and Sediment Control Plan (E&S Plan). As part of the E&S Plan, concrete barriers were placed around the AAA site. The barriers were wrapped in plastic, and weighted with gravel at the base of the barriers to prevent any surface water run-off from the Riverfront Headquarters site to the Christina River. All stormwater was contained on-site or filtered through an on-site sedimentation tank with filters prior to being discharged into the sanitary sewer in accordance with City of Wilmington permit requirements.

6.0 Interim Response Actions

The Interim Response Actions (IRA) at the site were initiated in order to properly manage, handle and dispose of soil and groundwater and other materials generated at the site and encountered during construction. These IRAs were performed at the site prior to issuance of the proposed plan and will continue until construction completion.

Interim Response Actions occurred during the following construction activities: rerouting two (2) large existing storm water lines, installing underground utilities, pre-augering for foundation piles, and excavations for pile caps, grade beams and an elevator shaft. IRA will continue to occur throughout construction as needed for construction completion. IRA completed after the August 2004 Interim Response Action Status Report will be

summarized in the HSCA Construction Completion Report for this project, which will be prepared after substantial construction completion.

The following DNREC-approved remedial IRA were performed at the site with DNREC oversight and in accordance with the DNREC-approved Contaminated Material and Water Management Work Plan (CMWMWP) and Health and Safety Plan (HASP):

- ? **Dewatering:** When groundwater was pumped from excavations, it was pumped to a settlement tank, and then filtered to remove sediment prior to discharge into the City's sanitary sewer system under a temporary discharge permit granted by the City of Wilmington. Flow metering and discharge sampling were performed as required by the City. Analytical results of the discharge samples met the City's permit requirements. Approximately 712,000 gallons of groundwater were pumped from the site, filtered, and discharged to the sanitary sewer system.
- ? **Disposal of Site Dewatering Sediment:** The sediment collected during dewatering was removed from the settlement tank, managed and properly disposed off-site along with the lead-hazardous soil (see below). The sediment was properly disposed of by Casie Ecology Oil Salvage, Inc. in Vineland, New Jersey.
- ? **Disposal of Lead-hazardous Soil:** Subsurface soil excavated for construction purposes that was determined to be hazardous waste based on lead results concentration using the Toxicity Characteristic Leaching Procedure (TCLP) analysis was removed and properly disposed offsite per federal and state regulations. Approximately 1,800 tons of lead-hazardous soil were removed and properly disposed during this IRA. The soil was properly disposed of by Casie Ecology Oil Salvage, Inc. in Vineland, New Jersey.
- ? **Disposal of Non-hazardous Soil:** Excavated soil that was non-hazardous, and that could not be reused on site for structural reasons, was removed and properly disposed, per federal and state regulations. Approximately 2,600 tons of non-hazardous soil was removed as part of this IRA. The soil was properly disposed at the Soil Safe, Inc. facility in Bridgeport, New Jersey.
- ? **Re-use of Non-hazardous Soil:** Excavated soil that was non-hazardous and could be reused on site was reused. Approximately 150 to 300 tons of soil were re-used as on site fill.
- ? **Disposal of Lead-hazardous Wood:** Excavated wood that was hazardous for lead per TCLP analysis was removed, cut into three (3) foot sections, loaded into a roll-off and properly disposed of in accordance with federal and state regulations. Approximately seven (7) tons of lead-hazardous wood were

removed as part of this interim action. The wood was properly disposed at Envirosafe Services of Ohio Inc. in Oregon, Ohio.

- ? **Disposal of Non-hazardous Wood:** Excavated wood that was non-hazardous was removed, cut into three (3) foot sections, loaded into a roll-off and properly disposed. Approximately 16.5 tons of non-hazardous wood was removed during this IRA. The wood was properly disposed at Modern Landfill in York, Pennsylvania.

- ? **Marker Fabric:** Orange marker fabric was placed along the side walls and floors of the utility trenches to delineate the clean fill from the historic industrial fill. As noted above, subsurface soil on the eastern side of the site is hazardous for lead. Tested and DNREC-approved clean fill was used as backfill in the utility trenches. Therefore, as the trenches now contain clean fill, DNREC will not have to be contacted for utility upgrade or repair unless the work is conducted outside the clean fill areas.

- ? **Erosion and Sediment Controls:** In addition to standard sediment and erosion control measures, DNREC-required concrete barriers were installed around the site perimeter to prevent offsite sediment migration.

7.0 Remedial Action Objectives

The Regulations provide that DNREC set objectives for land use, resource use, and cleanup levels that are protective of human health and the environment. The following qualitative objectives are determined to be appropriate for the site:

- Control potential human exposure (dermal, inhalation and ingestion) to contaminated soil.

- Control potential contaminated soil erosion and subsequent overland transport of contaminated surface water to the Christina River.

- Properly reuse or dispose of all excavated soil and groundwater generated during construction, in accordance with local, state and federal regulations.

These objectives are consistent with the planned development of the site and the surrounding land and development plans for the City of Wilmington, zoning policies, state regulations governing water supply, and worker health and safety.

Based on the above qualitative remedial action objectives, the following quantitative remedial action objectives (RAO) based on restricted use were developed:

- Prevent human exposure to soil or other media having a cumulative risk factor greater than 1×10^{-5} and/or a hazard index of 1, or as based on DNREC URS tables. This includes but is not limited to the following:
 1. Prevent human exposure to soil having a lead concentration greater than the URS for lead of 1,000 milligrams per kilogram (mg/kg).
 2. Prevent human exposure to soil having an arsenic concentration greater than 19 mg/kg, per the EPA RBC for arsenic (April 2004).
 3. Prevent human exposure to soil having a benzo(a)pyrene concentration greater than 0.8 mg/kg, the site-specific risk-based concentration.
 4. Prevent human exposure to soil having a PCB concentration greater than 25 mg/kg developed, per the Toxic Substances Control Act (TSCA) low occupancy area risk-based cleanup levels.
- Dispose offsite at a licensed Resource Conservation and Recovery Act (RCRA) hazardous waste disposal facility all excavated soil generated during construction with lead Toxicity Characteristic Leaching Procedure (TCLP) results above 5.0 milligrams per liter (mg/L).
- Manage and mitigate environmental risks, as they occur during the building construction and redevelopment process, in accordance with the DNREC-approved, site-specific CMWMWP and the site-specific Health and Safety Plan (HASP). This will include, but is not limited to, removal of underground storage tanks (USTs) and petroleum-impacted soil, if discovered, in accordance with DNREC's Tank Management Branch (TMB) regulations.

8.0 Risk Evaluation Summary

A risk assessment to evaluate the possible effects on human health from the use of the site consistent with the objectives discussed above was performed using appropriate risk assessment methods.

The carcinogenic cumulative risk posed by site soil to a commercial worker would be 9.0×10^{-6} (9.0 in 1,000,000), which is within DNREC acceptable risk guidelines. The individual compounds that most significantly contribute to the carcinogenic risk are arsenic and benzo(a)pyrene. The non-carcinogenic cumulative risk would result in a Hazard Quotient of 0.04, which is within DNREC's acceptable risk guidelines.

Under a construction worker scenario the carcinogenic risk posed by site soil was calculated to be 1.4×10^{-6} and the non-carcinogenic hazard index was calculated to be 0.14 which again are within acceptable risk guidelines.

Because the US EPA has not published a consensus chronic reference dose (RfD) or cancer slope factor (CSF) for inorganic lead, it is not possible to calculate risk-based concentrations for this metal and, therefore, it is not included in the DNREC Risk Calculator. The US EPA Office of Solid Waste directive recommends that soil levels less than 1,000 mg/kg (which is the same concentration used by DNREC for the restricted use criteria) are generally safe for commercial use. The mean lead concentration across the site is 508 mg/kg, which is below the restricted use evaluation criteria. However, disposal characterization samples from the geotechnical borings contained up to 14.1 mg/L in TCLP lead analysis, indicating that leaching is possible under low pH conditions. Nevertheless, based on the groundwater data at the site, lead is not leaching under field conditions of pH 7 to 8. The distribution of lead at the site is presented in Figure 3.

Because the elevated lead concentrations were predominantly located in the subsurface samples from the eastern portion of the property, separate calculations were performed to evaluate the lead distribution. The 95% Upper Confidence Limit (UCL) of the mean for the subsurface samples on the eastern portion of the property is 2,596 mg/kg, which is above both unrestricted and restricted use criteria, poses a risk if direct contact occurs. However, this soil is below the ground surface and will not be accessible by direct contact. The building footprint and/or parking areas will cover this area, as well as the majority of the site. The 95% UCL of the mean for the surface and surface samples collected from the remainder of the property is 359 mg/kg, which is below both unrestricted and restricted use criteria.

The lead-impacted subsurface soil is located along the eastern edge of the site. This subsurface soil was located at a minimum depth of three (3) feet below the top of ground across the eastern portion of the site prior to construction. The site will be filled for construction purposes. At the completion of construction, all areas of lead-impacted soil above commercial levels will be covered with a minimum of two (2) feet of clean fill. As such, there is no direct exposure pathway to the soil. Based on the risk assessment results and DNREC's requirements for protection of human health and the environment, the site does not require either the removal of the lead-impacted soil or the placement of an impervious cap. However, after construction completion, the surface of the soil will be covered with imported fill, the building, parking lots, hardscaping and/or landscaping.

The cumulative risk assessment performed for site groundwater shows that consumption of groundwater from beneath the site would pose an unacceptable carcinogenic and non-carcinogenic risk. However, the site is included in the existing City of Wilmington Groundwater Management Zone as well as regulated by City of Wilmington municipal law all of which prevent potable consumption of groundwater within the City limits.

The risk to the environment resulting from groundwater discharge to surface water was also evaluated. Based on modeling of the chemicals of concern in groundwater, total PCBs are below the URS and the fresh water chronic criteria, but exceed the fish ingestion criteria. All other parameters detected in site groundwater, are more than one order of magnitude lower than the most conservative surface water quality criteria by the time they reach the Christina River.

9.0 Proposed Plan of Remedial Action

Based on the results of previous investigations, including the RI, the FFS, the IRA at the site and the RAOs, DNREC proposes the following remedial actions for the site:

- ? As described in Alternative 3 in the FFS, the proposed remedy for soil contaminated with lead consists of the proper management and offsite disposal of excavated, lead-contaminated soil with TCLP analysis results above 5 mg/l. This will be performed each time soil is excavated during the building construction and utility installation process. All work has been and will continue to be performed under the CMWMWP and the HASP. To date, several interim action soil removal actions have been performed on the site and will continue to be performed through the remaining construction phases of the project. The remaining construction activities include but are not limited to installing the building slab and additional utilities work as necessary to support the operation of the building, as shown on the Site Development Plan (Figure 4).
- ? Following construction completion, any intrusive activities (including excavating, etc.) in the soil below two (2) feet in depth in the lead-impacted areas of the site will be restricted by the placement of a deed restriction noting that no intrusive activities will be allowed without prior approval of DNREC.
- ? The DNREC-approved O&M Plan will be finalized within 90 days following construction completion. The O&M Plan will provide procedures for evaluating the integrity of the site stabilization following construction. In addition, the O&M Plan will include a Groundwater Quality Management Plan for the site which will include provisions for continued groundwater monitoring and evaluation.
- ? The groundwater will be restricted by the owner by the placement of a deed restriction noting that groundwater shall not be used as a potable water supply and the site is located within a City of Wilmington GMZ (dated August 2001) to prevent future use of the groundwater beneath the site without prior approval of DNREC. In addition, the City prohibits drinking water wells to be installed within the City limits as follows:

“The use, maintenance, possession and construction of a private well within the boundaries of the city without the approval of the commissioner, who may in his discretion grant such approval, is

prohibited. Every person violating this section shall be guilty of a misdemeanor and shall be punished by a fine of \$100.00."

- ? While not anticipated based on historical uses of the site, any petroleum contaminated materials or underground storage tanks (USTs) that are encountered during construction at the site will be addressed by DNREC's Tank Management Branch (TMB) according to the applicable TMB regulations.
- ? The site use will be restricted to commercial use by the owner by the placement of a deed restriction. Any future development of the parcels will be limited to commercial development.

10.0 Public Participation

DNREC-SIRB actively solicits public comments or suggestions on the proposed plan and welcomes opportunities to answer questions. Please direct written comments to:

Department of Natural Resources and Environmental Control
Division of Air and Waste Management
Site Investigation and Restoration Branch
391 Lukens Drive
New Castle, Delaware 19720-2774
Attn: Jane Biggs Sanger

For verbal comments, please call Jane Biggs Sanger at (302) 395-2600. The public comment period for this proposed plan begins on September 13, 2004, and ends at the close of business (4:30 p.m.) on October 4, 2004. If requested, a public hearing will be held on the proposed plan. The hearing time and place will be announced if said hearing is requested.

John Blevins, Director
Division of Air and Waste Management

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Date of Review of Proposed Plan

Figure 1 - Site Location

Figure 2 - Site Layout

Figure 3 - Subsurface Lead Above 1,000 mg/kg

Figure 4 - Site Redevelopment Plan