Camden Redevelopment Agency

November 12, 2020

US Environmental Protection Agency, Region II
290 Broadway
New York, NY 10007-1866
Attn: Ms. Alison Devine, Project Officer

Dear Ms. Devine:

RE: Brownfields Cleanup Decision Memorandum
Camden Laboratories
1667 Davis Street (Block 1392, Lot 33)
Camden, New Jersey

The City of Camden Redevelopment Agency (CRA) is pleased to submit this Brownfields Cleanup Decision Memorandum (Decision Memo) to the U.S. Environmental Protection Agency (USEPA), in accordance with the Cooperative Agreements for the EPA Cleanup Grant BF-96258700 and the Brownfield Revolving Loan Fund (RLF) BF-96286914.

This memorandum presents the steps leading to the selection of a remedial approach at the referenced site. The memorandum is organized as follows:

Section 1 – an introduction,

Section 2 - a summary of the Analysis of Brownfields Cleanup Alternatives (ABCA),

Section 3 – a description of the selected remedial approach, and

Section 4 – a demonstration that the selected remedial approach achieves regulatory compliance and attains the cleanup goals.

1 INTRODUCTION

1.1 Background

Camden Labs is a 3.9 acre property originally developed in the early 1920's as a hospital for contagious diseases. In the 1950's the facility was transformed into the South Jersey Medical Research Foundation Laboratory as the home for the Coriell Institute for Medical Research (CIMR). The original hospital buildings were subsequently demolished and the laboratory buildings currently located on site were built in various phases between the 1950's to 1980's. The site was purchased by Camden Laboratories, LP, in 1989 and then operated as a series of medical laboratories including "Viro-Med Biosafety" and "Quality Bio-tech" until at least 2007. The site was vacant after 2008 and the remaining buildings were demolished in 2018.

Located in the Mt. Ephraim neighborhood, the Camden Labs site is on the southeast side of the community, half a mile from the Cooper River. The Mt. Ephraim neighborhood consists of a local commercial corridor, Mt. Ephraim Avenue, surrounded by diverse residential areas that also contain a variety of institutional uses, such as hospitals, schools and churches. The area also contains many vacant and blighted brownfield sites, owing to commercial and industrial uses historically located in the community. Camden Labs has been identified as a primary brownfield site or "catalyst" site by the recent Mt. Ephraim EPA Area Wide Plan (AWP) due to its size and location in the neighborhood. Its potential as a catalyst site is enhanced by being surrounded by a predominantly residential area and within walking distance of the Ferry Avenue PATCO high speed commuter rail station. More significantly, Camden Labs, a known contaminated brownfield shares the block with the community's Whitman Park.

The U.S. Environmental Protection Agency (USEPA) has awarded the City of Camden with funds in the amount of $200,000 to assist with the environmental remediation of the site. The City has entered into an agreement with the USEPA Cooperative Agreement No. BF 96258700 and No. BF 96286914 which provides the terms and conditions for City's use of the brownfields cleanup grant funds, including a commitment to provide for community involvement in the site remediation process.

In accordance with those terms and conditions, the City of Camden Redevelopment Agency (CRA) on behalf of the City produced a work plan describing cleanup tasks to be completed, including project deliverables. Project deliverables include the ABCA and this Decision Memo, among other documents. The CRA produced the draft ABCA, dated November 11, 2017 and the final October 2020, and submitted the document to the USEPA. A summary of the ABCA is presented below, in Section 2.

Based on the analyses provided in the ABCA, including the open public meeting (with no attendees/comments); consultation with the State regulatory authority (NJDEP); and the entirety of the administrative record for the site, the City has selected a remedial approach for the site, as presented in this Decision Memo.

2 SUMMARY OF ABCA

The purpose of the ABCA is to identify, evaluate, and compare the reasonable alternatives for addressing the contamination identified at the Site. The ABCA presents information regarding site description, site environmental conditions, applicable laws and standards, and an evaluation of selected remedial alternatives. These items are summarized in this section.

2.1 Site Description

The current remaining areas of concern include monitoring wells and historic evidence of a surface mercury spill.

2.2 Site Environmental Conditions

The site is currently an active case with the New Jersey Department of Environmental Protection (NJDEP) Site Remediation Program (SRP) with Program Interest (PI) No. 016718 and has been

subject to multiple Site Investigations and Remedial Investigations under the oversight of the NJDEP since 1989. The results of studies are summarized in this section.

2.2.1 Historic Site Investigation

The site was subject to environmental investigation and remediation under the oversight of the NJDEP in the years 1989-2008. According to historical records, prior to 2004, a mercury surface spill occurred which resulted in concentrations exceeding the NJDEP residential direct contact soil remediation standard (RDCSRS). In addition, mercury impacted soil above the Impact to Ground Water Site Remediation Standard (IGWSRS) has extended into the saturated zone.

The various phases of investigation and remediation in that period included the closure of three fuel oil underground storage tanks in 1989; a Preliminary Assessment in 2007 by Environmental Resolutions Inc.; a Preliminary Assessment, Site Investigation, and Remedial Action Workplan in 2008 by CMX.

To further investigate six (6) AOCs as required by NJDEP in the December 2008 Notice of Deficiency, the consultant (CMX) for Camden Laboratories, LP conducted a Supplemental Site Investigation between December 2008 - January 2009, which included additional site reconnaissance, records research and the collection and analysis of soil samples. According to the 2009 Supplemental Site Investigation Report, sufficient evidence was developed by the investigation for CMX to request a finding of "No Further Action" from NJDEP for AOC 1 (275-Gallon Fuel Oil Aboveground Storage Tank), AOC 2 (Former No. 2 Fuel Oil Underground Storage Tanks), AOC 3 (Storage Containers), AOC 13 (Liquid Nitrogen Spill), and AOC 14 (Groundwater).

To investigate the area of the suspected mercury soil spill, CMX installed sixteen (16) soil borings to depths ranging between four (4) feet to twenty-five (25) feet below grade (fbg). Field screening indicated that mercury vapor was present at a majority of the soil borings advanced. Soil samples analyzed for mercury reported levels as high as 3,700 mg/kg, exceeding the residential direct contact NJDEP Residential Direct Contact Soil Remediation Standard (RDCSRS) of 23 mg/kg, by more than two orders of magnitude. It should be noted that samples were biased away from areas of high levels of mercury vapor in an attempt to delineate the contaminated area within the soil profile; therefore the highest levels of soil contamination by mercury were not sampled or analyzed.

According to CMX, the area of mercury contamination was horizontally and vertically delineated to the NJDEP RDCSRS. The estimated area of mercury contaminated soil measured twenty-four (24) feet in length by thirty-four (34) feet in width and extended to a maximum depth of twenty-three (23) fbg. The volume of mercury contaminated soils was estimated to be 500 - 700 cubic yards or approximately 750 – 1000 tons.

2.2.2 Phase I Environmental Assessment

In February 2017, TRC Environmental Corp. completed a Preliminary Assessment (and Phase 1 ESA) on behalf of the CRA prior to the City's acquisition of the site in November of 2017. The TRC Preliminary Assessment identified several Areas of Concern (AOC) requiring additional investigation.

2.2.3 Phase II Environmental Assessments/Supplemental Soil Investigation

In February 2018, soil sampling activities were conducted in AOC-16 by Woodard & Curran in an effort to delineate the horizontal and vertical extent of previously identified IGWSSL mercury exceedances in soil. Five soil borings were advanced outbound of previously identified exceedances. A total of eight soil samples were collected and analyzed for mercury. With the exception of one soil sample (M-9(18.0-18.5)), mercury was either not-detected or was reported at a concentration below the NJDEP RDC/NRDC SRS and/or IGWSSL. Mercury was reported at a concentration exceeding the NJDEP IGWSSL of 0.1 mg/kg in soil sample (M-9(18.0-18.5)); however, the reported mercury concentration was below the NJDEP RDCSRS and/or NRDCSRS. Based on these results, contingency analysis for mercury using Soil Precipitation Leaching Procedure (SPLP) methods were activated for sample M-9(18.0-18.5) and M-10(1.5-2.0). All total mercury concentrations reported for the soil samples collected during the February 2018 soil sampling event were either not detected or were reported at or below the calculated AOC-specific IGWSRS.

Based on the results of the February 2018 soil investigation and development of the AOC-specific IGWSRS, the estimated volume of mercury-impacted soils was 4,000 cubic yards. Additional supplemental investigation in February 2020 allowed for the mercury impacted area to be further refined. As a result the estimated area of mercury contaminated soil to be remediated is 1,200 SF and extends to a maximum depth of twenty (20) fbg. The volume of mercury contaminated soils is estimated to be 890 cubic yards or approximately 1,335 tons.

On August 6, 2018, Enviroprobe installed three (3) ground water monitoring wells at the highest reported concentration of mercury in soils and in the suspected downgradient direction. Ground water samples were collected in August 2018 and again in October 2018. Ground water samples were submitted for mercury analysis and were found to be non-detect or reported at a concentration below the NJDEP GWQS. No further investigation of ground water was recommended and therefore the monitoring wells shall be properly abandoned in accordance with the Technical Requirements and appropriate guidance, regulations and practices. The proposed remedy for AOC-16 mercury impacted soils was outlined in Woodard & Curran's October 2019 Remedial Action Workplan submitted to NJDEP via the NJDEP Online Service on December 9, 2019.

2.2.3 Ongoing Monitoring

Following remediation, no ongoing operation and maintenance of remedial systems will be required.

2.2.4 Summary of Data

Existing monitoring wells will be abandoned and closed. Delineated subsurface media shall be addressed by excavation and disposal. This approach will allow for unrestricted use of the site.

2.3 Applicable Laws and Cleanup Standards

The continuing remediation of the site will be performed in accordance with the applicable statutes, regulations and guidance of the State of New Jersey and the NJDEP. These include the various NJDEP regulations promulgated to implement the Site Remediation Reform Act of 2009

(SRRA), including but not limited to the Remediation Standards regulations (N.J.A.C. 7:26D) and the Technical Requirements for Site Remediation ("Tech Rules", N.J.A.C. 7:26E). All field activities will be performed in conformance with the NJDEP Field Sampling Procedures Manual.

The reference cleanup standards for soil will be NJDEP's published numeric values for Non-Residential Direct Contact Soil Remediation Standards (NRDCSRS), NJDEP's Residential Direct Contact Soil Remediation Standards (RDCSRS), and Impact to Groundwater Soil Remediation Standard (IGWSRS).

The expected outcome of the project is Unrestricted Use.

2.4 Analysis of Cleanup Alternatives

The ABCA presents an evaluation of several potential cleanup scenarios for the site. The following evaluation criteria were considered in comparing the remedial alternatives:

- Effectiveness in providing compliance with NJDEP regulations and increased protectiveness to public health and the environment;
- Implementability of the considered alternative; and
- Cost of the considered alternative.

Based on these criteria and giving consideration to site characteristics, surrounding environment, land-use restrictions, potential future uses, and cleanup goals, the City selected Site-Wide Remediation as the preferred remedial approach. The preferred remedial approach is described in Section 3 of this Decision Memo.

The City and the CRA have conducted a series of outreach meetings to present the cleanup approach and solicit input. Prior to the submission of the cleanup grant, a public meeting was held to present the draft ABCA and remedial alternatives (no attendees/ comments). Subsequently, the remediation approach has been presented and discussed at several of the monthly meetings of the Camden Community Collaboration Initiative. Alt 3 – Site-Wide Remediation which does not require remedial permitting, or inspection and maintenance of a cap, is the selected remedy based upon its cost, ease of implementation, protectiveness of human health and the environment, and sustainability. All comments made were supportive of the project. Additional public meetings will be hosted by Camden County in conjunction with development of the park design.

3 SELECTED ENVIRONMENTAL CLEANUP PLAN

3.1 Remedial Approach: Site-Wide Remediation

The remedial approach will consist of removal and disposal of contaminated soil along with closure and abandonment of the groundwater monitoring wells, removal of the asphalt driveway and replacement of a section of water main to comply with the City of Camden requirements. The tasks involved in this approach include:

a) Retain environmental engineering firm and LSRP, and LSRP review of previous reporting;

b) Project and Grant Management tasks, including public notification;

c) Prepare project specifications and bid documents;

d) Conduct procurement process;

e) Procurement and testing of clean fill materials;

f) Closure and abandonment of three monitoring wells;

g) Removal of approximately 1,335 tons of mercury impacted soil;

h) Manage groundwater encountered during excavation, groundwater encountered during excavation will be pumped from the excavation cavity to an on-site holding tank for characterization analysis and disposal off-site;

i) Post-excavation sampling will be conducted by the LSRP prior to backfill of the excavation in order to verify that mercury contaminated soils have been fully removed. Post-excavation sampling will be conducted in accordance with the NJDEP Technical Guidance for Site Investigation of Soil, Remedial Investigation of Soil, and Remedial Action Verification Sampling for Soil (Version 1.2). It is anticipated that a total of seven samples will be takes, five sidewall and two bottom samples. QA/QC samples will also be taken;

j) Site restoration, including vegetative cover;

k) Water main replacement in accordance with City of Camden requirements (Approx. 40 LF);

l) Removal of asphalt driveway and restoration with topsoil and seed;

m) Prepare Remedial Action Report and other regulatory reporting requirements;

n) Prepare Quality Assurance, and Health and Safety deliverables.

3.2 Selection Rationale

This approach complies with unrestricted-use remediation standards and achieves project remediation goals by:

- Achieving compliance with the NJDEP Rules.
- Removing the threat of human exposure to residual site soil contaminants.

4 Regulatory Compliance and Achievement of Cleanup Goals

4.1 Regulatory Framework

The site will be remediated under the oversight of the New Jersey Department of Environmental Protection (NJDEP), the state environmental authority, as per regulations as set forth in the Technical Requirements for Site Remediation (TRSR) N.J.A.C. 7:26E.

The applicable cleanup standards include the Class IIA Groundwater Quality Standards (GWQS) adopted January 7, 1993 (N.J.A.C. 7:9-6), and the Interim Specific Criteria (last updated January 30,2002) and NJDEP soil standards adopted June 2, 2008 N.J.A.C. 7:26D.

The objective of the site remediation activities is to have an RAO issued by the LSRP prior to start of the future park development.

4.2 Achievement of Cleanup Goals

It is expected that abandonment of the monitoring wells and removal of contaminating soil will result in the site meeting unrestricted use standards and allow for redevelopment of the property.

4.3 Limitations

Following remediation, there will be no limitations to any future site owners, occupants, or other stakeholders.

5 Closing

This Decision Memo was prepared with the assistance of the City's technical consultant, Brownfield Redevelopment Solutions, Inc. (BRS). Please contact the BRS project managers listed below, or the undersigned, with any questions regarding this document.

BRS Project contacts:

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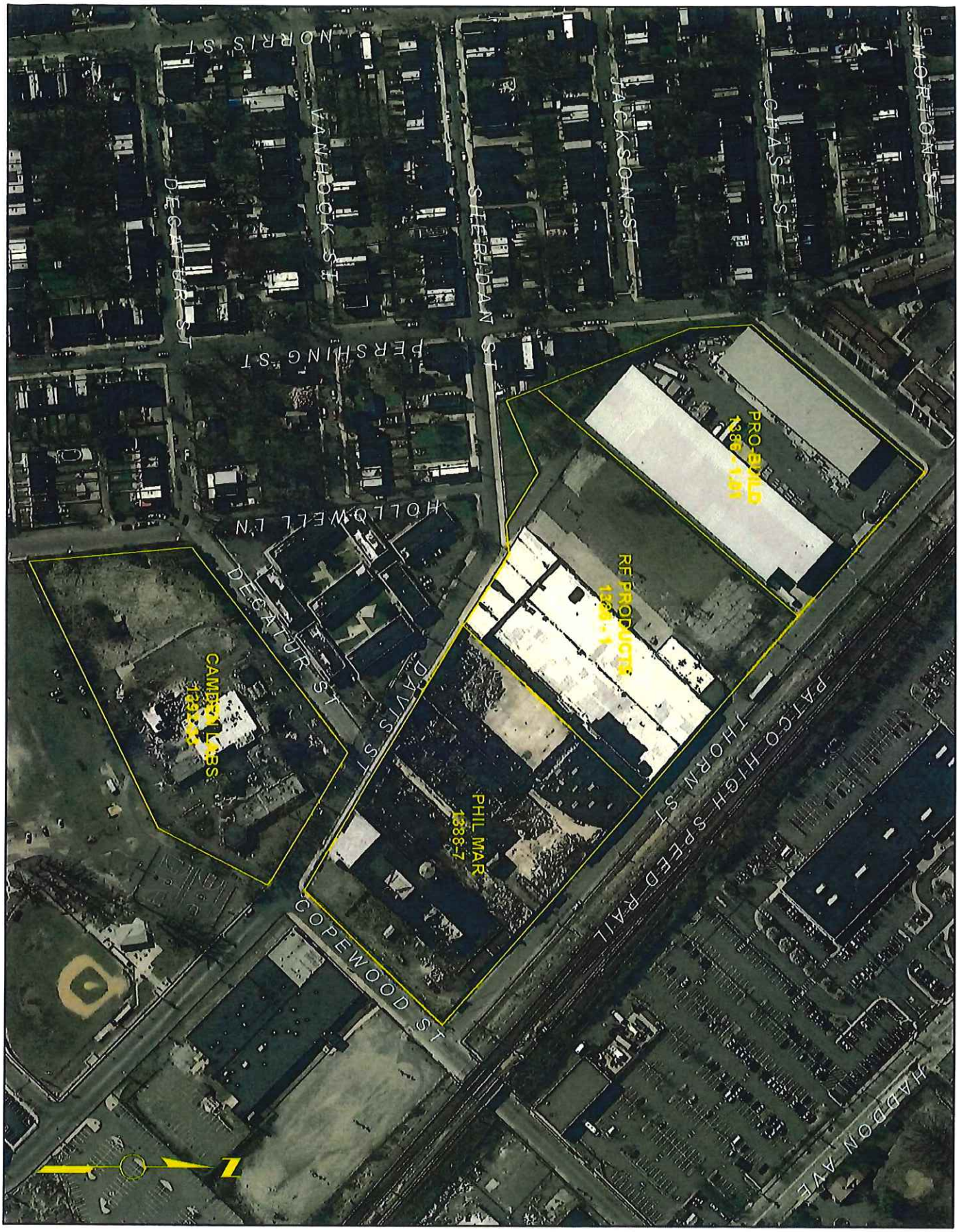
Sincerely,

Olivette Simpson,
Interim Executive Director
Camden Redevelopment Agency

Attachment

cc: Michele Christina, BRS
Jennifer Taylor, BRS

Attachment A – Site Location Map



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