UPDATED June 28, 2023
November 23, 2022

Ms. Melissa Dulinski
New Jersey Economic Development Authority
36 West State Street
Trenton, New Jersey 08608

Via email: MDulinski@njeda.com

Re: Data Gap Summary
Federal Street Sites
Concord Chemical Site
1650 Federal Street, Camden, NJ
Block 1186, Lot 25

Dear Ms. Dulinski,

BRS is pleased to provide the New Jersey Economic Development Authority (NJEDA) with this data gap summary of outstanding environmental issues at the above referenced property (the "site"). A review of prior environmental assessments was completed in order to provide recommendations for future assessment scope of work activities. BRS conducted a file review and made electronic copies of all available New Jersey Department of Environmental Protection (NJDEP) case files for the site at the NJDEP Office of Record Access in Trenton, NJ, on March 29, 2016 and again on September 6, 2022. No additional relevant information pertaining to environmental conditions at the site were found in 2022.

The site is located near the Marlton neighborhood and the Conrail railroad switching station in Camden, NJ on a rectangular parcel approximately 1.38 acres in size (see attached **Figures 1** and **2**). The property is bounded to the north by Federal Street, to the east by South 17th Street, to the south by Carman Street, and to the west by a former railroad spur and commercial lot. The surrounding area includes residential and industrial uses. The property is listed in many records as 1698 Federal Street.

Site Description and Background

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. 002734. The current owner of the site is City of Camden as of June 2018, with prior ownership as Concord Chemical Company, Inc. Concord Chemical Company operated from 1969 through at least 2004 and likely through 2009 as a soap manufacturing facility but abandoned the property in 2010. Various records of historic spills of oil and hazardous materials are on file and many spills were discharged to the municipal storm sewer system. Multiple prior environmental assessments have been conducted. Remedial Investigation and Remedial Action work plans dated September 2015 have been approved by NJDEP and that work was being publicly funded. According to NJDEP case files no Licensed Site Remediation Professional (LSRP) is currently retained on this site.

The documents that were included in the NJDEP file for this site indicate that in 1978 a stormwater sample was collected from the Federal Street pumping station located near the site and high concentrations of tetrachloroethylene (PCE) were detected in the sample. In 1980, the NJDEP sampled the production well at the facility as part their investigation into the Harrison landfill site and detected trichloroethylene (TCE), PCE, 1,1, dichloroethylene and 1,2 dichloroethane at concentrations that exceeded the Groundwater Quality Standards in effect at that time. In response to contamination identified at the Parkside Wellsite in 2004, NJDEP completed a Preliminary Assessment and Site Investigation (SI) at the site that indicated the presence of TCE, PCE and additional hazardous substances in groundwater above the Groundwater Remediation Standards. Concord Chemical did not respond to multiple directives and notices from NJDEP requiring remedial action at the site between 2004 and 2012.

History of Environmental Remediation

The site was abandoned sometime in early 2010 as determined by an inspection performed by City of Camden Public Works officials. In 2010, NJDEP was granted access to the site through a court order to conduct Remedial Investigation/ Remedial Action activities. NJDEP requested that the United States Environmental Protection Agency (EPA) perform a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) removal action to provide security at the site; identify, segregate and remove all hazardous materials including the removal of presumed asbestos containing material; and coordinate the transportation and off-site disposal of all wastes generated from within the building during the removal action. EPA completed removal actions in March 2011. The work was estimated to cost $1,970,000.00.

In June 2011, a fire heavily damaged the manufacturing building and in 2012 the majority of the manufacturing building was demolished, with the exception of two wings which include the kettle room, transformer room and cresylic acid filling room. The source of the additional hazardous substances, including methylene chloride, chlorobenzene and benzene groundwater plumes is believed to be located beneath the floor of the kettle room. The remaining buildings were scheduled for demolition circa the fall of 2016. Google Maps© Street View imagery dated September 2016 shows all the buildings as demolished with only the ground floor of the kettle room and the associated basement remaining.

EPA and the NJDEP have overseen the investigation and remedial actions at the site to date. Kleinfelder was apparently retained by the NJDEP to complete additional Remedial Investigation (RI) activities at the site. Total costs for this proposed work including remedial actions were estimated at $634,920.90. A September 2015 Kleinfelder work plan included the following activities:

- on-site soil and groundwater sampling;
- on-site permanent groundwater well installation and sampling;
- on-site sediment, stormwater and aquifer sampling;
- off-site groundwater sampling; and
- off-site soil gas and vapor intrusion investigation.

BRS confirmed that there is no evidence that further investigative work was completed after 2015.

A bibliography of documents reviewed is included at the end of this document. Files reviewed for this site have been uploaded to the following web links, https://spaces.hightail.com/space/hVKJrYZSWB; https://spaces.hightail.com/space/hVKJrYZSWB/group/st-c2ae35b2-f565-4856-a05f-3ab1614ab461.

Recommendations and Next Steps

In order to advance the investigation of the site, the recommended future scope of work includes the completion of additional investigation for soil, sediments, and groundwater, a vapor intrusion assessment, off-site groundwater investigation, and a receptor evaluation. The work should be performed in accordance with the requirements of N.J.A.C. 7:26E, and be directed by a New Jersey LSRP. A geophysical survey should be completed to evaluate the potential for buried tanks, piping, and other subsurface structures as part of assessment activities. Site clearing will likely be necessary to accommodate the geophysical equipment.

A site plan dated January 2015 showing AOCs and proposed on-site soil, sediment and groundwater monitoring well installation locations is included with the figures appended to this document.

<u>On-Site Remedial Investigation (RI)</u>

Based on the prior reporting it is recommended that the on-site RI include installation of test pits, approximately 40 soil borings, 40 hydropunch borings, 20 soil vapor sample points, and collection of soil, sediment, soil vapor, and groundwater samples for laboratory analysis.

It is estimated that 12 days of on-site labor consisting of two days of test pitting, eight days of drilling and two days of soil vapor sampling will be required to install and sample the test pits, soil/hydropunch borings, and soil vapor points. It is recommended that up to four soil and groundwater samples be collected per boring or hydropunch location, and one sediment and soil vapor sample be collected from each sampling point.

Pending results of the initial on-site hydropunch groundwater sampling event, up to eight permanent groundwater monitoring wells could be installed on-site for two subsequent groundwater sample collection and analysis events.

<u>Off-Site RI</u>

The recommended off-site RI includes site access agreements, installation of approximately 35 soil borings and/or hydropunch borings, up to 17 soil vapor (or indoor air sampling locations), and collection of soil, soil vapor/indoor air, and groundwater samples for laboratory analysis.

An estimated 10 days of off-site labor would be required for the off-site RI scope of work. It is recommended that up to four soil and groundwater samples be collected per boring or hydropunch location, and one soil vapor or indoor air sample be collected from each sampling point.

Pending results of the initial off-site RI sampling and a NJDEP review of the initial data set, permanent well installation and hydraulic conductivity testing for off-site investigation of local and/or regional groundwater could be necessary and estimated costs for these activities are included in the estimated project costs.

Soil sample analysis both on and off-site would include the following analyses:

- Total Contaminant List (TCL)/ Target Analyte List (TAL) + 30 parameters
- Volatile Organic Compounds (VOCs)
- Semi-VOCs (SVOCs)

Groundwater sample analysis both on and off-site would include the following analyses:

- VOCs
- SVOCs
- per-and polyfluoroalkyl (PFAS) compounds [perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), and perfluorononanoic acid (PFNA)] collected from permanent wells only

Soil vapor or indoor air sample analysis both on and off-site would include the following analysis:

- VOCs via TO-15 analysis

The RI approach and sampling analysis will ultimately be determined by the LSRP of record for the site. Following completion of the RI activities, additional on and off-site investigation may be required. Further, additional investigation for potential point sources for contamination of local and regional groundwater by chlorinated solvents may be required by NJDEP.

COST ESTIMATE

The detailed cost sheet, which includes Task 3 Third Party Owner's Representative, is attached.

Activity	**Cost Basis**
Task 1 -6: Remedial Investigation	$706,340.00

This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement BF-96242421 to the New Jersey Economic Development Authority. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, no names or recommend the use of commercial products mentioned in this document.

If you have any questions, please do not hesitate to contact me (856) 964-6456 or via email at aflammia@BRSinc.com.

Sincerely,

Alicia Flammia
Brownfield Redevelopment Solutions, Inc.

Cc: Olivette Simpson, CRA
Michele Christina, BRS
Jennifer Taylor, BRS
Megan Stanley, BRS

Figures

BRS inc
P.O. Box 2293
Medford Lakes, NJ 08055
T: 856-964-6456 | brsinc.com

Notes:

1) Aerial sourced from Google Earth Pro (8/23/2022)
2) Parcels Included: Block 116, Lot 15; Bock 1181 Lot 1; Block 1182, Lots 5 & 21; Block 1186, Lot 25
3) NJEDA - New Jersey Economic Development Authority

Legend

Federal Street Parcels

Scale	1:3,000
	0 125 250 500 Feet
Figure Title	**Federal Street Sites**
Client	NJEDA
Figure No.	1
Address	Federal Street Camden, New Jersey
Print Date	10/31/2022

Document Path: \\milescloud.local\33896\Data\BRS Portal\NJEDA\GIS - NJEDA\01_MXDs\Federal Street Maps\Figure 1_Federal Street_All Lots.mxd

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Notes:

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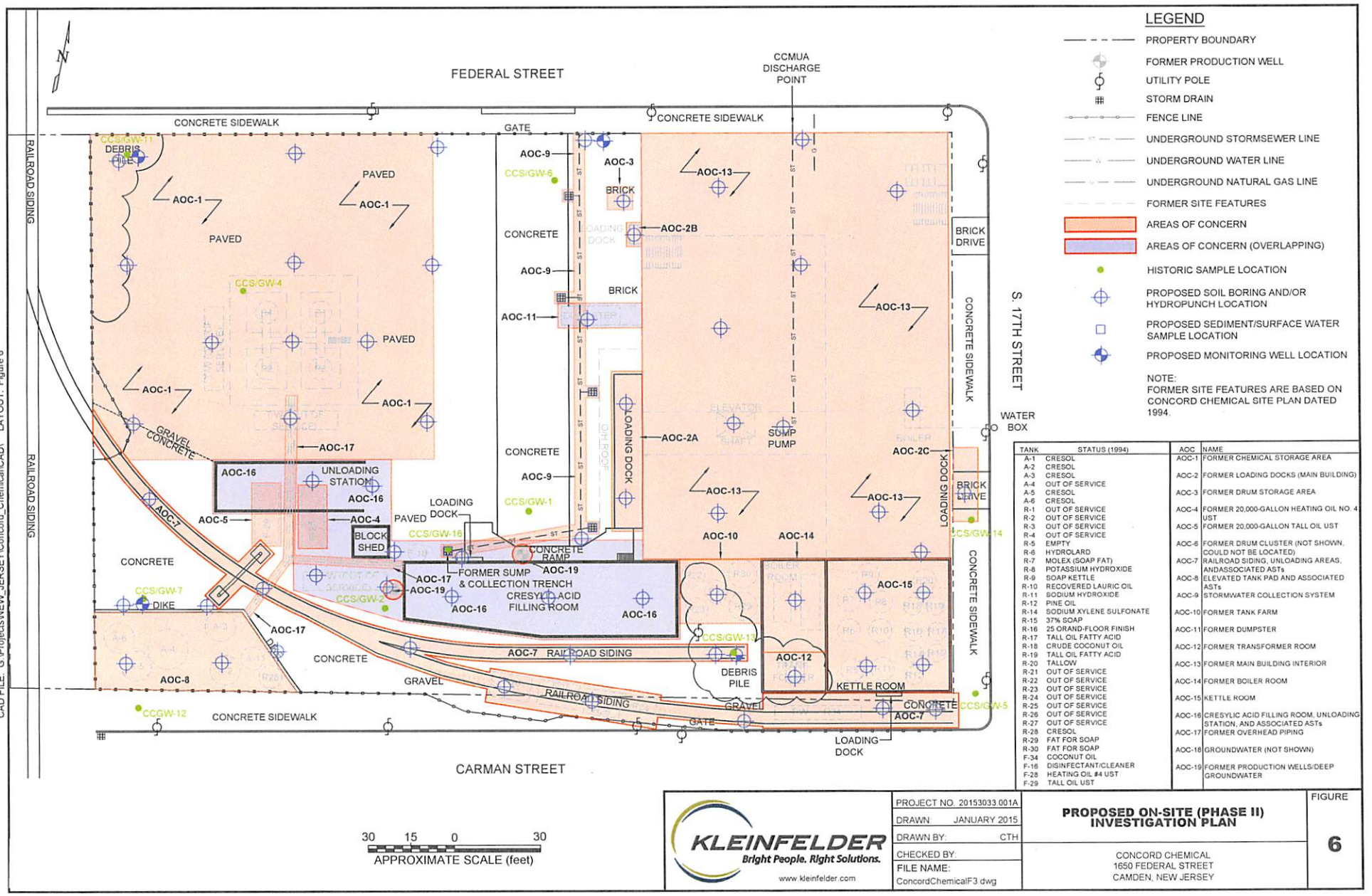
2) Parcels Included: Block 116, Lot 15; Bock 1181 Lot 1; Block 1182, Lots 5 & 21; Block 1186, Lot 25
3) NJEDA - New Jersey Economic Development Authority

Legend

- Concord Chemical
- Federal Street Parcels

Scale	1:3,000
	0 125 250 500 Feet
Figure Title	**Concord Chemical**
Client	NJEDA
Address	Federal Street Block 1186 Lot 25 Camden, New Jersey
Figure No.	**2**
Print Date	10/31/2022

Document Path: \\milescloud.local\33896\Data\BRS Portal\NJEDA\GIS - NJEDA\01_MXDs\Federal Street Maps\Figure 2_Concord Chemical.mxd



LEGEND

- PROPERTY BOUNDARY
- FORMER PRODUCTION WELL
- UTILITY POLE
- STORM DRAIN
- FENCE LINE
- UNDERGROUND STORMSEWER LINE
- UNDERGROUND WATER LINE
- UNDERGROUND NATURAL GAS LINE
- FORMER SITE FEATURES
- AREAS OF CONCERN
- AREAS OF CONCERN (OVERLAPPING)
- HISTORIC SAMPLE LOCATION
- PROPOSED SOIL BORING AND/OR HYDROPUNCH LOCATION
- PROPOSED SEDIMENT/SURFACE WATER SAMPLE LOCATION
- PROPOSED MONITORING WELL LOCATION

NOTE:
FORMER SITE FEATURES ARE BASED ON CONCORD CHEMICAL SITE PLAN DATED 1994.

TANK	STATUS (1994)
A-1	CRESOL
A-2	CRESOL
A-3	CRESOL
A-4	OUT OF SERVICE
A-5	CRESOL
A-6	CRESOL
R-1	OUT OF SERVICE
R-2	OUT OF SERVICE
R-3	OUT OF SERVICE
R-4	OUT OF SERVICE
R-5	EMPTY
R-6	HYDROLARD
R-7	MOLEX (SOAP FAT)
R-8	POTASSIUM HYDROXIDE
R-9	SOAP KETTLE
R-10	RECOVERED LAURIC OIL
R-11	SODIUM HYDROXIDE
R-12	PINE OIL
R-14	SODIUM XYLENE SULFONATE
R-15	37% SOAP
R-16	25 ORAND-FLOOR FINISH
R-17	TALL OIL FATTY ACID
R-18	CRUDE COCONUT OIL
R-19	TALL OIL FATTY ACID
R-20	TALLOW
R-21	OUT OF SERVICE
R-22	OUT OF SERVICE
R-23	OUT OF SERVICE
R-24	OUT OF SERVICE
R-25	OUT OF SERVICE
R-26	OUT OF SERVICE
R-27	OUT OF SERVICE
R-28	CRESOL
R-29	FAT FOR SOAP
R-30	FAT FOR SOAP
F-34	COCONUT OIL
F-16	DISINFECTANT/CLEANER
F-28	HEATING OIL #4 UST
F-29	TALL OIL UST

AOC	NAME
AOC-1	FORMER CHEMICAL STORAGE AREA
AOC-2	FORMER LOADING DOCKS (MAIN BUILDING)
AOC-3	FORMER DRUM STORAGE AREA
AOC-4	FORMER 20,000-GALLON HEATING OIL NO. 4 UST
AOC-5	FORMER 20,000-GALLON TALL OIL UST
AOC-6	FORMER DRUM CLUSTER (NOT SHOWN, COULD NOT BE LOCATED)
AOC-7	RAILROAD SIDING, UNLOADING AREAS, ANDASSOCIATED ASTs
AOC-8	ELEVATED TANK PAD AND ASSOCIATED ASTs
AOC-9	STORMWATER COLLECTION SYSTEM
AOC-10	FORMER TANK FARM
AOC-11	FORMER DUMPSTER
AOC-12	FORMER TRANSFORMER ROOM
AOC-13	FORMER MAIN BUILDING INTERIOR
AOC-14	FORMER BOILER ROOM
AOC-15	KETTLE ROOM
AOC-16	CRESYLIC ACID FILLING ROOM, UNLOADING STATION, AND ASSOCIATED ASTs
AOC-17	FORMER OVERHEAD PIPING
AOC-18	GROUNDWATER (NOT SHOWN)
AOC-19	FORMER PRODUCTION WELLS/DEEP GROUNDWATER

30 15 0 30
APPROXIMATE SCALE (feet)

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	20153033.001A
DRAWN:	JANUARY 2015
DRAWN BY:	CTH
CHECKED BY:	
FILE NAME:	ConcordChemicalF3.dwg

PROPOSED ON-SITE (PHASE II) INVESTIGATION PLAN

CONCORD CHEMICAL
1650 FEDERAL STREET
CAMDEN, NEW JERSEY

FIGURE
6

ATTACHED IMAGES: Images: ang1.bmp Images: attach.bmp Images: BEN.bmp Images: ENSR_PMS_CAD.tif Images: logo_AECOM_Color.jpg Images: Scan013.jpg
ATTACHED XREFS:
CAD FILE: G:\Projects\NEW_JERSEY\Concord_Chemical\CAD\ LAYOUT: Figure 6

Cost Estimate

Concord Chemical, 1650 Federal Street, Camden, NJ					
Activity	***Quantity***	***Hours***	***Days***	***Unit Price***	***Total***
ASSESSMENT COSTS					
Task 1 - LSRP Retention and Oversight, NJDEP forms					
Principal		2		$160.00	$320.00
LSRP		2		$150.00	$300.00
Project Manager		4		$130.00	$520.00
Staff Geologist		8		$110.00	$880.00
Site Clearing to prepare site for surveys	1			$6,500.00	$6,500.00
Geophysics	1			$3,500.00	$3,500.00
				Task Total 1	**$12,020.00**
Task 2- Remedial Investigation Planning / Coordination					
LSRP		5		$150.00	$750.00
Project Manager/Staff		8		$130.00	$1,040.00
QAPP	1			$3,000.00	$3,000.00
HASP	1			$1,850.00	$1,850.00
				Task Total 2	**$6,640.00**
Task 3- Soil Investigation					
LSRP		20		$150.00	$3,000.00
Project Manager		30		$130.00	$3,900.00
Staff Geologist		96		$110.00	$10,560.00
Travel and Equipment	12			$450.00	$5,400.00
Geoprobe 40 soil borings+ 40 hydropunch			8	$2,800.00	$22,400.00
Macrocore liners		320		$11.50	$3,680.00
Soil Vapor Points	20			$200.00	$4,000.00
Test Pitting Equipment			2	$2,200.00	$4,400.00
Mobilization to/from site	2			$550.00	$1,100.00
Laboratory Analysis					
Soil - TCL/TAL + 30 parameters	84			$550.00	$46,200.00
Soil - VOCs	84			$120.00	$10,080.00
Soil - SVOCs	84			$180.00	$15,120.00
GW - VOCs	164			$120.00	$19,680.00
GW - SVOCs	164			$180.00	$29,520.00
Soil Vapor - TO-15	22			$480.00	$10,560.00
Dispose of IDW (up to 10 drums)	Est	1		$6,000.00	$6,000.00
Off site costs - site access, 35 soil borings, 35 hydropunch, 17 soil vapor (87.5% of on-site costs)	Est	1		$171,150.00	$171,150.00
				Task Total 3	**$366,750.00**
Task 4- Groundwater Investigation					
LSRP		8		$150.00	$1,200.00
Project Manager		10		$130.00	$1,300.00
Staff Geologist		16		$110.00	$1,760.00
Field Staff		50		$100.00	$5,000.00
Travel and Equipment	6			$750.00	$4,500.00
Well Installation - Shallow	8			$2,000.00	$16,000.00
Survey	1			$2,800.00	$2,800.00
Laboratory Analysis					
GW - VOCs	18			$120.00	$2,160.00
GW - PFAS	18			$425.00	$7,650.00
Dispose of IDW (up to 10 drums)	Est	1		$6,000.00	$6,000.00
Off-site costs - site access, installation of regional well network (36 wells), hydraulic conductivity study, 2 sampling events	Est	1		$231,500.00	$231,500.00
				Task Total 4	**$279,870.00**
Task 5- Data Management and Evaluation					
Principal		6		$160.00	$960.00
LSRP		16		$150.00	$2,400.00
Project Manager/Staff		40		$130.00	$5,200.00
Data validation/DKQ review	1			$5,500.00	$5,500.00
				Task Total 5	**$14,060.00**
Task 6- LSRP Forms, EDDs, & RI Report					
LSRP		50		$150.00	$7,500.00
Project Manager/Staff		60		$130.00	$7,800.00
CADD Designer		40		$100.00	$4,000.00
Printing/shipping	1			$200.00	$200.00
Case Inventory Document	1			$2,500.00	$2,500.00
Receptor Evaluation (Initial)	1			$2,500.00	$2,500.00
Receptor Evaluation (Update)	1			$2,500.00	$2,500.00
				Task Total 6	**$27,000.00**
Task 7- Third Party Owner's Representative					
Principal		15		$150.00	$2,250.00
PG/PE/Project Manager		100		$130.00	$13,000.00
Grants Specialist		32		$90.00	$2,880.00
				Task Total 7	**$18,130.00**
Total RI Costs					**$724,470.00**

Bibliography of Documents Reviewed

Concord Chemical Company, 1650 Federal Street, Camden
NJDEP/EPA File Inventory

Date	Document Type	Prepared By	Prepared For	Comments
8/31/87, 9/14/87	Notice of Deficiency - UST Registration Questionnaire	NJDEP	Concord Chemical Company	Identifies deficiencies in the facility's UST Registration Questionnaire. Response from Concord to deficiency.
2/9/90	Notice of Violation	NJDEP	Concord Chemical	discharge of chemical without permit
1/19/95	UST Closure Approval	NJDEP	Concord Chemical	removal of one 20,000-gal #4 oil UST
10/27/98, 11/9/98	UST Declassify Letter	Concord Chemical	NJDEP	declassification of tank as it stored tall fatty acid oil
3/8/99	UST Removal Letter	Concord Chemical	NJDEP	removal of one 20,000-gal #4 oil UST
1/17/01	HDSRF Eligibility Letter	NJDEP	Concord Chemical	approval for HDSRF funds

Concord Chemical Company, 1650 Federal Street, Camden
NJDEP/EPA File Inventory

Date	Document Type	Prepared By	Prepared For	Comments
10/24/02, 3/5/03, 3/10/03, 3/27/03, 4/25/03, 4/29/03	Emails, memos, letters	NJDEP/NJEDA	NJDEP/NJEDA	Discussions regarding State over paid on grants from HDSRF as no loans were taken by Concord. Final correspondence approved additional funding.
12/3/03	NJDEP Site Access Letter	NJDEP	Concord Chemical	Site access to sample soil and GW in connection with Parkside wellfield contamination
6/18/04	NJDEP Site Investigation Report	NJDEP	NJDEP	6/18/04
6/29/04	NJDEP SI Report Narrative Letter	NJDEP	Concord Chemical	listing of site on KCSL
12/19/08, 1/5/09	DEP Directive and Notice to Insurers	NJDEP	Concord Chemical	Administrative Consent order to perform remedial investigation of discharges. Second letter on 1/5/09
9/28/10	Removal ACTION MEMORANDUM	EPA	EPA	$1,970,000 ceiling increase for total project costs

Concord Chemical Company, 1650 Federal Street, Camden
NJDEP/EPA File Inventory

Date	Document Type	Prepared By	Prepared For	Comments
11/19/10	SITE INVESTIGATION REPORT	EPA	EPA	
1/15/10	Court Order Granting Access	Superior Court of NJ	NJDEP	
8/1/10	NJDEP Memo - Order Granting Access	NJDEP	NJDEP	Publicly funded remediation request
7/18/11	REMOVAL SITE EVALUATION (RSE)	EPA	EPA	memo indicating sub slab soil gas concentrations too low to recommend VI investigation
10/30/14	Email	Kleinfelder	NJDEP	file review planning
1/1/15	Kleinfelder Maps	Kleinfelder	NJDEP	Groundwater Plume maps, RI/RD/RA maps

Concord Chemical Company, 1650 Federal Street, Camden
NJDEP/EPA File Inventory

Date	Document Type	Prepared By	Prepared For	Comments
1/2/15	Proposal	Kleinfelder	NJDEP	Proposed On-Site Phase 2 Investigation Plan
4/30/15	Letter	Michelman and Bricker	NJ Attorney General	Legal information relative to collection of funds/lawsuit for Miguel Castillo
5/4/15	Prendergast-Grayer-Petrone Email	NJ AG's office	NJDEP	Information relative to 2015 site access and EPA involvement
7/9/15	Court Order Approving Bldg Demo	Superior Court of NJ	NJDEP	
8/5/15	Email	NJDEP	Atlantic Response	Demo approval of last two structures
7/1/14	Proposal	Kleinfelder	NJDEP	Proposal to complete Background Information and Conceptual Investigation Approach doc. Remedial Investigation/Remedial Design/Remedial Action Selection (RI/RD/RAS)

Concord Chemical Company, 1650 Federal Street, Camden
NJDEP/EPA File Inventory

Date	Document Type	Prepared By	Prepared For	Comments
9/4/15	RI Proposal rev1	Kleinfelder	NJDEP	increased budget for Task 05 – Permitting and Access Agreements
6/26/2018	NJDEP and NJ Division of Law Labor Charges	SRWMP - Division of Enforcement, Technical & Financial Support	NJDEP	Covers costs incurred for assessment and cleanup at the site between 2/24/1992-6/26/2018
7/12/2018	Camden City WD Parkside Wellfield Contamination	NJDEP	Concord Chemical	Certified letter from NJDEP Direct Billing and Cost Recovery seeking recovery of costs in connection with the discharge of hazardous substances at the Concord Chemical facility, for cleanup and removal. Costs from NJDEP charges are listed as $3,792,322.03 and are noted to keep increasing until paid in full.