

Appendix D-1

Site 133 East Sample Maps



MAP LOCATION

Garfield Avenue

Halladay Street

Pacific Avenue

Forester Street

N. Point Light Rail Line

3A

1B

3B North

2B-1

2B-4

2A

3C

3B South

0 100

Garfield Avenue

Halladay Street

Pacific Avenue

Forester Street

N. Point Light Rail Line

3A

1B

3B North

2B-1

2B-4

2A

3C

3B South

0 100

R

S

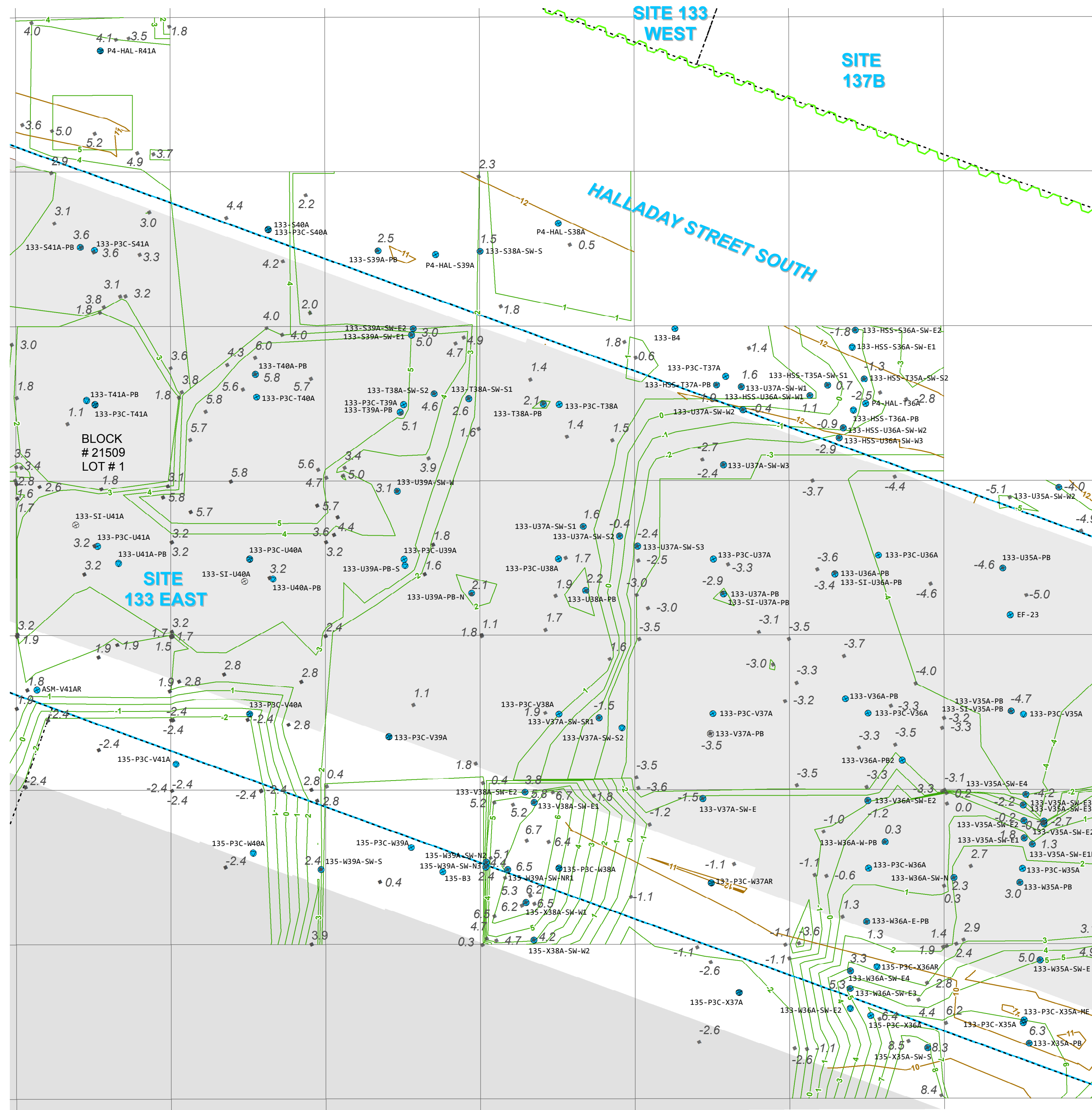
T

U

V

W

X



41A

40A

39A

38A

37A

36A

35A

SITE 135 SOUTH

SITE 133 WEST

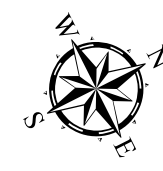
SITE 137B

HALLADAY STREET SOUTH

SITE 133 EAST

BLOCK #21509 LOT #1

AECOM



0 10 20 30 Feet

PPG
SITE 133 EAST
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

DATE: 08/17/2018

SITE 133 EAST (COLUMN 35A TO 41A)
SAMPLE MAP FOR Cr⁺⁶ COMPARED
TO CHROMIUM SOIL CLEANUP CRITERION

FIGURE 5-1B

ABBREVIATIONS:

CCPW - Chromate Chemical Production Waste
Cr⁺⁶ - hexavalent chromium
Cr - chromium
CrSCC - Chromium Soil Cleanup Criteria
ft - feet
mg/kg - milligrams per kilogram
NAVD88 - North American Vertical Datum of 1988

GENERAL NOTES:

- G1. The hexavalent chromium data associated with the sample locations shown on this figure are provided in Table 5-1. None of the detected Cr⁺⁶ results exceeded the standard.
- G2. Elevation vertical datum is NAVD88, in U.S. survey ft.
- G3. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
- G4. Additional sample locations are shown on Figures 5-1A, 5-1C, and 5-1D.
- G5. This figure presents data for locations within the Site boundary that have samples remaining in place. In addition, locations from outside the Site boundary and/or removed samples may be shown to demonstrate compliance with the remediation objectives. The Specific Notes on Table 5-1 include discussion of these situations, if necessary.

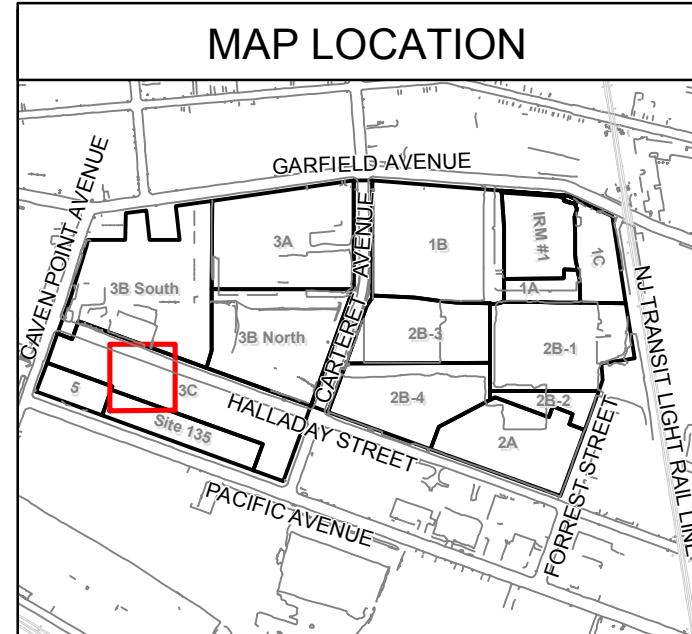
SPECIFIC NOTES:

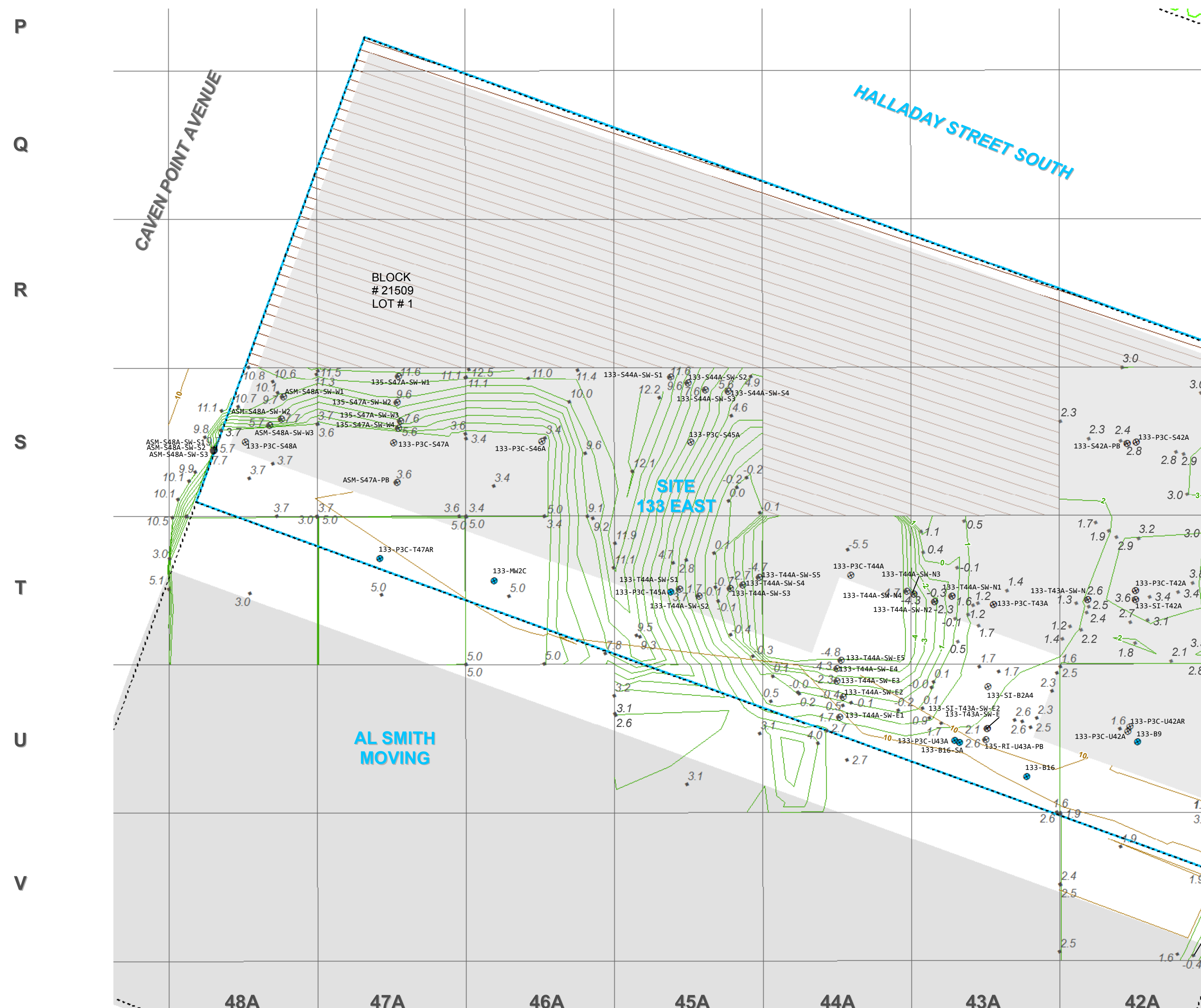
- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
- S2. Post-excavation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG SITE 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
- S3. Conceptual post-excavation elevation contours were generated using professional judgement based on post-excavation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
- S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr⁺⁶, CCPW, non-Cr constituents, and concrete foundation removal.
- S5. In Grids S40A, U36A, U37A, V35A, W35A, W38A, and X35A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

LEGEND

- ⊗ SAMPLING LOCATION (REMAINING SAMPLES)
- ⊗ SAMPLING LOCATION (REMOVED CONFIRMATION SAMPLES)
- REMAINING SAMPLES NOT ANALYZED FOR Cr⁺⁶
- RESULT IS BELOW THE MOST STRINGENT STANDARD
- POST-EXCAVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)
- CONCEPTUAL POST-EXCAVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)
- IN PLACE SHEET PILE (AS OF OCTOBER 2017)
- PRE-REMEDIATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)
- PROPERTY LINE
- FORMER BUILDING SLAB (AVERAGE ELEVATION 12.8 FT NAVD88)
- GRID LAYOUT
- SITE BOUNDARY

Soil Cleanup Criterion (mg/kg)	
Analyte	CrSCC
CHROMIUM (HEXAVALENT)	20





ABBREVIATIONS:
CCPW - Chromate Chemical Production Waste
Cr⁺³ - trivalent chromium
Cr⁺⁶ - hexavalent chromium
Cr - chromium
ft - feet
mg/kg - milligrams per kilogram
N/A - not applicable
NAV88 - North American Vertical Datum of 1988
NJDEP - New Jersey Department of Environmental Protection
NRDCSRs - New Jersey Department of Environmental Protection Non-Residential Direct Contact Soil Remediation Standard
RDCSRs - New Jersey Department of Environmental Protection Residential Direct Contact Soil Remediation Standard
RDCSRs-GAG - Residential Direct Contact Soil Remediation Standard - Garfield Avenue Group (alternative remediation standard approved by the New Jersey Department of Environmental Protection on December 28, 2016)
SCC - Soil Cleanup Criteria
SRS - Soil Remediation Standard

GENERAL NOTES:

- G1. None of the remaining soil samples in this quadrant were analyzed for CCPW metals. Additional sample locations are shown on Figures 5-2B, 5-2C, and 5-2D.
- G2. Elevation vertical datum is NAVD88, in U.S. survey ft.
- G3. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
- G4. This figure presents data only for locations within the Site boundary that have samples remaining in place.
- G5. There is currently no NJDEP SRS and no NJDEP SCC for total Cr. Therefore, total Cr results are compared to the interim NJDEP Residential SCC for Cr⁺³ of 120,000 mg/kg as the cleanup criteria for soil at the Garfield Avenue Group Sites. There is no non-residential SCC for Cr⁺³.

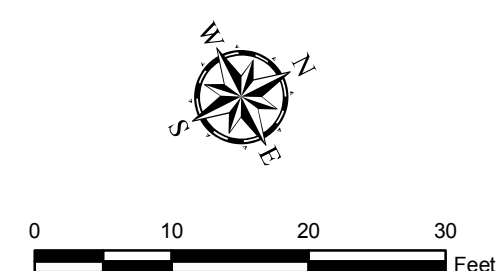
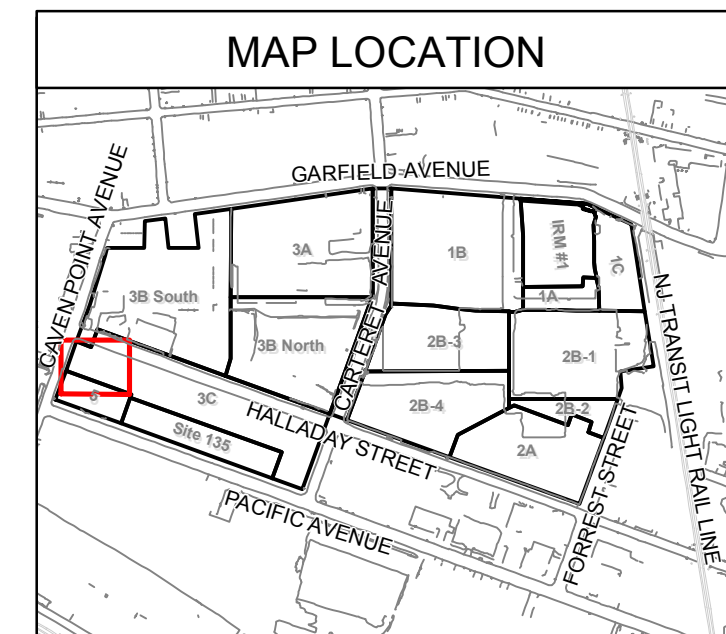
SPECIFIC NOTES:

- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
- S2. Post-excavation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG SITE 133/135 HSS 133&135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
- S3. Conceptual post-excavation elevation contours were generated using professional judgement based on post-excavation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
- S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr¹⁶, CCPW, non-Cr constituents, and concrete foundation removal.
- S5. In Grids S48A and U43A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

LEGEND

⊗	SAMPLING LOCATION (REMAINING SAMPLES)	POST-EXCAVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)	FORMER BUILDING SLAB (AVERAGE ELEVATION 12.8 FT NAVD88)
○	REMAINING SAMPLES NOT ANALYZED FOR COPPER METALS	CONCEPTUAL POST-EXCAVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)	GRID LAYOUT
●	RESULT IS BELOW THE MOST STRINGENT STANDARD	PRE-REMEDIATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)	GRIDS NOT FULLY REMEDIATED AND TO BE INCLUDED IN A SEPARATE SUBMITTAL
----	PROPERTY LINE		SITE BOUNDARY

Soil Remediation Standards (mg/kg)			
Analyte	RDCSR5	RDCSR5-GAG	NRDCSR5
ANTIMONY	31	N/A	450
CHROMIUM	120000	N/A	N/A
NICKEL	1600	N/A	23000
THALLIUM	N/A	N/A	N/A
VANADIUM	N/A	390	1100



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SITE 133 EAST
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

SITE 133 EAST (COLUMN 42A TO 48A)
SAMPLE MAP FOR CCPW METALS
COMPARED TO SOIL REMEDIATION STANDARDS

FIGURE 5-2A

From: \\usctm1001\001\Garfield\ppg\Indus\Garfield\GIS\MapData\ASSTIE_133E\ASSTIE\Figure_5-2B_Site_133E_CCPW_Metals_SRS.mxd

AECOM

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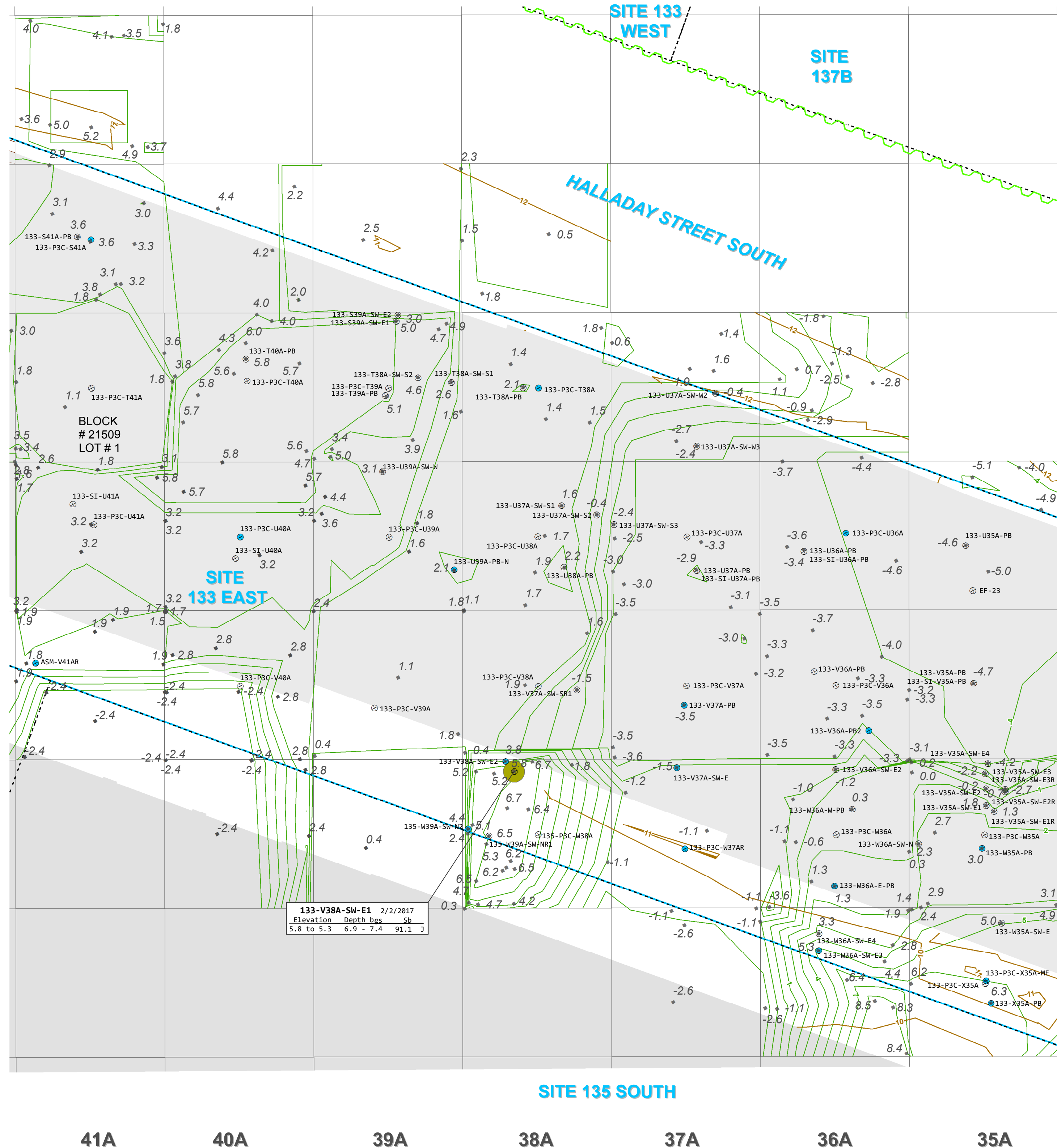
T

U

V

W

X



SITE 135 SOUTH

SITE 133 WEST

SITE 137B

HALLADAY STREET SOUTH

SITE 133 EAST

133-V38A-SW-E1		2/2/2017
<u>Elevation</u>	<u>Depth bgs</u>	<u>Sb</u>
5.8 to 5.3	6.9 - 7.4	91.1

ABBREVIATIONS:

CCPW - Chromate Chemical Production Waste
Cr³⁺ - trivalent chromium
Cr⁶⁺ - hexavalent chromium
Cr - chromium
ft - feet
mg/kg - milligrams per kilogram
N/A - not applicable
NAVD88 - North American Vertical Datum of 1988
NJDEP - New Jersey Department of Environmental Protection
NRDCSRS - New Jersey Department of Environmental Protection Non-Residential Direct Contact Soil Remediation Standard
RDCSRS - New Jersey Department of Environmental Protection Residential Direct Contact Soil Remediation Standard
RDCSRS-GAG - Residential Direct Contact Soil Remediation Standard - Garfield Avenue Group (alternative remediation standard approved by the New Jersey Department of Environmental Protection on December 28, 2016)
Sb - antimony
SCC - Soil Cleanup Criteria
SRS - Soil Remediation Standard

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.

GENERAL NOTES:

- G1. The CCPW data associated with the sample locations shown on this figure are provided in Table 5-2. Data presented in call out boxes on this figure are outliers (i.e., data points that require further explanation). Specific notes on how the New Jersey Department of Environmental Protection's remedial standards are being met and/or how remediation is being achieved/completed for each outlier sample are provided in the Specific Notes in Table 5-2.
- G2. "Elevation" refers to the sample elevation based on the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
- G3. Elevation vertical datum is NAVD88, in U.S. survey ft.
- G4. Results are reported in mg/kg.
- G5. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
- G6. Additional sample locations are shown on Figures 5-2A, 5-2C, and 5-2D.
- G7. This figure presents data only for locations within the Site boundary that have samples remaining in place.
- G8. There is currently no NJDEP SRS and no NJDEP SCC for total Cr. Therefore, total Cr results are compared to the interim NJDEP Residential SCC for Cr³⁺ of 120,000 mg/kg as the cleanup criteria for soil at the Garfield Avenue Group Sites. There is no non-residential SCC for Cr³⁺.

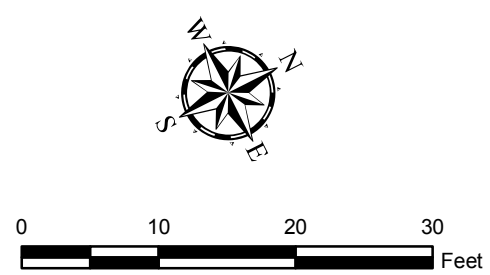
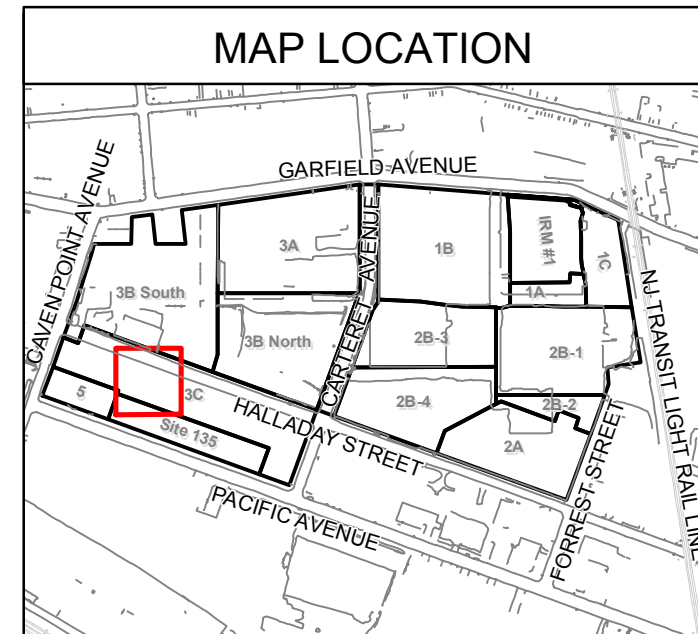
SPECIFIC NOTES:

- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
- S2. Post-excavation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG SITE 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
- S3. Conceptual post-excavation elevation contours were generated using professional judgement based on post-excavation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
- S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr⁶⁺, CCPW, non-Cr constituents, and concrete foundation removal.
- S5. In Grids U36A, U37A, V35A, W35A, and X35A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

LEGEND

- ⊗ SAMPLING LOCATION (REMAINING SAMPLES)
- NOT ANALYZED FOR CCPW METALS
- RESULT IS BELOW THE MOST STRINGENT STANDARD
- RESULTS EXCEED THE MOST STRINGENT STANDARD, BUT ARE IN COMPLIANCE WITH REMEDIATION OBJECTIVES
- ANTIMONY (Sb)
- POST-EXCAVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)
- CONCEPTUAL POST-EXCAVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)
- IN PLACE SHEET PILE (AS OF OCTOBER 2017)
- PRE-REMEDIATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)
- PROPERTY LINE
- FORMER BUILDING SLAB (AVERAGE ELEVATION 12.8 FT NAVD88)
- GRID LAYOUT
- SITE BOUNDARY

Soil Remediation Standards (mg/kg)			
Analyte	RDCSRS	RDCSRS-GAG	NRDCSRS
ANTIMONY	31	N/A	450
CHROMIUM	120000	N/A	N/A
NICKEL	1600	N/A	23000
THALLIUM	N/A	N/A	N/A
VANADIUM	N/A	390	1100

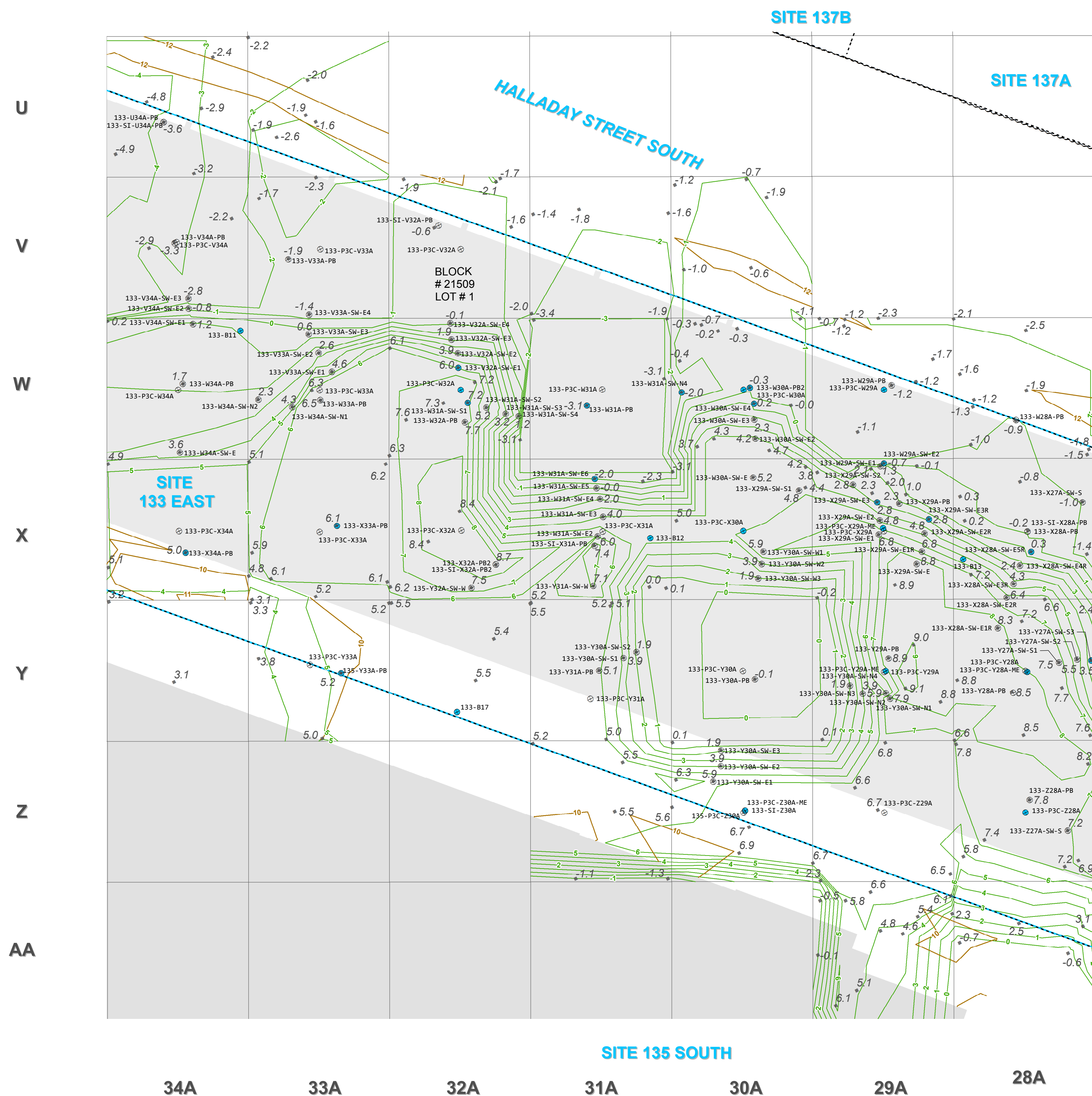


PPG
SITE 133 EAST
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

SITE 133 EAST (COLUMN 35A TO 41A)
SAMPLE MAP FOR CCPW METALS
COMPARED TO SOIL REMEDIATION STANDARDS

DATE: 08/17/2018

FIGURE 5-2B



ABBREVIATIONS:
CCPW - Chromate Chemical Production Waste
Cr⁺³ - trivalent chromium
Cr⁺⁶ - hexavalent chromium
Cr - chromium
ft - feet
mg/kg - milligrams per kilogram
N/A - not applicable
NAVD88 - North American Vertical Datum of 1988
NJDEP - New Jersey Department of Environmental Protection
NRDCSRs - New Jersey Department of Environmental Protection Non-Residential Direct Contact Soil Remediation Standard
RDCSRs - New Jersey Department of Environmental Protection Residential Direct Contact Soil Remediation Standard
RDCSRs-GAG - Residential Direct Contact Soil Remediation Standard - Garfield Avenue Group (alternative remediation standard approved by the New Jersey Department of Environmental Protection on December 28, 2016)
SCC - Soil Cleanup Criteria
SRS - Soil Remediation Standard

GENERAL NOTES:

- G1. The CCPW data associated with the sample locations shown on this figure is provided in Table 5-2. None of the detected CCPW results in this quadrant of Site 133 East exceeded the standards.
- G2. Elevation vertical datum is NAVD88, in U.S. survey ft.
- G3. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
- G4. Additional sample locations are shown on Figures 5-2A, 5-2B, and 5-2D.
- G5. This figure presents data only for locations within the Site boundary that have samples remaining in place.
- G6. There is currently no NJDEP SRS and no NJDEP SCC for total Cr. Therefore, total Cr results are compared to the interim NJDEP Residential SCC for Cr⁺³ of 120,000 mg/kg as the cleanup criteria for soil at the Garfield Avenue Ground Site. There is no non-residential SCC for Cr⁺³.

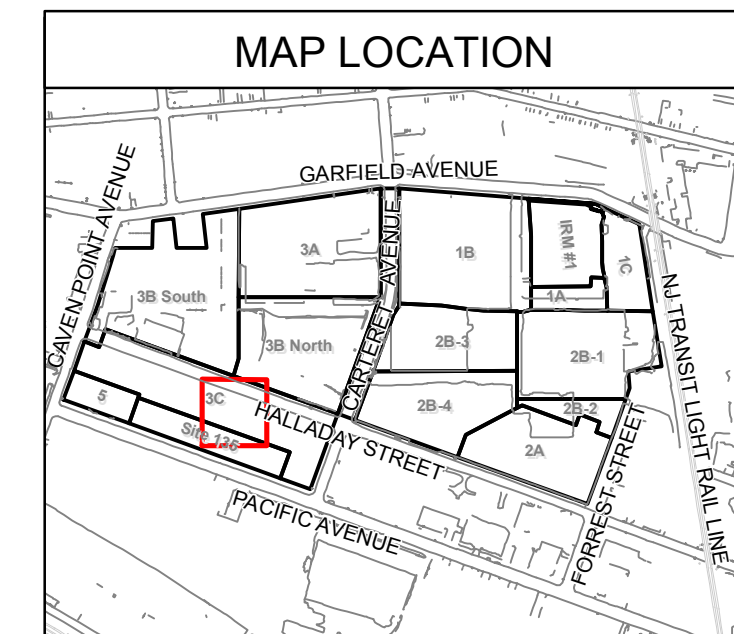
SPECIFIC NOTES:

- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
- S2. Post-excitation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG SITE 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
- S3. Conceptual post-excitation elevation contours were generated using professional judgement based on post-excitation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
- S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr^{VI}, CCPW, non-Cr constituents, and concrete foundation removal.
- S5. In Grids U34A, V34A, X28A, X29A, X32A, Y28A, Y29A, and Z30A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

LEGEND

⊗	SAMPLING LOCATION (REMAINING SAMPLES)	— 3.8' —	POST-EXCAVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)	■	FORMER BUILDING SLAB (AVERAGE ELEVATION 12.8 FT NAVD88)
○	REMAINING SAMPLES NOT ANALYZED FOR CPFW METALS	—	CONCEPTUAL POST-EXCAVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)	□	GRID LAYOUT
●	RESULT IS BELOW THE MOST STRINGENT STANDARD	~~~~~	REMOVED SHEET PILE	□	SITE BOUNDARY
		—	PRE-REMEDIATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)		
		----	PROPERTY LINE		

Soil Remediation Standards (mg/kg)			
Analyte	RDCSRs	RDCSRs-GAG	NRDCSRs
ANTIMONY	31	N/A	450
CHROMIUM	120000	N/A	N/A
NICKEL	1600	N/A	23000
THALLIUM	N/A	N/A	N/A
VANADIUM	N/A	390	1100



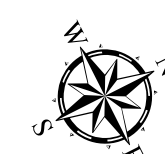
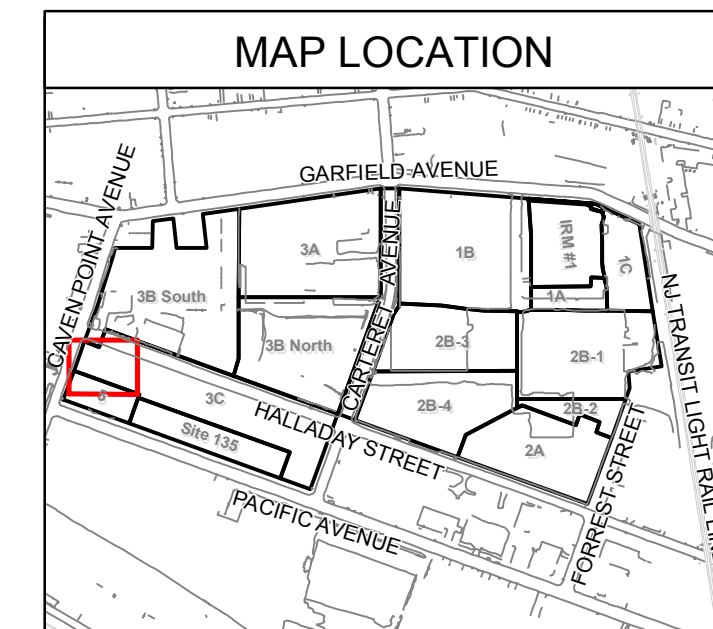
CCPW - Chromate Chemical Production Waste
Cr⁶⁺ - hexavalent chromium
Cr - chromium
DIGWSSL - Default Impact to Groundwater Soil Screening Level
ft - feet
IGW - Impact to Groundwater
IGWSRS-GAG - Impact to Groundwater Soil Remediation Standards
Avenue Group (site-specific alternative remediation standard as in
Supplemental Soil Remedial Investigation Report, Final Revision
Avenue Group, Hudson County Chromium Sites, Jersey City, New
AECOM, 08/30/18 and approved by NJDEP on 10/22/18)
mg/kg - milligram per kilogram
N/A - not applicable
NAVD88 - North American Vertical Datum of 1988

- G1.** None of the remaining soil samples in the unsaturated zone in this quadrant of Site 133 East were analyzed for CCPW metals. Additional sample locations are shown on Figures 5-3B, 5-3C, and 5-3D.
- G2.** Elevation vertical datum is NAVD88, in U.S. survey ft.
- G3.** Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
- G4.** This figure presents data only for locations within the Site boundary that have samples remaining in place.

- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
- S2. Post-excitation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG Site 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
- S3. Conceptual post-excitation elevation contours were generated using professional judgement based on post-excitation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
- S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr⁶, CCPW, non-Cr constituents, and concrete foundation removal.
- S5. In Grids S48A and U43A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

	SAMPLING LOCATION (REMAINING SAMPLES)		POST-EXCAVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)		FORMER BUILDING SLAB (AVERAGE ELEVATION 12.8 FT NAVD88)
	REMAINING SAMPLES NOT ANALYZED FOR CPW METALS		CONCEPTUAL POST-EXCAVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)		GRID LAYOUT
	RESULT IS BELOW THE MOST STRINGENT STANDARD		PRE-REMEDIATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)		GRIDS NOT FULLY REMEDIATED, AND TO BE INCLUDED IN A SEPARATE SUBMITTAL
			PROPERTY LINE		SITE BOUNDARY

Soil Screening Level & Soil Remediation Standards (mg/kg)		
Analyte	DIGWSSL	IGWSRS-GAC
ANTIMONY	N/A	62.7
CHROMIUM	N/A	N/A
NICKEL	N/A	170
THALLIUM	3	N/A
VANADIUM	N/A	N/A



Age Group	Total (%)	Male (%)	Female (%)	Male (%)	Female (%)
0-10	~10	~10	~10	~10	~10
11-20	~15	~15	~15	~15	~15
21-30	~20	~20	~20	~20	~20
31-40	~25	~25	~25	~25	~25
41-50	~20	~20	~20	~20	~20
51-60	~15	~15	~15	~15	~15
61-70	~10	~10	~10	~10	~10
71+	~5	~5	~5	~5	~5

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SITE 133 EAST
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JERSEY CITY, NEW JERSEY

SITE 133 EAST (COLUMN 42A TO 48A)
SAMPLE MAP FOR CCPW METALS
IN THE UNSATURATED SOIL ZONE
COMPARED TO IGW SOIL SCREENING LEVELS
AND SOIL REMEDIATION STANDARDS

FIGURE 5-3A

AECOM

R

S

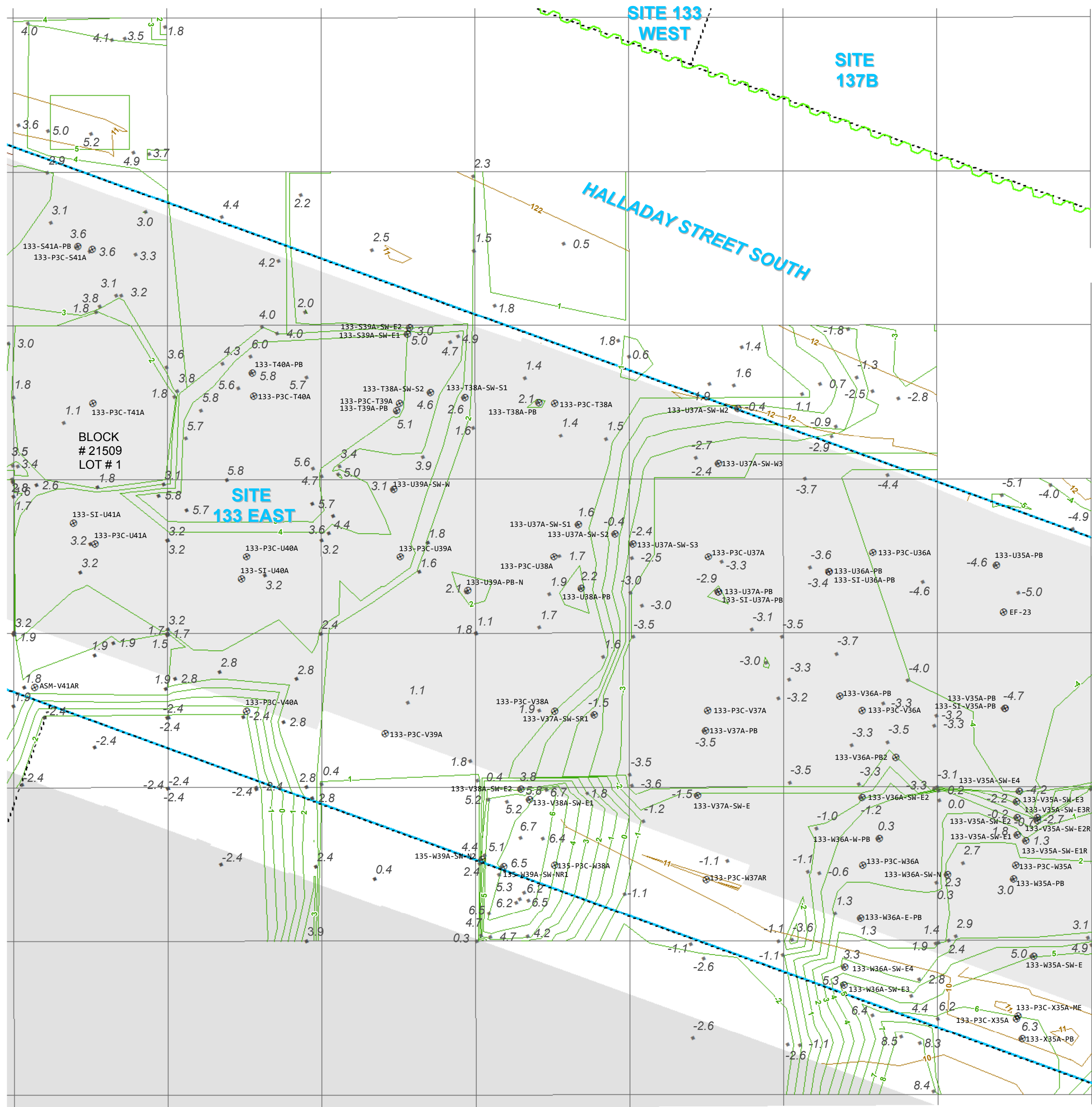
T

U

V

W

X



41A

40A

39A

38A

37A

36A

35A

SITE 135 SOUTH

SITE 133 WEST

SITE 137B

HALLADAY STREET SOUTH

SITE 133 EAST

BLOCK #21509 LOT #1

ABBREVIATIONS:

- CCPW - Chromate Chemical Production Waste
- Cr⁶ - hexavalent chromium
- Cr - chromium
- DIGWSSL - Default Impact to Groundwater Soil Screening Level
- ft - feet
- IGW - Impact to Groundwater
- IGWSRS-GAG - Impact to Groundwater Soil Remediation Standard - Garfield Avenue Group (site-specific alternative remediation standard as proposed in the Supplemental Soil Remedial Investigation Report, Final Revision 1, PPG Garfield Avenue Group, Hudson County Chromium Sites, Jersey City, New Jersey, AECOM, 08/30/18 and approved by NJDEP on 10/22/18)
- mg/kg - milligram per kilogram
- N/A - not applicable
- NAVD88 - North American Vertical Datum of 1988

GENERAL NOTES:

- G1. None of the remaining soil samples in the unsaturated zone in this quadrant of Site 133 East were analyzed for CCPW metals. Additional sample locations are shown on Figures 5-3A, 5-3C, and 5-3D.
- G2. Elevation vertical datum is NAVD88, in U.S. survey ft.
- G3. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
- G4. This figure presents data only for locations within the Site boundary that have samples remaining in place.

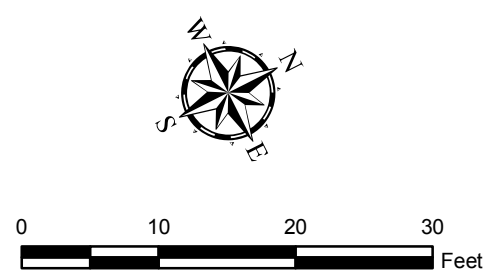
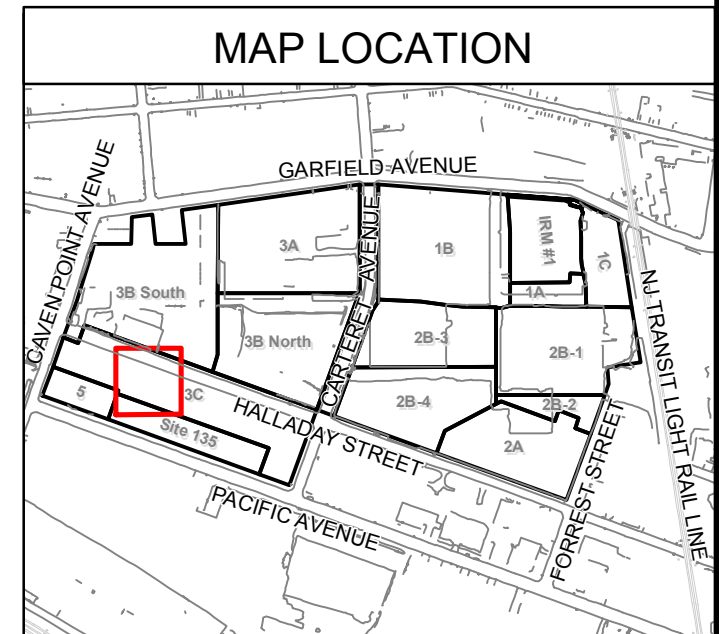
SPECIFIC NOTES:

- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
- S2. Post-excavation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG SITE 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
- S3. Conceptual post-excavation elevation contours were generated using professional judgement based on post-excavation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
- S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr⁶, CCPW, non-Cr constituents, and concrete foundation removal.
- S5. In Grids U36A, U37A, V35A, W35A, and X35A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

LEGEND

- SAMPLING LOCATION (REMAINING SAMPLES)
- REMAINING SAMPLES NOT ANALYZED FOR CCPW METALS
- RESULT IS BELOW THE MOST STRINGENT STANDARD
- POST-EXCAVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)
- CONCEPTUAL POST-EXCAVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)
- IN PLACE SHEET PILE (AS OF OCTOBER 2017)
- PRE-REMEDIATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)
- PROPERTY LINE
- FORMER BUILDING SLAB (AVERAGE ELEVATION 12.8 FT NAVD88)
- GRID LAYOUT
- SITE BOUNDARY

Soil Screening Level & Soil Remediation Standards (mg/kg)		
Analyte	DIGWSSL	IGWSRS-GAG
ANTIMONY	N/A	62.7
CHROMIUM	N/A	N/A
NICKEL	N/A	170
THALLIUM	3	N/A
VANADIUM	N/A	N/A



PPG
SITE 133 EAST
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

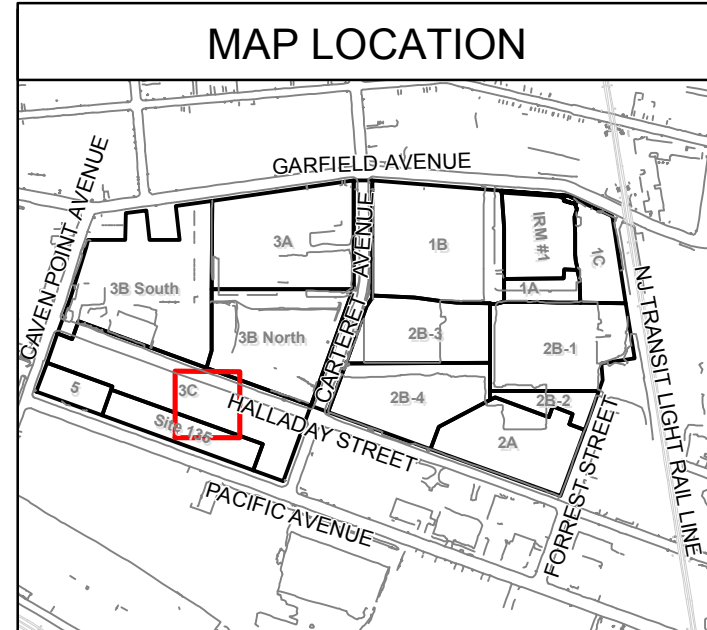
SITE 133 EAST (COLUMN 35A TO 41A)
SAMPLE MAP FOR CCPW METALS
IN THE UNSATURATED SOIL ZONE
COMPARED TO IGW SOIL SCREENING LEVELS
AND SOIL REMEDIATION STANDARDS

QUALIFIERS:
J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.

SPECIFIC NOTES:

- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
- S2. Post-excitation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG Site 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
- S3. Conceptual post-excitation elevation contours were generated using professional judgement based on post-excitation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
- S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr^{VI}, CCPW, non-Cr constituents, and concrete foundation removal.
- S5. In Grids U34A, V34A, X28A, X29A, X32A, Y28A, Y29A, and Z30A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

Soil Screening Level & Soil Remediation Standards (mg/kg)		
Analyte	DIGWSSL	IGWSRS-GAG
ANTIMONY	N/A	62.7
CHROMIUM	N/A	N/A
NICKEL	N/A	170
THALLIUM	3	N/A
VANADIUM	N/A	N/A



SITE 133 EAST (COLUMN 28A TO 34A)
SAMPLE MAP FOR CCPW METALS
IN THE UNSATURATED SOIL ZONE
COMPARED TO IGW SOIL SCREENING LEVELS
AND SOIL REMEDIATION STANDARDS

FIGURE 5-3C

PPG
SITE 133 EAST
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

DATE: 11/28/2018

R

S

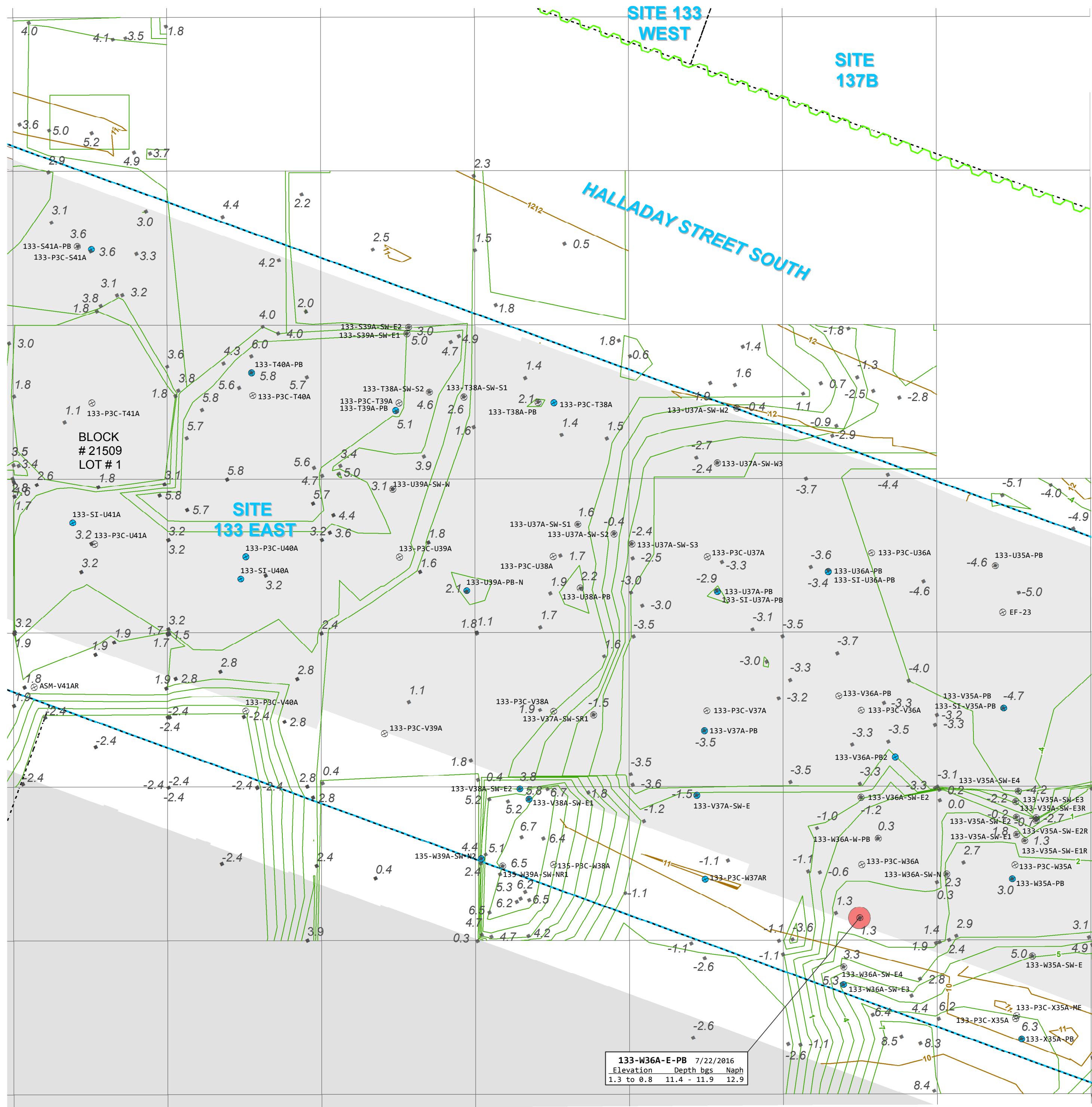
T

U

V

W

X



ABBREVIATIONS:
CCPW - Chromate Chemical Production Waste
Cr⁶ - hexavalent chromium
Cr - chromium
ft - feet
mg/kg - milligrams per kilogram
Naph - naphthalene
NAVD88 - North American Vertical Datum of 1988
NRDCSRS - New Jersey Department of Environmental Protection Non-Residential Direct Contact Soil Remediation Standard
RDCSRS - New Jersey Department of Environmental Protection Residential Direct Contact Soil Remediation Standard

- GENERAL NOTES:**
- G1. The naphthalene data associated with the sample locations shown on this figure are provided in Table 5-4. Data presented in call out boxes on this figure are outliers (i.e., data points that require further explanation). Specific notes on how the New Jersey Department of Environmental Protection's remedial standards are being met and/or how remediation is being achieved/completed for each outlier sample are provided in the Specific Notes in Table 5-4.
 - G2. "Elevation" refers to the sample elevation based on the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
 - G3. Elevation vertical datum is NAVD88, in U.S. survey ft.
 - G4. Results are reported in mg/kg.
 - G5. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
 - G6. Additional sample locations located to the southwest and northeast are shown on Figures 5-4A, 5-4C, and 5-4D.
 - G7. This figure presents data only for locations within the Site boundary that have samples remaining in place.

- SPECIFIC NOTES:**
- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
 - S2. Post-excavation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG SITE 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
 - S3. Conceptual post-excavation elevation contours were generated using professional judgement based on post-excavation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
 - S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr⁶, CCPW, non-Cr constituents, and concrete foundation removal.
 - S5. In Grids U36A, U37A, V35A, W35A, and X35A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

LEGEND

⊗ SAMPLING LOCATION (REMAINING SAMPLES)

○ REMAINING SAMPLES NOT ANALYZED FOR NAPHTHALENE

● RESULT IS BELOW THE MOST STRINGENT STANDARD

● RESULTS EXCEED THE MOST STRINGENT STANDARD, BUT WILL BE ADDRESSED BY INSTITUTIONAL AND/OR ENGINEERING CONTROLS

■ NAPHTHALENE (Naph)

● POST-EXCAVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)

— CONCEPTUAL POST-EXCAVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)

— IN PLACE SHEET PILE (AS OF OCTOBER 2017)

— PRE-REMEDIATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)

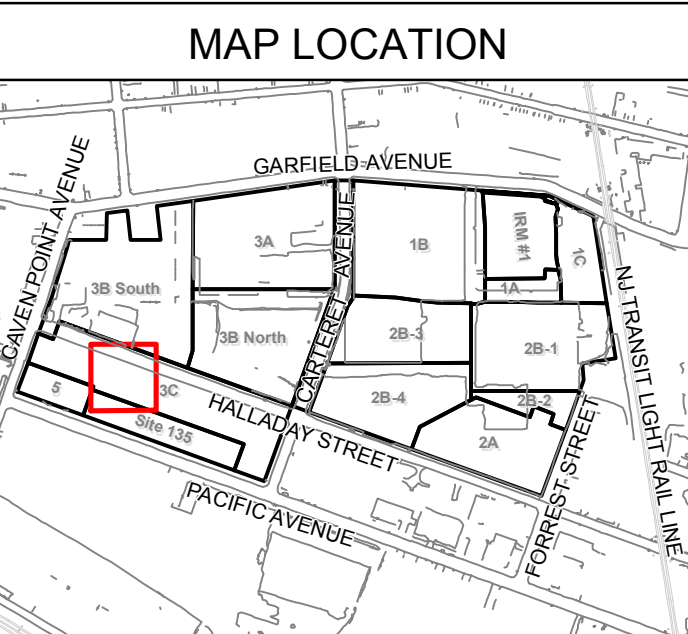
----- PROPERTY LINE

■ FORMER BUILDING SLAB (AVERAGE ELEVATION 12.8 FT NAVD88)

— GRID LAYOUT

□ SITE BOUNDARY

Soil Remediation Standard (mg/kg)		
Analyte	RDCSRS	NRDCSRS
NAPHTHALENE	6	17



PPG
SITE 133 EAST
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

SITE 133 EAST (COLUMN 35A TO 41A)
SAMPLE MAP FOR NAPHTHALENE
COMPARED TO SOIL REMEDIATION STANDARD

DATE: 08/17/2018

FIGURE 5-4B

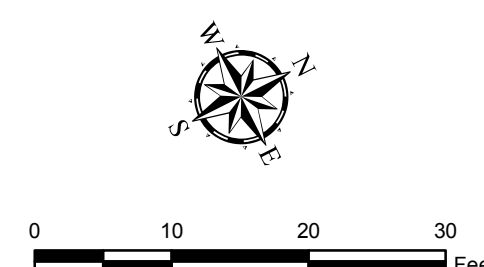
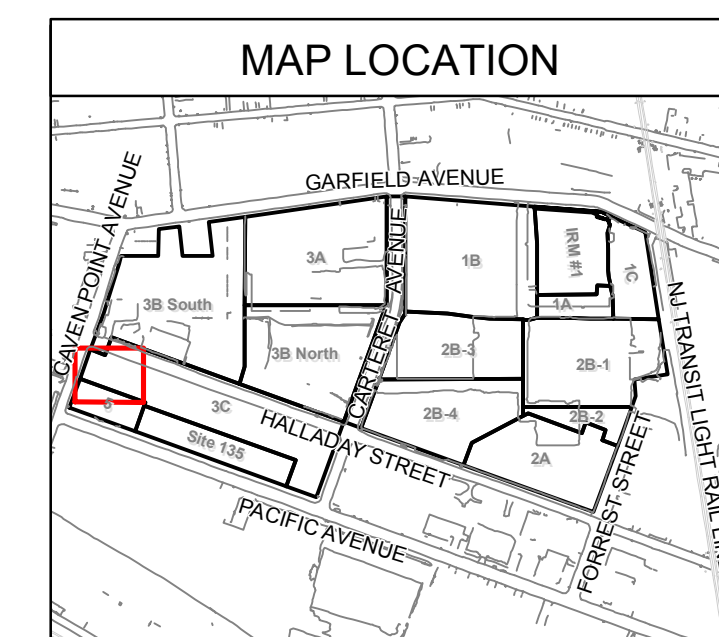
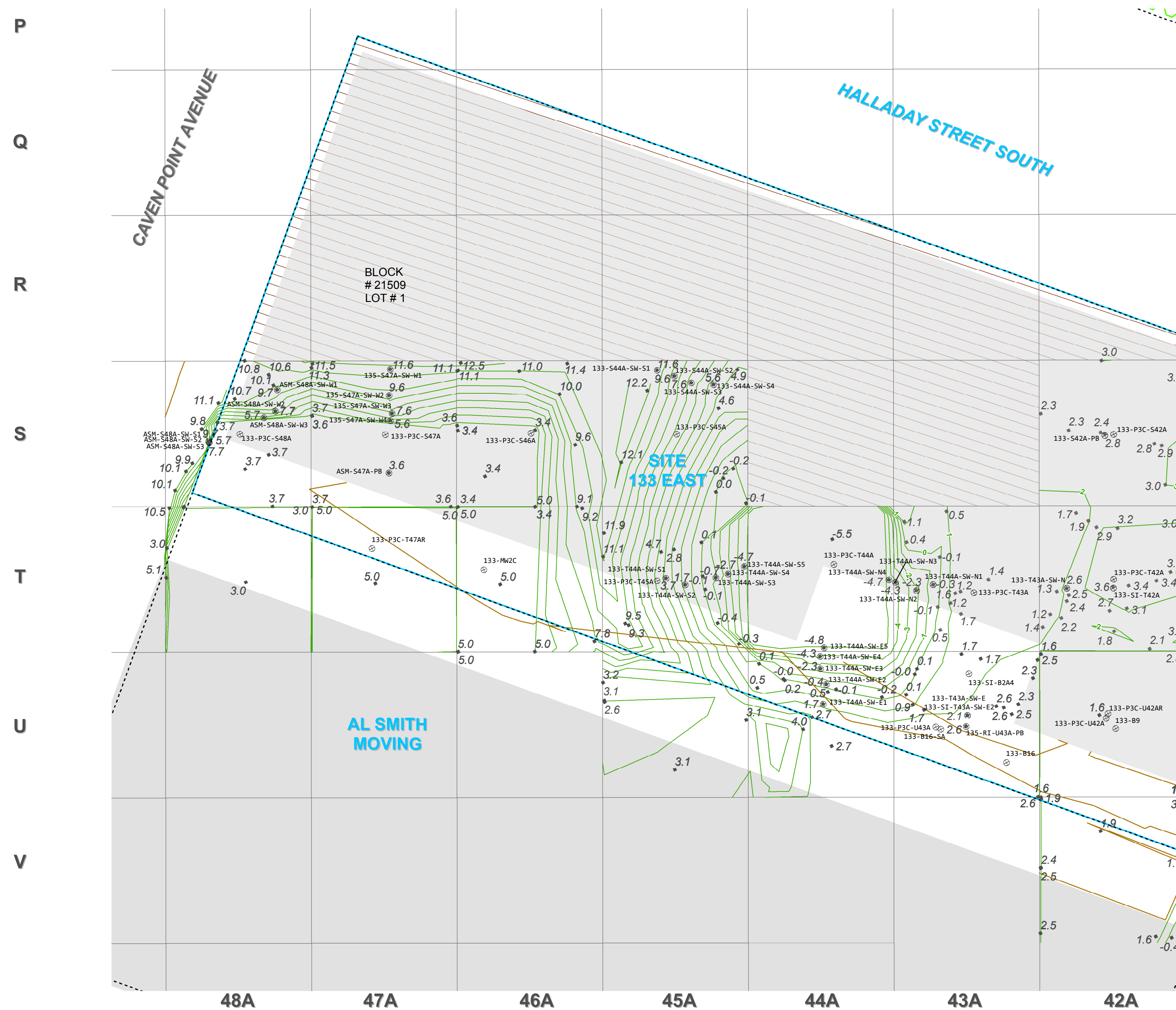
CCPW - Chromate Chemical Production Waste
Cr⁺⁶ - hexavalent chromium
Cr - chromium
DIGWSSL - Default Impact to Groundwater Soil Screening Level
ft - feet
IGW - Impact to Groundwater
mg/kg - milligram per kilogram
NAVD88 - North American Vertical Datum of 1988

- G1. None of the remaining soil samples in the unsaturated zone in this quadrant of Site 133 East were analyzed for naphthalene. Additional sample locations are shown on Figures 5-5B, 5-5C, and 5-5D.
- G2. Elevation vertical datum is NAVD88, in U.S. survey ft.
- G3. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
- G4. This figure presents data only for locations within the Site boundary that have samples remaining in place.

- S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
- S2. Post-excavation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG SITE 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
- S3. Conceptual post-excavation elevation contours were generated using professional judgement based on post-excavation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
- S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr⁶⁺, CCPW, non-Cr constituents, and concrete foundation removal.
- S5. In Grids S48A and U43A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.

	SAMPLING LOCATION (REMAINING SAMPLES)		-3.5'	POST-ELEVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)		FORMER BUILDING SLAB (AVERAGE ELEVATION 12.8 FT NAVD88)
	REMAINING SAMPLES NOT ANALYZED FOR NAPHTHALENE			CONCEPTUAL POST-ELEVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)		GRID LAYOUT
	RESULT IS BELOW THE MOST STRINGENT STANDARD			PRE-REMEDATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)		GRIDS NOT FULLY REMEDIATED AND TO BE INCLUDED IN A SEPARATE SUBMITTAL
						SITE BOUNDARY
				PROPERTY LINE		

Soil Screening Level (mg/kg)	
Analyte	DIGWSSL
NAPHTHALENE	25



PPG
SITE 133 EAST
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

SITE 133 EAST (COLUMN 42A TO 48A)
SAMPLE MAP FOR NAPHTHALENE
IN THE UNSATURATED SOIL ZONE
COMPARED TO IGW SOIL SCREENING LEVEL

FIGURE 5-5A

R

S

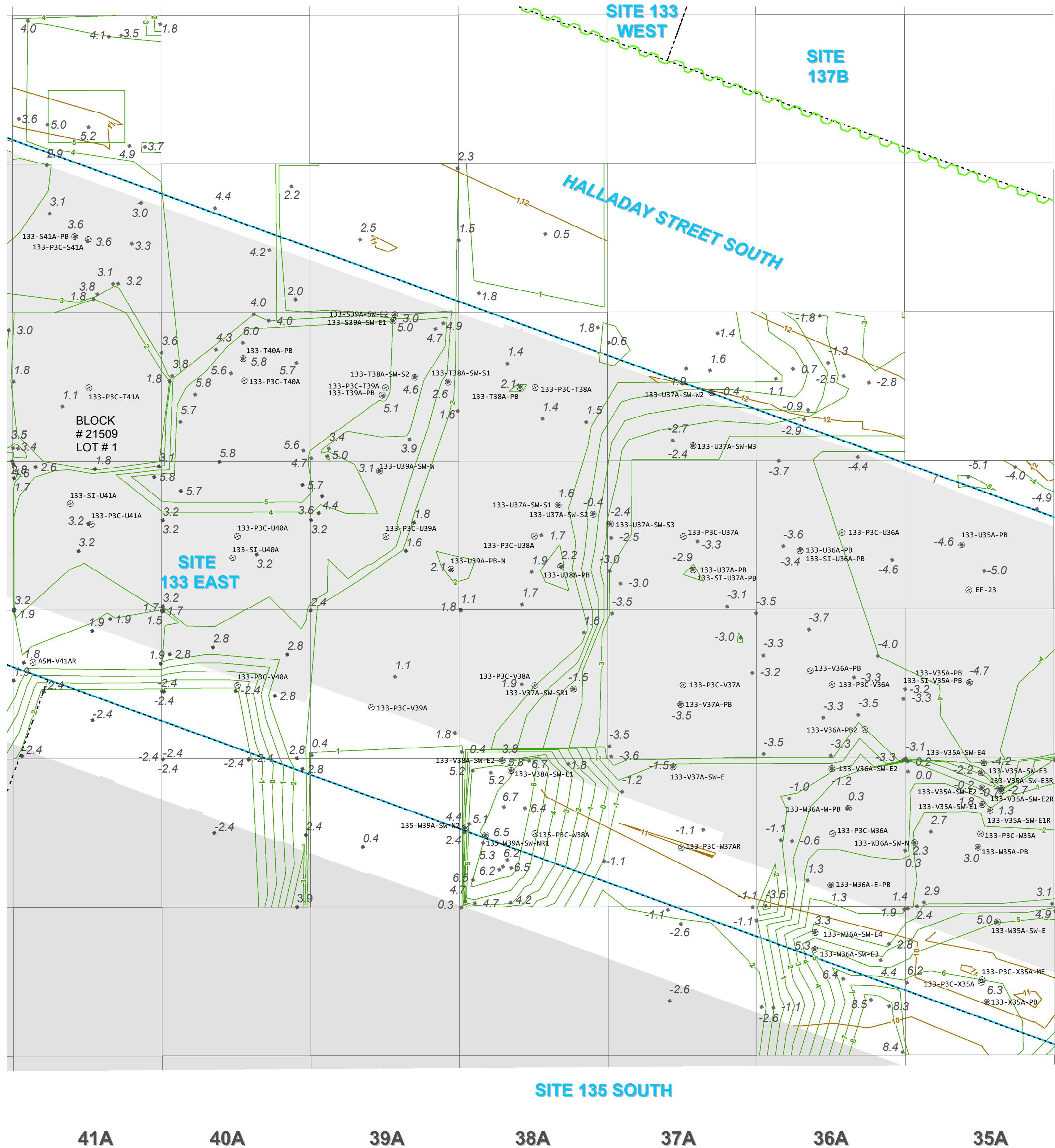
T

U

V

W

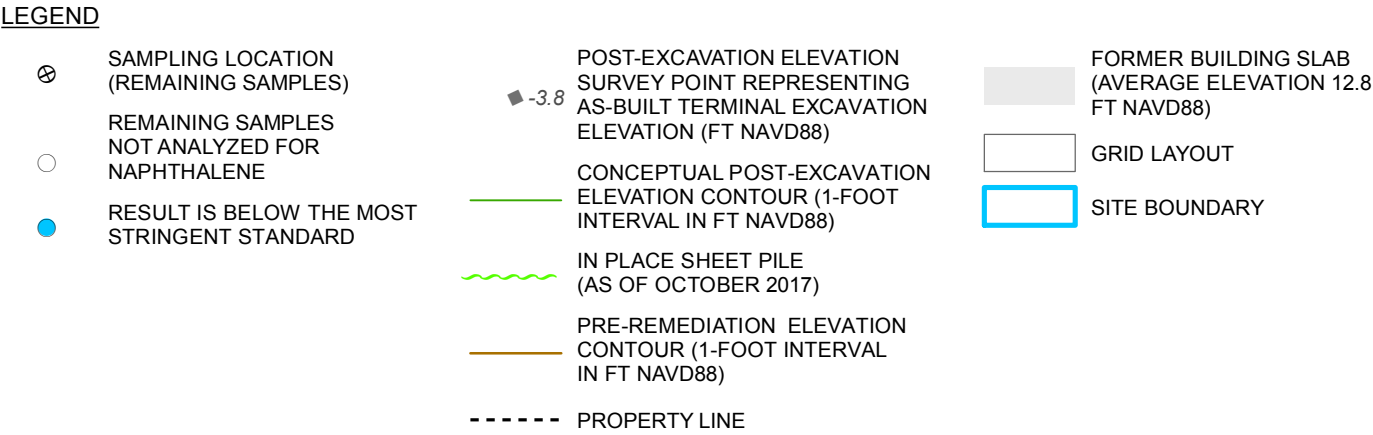
X



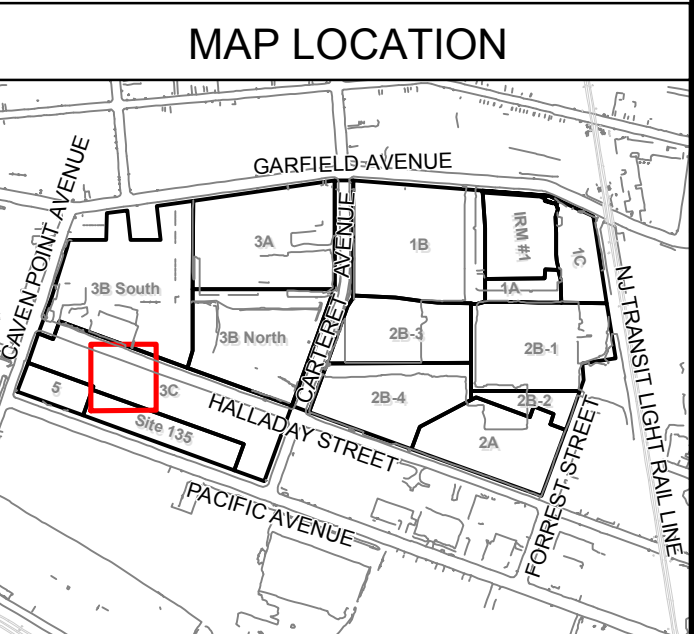
ABBREVIATIONS:
CCPW - Chromate Chemical Production Waste
Cr⁶ - hexavalent chromium
Cr - chromium
DIGWSSL - Default Impact to Groundwater Soil Screening Level
ft - feet
IGW - Impact to Groundwater
mg/kg - milligram per kilogram
NAVD88 - North American Vertical Datum of 1988

GENERAL NOTES:
G1. None of the remaining soil samples in the unsaturated zone in this quadrant of Site 133 East were analyzed for CCPW metals. Additional sample locations are shown on Figures 5-5A, 5-5C, and 5-5D.
G2. Elevation vertical datum is NAVD88, in U.S. survey ft.
G3. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
G4. This figure presents data only for locations within the Site boundary that have samples remaining in place.

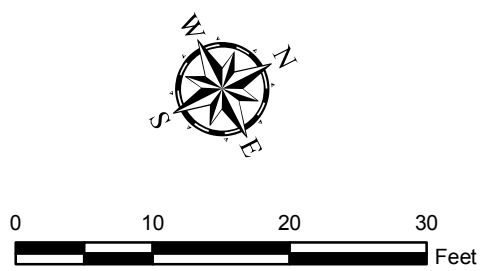
SPECIFIC NOTES:
S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.
S2. Post-excavation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC; PPG SITE 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.
S3. Conceptual post-excavation elevation contours were generated using professional judgement based on post-excavation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).
S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr⁶, CCPW, non-Cr constituents, and concrete foundation removal.
S5. In Grids U36A, U37A, V35A, W35A, and X35A, two sample locations are located adjacent; therefore, the sampling location symbols overlap on the figure.



Soil Screening Level (mg/kg)	
Analyte	DIGWSSL
NAPHTHALENE	25



AECOM



PPG
SITE 133 EAST
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

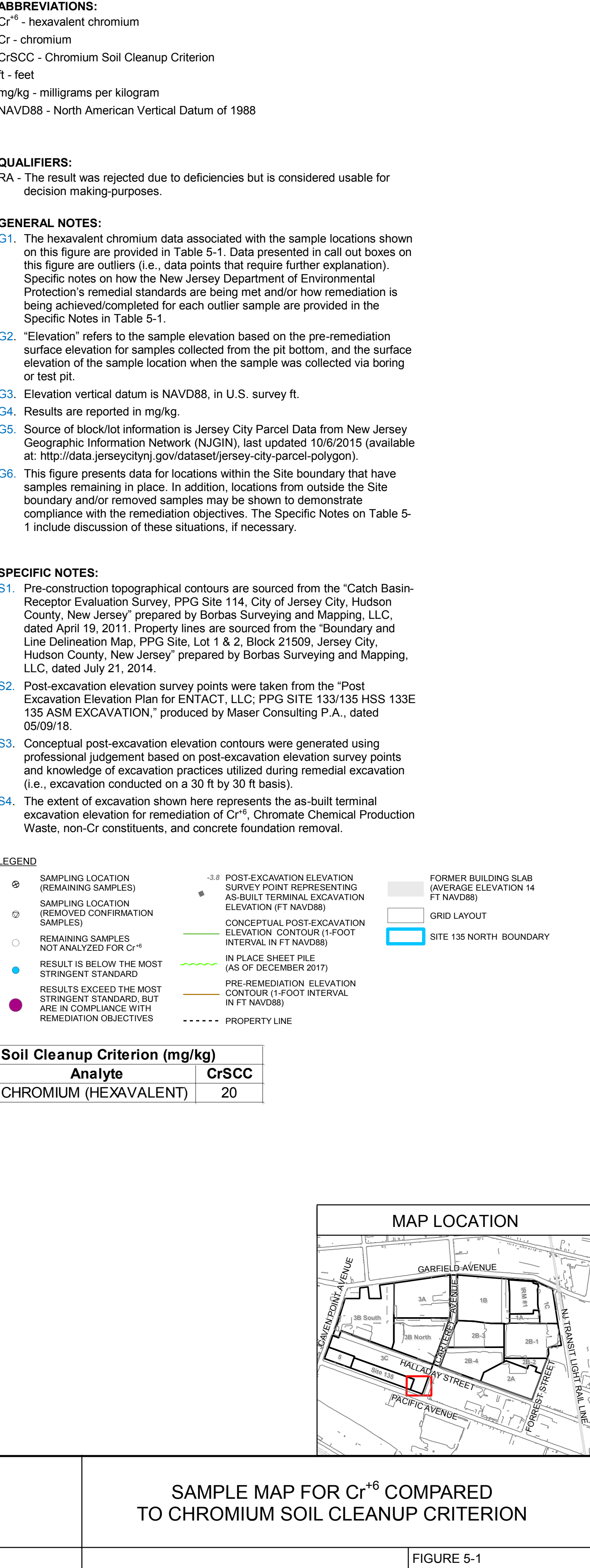
SITE 133 EAST (COLUMN 35A TO 41A)
SAMPLE MAP FOR NAPHTHALENE
IN THE UNSATURATED SOIL ZONE
COMPARED TO IGW SOIL SCREENING LEVEL

DATE: 08/17/2018

FIGURE 5-5B

Appendix D-2

Site 135 North Sample Maps



Appendix D-3

Site 135 South Sample Maps



AL SMITH MOVING

A diagram showing a horizontal line and a diagonal line labeled "PACIFIC AVENUE". A line segment connects a point on the horizontal line to a point on Pacific Avenue. The angle between the horizontal line and this segment is labeled "11".

43A

42A

41A

40A

39A

37A

AECOM

PPG
SITE 135 SOUTH
GARFIELD AVENUE GROUP
JERSEY CITY, NEW JERSEY

SITE 135 SOUTH (COLUMN 37A TO 42A)
SAMPLE MAP FOR Cr⁺⁶ COMPARED
TO CHROMIUM SOIL CLEANUP CRITERION

FIGURE 5-1A

ABBREVIATIONS:

CCPW - Chromate Chemical Production Waste

Cr⁺⁶ - hexavalent chromium

Cr - chromium
CrSCC - Chromium Soil Cleanup Criteria

ft - feet

mg/kg - milligrams per kilogram

NAVD88 - North American Vertical Datum of 1988

GENERAL NOTES:

G1. The hexavalent chromium data associated with the sample locations shown on this figure are provided in Table 5-1. None of the detected Cr⁺⁶ results in this portion of Site 135 South exceeded the CrSCC.

G2. Elevation vertical datum is NAVD88, in U.S. survey ft.

G3. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).

G4. Additional sample locations are shown on Figures 5-1B and 5-1C.

G5. This figure presents data for locations within the Site boundary that have samples remaining in place. In addition, locations from outside the Site boundary and/or removed samples may be shown to demonstrate compliance with the remediation objectives. The Specific Notes on Table 5-1 include discussion of these situations, if necessary.

SPECIFIC NOTES:

S1. Pre-construction topographical contours are sourced from the "Catch Basin-Receptor Evaluation Survey, PPG Site 114, City of Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated April 19, 2011. Property lines are sourced from the "Boundary and Line Delineation Map, PPG Site, Lot 1 & 2, Block 21509, Jersey City, Hudson County, New Jersey" prepared by Borbas Surveying and Mapping, LLC, dated July 21, 2014.

S2. Post-excavation elevation survey points were taken from the "Post Excavation Elevation Plan for ENTACT, LLC: PPG SITE 133/135 HSS 133E 135 ASM EXCAVATION," produced by Maser Consulting P.A., dated 05/09/18.

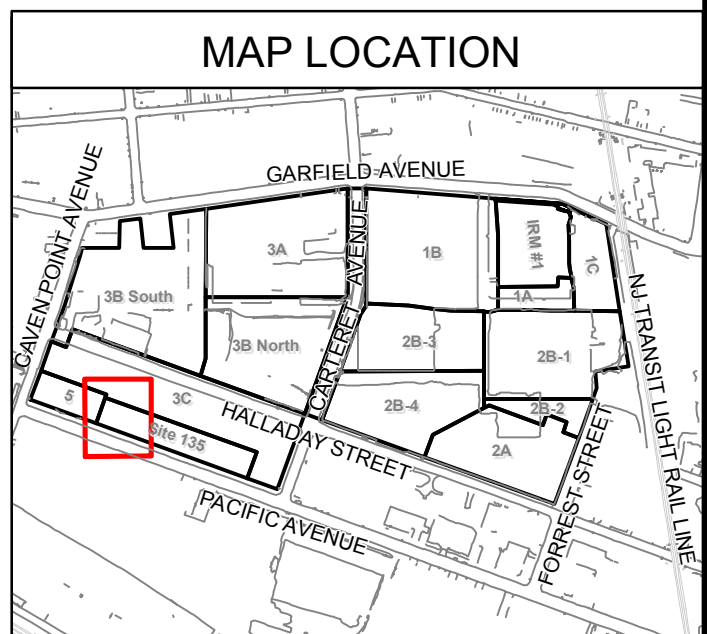
S3. Conceptual post-excavation elevation contours were generated using professional judgement based on post-excavation elevation survey points and knowledge of excavation practices utilized during remedial excavation (i.e., excavation conducted on a 30 ft by 30 ft basis).

S4. The extent of excavation shown here represents the as-built terminal excavation elevation for remediation of Cr⁶⁺, CCPW, non-Cr constituents, and concrete foundation removal.

LEGEND

- | | | | | | |
|---|--|-------|---|--|---|
| ○ | REMAINING SAMPLES
NOT ANALYZED FOR Cr-6 | -3.8 | POST-EXCAVATION ELEVATION
SURVEY POINT REPRESENTING
AS-BUILT TERMINAL EXCAVATION
ELEVATION (FT NAVD88) | | GRID LAYOUT |
| ⊗ | SAMPLING LOCATION
(REMAINING SAMPLES) | | | | SITE BOUNDARY |
| ⊗ | SAMPLING LOCATION
(REMOVED CONFIRMATION
SAMPLES) | | CONCEPTUAL POST-EXCAVATION
ELEVATION CONTOUR (1-FOOT
INTERVAL IN FT NAVD88) | | FORMER BUILDING SLAB
(AVERAGE ELEVATION 12.7
FT NAVD88) |
| ● | RESULT IS BELOW THE MOST
STRINGENT CRITERION | | PRE-REMEDIATION ELEVATION
CONTOUR (1-FOOT INTERVAL
IN FT NAVD88) | | |
| | | ----- | PROPERTY LINE | | |

Soil Cleanup Criterion (mg/kg)	
Analyte	CrSCC
CHROMIUM (HEXAVALENT)	20





GENERAL NOTES:

- G1. The CCPW data associated with the sample locations shown on this figure are provided in Table 5-2. None of the detected CCPW results in this portion of Site 135 South exceeded the standards.
- G2. Elevation vertical datum is NAVD88, in U.S. survey ft.
- G3. Source of block/lot information is Jersey City Parcel Data from New Jersey Geographic Information Network (NJGIN), last updated 10/6/2015 (available at: <http://data.jerseycitynj.gov/dataset/jersey-city-parcel-polygon>).
- G4. Additional sample locations are shown on Figures 5-2A and 5-2C.
- G5. This figure presents data only for locations within the Site boundary that have samples remaining in place.
- G6. There is currently no NJDEP SRS and no NJDEP SCC for total Cr. Therefore, total Cr results are compared to the interim NJDEP Residential SCC for Cr³⁺ of 120,000 mg/kg as the cleanup criteria for soil at the Garfield Avenue Groundwater Site. There is no non-residential SCC for Cr³⁺.

LEGEND

	SAMPLING LOCATION (REMAINING SAMPLES)		POST-EXCAVATION ELEVATION SURVEY POINT REPRESENTING AS-BUILT TERMINAL EXCAVATION ELEVATION (FT NAVD88)		GRID LAYOUT
	REMAINING SAMPLES NOT ANALYZED FOR CCWP METALS		CONCEPTUAL POST-EXCAVATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)		SITE BOUNDARY
	RESULT IS BELOW THE MOST STRINGENT STANDARD		PRE-REMEDIATION ELEVATION CONTOUR (1-FOOT INTERVAL IN FT NAVD88)		FORMER BUILDING SLAB (AVERAGE ELEVATION 12.7 FT NAVD88)
			PROPERTY LINE		

A map showing the intersection of Garfield Avenue and Halladay Street. The subject property, 38 North, is highlighted with a red box. Other streets shown include Convent Avenue, Pacific Avenue, and Forest Street. The map also shows the N. Transit Light Rail Line and various lots and buildings in the area.

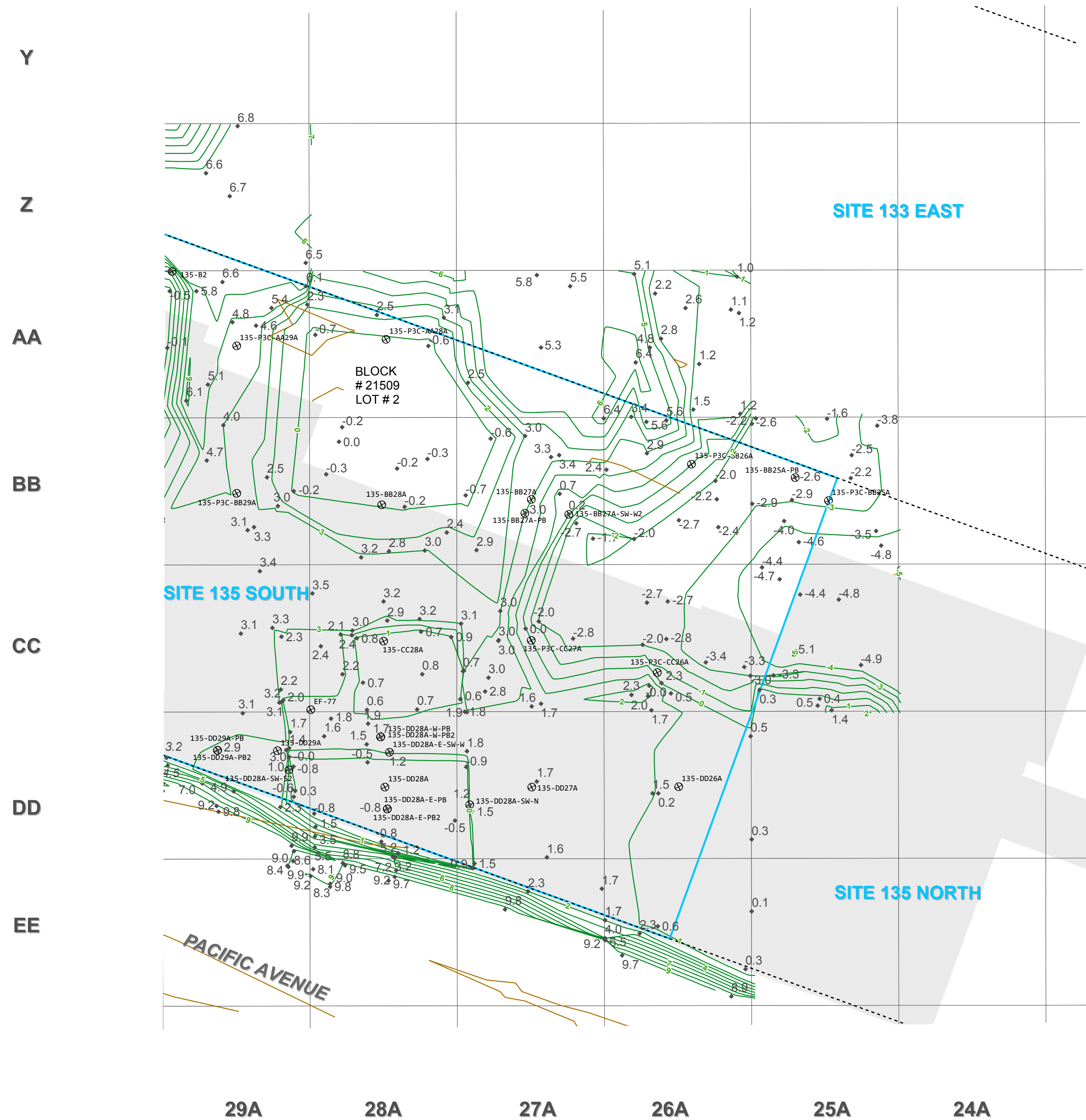


SITE 135 SOUTH (COLUMN 30A TO 36A)
SAMPLE MAP FOR CCPW METALS COMPARED
TO SOIL REMEDIATION STANDARDS

FIGURE 5-2B



FIGURE 5-2C



Appendix D-4

Site 133 East Tables

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
AA21A	133-AA21A-PB	11.3	133-AA21A-PB-14.3-14.8	14.3 - 14.8 ft	-3.0	-3.5	JC4479-2R	JC4479R	09/22/2015	remaining	N	Y		0.83	J		
AA21A	133-AA21A-PB	11.3	133-AA21A-PB-14.3-14.8X	14.3 - 14.8 ft	-3.0	-3.5	JC4479-3R	JC4479R	09/22/2015	remaining	FD	Y		0.74	J		
AA21A	133-P3C-AA21A	11.3	133-P3C-AA21A-14.5-15.0	14.5 - 15.0 ft	-3.3	-3.8	JB42618-6	JB42618	07/19/2013	remaining	N	Y		< 0.084	UJ		
AA21A	133-P3C-AA21A	11.3	133-P3C-AA21A-15.5-16.0	15.5 - 16.0 ft	-4.3	-4.8	JB42618-7R	JB42618R	07/19/2013	remaining	N	Y		< 0.066	UJ		
AA21A	133-P3C-AA21A	11.3	133-P3C-AA21A-16.0-16.5	16.0 - 16.5 ft	-4.8	-5.3	JB42618-8	JB42618	07/19/2013	remaining	N	Y		2.7	J		
AA22A	133-AA22A-PB	13.4	133-AA22A-PB-18.3-18.8	18.3 - 18.8 ft	-4.9	-5.4	JC4544-2	JC4544	09/23/2015	remaining	N	Y		0.92	J	S1	
AA22A	133-P3C-AA22A	13.4	133-P3C-AA22A-19.0-19.5	19.0 - 19.5 ft	-5.6	-6.1	JB81735-8	JB81735	11/13/2014	remaining	N	Y		1.7	J	S1	
AA22A	133-P3C-AA22A	13.4	133-P3C-AA22A-19.5-20.0	19.5 - 20.0 ft	-6.1	-6.6	JB81735-9	JB81735	11/13/2014	remaining	N	Y		0.52	J	S1	
AA22A	133-P3C-AA22A	13.4	133-P3C-AA22A-20.0-20.5	20.0 - 20.5 ft	-6.6	-7.1	JB81735-10	JB81735	11/13/2014	remaining	N	Y		2.2	J	S1	
AA23A	133-AA23A-PB	11.1	133-AA23A-PB-14.8-15.3	14.8 - 15.3 ft	-3.7	-4.2	JC3445-2	JC3445	09/09/2015	remaining	N	Y		2.5	RA		
AA23A	133-AA23A-PB	11.1	133-AA23A-PB-14.8-15.3X	14.8 - 15.3 ft	-3.7	-4.2	JC3445-3	JC3445	09/09/2015	remaining	FD	Y		< 0.36	RA		
AA23A	EF-15	12.8	EF-B15-17.0	17.0 - 17.5 ft	-4.2	-4.7	460-25899-19	460258991	04/28/2011	remaining	N	Y		< 0.85	U		
AA23A	EF-15	12.8	EF-B15-22.0	22.0 - 22.5 ft	-9.2	-9.7	460-25899-20	460258991	04/28/2011	remaining	N	Y		< 0.76	U		
AA24A	133-AA24A-PB	13.3	133-AA24A-PB-16.9-17.4	16.9 - 17.4 ft	-3.6	-4.1	JC18360-2	JC18360	04/14/2016	remaining	N	Y		0.83	J		
AA25A	133-AA24A-SW-S1	13.3	133-AA24A-SW-S-12.9-13.4	12.9 - 13.4 ft	0.4	-0.1	JC18883-4	JC18883	04/22/2016	remaining	N	Y		0.53	J		
AA25A	133-AA24A-SW-S2	13.3	133-AA24A-SW-S-14.9-15.4	14.9 - 15.4 ft	-1.6	-2.1	JC18883-3R	JC18883R	04/22/2016	remaining	N	Y		1.5	J		
AA25A	133-AA25A-PB3	13.3	133-AA25A-PB-12.4-12.9	12.4 - 12.9 ft	0.9	0.4	JC20620-2R	JC20620R	05/19/2016	remaining	N	Y		1.8	RA		
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-14.0-14.5	14.0 - 14.5 ft	-0.8	-1.3	JB62137-4R	JB62137R	03/17/2014	remaining	N	Y		1.6	J		
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-15.0-15.5	15.0 - 15.5 ft	-1.8	-2.3	JB62137-5R	JB62137R	03/17/2014	remaining	N	Y		12.3	J		
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-15.5-16.0	15.5 - 16.0 ft	-2.3	-2.8	JB62137-6R	JB62137R	03/17/2014	remaining	N	Y		1.6	J		
AA25A	133-Z25A-SW-E1	13.1	133-Z25A-SW-E-12.6-13.1	12.6 - 13.1 ft	0.5	0.0	JC18883-6R	JC18883R	04/22/2016	remaining	N	Y		9.0	J		
AA25A	133-Z25A-SW-E2	13.1	133-Z25A-SW-E-14.6-15.1	14.6 - 15.1 ft	-1.5	-2.0	JC18883-5	JC18883	04/22/2016	remaining	N	Y		0.45	J		
AA26A	133-AA26A-N-SW-S	11.4	133-AA26A-N-SW-S-6.6-7.1	6.6 - 7.1 ft	4.8	4.3	JC19057-5	JC19057	04/26/2016	remaining	N	Y		0.49	J	S2, S3	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-5.0-5.5	5.0 - 5.5 ft	6.4	5.9	JB64207-3R	JB64207R	04/09/2014	removed	N	Y		0.27	J	S2, S3	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-7.0-7.5	7.0 - 7.5 ft	4.4	3.9	JB64207-4R	JB64207R	04/09/2014	removed	N	Y		0.58	J	S2, S3	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-9.0-9.5	9.0 - 9.5 ft	2.4	1.9	JB64207-5	JB64207	04/09/2014	remaining	N	Y		0.73	J	S2, S3	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-11.0-11.5	11.0 - 11.5 ft	0.4	-0.1	JB64207-6R	JB64207R	04/09/2014	remaining	N	Y		0.34	J	S2, S3	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-13.0-13.5	13.0 - 13.5 ft	-1.6	-2.1	JB64207-7R	JB64207R	04/09/2014	remaining	N	Y		0.75	J	S2, S3	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-13.5-14.0	13.5 - 14.0 ft	-2.1	-2.6	JB64207-8R	JB64207R	04/09/2014	remaining	N	Y		0.41	J	S2, S3	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-14.0-14.5	14.0 - 14.5 ft	-2.6	-3.1	JB64207-9	JB64207	04/09/2014	remaining	N	Y		9.7	J	S2, S3	
AA26A	133-Z26A-SW-E1	13.1	133-Z26A-SW-E-10.5-11.0	10.5 - 11.0 ft	2.6	2.1	JC19057-2	JC19057	04/26/2016	remaining	N	Y		< 0.39	UJ	S2, S3	
AA26A	135-AA26A-N-SW-S	11.4	133-AA26A-N-SW-S-8.6-9.1	8.6 - 9.1 ft	2.8	2.3	JC20733-4R	JC20733R	05/20/2016	remaining	N	Y		0.40	J	S2, S3	
AA26A	135-AA26A-PB-N2	11.4	133-AA26A-PB-N-10.2-10.7	10.2 - 10.7 ft	1.2	0.7	JC20733-5R	JC20733R	05/20/2016	remaining	N	Y		0.89	J	S2, S3	
AA27A	133-B18	10.4	133-B18D (4.5-5.0)J49295-15R	4.5 - 5.0 ft	5.9	5.4	J49295-15R	J49295	12/14/2006	remaining	N	Y		< 1.6	U	S2, S4	
AA27A	133-B18	10.4	PPG-133-B18E 8.5-9.0 797398	8.5 - 9.0 ft	1.9	1.4	797398	B500	01/04/2007	remaining	N	Y		< 3.66	UJ	S2, S4	
AA27A	133-B18	10.4	PPG-133-B18F 12.0-13.0 797399	12.0 - 13.0 ft	-1.6	-2.6	797399	B500	01/04/2007	remaining	N	Y		< 2.53	UJ	S2, S4	
AA27A	133-B18	10.4	PPG-133-B18G 16.0-17.0 797400	16.0 - 17.0 ft	-5.6	-6.6	797400	B500	01/04/2007	remaining	N	Y		< 3.52	UJ	S2, S4	
AA27A	133-B18	10.4	PPG-133-B18GD 16.0-17.0 797401	16.0 - 17.0 ft	-5.6	-6.6	797401	B500	01/04/2007	remaining	FD	Y		< 3.62	UJ	S2, S4	
AA27A	133-B18	10.4	PPG-133-B18H 20.2-20.7 797402	20.2 - 20.7 ft	-9.8	-10.3	797402	B500	01/04/2007	remaining	N	Y		< 2.31	UJ	S2, S4	
AA27A	133-P3C-AA27A	10.4	133-P3C-AA27A-6.5-7.0	6.5 - 7.0 ft	3.9	3.4	JB37688-4	JB37688	05/22/2013	remaining	N	Y		0.11	RA	S2, S4	
AA27A	133-P3C-AA27A	10.4	133-P3C-AA27A-10.5-11.0	10.5 - 11.0 ft	-0.1	-0.6	JB37688-1	JB37688	05/22/2013	remaining	N	Y		0.95	RA	S2, S4	
AA27A	133-P3C-AA27A	10.4	133-P3C-AA27A-14.2-14.7	14.2 - 14.7 ft	-3.8	-4.3	JB37688-2	JB37688	05/22/2013	remaining	N	Y		0.36	RA	S2, S4	
AA27A	133-P3C-AA27A	10.4	133-P3C-AA27A-14.7-15.2	14.7 - 15.2 ft	-4.3	-4.8	JB37688-3	JB37688	05/22/2013	remaining	N	Y		0.48	RA	S2, S4	
AA27A	133-P3C-AA27A-ME	11.7	133-P3C-AA27A-5.0-5.5	5.0 - 5.5 ft	6.7	6.2	JB96555-4	JB96555	06/08/2015	removed	N	Y		< 0.35	UJ	S2, S4	
AA27A	133-P3C-AA27A-ME	11.7	133-P3C-AA27A-7.0-7.5	7.0 - 7.5 ft	4.7	4.2	JB96555-5R	JB96555R	06/08/2015	remaining	N	Y		0.54	J	S2, S4	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-3.0-3.5	3.0 - 3.5 ft	7.1	6.6	JB65662-2R	JB65662R	04/25/2014	removed	N	Y		6.8	J	S2, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-4.5-5.0	4.5 - 5.0 ft	5.6	5.1	JB37688-11	JB37688	05/22/2013	removed	N	Y		0.26	RA	S2, S5	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-6.5-7.0	6.5 - 7.0 ft	3.6	3.1	JB37688-12	JB37688	05/22/2013	removed	N	Y		< 0.10	RA	S2, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-6.5-7.0X	6.5 - 7.0 ft	3.6	3.1	JB37688-13R	JB37688R	05/22/2013	removed	FD	Y		< 0.31	RA	S2, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-8.5-9.0	8.5 - 9.0 ft	1.6	1.1	JB37688-14R	JB37688R	05/22/2013	removed	N	Y		< 0.34	RA	S2, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-10.5-11.0	10.5 - 11.0 ft	-0.4	-0.9	JB37688-6R	JB37688R	05/22/2013	remaining	N	Y		< 0.31	RA	S2, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-12.5-13.0	12.5 - 13.0 ft	-2.4	-2.9	JB37688-7	JB37688	05/22/2013	remaining	N	Y		0.33	RA	S2, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-14.5-15.0	14.5 - 15.0 ft	-4.4	-4.9	JB37688-8	JB37688	05/22/2013	remaining	N	Y		0.33	RA	S2, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-15.3-15.8	15.3 - 15.8 ft	-5.2	-5.7	JB37688-9	JB37688	05/22/2013	remaining	N	Y		0.16	RA	S2, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-15.8-16.3	15.8 - 16.3 ft	-5.7	-6.2	JB37688-10	JB37688	05/22/2013	remaining	N	Y		1.2	RA	S2, S5	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-5.0-5.5	5.0 - 5.5 ft	7.6	7.1	JB65408-3	JB65408	04/23/2014	removed	N	Y		3.5	J	S2, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-7.0-7.5	7.0 - 7.5 ft	5.6	5.1	JB65408-4	JB65408	04/23/2014	removed	N	Y		0.77	J	S2, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-9.0-9.5	9.0 - 9.5 ft	3.6	3.1	JB65408-5	JB65408	04/23/2014	remaining	N	Y		0.22	J	S2, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-11.0-11.5	11.0 - 11.5 ft	1.6	1.1	JB65408-6	JB65408	04/23/2014	remaining	N	Y		1.5	J	S2, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-13.0-13.5	13.0 - 13.5 ft	-0.4	-0.9	JB65408-7	JB65408	04/23/2014	remaining	N	Y		1.5	J	S2, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-15.0-15.5	15.0 - 15.5 ft	-2.4	-2.9	JB65408-8	JB65408	04/23/2014	remaining	N	Y		1.5	J	S2, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-16.0-16.5	16.0 - 16.5 ft	-3.4	-3.9	JB65408-9	JB65408	04/23/2014	remaining	N	Y		0.42	J	S2, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-16.5-17.0	16.5 - 17.0 ft	-3.9	-4.4	JB65408-10R	JB65408R	04/23/2014	remaining	N	Y		2.3	J	S2, S6	
BB21A	133-P3C-BB21A	12.9	133-P3C-BB21A-16.0-16.5	16.0 - 16.5 ft	-3.1	-3.6	JB81735-21	JB81735	11/13/2014	remaining	N	Y		6.2	J		
BB21A	133-P3C-BB21A	12.9	133-P3C-BB21A-16.5-17.0	16.5 - 17.0 ft	-3.6	-4.1	JB81735-22R	JB81735R	11/13/2014	remaining	N	Y		0.31	J		
BB21A	133-P3C-BB21A	12.9	133-P3C-BB21A-17.0-17.5	17.0 - 17.5 ft	-4.1	-4.6	JB81735-23R	JB81735R	11/13/2014	remaining	N	Y		3.0	J		
BB22A	133-BB22A-S-PB	12.9	133-BB22A-S-PB-16.1-16.6	16.1 - 16.6 ft	-3.2	-3.7	JC16541-2	JC16541	03/18/2016	remaining	N	Y		2.7	J	S7	
BB22A	133-BB22A-S-SW-N	12.9	133-BB22A-S-SW-N-14.3-14.8	14.3 - 14.8 ft	-1.4	-1.9	JC16541-3R	JC16541R	03/18/2016	remaining	N	Y		4.4	J	S7	
BB22A	133-P3C-BB22A	12.9	133-P3C-BB22A-13.0-13.5	13.0 - 13.5 ft	-0.1	-0.6	JB61714-10R	JB61714R	03/12/2014	removed	N	Y		0.94	J	S7	
BB22A	133-P3C-BB22A	12.9	133-P3C-BB22A-15.0-15.5	15.0 - 15.5 ft	-2.1	-2.6	JB61714-11R	JB61714R	03/12/2014	remaining	N	Y		3.2	J	S7	
BB22A	133-P3C-BB22A	12.9	133-P3C-BB22A-15.5-16.0	15.5 - 16.0 ft	-2.6	-3.1	JB61714-13T	JB61714T	03/12/2014	remaining	N	Y		19.7	J	S7	
BB23A	133-BB23A-PB	11.6	133-BB23A-PB-15.2-15.7	15.2 - 15.7 ft	-3.6	-4.1	JC17466-2R	JC17466R	04/01/2016	remaining	N	Y		1.1	J		
BB24A	133-P3C-BB24A	11.8	133-P3C-BB24A-16.0-16.5	16.0 - 16.5 ft	-4.2	-4.7	JB64106-4R	JB64106R	04/08/2014	remaining	N	Y		2.1	J	S8	
BB24A	135-BB24A-PB	11.8	135-BB24A-PB-16.2-16.7	16.2 - 16.7 ft	-4.4	-4.9	JC18798-3	JC18798	04/21/2016	remaining	N	Y		< 0.51	RA	S8	
BB24A	135-BB24A-PB	11.8	135-BB24A-PB-16.2-16.7X	16.2 - 16.7 ft	-4.4	-4.9	JC18798-4	JC18798	04/21/2016	remaining	FD	Y		< 0.50	RA	S8	
BB25A	135-BB25A-PB	11.5	135-BB25A-PB-14.1-14.6	14.1 - 14.6 ft	-2.6	-3.1	JC21493-2	JC21493	06/03/2016	remaining	N	Y		0.41	J	S9, S10	
BB25A	135-BB25A-SW-W	11.5	135-BB25A-SW-W-12.0-12.5	12.0 - 12.5 ft	-0.5	-1.0	JC21797-2	JC21797	06/07/2016	removed	N	Y		0.97	RA	S9, S11	
BB26A	135-BB25A-SW-S1	11.5	135-BB25A-SW-S-8.1-8.6	8.1 - 8.6 ft	3.4	2.9	JC21493-5R	JC21493R	06/03/2016	removed	N	Y		7.9	J	S2, S12	
BB26A	135-BB25A-SW-S2	11.5	135-BB25A-SW-S-10.1-10.6	10.1 - 10.6 ft	1.4	0.9	JC21493-4	JC21493	06/03/2016	removed	N	Y		1.2	J	S2, S12	
BB26A	135-BB25A-SW-S3	11.5	135-BB25A-SW-S-12.1-12.6	12.1 - 12.6 ft	-0.6	-1.1	JC21493-3	JC21493	06/03/2016	removed	N	Y		0.73	J	S2, S12	
BB26A	135-BB26A-PB	12.1	135-BB26A-PB-6.7-7.2	6.7 - 7.2 ft	5.4	4.9	JC20248-6R	JC20248R	05/13/2016	removed	N	Y		0.45	J	S2, S12	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-7.0-7.5	7.0 - 7.5 ft	5.1	4.6	JB37831-2	JB37831	05/23/2013	removed	N	Y		0.49	RA	S2, S12	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-7.0-7.5X	7.0 - 7.5 ft	5.1	4.6	JB37831-3R	JB37831R	05/23/2013	removed	FD	Y		1.1	RA	S2, S12	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-9.0-9.5	9.0 - 9.5 ft	3.1	2.6	JB37831-4	JB37831	05/23/2013	removed	N	Y		0.24	RA	S2, S12	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-11.0-11.5	11.0 - 11.5 ft	1.1	0.6	JB37831-5R	JB37831R	05/23/2013	removed	N	Y		< 0.37	RA	S2, S12	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-12.7-13.2	12.7 - 13.2 ft	-0.6	-1.1	JB37831-6R	JB37831R	05/23/2013	remaining	N	Y		3.3	RA	S2	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-14.6-15.1	14.6 - 15.1 ft	-2.5	-3.0	JB37831-7	JB37831	05/23/2013	remaining	N	Y		0.43	RA	S2	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-15.1-15.6	15.1 - 15.6 ft	-3.0	-3.5	JB37831-8	JB37831	05/23/2013	remaining	N	Y		1.7	RA	S2	
CC22A	133-BB22A-SW-E3	12.9	133-BB22A-SW-E-14.1-14.6	14.1 - 14.6 ft	-1.2	-1.7	JC16541-4R	JC16541R	03/18/2016	remaining	N	Y		3.4	J	S8	
CC22A	135-CC23A-SW-N3	11.0	135-CC23A-SW-N-11.1-11.6	11.1 - 11.6 ft	-0.1	-0.6	JC17367-3R	JC17367R	03/31/2016	removed	N	Y		< 0.16	UJ	S8, S13	
CC22A	135-CC23A-SW-N4	11.0	135-CC23A-SW-N-13.1-13.6	13.1 - 13.6 ft	-2.1	-2.6	JC17367-2R	JC17367R	03/31/2016	remaining	N	Y		2.2	J	S8	
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-12.0-12.5	12.0 - 12.5 ft	-0.8	-1.3	JB37831-13R	JB37831R	05/23/2013	removed	N	Y		0.37	RA	S8, S13	
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-12.5-13.0	12.5 - 13.0 ft	-1.3	-1.8	JB37831-14R	JB37831R	05/23/2013	remaining	N	Y		1.3	RA	S8	
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-13.0-13.5	13.0 - 13.5 ft	-1.8	-2.3	JB37831-15R	JB37831R	05/23/2013	remaining	N	Y		3.5	RA	S8	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
CC23A	135-B1	10.5	PPG-135-B1G 17.0-17.5 797407	17.0 - 17.5 ft	-6.5	-7.0	797407	B500	01/04/2007	remaining	N	Y		< 3.59	UJ	S14, S8	
CC23A	135-B1	10.5	PPG-135-B1H 20.6-21.1 797408	20.6 - 21.1 ft	-10.1	-10.6	797408	B500	01/04/2007	remaining	N	Y		< 2.53	UJ	S14, S8	
CC23A	135-CC23A-PB	11.0	135-CC23A-PB-14.0-14.5	14.0 - 14.5 ft	-3.0	-3.5	JC17465-2R	JC17465R	04/01/2016	remaining	N	Y		1.4	J	S14, S8	
CC23A	135-CC24A-SW-N	14.0	135-CC24A-SW-N-18.4-18.9	18.4 - 18.9 ft	-4.4	-4.9	JC18798-2	JC18798	04/21/2016	remaining	N	Y		0.56	RA	S14, S8	
R41A	P4-HAL-R41A	11.7	P4-HAL-R41-6.5-7.0	6.5 - 7.0 ft	5.2	4.7	JB76177-4R	JB76177R	09/10/2014	removed	N	Y		0.52	J	S15, S16, S17	
R41A	P4-HAL-R41A	11.7	P4-HAL-R41-8.5-9.0	8.5 - 9.0 ft	3.2	2.7	JB76177-5R	JB76177R	09/10/2014	remaining	N	Y		1.2	J	S15, S17	
R41A	P4-HAL-R41A	11.7	P4-HAL-R41-10.5-11.0	10.5 - 11.0 ft	1.2	0.7	JB76177-6R	JB76177R	09/10/2014	remaining	N	Y		0.65	J	S15, S17	
R41A	P4-HAL-R41A	11.7	P4-HAL-R41-12.5-13.0	12.5 - 13.0 ft	-0.8	-1.3	JB76177-7R	JB76177R	09/10/2014	remaining	N	Y		0.31	J	S15, S17	
R41A	P4-HAL-R41A	11.7	P4-HAL-R41-14.5-15.0	14.5 - 15.0 ft	-2.8	-3.3	JB76177-8R	JB76177R	09/10/2014	remaining	N	Y		0.61	J	S15, S17	
R41A	P4-HAL-R41A	11.7	P4-HAL-R41-15.0-15.5	15.0 - 15.5 ft	-3.3	-3.8	JB76177-9	JB76177	09/10/2014	remaining	N	Y		< 0.20	UJ	S15, S17	
R41A	P4-HAL-R41A	11.7	P4-HAL-R41-15.5-16.0	15.5 - 16.0 ft	-3.8	-4.3	JB76177-10	JB76177	09/10/2014	remaining	N	Y		3.0	J	S15, S17	
S38A	133-S38A-SW-S	12.1	133-S38A-SW-S-9.6-10.1	10.6 - 11.1 ft	1.5	1.0	JB98468-3R	JB98468R	07/06/2015	remaining	N	Y		0.58	J	S15, S18	
S38A	133-S38A-SW-S	12.1	133-S38A-SW-S-9.6-10.1X	10.6 - 11.1 ft	1.5	1.0	JB98468-4	JB98468	07/06/2015	remaining	FD	Y		< 0.24	UJ	S15, S18	
S38A	P4-HAL-S38A	12.1	P4-HAL-S38A-11.5-12.0	11.5 - 12.0 ft	0.6	0.1	JB76853-5	JB76853	09/17/2014	remaining	N	Y		0.64	J	S15	
S38A	P4-HAL-S38A	12.1	P4-HAL-S38A-13.5-14.0	13.5 - 14.0 ft	-1.4	-1.9	JB76853-7R	JB76853R	09/17/2014	remaining	N	Y		0.53	J	S15	
S38A	P4-HAL-S38A	12.1	P4-HAL-S38A-14.0-14.5	14.0 - 14.5 ft	-1.9	-2.4	JB76853-6R	JB76853R	09/17/2014	remaining	N	Y		1.4	J	S15	
S39A	133-S39A-PB	11.0	133-HSS-S39A-PB-8.5-9.0	8.5 - 9.0 ft	2.5	2.0	JB97954-2R	JB97954R	06/26/2015	remaining	N	Y		0.48	RA	S15	
S39A	P4-HAL-S39A	11.0	P4-HAL-S39A-10.5-11.0	10.5 - 11.0 ft	0.5	0.0	JB78630-6R	JB78630R	10/07/2014	remaining	N	Y		2.8	J	S15	
S39A	P4-HAL-S39A	11.0	P4-HAL-S39A-12.5-13.0	12.5 - 13.0 ft	-1.5	-2.0	JB78630-7	JB78630	10/07/2014	remaining	N	Y		< 0.20	UJ	S15	
S39A	P4-HAL-S39A	11.0	P4-HAL-S39A-13.0-13.5	13.0 - 13.5 ft	-2.0	-2.5	JB78630-8R	JB78630R	10/07/2014	remaining	N	Y		0.33	J	S15	
S39A	P4-HAL-S39A	11.0	P4-HAL-S39A-13.5-14.0	13.5 - 14.0 ft	-2.5	-3.0	JB78630-9R	JB78630R	10/07/2014	remaining	N	Y		1.1	J	S15	
S40A	133-P3C-S40A	11.4	133-P3C-S40A-7.0-7.5	7.0 - 7.5 ft	4.4	3.9	JB42537-2R	JB42537R	07/18/2013	removed	N	Y		0.36	J	S15, S19	
S40A	133-P3C-S40A	11.4	133-P3C-S40A-9.0-9.5	9.0 - 9.5 ft	2.4	1.9	JB42537-3R	JB42537R	07/18/2013	remaining	N	Y		0.37	J	S15	
S40A	133-P3C-S40A	11.4	133-P3C-S40A-11.0-11.5	11.0 - 11.5 ft	0.4	-0.1	JB42537-4R	JB42537R	07/18/2013	remaining	N	Y		0.30	J	S15	
S40A	133-P3C-S40A	11.4	133-P3C-S40A-11.0-11.5X	11.0 - 11.5 ft	0.4	-0.1	JB42537-5R	JB42537R	07/18/2013	remaining	FD	Y		0.26	J	S15	
S40A	133-P3C-S40A	11.4	133-P3C-S40A-13.0-13.5	13.0 - 13.5 ft	-1.6	-2.1	JB42537-6R	JB42537R	07/18/2013	remaining	N	Y		0.55	J	S15	
S40A	133-P3C-S40A	11.4	133-P3C-S40A-13.5-14.0	13.5 - 14.0 ft	-2.1	-2.6	JB42537-7R	JB42537R	07/18/2013	remaining	N	Y		0.29	J	S15	
S40A	133-P3C-S40A	11.4	133-P3C-S40A-14.0-14.5	14.0 - 14.5 ft	-2.6	-3.1	JB42537-8R	JB42537R	07/18/2013	remaining	N	Y		3.0	J	S15	
S40A	133-S40A	11.4	133-S40A-15.2-15.7	15.2 - 15.7 ft	-3.8	-4.3	JB93027-3	JB93027	04/22/2015	remaining	N	Y		< 0.33	UJ	S15	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-8.0-8.5	8.0 - 8.5 ft	3.1	2.6	JB40574-5	JB40574	06/25/2013	remaining	N	Y		0.45	RA	S15	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-10.0-10.5	10.0 - 10.5 ft	1.1	0.6	JB40574-6	JB40574	06/25/2013	remaining	N	Y		< 0.084	RA	S15	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-12.0-12.5	12.0 - 12.5 ft	-0.9	-1.4	JB40574-7	JB40574	06/25/2013	remaining	N	Y		< 0.087	RA	S15	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-14.0-14.5	14.0 - 14.5 ft	-2.9	-3.4	JB40574-8	JB40574	06/25/2013	remaining	N	Y		< 0.11	RA	S15	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-14.5-15.0	14.5 - 15.0 ft	-3.4	-3.9	JB40574-9	JB40574	06/25/2013	remaining	N	Y		0.89	RA	S15	
S41A	133-S41A-PB	11.1	133-S41A-PB-7.5-8.0	7.5 - 8.0 ft	3.6	3.1	JB95633-1R	JB95633R	05/28/2015	remaining	N	Y		< 0.20	RA	S15	
S42A	133-P3C-S42A	12.1	133-P3C-S42A-10.5-11.0	10.5 - 11.0 ft	1.6	1.1	JB63604-6	JB63604	04/02/2014	remaining	N	Y		1.1	J	S20	
S42A	133-P3C-S42A	12.1	133-P3C-S42A-12.5-13.0	12.5 - 13.0 ft	-0.4	-0.9	JB63604-7R	JB63604R	04/02/2014	remaining	N	Y		0.81	J	S20	
S42A	133-P3C-S42A	12.1	133-P3C-S42A-14.5-15.0	14.5 - 15.0 ft	-2.4	-2.9	JB63604-8	JB63604	04/02/2014	remaining	N	Y		0.97	J	S20	
S42A	133-P3C-S42A	12.1	133-P3C-S42A-14.5-15.0X	14.5 - 15.0 ft	-2.4	-2.9	JB63604-9	JB63604	04/02/2014	remaining	FD	Y		0.25	J	S20	
S42A	133-P3C-S42A	12.1	133-P3C-S42A-16.0-16.5	16.0 - 16.5 ft	-3.9	-4.4	JB63604-10R	JB63604R	04/02/2014	remaining	N	Y		< 0.13	UJ	S20	
S42A	133-P3C-S42A	12.1	133-P3C-S42A-16.5-17.0	16.5 - 17.0 ft	-4.4	-4.9	JB63604-11	JB63604	04/02/2014	remaining	N	Y		3.0	J	S20	
S42A	133-S42A-PB	12.1	133-S42A-PB-9.3-9.8	9.3 - 9.8 ft	2.8	2.3	JB95370-1	JB95370	05/22/2015	remaining	N	Y		< 0.27	RA	S20	
S44A	133-P3C-S44A	12.1	133-P3C-S44A-6.5-7.0	6.5 - 7.0 ft	5.6	5.1	JB63899-13	JB63899	04/04/2014	removed	N	Y		1.2	J	S21	
S44A	133-P3C-S44A	12.1	133-P3C-S44A-8.5-9.0	8.5 - 9.0 ft	3.6	3.1	JB63899-14R	JB63899R	04/04/2014	removed	N	Y		0.27	J	S21	
S44A	133-P3C-S44A	12.1	133-P3C-S44A-10.5-11.0	10.5 - 11.0 ft	1.6	1.1	JB63899-15	JB63899	04/04/2014	remaining	N	Y		0.45	J	S21	
S44A	133-P3C-S44A	12.1	133-P3C-S44A-10.5-11.0X	10.5 - 11.0 ft	1.6	1.1	JB63899-16R	JB63899R	04/04/2014	remaining	FD	Y		0.43	J	S21	
S44A	133-P3C-S44A	12.1	133-P3C-S44A-12.5-13.0	12.5 - 13.0 ft	-0.4	-0.9	JB63899-17	JB63899	04/04/2014	remaining	N	Y		0.37	J	S21	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes
S44A	133-P3C-S44A	12.1	133-P3C-S44A-14.5-15.0	14.5 - 15.0 ft	-2.4	-2.9	JB63899-18	JB63899	04/04/2014	remaining	N	Y		0.26 J		S21
S44A	133-P3C-S44A	12.1	133-P3C-S44A-15.5-16.0	15.5 - 16.0 ft	-3.4	-3.9	JB63899-19	JB63899	04/04/2014	remaining	N	Y		1.9 J		S21
S44A	133-P3C-S44A	12.1	133-P3C-S44A-16.0-16.5	16.0 - 16.5 ft	-3.9	-4.4	JB63899-20	JB63899	04/04/2014	remaining	N	Y		2.3 J		S21
S44A	133-T44A-SW-W1	12.2	133-T44A-SW-W-10.5-11.0	10.5 - 11.0 ft	1.7	1.2	JB94843-2	JB94843	05/15/2015	remaining	N	Y		< 0.24 UJ		S21
S44A	133-T44A-SW-W2	12.2	133-T44A-SW-W-12.5-13.0	12.5 - 13.0 ft	-0.3	-0.8	JB94843-3	JB94843	05/15/2015	remaining	N	Y		0.45 J		S21
S44A	133-T44A-SW-W3	12.2	133-T44A-SW-W-14.5-15.0	14.5 - 15.0 ft	-2.3	-2.8	JB94843-4	JB94843	05/15/2015	remaining	N	Y		0.32 J		S21
S44A	133-T44A-SW-W4	12.2	133-T44A-SW-W-16.5-17.0	16.5 - 17.0 ft	-4.3	-4.8	JB94843-5R	JB94843R	05/15/2015	remaining	N	Y		0.59 J		S21
S44A	133-T44A-SW-W5	12.2	133-T44A-SW-W-17.0-17.5	17.0 - 17.5 ft	-4.8	-5.3	JB94843-6R	JB94843R	05/15/2015	remaining	N	Y		2.0 J		S21
S45A	133-P3C-S45A	12.3	133-P3C-S45A-0.5-1.0	0.5 - 1.0 ft	11.8	11.3	JB63899-21R	JB63899R	04/04/2014	removed	N	Y		1.7 J		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-2.5-3.0	2.5 - 3.0 ft	9.8	9.3	JB63899-22T	JB63899T	04/04/2014	removed	N	Y		3.5 RA		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-4.5-5.0	4.5 - 5.0 ft	7.8	7.3	JB63899-23	JB63899	04/04/2014	remaining	N	Y		0.76 RA		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-6.5-7.0	6.5 - 7.0 ft	5.8	5.3	JB63899-24	JB63899	04/04/2014	remaining	N	Y		0.72 RA		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-8.5-9.0	8.5 - 9.0 ft	3.8	3.3	JB63899-25	JB63899	04/04/2014	remaining	N	Y		0.14 RA		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-10.5-11.0	10.5 - 11.0 ft	1.8	1.3	JB63899-26	JB63899	04/04/2014	remaining	N	Y		0.73 RA		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-12.5-13.0	12.5 - 13.0 ft	-0.2	-0.7	JB63899-27	JB63899	04/04/2014	remaining	N	Y		0.76 RA		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-14.5-15.0	14.5 - 15.0 ft	-2.2	-2.7	JB63899-28	JB63899	04/04/2014	remaining	N	Y		0.90 RA		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-16.0-16.5	16.0 - 16.5 ft	-3.7	-4.2	JB63899-29	JB63899	04/04/2014	remaining	N	Y		0.75 RA		S22, S23
S45A	133-P3C-S45A	12.3	133-P3C-S45A-16.5-17.0	16.5 - 17.0 ft	-4.2	-4.7	JB63899-30T	JB63899T	04/04/2014	remaining	N	Y		2.2 RA		S22, S23
S45A	133-S44A-SW-S1	12.1	133-S44A-SW-S-0.5-1.0	0.5 - 1.0 ft	11.6	11.1	JB94512-6R	JB94512R	05/12/2015	remaining	N	Y		0.96 J		S23
S45A	133-S44A-SW-S2	12.1	133-S44A-SW-S-2.5-3.0	2.5 - 3.0 ft	9.6	9.1	JB94512-7	JB94512	05/12/2015	remaining	N	Y		1.1 J		S23
S45A	133-S44A-SW-S3	12.1	133-S44A-SW-S-4.5-5.0	4.5 - 5.0 ft	7.6	7.1	JB94512-8	JB94512	05/12/2015	remaining	N	Y		0.67 J		S23
S45A	133-S44A-SW-S4	12.1	133-S44A-SW-S-6.0-6.5	6.5 - 7.0 ft	5.6	5.1	JB94512-9	JB94512	05/12/2015	remaining	N	Y		0.32 J		S23
S46A	133-P3C-S46A	12.2	133-P3C-S46A-0.5-1.0	0.5 - 1.0 ft	11.7	11.2	JB63899-31	JB63899	04/04/2014	removed	N	Y		1.7 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-2.0-2.5	2.0 - 2.5 ft	10.2	9.7	JB63899-32	JB63899	04/04/2014	removed	N	Y		1.4 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-4.0-4.5	4.0 - 4.5 ft	8.2	7.7	JB63899-33T	JB63899T	04/04/2014	removed	N	Y		3.6 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-6.0-6.5	6.0 - 6.5 ft	6.2	5.7	JB63899-34	JB63899	04/04/2014	removed	N	Y		0.15 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-8.0-8.5	8.0 - 8.5 ft	4.2	3.7	JB63899-35	JB63899	04/04/2014	removed	N	Y		0.56 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-10.0-10.5	10.0 - 10.5 ft	2.2	1.7	JB63899-36	JB63899	04/04/2014	remaining	N	Y		1.7 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-12.0-12.5	12.0 - 12.5 ft	0.2	-0.3	JB63899-37	JB63899	04/04/2014	remaining	N	Y		0.54 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-14.0-14.5	14.0 - 14.5 ft	-1.8	-2.3	JB63899-38	JB63899	04/04/2014	remaining	N	Y		0.61 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-15.0-15.5	15.0 - 15.5 ft	-2.8	-3.3	JB63899-39	JB63899	04/04/2014	remaining	N	Y		0.85 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-15.0-15.5X	15.0 - 15.5 ft	-2.8	-3.3	JB63899-40	JB63899	04/04/2014	remaining	FD	Y		1.0 RA		S24
S46A	133-P3C-S46A	12.2	133-P3C-S46A-15.5-16.0	15.5 - 16.0 ft	-3.3	-3.8	JB63899-41	JB63899	04/04/2014	remaining	N	Y		3.1 RA		S24
S47A	133-P3C-S47A	12.1	133-P3C-S47A-8.5-9.0	8.5 - 9.0 ft	3.6	3.1	JB63772-15	JB63772	04/03/2014	remaining	N	Y		0.63 J		S25
S47A	133-P3C-S47A	12.1	133-P3C-S47A-10.5-11.0	10.5 - 11.0 ft	1.6	1.1	JB63772-16	JB63772	04/03/2014	remaining	N	Y		0.60 J		S25
S47A	133-P3C-S47A	12.1	133-P3C-S47A-12.5-13.0	12.5 - 13.0 ft	-0.4	-0.9	JB63772-17	JB63772	04/03/2014	remaining	N	Y		0.15 J		S25
S47A	133-P3C-S47A	12.1	133-P3C-S47A-13.0-13.5	13.0 - 13.5 ft	-0.9	-1.4	JB63772-18	JB63772	04/03/2014	remaining	N	Y		2.6 J		S25
S47A	135-S47A-SW-W1	12.2	135-S47A-SW-W-0.6-1.1	0.6 - 1.1 ft	11.6	11.1	JC55761-5R	JC55761R	11/17/2017	remaining	N	Y		1.0 J		S25
S47A	135-S47A-SW-W2	12.2	135-S47A-SW-W-2.6-3.1	2.6 - 3.1 ft	9.6	9.1	JC55761-4R	JC55761R	11/17/2017	remaining	N	Y		3.3 J		S25
S47A	135-S47A-SW-W3	12.2	135-S47A-SW-W-4.6-5.1	4.6 - 5.1 ft	7.6	7.1	JC55761-3	JC55761	11/17/2017	remaining	N	Y		2.8 J		S25
S47A	135-S47A-SW-W4	12.2	135-S47A-SW-W-6.6-7.1	6.6 - 7.1 ft	5.6	5.1	JC55761-2	JC55761	11/17/2017	remaining	N	Y		3.2 J		S25
S47A	ASM-S47A-PB	12.4	ASM-S47A-PB-8.8-9.3	8.8 - 9.3 ft	3.6	3.1	JC55606-6	JC55606	11/16/2017	remaining	N	Y		< 0.57 U		S25
S48A	133-P3C-S48A	12.1	133-P3C-S48A-8.5-9.0	8.5 - 9.0 ft	3.6	3.1	JB63772-23	JB63772	04/03/2014	remaining	N	Y		0.49 J		S26, S27
S48A	133-P3C-S48A	12.1	133-P3C-S48A-10.5-11.0	10.5 - 11.0 ft	1.6	1.1	JB63772-24	JB63772	04/03/2014	remaining	N	Y		0.14 J		S26, S27
S48A	133-P3C-S48A	12.1	133-P3C-S48A-12.2-12.7	12.2 - 12.7 ft	-0.1	-0.6	JB63772-25	JB63772	04/03/2014	remaining	N	Y		0.56 J		S26, S27
S48A	133-P3C-S48A	12.1	133-P3C-S48A-12.2-12.7X	12.2 - 12.7 ft	-0.1	-0.6	JB63772-27	JB63772	04/03/2014	remaining	FD	Y		0.26 J		S26, S27
S48A	133-P3C-S48A	12.1	133-P3C-S48A-12.7-13.2	12.7 - 13.2 ft	-0.6	-1.1	JB63772-26	JB63772	04/03/2014	remaining	N	Y		2.0 J		S26, S27

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
S48A	ASM-S48A-SW-S1	12.1	ASM-S48A-SW-S-2.4-2.9	2.4 - 2.9 ft	9.7	9.2	JC55516-16	JC55516	11/15/2017	remaining	N	Y		6.6		S26, S27	
S48A	ASM-S48A-SW-S2	12.1	ASM-S48A-SW-S-4.4-4.9	4.4 - 4.9 ft	7.7	7.2	JC55516-15	JC55516	11/15/2017	remaining	N	Y		2.5		S26, S27	
S48A	ASM-S48A-SW-S3	12.1	ASM-S48A-SW-S-6.4-6.9	6.4 - 6.9 ft	5.7	5.2	JC55516-14	JC55516	11/15/2017	remaining	N	Y		< 0.61	U	S26, S27	
S48A	ASM-S48A-SW-W1	12.1	ASM-S48A-SW-W-2.4-2.9	2.4 - 2.9 ft	9.7	9.2	JC55516-13	JC55516	11/15/2017	remaining	N	Y		1.0		S26, S27	
S48A	ASM-S48A-SW-W2	12.1	ASM-S48A-SW-W-4.4-4.9	4.4 - 4.9 ft	7.7	7.2	JC55516-12	JC55516	11/15/2017	remaining	N	Y		0.65		S26, S27	
S48A	ASM-S48A-SW-W3	12.1	ASM-S48A-SW-W-6.4-6.9	6.4 - 6.9 ft	5.7	5.2	JC55516-11	JC55516	11/15/2017	remaining	N	Y		1.4		S26, S27	
T36A	133-HSS-S36A-SW-E1	12.2	133-HSS-S36A-SW-E-12.0-12.5	12.0 - 12.5 ft	0.2	-0.3	JB98788-5	JB98788	07/09/2015	removed	N	Y		0.32	RA	S15, S28	
T36A	133-HSS-S36A-SW-E2	12.2	133-HSS-S36A-SW-E-14.0-14.5	14.0 - 14.5 ft	-1.8	-2.3	JB98788-4	JB98788	07/09/2015	remaining	N	Y		< 0.30	RA	S15	
T36A	133-HSS-T35A-SW-S1	12.2	133-HSS-T35A-SW-S-11.5-12.0	11.5 - 12.0 ft	0.7	0.2	JB99274-5	JB99274	07/16/2015	remaining	N	Y		8.0	J	S15	
T36A	133-HSS-T35A-SW-S2	12.2	133-HSS-T35A-SW-S-13.5-14.0	13.5 - 14.0 ft	-1.3	-1.8	JB99274-4R	JB99274R	07/16/2015	remaining	N	Y		4.1	J	S15	
T36A	133-HSS-T36A-PB	11.5	133-HSS-T36A-PB-9.9-10.4	9.9 - 10.4 ft	1.6	1.1	JB98897-3	JB98897	07/10/2015	removed	N	Y		1.0	J	S15, S28	
T36A	133-HSS-U36A-SW-W1	12.6	133-HSS-U36A-SW-W-11.5-12.0	11.5 - 12.0 ft	1.1	0.6	JB99274-7	JB99274	07/16/2015	remaining	N	Y		< 0.28	UJ	S15	
T36A	133-HSS-U36A-SW-W2	12.6	133-HSS-U36A-SW-W-13.5-14.0	13.5 - 14.0 ft	-0.9	-1.4	JB99274-6	JB99274	07/16/2015	remaining	N	Y		< 0.27	UJ	S15	
T36A	133-HSS-U36A-SW-W3	12.6	133-HSS-U36A-SW-W-15.5-16.0	15.5 - 16.0 ft	-2.9	-3.4	JB99274-8	JB99274	07/16/2015	remaining	N	Y		< 0.33	UJ	S15	
T36A	P4-HAL-T36A	11.5	P4-HAL-T36A-13.0-13.5	13.0 - 13.5 ft	-1.5	-2.0	JB78630-17R	JB78630R	10/07/2014	remaining	N	Y		0.35	J	S15	
T36A	P4-HAL-T36A	11.5	P4-HAL-T36A-15.0-15.5	15.0 - 15.5 ft	-3.5	-4.0	JB78630-18	JB78630	10/07/2014	remaining	N	Y		< 0.21	UJ	S15	
T36A	P4-HAL-T36A	11.5	P4-HAL-T36A-17.0-17.5	17.0 - 17.5 ft	-5.5	-6.0	JB78630-19R	JB78630R	10/07/2014	remaining	N	Y		0.21	J	S15	
T36A	P4-HAL-T36A	11.5	P4-HAL-T36A-17.5-18.0	17.5 - 18.0 ft	-6.0	-6.5	JB78630-20R	JB78630R	10/07/2014	remaining	N	Y		0.79	J	S15	
T37A	133-B4	11.5	PPG-133-B4F_12.5-13.0_792635	12.5 - 13.0 ft	-1.0	-1.5	792635	A757	12/12/2006	remaining	N	Y		< 2.78	U	S15	
T37A	133-B4	11.5	PPG-133-B4FD_12.5-13.0_792636	12.5 - 13.0 ft	-1.0	-1.5	792636	A757	12/12/2006	remaining	FD	Y		< 2.73	U	S15	
T37A	133-B4	11.5	PPG-133-B4G_14.3-14.8_792637	14.3 - 14.8 ft	-2.8	-3.3	792637	A757	12/12/2006	remaining	N	Y		< 3.41	U	S15	
T37A	133-B4	11.5	PPG-133-B4H_18.3-18.8_792638	18.3 - 18.8 ft	-6.8	-7.3	792638	A757	12/12/2006	remaining	N	Y		< 5	U	S15	
T37A	133-B4	11.5	PPG-133-B4I_21.8-22.3_792639	21.8 - 22.3 ft	-10.3	-10.8	792639	A757	12/12/2006	remaining	N	Y		< 2.42	U	S15	
T37A	133-HSS-T37A-PB	11.6	133-HSS-T37A-PB-9.6-10.1	9.6 - 10.1 ft	2.0	1.5	JB98637-2	JB98637	07/08/2015	remaining	N	Y		< 0.24	UJ	S15	
T37A	133-P3C-T37A	11.6	133-P3C-T37A-10.0-10.5	10.0 - 10.5 ft	1.6	1.1	JB40576-2R	JB40576R	06/25/2013	remaining	N	Y		1.3	J	S15	
T37A	133-P3C-T37A	11.6	133-P3C-T37A-12.0-12.5	12.0 - 12.5 ft	-0.4	-0.9	JB40576-3R	JB40576R	06/25/2013	remaining	N	Y		0.15	J	S15	
T37A	133-P3C-T37A	11.6	133-P3C-T37A-13.7-14.2	13.7 - 14.2 ft	-2.1	-2.6	JB40576-4R	JB40576R	06/25/2013	remaining	N	Y		2.1	J	S15	
T37A	133-P3C-T37A	11.6	133-P3C-T37A-14.2-14.7	14.2 - 14.7 ft	-2.6	-3.1	JB40576-5	JB40576	06/25/2013	remaining	N	Y		< 0.10	UJ	S15	
T37A	133-U37A-SW-W1	12.6	133-U37A-SW-W-11.0-11.5	11.0 - 11.5 ft	1.6	1.1	JB98637-6R	JB98637R	07/08/2015	remaining	N	Y		0.46	J	S15	
T37A	133-U37A-SW-W2	12.6	133-U37A-SW-W-13.0-13.5	13.0 - 13.5 ft	-0.4	-0.9	JB98637-5	JB98637	07/08/2015	remaining	N	Y		< 0.22	UJ	S15	
T37A	133-U37A-SW-W3	12.6	133-U37A-SW-W-15.0-15.5	15.0 - 15.5 ft	-2.4	-2.9	JB98637-4	JB98637	07/08/2015	remaining	N	Y		< 0.25	UJ	S15	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-12.0-12.5	12.0 - 12.5 ft	0.8	0.3	JB82214-7R	JB82214R	11/19/2014	remaining	N	Y		1.1	J	S15	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-12.0-12.5X	12.0 - 12.5 ft	0.8	0.3	JB82214-12R	JB82214R	11/19/2014	remaining	FD	Y		2.0	J	S15	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-14.0-14.5	14.0 - 14.5 ft	-1.2	-1.7	JB82214-8R	JB82214R	11/19/2014	remaining	N	Y		< 0.20	UJ	S15	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-16.0-16.5	16.0 - 16.5 ft	-3.2	-3.7	JB82214-9R	JB82214R	11/19/2014	remaining	N	Y		0.22	J	S15	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-16.5-17.0	16.5 - 17.0 ft	-3.7	-4.2	JB82214-10R	JB82214R	11/19/2014	remaining	N	Y		< 0.22	UJ	S15	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-17.0-17.5	17.0 - 17.5 ft	-4.2	-4.7	JB82214-11R	JB82214R	11/19/2014	remaining	N	Y		0.42	J	S15	
T38A	133-T38A-PB	12.8	133-T38A-PB-10.7-11.2	10.7 - 11.2 ft	2.1	1.6	JB98320-8R	JB98320R	07/01/2015	remaining	N	Y		0.37	J	S15	
T39A	133-P3C-T39A	12.4	133-P3C-T39A-8.5-9.0	8.5 - 9.0 ft	3.8	3.3	JB62811-6R	JB62811R	03/24/2014	remaining	N	Y		0.47	J		
T39A	133-P3C-T39A	12.4	133-P3C-T39A-10.5-11.0	10.5 - 11.0 ft	1.8	1.3	JB62811-7R	JB62811R	03/24/2014	remaining	N	Y		0.44	J		
T39A	133-P3C-T39A	12.4	133-P3C-T39A-12.5-13.0	12.5 - 13.0 ft	-0.2	-0.7	JB62811-8R	JB62811R	03/24/2014	remaining	N	Y		3.1	J		
T39A	133-P3C-T39A	12.4	133-P3C-T39A-13.5-14.0	13.5 - 14.0 ft	-1.2	-1.7	JB62811-9R	JB62811R	03/24/2014	remaining	N	Y		0.93	J		
T39A	133-P3C-T39A	12.4	133-P3C-T39A-14.0-14.5	14.0 - 14.5 ft	-1.7	-2.2	JB62811-10R	JB62811R	03/24/2014	remaining	N	Y		3.0	J		
T39A	133-S39A-SW-E1	11.0	133-S39A-SW-E-6.0-6.5	6.0 - 6.5 ft	5.0	4.5	JB98320-2	JB98320	07/01/2015	remaining	N	Y		< 0.23	UJ		
T39A	133-S39A-SW-E2	11.0	133-S39A-SW-E-8.0-8.5	8.0 - 8.5 ft	3.0	2.5	JB98320-3	JB98320	07/01/2015	remaining	N	Y		1.8	J		
T39A	133-S39A-SW-E2	11.0	133-S39A-SW-E-8.0-8.5X	8.0 - 8.5 ft	3.0	2.5	JB98320-4R	JB98320R	07/01/2015	remaining	FD	Y		2.7	J		
T39A	133-T38A-SW-S1	12.8	133-T38A-SW-S-10.2-10.7	10.2 - 10.7 ft	2.6	2.1	JB98468-1	JB98468	07/06/2015	remaining	N	Y		< 0.25	UJ		

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
T39A	133-T38A-SW-S2	12.8	133-T38A-SW-S-8.2-8.7	8.2 - 8.7 ft	4.6	4.1	JB98468-2	JB98468	07/06/2015	remaining	N	Y		< 0.22	UJ		
T39A	133-T39A-PB	12.4	133-T39A-PB-7.3-7.8	7.3 - 7.8 ft	5.1	4.6	JB97954-5R	JB97954R	06/26/2015	remaining	N	Y		< 0.20	RA		
T40A	133-P3C-T40A	12.1	133-P3C-T40A-6.5-7.0	6.5 - 7.0 ft	5.6	5.1	JB62894-4	JB62894	03/25/2014	remaining	N	Y		< 0.11	RA		
T40A	133-P3C-T40A	12.1	133-P3C-T40A-8.5-9.0	8.5 - 9.0 ft	3.6	3.1	JB62894-5	JB62894	03/25/2014	remaining	N	Y		< 0.10	RA		
T40A	133-P3C-T40A	12.1	133-P3C-T40A-8.5-9.0X	8.5 - 9.0 ft	3.6	3.1	JB62894-6	JB62894	03/25/2014	remaining	FD	Y		< 0.10	RA		
T40A	133-P3C-T40A	12.1	133-P3C-T40A-10.5-11.0	10.5 - 11.0 ft	1.6	1.1	JB62894-7R	JB62894R	03/25/2014	remaining	N	Y		< 0.12	RA		
T40A	133-P3C-T40A	12.1	133-P3C-T40A-12.5-13.0	12.5 - 13.0 ft	-0.4	-0.9	JB62894-8	JB62894	03/25/2014	remaining	N	Y		< 0.085	RA		
T40A	133-P3C-T40A	12.1	133-P3C-T40A-14.5-15.0	14.5 - 15.0 ft	-2.4	-2.9	JB62894-9R	JB62894R	03/25/2014	remaining	N	Y		< 0.15	RA		
T40A	133-P3C-T40A	12.1	133-P3C-T40A-15.0-15.5	15.0 - 15.5 ft	-2.9	-3.4	JB62894-10	JB62894	03/25/2014	remaining	N	Y		0.61	RA		
T40A	133-T40A-PB	12.1	133-T40A-PB-6.3-6.8	6.3 - 6.8 ft	5.8	5.3	JB96575-2	JB96575	06/09/2015	remaining	N	Y		0.29	RA	S29	
T41A	133-P3C-T41A	11.8	133-P3C-T41A-7.0-7.5	7.0 - 7.5 ft	4.8	4.3	JB63127-5	JB63127	03/27/2014	removed	N	Y		0.40	J	S30	
T41A	133-P3C-T41A	11.8	133-P3C-T41A-9.0-9.5	9.0 - 9.5 ft	2.8	2.3	JB63127-6R	JB63127R	03/27/2014	removed	N	Y		1.7	J	S30	
T41A	133-P3C-T41A	11.8	133-P3C-T41A-11.0-11.5	11.0 - 11.5 ft	0.8	0.3	JB63127-7	JB63127	03/27/2014	remaining	N	Y		0.28	J	S30	
T41A	133-P3C-T41A	11.8	133-P3C-T41A-11.0-11.5X	11.0 - 11.5 ft	0.8	0.3	JB63127-8R	JB63127R	03/27/2014	remaining	FD	Y		0.50	J	S30	
T41A	133-P3C-T41A	11.8	133-P3C-T41A-13.0-13.5	13.0 - 13.5 ft	-1.2	-1.7	JB63127-9	JB63127	03/27/2014	remaining	N	Y		0.13	J	S30	
T41A	133-P3C-T41A	11.8	133-P3C-T41A-15.0-15.5	15.0 - 15.5 ft	-3.2	-3.7	JB63127-10	JB63127	03/27/2014	remaining	N	Y		0.30	J	S30	
T41A	133-P3C-T41A	11.8	133-P3C-T41A-19.0-19.5	19.0 - 19.5 ft	-7.2	-7.7	JB63517-1R	JB63517R	04/01/2014	remaining	N	Y		0.76	J	S30	
T41A	133-P3C-T41A	11.8	133-P3C-T41A-20.0-20.5	20.0 - 20.5 ft	-8.2	-8.7	JB63127-11R	JB63127R	03/27/2014	remaining	N	Y		0.97	J	S30	
T41A	133-T41A-PB	11.8	133-T41A-PB-7.2-7.8	7.2 - 7.8 ft	4.6	4.0	JB96575-3	JB96575	06/09/2015	removed	N	Y		0.40	RA	S30	
T42A	133-P3C-T42A	12.6	133-P3C-T42A-9.0-9.5	9.0 - 9.5 ft	3.6	3.1	JB63127-14	JB63127	03/27/2014	remaining	N	Y		1.1	J		
T42A	133-P3C-T42A	12.6	133-P3C-T42A-11.0-11.5	11.0 - 11.5 ft	1.6	1.1	JB63127-15R	JB63127R	03/27/2014	remaining	N	Y		1.0	J		
T42A	133-P3C-T42A	12.6	133-P3C-T42A-13.0-13.5	13.0 - 13.5 ft	-0.4	-0.9	JB63127-16R	JB63127R	03/27/2014	remaining	N	Y		0.24	J		
T42A	133-P3C-T42A	12.6	133-P3C-T42A-15.0-15.5	15.0 - 15.5 ft	-2.4	-2.9	JB63127-17R	JB63127R	03/27/2014	remaining	N	Y		0.37	J		
T42A	133-P3C-T42A	12.6	133-P3C-T42A-16.2-16.7	16.2 - 16.7 ft	-3.6	-4.1	JB63127-18	JB63127	03/27/2014	remaining	N	Y		0.53	J		
T42A	133-P3C-T42A	12.6	133-P3C-T42A-16.7-17.2	16.7 - 17.2 ft	-4.1	-4.6	JB63127-19R	JB63127R	03/27/2014	remaining	N	Y		1.6	J		
T42A	133-T43A-SW-N	12.2	133-T43A-SW-N-9.6-10.1	9.6 - 10.1 ft	2.6	2.1	JB97954-3R	JB97954R	06/26/2015	remaining	N	Y		1.4	RA		
T43A	133-P3C-T43A	12.2	133-P3C-T43A-10.5-11.0	10.5 - 11.0 ft	1.7	1.2	JB63517-7	JB63517	04/01/2014	remaining	N	Y		0.16	J	S31	
T43A	133-P3C-T43A	12.2	133-P3C-T43A-12.5-13.0	12.5 - 13.0 ft	-0.3	-0.8	JB63517-8	JB63517	04/01/2014	remaining	N	Y		8.9	J	S31	
T43A	133-P3C-T43A	12.2	133-P3C-T43A-14.5-15.0	14.5 - 15.0 ft	-2.3	-2.8	JB63517-9R	JB63517R	04/01/2014	remaining	N	Y		0.33	J	S31	
T43A	133-P3C-T43A	12.2	133-P3C-T43A-16.5-17.0	16.5 - 17.0 ft	-4.3	-4.8	JB63517-10R	JB63517R	04/01/2014	remaining	N	Y		0.52	J	S31	
T43A	133-P3C-T43A	12.2	133-P3C-T43A-17.0-17.5	17.0 - 17.5 ft	-4.8	-5.3	JB63517-11R	JB63517R	04/01/2014	remaining	N	Y		1.1	J	S31	
T43A	133-T44A-SW-N1	12.2	133-T44A-SW-N-12.5-13.0	12.5 - 13.0 ft	-0.3	-0.8	JB94843-7	JB94843	05/15/2015	remaining	N	Y		0.40	J	S31	
T43A	133-T44A-SW-N2	12.2	133-T44A-SW-N-14.5-15.0	14.5 - 15.0 ft	-2.3	-2.8	JB94843-8	JB94843	05/15/2015	remaining	N	Y		0.46	J	S31	
T43A	133-T44A-SW-N3	12.2	133-T44A-SW-N-16.5-17.0	16.5 - 17.0 ft	-4.3	-4.8	JB94843-9	JB94843	05/15/2015	remaining	N	Y		0.71	J	S31	
T44A	133-P3C-T44A	12.2	133-P3C-T44A-17.5-18.0	17.5 - 18.0 ft	-5.3	-5.8	JB63517-23R	JB63517R	04/01/2014	remaining	N	Y		0.18	J		
T44A	133-P3C-T44A	12.2	133-P3C-T44A-18.0-18.5	18.0 - 18.5 ft	-5.8	-6.3	JB63517-24	JB63517	04/01/2014	remaining	N	Y		0.87	J		
T44A	133-T44A-SW-E5	10.6	133-T44A-SW-E-17.0-17.5	15.4 - 15.9 ft	-4.8	-5.3	JB94615-6R	JB94615R	05/13/2015	remaining	N	Y		1.4	J	S32	
T44A	133-T44A-SW-N4	12.2	133-T44A-SW-N-17.0-17.5	17.0 - 17.5 ft	-4.8	-5.3	JB94843-10R	JB94843R	05/15/2015	remaining	N	Y		0.74	J		
T45A	133-P3C-T45A	12.2	133-P3C-T45A-0.5-1.0	0.5 - 1.0 ft	11.7	11.2	JB63604-12R	JB63604R	04/02/2014	removed	N	Y		0.94	RA	S33, S34	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-2.5-3.0	2.5 - 3.0 ft	9.7	9.2	JB63604-13R	JB63604R	04/02/2014	removed	N	Y		2.2	RA	S33	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-4.5-5.0	4.5 - 5.0 ft	7.7	7.2	JB63604-14	JB63604	04/02/2014	removed	N	Y		0.29	RA	S33	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-6.5-7.0	6.5 - 7.0 ft	5.7	5.2	JB63604-15	JB63604	04/02/2014	removed	N	Y		0.40	RA	S33	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-8.5-9.0	8.5 - 9.0 ft	3.7	3.2	JB63604-16	JB63604	04/02/2014	remaining	N	Y		0.30	RA	S33	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-10.5-11.0	10.5 - 11.0 ft	1.7	1.2	JB63604-17R	JB63604R	04/02/2014	remaining	N	Y		0.24	RA	S33	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-10.5-11.0X	10.5 - 11.0 ft	1.7	1.2	JB63604-20	JB63604	04/02/2014	remaining	FD	Y		0.38	RA	S33	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-12.5-13.0	12.5 - 13.0 ft	-0.3	-0.8	JB63604-18	JB63604	04/02/2014	remaining	N	Y		0.21	RA	S33	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-14.5-15.0	14.5 - 15.0 ft	-2.3	-2.8	JB63604-19	JB63604	04/02/2014	remaining	N	Y		0.25	RA	S33	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-16.5-17.0	16.5 - 17.0 ft	-4.3	-4.8	JB63604-21	JB63604	04/02/2014	remaining	N	Y		0.55	RA	S33	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-17.0-17.5	17.0 - 17.5 ft	-4.8	-5.3	JB63604-22	JB63604	04/02/2014	remaining	N	Y		3.0	RA	S33	
T45A	133-T44A-SW-S1	12.2	133-T44A-SW-S-8.5-9.0	8.5 - 9.0 ft	3.7	3.2	JB94512-10	JB94512	05/12/2015	remaining	N	Y		< 0.22	UJ	S33	
T45A	133-T44A-SW-S2	12.2	133-T44A-SW-S-10.5-11.0	10.5 - 11.0 ft	1.7	1.2	JB94512-11	JB94512	05/12/2015	remaining	N	Y		< 0.21	UJ	S33	
T45A	133-T44A-SW-S3	12.2	133-T44A-SW-S-12.5-13.0	13.0 - 13.5 ft	-0.8	-1.3	JB94512-12	JB94512	05/12/2015	remaining	N	Y		0.55	J	S18, S33	
T45A	133-T44A-SW-S4	12.2	133-T44A-SW-S-14.5-15.0	14.9 - 15.4 ft	-2.7	-3.2	JB94512-13	JB94512	05/12/2015	remaining	N	Y		< 0.23	UJ	S18, S33	
T45A	133-T44A-SW-S5	12.2	133-T44A-SW-S-16.5-17.0	17.0 - 17.5 ft	-4.8	-5.3	JB94512-14	JB94512	05/12/2015	remaining	N	Y		< 0.33	UJ	S18, S33	
T46A	133-MW2C	10.4	1332CA 0.5-1.0 801294	0.5 - 1.0 ft	9.9	9.4	801294	C111	01/19/2007	removed	N	Y		< 2.41	UJ	S26, S34	
T46A	133-MW2C	10.4	1332CAD 0.5-1.0 801295	0.5 - 1.0 ft	9.9	9.4	801295	C111	01/19/2007	removed	FD	Y		< 2.41	UJ	S26, S34	
T46A	133-MW2C	10.4	1332CB 3.8-4.2 801297	3.8 - 4.2 ft	6.6	6.2	801297	C111	01/19/2007	removed	N	Y		< 2.72	UJ	S26, S34	
T46A	133-MW2C	10.4	133-2CE 5.0-5.5 816945	5.0 - 5.5 ft	5.4	4.9	816945	E381	03/27/2007	remaining	N	Y		< 3.1	UJ	S26, S34	
T46A	133-MW2C	10.4	133-2CF 7.0-7.5 816946	7.0 - 7.5 ft	3.4	2.9	816946	E381	03/27/2007	remaining	N	Y		< 2.44	UJ	S26	
T46A	133-MW2C	10.4	133-2CG 9.0-9.7 816947	9.0 - 9.7 ft	1.4	0.7	816947	E381	03/27/2007	remaining	N	Y		< 2.97	UJ	S26	
T46A	133-MW2C	10.4	133-2CGD 9.0-9.7 816948	9.0 - 9.7 ft	1.4	0.7	816948	E381	03/27/2007	remaining	FD	Y		< 2.96	UJ	S26	
T46A	133-MW2C	10.4	133-2CH 13.0-14.0 816949	13.0 - 14.0 ft	-2.6	-3.6	816949	E381	03/27/2007	remaining	N	Y		< 7.04	UJ	S26	
T46A	133-MW2C	10.4	133-2CI 19.2-19.3 819252	19.2 - 19.3 ft	-8.8	-8.9	819252	E754	04/04/2007	remaining	N	Y		< 2.75	UJ	S26	
T46A	133-MW2C	10.4	133-2CJ 21.0-22.0 819253	21.0 - 22.0 ft	-10.6	-11.6	819253	E754	04/04/2007	remaining	N	Y		< 4.89	UJ	S26	
T46A	133-MW2C	10.4	133-2CK 22.0-22.5 819254	22.0 - 22.5 ft	-11.6	-12.1	819254	E754	04/04/2007	remaining	N	Y		< 2.63	UJ	S26	
T46A	133-MW2C	10.4	133-2CL 23.0-23.6 819255	23.0 - 23.6 ft	-12.6	-13.2	819255	E754	04/04/2007	remaining	N	Y		< 4.43	UJ	S26	
T46A	133-MW2C	10.4	133-2CLD 23.0-23.6 819256	23.0 - 23.6 ft	-12.6	-13.2	819256	E754	04/04/2007	remaining	FD	Y		< 5.31	UJ	S26	
T46A	133-MW2C	10.4	133-2CM 23.6-24.1 819257	23.6 - 24.1 ft	-13.2	-13.7	819257	E754	04/04/2007	remaining	N	Y		< 2.49	UJ	S26	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-1.0-1.5	1.0 - 1.5 ft	9.6	9.1	JB64871-11R	JB64871R	04/16/2014	removed	N	Y		2.8	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-3.0-3.5	3.0 - 3.5 ft	7.6	7.1	JB64871-17R	JB64871R	04/16/2014	removed	N	Y		10.9	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-5.0-5.5	5.0 - 5.5 ft	5.6	5.1	JB64871-18	JB64871	04/16/2014	removed	N	Y		0.10	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-7.0-7.5	7.0 - 7.5 ft	3.6	3.1	JB64871-19	JB64871	04/16/2014	remaining	N	Y		0.35	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-9.0-9.5	9.0 - 9.5 ft	1.6	1.1	JB64871-20	JB64871	04/16/2014	remaining	N	Y		0.30	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-11.0-11.5	11.0 - 11.5 ft	-0.4	-0.9	JB64871-12	JB64871	04/16/2014	remaining	N	Y		0.45	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-11.0-11.5X	11.0 - 11.5 ft	-0.4	-0.9	JB64871-13	JB64871	04/16/2014	remaining	FD	Y		0.31	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-13.0-13.5	13.0 - 13.5 ft	-2.4	-2.9	JB64871-14	JB64871	04/16/2014	remaining	N	Y		0.12	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-14.3-14.8	14.3 - 14.8 ft	-3.8	-4.3	JB64871-15	JB64871	04/16/2014	remaining	N	Y		0.20	J	S26, S34	
T46A	133-P3C-T46A	10.6	133-P3C-T46A-14.8-15.3	14.8 - 15.3 ft	-4.3	-4.8	JB64871-16	JB64871	04/16/2014	remaining	N	Y		0.73	RA	S26, S34	
T46A	T46AR/MW2C-SA	10.2	133-MW2C-SA-0.5-1.0	0.5 - 1.0 ft	9.7	9.2	JB71606-12R	JB71606R	07/14/2014	removed	N	Y		1.7	J	S26, S34	
T46A	T46AR/MW2C-SA	10.2	133-MW2C-SA-2.5-3.0	2.5 - 3.0 ft	7.7	7.2	JB71606-13R	JB71606R	07/14/2014	removed	N	Y		5.6	J	S26, S34	
T46A	T46AR/MW2C-SA	10.2	133-MW2C-SA-4.5-5.0	4.5 - 5.0 ft	5.7	5.2	JB71606-14	JB71606	07/14/2014	removed	N	Y		< 0.22	UJ	S26, S34	
T47A	133-P3C-T47A	10.5	133-P3C-T47A-6.0-6.5	6.0 - 6.5 ft	4.5	4.0	JB64753-4	JB64753	04/15/2014	remaining	N	Y		0.26	J	S14, S26	
T47A	133-P3C-T47A	10.5	133-P3C-T47A-8.0-8.5	8.0 - 8.5 ft	2.5	2.0	JB64753-5	JB64753	04/15/2014	remaining	N	Y		0.11	J	S14, S26	
T47A	133-P3C-T47A	10.5	133-P3C-T47A-10.0-10.5	10.0 - 10.5 ft	0.5	0.0	JB64753-6	JB64753	04/15/2014	remaining	N	Y		0.32	J	S14, S26	
T47A	133-P3C-T47A	10.5	133-P3C-T47A-11.7-12.2	11.7 - 12.2 ft	-1.2	-1.7	JB64753-7	JB64753	04/15/2014	remaining	N	Y		0.52	J	S14, S26	
T47A	133-P3C-T47A	10.5	133-P3C-T47A-12.2-12.7	12.2 - 12.7 ft	-1.7	-2.2	JB64753-8	JB64753	04/15/2014	remaining	N	Y		1.2	J	S14, S26	
T47A	133-P3C-T47AR	10.1	133-P3C-SA-T47A-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JB71606-10	JB71606	07/14/2014	remaining	N	Y		1.1	J	S14, S26	
T47A	133-P3C-T47AR	10.1	133-P3C-SA-T47A-6.0-6.5	6.0 - 6.5 ft	4.1	3.6	JB71606-11R	JB71606R	07/14/2014	remaining	N	Y		0.44	J	S14, S26	
T47A	ASM-T47AR2	14.0	ASM-T47AR2-5.0-5.5	5.0 - 5.5 ft	9.0	8.5	JC28400-7	JC28400	09/26/2016	removed	N	Y		0.83	J	S14, S26, S35	
T47A	ASM-T47AR2	14.0	ASM-T47AR2-7.0-7.5	7.0 - 7.5 ft	7.0	6.5	JC28400-8	JC28400	09/26/2016	removed	N	Y		0.74	J	S14, S26, S35	
T47A	ASM-T47AR2	14.0	ASM-T47AR2-9.0-9.5	9.0 - 9.5 ft	5.0	4.5	JC28400-9	JC28400	09/26/2016	remaining	N	Y		< 0.32	UJ	S14, S26	
T47A	ASM-T47AR2	14.0	ASM-T47AR2-11.0-11.5	11.0 - 11.5 ft	3.0	2.5	JC28400-3	JC28400	09/26/2016	remaining	N	Y		< 0.45	UJ	S14, S26	
T47A	ASM-T47AR2	14.0	ASM-T47AR2-13.0-13.5	13.0 - 13.5 ft	1.0	0.5	JC28400-4	JC28400	09/26/2016	remaining	N	Y		< 0.32	UJ	S14, S26	
T47A	ASM-T47AR2	14.0	ASM-T47AR2-13.5-14.0	13.5 - 14.0 ft	0.5	0.0	JC28400-5	JC28400	09/26/2016	remaining	N	Y		3.3	J	S14, S26	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes
T48A	135-P3C-T48A	10.4	135-P3C-T48A-8.0-8.5	8.0 - 8.5 ft	2.4	1.9	JB64752-5R	JB64752R	04/15/2014	remaining	N	Y		0.47	J	S26, S36
T48A	135-P3C-T48A	10.4	135-P3C-T48A-10.0-10.5	10.0 - 10.5 ft	0.4	-0.1	JB64752-9	JB64752	04/15/2014	remaining	N	Y		< 0.10	UJ	S26, S36
T48A	135-P3C-T48A	10.4	135-P3C-T48A-11.0-11.5	11.0 - 11.5 ft	-0.6	-1.1	JB64752-6	JB64752	04/15/2014	remaining	N	Y		< 0.11	UJ	S26, S36
T48A	135-P3C-T48A	10.4	135-P3C-T48A-11.0-11.5X	11.0 - 11.5 ft	-0.6	-1.1	JB64752-7	JB64752	04/15/2014	remaining	FD	Y		0.098	J	S26, S36
T48A	135-P3C-T48A	10.4	135-P3C-T48A-11.5-12.0	11.5 - 12.0 ft	-1.1	-1.6	JB64752-8	JB64752	04/15/2014	remaining	N	Y		3.2	J	S26, S36
T48A	135-P3C-T48AR	10.5	135-P3C-T48AR-12.0-12.5	12.0 - 12.5 ft	-1.5	-2.0	JC26004-2	JC26004	08/17/2016	remaining	N	Y		2.3	J	S26, S36
T48A	ASM-T48AR2	10.5	ASM-T48AR2-12.0-12.5	12.0 - 12.5 ft	-1.5	-2.0	JC31135-2R	JC31135R	11/04/2016	remaining	N	Y		0.63	J	S26, S36
T48A	ASM-T48AR2	10.5	ASM-T48AR2-12.5-13.0	12.5 - 13.0 ft	-2.0	-2.5	JC31135-3R	JC31135R	11/04/2016	remaining	N	Y		0.41	J	S26, S36
T48A	ASM-T48A-SW-S3	10.5	ASM-T48A-SW-S-5.4-5.9	5.4 - 5.9 ft	5.1	4.6	JC53600-10	JC53600	10/20/2017	remaining	N	Y		3.1	RA	S26, S36
T48A	ASM-T48A-PB	10.4	ASM-T48A-PB-7.4-7.9	7.4 - 7.9 ft	3.0	2.5	JC53600-9	JC53600	10/20/2017	remaining	N	Y		< 0.50	RA	S26, S36
U33A	133-U33A-PB	12.2	133-U33A-PB-14.0-14.5	14.0 - 14.5 ft	-1.8	-2.3	JB99806-4	JB99806	07/23/2015	remaining	N	Y		0.40	J	S15
U33A	P4-HAL-U33A	12.2	P4-HAL-U33A-15.0-15.5	15.0 - 15.5 ft	-2.8	-3.3	JB77885-9	JB77885	09/29/2014	remaining	N	Y		1.2	J	S15
U33A	P4-HAL-U33A	12.2	P4-HAL-U33A-16.5-17.0	16.5 - 17.0 ft	-4.3	-4.8	JB77885-10	JB77885	09/29/2014	remaining	N	Y		0.71	J	S15
U33A	P4-HAL-U33A	12.2	P4-HAL-U33A-17.0-17.5	17.0 - 17.5 ft	-4.8	-5.3	JB77885-11R	JB77885R	09/29/2014	remaining	N	Y		1.8	J	S15
U34A	133-P3C-U34A	12.6	133-P3C-U34A-16.5-17.0	16.5 - 17.0 ft	-3.9	-4.4	JB40712-3R	JB40712R	06/26/2013	remaining	N	Y		0.30	RA	S15
U34A	133-P3C-U34A	12.6	133-P3C-U34A-17.0-17.5	17.0 - 17.5 ft	-4.4	-4.9	JB40712-2	JB40712	06/26/2013	remaining	N	Y		0.73	RA	S15
U34A	133-P3C-U34A	12.6	133-P3C-U34A-17.5-18.0	17.5 - 18.0 ft	-4.9	-5.4	JB40712-1R	JB40712R	06/26/2013	remaining	N	Y		8.6	RA	S15
U34A	133-U34A-PB	12.6	133-U34A-PB-16.3-16.8	16.3 - 16.8 ft	-3.7	-4.2	JB99806-2	JB99806	07/23/2015	remaining	N	Y		< 0.28	UJ	S15
U35A	133-U35A-PB	12.8	133-U35A-PB-17.3-17.8	17.3 - 17.8 ft	-4.5	-5.0	JB99601-2R	JB99601R	07/21/2015	remaining	N	Y		1.6	J	S15
U35A	133-U35A-SW-W2	12.8	133-U35A-SW-W-16.8-17.3	16.8 - 17.3 ft	-4.0	-4.5	JB99601-3	JB99601	07/21/2015	remaining	N	Y		< 0.22	UJ	S15
U35A	EF-23	12.7	EF-B23-20.0	20.0 - 20.5 ft	-7.3	-7.8	460-26239-17	460262391	05/06/2011	remaining	N	Y		< 1.0	UJ	S15
U36A	133-P3C-U36A	12.6	133-P3C-U36A-18.0-18.5	18.0 - 18.5 ft	-5.4	-5.9	JB81503-3	JB81503	11/11/2014	remaining	N	Y		16.6		
U36A	133-P3C-U36A	12.6	133-P3C-U36A-20.3-20.8	20.3 - 20.8 ft	-7.7	-8.2	JB81500-1R	JB81500R	11/11/2014	remaining	N	Y		5.8	J	
U36A	133-P3C-U36A	12.6	133-P3C-U36A-20.8-21.3	20.8 - 21.3 ft	-8.2	-8.7	JB81500-2	JB81500	11/11/2014	remaining	N	Y		< 0.46	UJ	
U36A	133-U36A-PB	12.6	133-U36A-PB-16.0-16.5	16.0 - 16.5 ft	-3.4	-3.9	JB99084-2	JB99084	07/14/2015	remaining	N	Y		2.2	RA	
U37A	133-P3C-U37A	12.6	133-P3C-U37A-15.5-16.0	15.5 - 16.0 ft	-2.9	-3.4	JB81300-20	JB81300	11/07/2014	remaining	N	Y		1.4	J	
U37A	133-U37A-PB	12.6	133-U37A-PB-15.5-16.0	15.5 - 16.0 ft	-2.9	-3.4	JB98544-2	JB98544	07/07/2015	remaining	N	Y		2.0	RA	
U37A	133-U37A-PB	12.6	133-U37A-PB-15.5-16.0X	15.5 - 16.0 ft	-2.9	-3.4	JB98544-3	JB98544	07/07/2015	remaining	FD	Y		0.68	RA	
U37A	133-U37A-SW-S3	12.6	133-U37A-SW-S-15.0-15.5	15.0 - 15.5 ft	-2.4	-2.9	JB98544-4	JB98544	07/07/2015	remaining	N	Y		< 0.34	RA	
U38A	133-P3C-U38A	12.5	133-P3C-U38A-12.0-12.5	12.0 - 12.5 ft	0.5	0.0	JB81300-8	JB81300	11/07/2014	remaining	N	Y		0.73	J	
U38A	133-P3C-U38A	12.5	133-P3C-U38A-13.5-14.0	13.5 - 14.0 ft	-1.0	-1.5	JB81300-10	JB81300	11/07/2014	remaining	N	Y		0.85	J	
U38A	133-P3C-U38A	12.5	133-P3C-U38A-14.0-14.5	14.0 - 14.5 ft	-1.5	-2.0	JB81300-9	JB81300	11/07/2014	remaining	N	Y		3.4	J	
U38A	133-U37A-SW-S1	12.6	133-U37A-SW-S-11.0-11.5	11.0 - 11.5 ft	1.6	1.1	JB98544-6R	JB98544R	07/07/2015	remaining	N	Y		1.1	RA	
U38A	133-U37A-SW-S2	12.6	133-U37A-SW-S-13.0-13.5	13.0 - 13.5 ft	-0.4	-0.9	JB98544-5R	JB98544R	07/07/2015	remaining	N	Y		0.73	RA	
U38A	133-U38A-PB	12.5	133-U38A-PB-10.3-10.8	10.3 - 10.8 ft	2.2	1.7	JB98320-7	JB98320	07/01/2015	remaining	N	Y		0.82	J	
U39A	133-P3C-U39A	12.4	133-P3C-U39A-9.0-9.5	9.0 - 9.5 ft	3.4	2.9	JB63022-5	JB63022	03/26/2014	remaining	N	Y		< 0.098	UJ	S37
U39A	133-P3C-U39A	12.4	133-P3C-U39A-9.0-9.5X	9.0 - 9.5 ft	3.4	2.9	JB63022-6R	JB63022R	03/26/2014	remaining	FD	Y		0.87	JB	S37
U39A	133-P3C-U39A	12.4	133-P3C-U39A-11.0-11.5	11.0 - 11.5 ft	1.4	0.9	JB63022-7	JB63022	03/26/2014	remaining	N	Y		0.50	JB	S37
U39A	133-P3C-U39A	12.4	133-P3C-U39A-13.0-13.5	13.0 - 13.5 ft	-0.6	-1.1	JB63022-8	JB63022	03/26/2014	remaining	N	Y		< 0.11	UJ	S37
U39A	133-P3C-U39A	12.4	133-P3C-U39A-13.5-14.0	13.5 - 14.0 ft	-1.1	-1.6	JB63022-9R	JB63022R	03/26/2014	remaining	N	Y		< 0.16	UJ	S37
U39A	133-P3C-U39A	12.4	133-P3C-U39A-14.0-14.5	14.0 - 14.5 ft	-1.6	-2.1	JB63022-10	JB63022	03/26/2014	remaining	N	Y		1.2	J	S37
U39A	133-U39A-PB-N	12.4	133-U39A-PB-N-8.1-8.6	10.3 - 10.8 ft	2.1	1.6	JB98320-5R	JB98320R	07/01/2015	remaining	N	Y		11.6	J	S37
U39A	133-U39A-PB-S	12.4	133-U39A-PB-S-10.3-10.8	8.1 - 8.6 ft	4.3	3.8	JB98320-6	JB98320	07/01/2015	removed	N	Y		1.5	J	S37
U39A	133-U39A-SW-W	12.4	133-U39A-SW-W-9.4-9.9	9.4 - 9.9 ft	3.0	2.5	JC2027-2R	JC2027R	08/20/2015	remaining	N	Y		0.34	J	S37
U40A	133-P3C-U40A	12.0	133-P3C-U40A-7.0-7.5	7.0 - 7.5 ft	5.0	4.5	JB63022-14	JB63022	03/26/2014	removed	N	Y		< 0.090	UJ	S29
U40A	133-P3C-U40A	12.0	133-P3C-U40A-9.0-9.5	9.0 - 9.5 ft	3.0	2.5	JB63022-15	JB63022	03/26/2014	remaining	N	Y		< 0.090	UJ	S29
U40A	133-P3C-U40A	12.0	133-P3C-U40A-11.0-11.5	11.0 - 11.5 ft	1.0	0.5	JB63022-16R	JB63022R	03/26/2014	remaining	N	Y		0.68	JB	S29

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes
U40A	133-P3C-U40A	12.0	133-P3C-U40A-13.0-13.5	13.0 - 13.5 ft	-1.0	-1.5	JB63022-17R	JB63022R	03/26/2014	remaining	N	Y		< 0.16	UJ	S29
U40A	133-P3C-U40A	12.0	133-P3C-U40A-14.0-14.5	14.0 - 14.5 ft	-2.0	-2.5	JB63022-18	JB63022	03/26/2014	remaining	N	Y		< 0.11	UJ	S29
U40A	133-P3C-U40A	12.0	133-P3C-U40A-14.5-15.0	14.5 - 15.0 ft	-2.5	-3.0	JB63022-19	JB63022	03/26/2014	remaining	N	Y		0.70	JB	S29
U40A	133-U40A-PB	12.0	133-U40A-PB-6.8-7.3	6.8 - 7.3 ft	5.2	4.7	JB96575-5	JB96575	06/09/2015	removed	N	Y		0.40	RA	S29
U41A	133-P3C-U41A	11.8	133-P3C-U41A-8.5-9.0	8.5 - 9.0 ft	3.3	2.8	JB62894-15	JB62894	03/25/2014	remaining	N	Y		< 0.083	RA	S38
U41A	133-P3C-U41A	11.8	133-P3C-U41A-10.5-11.0	10.5 - 11.0 ft	1.3	0.8	JB62894-16	JB62894	03/25/2014	remaining	N	Y		< 0.089	RA	S38
U41A	133-P3C-U41A	11.8	133-P3C-U41A-12.5-13.0	12.5 - 13.0 ft	-0.7	-1.2	JB62894-17	JB62894	03/25/2014	remaining	N	Y		0.29	RA	S38
U41A	133-P3C-U41A	11.8	133-P3C-U41A-14.5-15.0	14.5 - 15.0 ft	-2.7	-3.2	JB62894-18	JB62894	03/25/2014	remaining	N	Y		0.26	RA	S38
U41A	133-P3C-U41A	11.8	133-P3C-U41A-15.5-16.0	15.5 - 16.0 ft	-3.7	-4.2	JB62894-19	JB62894	03/25/2014	remaining	N	Y		< 0.11	RA	S38
U41A	133-P3C-U41A	11.8	133-P3C-U41A-16.0-16.5	16.0 - 16.5 ft	-4.2	-4.7	JB62894-20	JB62894	03/25/2014	remaining	N	Y		0.53	RA	S38
U41A	133-P3C-U41A	11.8	133-P3C-U41A-16.5-17.0	16.5 - 17.0 ft	-4.7	-5.2	JB62894-21	JB62894	03/25/2014	remaining	N	Y		< 0.15	RA	S38
U41A	133-P3C-U41A	11.8	133-P3C-U41A-18.5-19.0	18.5 - 19.0 ft	-6.7	-7.2	JB62894-22	JB62894	03/25/2014	remaining	N	Y		0.45	RA	S38
U41A	133-P3C-U41A	11.8	133-P3C-U41A-19.5-20.0	19.5 - 20.0 ft	-7.7	-8.2	JB62894-23	JB62894	03/25/2014	remaining	N	Y		0.38	RA	S38
U41A	133-U41A-PB	11.8	133-U41A-PB-6.8-7.3	6.8 - 7.3 ft	5.0	4.5	JB96575-4	JB96575	06/09/2015	removed	N	Y		< 0.25	RA	S38
U42A	133-B9	12.1	PPG-133-B9D 12.0-12.5 797784	12.0 - 12.5 ft	0.1	-0.4	797784	B560	01/05/2007	remaining	N	Y			R	
U42A	133-B9	12.1	PPG-133-B9E 14.0-14.5 797785	14.0 - 14.5 ft	-1.9	-2.4	797785	B560	01/05/2007	remaining	N	Y			R	
U42A	133-P3C-U42A	12.1	133-P3C-U42A-16.0-16.5	16.0 - 16.5 ft	-3.9	-4.4	JB63022-20	JB63022	03/26/2014	remaining	N	Y		< 0.092	J	
U42A	133-P3C-U42A	12.1	133-P3C-U42A-16.0-16.5X	16.0 - 16.5 ft	-3.9	-4.4	JB63022-21	JB63022	03/26/2014	remaining	FD	Y		< 0.086	RA	
U42A	133-P3C-U42A	12.1	133-P3C-U42A-17.5-18.0	17.5 - 18.0 ft	-5.4	-5.9	JB63022-22	JB63022	03/26/2014	remaining	N	Y		< 0.14	RA	
U42A	133-P3C-U42A	12.1	133-P3C-U42A-18.0-18.5	18.0 - 18.5 ft	-5.9	-6.4	JB63022-23	JB63022	03/26/2014	remaining	N	Y		1.3	RA	
U42A	133-P3C-U42AR	12.2	133-P3C-U42AR-10.5-11.0	10.5 - 11.0 ft	1.7	1.2	JB82628-2R	JB82628R	11/24/2014	remaining	N	Y		0.60		
U42A	133-P3C-U42AR	12.2	133-P3C-U42AR-12.0-12.5	12.0 - 12.5 ft	0.2	-0.3	JB82628-3R	JB82628R	11/24/2014	remaining	N	Y		1.2		
U42A	133-P3C-U42AR	12.2	133-P3C-U42AR-14.0-14.5	14.0 - 14.5 ft	-1.8	-2.3	JB82628-4R	JB82628R	11/24/2014	remaining	N	Y		0.71		
U43A	133-B16	9.9	133B16D 11.5-12.0 802263	11.5 - 12.0 ft	-1.6	-2.1	802263	C243	01/24/2007	remaining	N	Y		< 2.31	UJ	S26, S39
U43A	133-B16	9.9	133B16E 13.2-13.7 802264	13.2 - 13.7 ft	-3.3	-3.8	802264	C243	01/24/2007	remaining	N	Y		< 3.24	UJ	S26, S39
U43A	133-B16	9.9	133B16F 14.6-15.0 802265	14.6 - 15.0 ft	-4.7	-5.1	802265	C243	01/24/2007	remaining	N	Y		< 2.49	UJ	S26, S39
U43A	133-B16	9.9	133B16G 17.0-17.3 802266	17.0 - 17.3 ft	-7.1	-7.4	802266	C243	01/24/2007	remaining	N	Y		< 6.06	UJ	S26, S39
U43A	133-B16	9.9	133B16H 18.9-19.2 802267	18.9 - 19.2 ft	-9.0	-9.3	802267	C243	01/24/2007	remaining	N	Y		< 4.45	UJ	S26, S39
U43A	133-B16	9.9	133B16I 21.5-22.0 802268	21.5 - 22.0 ft	-11.6	-12.1	802268	C243	01/24/2007	remaining	N	Y		< 3.54	UJ	S26, S39
U43A	133-B16-SA	10.5	133-B16-SA-6.5-7.0	6.5 - 7.0 ft	4.0	3.5	JB71691-6	JB71691	07/15/2014	removed	N	Y		< 0.21	UJ	S26, S39
U43A	133-B16-SA	10.5	133-B16-SA-8.5-9.0	8.5 - 9.0 ft	2.0	1.5	JB71691-7	JB71691	07/15/2014	remaining	N	Y		1.9	J	S26, S39
U43A	133-B16-SA	10.5	133-B16-SA-10.5-11.0	10.5 - 11.0 ft	0.0	-0.5	JB71691-8	JB71691	07/15/2014	remaining	N	Y		< 0.21	UJ	S26, S39
U43A	133-P3C-U43A	10.2	133-P3C-U43A-6.5-7.0	6.5 - 7.0 ft	3.7	3.2	JB40574-14	JB40574	06/25/2013	removed	N	Y		0.37	RA	S26, S40
U43A	133-P3C-U43A	10.2	133-P3C-U43A-8.5-9.0	8.5 - 9.0 ft	1.7	1.2	JB40574-15	JB40574	06/25/2013	remaining	N	Y		0.42	RA	S26
U43A	133-P3C-U43A	10.2	133-P3C-U43A-10.5-11.0	10.5 - 11.0 ft	-0.3	-0.8	JB40574-16	JB40574	06/25/2013	remaining	N	Y		< 0.081	RA	S26
U43A	133-P3C-U43A	10.2	133-P3C-U43A-12.5-13.0	12.5 - 13.0 ft	-2.3	-2.8	JB40574-17	JB40574	06/25/2013	remaining	N	Y		< 0.11	RA	S26
U43A	133-P3C-U43A	10.2	133-P3C-U43A-14.0-14.5	14.0 - 14.5 ft	-3.8	-4.3	JB40574-18	JB40574	06/25/2013	remaining	N	Y		0.72	RA	S26
U43A	133-P3C-U43A	10.2	133-P3C-U43A-14.5-15.0	14.5 - 15.0 ft	-4.3	-4.8	JB40574-19	JB40574	06/25/2013	remaining	N	Y		0.81	RA	S26
U43A	133-T43A-SW-E	10.2	133-T43A-SW-E-10.0-10.6	8.0 - 7.5 ft	2.2	1.6	JB95127-2R	JB95127R	05/20/2015	remaining	N	Y		0.31	RA	S26, S32
U44A	133-P3C-U44A	10.6	133-P3C-U44A-5.0-5.5	5.0 - 5.5 ft	5.6	5.1	JB64753-11	JB64753	04/15/2014	removed	N	Y		< 0.091	U	S26, S41
U44A	133-P3C-U44A	10.6	133-P3C-U44A-7.0-7.5	7.0 - 7.5 ft	3.6	3.1	JB64753-12	JB64753	04/15/2014	removed	N	Y		< 0.081	U	S26, S41
U44A	133-P3C-U44A	10.6	133-P3C-U44A-9.0-9.5	9.0 - 9.5 ft	1.6	1.1	JB64753-13	JB64753	04/15/2014	remaining	N	Y		0.76		S26, S41
U44A	133-P3C-U44A	10.6	133-P3C-U44A-11.0-11.5	11.0 - 11.5 ft	-0.4	-0.9	JB64753-14	JB64753	04/15/2014	remaining	N	Y		< 0.10	U	S26, S41
U44A	133-P3C-U44A	10.6	133-P3C-U44A-13.0-13.5	13.0 - 13.5 ft	-2.4	-2.9	JB64753-15	JB64753	04/15/2014	remaining	N	Y		0.25	J	S26, S41
U44A	133-P3C-U44A	10.6	133-P3C-U44A-15.0-15.5	15.0 - 15.5 ft	-4.4	-4.9	JB64753-16	JB64753	04/15/2014	remaining	N	Y		0.28	J	S26, S41
U44A	133-P3C-U44A	10.6	133-P3C-U44A-15.5-16.0	15.5 - 16.0 ft	-4.9	-5.4	JB64753-17	JB64753	04/15/2014	remaining	N	Y		1.6	J	S26, S41
U44A	133-T44A-SW-E1	10.6	133-T44A-SW-E-10.5-11.0	8.9 - 9.4 ft	1.7	1.2	JB94615-2R	JB94615R	05/13/2015	remaining	N	Y		0.36	J	S26, S32, S41

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes
U44A	133-T44A-SW-E2	10.6	133-T44A-SW-E-12.5-13.0	10.9 - 11.4 ft	-0.3	-0.8	JB94615-3R	JB94615R	05/13/2015	remaining	N	Y		0.74	J	S26, S32, S41
U44A	133-T44A-SW-E3	10.6	133-T44A-SW-E-14.5-15.0	12.9 - 13.4 ft	-2.3	-2.8	JB94615-4R	JB94615R	05/13/2015	remaining	N	Y		0.41	J	S26, S32, S41
U44A	133-T44A-SW-E4	10.6	133-T44A-SW-E-16.5-17.0	14.9 - 15.4 ft	-4.3	-4.8	JB94615-5	JB94615	05/13/2015	remaining	N	Y		< 0.27	UJ	S26, S32, S41
U44A	ASM-V44A-SW-W1	10.6	ASM-V44A-SW-W-9.6-10.1	6.0 - 6.5 ft	4.6	4.1	JC56207-2R	JC56207R	11/29/2017	remaining	N	Y		< 0.15	RA	S26, S32, S41
U45A	135-P3C-U45A	10.9	135-P3C-U45A-1.0-1.5	1.0 - 1.5 ft	9.9	9.4	JB64860-1	JB64860	04/16/2014	removed	N	Y		1.3	J	S26, S42
U45A	135-P3C-U45A	10.9	135-P3C-U45A-3.0-3.5	3.0 - 3.5 ft	7.9	7.4	JB64860-2R	JB64860R	04/16/2014	removed	N	Y		15.6	J	S26, S42
U45A	135-P3C-U45A	10.9	135-P3C-U45A-5.0-5.5	5.0 - 5.5 ft	5.9	5.4	JB64860-3R	JB64860R	04/16/2014	removed	N	Y		1.5	J	S26, S42
U45A	135-P3C-U45A	10.9	135-P3C-U45A-7.0-7.5	7.0 - 7.5 ft	3.9	3.4	JB64860-4R	JB64860R	04/16/2014	removed	N	Y		0.86	J	S26, S42
U45A	135-P3C-U45A	10.9	135-P3C-U45A-9.0-9.5	9.0 - 9.5 ft	1.9	1.4	JB64860-5R	JB64860R	04/16/2014	remaining	N	Y		1.1	J	S26, S42
U45A	135-P3C-U45A	10.9	135-P3C-U45A-11.0-11.5	11.0 - 11.5 ft	-0.1	-0.6	JB64860-6	JB64860	04/16/2014	remaining	N	Y		0.32	J	S26, S42
U45A	135-P3C-U45A	10.9	135-P3C-U45A-13.0-13.5	13.0 - 13.5 ft	-2.1	-2.6	JB64860-7R	JB64860R	04/16/2014	remaining	N	Y		0.49	J	S26, S42
U45A	135-P3C-U45A	10.9	135-P3C-U45A-15.2-15.7	15.2 - 15.7 ft	-4.3	-4.8	JB64860-8	JB64860	04/16/2014	remaining	N	Y		0.63	J	S26, S42
U45A	135-P3C-U45A	10.9	135-P3C-U45A-15.7-16.2	15.7 - 16.2 ft	-4.8	-5.3	JB64860-9R	JB64860R	04/16/2014	remaining	N	Y		1.5	J	S26, S42
V30A	133-U30A-SW-E1	12.5	133-U30A-SW-E-13.2-13.7	13.2 - 13.7 ft	-0.7	-1.2	JC2160-3R	JC2160R	08/21/2015	remaining	N	Y		0.30	J	S15
V30A	P4-HAL-V30A	12.5	P4-HAL-V30A-13.0-13.5	13.0 - 13.5 ft	-0.5	-1.0	JB78753-5	JB78753	10/08/2014	remaining	N	Y		2.6	J	S15
V30A	P4-HAL-V30A	12.5	P4-HAL-V30A-15.0-15.5	15.0 - 15.5 ft	-2.5	-3.0	JB78753-6R	JB78753R	10/08/2014	remaining	N	Y		0.54	J	S15
V30A	P4-HAL-V30A	12.5	P4-HAL-V30A-17.0-17.5	17.0 - 17.5 ft	-4.5	-5.0	JB78753-7	JB78753	10/08/2014	remaining	N	Y		2.1	J	S15
V30A	P4-HAL-V30A	12.5	P4-HAL-V30A-17.0-17.5X	17.0 - 17.5 ft	-4.5	-5.0	JB78753-9	JB78753	10/08/2014	remaining	FD	Y		1.6	J	S15
V30A	P4-HAL-V30A	12.5	P4-HAL-V30A-17.5-18.0	17.5 - 18.0 ft	-5.0	-5.5	JB78753-8	JB78753	10/08/2014	remaining	N	Y		2.1	J	S15
V31A	133-HSS-V31A-PB2	12.3	133-HSS-V31A-PB-14.1-14.6	14.1 - 14.6 ft	-1.8	-2.3	JC2393-3	JC2393	08/26/2015	remaining	N	Y		< 0.26	UJ	S15
V31A	P4-HAL-V31A	12.3	P4-HAL-V31A-15.0-15.5	15.0 - 15.5 ft	-2.7	-3.2	JB78382-16R	JB78382R	10/03/2014	remaining	N	Y		0.30	J	S15
V31A	P4-HAL-V31A	12.3	P4-HAL-V31A-15.5-16.0	15.5 - 16.0 ft	-3.2	-3.7	JB78382-17R	JB78382R	10/03/2014	remaining	N	Y		0.69	J	S15
V31A	P4-HAL-V31A	12.3	P4-HAL-V31A-16.0-16.5	16.0 - 16.5 ft	-3.7	-4.2	JB78382-18	JB78382	10/03/2014	remaining	N	Y		0.47	J	S15
V32A	133-B2	12.4	PPG-133-B2F 16.3-17.3	16.3 - 17.3 ft	-3.9	-4.9	792168	A686	12/11/2006	remaining	N	Y		< 4.03	RA	S15
V32A	133-B2	12.4	PPG-133-B2G 20.0-20.5	20.0 - 20.5 ft	-7.6	-8.1	792169	A686	12/11/2006	remaining	N	Y		14.9	RA	S15
V32A	133-B2	12.4	PPG-133-B2H 22.0-22.5	22.0 - 22.5 ft	-9.6	-10.1	792170	A686	12/11/2006	remaining	N	Y		< 2.42	RA	S15
V32A	133-B2	12.4	PPG-133-B2I 23.2-23.7	23.2 - 23.7 ft	-10.8	-11.3	792171	A686	12/11/2006	remaining	N	Y		< 2.51	UJ	S15
V32A	133-P3C-V32A	12.4	133-P3C-V32A-13.0-13.5	13.0 - 13.5 ft	-0.6	-1.1	JB42537-10R	JB42537R	07/18/2013	remaining	N	Y		0.52	J	S15
V32A	133-P3C-V32A	12.4	133-P3C-V32A-14.7-15.2	14.7 - 15.2 ft	-2.3	-2.8	JB42537-11R	JB42537R	07/18/2013	remaining	N	Y		0.40	J	S15
V32A	133-P3C-V32A	12.4	133-P3C-V32A-15.2-15.7	15.2 - 15.7 ft	-2.8	-3.3	JB42537-12R	JB42537R	07/18/2013	remaining	N	Y		1.1	J	S15
V33A	133-P3C-V33A	13.1	133-P3C-V33A-15.0-15.5	15.0 - 15.5 ft	-1.9	-2.4	JB81605-23R	JB81605R	11/12/2014	remaining	N	Y		1.2	J	S15
V33A	133-V33A-PB	13.1	133-V33A-PB-15.0-15.5	15.0 - 15.5 ft	-1.9	-2.4	JB99963-3	JB99963	07/24/2015	remaining	N	Y		0.30	RA	S15
V33A	133-V33A-SW-E4	13.1	133-V33A-SW-E-14.5-15.0	14.5 - 15.0 ft	-1.4	-1.9	JC137-7	JC137	07/27/2015	remaining	N	Y		< 0.25	UJ	S15
V34A	133-P3C-V34A	13.2	133-P3C-V34A-16.5-17.0	16.5 - 17.0 ft	-3.3	-3.8	JB81605-10	JB81605	11/12/2014	remaining	N	Y		0.75	J	
V34A	133-P3C-V34A	13.2	133-P3C-V34A-17.0-17.5	17.0 - 17.5 ft	-3.8	-4.3	JB81605-11	JB81605	11/12/2014	remaining	N	Y		0.99	J	
V34A	133-V34A-PB	13.2	133-V34A-PB-16.5-17.0	16.5 - 17.0 ft	-3.3	-3.8	JB99806-3R	JB99806R	07/23/2015	remaining	N	Y		0.38	J	
V34A	133-V34A-SW-E2	13.1	133-V34A-SW-E-14.0-14.5	14.0 - 14.5 ft	-0.9	-1.4	JC137-5	JC137	07/27/2015	remaining	N	Y		< 0.34	UJ	
V34A	133-V34A-SW-E3	13.1	133-V34A-SW-E-16.0-16.5	16.0 - 16.5 ft	-2.9	-3.4	JC137-4	JC137	07/27/2015	remaining	N	Y		< 0.28	UJ	
V35A	133-P3C-V35A	12.6	133-P3C-V35A-17.5-18.0	17.5 - 18.0 ft	-4.9	-5.4	JB62894-32	JB62894	03/25/2014	removed	N	Y	FILL (FILL)	33.2	J	S43
V35A	133-P3C-V35A	12.6	133-P3C-V35A-18.0-18.5	18.0 - 18.5 ft	-5.4	-5.9	JB62894-33T	JB62894T	03/25/2014	removed	N	Y	MM (PT)	33.6	J	S44
V35A	133-V35A-PB	12.6	133-V35A-PB-17.3-17.8	17.3 - 17.8 ft	-4.7	-5.2	JB99722-2R	JB99722R	07/22/2015	remaining	N	Y	MM (PT)	1.2	RA	S43, S44
V36A	133-P3C-V36A	12.6	133-P3C-V36A-15.5-16.0	15.5 - 16.0 ft	-2.9	-3.4	JB81500-12R	JB81500R	11/11/2014	remaining	N	Y		2.7	J	
V36A	133-V36A-PB	12.6	133-V36A-PB-15.7-16.2	15.7 - 16.2 ft	-3.1	-3.6	JB99084-3	JB99084	07/14/2015	remaining	N	Y		1.4	RA	S45
V36A	133-V36A-PB2	12.6	133-V36A-PB-15.7-16.2R	15.7 - 16.2 ft	-3.1	-3.6	JC24395-2	JC24395	07/20/2016	remaining	N	Y		< 0.32	RA	S45
V37A	133-P3C-V37A	12.6	133-P3C-V37A-16.0-16.5	16.0 - 16.5 ft	-3.4	-3.9	JB80169-10	JB80169	10/27/2014	remaining	N	Y		< 0.28	UJ	
V37A	133-P3C-V37A	12.6	133-P3C-V37A-16.5-17.0	16.5 - 17.0 ft	-3.9	-4.4	JB80169-11R	JB80169R	10/27/2014	remaining	N	Y		1.1	J	
V38A	133-P3C-V38A	12.7	133-P3C-V38A-10.5-11.0	10.5 - 11.0 ft	2.2	1.7	JB80169-18	JB80169	10/27/2014	remaining	N	Y		< 0.23	U	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
V38A	133-P3C-V38A	12.7	133-P3C-V38A-12.5-13.0	12.5 - 13.0 ft	0.2	-0.3	JB80169-19	JB80169	10/27/2014	remaining	N	Y		< 0.25	U		
V38A	133-P3C-V38A	12.7	133-P3C-V38A-14.5-15.0	14.5 - 15.0 ft	-1.8	-2.3	JB80169-20	JB80169	10/27/2014	remaining	N	Y		0.81			
V38A	133-P3C-V38A	12.7	133-P3C-V38A-15.5-16.0	15.5 - 16.0 ft	-2.8	-3.3	JB80169-21	JB80169	10/27/2014	remaining	N	Y		< 0.35	UJ		
V38A	133-P3C-V38A	12.7	133-P3C-V38A-16.0-16.5	16.0 - 16.5 ft	-3.3	-3.8	JB80169-22	JB80169	10/27/2014	remaining	N	Y		19.7	J		
V38A	133-V37A-SW-S2	12.6	133-V37A-SW-S-12.1-12.6	12.1 - 12.6 ft	0.5	0.0	JC35627-4	JC35627	01/17/2017	removed	N	Y		< 0.42	UJ	S46	
V38A	133-V37A-SW-SR1	12.6	133-V37A-SW-S-14.1-14.6R1	14.1 - 14.6 ft	-1.5	-2.0	JC37448-2	JC37448	02/17/2017	remaining	N	Y		< 0.48	UJ		
V39A	133-P3C-V39A	13.6	133-P3C-V39A-10.0-10.5	10.0 - 10.5 ft	3.6	3.1	JB65296-8	JB65296	04/22/2014	removed	N	Y		0.37	J	S47	
V39A	133-P3C-V39A	13.6	133-P3C-V39A-12.0-12.5	12.0 - 12.5 ft	1.6	1.1	JB65296-9T	JB65296T	04/22/2014	removed	N	Y		2.0	J	S47	
V39A	133-P3C-V39A	13.6	133-P3C-V39A-14.0-14.5	14.0 - 14.5 ft	-0.4	-0.9	JB65296-10	JB65296	04/22/2014	remaining	N	Y		0.74	J	S47	
V39A	133-P3C-V39A	13.6	133-P3C-V39A-14.5-15.0	14.5 - 15.0 ft	-0.9	-1.4	JB65296-11T	JB65296T	04/22/2014	remaining	N	Y		3.0	J	S47	
V39A	133-P3C-V39A	13.6	133-P3C-V39A-15.0-15.5	15.0 - 15.5 ft	-1.4	-1.9	JB65296-12	JB65296	04/22/2014	remaining	N	Y		2.7	J	S47	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-6.0-6.5	6.0 - 6.5 ft	3.4	2.9	JB65204-5R	JB65204R	04/21/2014	removed	N	Y		1.5	J	S2, S48, S49	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-6.0-6.5X	6.0 - 6.5 ft	3.4	2.9	JB65204-6R	JB65204R	04/21/2014	removed	FD	Y		1.9	J	S2, S48, S49	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JB65204-13	JB65204	04/21/2014	removed	N	Y		0.61	J	S2, S48, S49	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-8.0-8.5	8.0 - 8.5 ft	1.4	0.9	JB65204-7R	JB65204R	04/21/2014	removed	N	Y		0.72	J	S2, S48, S49	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-10.0-10.5	10.0 - 10.5 ft	-0.6	-1.1	JB65204-8R	JB65204R	04/21/2014	removed	N	Y		2.0	J	S2, S48, S49	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-12.0-12.5	12.0 - 12.5 ft	-2.6	-3.1	JB65204-9R	JB65204R	04/21/2014	remaining	N	Y		0.67	J	S2, S48, S49	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-14.0-14.5	14.0 - 14.5 ft	-4.6	-5.1	JB65204-10R	JB65204R	04/21/2014	remaining	N	Y		0.89	J	S2, S48, S49	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-15.3-15.8	15.3 - 15.8 ft	-5.9	-6.4	JB65204-11R	JB65204R	04/21/2014	remaining	N	Y		2.0	J	S2, S48, S49	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-15.8-16.3	15.8 - 16.3 ft	-6.4	-6.9	JB65204-12R	JB65204R	04/21/2014	remaining	N	Y		3.4	J	S2, S48, S49	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-11.0-11.5	11.0 - 11.5 ft	2.7	2.2	JB42618-13R	JB42618R	07/19/2013	removed	N	Y		< 0.074	UJ	S2, S48, S49	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-13.0-13.5	13.0 - 13.5 ft	0.7	0.2	JB42618-14R	JB42618R	07/19/2013	removed	N	Y		< 0.080	UJ	S2, S48, S49	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-15.0-15.5	15.0 - 15.5 ft	-1.3	-1.8	JB42618-15	JB42618	07/19/2013	removed	N	Y		< 0.087	UJ	S2, S48, S49	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-15.5-16.0	15.5 - 16.0 ft	-1.8	-2.3	JB42618-16	JB42618	07/19/2013	removed	N	Y		0.32	J	S2, S48, S49	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-15.5-16.0X	15.5 - 16.0 ft	-1.8	-2.3	JB42618-17	JB42618	07/19/2013	removed	FD	Y		0.17	J	S2, S48, S49	
V41A	ASM-V41AR	10.1	ASM-V41AR-8.0-8.5	8.0 - 8.5 ft	2.1	1.6	JC31135-8	JC31135	11/04/2016	remaining	N	Y		< 0.35	UJ	S2, S26	
V41A	ASM-V41AR	10.1	ASM-V41AR-10.0-10.5	10.0 - 10.5 ft	0.1	-0.4	JC31135-4	JC31135	11/04/2016	remaining	N	Y		< 0.35	UJ	S2, S26	
V41A	ASM-V41AR	10.1	ASM-V41AR-12.0-12.5	12.0 - 12.5 ft	-1.9	-2.4	JC31135-5R	JC31135R	11/04/2016	remaining	N	Y		0.80	J	S2, S26	
V41A	ASM-V41AR	10.1	ASM-V41AR-13.0-13.5	13.0 - 13.5 ft	-2.9	-3.4	JC31135-6R	JC31135R	11/04/2016	remaining	N	Y		0.58	J	S2, S26	
V41A	ASM-V41AR	10.1	ASM-V41AR-13.5-14.0	13.5 - 14.0 ft	-3.4	-3.9	JC31135-7R	JC31135R	11/04/2016	remaining	N	Y		0.56	J	S2, S26	
V42A	135-P3C-V42A	10.7	135-P3C-V42A-9.5-10.0	9.5 - 10.0 ft	1.2	0.7	JB64752-14	JB64752	04/15/2014	remaining	N	Y		0.67	RA	S14, S26	
V42A	135-P3C-V42A	10.7	135-P3C-V42A-11.5-12.0	11.5 - 12.0 ft	-0.8	-1.3	JB64752-15	JB64752	04/15/2014	remaining	N	Y		0.20	RA	S14, S26	
V42A	135-P3C-V42A	10.7	135-P3C-V42A-13.5-14.0	13.5 - 14.0 ft	-2.8	-3.3	JB64752-16	JB64752	04/15/2014	remaining	N	Y		< 0.083	RA	S14, S26	
V42A	135-P3C-V42A	10.7	135-P3C-V42A-15.0-15.5	15.0 - 15.5 ft	-4.3	-4.8	JB64752-17	JB64752	04/15/2014	remaining	N	Y		0.20	RA	S14, S26	
V42A	135-P3C-V42A	10.7	135-P3C-V42A-15.0-15.5X	15.0 - 15.5 ft	-4.3	-4.8	JB64752-18	JB64752	04/15/2014	remaining	FD	Y		0.096	RA	S14, S26	
V42A	135-P3C-V42A	10.7	135-P3C-V42A-15.5-16.0	15.5 - 16.0 ft	-4.8	-5.3	JB64752-19	JB64752	04/15/2014	remaining	N	Y		0.23	RA	S14, S26	
V42A	ASM-V41A-SW-S4	13.4	ASM-V41A-SW-S-11.8-12.3	11.8 - 12.3 ft	1.6	1.1	JC52125-3R	JC52125R	09/29/2017	remaining	N	Y		< 0.14	RA	S14, S26	
V42A	ASM-V41A-SW-S5	13.4	ASM-V41A-SW-S-13.8-14.3	13.8 - 14.3 ft	-0.4	-0.9	JC52125-2R	JC52125R	09/29/2017	remaining	N	Y		< 0.18	RA	S14, S26	
V42A	ASM-V42AR2	14.4	ASM-V42AR2-12.0-12.5	12.0 - 12.5 ft	2.4	1.9	JC28463-22	JC28463	09/27/2016	removed	N	Y		< 0.38	UJ	S14, S26, S50	
V42A	ASM-V42AR2	14.4	ASM-V42AR2-14.0-14.5	14.0 - 14.5 ft	0.4	-0.1	JC28463-23	JC28463	09/27/2016	remaining	N	Y		3.0	J	S14, S26	
V42A	ASM-V42AR2	14.4	ASM-V42AR2-15.0-15.5	15.0 - 15.5 ft	-0.6	-1.1	JC28463-24	JC28463	09/27/2016	remaining	N	Y		< 0.32	UJ	S14, S26	
V42A	ASM-V42AR2	14.4	ASM-V42AR2-15.0-15.5X	15.0 - 15.5 ft	-0.6	-1.1	JC28463-25	JC28463	09/27/2016	remaining	FD	Y		< 0.32	UJ	S14, S26	
V42A	ASM-V42AR2	14.4	ASM-V42AR2-15.5-16.0	15.5 - 16.0 ft	-1.1	-1.6	JC28463-26	JC28463	09/27/2016	remaining	N	Y		< 0.78	UJ	S14, S26	
W27A	133-B1	11.8	133-B1H_16-16.5	16.0 - 16.5 ft	-4.2	-4.7	791766	A623	12/08/2006	remaining	N	Y		< 3.59	U	S15, S51	
W27A	133-B1	11.8	133_B1I_18-18.5	18.0 - 18.5 ft	-6.2	-6.7	791767	A623	12/08/2006	remaining	N	Y		< 3.48	U	S15, S51	
W27A	133-B1	11.8	133-B1J_20-20.5	20.0 - 20.5 ft	-8.2	-8.7	791768	A623	12/08/2006	remaining	N	Y		< 3.52	U	S15, S51	
W27A	133-B1	11.8	133-B1K_22-22.5	22.0 - 22.5 ft	-10.2	-10.7	791769	A623	12/08/2006	remaining	N	Y		< 2.43	U	S15, S51	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
W27A	133-P3C-MW101I	9.4	133-P3C-MW101I-35.0-35.5	35.0 - 35.5 ft	-25.6	-26.1	JC13952-4	JC13952	01/26/2016	remaining	N	Y		< 0.24	U	S15, S51	
W27A	133-P3C-MW101I	9.4	133-P3C-MW101I-40.0-40.5	40.0 - 40.5 ft	-30.6	-31.1	JC13952-5	JC13952	01/26/2016	remaining	N	Y		< 0.24	U	S15, S51	
W27A	133-P3C-MW101I	9.4	133-P3C-MW101I-44.0-44.5	44.0 - 44.5 ft	-34.6	-35.1	JC13952-6	JC13952	01/26/2016	remaining	N	Y		< 0.24	U	S15, S51	
W27A	133-W27A-PB	12.2	133-W27A-PB-15.0-15.5	15.0 - 15.5 ft	-2.8	-3.3	JC1474-5R	JC1474R	08/13/2015	remaining	N	Y		0.36	J	S15, S51	
W28A	133-P3C-W28A	12.1	133-P3C-W28A-14.5-15.0	14.5 - 15.0 ft	-2.4	-2.9	JB42410-2R	JB42410R	07/17/2013	remaining	N	Y		0.58	J	S15	
W28A	133-P3C-W28A	12.1	133-P3C-W28A-15.0-15.5	15.0 - 15.5 ft	-2.9	-3.4	JB42410-3R	JB42410R	07/17/2013	remaining	N	Y		2.0	J	S15	
W28A	133-W28A-PB	12.1	133-W28A-PB-13.1-13.6	13.1 - 13.6 ft	-1.0	-1.5	JC1474-3	JC1474	08/13/2015	remaining	N	Y		< 0.47	UJ	S15	
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.0-14.5	14.0 - 14.5 ft	-1.6	-2.1	JB40576-13R	JB40576R	06/25/2013	remaining	N	Y		0.32	J	S15	
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.5-15.0	14.5 - 15.0 ft	-2.1	-2.6	JB40576-14R	JB40576R	06/25/2013	remaining	N	Y		0.89	J	S15	
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.5-15.0X	14.5 - 15.0 ft	-2.1	-2.6	JB40576-15R	JB40576R	06/25/2013	remaining	FD	Y		0.49	J	S15	
W29A	133-W29A-PB	12.0	133-W29A-PB-13.2-13.7	13.2 - 13.7 ft	-1.2	-1.7	JC6112-2	JC6112	10/13/2015	remaining	N	Y		< 0.33	RA	S15	
W30A	133-P3C-W30A	13.2	133-P3C-W30A-14.0-14.5	14.0 - 14.5 ft	-0.8	-1.3	JB81978-10T	JB81978T	11/17/2014	remaining	N	Y		< 0.29	UJ	S15, S52	
W30A	133-P3C-W30A	13.2	133-P3C-W30AR-15.0-15.5	15.0 - 15.5 ft	-1.8	-2.3	JB83431-1R	JB83431R	12/05/2014	remaining	N	Y		0.35	J	S15, S52	
W30A	133-P3C-W30A	13.2	133-P3C-W30A-15.5-16.0	15.5 - 16.0 ft	-2.3	-2.8	JB81978-11T	JB81978T	11/17/2014	remaining	N	Y		0.44	J	S15, S52	
W30A	133-P3C-W30A	13.2	133-P3C-W30A-16.0-16.5	16.0 - 16.5 ft	-2.8	-3.3	JB81978-12T	JB81978T	11/17/2014	remaining	N	Y		0.57	J	S15, S52	
W30A	133-W30A-PB2	13.2	133-W30A-PB-13.5-14.0	13.5 - 14.0 ft	-0.3	-0.8	JC6112-3	JC6112	10/13/2015	remaining	N	Y		< 0.30	RA	S15, S52	
W30A	133-W30A-SW-E2	13.2	133-W30A-SW-E-9.0-9.5	9.0 - 9.5 ft	4.2	3.7	JC6269-6	JC6269	10/14/2015	remaining	N	Y		9.7	RA	S15, S52	
W30A	133-W30A-SW-E3	13.2	133-W30A-SW-E-11.0-11.5	11.0 - 11.5 ft	2.2	1.7	JC6269-5R	JC6269R	10/14/2015	remaining	N	Y		4.4	RA	S15, S52	
W30A	133-W30A-SW-E4	13.2	133-W30A-SW-E-13.0-13.5	13.0 - 13.5 ft	0.2	-0.3	JC6269-4	JC6269	10/14/2015	remaining	N	Y		0.40	RA	S15, S52	
W30A	133-W31A-SW-N1	13.1	133-W31A-SW-N-9.1-9.6	9.1 - 9.6 ft	4.0	3.5	JC1610-7R	JC1610R	08/14/2015	removed	N	Y		9.8	RA	S15, S53	
W30A	133-W31A-SW-N2	13.1	133-W31A-SW-N-11.1-11.6	11.1 - 11.6 ft	2.0	1.5	JC1610-6R	JC1610R	08/14/2015	removed	N	Y		4.5	RA	S15, S53	
W30A	133-W31A-SW-N3	13.1	133-W31A-SW-N-13.1-13.6	13.1 - 13.6 ft	0.0	-0.5	JC1610-5R	JC1610R	08/14/2015	removed	N	Y		8.6	RA	S15, S53	
W30A	133-W31A-SW-N4	13.1	133-W31A-SW-N-15.1-15.6	15.1 - 15.6 ft	-2.0	-2.5	JC1610-4	JC1610	08/14/2015	remaining	N	Y		0.82	RA	S15	
W31A	133-P3C-W31A	13.1	133-P3C-W31A-15.5-16.0	15.5 - 16.0 ft	-2.4	-2.9	JB82047-10	JB82047	11/18/2014	removed	N	Y		< 0.32	UJ	S54	
W31A	133-P3C-W31A	13.1	133-P3C-W31A-16.0-16.5	16.0 - 16.5 ft	-2.9	-3.4	JB82047-11	JB82047	11/18/2014	remaining	N	Y		0.74	J		
W31A	133-W31A-PB	13.1	133-W31A-PB-16.2-16.7	16.2 - 16.7 ft	-3.1	-3.6	JC6340-2	JC6340	10/15/2015	remaining	N	Y		1.1	J		
W31A	133-W31A-SW-S5	13.1	133-W31A-SW-S-13.9-14.4	13.9 - 14.4 ft	-0.8	-1.3	JC406-3	JC406	07/30/2015	removed	N	Y		< 0.22	UJ	S54	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-6.0-6.5	6.0 - 6.5 ft	7.1	6.6	JB82047-15R	JB82047R	11/18/2014	remaining	N	Y		1.0	J		
W32A	133-P3C-W32A	13.1	133-P3C-W32A-6.0-6.5X	6.0 - 6.5 ft	7.1	6.6	JB82047-16R	JB82047R	11/18/2014	remaining	FD	Y		0.52	J		
W32A	133-P3C-W32A	13.1	133-P3C-W32A-8.0-8.5	8.0 - 8.5 ft	5.1	4.6	JB82047-17R	JB82047R	11/18/2014	remaining	N	Y		0.60	J		
W32A	133-P3C-W32A	13.1	133-P3C-W32A-10.0-10.5	10.0 - 10.5 ft	3.1	2.6	JB82047-18R	JB82047R	11/18/2014	remaining	N	Y		0.92	J		
W32A	133-P3C-W32A	13.1	133-P3C-W32A-12.0-12.5	12.0 - 12.5 ft	1.1	0.6	JB82047-19R	JB82047R	11/18/2014	remaining	N	Y		2.9	J		
W32A	133-P3C-W32A	13.1	133-P3C-W32A-14.0-14.5	14.0 - 14.5 ft	-0.9	-1.4	JB82047-20	JB82047	11/18/2014	remaining	N	Y		10.5	J		
W32A	133-P3C-W32A	13.1	133-P3C-W32A-16.0-16.5	16.0 - 16.5 ft	-2.9	-3.4	JB82047-21	JB82047	11/18/2014	remaining	N	Y		< 0.23	UJ		
W32A	133-P3C-W32A	13.1	133-P3C-W32A-17.0-17.5	17.0 - 17.5 ft	-3.9	-4.4	JB82047-22	JB82047	11/18/2014	remaining	N	Y		3.5	J		
W32A	133-P3C-W32A	13.1	133-P3C-W32A-17.5-18.0	17.5 - 18.0 ft	-4.4	-4.9	JB82047-23	JB82047	11/18/2014	remaining	N	Y		1.8	J		
W32A	133-V32A-SW-E1	12.4	133-V32A-SW-E-6.5-7.0	6.5 - 7.0 ft	5.9	5.4	JC310-6	JC310	07/29/2015	remaining	N	Y		< 0.28	RA		
W32A	133-V32A-SW-E2	12.4	133-V32A-SW-E-8.5-9.0	8.5 - 9.0 ft	3.9	3.4	JC310-5	JC310	07/29/2015	remaining	N	Y		0.48	RA		
W32A	133-V32A-SW-E3	12.4	133-V32A-SW-E-10.5-11.0	10.5 - 11.0 ft	1.9	1.4	JC310-4	JC310	07/29/2015	remaining	N	Y		< 0.28	RA		
W32A	133-V32A-SW-E4	12.4	133-V32A-SW-E-12.5-13.0	12.5 - 13.0 ft	-0.1	-0.6	JC310-3	JC310	07/29/2015	remaining	N	Y		0.42	RA		
W32A	133-W31A-SW-S1	13.1	133-W31A-SW-S-5.9-6.4	5.9 - 6.4 ft	7.2	6.7	JC406-7	JC406	07/30/2015	remaining	N	Y		0.33	J		
W32A	133-W31A-SW-S2	13.1	133-W31A-SW-S-7.9-8.4	7.9 - 8.4 ft	5.2	4.7	JC406-6	JC406	07/30/2015	remaining	N	Y		0.25	J		
W32A	133-W31A-SW-S3	13.1	133-W31A-SW-S-9.9-10.4	9.9 - 10.4 ft	3.2	2.7	JC406-5	JC406	07/30/2015	remaining	N	Y		< 0.22	UJ		
W32A	133-W31A-SW-S4	13.1	133-W31A-SW-S-11.9-12.4	11.9 - 12.4 ft	1.2	0.7	JC406-4	JC406	07/30/2015	remaining	N	Y		< 0.25	UJ		
W32A	133-W32A-PB	13.1	133-W32A-PB-5.4-5.9	5.4 - 5.9 ft	7.7	7.2	JC310-2R	JC310R	07/29/2015	remaining	N	Y		0.58	RA		
W33A	133-P3C-W33A	13.1	133-P3C-W33A-7.0-7.5	7.0 - 7.5 ft	6.1	5.6	JB61103-2	JB61103	03/05/2014	remaining	N	Y		< 0.092	RA	S55	
W33A	133-P3C-W33A	13.1	133-P3C-W33A-9.0-9.5	9.0 - 9.5 ft	4.1	3.6	JB61103-3	JB61103	03/05/2014	remaining	N	Y		5.4	RA		

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
W33A	133-P3C-W33A	13.1	133-P3C-W33A-11.0-11.5	11.0 - 11.5 ft	2.1	1.6	JB61103-4	JB61103	03/05/2014	remaining	N	Y		10	RA		
W33A	133-P3C-W33A	13.1	133-P3C-W33A-13.0-13.5	13.0 - 13.5 ft	0.1	-0.4	JB61103-5	JB61103	03/05/2014	remaining	N	Y		7.4	RA		
W33A	133-P3C-W33A	13.1	133-P3C-W33A-14.5-15.0	14.5 - 15.0 ft	-1.4	-1.9	JB61103-6	JB61103	03/05/2014	remaining	N	Y		8.7	RA		
W33A	133-P3C-W33A	13.1	133-P3C-W33A-15.0-15.5	15.0 - 15.5 ft	-1.9	-2.4	JB61103-7	JB61103	03/05/2014	remaining	N	Y		1.5	RA		
W33A	133-V33A-SW-E1	13.1	133-V33A-SW-E-8.5-9.0	8.5 - 9.0 ft	4.6	4.1	JC137-10	JC137	07/27/2015	remaining	N	Y		< 0.26	UJ		
W33A	133-V33A-SW-E2	13.1	133-V33A-SW-E-10.5-11.0	10.5 - 11.0 ft	2.6	2.1	JC137-9	JC137	07/27/2015	remaining	N	Y		< 0.27	UJ		
W33A	133-V33A-SW-E3	13.1	133-V33A-SW-E-12.5-13.0	12.5 - 13.0 ft	0.6	0.1	JC137-8	JC137	07/27/2015	remaining	N	Y		< 0.27	UJ		
W33A	133-W33A-PB	13.1	133-W33A-PB-6.6-7.1	6.6 - 7.1 ft	6.5	6.0	JC137-3	JC137	07/27/2015	remaining	N	Y		< 0.24	UJ	S55	
W33A	133-W34A-SW-N1	13.1	133-W34A-SW-N-8.8-9.3	8.8 - 9.3 ft	4.3	3.8	JC137-12	JC137	07/27/2015	remaining	N	Y		< 0.33	UJ	S55	
W33A	133-W34A-SW-N2	13.1	133-W34A-SW-N-10.8-11.3	10.8 - 11.3 ft	2.3	1.8	JC137-11	JC137	07/27/2015	remaining	N	Y		0.93	J		
W34A	133-B11	13.1	133-B11D 13.5-14.2 821985	13.5 - 14.2 ft	-0.4	-1.1	821985	F201	04/17/2007	remaining	N	Y		< 3.34	UJ		
W34A	133-P3C-W34A	13.1	133-P3C-W34A-11.0-11.5	11.0 - 11.5 ft	2.1	1.6	JB61103-10R	JB61103R	03/05/2014	remaining	N	Y		0.30	RA		
W34A	133-P3C-W34A	13.1	133-P3C-W34A-11.0-11.5X	11.0 - 11.5 ft	2.1	1.6	JB61103-11R	JB61103R	03/05/2014	remaining	FD	Y		< 0.21	RA		
W34A	133-P3C-W34A	13.1	133-P3C-W34A-13.0-13.5	13.0 - 13.5 ft	0.1	-0.4	JB61103-12T	JB61103T	03/05/2014	remaining	N	Y		1.5	J		
W34A	133-P3C-W34A	13.1	133-P3C-W34A-15.0-15.5	15.0 - 15.5 ft	-1.9	-2.4	JB61103-13T	JB61103T	03/05/2014	remaining	N	Y		0.13	J		
W34A	133-P3C-W34A	13.1	133-P3C-W34A-17.0-17.5	17.0 - 17.5 ft	-3.9	-4.4	JB61103-14T	JB61103T	03/05/2014	remaining	N	Y		0.41	J		
W34A	133-P3C-W34A	13.1	133-P3C-W34A-17.5-18.0	17.5 - 18.0 ft	-4.4	-4.9	JB61103-15	JB61103	03/05/2014	remaining	N	Y		0.86	RA		
W34A	133-V34A-SW-E1	13.1	133-V34A-SW-E-12.0-12.5	12.0 - 12.5 ft	1.1	0.6	JC137-6	JC137	07/27/2015	remaining	N	Y		< 0.31	UJ		
W34A	133-W34A-PB	13.1	133-W34A-PB-11.4-11.9	11.4 - 11.9 ft	1.7	1.2	JC137-2R	JC137R	07/27/2015	remaining	N	Y		0.30	J		
W34A	133-W34A-SW-E	13.1	133-W34A-SW-E-9.5-10.0	9.5 - 10.0 ft	3.6	3.1	JC25915-6R	JC25915R	08/16/2016	remaining	N	Y		0.65	J		
W35A	133-P3C-W35A	12.7	133-P3C-W35A-11.5-12.0	11.5 - 12.0 ft	1.2	0.7	JB63022-27	JB63022	03/26/2014	remaining	N	Y		< 0.084	RA		
W35A	133-P3C-W35A	12.7	133-P3C-W35A-13.5-14.0	13.5 - 14.0 ft	-0.8	-1.3	JB63022-28T	JB63022T	03/26/2014	remaining	N	Y		1.9	RA		
W35A	133-P3C-W35A	12.7	133-P3C-W35A-15.5-16.0	15.5 - 16.0 ft	-2.8	-3.3	JB63022-29T	JB63022T	03/26/2014	remaining	N	Y		2.7	RA		
W35A	133-P3C-W35A	12.7	133-P3C-W35A-17.0-17.5	17.0 - 17.5 ft	-4.3	-4.8	JB63022-30T	JB63022T	03/26/2014	remaining	N	Y		1.6	RA		
W35A	133-P3C-W35A	12.7	133-P3C-W35A-17.5-18.0	17.5 - 18.0 ft	-4.8	-5.3	JB63022-31	JB63022	03/26/2014	remaining	N	Y		3.0	RA		
W35A	133-V35A-SW-E1	12.6	133-V35A-SW-E-10.8-11.3	10.8 - 11.3 ft	1.8	1.3	JB99722-8R	JB99722R	07/22/2015	remaining	N	Y		< 0.22	RA	S56	
W35A	133-V35A-SW-E1R	12.6	133-V35A-SW-E-11.3-11.8	11.3 - 11.8 ft	1.3	0.8	JC25915-5	JC25915	08/16/2016	remaining	N	Y		0.84	J	S56	
W35A	133-V35A-SW-E2	12.6	133-V35A-SW-E-12.8-13.3	12.8 - 13.3 ft	-0.2	-0.7	JB99722-7	JB99722	07/22/2015	remaining	N	Y		< 0.26	RA	S56	
W35A	133-V35A-SW-E2R	12.6	133-V35A-SW-E-13.3-13.8	13.3 - 13.8 ft	-0.7	-1.2	JC25915-4	JC25915	08/16/2016	remaining	N	Y		< 0.35	UJ	S56	
W35A	133-V35A-SW-E3	12.6	133-V35A-SW-E-14.8-15.3	14.8 - 15.3 ft	-2.2	-2.7	JB99722-6	JB99722	07/22/2015	remaining	N	Y		< 0.25	RA	S56	
W35A	133-V35A-SW-E3R	12.6	133-V35A-SW-E-15.3-15.8	15.3 - 15.8 ft	-2.7	-3.2	JC25915-3R	JC25915R	08/16/2016	remaining	N	Y		0.90	J	S56	
W35A	133-V35A-SW-E4	12.6	133-V35A-SW-E-16.8-17.3	16.8 - 17.3 ft	-4.2	-4.7	JB99722-5	JB99722	07/22/2015	remaining	N	Y		< 0.25	RA	S56	
W35A	133-W35A-PB	12.9	133-W35A-PB-9.9-10.4	9.9 - 10.4 ft	3.0	2.5	JC25689-2R	JC25689R	08/11/2016	remaining	N	Y		0.93	J		
W35A	133-W36A-SW-N	12.7	133-W36A-SW-N-10.4-10.9	10.4 - 10.9 ft	2.3	1.8	JC25689-6R	JC25689R	08/11/2016	remaining	N	Y		0.52	J		
W36A	133-P3C-W36A	12.7	133-P3C-W36A-12.5-13.0	12.5 - 13.0 ft	0.2	-0.3	JB62894-41T	JB62894T	03/25/2014	remaining	N	Y		0.38	J	S57	
W36A	133-P3C-W36A	12.7	133-P3C-W36A-14.5-15.0	14.5 - 15.0 ft	-1.8	-2.3	JB62894-42	JB62894	03/25/2014	remaining	N	Y		0.20	J	S57	
W36A	133-P3C-W36A	12.7	133-P3C-W36A-16.0-16.5	16.0 - 16.5 ft	-3.3	-3.8	JB62894-43T	JB62894T	03/25/2014	remaining	N	Y		3.5	J	S57	
W36A	133-P3C-W36A	12.7	133-P3C-W36A-16.5-17.0	16.5 - 17.0 ft	-3.8	-4.3	JB62894-44	JB62894	03/25/2014	remaining	N	Y		2.6	J	S57	
W36A	133-V36A-SW-E2	12.6	133-V36A-SW-E-13.8-14.3	13.8 - 14.3 ft	-1.2	-1.7	JC24395-3R	JC24395R	07/20/2016	remaining	N	Y		< 0.24	RA	S57	
W36A	133-W36A-E-PB	12.7	133-W36A-E-PB-11.4-11.9	11.4 - 11.9 ft	1.3	0.8	JC24571-2	JC24571	07/22/2016	remaining	N	Y		1.0	RA	S57	
W36A	133-W36A-W-PB	12.7	133-W36A-W-PB-12.4-12.9	12.4 - 12.9 ft	0.3	-0.2	JC24571-7R	JC24571R	07/22/2016	remaining	N	Y		1.2	RA	S57	
W36A	133-W36A-W-PB	12.7	133-W36A-W-PB-12.4-12.9X	12.4 - 12.9 ft	0.3	-0.2	JC24571-8	JC24571	07/22/2016	remaining	FD	Y		0.51	RA	S57	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-7.0-7.5	7.0 - 7.5 ft	5.9	5.4	JB65296-16	JB65296	04/22/2014	removed	N	Y		1.9		S2, S58	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-9.0-9.5	9.0 - 9.5 ft	3.9	3.4	JB65296-17	JB65296	04/22/2014	removed	N	Y		0.85		S2, S58	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-11.0-11.5	11.0 - 11.5 ft	1.9	1.4	JB65296-18R	JB65296R	04/22/2014	removed	N	Y		0.24	J	S2, S58	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-13.0-13.5	13.0 - 13.5 ft	-0.1	-0.6	JB65296-19	JB65296	04/22/2014	removed	N	Y		0.30	J	S2, S58	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-15.0-15.5	15.0 - 15.5 ft	-2.1	-2.6	JB65296-20	JB65296	04/22/2014	remaining	N	Y		0.39	J	S2, S58	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-15.6-16.1	15.6 - 16.1 ft	-2.7	-3.2	JB65296-21	JB65296	04/22/2014	remaining	N	Y		0.29 J		S2, S58
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-16.1-16.6	16.1 - 16.6 ft	-3.2	-3.7	JB65296-22	JB65296	04/22/2014	remaining	N	Y		3.7 J		S2, S58
W37A	133-V37A-SW-E	12.6	133-V37A-SW-E-14.1-14.6	14.1 - 14.6 ft	-1.5	-2.0	JC35627-6R	JC35627R	01/17/2017	remaining	N	Y		16.4 J		S2
W38A	133-V38A-SW-E1	9.4	133-V38A-SW-E-6.9-7.4	3.6 - 4.1 ft	5.8	5.3	JC36658-3	JC36658	02/02/2017	remaining	N	Y		< 0.44	RA	S2, S32
W38A	133-V38A-SW-E1	9.4	133-V38A-SW-E-6.9-7.4X	3.6 - 4.1 ft	5.8	5.3	JC36658-4	JC36658	02/02/2017	remaining	FD	Y		< 0.44	RA	S2, S32
W38A	133-V38A-SW-E2	9.4	133-V38A-SW-E-8.9-9.4	5.6 - 6.1 ft	3.8	3.3	JC36658-2	JC36658	02/02/2017	remaining	N	Y		< 0.43	RA	S2, S32
W38A	135-P3C-W38A	9.4	135-P3C-W38A-1.0-1.5	1.0 - 1.5 ft	8.4	7.9	JB65079-2	JB65079	04/18/2014	removed	N	Y		0.78 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-3.0-3.5	3.0 - 3.5 ft	6.4	5.9	JB65079-3	JB65079	04/18/2014	removed	N	Y		10.3 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-5.0-5.5	5.0 - 5.5 ft	4.4	3.9	JB36930-1	JB36930	05/13/2013	remaining	N	Y		2.7 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JB36930-2R	JB36930R	05/13/2013	remaining	N	Y		0.24 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-8.5-9.0	8.5 - 9.0 ft	0.9	0.4	JB36930-3R	JB36930R	05/13/2013	remaining	N	Y		1.0 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-10.5-11.0	10.5 - 11.0 ft	-1.1	-1.6	JB36930-4	JB36930	05/13/2013	remaining	N	Y		0.64 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-12.5-13.0	12.5 - 13.0 ft	-3.1	-3.6	JB36930-5R	JB36930R	05/13/2013	remaining	N	Y		0.70 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-14.5-15.0	14.5 - 15.0 ft	-5.1	-5.6	JB36930-6R	JB36930R	05/13/2013	remaining	N	Y		0.69 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-16.0-16.5	16.0 - 16.5 ft	-6.6	-7.1	JB36930-7R	JB36930R	05/13/2013	remaining	N	Y		0.76 J		S2, S59
W38A	135-P3C-W38A	9.4	135-P3C-W38A-16.5-17.0	16.5 - 17.0 ft	-7.1	-7.6	JB36930-8R	JB36930R	05/13/2013	remaining	N	Y		1.4 J		S2, S59
W38A	135-W39A-SW-N2	9.4	135-W39A-SW-N-5.0-5.5	5.0 - 5.5 ft	4.4	3.9	JC36564-5R	JC36564R	02/01/2017	remaining	N	Y		< 0.16	RA	S2
W38A	135-W39A-SW-N3	9.4	135-W39A-SW-N-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JC36564-4R	JC36564R	02/01/2017	remaining	N	Y		< 0.15	RA	S2
W38A	135-W39A-SW-NR1	9.4	135-W39A-SW-N-3.0-3.5R	3.0 - 3.5 ft	6.4	5.9	JC37447-2R	JC37447R	02/17/2017	remaining	N	Y		1.2 J		S2
W38A	135-X38A-SW-W1	9.4	135-X38A-SW-W-7.4-7.9	3.2 - 3.7 ft	6.2	5.7	JC36500-5	JC36500	01/31/2017	remaining	N	Y		< 0.45	UJ	S2, S32
W38A	135-X38A-SW-W2	9.4	135-X38A-SW-W-9.4-9.9	5.2 - 5.7 ft	4.2	3.7	JC36500-4	JC36500	01/31/2017	remaining	N	Y		< 0.41	UJ	S2, S32
W39A	135-B3	9.3	135B3C 10.5-10.8 802273	10.5 - 10.8 ft	-1.2	-1.5	802273	C243	01/24/2007	remaining	N	Y		< 3.09	UJ	S2
W39A	135-B3	9.3	135B3D 16.0-16.5 802274	16.0 - 16.5 ft	-6.7	-7.2	802274	C243	01/24/2007	remaining	N	Y		< 3.6	UJ	S2
W39A	135-P3C-W39A	9.4	135-P3C-W39A-9.0-9.5	9.0 - 9.5 ft	0.4	-0.1	JB37527-4R	JB37527R	05/20/2013	remaining	N	Y		0.12 J		S2
W39A	135-P3C-W39A	9.4	135-P3C-W39A-11.0-11.5	11.0 - 11.5 ft	-1.6	-2.1	JB37527-5R	JB37527R	05/20/2013	remaining	N	Y		0.46 J		S2
W39A	135-P3C-W39A	9.4	135-P3C-W39A-13.0-13.5	13.0 - 13.5 ft	-3.6	-4.1	JB37527-6	JB37527	05/20/2013	remaining	N	Y		1.7 J		S2
W39A	135-P3C-W39A	9.4	135-P3C-W39A-13.5-14.0	13.5 - 14.0 ft	-4.1	-4.6	JB37527-7R	JB37527R	05/20/2013	remaining	N	Y		< 0.099	UJ	S2
W39A	135-P3C-W39A	9.4	135-P3C-W39A-14.0-14.5	14.0 - 14.5 ft	-4.6	-5.1	JB37527-8	JB37527	05/20/2013	remaining	N	Y		1.0 J		S2
W40A	135-P3C-W40A	13.3	135-P3C-W40A-9.0-9.5	9.0 - 9.5 ft	4.3	3.8	JB65201-6R	JB65201R	04/21/2014	removed	N	Y		11.1 J		S2, S14, S60
W40A	135-P3C-W40A	13.3	135-P3C-W40A-11.0-11.5	11.0 - 11.5 ft	2.3	1.8	JB65201-7	JB65201	04/21/2014	removed	N	Y		0.22 J		S2, S14, S60
W40A	135-P3C-W40A	13.3	135-P3C-W40A-13.0-13.5	13.0 - 13.5 ft	0.3	-0.2	JB65201-8	JB65201	04/21/2014	removed	N	Y		0.56 J		S2, S14, S60
W40A	135-P3C-W40A	13.3	135-P3C-W40A-13.0-13.5X	13.0 - 13.5 ft	0.3	-0.2	JB65201-9	JB65201	04/21/2014	removed	FD	Y		0.97 J		S2, S14, S60
W40A	135-P3C-W40A	13.3	135-P3C-W40A-14.4-14.9	14.4 - 14.9 ft	-1.1	-1.6	JB65201-10	JB65201	04/21/2014	removed	N	Y		0.94 J		S2, S14, S60
W40A	135-P3C-W40A	13.3	135-P3C-W40A-14.9-15.4	14.9 - 15.4 ft	-1.6	-2.1	JB65201-11	JB65201	04/21/2014	removed	N	Y		1.1 J		S2, S14, S60
W40A	135-W39A-SW-S	9.4	135-W39A-SW-S-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JC36564-9R	JC36564R	02/01/2017	remaining	N	Y		< 0.16	RA	S2, S14
X25A	133-HSS-X25A-PB	11.5	133-HSS-X25A-PB-14.1-14.6	14.1 - 14.6 ft	-2.6	-3.1	JC6738-2R	JC6738R	10/21/2015	remaining	N	Y		2.0 J		S15
X25A	P4-HAL-X25A	11.5	P4-HAL-X25A-14.0-14.5	14.0 - 14.5 ft	-2.5	-3.0	JB77885-21R	JB77885R	09/29/2014	remaining	N	Y		1.0 J		S15
X26A	133-X26A-PB	13.3	133-X26A-PB-15.0-15.5	15.0 - 15.5 ft	-1.7	-2.2	JC2535-7R	JC2535R	08/27/2015	remaining	N	Y		3.2 J		S15
X27A	133-X27A-PB	11.9	133-X27A-PB-14.2-14.7	14.2 - 14.7 ft	-2.3	-2.8	JC1699-2R	JC1699R	08/17/2015	remaining	N	Y		1.5 J		S15
X27A	133-X27A-PB	11.9	133-X27A-PB-14.2-14.7X	14.2 - 14.7 ft	-2.3	-2.8	JC1699-3	JC1699	08/17/2015	remaining	FD	Y		1.3 J		S15
X27A	PSEG-SB42	12.0	PSEG-SB42B 15-15.5	15.0 - 15.5 ft	-3.0	-3.5	785963	Z760	11/17/2006	remaining	N	Y		< 5.45	UJ	S15
X27A	PSEG-SB42	12.0	PSEG-SB42C 18-19.5	18.0 - 19.5 ft	-6.0	-7.5	785964	Z760	11/17/2006	remaining	N	Y		< 3.64	UJ	S15
X27A	PSEG-SB42	12.0	PSEG-SB42D 23-23.5	23.0 - 23.5 ft	-11.0	-11.5	785965	Z760	11/17/2006	remaining	N	Y		< 3.38	UJ	S15
X28A	133-B13	13.1	133-B13E 9.4-10.4 821889	9.4 - 10.4 ft	3.7	2.7	821889	F201	04/16/2007	remaining	N	Y		< 2.78	UJ	S61
X28A	133-B13	13.1	133-B13F 12.7-14.9 821890	12.7 - 14.9 ft	0.4	-1.8	821890	F201	04/16/2007	remaining	N	Y		4.1 J		S61
X28A	133-B13	13.1	133-B13FD 12.7-14.9 821891	12.7 - 14.9 ft	0.4	-1.8	821891	F201	04/16/2007	remaining	FD	Y		< 3.5	UJ	S61
X28A	133-X27A-SW-S	11.9	133-X27A-SW-S-12.9-13.4	12.9 - 13.4 ft	-1.0	-1.5	JC2027-4R	JC2027R	08/20/2015	remaining	N	Y		0.39 J		S61

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
X28A	133-X28A-PB	11.9	133-X28A-PB-12.1-12.6	12.1 - 12.6 ft	-0.2	-0.7	JC1610-2	JC1610	08/14/2015	remaining	N	Y		< 0.42	RA	S61	
X28A	133-X28A-SW-E2R	11.9	133-X28A-SW-E-5.7-6.2R	5.7 - 6.2 ft	6.2	5.7	JC5901-12R	JC5901R	10/09/2015	remaining	N	Y		1.2	J	S61	
X28A	133-X28A-SW-E3R	11.9	133-X28A-SW-E-7.7-8.2R	7.7 - 8.2 ft	4.2	3.7	JC5901-11R	JC5901R	10/09/2015	remaining	N	Y		0.72	J	S61	
X28A	133-X28A-SW-E4R	11.9	133-X28A-SW-E-9.7-10.2R	9.7 - 10.2 ft	2.2	1.7	JC5901-10R	JC5901R	10/09/2015	remaining	N	Y		1.9	J	S61	
X28A	133-X28A-SW-E5R	11.9	133-X28A-SW-E-11.7-12.2R	11.7 - 12.2 ft	0.2	-0.3	JC5901-9R	JC5901R	10/09/2015	remaining	N	Y		1.1	J	S61	
X29A	133-P3C-X29A	13.1	133-P3C-X29A-7.5-8.0	7.5 - 8.0 ft	5.6	5.1	JB61460-4	JB61460	03/10/2014	remaining	N	Y		0.49	J	S62	
X29A	133-P3C-X29A	13.1	133-P3C-X29A-9.5-10.0	9.5 - 10.0 ft	3.6	3.1	JB61460-5	JB61460	03/10/2014	remaining	N	Y		0.37	J	S62	
X29A	133-P3C-X29A	13.1	133-P3C-X29A-11.5-12.0	11.5 - 12.0 ft	1.6	1.1	JB61460-6	JB61460	03/10/2014	remaining	N	Y		0.23	J	S62	
X29A	133-P3C-X29A	13.1	133-P3C-X29A-11.5-12.0X	11.5 - 12.0 ft	1.6	1.1	JB61460-7	JB61460	03/10/2014	remaining	FD	Y		0.32	J	S62	
X29A	133-P3C-X29A	13.1	133-P3C-X29A-13.5-14.0	13.5 - 14.0 ft	-0.4	-0.9	JB61460-8	JB61460	03/10/2014	remaining	N	Y		< 0.12	UJ	S62	
X29A	133-P3C-X29A	13.1	133-P3C-X29A-15.5-16.0	15.5 - 16.0 ft	-2.4	-2.9	JB61460-9	JB61460	03/10/2014	remaining	N	Y		< 0.086	UJ	S62	
X29A	133-P3C-X29A	13.1	133-P3C-X29A-17.5-18.0	17.5 - 18.0 ft	-4.4	-4.9	JB61460-10	JB61460	03/10/2014	remaining	N	Y		0.28	J	S62	
X29A	133-P3C-X29A	13.1	133-P3C-X29A-19.5-20.0	19.5 - 20.0 ft	-6.4	-6.9	JB61460-11R	JB61460R	03/10/2014	remaining	N	Y		0.52	J	S62	
X29A	133-P3C-X29A-ME	13.2	133-P3C-X29A-ME-8.0-8.5	8.0 - 8.5 ft	5.2	4.7	JB96333-7	JB96333	06/04/2015	remaining	N	Y		0.97	J		
X29A	133-W29A-SW-E1	12.0	133-W29A-SW-E-10.7-11.2	10.7 - 11.2 ft	1.3	0.8	JC6269-3	JC6269	10/14/2015	remaining	N	Y		0.41	RA		
X29A	133-W29A-SW-E2	12.0	133-W29A-SW-E-12.7-13.2	12.7 - 13.2 ft	-0.7	-1.2	JC6269-2	JC6269	10/14/2015	remaining	N	Y		0.45	RA		
X29A	133-X28A-SW-S	11.9	133-X28A-SW-S-10.9-11.4	10.9 - 11.4 ft	1.0	0.5	JC2027-3	JC2027	08/20/2015	removed	N	Y		0.88	J	S63	
X29A	133-X29A-PB	13.1	133-X29A-10.8-11.3	10.8 - 11.3 ft	2.3	1.8	JC1346-6	JC1346	08/12/2015	remaining	N	Y		1.5	J	S62	
X29A	133-X29A-SW-E	13.1	133-X29A-SW-E-4.3-4.8	4.3 - 4.8 ft	8.8	8.3	JC2160-7R	JC2160R	08/21/2015	remaining	N	Y		4.3	J	S62, S64	
X29A	133-X29A-SW-E1	13.1	133-X29A-SW-E-6.3-6.8	6.3 - 6.8 ft	6.8	6.3	JC1699-8R	JC1699R	08/17/2015	remaining	N	Y		0.37	J	S62, S64	
X29A	133-X29A-SW-E1R	13.1	133-X29A-SW-E-6.3-6.8R	6.3 - 6.8 ft	6.8	6.3	JC2160-6R	JC2160R	08/21/2015	remaining	N	Y		6.4	J	S62, S64	
X29A	133-X29A-SW-E2	13.1	133-X29A-SW-E-8.3-8.8	8.3 - 8.8 ft	4.8	4.3	JC1699-7R	JC1699R	08/17/2015	remaining	N	Y		1.2	J	S62, S64	
X29A	133-X29A-SW-E2R	13.1	133-X29A-SW-E-8.3-8.8R	8.3 - 8.8 ft	4.8	4.3	JC2160-5	JC2160	08/21/2015	remaining	N	Y		3.2	J	S62, S64	
X29A	133-X29A-SW-E3	13.1	133-X29A-SW-E-10.3-10.8	10.3 - 10.8 ft	2.8	2.3	JC1699-6R	JC1699R	08/17/2015	remaining	N	Y		2.5	J	S62, S64	
X29A	133-X29A-SW-E3R	13.1	133-X29A-SW-E-10.3-10.8R	10.3 - 10.8 ft	2.8	2.3	JC2160-4	JC2160	08/21/2015	remaining	N	Y		5.6	J	S62, S64	
X29A	133-X29A-SW-S2	13.1	133-X29A-SW-S-10.3-10.8	10.3 - 10.8 ft	2.8	2.3	JC1755-4R	JC1755R	08/18/2015	remaining	N	Y		< 0.24	UJ		
X30A	133-P3C-X30A	13.1	133-P3C-X30A-10.0-10.5	10.0 - 10.5 ft	3.1	2.6	JB81978-19	JB81978	11/17/2014	remaining	N	Y		0.42	J		
X30A	133-P3C-X30A	13.1	133-P3C-X30A-12.0-12.5	12.0 - 12.5 ft	1.1	0.6	JB81978-20	JB81978	11/17/2014	remaining	N	Y		< 0.23	UJ		
X30A	133-P3C-X30A	13.1	133-P3C-X30A-14.0-14.5	14.0 - 14.5 ft	-0.9	-1.4	JB81978-21	JB81978	11/17/2014	remaining	N	Y		< 0.28	UJ		
X30A	133-P3C-X30A	13.1	133-P3C-X30A-16.0-16.5	16.0 - 16.5 ft	-2.9	-3.4	JB81978-22	JB81978	11/17/2014	remaining	N	Y		0.65	J		
X30A	133-P3C-X30A	13.1	133-P3C-X30A-16.5-17.0	16.5 - 17.0 ft	-3.4	-3.9	JB81978-23	JB81978	11/17/2014	remaining	N	Y		3.7	J		
X30A	133-W30A-SW-E	13.2	133-W30A-SW-E-8.0-8.5	8.0 - 8.5 ft	5.2	4.7	JC1876-4	JC1876	08/19/2015	remaining	N	Y		0.61	RA	S52	
X30A	133-X29A-SW-S1	13.1	133-X29A-SW-S-8.3-8.8	8.3 - 8.8 ft	4.8	4.3	JC1755-5	JC1755	08/18/2015	remaining	N	Y		4.4	J		
X30A	133-X30A-PB	13.1	133-X30A-PB-6.4-6.9	6.4 - 6.9 ft	6.7	6.2	JC1346-3R	JC1346R	08/12/2015	removed	N	Y		11.5	J	S65	
X30A	133-Y30A-SW-W1	13.1	133-Y30A-SW-W-7.2-7.7	7.2 - 7.7 ft	5.9	5.4	JC20436-4	JC20436	05/17/2016	remaining	N	Y		0.71	J		
X30A	133-Y30A-SW-W2	13.1	133-Y30A-SW-W-9.2-9.7	9.2 - 9.7 ft	3.9	3.4	JC20436-3R	JC20436R	05/17/2016	remaining	N	Y		1.5	J		
X30A	133-Y30A-SW-W3	13.1	133-Y30A-SW-W-11.2-11.7	11.2 - 11.7 ft	1.9	1.4	JC20436-2	JC20436	05/17/2016	remaining	N	Y		0.76	J		
X31A	133-B12	13.1	133-B12D_5.0-6.0_821978	5.0 - 6.0 ft	8.1	7.1	821978	F201	04/17/2007	removed	N	Y		< 2.32	UJ	S66	
X31A	133-B12	13.1	133-B12E_8.6-9.6_821979	8.6 - 9.6 ft	4.5	3.5	821979	F201	04/17/2007	remaining	N	Y		4.1	J		
X31A	133-B12	13.1	133-B12ED_8.6-9.6_821980	8.6 - 9.6 ft	4.5	3.5	821980	F201	04/17/2007	remaining	FD	Y		< 3.4	UJ		
X31A	133-B12	13.1	133-B12F_13.3-14.3_821981	13.3 - 14.3 ft	-0.2	-1.2	821981	F201	04/17/2007	remaining	N	Y		< 3.04	UJ		
X31A	133-P3C-X31A	13.1	133-P3C-X31A-8.5-9.0	8.5 - 9.0 ft	4.6	4.1	JB62811-15R	JB62811R	03/24/2014	remaining	N	Y		0.62	J		
X31A	133-P3C-X31A	13.1	133-P3C-X31A-10.5-11.0	10.5 - 11.0 ft	2.6	2.1	JB62811-16R	JB62811R	03/24/2014	remaining	N	Y		3.1	J		
X31A	133-P3C-X31A	13.1	133-P3C-X31A-12.5-13.0	12.5 - 13.0 ft	0.6	0.1	JB62811-17R	JB62811R	03/24/2014	remaining	N	Y		1.3	J		
X31A	133-P3C-X31A	13.1	133-P3C-X31A-12.5-13.0X	12.5 - 13.0 ft	0.6	0.1	JB62811-18R	JB62811R	03/24/2014	remaining	FD	Y		0.72	J		
X31A	133-P3C-X31A	13.1	133-P3C-X31A-14.5-15.0	14.5 - 15.0 ft	-1.4	-1.9	JB62811-19R	JB62811R	03/24/2014	remaining	N	Y		0.43	J		
X31A	133-P3C-X31A	13.1	133-P3C-X31A-15.5-16.0	15.5 - 16.0 ft	-2.4	-2.9	JB62811-20R	JB62811R	03/24/2014	remaining	N	Y		0.48	J		

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes
X31A	133-P3C-X31A	13.1	133-P3C-X31A-16.0-16.5	16.0 - 16.5 ft	-2.9	-3.4	JB62811-21R	JB62811R	03/24/2014	remaining	N	Y		2.5 J		
X31A	133-W31A-SW-E2	13.1	133-W31A-SW-E-7.1-7.6	7.1 - 7.6 ft	6.0	5.5	JC3366-6	JC3366	09/08/2015	remaining	N	Y		11.8 J		
X31A	133-W31A-SW-E3	13.1	133-W31A-SW-E-9.1-9.6	9.1 - 9.6 ft	4.0	3.5	JC3366-5R	JC3366R	09/08/2015	remaining	N	Y		10.2 J		
X31A	133-W31A-SW-E4	13.1	133-W31A-SW-E-11.1-11.6	11.1 - 11.6 ft	2.0	1.5	JC3366-4	JC3366	09/08/2015	remaining	N	Y		1.7 J		
X31A	133-W31A-SW-E5	13.1	133-W31A-SW-E-13.1-13.6	13.1 - 13.6 ft	0.0	-0.5	JC3366-3	JC3366	09/08/2015	remaining	N	Y		2.9 J		
X31A	133-W31A-SW-E6	13.1	133-W31A-SW-E-15.1-15.6	15.1 - 15.6 ft	-2.0	-2.5	JC3366-2R	JC3366R	09/08/2015	remaining	N	Y		9.0 J		
X31A	133-Y31A-SW-W	11.7	133-Y31A-SW-W-4.6-5.1	4.6 - 5.1 ft	7.1	6.6	JC25915-2R	JC25915R	08/16/2016	remaining	N	Y		0.44 J		
X32A	133-P3C-X32A	13.1	133-P3C-X32A-5.0-5.5	5.0 - 5.5 ft	8.1	7.6	JB61460-14R	JB61460R	03/10/2014	remaining	N	Y		5.8 J		
X32A	133-P3C-X32A	13.1	133-P3C-X32A-7.0-7.5	7.0 - 7.5 ft	6.1	5.6	JB61460-15	JB61460	03/10/2014	remaining	N	Y		< 0.10	UJ	
X32A	133-P3C-X32A	13.1	133-P3C-X32A-9.0-9.5	9.0 - 9.5 ft	4.1	3.6	JB61460-16	JB61460	03/10/2014	remaining	N	Y		< 0.096	UJ	
X32A	133-P3C-X32A	13.1	133-P3C-X32A-11.0-11.5	11.0 - 11.5 ft	2.1	1.6	JB61460-17	JB61460	03/10/2014	remaining	N	Y		< 0.095	UJ	
X32A	133-P3C-X32A	13.1	133-P3C-X32A-13.0-13.5	13.0 - 13.5 ft	0.1	-0.4	JB61460-18	JB61460	03/10/2014	remaining	N	Y		0.56 J		
X32A	133-P3C-X32A	13.1	133-P3C-X32A-15.0-15.5	15.0 - 15.5 ft	-1.9	-2.4	JB61460-19	JB61460	03/10/2014	remaining	N	Y		0.32 J		
X32A	133-P3C-X32A	13.1	133-P3C-X32A-15.5-16.0	15.5 - 16.0 ft	-2.4	-2.9	JB61460-20	JB61460	03/10/2014	remaining	N	Y		1.6 J		
X32A	133-X32A-PB2	13.1	133-HSS-X32A-PB-4.3-4.8	4.3 - 4.8 ft	8.8	8.3	JC628-2R	JC628R	08/03/2015	remaining	N	Y		0.94 J		
X32A	135-Y32A-SW-W	12.2	135-Y32A-SW-W-4.7-5.2	4.7 - 5.2 ft	7.5	7.0	JC25216-11	JC25216	08/04/2016	remaining	N	Y		1.5 J		
X33A	133-P3C-X33A	13.1	133-P3C-X33A-5.0-5.5	5.0 - 5.5 ft	8.1	7.6	JB61103-16T	JB61103T	03/05/2014	removed	N	Y		0.47 J		S67
X33A	133-P3C-X33A	13.1	133-P3C-X33A-7.0-7.5	7.0 - 7.5 ft	6.1	5.6	JB61103-17T	JB61103T	03/05/2014	remaining	N	Y		0.28 J		
X33A	133-P3C-X33A	13.1	133-P3C-X33A-9.0-9.5	9.0 - 9.5 ft	4.1	3.6	JB61103-18T	JB61103T	03/05/2014	remaining	N	Y		0.68 J		
X33A	133-P3C-X33A	13.1	133-P3C-X33A-9.0-9.5X	9.0 - 9.5 ft	4.1	3.6	JB61103-19T	JB61103T	03/05/2014	remaining	FD	Y		0.51 J		
X33A	133-P3C-X33A	13.1	133-P3C-X33A-11.0-11.5	11.0 - 11.5 ft	2.1	1.6	JB61103-20T	JB61103T	03/05/2014	remaining	N	Y		0.74 J		
X33A	133-P3C-X33A	13.1	133-P3C-X33A-13.0-13.5	13.0 - 13.5 ft	0.1	-0.4	JB61103-21T	JB61103T	03/05/2014	remaining	N	Y		0.66 J		
X33A	133-P3C-X33A	13.1	133-P3C-X33A-14.5-15.0	14.5 - 15.0 ft	-1.4	-1.9	JB61103-22T	JB61103T	03/05/2014	remaining	N	Y		0.20 J		
X33A	133-P3C-X33A	13.1	133-P3C-X33A-15.0-15.5	15.0 - 15.5 ft	-1.9	-2.4	JB61103-23T	JB61103T	03/05/2014	remaining	N	Y		2.2 J		
X33A	133-X33A-PB	13.1	133-X33A-PB-7.0-7.5	7.0 - 7.5 ft	6.1	5.6	JC25689-5R	JC25689R	08/11/2016	remaining	N	Y		9.6 J		S67
X34A	133-P3C-X34A	10.1	133-P3C-X34A-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JB37620-1	JB37620	05/21/2013	remaining	N	Y		3.2 J		
X34A	133-P3C-X34A	10.1	133-P3C-X34A-7.0-7.5	7.0 - 7.5 ft	3.1	2.6	JB37620-2R	JB37620R	05/21/2013	remaining	N	Y		0.32 J		
X34A	133-P3C-X34A	10.1	133-P3C-X34A-8.5-9.0	8.5 - 9.0 ft	1.6	1.1	JB37620-3R	JB37620R	05/21/2013	remaining	N	Y		0.16 J		
X34A	133-P3C-X34A	10.1	133-P3C-X34A-10.5-11.0	10.5 - 11.0 ft	-0.4	-0.9	JB37620-4R	JB37620R	05/21/2013	remaining	N	Y		0.30 J		
X34A	133-P3C-X34A	10.1	133-P3C-X34A-12.5-13.0	12.5 - 13.0 ft	-2.4	-2.9	JB37620-5R	JB37620R	05/21/2013	remaining	N	Y		0.32 J		
X34A	133-P3C-X34A	10.1	133-P3C-X34A-14.2-14.7	14.2 - 14.7 ft	-4.1	-4.6	JB37620-6	JB37620	05/21/2013	remaining	N	Y		0.16 J		
X34A	133-P3C-X34A	10.1	133-P3C-X34A-14.7-15.2	14.7 - 15.2 ft	-4.6	-5.1	JB37620-7	JB37620	05/21/2013	remaining	N	Y		1.1 J		
X34A	133-X34A-PB	10.1	133-X34A-PB-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JC25689-4	JC25689	08/11/2016	remaining	N	Y		< 0.38	UJ	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-6.5-7.0	6.5 - 7.0 ft	4.3	3.8	JB37620-9	JB37620	05/21/2013	remaining	N	Y		0.50 J		S2, S48
X35A	133-P3C-X35A	10.8	133-P3C-X35A-6.5-7.0X	6.5 - 7.0 ft	4.3	3.8	JB37620-10R	JB37620R	05/21/2013	remaining	FD	Y		0.56 J		S2, S48
X35A	133-P3C-X35A	10.8	133-P3C-X35A-8.5-9.0	8.5 - 9.0 ft	2.3	1.8	JB37620-11R	JB37620R	05/21/2013	remaining	N	Y		0.59 J		S2, S48
X35A	133-P3C-X35A	10.8	133-P3C-X35A-10.5-11.0	10.5 - 11.0 ft	0.3	-0.2	JB37620-12R	JB37620R	05/21/2013	remaining	N	Y		0.38 J		S2, S48
X35A	133-P3C-X35A	10.8	133-P3C-X35A-12.5-13.0	12.5 - 13.0 ft	-1.7	-2.2	JB37620-13	JB37620	05/21/2013	remaining	N	Y		< 0.093	RA	S2, S48
X35A	133-P3C-X35A	10.8	133-P3C-X35A-14.5-15.0	14.5 - 15.0 ft	-3.7	-4.2	JB37620-14T	JB37620T	05/21/2013	remaining	N	Y		3.0	RA	S2, S48
X35A	133-P3C-X35A	10.8	133-P3C-X35A-15.5-16.0	15.5 - 16.0 ft	-4.7	-5.2	JB37620-15	JB37620	05/21/2013	remaining	N	Y		0.76	RA	S2, S48
X35A	133-P3C-X35A	10.8	133-P3C-X35A-16.0-16.5	16.0 - 16.5 ft	-5.2	-5.7	JB37620-16	JB37620	05/21/2013	remaining	N	Y		0.88	RA	S2, S48
X35A	133-P3C-X35A-ME	12.7	133-P3C-X35A-ME-8.5-9.0	8.5 - 9.0 ft	4.2	3.7	JB96555-13	JB96555	06/08/2015	remaining	N	Y		< 0.28	UJ	S2, S48
X35A	133-W35A-SW-E	12.9	133-W35A-SW-E-7.9-8.4	7.9 - 8.4 ft	5.0	4.5	JC25915-7R	JC25915R	08/16/2016	remaining	N	Y		1.1 J		S2, S48
X35A	133-X35A-PB	10.8	133-X35A-PB-4.5-5.0	4.5 - 5.0 ft	6.3	5.8	JC25689-3R	JC25689R	08/11/2016	remaining	N	Y		1.0 J		S2, S48
X36A	133-W36A-SW-E2	9.9	133-W36A-SW-E-5.4-5.9	2.6 - 3.1 ft	7.3	6.8	JC24571-5R	JC24571R	07/22/2016	removed	N	Y		5.0	RA	S2, S32, S48, S68
X36A	133-W36A-SW-E3	9.9	133-W36A-SW-E-7.4-7.9	4.6 - 5.1 ft	5.3	4.8	JC24571-4	JC24571	07/22/2016	remaining	N	Y		0.75	RA	S2, S32, S48
X36A	133-W36A-SW-E4	9.9	133-W36A-SW-E-9.4-9.9	6.6 - 7.1 ft	3.3	2.8	JC24571-3	JC24571	07/22/2016	remaining	N	Y		0.70	RA	S2, S32, S48

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes
X36A	135-P3C-X36A	9.9	135-P3C-X36A-6.0-6.5	6.0 - 6.5 ft	3.9	3.4	JB36931-3R	JB36931R	05/13/2013	remaining	N	Y		0.41	J	S2, S48, S69
X36A	135-P3C-X36A	9.9	135-P3C-X36A-8.0-8.5	8.0 - 8.5 ft	1.9	1.4	JB36931-1	JB36931	05/13/2013	remaining	N	Y		0.37	J	S2, S48, S69
X36A	135-P3C-X36A	9.9	135-P3C-X36A-8.0-8.5X	8.0 - 8.5 ft	1.9	1.4	JB36931-2	JB36931	05/13/2013	remaining	FD	Y		0.36	J	S2, S48, S69
X36A	135-P3C-X36A	9.9	135-P3C-X36A-10.0-10.5	10.0 - 10.5 ft	-0.1	-0.6	JB36931-4	JB36931	05/13/2013	remaining	N	Y		0.62	J	S2, S48, S69
X36A	135-P3C-X36A	9.9	135-P3C-X36A-12.0-12.5	12.0 - 12.5 ft	-2.1	-2.6	JB36931-5	JB36931	05/13/2013	remaining	N	Y		0.15	J	S2, S48, S69
X36A	135-P3C-X36A	9.9	135-P3C-X36A-14.0-14.5	14.0 - 14.5 ft	-4.1	-4.6	JB36931-6R	JB36931R	05/13/2013	remaining	N	Y		1.1	J	S2, S48, S69
X36A	135-P3C-X36A	9.9	135-P3C-X36A-16.0-16.5	16.0 - 16.5 ft	-6.1	-6.6	JB36931-7	JB36931	05/13/2013	remaining	N	Y		0.18	J	S2, S48, S69
X36A	135-P3C-X36A	9.9	135-P3C-X36A-16.5-17.0	16.5 - 17.0 ft	-6.6	-7.1	JB36931-8	JB36931	05/13/2013	remaining	N	Y		0.61	J	S2, S48, S69
X36A	135-P3C-X36AR	12.4	135-P3C-X36AR-0.0-0.5	0.0 - 0.5 ft	12.4	11.9	JB83043-3	JB83043	12/02/2014	removed	N	Y		13.9		S2, S48, S69
X36A	135-X35A-SW-S	10.8	135-X35A-SW-S-2.5-3.0	2.5 - 3.0 ft	8.3	7.8	JC26798-2	JC26798	08/31/2016	remaining	N	Y		7.3	J	S2, S48
X37A	135-P3C-X37A	9.8	135-P3C-X37A-1.0-1.5	1.0 - 1.5 ft	8.8	8.3	JB65079-4	JB65079	04/18/2014	removed	N	Y		0.56	J	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-3.0-3.5	3.0 - 3.5 ft	6.8	6.3	JB65079-5	JB65079	04/18/2014	removed	N	Y		0.72	J	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-5.0-5.5	5.0 - 5.5 ft	4.8	4.3	JB37527-9R	JB37527R	05/20/2013	removed	N	Y		0.39	J	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-7.0-7.5	7.0 - 7.5 ft	2.8	2.3	JB37527-10R	JB37527R	05/20/2013	removed	N	Y		< 0.11	UJ	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-9.0-9.5	9.0 - 9.5 ft	0.8	0.3	JB37527-11R	JB37527R	05/20/2013	removed	N	Y		0.47	J	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-10.5-11.0	10.5 - 11.0 ft	-0.7	-1.2	JB37527-12R	JB37527R	05/20/2013	removed	N	Y		0.56	J	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-12.5-13.0	12.5 - 13.0 ft	-2.7	-3.2	JB37527-13R	JB37527R	05/20/2013	remaining	N	Y		0.95	J	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-14.5-15.0	14.5 - 15.0 ft	-4.7	-5.2	JB37527-14	JB37527	05/20/2013	remaining	N	Y		0.42	J	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-15.7-16.2	15.7 - 16.2 ft	-5.9	-6.4	JB37527-15	JB37527	05/20/2013	remaining	N	Y		0.26	J	S2, S70
X37A	135-P3C-X37A	9.8	135-P3C-X37A-16.2-16.7	16.2 - 16.7 ft	-6.4	-6.9	JB37527-16	JB37527	05/20/2013	remaining	N	Y		3.9	J	S2, S70
Y22A	114-MW19C	11.0	PPG-114-MW19CA(50.0-51.0)J45378-1	50.0 - 51.0 ft	-39.0	-40.0	J45378-1	J45378	11/02/2006	remaining	N	Y		1.5		S15
Y22A	114-MW19C	11.0	PPG-114-MW19CAD(50.0-51.0)J45378-2	50.0 - 51.0 ft	-39.0	-40.0	J45378-2	J45378	11/02/2006	remaining	FD	Y		< 1.4	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CB(54.0-55.0)J45378-3	54.0 - 55.0 ft	-43.0	-44.0	J45378-3	J45378	11/02/2006	remaining	N	Y		< 1.3	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CC(58.0-58.5)J45378-4	58.0 - 58.5 ft	-47.0	-47.5	J45378-4	J45378	11/02/2006	remaining	N	Y		< 1.2	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CD(62.0-62.5)J45378-5	62.0 - 62.5 ft	-51.0	-51.5	J45378-5	J45378	11/02/2006	remaining	N	Y		< 1.2	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CE(64.0-64.5)J45378-6	64.0 - 64.5 ft	-53.0	-53.5	J45378-6	J45378	11/02/2006	remaining	N	Y		< 1.3	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CF(68.0-68.5)J45378-7	68.0 - 68.5 ft	-57.0	-57.5	J45378-7	J45378	11/02/2006	remaining	N	Y		< 1.4	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CG(72.0-72.5)J45378-8	72.0 - 72.5 ft	-61.0	-61.5	J45378-8	J45378	11/02/2006	remaining	N	Y		< 1.4	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CH(77.0-77.5)J45378-9	77.0 - 77.5 ft	-66.0	-66.5	J45378-9	J45378	11/02/2006	remaining	N	Y		< 1.3	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CI(80.0-80.5)J45378-10	80.0 - 80.5 ft	-69.0	-69.5	J45378-10	J45378	11/02/2006	remaining	N	Y		< 1.3	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CJ(84.0-84.5)J45378-11	84.0 - 84.5 ft	-73.0	-73.5	J45378-11	J45378	11/02/2006	remaining	N	Y		< 1.3	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CK(87.5-88.0)J45378-13	87.5 - 88.0 ft	-76.5	-77.0	J45378-13	J45378	11/02/2006	remaining	N	Y		< 1.3	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CL(93.0-93.5)J45378-14	93.0 - 93.5 ft	-82.0	-82.5	J45378-14	J45378	11/02/2006	remaining	N	Y		< 1.1	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CM(96.0-96.5)J45378-15	96.0 - 96.5 ft	-85.0	-85.5	J45378-15	J45378	11/02/2006	remaining	N	Y		< 1.2	U	S15
Y22A	114-MW19C	11.0	PPG-114-MW19CN(100.0-101.0)J45462-1	100.0 - 101.0 ft	-89.0	-90.0	J45462-1	J45462	11/03/2006	remaining	N	Y		< 1.1	UJ	S15
Y22A	133-P3C-Y22A	10.9	133-P3C-Y22A-14.1-14.6	14.1 - 14.6 ft	-3.3	-3.8	JB40820-8R	JB40820R	06/27/2013	removed	N	Y		4.3	RA	S15, S71
Y22A	133-Y22A-PB	10.9	133-Y22A-PB-15.6-16.1	15.6 - 16.1 ft	-4.7	-5.2	JC5497-2R	JC5497R	10/06/2015	remaining	N	Y		1.9	J	S15
Y23A	133-P3C-Y23A	11.6	133-P3C-Y23A-15.0-15.5	15.0 - 15.5 ft	-3.4	-3.9	JB42410-13R	JB42410R	07/17/2013	remaining	N	Y		1.5	J	S15
Y23A	133-P3C-Y23A	11.6	133-P3C-Y23A-15.0-15.5X	15.0 - 15.5 ft	-3.4	-3.9	JB42410-12R	JB42410R	07/17/2013	remaining	FD	Y		1.9	J	S15
Y23A	133-P3C-Y23A	11.6	133-P3C-Y23A-15.5-16.0	15.5 - 16.0 ft	-3.9	-4.4	JB42410-11	JB42410	07/17/2013	remaining	N	Y		2.8	J	S15
Y23A	133-Y23A-PB	11.6	133-Y23A-PB-14.3-14.8	14.3 - 14.8 ft	-2.7	-3.2	JC5740-2	JC5740	10/08/2015	remaining	N	Y		11.8	J	S15
Y24A	133-B24	11.6	PPG-133-B24H_17.5-18.0_794518	17.5 - 18.0 ft	-5.9	-6.4	794518	B013	12/18/2006	remaining	N	Y		< 3.6	UJ	S15
Y24A	133-B24	11.6	PPG-133-B24I_21.7-22.2_794519	21.7 - 22.2 ft	-10.1	-10.6	794519	B013	12/18/2006	remaining	N	Y		< 2.52	UJ	S15
Y24A	133-Y24A-PB	11.6	133-Y24A-PB-14.0-14.5	14.0 - 14.5 ft	-2.4	-2.9	JC6340-4R	JC6340R	10/15/2015	remaining	N	Y		1.3	J	S15
Y25A	133-P3C-Y25AR	13.2	133-P3C-Y25AR-15.5-16.0	15.5 - 16.0 ft	-2.3	-2.8	JB82947-8R	JB82947R	12/01/2014	remaining	N	Y		9.4	J	
Y25A	133-Y25A-PB	13.2	133-Y25A-PB-15.5-16.0	15.7 - 16.3 ft	-2.5	-3.1	JC2659-7	JC2659	08/28/2015	remaining	N	Y		0.60	J	S18
Y26A	133-B14	13.0	133-B14K_14.9-15.8_822277	14.9 - 15.8 ft	-1.9	-2.8	822277	F201	04/18/2007	remaining	N	Y		3.4	J	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-14.0-14.5	14.0 - 14.5 ft	-1.0	-1.5	JB82214-21	JB82214	11/19/2014	remaining	N	Y		< 0.23	UJ		
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-15.0-15.5	15.0 - 15.5 ft	-2.0	-2.5	JB82214-22	JB82214	11/19/2014	remaining	N	Y		< 0.22	UJ		
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-15.5-16.0	15.5 - 16.0 ft	-2.5	-3.0	JB82214-23	JB82214	11/19/2014	remaining	N	Y		0.61	J		
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-16.0-16.5	16.0 - 16.5 ft	-3.0	-3.5	JB97654-1	JB97654	06/22/2015	remaining	N	Y		0.49	RA		
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-16.0-16.5X	16.0 - 16.5 ft	-3.0	-3.5	JB97654-2	JB97654	06/22/2015	remaining	FD	Y		1.3	RA		
Y27A	133-X27A-SW-E1-R	13.0	133-X27A-SW-E-10.8-11.3R	10.8 - 11.3 ft	2.2	1.7	JC5901-8R	JC5901R	10/09/2015	remaining	N	Y		0.90	J		
Y27A	133-X27A-SW-E2-R	13.0	133-X27A-SW-E-12.8-13.3R	12.8 - 13.3 ft	0.2	-0.3	JC5901-7R	JC5901R	10/09/2015	remaining	N	Y		1.2	J		
Y27A	133-X27A-SW-E3-R	13.0	133-X27A-SW-E-14.8-15.3R	14.8 - 15.3 ft	-1.8	-2.3	JC5901-6R	JC5901R	10/09/2015	remaining	N	Y		0.91	J		
Y27A	133-Y26A-SW-S1R	12.5	133-Y26A-SW-S-10.4-10.9R	10.4 - 10.9 ft	2.1	1.6	JC5901-5	JC5901	10/09/2015	remaining	N	Y		0.51	J		
Y27A	133-Y26A-SW-S2R	12.5	133-Y26A-SW-S-12.4-12.9R	12.4 - 12.9 ft	0.1	-0.4	JC5901-4	JC5901	10/09/2015	remaining	N	Y		0.67	J		
Y27A	133-Y26A-SW-S3R	12.5	133-Y26A-SW-S-14.4-14.9R	14.4 - 14.9 ft	-1.9	-2.4	JC5901-2R	JC5901R	10/09/2015	remaining	N	Y		0.61	J		
Y27A	133-Y26A-SW-S3R	12.5	133-Y26A-SW-S-14.4-14.9RX	14.4 - 14.9 ft	-1.9	-2.4	JC5901-3	JC5901	10/09/2015	remaining	FD	Y		0.53	J		
Y27A	133-Y27A-PB	13.0	133-Y27A-PB-10.0-10.5	10.0 - 10.5 ft	3.0	2.5	JC1876-6	JC1876	08/19/2015	remaining	N	Y		0.82	RA		
Y28A	133-P3C-Y28A	12.7	133-P3C-Y28A-4.0-4.5	4.0 - 4.5 ft	8.7	8.2	JB62137-10R	JB62137R	03/17/2014	remaining	N	Y		1.2	J		
Y28A	133-P3C-Y28A	12.7	133-P3C-Y28A-6.0-6.5	6.0 - 6.5 ft	6.7	6.2	JB62137-11R	JB62137R	03/17/2014	remaining	N	Y		0.34	J		
Y28A	133-P3C-Y28A	12.7	133-P3C-Y28A-8.0-8.5	8.0 - 8.5 ft	4.7	4.2	JB62137-12	JB62137	03/17/2014	remaining	N	Y		< 0.10	U		
Y28A	133-P3C-Y28A	12.7	133-P3C-Y28A-10.0-10.5	10.0 - 10.5 ft	2.7	2.2	JB62137-13	JB62137	03/17/2014	remaining	N	Y		0.30	J		
Y28A	133-P3C-Y28A	12.7	133-P3C-Y28A-12.0-12.5	12.0 - 12.5 ft	0.7	0.2	JB62137-14	JB62137	03/17/2014	remaining	N	Y		< 0.086	U		
Y28A	133-P3C-Y28A	12.7	133-P3C-Y28A-14.0-14.5	14.0 - 14.5 ft	-1.3	-1.8	JB62137-15	JB62137	03/17/2014	remaining	N	Y		< 0.092	U		
Y28A	133-P3C-Y28A	12.7	133-P3C-Y28A-15.0-15.5	15.0 - 15.5 ft	-2.3	-2.8	JB62137-16	JB62137	03/17/2014	remaining	N	Y		0.17	J		
Y28A	133-P3C-Y28A	12.7	133-P3C-Y28A-15.5-16.0	15.5 - 16.0 ft	-2.8	-3.3	JB62137-17	JB62137	03/17/2014	remaining	N	Y		< 0.12	U		
Y28A	133-P3C-Y28A-ME	12.8	133-P3C-Y28A-ME-5.0-5.5	5.0 - 5.5 ft	7.8	7.3	JB96260-20	JB96260	06/03/2015	remaining	N	Y		< 0.26	UJ		
Y28A	133-P3C-Y28A-ME	12.8	133-P3C-Y28A-ME-6.0-6.5	6.0 - 6.5 ft	6.8	6.3	JB96260-21	JB96260	06/03/2015	remaining	N	Y		< 0.25	UJ		
Y28A	133-P3C-Y28A-ME	12.8	133-P3C-Y28A-ME-6.5-7.0	6.5 - 7.0 ft	6.3	5.8	JB96260-22	JB96260	06/03/2015	remaining	N	Y		< 0.32	UJ		
Y28A	133-X28A-SW-E1R	11.9	133-X28A-SW-E-3.7-4.2R	3.7 - 4.2 ft	8.2	7.7	JC5901-13R	JC5901R	10/09/2015	remaining	N	Y		1.6	J		
Y28A	133-Y27A-SW-S1	13.0	133-Y27A-SW-S-5.5-6.0	5.5 - 6.0 ft	7.5	7.0	JC2217-7	JC2217	08/24/2015	remaining	N	Y		< 0.26	UJ		
Y28A	133-Y27A-SW-S2	13.0	133-Y27A-SW-S-7.5-8.0	7.5 - 8.0 ft	5.5	5.0	JC2217-6	JC2217	08/24/2015	remaining	N	Y		0.29	J		
Y28A	133-Y27A-SW-S3	13.0	133-Y27A-SW-S-9.5-10.0	9.5 - 10.0 ft	3.5	3.0	JC2217-5	JC2217	08/24/2015	remaining	N	Y		< 0.26	UJ		
Y28A	133-Y28A-PB	12.7	133-Y28A-PB-4.1-4.6	4.1 - 4.6 ft	8.6	8.1	JC1610-3R	JC1610R	08/14/2015	remaining	N	Y		< 0.15	RA		
Y29A	133-P3C-Y29A	12.8	133-P3C-Y29A-5.0-5.5	5.0 - 5.5 ft	7.8	7.3	JB62137-20	JB62137	03/17/2014	remaining	N	Y		< 0.11	U		
Y29A	133-P3C-Y29A	12.8	133-P3C-Y29A-7.0-7.5	7.0 - 7.5 ft	5.8	5.3	JB62137-21	JB62137	03/17/2014	remaining	N	Y		0.17	J		
Y29A	133-P3C-Y29A	12.8	133-P3C-Y29A-9.0-9.5	9.0 - 9.5 ft	3.8	3.3	JB62137-22	JB62137	03/17/2014	remaining	N	Y		< 0.10	U		
Y29A	133-P3C-Y29A	12.8	133-P3C-Y29A-11.0-11.5	11.0 - 11.5 ft	1.8	1.3	JB62137-23	JB62137	03/17/2014	remaining	N	Y		< 0.093	U		
Y29A	133-P3C-Y29A	12.8	133-P3C-Y29A-13.0-13.5	13.0 - 13.5 ft	-0.2	-0.7	JB62137-24	JB62137	03/17/2014	remaining	N	Y		< 0.14	UJ		
Y29A	133-P3C-Y29A	12.8	133-P3C-Y29A-15.0-15.5	15.0 - 15.5 ft	-2.2	-2.7	JB62137-25	JB62137	03/17/2014	remaining	N	Y		< 0.081	U		
Y29A	133-P3C-Y29A	12.8	133-P3C-Y29A-15.5-16.0	15.5 - 16.0 ft	-2.7	-3.2	JB62137-26	JB62137	03/17/2014	remaining	N	Y		2.3			
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-5.0-5.5	5.0 - 5.5 ft	7.7	7.2	JB96260-26	JB96260	06/03/2015	remaining	N	Y		0.83	J		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-6.0-6.5	6.0 - 6.5 ft	6.7	6.2	JB96260-27	JB96260	06/03/2015	remaining	N	Y		0.61	J		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-6.7-7.2	6.7 - 7.2 ft	6.0	5.5	JB96260-28	JB96260	06/03/2015	remaining	N	Y		1.3	J		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-10.0-10.5	10.0 - 10.5 ft	2.7	2.2	JB96260-24	JB96260	06/03/2015	remaining	N	Y		< 0.34	UJ		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-13.3-13.8	13.3 - 13.8 ft	-0.6	-1.1	JB96260-25	JB96260	06/03/2015	remaining	N	Y		< 0.27	UJ		
Y29A	133-Y29A-PB	12.8	133-Y29A-PB-3.8-4.3	3.8 - 4.3 ft	9.0	8.5	JC1346-5	JC1346	08/12/2015	remaining	N	Y		0.93	J		
Y29A	133-Y30A-SW-N1	13.1	133-Y30A-SW-N-5.2-5.7	5.2 - 5.7 ft	7.9	7.4	JC20436-8	JC20436	05/17/2016	remaining	N	Y		1.1	J	S72	
Y29A	133-Y30A-SW-N2	13.1	133-Y30A-SW-N-7.2-7.7	7.2 - 7.7 ft	5.9	5.4	JC20436-7	JC20436	05/17/2016	remaining	N	Y		< 0.51	UJ		
Y29A	133-Y30A-SW-N3	13.1	133-Y30A-SW-N-9.2-9.7	9.2 - 9.7 ft	3.9	3.4	JC20436-6	JC20436	05/17/2016	remaining	N	Y		< 0.34	UJ		
Y29A	133-Y30A-SW-N4	13.1	133-Y30A-SW-N-11.2-11.7	11.2 - 11.7 ft	1.9	1.4	JC20436-5	JC20436	05/17/2016	remaining	N	Y		< 0.39	UJ		
Y30A	133-P3C-Y30A	13.1	133-P3C-Y30A-13.0-13.5	13.0 - 13.5 ft	0.1	-0.4	JB61460-29	JB61460	03/10/2014	remaining	N	Y		0.26	RA		

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Y30A	133-P3C-Y30A	13.1	133-P3C-Y30A-15.0-15.5	15.0 - 15.5 ft	-1.9	-2.4	JB61460-30	JB61460	03/10/2014	remaining	N	Y		0.31	RA		
Y30A	133-P3C-Y30A	13.1	133-P3C-Y30A-16.0-16.5	16.0 - 16.5 ft	-2.9	-3.4	JB61460-31R	JB61460R	03/10/2014	remaining	N	Y		12.2	RA		
Y30A	133-P3C-Y30A	13.1	133-P3C-Y30A-16.5-17.0	16.5 - 17.0 ft	-3.4	-3.9	JB61460-32	JB61460	03/10/2014	remaining	N	Y		1.6	RA		
Y30A	133-Y30A-PB	13.1	133-Y30A-PB-13.2-13.7	13.2 - 13.7 ft	-0.1	-0.6	JC20353-4	JC20353	05/16/2016	remaining	N	Y		1.2	J		
Y31A	133-P3C-Y31A	11.7	133-P3C-Y31A-6.5-7.0	6.5 - 7.0 ft	5.2	4.7	JB65647-5R	JB65647R	04/25/2014	remaining	N	Y		0.63	J		
Y31A	133-P3C-Y31A	11.7	133-P3C-Y31A-8.5-9.0	8.5 - 9.0 ft	3.2	2.7	JB65647-6R	JB65647R	04/25/2014	remaining	N	Y		0.67	J		
Y31A	133-P3C-Y31A	11.7	133-P3C-Y31A-10.5-11.0	10.5 - 11.0 ft	1.2	0.7	JB65647-7RT	JB65647RT	04/25/2014	remaining	N	Y		0.87	J		
Y31A	133-P3C-Y31A	11.7	133-P3C-Y31A-12.5-13.0	12.5 - 13.0 ft	-0.8	-1.3	JB65647-8R	JB65647R	04/25/2014	remaining	N	Y		1.5	J		
Y31A	133-P3C-Y31A	11.7	133-P3C-Y31A-14.5-15.0	14.5 - 15.0 ft	-2.8	-3.3	JB65647-9	JB65647	04/25/2014	remaining	N	Y		1.8	J		
Y31A	133-P3C-Y31A	11.7	133-P3C-Y31A-15.0-15.5	15.0 - 15.5 ft	-3.3	-3.8	JB65647-10R	JB65647R	04/25/2014	remaining	N	Y		5.2	J		
Y31A	133-Y30A-SW-S1	13.1	133-Y30A-SW-S-9.2-9.7	9.2 - 9.7 ft	3.9	3.4	JC20436-13	JC20436	05/17/2016	remaining	N	Y		0.43	J		
Y31A	133-Y30A-SW-S2	13.1	133-Y30A-SW-S-11.2-11.7	11.2 - 11.7 ft	1.9	1.4	JC20436-12R	JC20436R	05/17/2016	remaining	N	Y		1.1	J		
Y31A	133-Y31A-PB	11.7	133-Y31A-PB-6.6-7.1	6.6 - 7.1 ft	5.1	4.6	JC22345-2	JC22345	06/16/2016	remaining	N	Y		2.8	RA		
Y32A	133-B17	10.2	133-B17C (4.0-4.5)J49295-20R	4.0 - 4.5 ft	6.2	5.7	J49295-20R	J49295	12/14/2006	removed	N	Y		< 1.8	U	S2, S48, S73	
Y32A	133-B17	10.2	PPG-133-B17D 8.0-8.5 796979	8.0 - 8.5 ft	2.2	1.7	796979	B441	01/03/2007	remaining	N	Y		< 2.88	UJ	S2, S48	
Y32A	133-B17	10.2	PPG-133-B17E 12.2-13.2 796980	12.2 - 13.2 ft	-2.0	-3.0	796980	B441	01/03/2007	remaining	N	Y		< 3.5	UJ	S2, S48	
Y32A	133-B17	10.2	PPG-133-B17ED 12.2-13.2 796981	12.2 - 13.2 ft	-2.0	-3.0	796981	B441	01/03/2007	remaining	FD	Y		< 3.55	UJ	S2, S48	
Y32A	133-B17	10.2	PPG-133-B17F 13.4-13.9 796982	13.4 - 13.9 ft	-3.2	-3.7	796982	B441	01/03/2007	remaining	N	Y		< 4.5	UJ	S2, S48	
Y32A	133-B17	10.2	PPG-133-B17G 17.5-18.5 796983	17.5 - 18.5 ft	-7.3	-8.3	796983	B441	01/03/2007	remaining	N	Y		< 3.51	UJ	S2, S48	
Y32A	133-B17	10.2	PPG-133-B17H 21.5-22.0 796984	21.5 - 22.0 ft	-11.3	-11.8	796984	B441	01/03/2007	remaining	N	Y		< 2.8	UJ	S2, S48	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-6.0-6.5	6.0 - 6.5 ft	6.2	5.7	JB37583-1R	JB37583R	05/21/2013	removed	N	Y		1.6	J	S2, S48, S73	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-8.0-8.5	8.0 - 8.5 ft	4.2	3.7	JB37583-2	JB37583	05/21/2013	remaining	N	Y		0.44	J	S2, S48	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-10.0-10.5	10.0 - 10.5 ft	2.2	1.7	JB37583-3	JB37583	05/21/2013	remaining	N	Y		0.23	J	S2, S48	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-12.0-12.5	12.0 - 12.5 ft	0.2	-0.3	JB37583-4	JB37583	05/21/2013	remaining	N	Y		0.34	J	S2, S48	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-14.3-14.8	14.3 - 14.8 ft	-2.1	-2.6	JB37583-5	JB37583	05/21/2013	remaining	N	Y		0.48	J	S2, S48	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-14.8-15.3	14.8 - 15.3 ft	-2.6	-3.1	JB37583-6R	JB37583R	05/21/2013	remaining	N	Y		1.9	J	S2, S48	
Y33A	133-P3C-Y33A	12.3	133-P3C-Y33A-15.0-15.5	15.0 - 15.5 ft	-2.7	-3.2	JB97654-3	JB97654	06/22/2015	remaining	N	Y		2.5	RA	S2, S48	
Y33A	133-P3C-Y33A-ME	12.6	133-P3C-Y33A-ME-9.0-9.5	9.0 - 9.5 ft	3.6	3.1	JB96555-18R	JB96555R	06/08/2015	remaining	N	Y		0.47	J	S2, S48	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-4.7-5.2	4.7 - 5.2 ft	5.2	4.7	JB37690-15	JB37690	05/22/2013	remaining	N	Y		2.7	RA	S2, S48	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-6.7-7.2	6.7 - 7.2 ft	3.2	2.7	JB37690-16	JB37690	05/22/2013	remaining	N	Y		0.46	RA	S2, S48	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-8.7-9.2	8.7 - 9.2 ft	1.2	0.7	JB37690-7	JB37690	05/22/2013	remaining	N	Y		1.2	J	S2, S48	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-10.5-11.0	10.5 - 11.0 ft	-0.6	-1.1	JB37690-6R	JB37690R	05/22/2013	remaining	N	Y		1.2	J	S2, S48	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-12.5-13.0	12.5 - 13.0 ft	-2.6	-3.1	JB37690-3R	JB37690R	05/22/2013	remaining	N	Y		0.13	J	S2, S48	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-14.1-14.6	14.1 - 14.6 ft	-4.2	-4.7	JB37690-5R	JB37690R	05/22/2013	remaining	N	Y		0.38	J	S2, S48	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-14.6-15.1	14.6 - 15.1 ft	-4.7	-5.2	JB37690-4R	JB37690R	05/22/2013	remaining	N	Y		1.7	J	S2, S48	
Y33A	135-Y33A-PB	9.9	135-Y33A-PB-8.3-8.8	4.7 - 5.2 ft	5.2	4.7	JC25852-2	JC25852	08/15/2016	remaining	N	Y		0.63	J	S2, S48, S18, S74	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-6.5-7.0	6.5 - 7.0 ft	3.3	2.8	JB37620-19T	JB37620T	05/21/2013	remaining	N	Y		< 0.35	RA	S2, S74	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-8.5-9.0	8.5 - 9.0 ft	1.3	0.8	JB37620-18	JB37620	05/21/2013	remaining	N	Y		0.19	RA	S2	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-8.5-9.0X	8.5 - 9.0 ft	1.3	0.8	JB37620-20T	JB37620T	05/21/2013	remaining	FD	Y		< 0.29	RA	S2	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-10.5-11.0	10.5 - 11.0 ft	-0.8	-1.3	JB37620-21	JB37620	05/21/2013	remaining	N	Y		< 0.10	RA	S2	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-12.5-13.0	12.5 - 13.0 ft	-2.8	-3.3	JB37620-22T	JB37620T	05/21/2013	remaining	N	Y		< 0.26	RA	S2	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-14.0-14.5	14.0 - 14.5 ft	-4.3	-4.8	JB37620-23T	JB37620T	05/21/2013	remaining	N	Y		1.0	RA	S2	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-14.5-15.0	14.5 - 15.0 ft	-4.8	-5.3	JB37620-24T	JB37620T	05/21/2013	remaining	N	Y		2.1	RA	S2	
Y34A	135-Y34A-PB	9.8	135-Y34A-PB-6.7-7.2	6.7 - 7.2 ft	3.1	2.6	JC25216-2	JC25216	08/04/2016	remaining	N	Y		< 0.35	UJ	S2	
Z21A	133-Z21A-PB	13.4	133-Z21A-PB-17.9-18.4	17.9 - 18.4 ft	-4.5	-5.0	JC4783-2	JC4783	09/25/2015	remaining	N	Y		< 0.63	RA	S14, S15	
Z21A	P4-HAL-Z21A	10.9	P4-HAL-Z21A-16.5-17.0	16.5 - 17.0 ft	-5.6	-6.1	JB77250-18	JB77250	09/22/2014	remaining	N	Y		< 0.19	UJ	S14, S15	
Z21A	P4-HAL-Z21A	10.9	P4-HAL-Z21A-17.0-17.5	17.0 - 17.5 ft	-6.1	-6.6	JB77250-19R	JB77250R	09/22/2014	remaining	N	Y		4.4	J	S14, S15	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Z22A	133-P3C-Z22A	13.4	133-PC3-Z22A-17.5-18.0	17.5 - 18.0 ft	-4.1	-4.6	JB81809-9R	JB81809R	11/14/2014	remaining	N	Y		4.2 J		S15	
Z22A	133-P3C-Z22A	13.4	133-PC3-Z22A-18.0-18.5	18.0 - 18.5 ft	-4.6	-5.1	JB81809-10	JB81809	11/14/2014	remaining	N	Y		1.3 J		S15	
Z22A	133-P3C-Z22A	13.4	133-PC3-Z22A-18.5-19.0	18.5 - 19.0 ft	-5.1	-5.6	JB81809-11R	JB81809R	11/14/2014	remaining	N	Y		7.0 J		S15	
Z22A	133-Z22A-PB	13.4	133-Z22A-PB-17.9-18.4	17.9 - 18.4 ft	-4.5	-5.0	JC4783-3	JC4783	09/25/2015	remaining	N	Y		1.7 RA		S15	
Z23A	133-P3C-Z23AR	13.0	133-P3C-Z23AR-16.5-17.0	16.5 - 17.0 ft	-3.5	-4.0	JB82738-15	JB82738	11/25/2014	remaining	N	Y		0.97 J			
Z23A	133-P3C-Z23AR	13.0	133-P3C-Z23AR-17.0-17.5	17.0 - 17.5 ft	-4.0	-4.5	JB82738-16	JB82738	11/25/2014	remaining	N	Y		1.6 J			
Z23A	133-Z23A-PB	13.0	133-Z23A-PB-16.1-16.6	16.1 - 16.6 ft	-3.1	-3.6	JC5740-3	JC5740	10/08/2015	remaining	N	Y		0.76 J			
Z24A	133-Z24A-PB	13.3	133-Z24A-PB-16.8-17.3	16.8 - 17.3 ft	-3.5	-4.0	JC3229-2	JC3229	09/04/2015	remaining	N	Y		< 0.35	RA		
Z25A	133-P3C-Z25A	13.1	133-P3C-Z25A-15.5-16.0	15.5 - 16.0 ft	-2.4	-2.9	JB81809-21	JB81809	11/14/2014	remaining	N	Y		2.2 J			
Z25A	133-Z25A-PB	13.1	133-Z25A-PB-15.5-16.0	15.5 - 16.0 ft	-2.4	-2.9	JC2721-2	JC2721	08/31/2015	remaining	N	Y		2.1 RA			
Z26A	133-P3C-Z26A	13.1	133-P3C-Z26A-11.0-11.5	11.0 - 11.5 ft	2.1	1.6	JB61714-23	JB61714	03/12/2014	removed	N	Y		0.40 J		S75	
Z26A	133-P3C-Z26A	13.1	133-P3C-Z26A-13.0-13.5	13.0 - 13.5 ft	0.1	-0.4	JB61714-24	JB61714	03/12/2014	removed	N	Y		0.51 J		S75	
Z26A	133-P3C-Z26A	13.1	133-P3C-Z26A-15.0-15.5	15.0 - 15.5 ft	-1.9	-2.4	JB61714-25T	JB61714T	03/12/2014	remaining	N	Y		0.63 J		S75	
Z26A	133-P3C-Z26A	13.1	133-P3C-Z26A-15.5-16.0	15.5 - 16.0 ft	-2.4	-2.9	JB61714-26	JB61714	03/12/2014	remaining	N	Y		1.1 J		S75	
Z26A	133-Z26A-PB-E	13.1	133-Z26A-PB-E-11.1-11.6	11.1 - 11.6 ft	2.0	1.5	JC2920-3	JC2920	09/02/2015	remaining	N	Y		< 0.28	UJ	S75	
Z26A	133-Z26A-PB-W	13.1	133-Z26A-PB-W-14.5-15.0	14.5 - 15.0 ft	-1.4	-1.9	JC2920-2	JC2920	09/02/2015	remaining	N	Y		< 0.29	UJ	S75	
Z26A	133-Z26A-SW-E2	13.1	133-Z26A-SW-E-12.5-13.0	12.5 - 13.0 ft	0.6	0.1	JC19057-3	JC19057	04/26/2016	remaining	N	Y		0.59 J		S75	
Z26A	133-Z26A-SW-S	13.1	133-Z26A-SW-S-10.6-11.1	10.6 - 11.1 ft	2.5	2.0	JC3090-2	JC3090	09/03/2015	remaining	N	Y		< 0.28	UJ	S75	
Z27A	133-P3C-Z27A	13.0	133-P3C-Z27A-9.0-9.5	9.0 - 9.5 ft	4.0	3.5	JB61714-32T	JB61714T	03/12/2014	remaining	N	Y		0.79 J		S76	
Z27A	133-P3C-Z27A	13.0	133-P3C-Z27A-11.0-11.5	11.0 - 11.5 ft	2.0	1.5	JB61714-33T	JB61714T	03/12/2014	remaining	N	Y		13.5 J			
Z27A	133-P3C-Z27A	13.0	133-P3C-Z27A-13.0-13.5	13.0 - 13.5 ft	0.0	-0.5	JB61714-34	JB61714	03/12/2014	remaining	N	Y		0.20 J			
Z27A	133-P3C-Z27A	13.0	133-P3C-Z27A-14.5-15.0	14.5 - 15.0 ft	-1.5	-2.0	JB61714-35T	JB61714T	03/12/2014	remaining	N	Y		0.53 J			
Z27A	133-P3C-Z27A	13.0	133-P3C-Z27A-15.0-15.5	15.0 - 15.5 ft	-2.0	-2.5	JB61714-36	JB61714	03/12/2014	remaining	N	Y		2.0 J			
Z27A	133-Y27A-SW-E	13.0	133-Y27A-SW-E-9.0-9.5	9.0 - 9.5 ft	4.0	3.5	JC2776-2	JC2776	09/01/2015	remaining	N	Y		4.7 J			
Z27A	133-Z27A-PB	13.0	133-Z27A-PB-7.8-8.3	7.8 - 8.3 ft	5.2	4.7	JC2659-8	JC2659	08/28/2015	remaining	N	Y		< 0.28	UJ		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-3.0-3.5	3.0 - 3.5 ft	7.7	7.2	JB40310-2R	JB40310R	06/21/2013	remaining	N	Y		4.0 RA			
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-5.0-5.5	5.0 - 5.5 ft	5.7	5.2	JB40310-3	JB40310	06/21/2013	remaining	N	Y		< 0.092	RA		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-7.0-7.5	7.0 - 7.5 ft	3.7	3.2	JB40310-4	JB40310	06/21/2013	remaining	N	Y		< 0.12	RA		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-7.0-7.5X	7.0 - 7.5 ft	3.7	3.2	JB40310-5	JB40310	06/21/2013	remaining	FD	Y		< 0.10	RA		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-8.9-9.4	8.9 - 9.4 ft	1.8	1.3	JB40310-6	JB40310	06/21/2013	remaining	N	Y		< 0.12	RA		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-10.6-11.1	10.6 - 11.1 ft	0.1	-0.4	JB40310-7	JB40310	06/21/2013	remaining	N	Y		0.44 RA			
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-12.6-13.1	12.6 - 13.1 ft	-1.9	-2.4	JB40310-8R	JB40310R	06/21/2013	remaining	N	Y		< 0.10	RA		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-14.1-14.6	14.1 - 14.6 ft	-3.4	-3.9	JB40310-9	JB40310	06/21/2013	remaining	N	Y		< 0.089	RA		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-14.6-15.1	14.6 - 15.1 ft	-3.9	-4.4	JB40310-10	JB40310	06/21/2013	remaining	N	Y		< 0.13	RA		
Z28A	133-Z27A-SW-S	13.0	133-Z27A-SW-S-5.8-6.3	5.8 - 6.3 ft	7.2	6.7	JC20733-3R	JC20733R	05/20/2016	remaining	N	Y		12.9 J			
Z28A	133-Z28A-PB	10.7	133-Z28A-PB-2.9-3.4	2.9 - 3.4 ft	7.8	7.3	JC20733-2	JC20733	05/20/2016	remaining	N	Y		0.75 J			
Z29A	135-B2	10.3	135-B2C (3.4-3.8)J49295-9R	3.4 - 3.8 ft	6.9	6.5	J49295-9R	J49295	12/14/2006	removed	N	Y		< 1.6	U	S2, S77	
Z29A	135-B2	10.3	135-B2D (4.5-5.0)J49295-10R	4.5 - 5.0 ft	5.8	5.3	J49295-10R	J49295	12/14/2006	removed	N	Y		< 1.8	U	S2, S77	
Z29A	135-B2	10.3	PPG-135-B2E_8.5-9.0_796987	8.5 - 9.0 ft	1.8	1.3	796987	B441	01/03/2007	remaining	N	Y		< 3.15	UJ	S2	
Z29A	135-B2	10.3	PPG-135-B2F_12.5-13.0_796988	12.5 - 13.0 ft	-2.2	-2.7	796988	B441	01/03/2007	remaining	N	Y		< 3.92	UJ	S2	
Z29A	135-B2	10.3	PPG-135-B2G_13.7-14.2_796989	13.7 - 14.2 ft	-3.4	-3.9	796989	B441	01/03/2007	remaining	N	Y		< 2.4	UJ	S2	
Z29A	135-B2	10.3	PPG-135-B2H_16.0-16.5_796990	16.0 - 16.5 ft	-5.7	-6.2	796990	B441	01/03/2007	remaining	N	Y		< 5.9	UJ	S2	
Z29A	135-B2	10.3	PPG-135-B2I_20.0-20.5_796991	20.0 - 20.5 ft	-9.7	-10.2	796991	B441	01/03/2007	remaining	N	Y		< 3.51	UJ	S2	
Z29A	135-B2	10.3	PPG-135-B2J_22.2-22.7_796992	22.2 - 22.7 ft	-11.9	-12.4	796992	B441	01/03/2007	remaining	N	Y		< 2.77	UJ	S2	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-6.5-7.0	6.5 - 7.0 ft	3.9	3.4	JB37690-8	JB37690	05/22/2013	remaining	N	Y		0.98 J		S2	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-6.5-7.0X	6.5 - 7.0 ft	3.9	3.4	JB37690-17	JB37690	05/22/2013	remaining	FD	Y		0.80 RA		S2	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-10.5-11.0	10.5 - 11.0 ft	-0.1	-0.6	JB37690-10	JB37690	05/22/2013	remaining	N	Y		0.26 J		S2	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-12.5-13.0	12.5 - 13.0 ft	-2.1	-2.6	JB37690-11	JB37690	05/22/2013	remaining	N	Y		0.54	J	S2	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-14.5-15.0	14.5 - 15.0 ft	-4.1	-4.6	JB37690-12	JB37690	05/22/2013	remaining	N	Y		0.52	J	S2	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-15.5-16.0	15.5 - 16.0 ft	-5.1	-5.6	JB37690-13	JB37690	05/22/2013	remaining	N	Y		0.35	J	S2	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-16.0-16.5	16.0 - 16.5 ft	-5.6	-6.1	JB37690-14	JB37690	05/22/2013	remaining	N	Y		13.4	J	S2	
Z30A	133-P3C-Z30A-ME	11.5	133-P3C-Z30A-ME-5.0-5.5	5.0 - 5.5 ft	6.5	6.0	JB96803-4	JB96803	06/11/2015	remaining	N	Y		< 0.28	RA	S2, S78	
Z30A	133-P3C-Z30A-ME	11.5	133-P3C-Z30A-ME-7.0-7.5	7.0 - 7.5 ft	4.5	4.0	JB96803-5R	JB96803R	06/11/2015	remaining	N	Y		< 1.1	RA	S2, S78	
Z30A	133-Y30A-SW-E1	10.2	133-Y30A-SW-E-7.2-7.7	4.3 - 4.8 ft	5.9	5.4	JC20436-11R	JC20436R	05/17/2016	remaining	N	Y		0.52	J	S2, S32	
Z30A	133-Y30A-SW-E2	10.2	133-Y30A-SW-E-9.2-9.7	6.3 - 6.8 ft	3.9	3.4	JC20436-10R	JC20436R	05/17/2016	remaining	N	Y		0.76	J	S2, S32	
Z30A	133-Y30A-SW-E3	10.2	133-Y30A-SW-E-11.2-11.7	8.3 - 8.8 ft	1.9	1.4	JC20436-9R	JC20436R	05/17/2016	remaining	N	Y		16.0	J	S2, S32	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-3.0-3.5	3.0 - 3.5 ft	7.2	6.7	JB65662-7R	JB65662R	04/25/2014	removed	N	Y		0.80	J	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-5.0-5.5	5.0 - 5.5 ft	5.2	4.7	JB37690-2R	JB37690R	05/22/2013	remaining	N	Y		0.20	J	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-6.5-7.0	6.5 - 7.0 ft	3.7	3.2	JB37690-1R	JB37690R	05/22/2013	remaining	N	Y		0.35	J	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-8.5-9.0	8.5 - 9.0 ft	1.7	1.2	JB37690-24	JB37690	05/22/2013	remaining	N	Y		0.39	RA	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-10.5-11.0	10.5 - 11.0 ft	-0.3	-0.8	JB37690-18	JB37690	05/22/2013	remaining	N	Y		0.71	RA	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-12.5-13.0	12.5 - 13.0 ft	-2.3	-2.8	JB37690-19	JB37690	05/22/2013	remaining	N	Y		2.3	RA	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-14.5-15.0	14.5 - 15.0 ft	-4.3	-4.8	JB37690-20	JB37690	05/22/2013	remaining	N	Y		< 0.14	RA	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-15.4-15.9	15.4 - 15.9 ft	-5.2	-5.7	JB37690-21	JB37690	05/22/2013	remaining	N	Y		< 0.084	RA	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-15.4-15.9X	15.4 - 15.9 ft	-5.2	-5.7	JB37690-22T	JB37690T	05/22/2013	remaining	FD	Y		< 0.30	RA	S2, S78	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-15.9-16.4	15.9 - 16.4 ft	-5.7	-6.2	JB37690-23	JB37690	05/22/2013	remaining	N	Y		1.1	J	S2, S78	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-3.0-3.5	3.0 - 3.5 ft	7.1	6.6	JB65510-13R	JB65510R	04/24/2014	removed	N	Y		4.5	J	S2, S79	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JB37583-8	JB37583	05/21/2013	remaining	N	Y		0.60	J	S2, S79	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-5.0-5.5X	5.0 - 5.5 ft	5.1	4.6	JB37583-9	JB37583	05/21/2013	remaining	FD	Y		< 0.14	UJ	S2, S79	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-6.5-7.0	6.5 - 7.0 ft	3.6	3.1	JB37583-10	JB37583	05/21/2013	remaining	N	Y		1.1	J	S2, S79	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-8.5-9.0	8.5 - 9.0 ft	1.6	1.1	JB37583-11	JB37583	05/21/2013	remaining	N	Y		0.23	J	S2, S79	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-10.5-11.0	10.5 - 11.0 ft	-0.4	-0.9	JB37583-12R	JB37583R	05/21/2013	remaining	N	Y		0.17	J	S2, S79	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-12.5-13.0	12.5 - 13.0 ft	-2.4	-2.9	JB37583-13	JB37583	05/21/2013	remaining	N	Y		0.68	J	S2, S79	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-14.5-15.0	14.5 - 15.0 ft	-4.4	-4.9	JB37583-14R	JB37583R	05/21/2013	remaining	N	Y		< 0.089	UJ	S2, S79	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-15.0-15.5	15.0 - 15.5 ft	-4.9	-5.4	JB37583-15	JB37583	05/21/2013	remaining	N	Y		1.6	J	S2, S79	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
CCPW - Chromate Chemical Production Waste
Chromium Policy - Memorandum from NJDEP Commissioner Lisa P. Jackson to Irene Kropp, Subject: Chromium Moratorium (Chromium Policy), dated February 8, 2007
COPR - Chromite Ore Processing Residue
Cr⁺⁶ - hexavalent chromium
CrSCC - Chromium Soil Cleanup Criteria
El. - elevation
FD - field duplicate sample type
ft - feet
GGM - green-gray mud
GPS - global positioning system
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
NJDEP - New Jersey Department of Environmental Protection
PDI - Pre-Design Investigation
RAR - Remedial Action Report
SDG - sample delivery group
TEE - terminal excavation elevation
USCS - Unified Soil Classification System

MATRICES:

FILL - fill
MM - meadow mat
UND - undisturbed native deposit
UNDno - non-organic undisturbed native deposit
UNDorg - organic undisturbed native deposit

USCS Classifications:

PT - peat

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
JB - The analyte concentration is greater than three times, but less than or equal to ten (10) times the concentration in the associated method/prep blank. The presence of the analyte in the sample is considered "real." The concentration is quantitatively qualified (JB) due to method blank contamination.
R - The result was rejected due to serious deficiencies; the presence or absence of the analyte could not be confirmed.
RA - The result was rejected due to deficiencies but is considered usable for decision making-purposes.
U - The analyte was not detected above the sample reporting limit shown.
UJ - The analyte was not detected above the sample reporting limit shown and the reporting limit was approximate.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Row R through CC (extending west to east) and Grid Column 48A through 21A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88.
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs. In some cases, the "Sample ID" in the table is a variant of the sample ID in the laboratory report and/or data validation report. In these cases, the "Lab ID" associates the sample results to the laboratory report and/or data validation report.
G7. "Depth Interval" is based on the "Location Elevation."
G8. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G9. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the clean confirmation pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G10. In some grids, the clean confirmation sample was collected prior to excavation and, therefore, a pit bottom sample was not collected. As a result, the clean confirmation sample elevation may vary from the as-built TEE. In addition, sometimes the clean confirmation sample was removed during excavation.
G11. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G12. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G13. "Date Collected" refers to the date the soil sample was collected.
G14. "Sample Status" indicates whether a sample is remaining or removed:
- "Remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location; and

Table 5-1
Cr+6 Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
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- "Removed" indicates the sample was removed during excavation.
- G15. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figures 5-1A, 5-1B, 5-1C, and 5-1D.
- G16. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
- G17. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
- G18. For samples with Cr+6 CrSCC exceedances, the USCS Classification is provided. Where the sample was collected above 20 ft bgs, the matrix (e.g., MM, UND, UNDno, UNDorg, or FILL) is also specified. In the event that a post-excavation sample supersedes a sample with Cr+6 CrSCC exceedances, the USCS Classification, and matrix if applicable, for the post-excavation sample is also provided.
- G19. "Result" refers to the analytical result which is reported in mg/kg.
- G20. Bold text indicates that the result exceeds the CrSCC. Non-bold text indicates that the result does not exceed the CrSCC.
- G21. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data. For unvalidated data, it refers to the qualifier assigned by the laboratory.
- G22. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.

SPECIFIC NOTES:

- S1. In Grid AA22A, the boring log for PDI boring 133-P3C-AA22A indicates GGM down to approximately El. -5.6 ft NAVD88. Based on this elevation as compared to the as-built TEE (approximately El. -4.9 ft NAVD88), a portion of this material appears to be remaining in place; however, based on the boring log, the GGM was located above MM. The excavation field notes indicate that the GGM was removed and this grid was excavated to visually clean MM. A confirmation pit bottom sample (133-AA22A-PB-18.3-18.8 [El. -4.9 to -5.4 ft NAVD88]) was collected at the visually clean as-built TEE of El. -4.9 ft NAVD88. The Cr+6 result for the confirmatory sample was less than 20 mg/kg.
- S2. The portions of Grids V40A, V41A, W37A, W38A, W39A, W40A, X35A, X36A, X37A, Y32A, Y33A, Y34A, Z29A, Z30A, Z31A, AA26A, AA27A, AA28A, AA29A, and BB26A located in Site 133 East were excavated concurrently with the portions of these grids located in Site 135 South. Remaining samples located within these grids in their entirety (i.e., on both sites) are included in this table.
- S3. Grid AA26A was excavated as a split grid with two distinct as-built TEEs. The PDI sample 133-P3C-AA26A-5.0-5.5 (El. 6.4 to 5.9 ft NAVD88) serves as the Cr+6 confirmation pit bottom sample for the southern portion of the grid. This sample and the PDI sample 133-P3C-AA26A-7.0-7.5 (El. 4.4 to 3.9 ft NAVD88) were removed due to sloping towards the deeper northern portion of the grid.
- S4. Grid AA27A was excavated for remediation of non-Cr+6 constituents only. Excavation for the remediation of Cr+6 was not required since the Cr+6 concentrations in samples collected from historical boring 133-B18 and PDI borings 133-P3C-AA27A and 133-P3C-AA27A-ME were less than the CrSCC. The removed PDI sample 133-P3C-AA27A-5.0-5.5 (El. 6.7 to 6.2 ft NAVD88) from the closest interval above the remaining soil in the grid serves as the Cr+6 confirmation pit bottom sample.
- S5. Grid AA28A was excavated for remediation of non-Cr+6 constituents only. Excavation for the remediation of Cr+6 was not required since the Cr+6 concentrations in samples collected from PDI boring 135-P3C-AA28A were less than the CrSCC. The removed PDI samples from boring 135-P3C-AA28A between El. 7.1 to 1.1 ft NAVD88 serve as the Cr+6 confirmation pit bottom and sidewall samples.
- S6. Grid AA29A was excavated for remediation of non-Cr+6 constituents only. Excavation for the remediation of Cr+6 was not required since the Cr+6 concentrations in samples collected from the PDI boring 135-P3C-AA29A were less than the CrSCC. The removed PDI samples from boring 135-P3C-AA29A between El. 7.6 to 5.1 ft NAVD88 serve as the Cr+6 confirmation pit bottom and sidewall samples.
- S7. Grid BB22A was excavated as a split grid with two distinct as-built TEEs. In Grid BB22A, the PDI sample 133-P3C-BB22A-13.0-13.5 (El. -0.1 to -0.6 ft NAVD88) serves as the Cr+6 confirmation pit bottom sample for the northern portion of the grid. This sample was removed due to sloping towards the deeper southern portion of the grid.
- S8. The portion of Grids BB24A, CC22A, and CC23A located in Site 133 East were excavated concurrently with the portion of these grids located in Site 135 North. Remaining samples located within these grids in their entirety (i.e., on both sites) are included in this table.
- S9. The portion of Grid BB25A located in Site 133 East was excavated concurrently with the portion of this grid located in Sites 135 North and 135 South. Remaining samples located within this grid in its entirety (i.e., on all sites) are included in this table.
- S10. In Grid BB25A, excavation for Cr+6 remediation was conducted to El. -2.6 ft NAVD88 and a Cr+6 confirmation pit bottom sample (135-BB25A-PB-14.1-14.6 [El. -2.6 to -3.1 ft NAVD88]) was collected. A portion of Grid BB25A was further excavated deeper to remove the former building footprint, which resulted in sloping from the pit bottom El. -2.6 ft NAVD88 to El. -4.8 ft NAVD88. Since the sloping was not due to Cr+6 remediation, no sidewall samples were required.
- S11. In Grid BB25A, the Cr+6 western sidewall confirmation sample at location 135-BB25A-SW-W (135-BB25A-SW-W-12.0-12.5 [El. -0.5 to -1.0 ft NAVD88]) was removed due to sloping towards adjacent Grids AA24A and BB24A.
- S12. Grid BB26A was excavated deeper than required for Cr+6 remediation due to presence of non-Cr+6 constituents. The excavation for non-Cr+6 constituents removed the Grid BB25A Cr+6 southern sidewall confirmation samples at locations 135-BB25A-SW-S1 (135-BB25A-SW-S-8.1-8.6 [El. 3.4 to 2.9 ft NAVD88]), 135-BB25A-SW-S2 (135-BB25A-SW-S-10.1-10.6 [El. 1.4 to 0.9 ft NAVD88]), and 135-BB25A-SW-S3 (135-BB25A-SW-S-12.1-12.6 [El. -0.6 to -1.1 ft NAVD88]); the Grid BB26A confirmation pit bottom sample (135-BB26A-PB-6.7-7.2 [El. 5.4 to 4.9 ft NAVD88]); and the clean PDI samples from boring 135-P3C-BB26A (between El. 5.1 to 0.6 ft NAVD88) that serve as the confirmation sidewall samples between Grids BB26A and AA26A.
- S13. Grid CC22A was excavated to facilitate sloping into Grids CC23A and DD22A. The removed sidewall sample at location 135-CC23A-SW-N3 (135-CC23A-SW-N-11.1-11.6 [El. -0.1 to -0.6 ft NAVD88]) was collected at the same elevation as the shallowest remaining soil in the grid (approximately El. -0.4 ft NAVD88) and serves as the confirmation pit bottom sample at the shallowest elevation remaining in the grid. This confirmation sample (135-CC23A-SW-N-11.1-11.6) and the next closest PDI sample (135-P3C-CC22A-12.0-12.5 [El. -0.8 to -1.3 ft NAVD88]) were removed due to the sloping to adjacent grids.
- S14. In Grids CC23A, T47A, V42A, W40A, and Z21A, the location elevations of two or more locations within the same grid vary by more than two feet. The samples with the higher location elevation(s) fall within the footprint of the former building slab. The samples with the lower location elevation(s) fall outside the footprint of the building slab.
- S15. The portions of Grids R41A, S38A, S39A, S40A, S41A, T36A, T37A, T38A, U33A, U34A, U35A, V30A, V31A, V32A, V33A, W27A, W28A, W29A, W30A, X25A, X26A, X27A, Y22A, Y23A, Y24A, Z21A, and Z22A located in Site 133 East were excavated concurrently with the portions of these grids located in Halladay Street South. Remaining samples located within these grids in their entirety (i.e., on both sites) are included in this table.
- S16. In Grid R41A, PDI sample P4-HAL-R41A-6.5-7.0 (El. 5.2 to 4.7 ft NAVD88) was utilized as the Cr+6 confirmation pit bottom sample; it was removed due to sloping towards adjacent grids.
- S17. Adjacent to Grid R41A, Grid R42A requires additional excavation. The proposed final elevation of Grid R42A is El. 3.8 ft NAVD88. Based on the proposed final elevation, Cr+6 confirmation sidewall samples between Grids R41A and R42A will not be required.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
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- S18. In Grids S38A, T45A, Y25A, and Y33A, the depth intervals included in the Sample IDs 133-S38A-SW-S-9.6-10.1 and its field duplicate, 133-T44A-SW-S-12.5-13.0, 133-T44A-SW-S-14.5-15.0, 133-T44A-SW-S-16.5-17.0, 133-Y25A-PB-15.5-16.0, and 135-Y33A-PB-8.3-8.8 do not correspond to the actual depth intervals where the samples were collected since the depth intervals in the sample IDs were estimated in the field. The actual depth intervals were updated following review of the GPS-measured pre-construction location elevations and GPS-measured sample start elevations and are provided in the “Depth Interval” column on this table.
- S19. In Grid S40A, the PDI sample 133-P3C-S40A-7.0-7.5 (El. 4.4 to 3.9 ft NAVD88) was utilized as the Cr⁺⁶ confirmation pit bottom sample; it was removed due to sloping towards adjacent grids.
- S20. Adjacent to Grid S42A, Grids R42A and S43A require additional excavation. Based on the proposed final elevation of Grid R42A (El. 3.8 ft NAVD88), Cr⁺⁶ confirmation sidewall samples between Grids S42A and R42A will not be required. Based on the proposed final elevation of Grid S43A (El. 2.7 ft NAVD88), Cr⁺⁶ confirmation sidewall samples between Grids S42A and S43A will not be required.
- S21. Adjacent to Grid T44A, the northern portion of Grid S44A requires additional excavation and sampling. Based on the proposed final elevation of Grid S44A (El. 5.6 ft NAVD88), seven sidewall samples were required between Grids S44A and T44A. Five post-excavation sidewall samples were collected at locations 133-T44A-SW-W1 (133-T44A-SW-W-10.5-11.0 [El. 1.7 to 1.2 ft NAVD88]), 133-T44A-SW-W2 (133-T44A-SW-W-12.5-13.0 [El. -0.3 to -0.8 ft NAVD88]), 133-T44A-SW-W3 (133-T44A-SW-W-14.5-15.0 [El. -2.3 to -2.8 ft NAVD88]), 133-T44A-SW-W4 (133-T44A-SW-W-16.5-17.0 [El. -4.3 to -4.8 ft NAVD88]), and 133-T44A-SW-W5 (133-T44A-SW-W-17.0-17.5 [El. -4.8 to -5.3 ft NAVD88]). At approximately El. 2.5 ft NAVD88, the sidewall slope intersected with PDI location 133-P3C-S44A. Removed PDI samples 133-P3C-S44A-6.5-7.0 (El. 5.6 to 5.1 ft NAVD88) and 133-P3C-S44A-8.5-9.0 (El. 3.6 to 3.1 ft NAVD88) serve as additional sidewall samples between Grids S44A and T44A.
- S22. In Grid S45A, excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in the samples collected from the PDI boring 133-P3C-S45A were less than the CrSCC. The PDI samples 133-P3C-S45A-0.5-1.0 and 133-P3C-S45A-2.5-3.0 were removed due to sloping towards adjacent grids.
- S23. Adjacent to Grid S45A, Grids S44A and R45A require additional excavation and/or sampling. Based on the proposed final elevation of Grid S44A (El. 5.6 ft NAVD88), three sidewall samples were required between Grids S44A and S45A. Four post-excavation sidewall samples were collected at locations 133-S44A-SW-S1 (133-S44A-SW-S-0.5-1.0 [El. 11.6 to 11.1 ft NAVD88]), 133-S44A-SW-S2 (133-S44A-SW-S-2.5-3.0 [El. 9.6 to 9.1 ft NAVD88]), 133-S44A-SW-S3 (133-S44A-SW-S-4.5-5.0 [El. 7.6 to 7.1 ft NAVD88]), and 133-S44A-SW-S4 (133-S44A-SW-S-6.0-6.5 [El. 5.6 to 5.1 ft NAVD88]). Grid R45A does not require excavation throughout the grid. Additional excavation and sampling is required along the southern R44A slope which falls into Grid R45A; therefore, no sidewall samples are needed between Grids R45A and S45A.
- S24. In Grid S46A, excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in the samples collected from the PDI boring 133-P3C-S46A were less than the CrSCC. The removed PDI sample 133-P3C-S46A-0.5-1.0 (El. 11.7 to 11.2 ft NAVD88) from the same elevation as the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation sample. Excavation in the southeastern portion of the grid was conducted to approximately the same elevation as the eastern half of Grid S47A (El. 3.6 ft NAVD88), so that removed PDI samples from boring 133-P3C-S46A serve as confirmation sidewall samples for the south to north slope from El. 3.4 to 11.4 ft NAVD88 in Grid S46A. These PDI samples horizontally delineate the extent of visible CCPW encountered in the eastern portion of Grid S47A.
- S25. Grid S47A originally did not require excavation for remediation of Cr⁺⁶ because the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-S47A were less than the CrSCC. However, visible CCPW material was encountered in the eastern portion of the grid. The eastern portion of the grid was excavated to El. 3.6 ft NAVD88 and a Cr⁺⁶ confirmation pit bottom sample (ASM-S47A-PB-8.8-9.3 [El. 3.6 to 3.1 ft NAVD88]) was collected. Visible CCPW material was not observed in the western portion of the grid and Cr⁺⁶ western sidewall confirmation samples at locations 135-S47A-SW-W1 (135-S47A-SW-W-0.6-1.1 [El. 11.6 to 11.1 ft NAVD88]), 135-S47A-SW-W2 (135-S47A-SW-W-2.6-3.1 [El. 9.6 to 9.1 ft NAVD88]), 135-S47A-SW-W3 (135-S47A-SW-W-4.6-5.1 [El. 7.6 to 7.1 ft NAVD88]), and 135-S47A-SW-W4 (135-S47A-SW-W-6.6-7.1 [El. 5.6 to 5.1 ft NAVD88]) were collected at two-foot intervals as the grid sloped up towards Grid R47A.
- S26. The portions of Grids S48A, T46A, T47A, T48A, U43A, U44A, U45A, V41A, and V42A located in Site 133 East were excavated concurrently with the portions of these grids located in Al Smith Moving. Remaining and removed confirmation samples located within these grids in their entirety (i.e., on both sites) are included in this table.
- S27. Grid S48A originally did not require excavation for remediation of Cr⁺⁶ as the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-S48A were less than the CrSCC. However, visible CCPW material was encountered in the eastern portion of the grid. The eastern portion of the grid was excavated to El. 3.7 ft NAVD88 where PDI sample 133-P3C-S48A-8.5-9.0 (El. 3.6 to 3.1 ft NAVD88) serves as the confirmation pit bottom sample. Visible CCPW material was not observed in the western portion of the grid and Cr⁺⁶ western sidewall confirmation samples at locations ASM-S48A-SW-W1 (ASM-S48A-SW-W-2.4-2.9 [El. 9.7 to 9.2 ft NAVD88]), ASM-S48A-SW-W2 (ASM-S48A-SW-S-4.4-4.9 [El. 7.7 to 7.2 ft NAVD88]), and ASM-S48A-SW-W3 (ASM-S48A-SW-S-6.4-6.9 [El. 5.7 to 5.2 ft NAVD88]) were collected at two-foot intervals as the grid sloped up towards Grid R48A. Sidewall samples were not required at elevations greater than El. 9.7 ft NAVD88 because concrete was present to the west above El. 10.6 ft NAVD88. Three southern sidewall samples at locations ASM-S48A-SW-S1 (ASM-S48A-SW-S-2.4-2.9 [9.7 to 9.2 ft NAVD88]), ASM-S48A-SW-S2 (ASM-S48A-SW-S-4.4-4.9 [7.7 to 7.2 ft NAVD88]), and ASM-S48A-S3 (ASM-S48A-SW-S-6.4-6.9 [5.7 to 5.2]) were collected between El. 5.7 and 9.7 ft NAVD88. Additional southern sidewalls were not required at elevations above El. 9.7 ft NAVD88 because visually clean concrete associated with the Caven Point Avenue sidewalk was encountered at El. 9.7 ft NAVD88.
- S28. In Grid T36A, the Cr⁺⁶ confirmation pit bottom sample 133-HSS-T36A-PB-9.9-10.4 (El. 1.6 to 1.1 ft NAVD88) and the Cr⁺⁶ eastern sidewall confirmation sample at location 133-HSS-S36A-SW-E1 (133-HSS-S36A-SW-E-12.0-12.5 [El. 0.2 to -0.3 ft NAVD88]) were removed due to sloping towards adjacent grids.
- S29. Grid U40A originally did not require excavation for remediation of Cr⁺⁶ as the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-U40A were less than the CrSCC. However, visible CCPW material was encountered during excavation activities. During the 2015 mobilization, visible COPR material was removed and a Cr⁺⁶ confirmation pit bottom sample 133-U40A-PB-6.8-7.3 was collected at El. 5.2 to 4.7 ft NAVD88. The western-most portion of Grid U40A was not excavated all the way to El. 5.2 ft NAVD88 because visible CCPW was not encountered down to that elevation as confirmed by an inspection completed by Weston Solutions, Inc. The Cr⁺⁶ confirmation pit bottom sample 133-T40A-PB-6.3-6.8 (El. 5.8 to 5.3 ft NAVD88) from adjacent Grid T40A serves as the confirmation pit bottom sample for the portion of Grid U40A that was excavated to El. 5.8 ft NAVD88. During the 2017 mobilization, the eastern portion of the grid was further excavated to the proposed Cr⁺⁶ as-built TEE in Grid V40A (El. 3.2 ft NAVD88) so that removed PDI sample 133-P3C-U40A-7.0-7.5 (El. 5.0 to 4.5 ft NAVD88) serves as a the confirmation sidewall sample for the west-to-east slope from El. 5.8 ft NAVD88 in Grid T40A to approximately El. 2.8 ft NAVD88 in western Grid V40A. This PDI sample horizontally delineates Cr⁺⁶ in Grid V40A.
- S30. In Grid T41A, excavation for remediation of Cr⁺⁶ was conducted to El. 10.0 ft NAVD88. The grid was further excavated for remediation of non-Cr⁺⁶ constituents to El. 1.1 ft NAVD88. A Cr⁺⁶ confirmation pit bottom sample (133-T41A-PB-7.2-7.8 [El. 4.6 to 4.0 ft NAVD88]) was collected and subsequently removed. Since the additional excavation was for non-Cr⁺⁶ constituents, post-excavation sidewall samples were not required. The Cr⁺⁶ concentrations in samples below El. 10.0 ft NAVD88 collected from the PDI boring 133-P3C-T41A were less than the CrSCC, and the removed PDI samples 133-P3C-T41A-7.0-7.5 (El. 4.8 to 4.3 ft NAVD88) and 133-P3C-T41A-9.0-9.5 (El. 2.8 to 2.3 ft NAVD88) serve as the Cr⁺⁶ southern, western, eastern, and northern sidewall confirmation samples.
- S31. Adjacent to Grid T43A, Grid S43A requires additional excavation. Based on the proposed final elevation of Grid S43A (El. 2.7 ft NAVD88), Cr⁺⁶ sidewall confirmation samples between Grids T43A and S43A will not be required.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
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S32. In Grids T44A, U43A, U44A, W38A, X36A, and Z30A, the sidewall samples at locations 133-T44A-SW-E5, 133-T43A-SW-E, 133-T44A-SW-E1, 133-T44A-SW-E2, 133-T44A-SW-E3, 133-T44A-SW-E4, ASM-V44A-SW-W1, 133-V38A-SW-E1, 133-V38A-SW-E2, 135-X38A-SW-W1 , 135-X38A-SW-W2 ,133-W36A-SW-E2, 133-W36A-SW-E3, 133-W36A-SW-E4, 133-Y30A-SW-E1, 133-Y30A-SW-E2, and 133-Y30A-SW-E3 (samples 133-T44A-SW-E-17.0-17.5, 133-T43A-SW-E-10.0-10.6, 133-T44A-SW-E-10.5-11.0, 133-T44A-SW-E-12.5-13.0, 133-T44A-SW-E-14.5-15.0, 133-T44A-SW-E-16.5-17.0, ASM-V44A-SW-W-9.6-10.1, 133-V38A-SW-E-6.9-7.4, 133-V38A-SW-E-6.9-7.4X, 133-V38A-SW-E-8.9-9.4, 135-X38A-SW-W-7.4-7.9, 135-X38A-SW-W-9.4-9.9,133-W36A-SW-E-5.4-5.9, 133-W36A-SW-E-7.4-7.9, 133-W36A-SW-E-9.4-9.9, 133-Y30A-SW-E-7.2-7.7, 133-Y30A-SW-E-9.2-9.7, and 133-Y30A-SW-E-11.2-11.7) were named with depth intervals based on the pre-remediation surface elevation of the former slab. However, the samples are located outside the footprint of the building slab. The sample location elevations and corresponding depth intervals of these sidewall samples have been modified based on the pre-remediation elevation of the nearest PDI location to each sample location outside the footprint of the building slab. The sample names and measured sample start elevations have not been modified.

S33. Grid T45A was excavated to facilitate sloping into Grid T44A. The removed PDI sample 133-P3C-T45A-0.5-1.0 (El. 11.7 to 11.2 ft NAVD88) from the same elevation as the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation sample. Five post-excavation confirmation sidewall samples were collected along the slope between Grid T44A and T45A at elevations ranging from El. -4.8 to 3.7 ft NAVD88, at which point the slope intersected the clean PDI boring 133-P3C-T45A. Removed PDI samples from location 133-P3C-T45A between El. 5.2 and 9.7 ft NAVD88 serve as additional sidewall samples between Grids T44A and T45A.

S34. In Grid T46A, excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in the samples collected from the PDI boring 133-P3C-T46A were less than the CrSCC. Soil remains in the grid up to El. 11 ft NAVD88 so all removed and remaining samples collected from the grid are included in the data set. PDI and historical samples were not collected in the grid above El. 9.9 ft NAVD88 because visually clean concrete was present in the grid above that elevation. The removed PDI sample 133-P3C-T45A-0.5-1.0 (El. 11.7 to 11.2 ft NAVD88) from adjacent Grid T45A provides supporting evidence that this sample interval in Grid T46A is compliant with the Chromium Policy. Excavation in the southern portion of the grid was conducted to the same elevation as Grid T47A (El. 5.0 ft NAVD88), so that removed PDI samples from boring 133-P3C-T46A serves as confirmation sidewall samples for the south to north slope from El. 5.0 to 11.0 ft NAVD88 in Grid T46A. These PDI samples horizontally delineate the visible CCPW encountered within Grid T47A. The boring log for boring 133-MW2C indicates COPR from approximately El. 10.4 to 5.0 ft NAVD88. However, a test pit (T46AR/MW2C-SA) was advanced with oversight by AECOM and Weston Solutions, Inc. to confirm the presence of COPR documented in the boring log. No COPR was observed during test pitting to El. 5.2 ft NAVD88. Regardless, this material was removed during excavation. Confirmatory samples were collected at 2-ft intervals down to El. 5.2 ft NAVD88 and the Cr⁺⁶ concentrations were less than the CrSCC.

S35. In Grid T47A, removed PDI samples ASM-T47AR2-5.0-5.5 (El. 9.0 to 8.5 ft NAVD88) and ASM-T47AR2-7.0-7.5 (El. 7.0 to 7.5 ft NAVD88) serve as the Cr⁺⁶ southern sidewall confirmation samples between Grid T47A and Grid U47A (located in the Al Smith Moving property).

S36. Adjacent to Grid T48A, additional southern sidewall samples were collected in Grid T49A, outside the Site 133 East boundary. These sampling results do not reflect soil remaining in place in Site 133 East and will be reported in the Al Smith Moving property RAR submittal.

S37. Grid U39A was initially excavated as a split grid with two distinct as-built TEEs as part of the 2015 mobilization. The northern portion of the grid was excavated to El. 2.1 ft NAVD88 and pit bottom confirmation sample 133-U39A-PB-N-8.1-8.6 (El. 2.1 to 1.6 ft NAVD88) was collected. The southern portion of the grid was excavated to El. 4.3 ft NAVD88 and pit bottom sample 133-U39A-PB-S-10.3-10.8 (El. 4.3 to 3.8 ft NAVD88) was collected. The southern portion of the grid was further excavated to El. 3.2 ft NAVD88, consistent with adjacent Grid U40A as part of the 2017 mobilization, removing the southern pit bottom sample. The PDI sample 133-P3C-U39A-9.0-9.5 (El. 3.4 to 2.9 ft NAVD88) serves as the confirmation sidewall sample between the north and south portions of the grid. The depth intervals included in the Sample IDs 133-U39A-PB-N-8.1-8.6 and 133-U39A-PB-S-10.3-10.8 do not correspond to the actual depth intervals where the samples were collected. The depth intervals in the sample IDs were inadvertently switched when naming the samples during the field effort. The actual depth intervals were updated following review of the GPS-measured pre-construction location elevations and GPS-measured sample start elevations and are provided in the “Depth Interval” column on this table.

S38. Grid U41A was originally excavated to El. 5.0 ft NAVD88 and a clean confirmation pit bottom sample was collected (133-U41A-PB-6.8-7.3 [El. 5.0 to 4.5 ft NAVD]), as part of the 2015 mobilization. As part of the 2017 mobilization, the majority of the grid was further excavated to the elevation of the proposed Cr⁺⁶ TEE in Grid V41A (El. 3.2 ft NAVD88) so that the pit bottom sample (133-U41A-PB-6.8-7.3 [El. 5.0 to 4.5 ft NAVD88]) could be used to horizontally delineate to the west the Cr⁺⁶ encountered in Grid V41A.

S39. In Grid U43A, the boring log for boring 133-B16 indicates COPR is present from approximately El. 8.9 to -0.8 ft NAVD88. However, a test pit (133-B16-SA) was advanced with oversight by AECOM and Weston Solutions, Inc. to confirm the presence of COPR documented in the boring log. No COPR was observed during test pitting to El. -0.5 ft NAVD88. Confirmatory samples were collected at 2-ft intervals down to El. -0.5 ft NAVD88 and the Cr⁺⁶ concentrations were less than the CrSCC. The removed test pit sample 133-B16-SA-6.5-7.0 (El. 4.0 to 3.5 ft NAVD88) is included in the data set as material remains in place between the TEE (approximately El. 2.6 ft NAVD88) and the next deepest sample 133-B16-SA-8.5-9.0 (El. 2.0 to 1.5 ft NAVD88).

S40. In Grid U43A, excavation was deeper than required for remediation of Cr⁺⁶ due to the presence of non-Cr⁺⁶ constituents. The removed PDI sample 133-P3C-U43A-6.5-7.0 (El. 3.7 to 3.2 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample.

S41. Grid U44A did not require excavation for remediation of Cr⁺⁶ as the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-U44A were less than the CrSCC. Removed PDI sample 133-P3C-U44A-5.0-5.5 (El. 5.6 to 5.1 ft NAVD88) from the same elevation as the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation sample. The western portion of the grid was further excavated to facilitate sloping into Grid T44A. Between Grids T44A and U44A, post-excavation sidewall samples were collected between El. -4.8 and 1.7 ft NAVD88 at locations 133-T44A-SW-E1, 133-T44A-SW-E2, 133-T44A-SW-E3, and 133-T44A-SW-E4. Removed PDI sample 133-P3C-U44A-7.0-7.5 (El. 3.6 to 3.1 ft NAVD88) serves as an additional sidewall sample between Grids T44A and U44A. Excavation in the northeast corner of the grid was conducted to the same elevation as Grid U43A (El. 2.6 ft NAVD88), so that removed PDI samples from borings 133-P3C-U44A serve as confirmation sidewall samples for the south to north slope from El. 2.7 to 5.0 ft NAVD88 in Grid U44A. These PDI samples horizontally delineate the Cr⁺⁶ encountered within Grid U43A.

S42. In Grid U45A, excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-U45A were less than the CrSCC. Excavation in the eastern portion of the grid was conducted to the same elevation as Grid V45A (El. 3.1 ft NAVD88), so that removed PDI samples from borings 133-P3C-U45A serve as confirmation sidewall samples for the east to west slope from El. 3.1 to 11.9 ft NAVD88 in Grids U45A and T45A. These PDI samples horizontally delineate the visible CCPW encountered within Grid V45A.

S43. In Grid V35A, the Cr⁺⁶ result for PDI sample 133-P3C-V35A-17.5-18.0 (El. -4.9 to -5.4 ft NAVD88) is greater than 20 mg/kg but in compliance with the Chromium Policy because this sample was actually removed. Based on the sample elevation (El. -4.9 to -5.4 ft NAVD88) as compared to the as-built TEE (El. -4.7 ft NAVD88), this sample appears to be remaining in place; however, this sample was collected from fill above MM. The excavation field notes indicate that the fill material was removed and this grid was excavated to visually clean MM. A Cr⁺⁶ confirmation pit bottom sample (133-V35A-PB-17.3-17.8 [El. -4.7 to -5.2 ft NAVD88]) was collected at the visually clean as-built TEE of El. -4.7 ft NAVD88. The Cr⁺⁶ result for the confirmatory sample is less than 20 mg/kg.

S44. In Grid V35A, the Cr⁺⁶ result for PDI sample 133-P3C-V35A-18.0-18.5 (El. -5.4 to -5.9 ft NAVD88) is greater than 20 mg/kg but in compliance with the Chromium Policy because this sample was superseded by a post-excavation sample (133-V35A-PB-17.3-17.8 [El. -4.7 to -5.2 ft NAVD88]) collected from the pit bottom. The PDI sample 133-P3C-V35A-18.0-18.5 (El. -5.4 to -5.9 ft NAVD88) was collected from the top half foot of MM. The excavation was conducted to visually clean MM and the Cr⁺⁶ confirmation pit bottom sample was collected at the as-built TEE of El. -4.7 ft NAVD88. The Cr⁺⁶ result for the confirmatory sample is less than 20 mg/kg.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
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- S45. The western portion of Grid V36A was excavated in 2015 and the eastern portion of the grid was excavated in 2016. Pit bottom samples were collected during both mobilizations to demonstrate compliance with the Chromium Policy. A portion of the eastern pit bottom sample (133-V36A-PB-15.7-16.2R) was removed due to scraping for remediation of non-Cr⁺⁶ constituents.
- S46. In Grid V38A, the Cr⁺⁶ southern sidewall confirmation sample at location 133-V37A-SW-S2 (133-V37A-SW-S-12.1-12.6 [El. 0.5 to 0.0 ft NAVD88]) was removed during rescraping of the Grid V37A south sidewall exceedances located at El. -1.5 ft NAVD88 prior to backfilling.
- S47. In Grid V39A, excavation was deeper than required for remediation of Cr⁺⁶ due to the presence of non-Cr⁺⁶ constituents. The removed PDI sample (133-P3C-V39A-12.0-12.5 [El. 1.6 to 1.1 ft NAVD88]) was collected 0.5 ft above the shallowest remaining soil in the grid (El. 1.1 ft NAVD88); therefore, this sample serves as the Cr⁺⁶ confirmation pit bottom sample.
- S48. In Grids V40A, X35A, X36A, Y32A, and Y33A, multiple borings were installed adjacent to each other at different points in time. The location elevations vary because earthwork modified the surface elevation between the two sampling events.
- S49. Grid V40A required excavation to an as-built TEE of El. 3.4 ft NAVD88 for remediation of Cr⁺⁶. The removed PDI sample 133-P3C-V40A-6.0-6.5 (El. 3.4 to 2.9 ft NAVD88), and the associated field duplicate, serves as the Cr⁺⁶ confirmation pit bottom sample. Additional excavation was conducted in the northern and western portions of the grid to El. 2.8 ft NAVD88 for remediation of non-Cr⁺⁶ constituents. Excavation in the southeast corner of the grid was conducted to the same elevation as Grid W41A (El. -2.4 ft NAVD88), so that removed PDI samples from borings 133-P3C-V40A and 135-P3C-V41A serve as western confirmation sidewall samples for the west to east slope from El. 2.8 to -2.4 ft NAVD88 in Grids V40A and V41A. These PDI samples horizontally delineate the Cr⁺⁶ encountered within Grid W41A.
- S50. In Grid V42A, excavation was deeper than required for remediation of Cr⁺⁶ due to the presence of non-Cr⁺⁶ constituents. The removed PDI sample ASM-V42AR2-12.0-12.5 (El. 2.4 to 1.9 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample.
- S51. In Grid W27A, the location elevations of locations 133-B1, 133-P3C-MW101I, and 133-W27A-PB differ by 2.8 ft. The location elevation of 133-B1 and 133-W27A-PB represent the pre-remediation surface elevation and the location elevation of location 133-P3C-MW101I represents the location elevation following remediation, during interim restoration.
- S52. Grid W30A originally did not require excavation for remediation of Cr⁺⁶ as the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-W30A were less than the CrSCC. However, visible CCPW material was encountered in the western portion of the grid. The western portion of the grid was excavated to El. -0.3 ft NAVD88 and a Cr⁺⁶ confirmation pit bottom sample (133-W30A-PB-13.5-14.0 [El. -0.3 to -0.8 ft NAVD88]) was collected. Visible CCPW material was not observed in the eastern portion of the grid and Cr⁺⁶ confirmation eastern sidewall samples at locations 133-W30A-SW-E in Grid X30A (133-W30A-SW-E-8.0-8.5 [El. 5.2 to 4.7 ft NAVD88]), 133-W30A-SW-E2 (133-W30A-SW-E-9.0-9.5 [El. 4.2 to 3.7 ft NAVD88]), 133-W30A-SW-E3 (133-W30A-SW-E-11.0-11.5 [El. 2.2 to 1.7 ft NAVD88]), and 133-W30A-SW-E4 (133-W30A-SW-E-13.0-13.5 [El. 0.2 to -0.3 ft NAVD88]) were collected from the excavation slope towards Grid X30A.
- S53. In Grid W30A, the Grid W31A Cr⁺⁶ northern sidewall confirmation samples at locations 133-W31A-SW-N1 (133-W31A-SW-N-9.1-9.6 [El. 4.0 to 3.5 ft NAVD88]), 133-W31A-SW-N2 (133-W31A-SW-N-11.1-11.6 [El. 2.0 to 1.5 ft NAVD88]), and 133-W31A-SW-N3 (133-W31A-SW-N-13.1-13.6 [El. 0.0 to -0.5 ft NAVD88]) were removed due to sloping of split Grid W30A.
- S54. Grid W31A was excavated from El. -2.5 to -3.1 ft NAVD88 due to chromium blooming. The southern sidewall sample at location 133-W31A-SW-S5 (133-W31A-SW-S-13.9-14.4 [El. -0.8 to -1.3 ft NAVD88]) and the PDI sample 133-P3C-W31A-15.5-16.0 (El. -2.4 to -2.9 ft NAVD88) were removed with this excavation. Both samples serve as Cr⁺⁶ southern sidewall confirmation samples.
- S55. In Grid W33A, the PDI sample 133-P3C-W33A-7.0-7.5 (El. 6.1 to 5.6 ft NAVD88) serves as a Grid W34A Cr⁺⁶ northern sidewall confirmation sample between the Grid W33A pit bottom sample 133-W33A-PB-6.6-7.1 at El. 6.5 ft NAVD88 and Grid W34A northern sidewall sample at location 133-W34A-SW-N1 (133-W34A-SW-N-8.8-9.3) at El. 4.3 ft NAVD88.
- S56. In Grid W35A, the Grid V35A Cr⁺⁶ eastern sidewall confirmation samples at locations 133-V35A-SW-E1 (133-V35A-SW-E-10.8-11.3 [El. 1.8 to 1.3 ft NAVD88]), 133-V35A-SW-E1R (133-V35A-SW-E-11.3-11.8 [El. 1.3 to 0.8 ft NAVD88]), 133-V35A-SW-E2 (133-V35A-SW-E-12.8-13.3 [El. -0.2 to -0.7 ft NAVD88]), 133-V35A-SW-E2R (133-V35A-SW-E-13.3-13.8 [El. -0.7 to -1.2 ft NAVD88]), 133-V35A-SW-E3 (133-V35A-SW-E-14.8-15.3 [El. -2.2 to -2.7 ft NAVD88]), 133-V35A-SW-E3R (133-V35A-SW-E-15.3-15.8 [El. -2.7 to -3.2 ft NAVD88]), and 133-V35A-SW-E4 (133-V35A-SW-E-16.8-17.3 [El. -4.2 to -4.7 ft NAVD88]) were collected as part of the Site 133 East mobilization in 2015 and the Site 135 South mobilization in 2016. Both sets of sidewall samples remain.
- S57. Grid W36A was excavated as a split grid with two distinct as-built TEEs.
- S58. Grid W37A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-W37AR were less than the CrSCC. The removed PDI samples from boring 133-P3C-W37AR between El. 5.9 to -0.6 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom and sidewall samples.
- S59. Grid W38A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in all samples collected from the PDI boring 133-P3C-W38A were less than the CrSCC. The PDI sample 135-P3C-W38A-1.0-1.5 (El. 8.4 to 7.9 ft NAVD88) was utilized as the Cr⁺⁶ confirmation pit bottom sample. This sample and the PDI sample 135-P3C-W38A-3.0-3.5 (El. 6.4 to 5.9 ft NAVD88) were removed for constructability purposes and sloping into adjacent grids.
- S60. Grid W40A required excavation to El. 6.3 ft NAVD88 for the remediation of Cr⁺⁶. The northern portion of the grid was further excavated (to between El. 2.4 and 3.9 ft NAVD88) for the remediation of non-Cr⁺⁶ constituents. PDI sample 135-P3C-W40A-9.0-9.5 (El. 4.3 to 3.8 ft NAVD88) from the closest interval above the remaining soil in the shallowest part of the grid serves as the Cr⁺⁶ confirmation pit bottom sample. The southern portion of the grid was excavated to the same elevation as Grid W41A (El. -2.4 ft NAVD88) so that removed PDI samples from boring 135-P3C-W40A serve as confirmation sidewall samples for the north to south slope from El. 3.9 to -2.4 ft NAVD88. These PDI samples horizontally delineate the Cr⁺⁶ encountered within Grid W41A.
- S61. Grid X28A originally did not required excavation for remediation of Cr⁺⁶ as the Cr⁺⁶ concentrations in samples collected from the historical boring 133-B13 were less than the CrSCC. However, visible CCPW material was encountered in the western portion of the grid. The western portion of the grid was excavated to El. -0.2 ft NAVD88 and a Cr⁺⁶ confirmation pit bottom sample (133-X28A-PB-12.1-12.6 [El. -0.2 to -0.7 ft NAVD88]) was collected. Visible CCPW material was not observed in the eastern portion of the grid and Cr⁺⁶ eastern sidewall confirmation samples at locations 133-X28A-SW-E2R (133-X28A-SW-E-5.7-6.2R [El. 6.2 to 5.7 ft NAVD88]), 133-X28A-SW-E3R (133-X28A-SW-E-7.7-8.2R [El. 4.2 to 3.7 ft NAVD88]), 133-X28A-SW-E4R (133-X28A-SW-E-9.7-10.2R [El. 2.2 to 1.7 ft NAVD88]), and 133-X28A-SW-E5R (133-X28A-SW-E-11.7-12.2R [El. 0.2 to -0.3 ft NAVD88]) were collected at two-foot intervals as the grid sloped up towards Grid Y28A.
- S62. Grid X29A originally did not require excavation for remediation of Cr⁺⁶ as the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-X29A were less than the CrSCC. However, visible CCPW material was encountered in the western portion of the grid. The western portion of the grid was excavated to El. 2.3 ft NAVD88 and a Cr⁺⁶ confirmation pit bottom sample (133-X29A-10.8-11.3 [El. 2.3 to 1.8 ft NAVD88]) was collected. Visible CCPW material was not observed in the eastern portion of the grid and two sets of Cr⁺⁶ eastern sidewall confirmation samples at locations 133-X29A-SW-E (133-X29A-SW-E-4.3-4.8 [El. 8.8 to 8.3 ft NAVD88]), 133-X29A-SW-E1R (133-X29A-SW-E-6.3-6.8R [El. 6.8 to 6.3 ft NAVD88]), 133-X29A-SW-E2R (133-X29A-SW-E-8.3-8.8R [El. 4.8 to 4.3 ft NAVD88]),

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

and 133-X29A-SW-E3R (133-X29A-SW-E-10.3-10.8R [El. 2.8 to 2.3 ft NAVD88]) and 133-X29A-SW-E1 (133-X29A-SW-E-6.3-6.8 [El. 6.8 to 6.3 ft NAVD88]), 133-X29A-SW-E2 (133-X29A-SW-E-8.3-8.8 [El. 4.8 to 4.3 ft NAVD88]), and 133-X29A-SW-E3 (133-X29A-SW-E-10.3-10.8 [El. 2.8 to 2.3 ft NAVD88]) were collected at two-foot intervals as the grid sloped up towards Grid Y29A.

S63. In Grid X29A, the Cr⁺⁶ southern sidewall confirmation sample at location 133-X28A-SW-S (133-X28A-SW-S-10.9-11.4 [El. 1.0 to 0.5 ft NAVD88]) was removed due to sloping towards adjacent Grids W28A and W29A.

S64. In Grid X29A, two sets of Cr⁺⁶ eastern sidewall confirmation samples were inadvertently collected on August 17, 2015 and August 21, 2015. No additional excavation was conducted between the two sampling dates, and both sets of sidewall samples remain.

S65. In Grid X30A, the confirmation pit bottom sample 133-X30A-PB-6.4-6.9 (El. 6.7 to 6.2 ft NAVD88) was removed due to sloping towards adjacent grids.

S66. In Grid X31A, excavation was deeper than required for remediation of Cr⁺⁶ due to the presence of non-Cr⁺⁶ constituents. The removed historical sample 133-B12D_5.0-6.0_821978 (El. 8.1 to 7.1 ft NAVD88) from the closest interval above the remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.

S67. Grid X33A was inadvertently excavated deeper than the proposed TEE of El. 8.7 ft NAVD88. The Cr⁺⁶ confirmation pit bottom sample 133-X33A-PB-7.0-7.5 (El. 6.1 to 5.6 ft NAVD88) was collected at the final as-built TEE of El. 6.1 ft NAVD88. The removed PDI sample 133-P3C-X33A-5.0-5.5 (El. 8.1 to 7.6 ft NAVD88) serves as the Cr⁺⁶ northern sidewall confirmation sample.

S68. In Grid X36A, the Cr⁺⁶ eastern sidewall confirmation sample at location 133-W36A-SW-E2 (133-W36A-SW-E-5.4-5.9 [El. 7.3 to 6.8 ft NAVD88]) was removed due to sloping towards adjacent Grid X37A.

S69. Grid X36A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from PDI borings 135-P3C-X36AR and 135-P3C-X36A were less than the CrSCC. The removed PDI sample 135-P3C-X36AR-0.0-0.5 (El. 12.4 to 11.9 ft NAVD88) from the closest interval above the remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.

S70. Grid X37A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-X37A were less than the CrSCC. The removed PDI samples from boring 135-P3C-X37A between El. 8.8 to -1.2 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom and sidewall samples.

S71. In Grid Y22A, the removed PDI sample 133-P3C-Y22A-14.1-14.6 (El. -3.3 to -3.8 ft NAVD88) serves as the Cr⁺⁶ southern sidewall confirmation sample.

S72. In Grid Y29A, the northern sidewall sample at location 133-Y30A-SW-N1 (133-Y30A-SW-N-5.2-5.7 [El. 7.9 to 7.4 ft NAVD88]) serves as the Grid Z29A Cr⁺⁶ western sidewall confirmation sample and the Grid Y30A Cr⁺⁶ northern sidewall confirmation sample.

S73. In Grid Y32A, excavation was deeper than required for remediation of Cr⁺⁶ due to the presence of non-Cr⁺⁶ constituents. The removed historical sample 133-B17C (4.0-4.5)J49295-20R (El. 6.2 to 5.7 ft NAVD88) and the removed PDI sample 133-P3C-Y32A-6.0-6.5 (El. 6.2 to 5.7 ft NAVD88) serve as the Cr⁺⁶ confirmation pit bottom samples.

S74. In Grid Y34A, the final elevation difference between Grid Y34A and Grid Y33A is 2.1 ft. However, the elevation difference between the PDI sample 135-P3C-Y34A-6.5-7.0 (El. 3.3 to 2.8 ft NAVD88) in Grid Y34A and the Grid Y33A Cr⁺⁶ confirmation pit bottom sample 135-Y33A-PB-8.3-8.8 (El. 5.2 to 4.7 ft NAVD88) is 1.9 ft. The interval from El. 3.3 to 3.1 ft NAVD88 in Grid Y34A was removed due to scraping of the grid; therefore, Cr⁺⁶ sidewall samples between Grids Y33A and Y34A were not required.

S75. Grid Z26A was excavated as a split grid with two distinct as-built TEEs. The removed PDI samples 133-P3C-Z26A-11.0-11.5 (El. 2.1 to 1.6 ft NAVD88) and 133-P3C-Z26A-13.0-13.5 (El. 0.1 to -0.4 ft NAVD88) serve as Cr⁺⁶ sidewall confirmation samples between the eastern and western portions of Grid Z26A while also serving as sidewall confirmation samples between Grids Z25A and Z26A.

S76. In Grid Z27A, the PDI sample 133-P3C-Z27A-9.0-9.5 (El. 4.0 to 3.5 ft NAVD88) serves as a Cr⁺⁶ sidewall confirmation sample between Grids Z26A and Z27A.

S77. In Grid Z29A, the historical sample 135-B2C (3.4-3.8)J49295-9R (El. 6.9 to 6.5 ft NAVD88), which falls on the grid line between Grids Z29A and AA29A, serves as the Cr⁺⁶ confirmation pit bottom sample for Grid Z29A as presented to NJDEP/Weston in the *PPG Target Excavation Depths in Phase 3B and 3C* dated August 19, 2013. NJDEP/Weston concurred with this sample via email on September 4, 2013. This sample and historical sample 135-B2D (4.5-5.0)J49295-10R (El. 5.8 to 5.3 ft NAVD88) were removed during concrete removal in Grid AA30A.

S78. Grid Z30A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI borings 133-P3C-Z30A and 133-P3C-Z30A-ME were less than the CrSCC. The removed PDI sample 133-P3C-Z30A-3.0-3.5 (El. 7.2 to 6.7 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample.

S79. Grid Z31A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-Z31A were less than the CrSCC. The removed PDI sample 135-P3C-Z31A-3.0-3.5 (El. 7.1 to 6.6 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample.

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

													Analyte CAS RN Units RDCSRS RDCSRS-GAG NRDCSRS	ANTIMONY 7440-36-0 mg/kg 31 N/A 450		CHROMIUM 7440-47-3 mg/kg 120000 N/A N/A		NICKEL 7440-02-0 mg/kg 1600 N/A 23000		THALLIUM 7440-28-0 mg/kg N/A N/A N/A		VANADIUM 7440-62-2 mg/kg N/A 390 1100		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9)	Sample End Elevation (ft NAVD88) (G4, G10)	Lab ID (G11)	Lab SDG (G11)	Date Collected (G12)	Sample Status (G13, G14)	Sample Type (G15)	Validated (Y/N) (G16)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G21)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Specific Notes	
AA23A	EF-15	12.8	EF-B15-17.0	17.0 - 17.5 ft	-4.2	-4.7	460-25899-19	460258991	04/28/2011	remaining	N	Y	< 1.5	UJ	112	J	26.1	J	< 1.7	U	40.0	J		
AA23A	EF-15	12.8	EF-B15-22.0	22.0 - 22.5 ft	-9.2	-9.7	460-25899-20	460258991	04/28/2011	remaining	N	Y	< 1.3	UJ	31.9	J	20.7	J	< 1.5	U	30.3	J		
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-14.0-14.5	14.0 - 14.5 ft	-0.8	-1.3	JB62137-4A	JB62137A	03/17/2014	remaining	N	Y	26.7	J	8240	J	24.4	J	1.2	J	20.0	J		
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-15.0-15.5	15.0 - 15.5 ft	-1.8	-2.3	JB62137-5A	JB62137A	03/17/2014	remaining	N	Y	19.1	J	7900	J	28.4	J	0.78	J	41.8	J		
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-15.5-16.0	15.5 - 16.0 ft	-2.3	-2.8	JB62137-6A	JB62137A	03/17/2014	remaining	N	Y	< 0.44	UJ	225	J	30.2	J	< 0.55	U	45.5	J		
AA27A	133-B18	10.4	133-B18D (4.5-5.0)J49295-15	4.5 - 5.0 ft	5.9	5.4	J49295-15	J49295	12/14/2006	remaining	N	Y	< 3.1	UJ	15.1	J	10.3		< 1.5	U	14.2			
AA27A	133-B18	10.4	PPG-133-B18E 8.5-9.0 797398	8.5 - 9.0 ft	1.9	1.4	797398	B500	01/04/2007	remaining	N	Y	< 2.1	UJ	46.8		26.9		< 1.7	U	37.1			
AA27A	133-B18	10.4	PPG-133-B18F 12.0-13.0 797399	12.0 - 13.0 ft	-1.6	-2.6	797399	B500	01/04/2007	remaining	N	Y	< 1.5	UJ	18.6		16		< 1.2	U	28.6			
AA27A	133-B18	10.4	PPG-133-B18G 16.0-17.0 797400	16.0 - 17.0 ft	-5.6	-6.6	797400	B500	01/04/2007	remaining	N	Y	< 2	UJ	37.1		26.9		< 1.7	U	41			
AA27A	133-B18	10.4	PPG-133-B18GD 16.0-17.0 797401	16.0 - 17.0 ft	-5.6	-6.6	797401	B500	01/04/2007	remaining	FD	Y	< 2.1	UJ	37.4		28		< 1.7	U	43.2			
AA27A	133-B18	10.4	PPG-133-B18H 20.2-20.7 797402	20.2 - 20.7 ft	-9.8	-10.3	797402	B500	01/04/2007	remaining	N	Y	< 1.3	UJ	11.2		11.8		< 1.1	U	12.5			
AA27A	133-P3C-AA27A-ME	11.7	133-P3C-AA27A-7.0-7.5	7.0 - 7.5 ft	4.7	4.2	JB96555-5A	JB96555A	06/08/2015	remaining	N	Y	1.7	J	13.4		13.5		< 0.27	UJ	24.8			
S41A	133-P3C-S41A	11.1	133-P3C-S41A-8.0-8.5	8.0 - 8.5 ft	3.1	2.6	JB40574-5A	JB40574A	06/25/2013	remaining	N	Y	13.0	J	51.7	J	171	J	< 2.2	U	22.2	J		
S41A	133-P3C-S41A	11.1	133-P3C-S41A-10.0-10.5	10.0 - 10.5 ft	1.1	0.6	JB40574-6A	JB40574A	06/25/2013	remaining	N	Y	5.6	J	233	J	25.3	J	< 0.37	U	27.9			
S41A	133-P3C-S41A	11.1	133-P3C-S41A-12.0-12.5	12.0 - 12.5 ft	-0.9	-1.4	JB40574-7A	JB40574A	06/25/2013	remaining	N	Y	3.6	J	14.7	J	13.6	J	< 0.38	U	20.1			
S41A	133-P3C-S41A	11.1	133-P3C-S41A-14.0-14.5	14.0 - 14.5 ft	-2.9	-3.4	JB40574-8A	JB40574A	06/25/2013	remaining	N	Y	2.6	J	36.7	J	13.5	J	1.2	J	23.4			
S41A	133-P3C-S41A	11.1	133-P3C-S41A-14.5-15.0	14.5 - 15.0 ft	-3.4	-3.9	JB40574-9A	JB40574A	06/25/2013	remaining	N	Y	5.5	J	57.9	J	37.2	J	< 0.80	UJ	66.0	J		
T38A	133-P3C-T38A	12.8	133-P3C-T38A-12.0-12.5	12.0 - 12.5 ft	0.8	0.3	JB82214-7A	JB82214A	11/19/2014	remaining	N	Y	< 0.26	UJ	1800	J	12.2		< 0.40	U	21.0	J		
T38A	133-P3C-T38A	12.8	133-P3C-T38A-12.0-12.5X	12.0 - 12.5 ft	0.8	0.3	JB82214-12A	JB82214A	11/19/2014	remaining	FD	Y	9.0	J	11400	J	17.8		< 2.0	U	48.7	J		
T38A	133-P3C-T38A	12.8	133-P3C-T38A-14.0-14.5	14.0 - 14.5 ft	-1.2	-1.7	JB82214-8A	JB82214A	11/19/2014	remaining	N	Y	< 0.34	UJ	26.0	J	5.4		< 0.51	U	12.8	J		
T38A	133-P3C-T38A	12.8	133-P3C-T38A-16.0-16.5	16.0 - 16.5 ft	-3.2	-3.7	JB82214-9A	JB82214A	11/19/2014	remaining	N	Y	< 0.26	UJ	84.8	J	9.7		< 0.40	U	21.0	J		
T38A	133-P3C-T38A	12.8	133-P3C-T38A-16.5-17.0	16.5 - 17.0 ft	-3.7	-4.2	JB82214-10A	JB82214A	11/19/2014	remaining	N	Y	< 0.27	UJ	28.3	J	14.0		< 0.41	U	33.4	J		
T38A	133-P3C-T38A	12.8	133-P3C-T38A-17.0-17.5	17.0 - 17.5 ft	-4.2	-4.7	JB82214-11A	JB82214A	11/19/2014	remaining	N	Y	< 0.27	UJ	25.4	J	16.6		< 0.41	U	35.5	J		
T45A	133-P3C-T45A	12.2	133-P3C-T45A-8.5-9.0	8.5 - 9.0 ft	3.7	3.2	JB63604-16A	JB63604A	04/02/2014	remaining	N	Y	3.2	J	17.5	J	21.7		< 0.65	U	29.0			
T45A	133-P3C-T45A	12.2	133-P3C-T45A-10.5-11.0	10.5 - 11.0 ft	1.7	1.2	JB63604-17A	JB63604A	04/02/2014	remaining	N	Y	< 0.32	UJ	21.1	J	15.6		0.67	J	30.2			
T45A	133-P3C-T45A	12.2	133-P3C-T45A-10.5-11.0X	10.5 - 11.0 ft	1.7	1.2	JB63604-20A	JB63604A	04/02/2014	remaining	FD	Y	< 0.35	UJ	13.7	J	19.0		< 0.53	U	32.0			
T45A	133-P3C-T45A	12.2	133-P3C-T45A-12.5-13.0	12.5 - 13.0 ft	-0.3	-0.8	JB63604-18A	JB63604A	04/02/2014	remaining	N	Y	0.55	J	15.9	J	20.0		< 0.60	U	34.4			
T45A	133-P3C-T45A	12.2	133-P3C-T45A-14.5-15.0	14.5 - 15.0 ft	-2.3	-2.8	JB63604-19A	JB63604A	04/02/2014	remaining	N	Y	3.0	J	24.0	J	17.3		< 0.50	U	21.5			
T45A	133-P3C-T45A	12.2	133-P3C-T45A-16.5-17.0	16.5 - 17.0 ft	-4.3	-4.8	JB63604-21A	JB63604A	04/02/2014	remaining	N	Y	1.8	J	40.0	J	24.7		1.5	J	44.1			
T45A	133-P3C-T45A	12.2	133-P3C-T45A-17.0-17.5	17.0 - 17.5 ft	-4.8	-5.3	JB63604-22A	JB63604A	04/02/2014	remaining	N	Y	< 1.0	UJ	38.4	J	34.8	J	< 1.3	UJ	50.7	J		
T46A	133-MW2C	10.4	133-2CE 5.0-5.5 816945	5.0 - 5.5 ft	5.4	4.9	816945	E381	03/27/2007	remaining	N	Y	< 1.8	UJ	21.2	J	16.1	J	< 1.5	U	21.8			
T46A	133-MW2C	10.4	133-2CF 7.0-7.5 816946	7.0 - 7.5 ft	3.4	2.9	816946	E381	03/27/2007	remaining	N	Y	3.8	J	20.1	J	15.1	J	< 1.1	U	25.2			
T46A	133-MW2C	10.4	133-2CG 9.0-9.7 816947	9.0 - 9.7 ft	1.4	0.7	816947	E381	03/27/2007	remaining	N	Y	< 1.7	UJ	11.1	J	16.6	J	< 1.4	U	24.4			
T46A	133-MW2C	10.4	133-2CGD 9.0-9.7 816948	9.0 - 9.7 ft	1.4	0.7	816948	E381	03/27/2007	remaining	FD	Y	< 1.7	UJ	10.5	J	17.2	J	< 1.4	U	24.6			
T46A	133-MW2C	10.4	133-2CH 13.0-14.0 816949	13.0 - 14.0 ft	-2.6	-3.6	816949	E381	03/27/2007	remaining	N	Y	< 4.1	UJ	64.6	J	45.3	J	< 3.3	UJ	68.6	J		
T46A	133-MW2C	10.4	133-2CI 19.2-19.3 819252	19.2 - 19.3 ft	-8.8	-8.9	819252	E754	04/04/2007	remaining	N	Y	< 1.3	UJ	12		16.4		< 1.3	U	12.1			
T46A	133-MW2C	10.4	133-2CJ 21.0-22.0 819253	21.0 - 22.0 ft	-10.6	-11.6	819253	E754	04/04/2007	remaining	N	Y	< 2.4	UJ	22.3		17.2		< 1.2	U	22			
T46A	133-MW2C	10.4	133-2CK 22.0-22.5 819254	22.0 - 22.5 ft	-11.6	-12.1	819254	E754	04/04/2007	remaining	N	Y	< 1.3	UJ	10.1		13.7		< 1.3	U	10.2			
T46A	133-MW2C	10.4	133-2CL 23.0-23.6 819255	23.0 - 23.6 ft	-12.6	-13.2	819255	E754	04/04/2007	remaining	N	Y	< 2.2	UJ	22.6		14.6		< 1.1	U	22.8			
T46A	133-MW2C	10.4	133-2CLD 23.0-23.6 819256	23.0 - 23.6 ft	-12.6	-13.2	819256	E754	04/04/2007	remaining	FD	Y	< 2.6	UJ	25.5		18.3		< 1.3	U	25.2			
T46A	133-MW2C	10.4	133-2CM 23.6-24.1 819257	23.6 - 24.1 ft	-13.2	-13.7	819257	E754	04/04/2007	remaining	N	Y	< 1.2	UJ	14.3		14.1		< 1.2	U	11.3			
T47A	133-P3C-T47AR	10.1	133-P3C-SA-T47A-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JB71606-10A	JB71606A	07/14/2014	remaining	N	Y	8.9		270		37.7		< 2.8	U	31.4			
T47A	133-P3C-T47AR	10.1	133-P3C-SA-T47A-6.0-6.5	6.0 - 6.5 ft	4.1	3.6	JB71606-11A	JB71606A	07/14/2014	remaining	N	Y	6.9		95.6		27.4		< 2.3	U	20.1			
U36A	133-P3C-U36A	12.6	133-P3C-U36A-18.0-18.5	18.0 - 18.5 ft	-5.4	-5.9	JB81503-3R	JB81503R	11/11/2014	remaining	N	Y	14.9	RA	8590	RA	16.0	RA		R	47.0	RA		
U39A	133-U39A-PB-N	12.4	133-U39A-PB-N-8.1-8.6	10.3 - 10.8 ft	2.1	1.6	JC1883-1	JC1883	07/01/2015	remaining	N	Y	< 0.41	UB	1310		19.9		0.36	J	40.1		S1	
U40A	133-P3C-U40A	12.0	133-P3C-U40A-9.0-9.5	9.0 - 9.5 ft	3.0	2.5	JB63022-15A	JB63022A	03/26/2014	remaining	N	Y	1.2	J	32.2		31.4		1.1	J	23.4			
U40A	133-P3C-U40A	12.0	133-P3C-U40A-11.0-11.5	11.0 - 11.5 ft	1.0	0.5	JB63022-16A	JB63022A	03/26/2014	remaining	N	Y	1.2	J	37.8		18.1		< 0.38	U	36.8			
U40A	133-P3C-U40A	12.0	133-P3C-U40A-13.0-13.5	13.0 - 13.5 ft	-1.0	-1.5	JB63022-17A	JB63022A	03/26/2014	remaining	N	Y	1.5	J	20.1		13.0		6.3	J	22.1			
U40A	133-P3C-U40A	12.0	133-P3C-U40A-14.0-14.5	14.0 - 14.5 ft	-2.0	-2.5	JB63022-18A	JB63022A	03/26/2014	remaining	N	Y	< 0.39	UJ	39.4		20.0		< 0.48	U	34.2			
U40A	133-P3C-U40A	12.0	133-P3C-U40A-14.5-15.0	14.5 - 15.0 ft	-2.5	-3.0	JB63022-19A	JB63022A	03/26/2014	remaining	N	Y	< 0.96	UJ	70.2	J	42.3	J	< 1.2	UJ	77.9	J		
U42A	133-B9	12.1	PPG-133-B9D 12.0-12.5 797784	12.0 - 12.5 ft	0.1	-0.4	797784	B560	01/05/2007	remaining	N	Y												

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

												Analyte CAS RN Units RDCSRS RDCSRS-GAG NRDCSRS	ANTIMONY 7440-36-0 mg/kg 31 N/A 450	CHROMIUM 7440-47-3 mg/kg 120000 N/A N/A	NICKEL 7440-02-0 mg/kg 1600 N/A 23000	THALLIUM 7440-28-0 mg/kg N/A N/A N/A	VANADIUM 7440-62-2 mg/kg N/A 390 1100						
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9)	Sample End Elevation (ft NAVD88) (G4, G10)	Lab ID (G11)	Lab SDG (G11)	Date Collected (G12)	Sample Status (G13, G14)	Sample Type (G15)	Validated (Y/N) (G16)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G21)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Specific Notes
U43A	133-B16-SA	10.5	133-B16-SA-10.5-11.0	10.5 - 11.0 ft	0.0	-0.5	JB71691-8A	JB71691A	07/15/2014	remaining	N	Y	1.4	J	16.0	J	12.9	J	< 0.45	U	26.5		
U43A	133-P3C-U43A	10.2	133-P3C-U43A-8.5-9.0	8.5 - 9.0 ft	1.7	1.2	JB40574-15A	JB40574A	06/25/2013	remaining	N	Y	0.53	J	14.2	J	10	J	< 0.33	U	18.3		
U43A	133-P3C-U43A	10.2	133-P3C-U43A-10.5-11.0	10.5 - 11.0 ft	-0.3	-0.8	JB40574-16A	JB40574A	06/25/2013	remaining	N	Y	0.75	J	16.4	J	10.2	J	< 0.33	U	24.8		
U43A	133-P3C-U43A	10.2	133-P3C-U43A-12.5-13.0	12.5 - 13.0 ft	-2.3	-2.8	JB40574-17A	JB40574A	06/25/2013	remaining	N	Y	2.1	J	12.9	J	13.7	J	< 0.48	U	23.6		
U43A	133-P3C-U43A	10.2	133-P3C-U43A-14.0-14.5	14.0 - 14.5 ft	-3.8	-4.3	JB40574-18A	JB40574A	06/25/2013	remaining	N	Y	5.9	J	29.3	J	21.2	J	< 0.56	U	23.0		
U43A	133-P3C-U43A	10.2	133-P3C-U43A-14.5-15.0	14.5 - 15.0 ft	-4.3	-4.8	JB40574-19A	JB40574A	06/25/2013	remaining	N	Y	5.2	J	63.0	J	40.3	J	< 0.96	UJ	62.8	J	
V36A	133-V36A-PB2	12.6	133-V36A-PB-15.7-16.2R	15.7 - 16.2 ft	-3.1	-3.6	JC24395-2A	JC24395A	07/20/2016	remaining	N	Y	1.2	J	236		16.1		< 0.43	U	38.5		
V37A	133-V37A-PB	12.6	133-V37A-PB-16.1-16.6	16.1 - 16.6 ft	-3.5	-4.0	JC35627-1	JC35627A	01/17/2017	remaining	N	Y	< 0.63	UJ	33.9	J	13.3	J	< 0.86	UJ	37.9	J	
V37A	133-V37A-PB	12.6	133-V37A-PB-16.1-16.6X	16.1 - 16.6 ft	-3.5	-4.0	JC35627-2	JC35627A	01/17/2017	remaining	FD	Y	< 0.64	UJ	47.0	J	17.2	J	< 0.87	UJ	42.5	J	
V41A	ASM-V41AR	10.1	ASM-V41AR-8.0-8.5	8.0 - 8.5 ft	2.1	1.6	JC31135-8A	JC31135A	11/04/2016	remaining	N	Y	1.3	J	89.2		32.0		< 0.49	U	30.6		
V41A	ASM-V41AR	10.1	ASM-V41AR-10.0-10.5	10.0 - 10.5 ft	0.1	-0.4	JC31135-4A	JC31135A	11/04/2016	remaining	N	Y	1.6	J	17.8		13.7		< 0.48	U	24.9		
V41A	ASM-V41AR	10.1	ASM-V41AR-12.0-12.5	12.0 - 12.5 ft	-1.9	-2.4	JC31135-5A	JC31135A	11/04/2016	remaining	N	Y	2.0		16.8		16.1		< 0.40	U	28.7		
V41A	ASM-V41AR	10.1	ASM-V41AR-13.0-13.5	13.0 - 13.5 ft	-2.9	-3.4	JC31135-6A	JC31135A	11/04/2016	remaining	N	Y	10.4		27.1		19.0		< 1.2	U	35.8		
V41A	ASM-V41AR	10.1	ASM-V41AR-13.5-14.0	13.5 - 14.0 ft	-3.4	-3.9	JC31135-7A	JC31135A	11/04/2016	remaining	N	Y	0.35	J	22.8		15.6		< 0.40	U	31.3		
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.0-14.5	14.0 - 14.5 ft	-1.6	-2.1	JB40576-13A	JB40576A	06/25/2013	remaining	N	Y	< 0.27	UJ	64.3		10.0		< 0.33	U	20.3		
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.5-15.0	14.5 - 15.0 ft	-2.1	-2.6	JB40576-14A	JB40576A	06/25/2013	remaining	N	Y	< 0.40	UJ	79.2		25.0		< 0.49	U	37.5		
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.5-15.0X	14.5 - 15.0 ft	-2.1	-2.6	JB40576-15A	JB40576A	06/25/2013	remaining	FD	Y	< 0.41	UJ	60.9		23.0		< 0.51	U	37.2		
W30A	133-P3C-W30A	13.2	133-P3C-W30A-14.0-14.5	14.0 - 14.5 ft	-0.8	-1.3	JB81978-10U	JB81978U	11/17/2014	remaining	N	Y	11.4	RA	10800	RA	21.4	RA		R	255	RA	
W30A	133-P3C-W30A	13.2	133-P3C-W30AR-15.0-15.5	15.0 - 15.5 ft	-1.8	-2.3	JB83431-1T	JB83431T	12/05/2014	remaining	N	Y	< 0.38	UJ	82.9	J	16.7		< 0.23	UJ	29.3		
W30A	133-P3C-W30A	13.2	133-P3C-W30A-15.5-16.0	15.5 - 16.0 ft	-2.3	-2.8	JB81978-11U	JB81978U	11/17/2014	remaining	N	Y		R	22.1	RA	15.9	RA		R	28.8	RA	
W30A	133-W30A-PB2	13.2	133-W30A-PB-13.5-14.0	13.5 - 14.0 ft	-0.3	-0.8	JC6112-3A	JC6112A	10/13/2015	remaining	N	Y	2.5	J	40.7		23.9		0.51	J	40.0		
W30A	133-W30A-SW-E4	13.2	133-W30A-SW-E-13.0-13.5	13.0 - 13.5 ft	0.2	-0.3	JC6269-4A	JC6269A	10/14/2015	remaining	N	Y	1.1	J	490		26.3		0.72	J	34.6		
W30A	133-W31A-SW-N4	13.1	133-W31A-SW-N-15.1-15.6	15.1 - 15.6 ft	-2.0	-2.5	JC1610-4A	JC1610A	08/14/2015	remaining	N	Y	< 0.41	U	685		18.1		0.70	J	29.8		
W31A	133-W31A-PB	13.1	133-W31A-PB-16.2-16.7	16.2 - 16.7 ft	-3.1	-3.6	JC6340-2A	JC6340A	10/15/2015	remaining	N	Y	< 0.76	UJ	30.2	J	23.5	J	< 0.47	UJ	49.3	J	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-6.0-6.5	6.0 - 6.5 ft	7.1	6.6	JB82047-15T	JB82047T	11/18/2014	remaining	N	Y	1.7	RA	24.6	RA	18.4	RA	0.35	RA	30.5	RA	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-6.0-6.5X	6.0 - 6.5 ft	7.1	6.6	JB82047-16T	JB82047T	11/18/2014	remaining	FD	Y	< 0.56	RA	24.7	RA	17.2	RA	0.58	RA	34.3	RA	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-8.0-8.5	8.0 - 8.5 ft	5.1	4.6	JB82047-17T	JB82047T	11/18/2014	remaining	N	Y		R	12.5	RA	14.0	RA		R	23.8	RA	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-10.0-10.5	10.0 - 10.5 ft	3.1	2.6	JB82047-18T	JB82047T	11/18/2014	remaining	N	Y	< 0.40	RA	34.4	RA	12.2	RA		R	17.7	RA	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-12.0-12.5	12.0 - 12.5 ft	1.1	0.6	JB82047-19T	JB82047T	11/18/2014	remaining	N	Y	< 0.47	RA	139	RA	17.1	RA		R	21.3	RA	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-14.0-14.5	14.0 - 14.5 ft	-0.9	-1.4	JB82047-20T	JB82047T	11/18/2014	remaining	N	Y	< 0.45	RA	473	RA	20.5	RA	0.33	RA	43.2	RA	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-16.0-16.5	16.0 - 16.5 ft	-2.9	-3.4	JB82047-21T	JB82047T	11/18/2014	remaining	N	Y	5.4	RA	9680	RA	19.8	RA	0.56	RA	38.6	RA	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-17.0-17.5	17.0 - 17.5 ft	-3.9	-4.4	JB82047-22T	JB82047T	11/18/2014	remaining	N	Y		R	4430	RA	31.7	RA	0.50	RA	53.1	RA	
W32A	133-V32A-SW-E1	12.4	133-V32A-SW-E-6.5-7.0	6.5 - 7.0 ft	5.9	5.4	JC310-6A	JC310A	07/29/2015	remaining	N	Y	1.0	J	21.2		23.5		< 0.28	U	30.7		
W32A	133-W31A-SW-S1	13.1	133-W31A-SW-S-5.9-6.4	5.9 - 6.4 ft	7.2	6.7	JC406-7A	JC406A	07/30/2015	remaining	N	Y	1.4	J	73.5		16.4		< 0.20	U	29.0		
W34A	133-B11	13.1	133-B11D 13.5-14.2 821985	13.5 - 14.2 ft	-0.4	-1.1	821985	F201	04/17/2007	remaining	N	Y	< 1.9	UJ	76.9		23.9	J	< 1.6	U	39.5		
W35A	133-W35A-PB	12.9	133-W35A-PB-9.9-10.4	9.9 - 10.4 ft	3.0	2.5	JC25689-2A	JC25689A	08/11/2016	remaining	N	Y	1.0	J	28.9		20.1		< 0.56	U	33.2		
W36A	133-W36A-E-PB	12.7	133-W36A-E-PB-11.4-11.9	11.4 - 11.9 ft	1.3	0.8	JC24571-2A	JC24571A	07/22/2016	remaining	N	Y	4.1		318		25.4		< 0.57	U	32.5		
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-15.0-15.5	15.0 - 15.5 ft	-2.1	-2.6	JB65296-20A	JB65296A	04/22/2014	remaining	N	Y	0.33	J	22.2		11.2		< 0.50	U	26.9		
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-15.6-16.1	15.6 - 16.1 ft	-2.7	-3.2	JB65296-21A	JB65296A	04/22/2014	remaining	N	Y	0.47	J	23.4		14.1		< 0.51	U	35.7		
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-16.1-16.6	16.1 - 16.6 ft	-3.2	-3.7	JB65296-22A	JB65296A	04/22/2014	remaining	N	Y	< 0.27	UJ	23.7	J	6.5	J	< 0.41	UJ	26.1	J	
W37A	133-V37A-SW-E	12.6	133-V37A-SW-E-14.1-14.6	14.1 - 14.6 ft	-1.5	-2.0	JC35627-6A	JC35627A	01/17/2017	remaining	N	Y	< 4.9	U	8480		23.0		< 6.6	U	40.4	J	
W38A	133-V38A-SW-E1	9.4	133-V38A-SW-E-6.9-7.4	3.6 - 4.1 ft	5.8	5.3	JC36658-3A	JC36658A	02/02/2017	remaining	N	Y	91.1	J	73.0		49.1		< 6.0	U	30.7		S2, S3
W38A	133-V38A-SW-E1	9.4	133-V38A-SW-E-6.9-7.4X	3.6 - 4.1 ft	5.8	5.3	JC36658-4A	JC36658A	02/02/2017	remaining	FD	Y	3.2	J	95.9		36.7		< 0.62	U	28.2		S2
W38A	133-V38A-SW-E2	9.4	133-V38A-SW-E-8.9-9.4	5.6 - 6.1 ft	3.8	3.3	JC36658-2A	JC36658A	02/02/2017	remaining	N	Y	< 0.43	U	110		29.4		< 0.58	U	52.7		S2
W38A	135-W39A-SW-N2	9.4	135-W39A-SW-N-5.0-5.5	5.0 - 5.5 ft	4.4	3.9	JC36564-5A	JC36564A	02/01/2017	remaining	N	Y	1.2	J	40.6		14.0		< 0.40	U	25.1		
X26A	133-X26A-PB	13.3	133-X26A-PB-15.0-15.5	15.0 - 15.5 ft	-1.7	-2.2	JC2510-3	JC2510	08/27/2015	remaining	N	Y	< 0.49	UJ	13.1	J	7.2		< 0.30	U	19.4		S4
X26A	133-X26A-PB	13.3	133-X26A-PB-15.0-15.5	15.0 - 15.5 ft	-1.7	-2.2	JC2535-7A	JC2535A	08/27/2015	remaining	N	Y	< 0.73	U	21.9	J	11.0	J	< 0.45	U	29.3	J	S4
X28A	133-B13	13.1	133-B13E 9.4-10.4 821889	9.4 - 10.4 ft	3.7	2.7	821889	F201	04/16/2007	remaining	N	Y	< 1.6	UJ	15.3		17.2	J	< 1.3	U	22.9		
X28A	133-B13	13.1	133-B13F 12.7-14.9 821890	12.7 - 14.9 ft	0.4	-1.8	821890	F201	04/16/2007	remaining	N	Y	< 1.8	UJ	23.3		16	J	< 1.5	U	30.9		
X28A	133-B13	13.1	133-B13FD 12.7-14.9 821891	12.7 - 14.9 ft	0.4	-1.8	821891	F201	04/16/2007	remaining	FD	Y	< 2	UJ	25.3		17.3	J	< 1.6	U	39.3		
X28A	133-X28A-SW-E5R	11.9	133-X28A-SW-E-11.7-12.2R	11.7 - 12.2 ft	0.2	-0.3	JC5901-9A	JC5901A	10/09/2015	remaining	N	Y	1.9	J	128	J	26.4		< 0.26	U	32.		

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

												Analyte CAS RN Units RDCSRS RDCSRS-GAG NRDCSRS	ANTIMONY 7440-36-0 mg/kg 31 N/A 450	CHROMIUM 7440-47-3 mg/kg 120000 N/A N/A	NICKEL 7440-02-0 mg/kg 1600 N/A 23000	THALLIUM 7440-28-0 mg/kg N/A N/A N/A	VANADIUM 7440-62-2 mg/kg N/A 390 1100						
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9)	Sample End Elevation (ft NAVD88) (G4, G10)	Lab ID (G11)	Lab SDG (G11)	Date Collected (G12)	Sample Status (G13, G14)	Sample Type (G15)	Validated (Y/N) (G16)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G21)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Specific Notes
X31A	133-B12	13.1	133-B12E 8.6-9.6 821979	8.6 - 9.6 ft	4.5	3.5	821979	F201	04/17/2007	remaining	N	Y	< 1.9	UJ	19.6		13.6	J	< 1.5	U	22.1		
X31A	133-B12	13.1	133-B12ED 8.6-9.6 821980	8.6 - 9.6 ft	4.5	3.5	821980	F201	04/17/2007	remaining	FD	Y	< 2	UJ	14.1		10.7	J	< 1.6	U	17.5		
X31A	133-B12	13.1	133-B12F 13.3-14.3 821981	13.3 - 14.3 ft	-0.2	-1.2	821981	F201	04/17/2007	remaining	N	Y	< 1.8	UJ	76.1		18.6	J	< 1.4	U	37.7		
X31A	133-W31A-SW-E6	13.1	133-W31A-SW-E-15.1-15.6	15.1 - 15.6 ft	-2.0	-2.5	JC3366-2A	JC3366A	09/08/2015	remaining	N	Y	< 0.31	U	174		7.3		< 0.19	U	14.0		
X33A	133-X33A-PB	13.1	133-X33A-PB-7.0-7.5	7.0 - 7.5 ft	6.1	5.6	JC25689-5A	JC25689A	08/11/2016	remaining	N	Y	0.42	J	810		33.8		< 0.50	U	38.8		
X34A	133-X34A-PB	10.1	133-X34A-PB-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JC25689-4A	JC25689A	08/11/2016	remaining	N	Y	0.80	J	15.2		16.8		< 0.52	U	26.2		
X35A	133-P3C-X35A-ME	12.7	133-P3C-X35A-ME-8.5-9.0	8.5 - 9.0 ft	4.2	3.7	JB96555-13A	JB96555A	06/08/2015	remaining	N	Y	1.5	J	12.7		13.5		< 0.59	UJ	14.7		S5
X35A	133-X35A-PB	10.8	133-X35A-PB-4.5-5.0	4.5 - 5.0 ft	6.3	5.8	JC25689-3A	JC25689A	08/11/2016	remaining	N	Y	2.3	J	107		24.7		0.70	J	36.2		S5
X36A	133-W36A-SW-E3	9.9	133-W36A-SW-E-7.4-7.9	4.6 - 5.1 ft	5.3	4.8	JC24571-4A	JC24571A	07/22/2016	remaining	N	Y	1.9	J	44.1		17.8		< 0.48	U	30.6		S2
Y24A	133-Y24A-PB	11.6	133-Y24A-PB-14.0-14.5	14.0 - 14.5 ft	-2.4	-2.9	JC6340-4A	JC6340A	10/15/2015	remaining	N	Y	< 0.96	UJ	24.7	J	26.1	J	< 0.59	UJ	39.4	J	S6
Y24A	133-Y24A-PB	11.6	133-Y24A-PB-14.0-14.5	14.0 - 14.5 ft	-2.4	-2.9	JC6344-3	JC6344	10/15/2015	remaining	N	Y	< 0.59	U	16.7		12.6		< 0.36	U	25.2		S6
Y26A	133-B14	13.0	133-B14K 14.9-15.8 822277	14.9 - 15.8 ft	-1.9	-2.8	822277	F201	04/18/2007	remaining	N	Y	< 1.7	UJ	217		15.7	J	< 1.4	U	30.1		
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-14.0-14.5	14.0 - 14.5 ft	-1.0	-1.5	JB82214-21A	JB82214A	11/19/2014	remaining	N	Y	0.66	J	15.8	J	13.6		< 0.40	U	18.7	J	
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-15.0-15.5	15.0 - 15.5 ft	-2.0	-2.5	JB82214-22A	JB82214A	11/19/2014	remaining	N	Y	0.37	J	43.3	J	13.0		< 0.42	U	28.9	J	
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-15.5-16.0	15.5 - 16.0 ft	-2.5	-3.0	JB82214-23A	JB82214A	11/19/2014	remaining	N	Y	< 0.27	UJ	25.8	J	13.5		< 0.41	U	33.9	J	
Y27A	133-X27A-SW-E3-R	13.0	133-X27A-SW-E-14.8-15.3R	14.8 - 15.3 ft	-1.8	-2.3	JC5901-6A	JC5901A	10/09/2015	remaining	N	Y	1.7	J	67.9	J	26.0		< 0.26	U	28.3	J	
Y27A	133-Y26A-SW-S3R	12.5	133-Y26A-SW-S-14.4-14.9R	14.4 - 14.9 ft	-1.9	-2.4	JC5901-2A	JC5901A	10/09/2015	remaining	N	Y	2.9	J	277	J	24.8		< 0.24	U	25.1	J	
Y27A	133-Y26A-SW-S3R	12.5	133-Y26A-SW-S-14.4-14.9RX	14.4 - 14.9 ft	-1.9	-2.4	JC5901-3A	JC5901A	10/09/2015	remaining	FD	Y	3.8	J	137	J	26.7		< 0.26	U	27.1	J	
Y27A	133-Y27A-PB	13.0	133-Y27A-PB-10.0-10.5	10.0 - 10.5 ft	3.0	2.5	JC1876-6A	JC1876A	08/19/2015	remaining	N	Y	< 0.41	U	477		42.8		< 0.25	U	35.7		
Y28A	133-P3C-Y28A-ME	12.8	133-P3C-Y28A-ME-5.0-5.5	5.0 - 5.5 ft	7.8	7.3	JB96260-20A	JB96260A	06/03/2015	remaining	N	Y	0.46	J	18.3		20.2		0.38	J	25.9		
Y28A	133-P3C-Y28A-ME	12.8	133-P3C-Y28A-ME-6.0-6.5	6.0 - 6.5 ft	6.8	6.3	JB96260-21A	JB96260A	06/03/2015	remaining	N	Y	0.64	J	15.4		23.1		0.47	J	25.3		
Y28A	133-P3C-Y28A-ME	12.8	133-P3C-Y28A-ME-6.5-7.0	6.5 - 7.0 ft	6.3	5.8	JB96260-22A	JB96260A	06/03/2015	remaining	N	Y	12.1		34.4		24.2		0.59	J	20.5		
Y28A	133-Y27A-SW-S3	13.0	133-Y27A-SW-S-9.5-10.0	9.5 - 10.0 ft	3.5	3.0	JC2217-5A	JC2217A	08/24/2015	remaining	N	Y	< 0.41	U	18.7		21.7		0.80	J	25.4		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-5.0-5.5	5.0 - 5.5 ft	7.7	7.2	JB96260-26A	JB96260A	06/03/2015	remaining	N	Y	< 0.75	U	258		17.3		< 0.46	U	21.5		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-6.0-6.5	6.0 - 6.5 ft	6.7	6.2	JB96260-27A	JB96260A	06/03/2015	remaining	N	Y	< 0.45	U	27.1		19.7		0.88	J	27.2		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-6.7-7.2	6.7 - 7.2 ft	6.0	5.5	JB96260-28A	JB96260A	06/03/2015	remaining	N	Y	1.8	J	24.8		21.5		0.38	J	24.3		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-10.0-10.5	10.0 - 10.5 ft	2.7	2.2	JB96260-24A	JB96260A	06/03/2015	remaining	N	Y	< 0.56	U	13.9		15.3		< 0.34	U	27.2		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-13.3-13.8	13.3 - 13.8 ft	-0.6	-1.1	JB96260-25A	JB96260A	06/03/2015	remaining	N	Y	0.62	J	15.7		15.6		< 0.27	U	21.5		
Y32A	133-B17	10.2	PPG-133-B17D 8.0-8.5 796979	8.0 - 8.5 ft	2.2	1.7	796979	B441	01/03/2007	remaining	N	Y	< 1.7	UJ	42.4		10.5		< 1.4	U	16.7		
Y32A	133-B17	10.2	PPG-133-B17E 12.2-13.2 796980	12.2 - 13.2 ft	-2.0	-3.0	796980	B441	01/03/2007	remaining	N	Y	< 2	UJ	33.6		24.1		< 1.6	U	38.1		
Y32A	133-B17	10.2	PPG-133-B17ED 12.2-13.2 796981	12.2 - 13.2 ft	-2.0	-3.0	796981	B441	01/03/2007	remaining	FD	Y	< 2.1	UJ	34.4		23.9		< 1.7	U	38.8		
Y32A	133-B17	10.2	PPG-133-B17F 13.4-13.9 796982	13.4 - 13.9 ft	-3.2	-3.7	796982	B441	01/03/2007	remaining	N	Y	< 2.6	UJ	31.1		16.9		< 1.1	U	34		
Y32A	133-B17	10.2	PPG-133-B17G 17.5-18.5 796983	17.5 - 18.5 ft	-7.3	-8.3	796983	B441	01/03/2007	remaining	N	Y	< 2	UJ	29.2		24.2		< 1.6	U	30.7		
Y32A	133-B17	10.2	PPG-133-B17H 21.5-22.0 796984	21.5 - 22.0 ft	-11.3	-11.8	796984	B441	01/03/2007	remaining	N	Y	< 1.6	UJ	11.2		9.2		< 1.3	U	16.4		
Y33A	135-Y33A-PB	14.0	135-Y33A-PB-8.3-8.8	8.8 - 9.3 ft	5.2	4.7	JC25852-2A	JC25852A	08/15/2016	remaining	N	Y	3.7		72.5		23.9		0.54	J	29.7		
Z23A	133-P3C-Z23AR	13.0	133-P3C-Z23AR-16.5-17.0	16.5 - 17.0 ft	-3.5	-4.0	JB82738-15T	JB82738T	11/25/2014	remaining	N	Y	< 0.54	UJ	86.9	J	20.7	J	< 0.33	UJ	35.2	J	
Z24A	133-Z24A-PB	13.3	133-Z24A-PB-16.8-17.3	16.8 - 17.3 ft	-3.5	-4.0	JC3229-2A	JC3229A	09/04/2015	remaining	N	Y	1.4	J	36.1		27.7		< 0.37	U	46.9		
Z26A	133-Z26A-SW-S	13.1	133-Z26A-SW-S-10.6-11.1	10.6 - 11.1 ft	2.5	2.0	JC3090-2A	JC3090A	09/03/2015	remaining	N	Y	1.5	J	46.2		24.8		0.75	J	31.8		
Z27A	133-Y27A-SW-E	13.0	133-Y27A-SW-E-9.0-9.5	9.0 - 9.5 ft	4.0	3.5	JC2776-2A	JC2776A	09/01/2015	remaining	N	Y	1.2	J	349		10.6		< 0.21	U	18.4		
Z27A	133-Z27A-PB	13.0	133-Z27A-PB-7.8-8.3	7.8 - 8.3 ft	5.2	4.7	JC2659-8A	JC2659A	08/28/2015	remaining	N	Y	0.85	J	17.1		20.1		< 0.28	U	25.2		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-3.0-3.5	3.0 - 3.5 ft	7.7	7.2	JB40310-2A	JB40310A	06/21/2013	remaining	N	Y	3.3	J	79.5		21.8		3.4	J	31.6		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-5.0-5.5	5.0 - 5.5 ft	5.7	5.2	JB40310-3A	JB40310A	06/21/2013	remaining	N	Y	< 0.31	UJ	24.1		14.7		< 0.38	U	32.5		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-7.0-7.5	7.0 - 7.5 ft	3.7	3.2	JB40310-4A	JB40310A	06/21/2013	remaining	N	Y	1.8	J	23.3		27.7		< 0.49	U	27.4		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-7.0-7.5X	7.0 - 7.5 ft	3.7	3.2	JB40310-5A	JB40310A	06/21/2013	remaining	FD	Y	1.7	J	27.6		27.5		< 0.44	U	29.0		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-8.9-9.4	8.9 - 9.4 ft	1.8	1.3	JB40310-6A	JB40310A	06/21/2013	remaining	N	Y	1.9	J	92.6		19.5		< 0.54	U	29.6		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-10.6-11.1	10.6 - 11.1 ft	0.1	-0.4	JB40310-7A	JB40310A	06/21/2013	remaining	N	Y	4.4	J	33.1		110		< 0.50	U	25.6		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-12.6-13.1	12.6 - 13.1 ft	-1.9	-2.4	JB40310-8A	JB40310A	06/21/2013	remaining	N	Y	1.7	J	203		26.0		< 0.40	U	35.1		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-14.1-14.6	14.1 - 14.6 ft	-3.4	-3.9	JB40310-9A	JB40310A	06/21/2013	remaining	N	Y	< 0.30	UJ	17.2		15.2		< 0.37	U	26.0		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-14.6-15.1	14.6 - 15.1 ft	-3.9	-4.4	JB40310-10A	JB40310A	06/21/2013	remaining	N	Y	0.65	J	33.3		26.6		< 0.58	U	47.3		
Z30A	133-P3C-Z30A-ME	11.5	133-P3C-Z30A-ME-5.0-5.5	5.0 - 5.5 ft	6.5	6.0	JB96803-4A	JB96803A	06/11/2015	remaining	N	Y	6.7	J	51.2	J	48.8		1.1	J	28.1	J	
Z30A	133-P3C-Z30A-ME	11.5	133-P3C-Z30A-ME-7.0-7.5	7.0 - 7.5 ft	4.5	4.0	JB96803-5A	JB96803A	06/11/2015	remaining	N	Y	4.0	J	53.3	J	41.0		< 0.32	UJ	23.8	J	

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
CCPW - Chromate Chemical Production Waste
Cr - chromium
Cr⁺³ - trivalent chromium
El. - elevation
FD - field duplicate sample type
ft - feet
GPS - global positioning system
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
N/A - not applicable
NJDEP - New Jersey Department of Environmental Protection
NRDCSRS - Non-Residential Direct Contact Soil Remediation Standard
PDI - Pre-Design Investigation
RDCSRS - Residential Direct Contact Soil Remediation Standard
RDCSRS-GAG - Residential Direct Contact Soil Remediation Standard - Garfield Avenue Group (alternative remediation standard approved by the New Jersey Department of Environmental Protection on December 28, 2016)
SCC - Soil Cleanup Criteria
SDG - sample delivery group
TEE - terminal excavation elevation

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
R - The sample result was rejected due to serious deficiencies; the presence or absence of the analyte could not be confirmed.
RA - The result was rejected due to deficiencies but is considered usable for decision-making purposes.
U - The analyte was not detected above the sample reporting limit shown.
UJ - The analyte was not detected above the sample reporting limit shown and the reporting limit was approximate.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Row R through CC (extending west to east) and Grid Column 48A through 21A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88.
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs.
G7. "Depth Interval" is based on the "Location Elevation."
G8. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G9. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G10. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G11. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G12. "Date Collected" refers to the date the soil sample was collected.
G13. "Sample Status" of "remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location.
G14. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figure 5-2A, 5-2B, 5-2C and 5-2D.
G15. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
G16. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
G17. "Result" refers to the analytical result which is reported in mg/kg. A blank entry indicates that the sample was not tested for that analyte.
G18. Bold text indicates a result that exceeds the RDCSRS or the RDCSRS-GAG. Bold and italicized text indicates a result that exceeds the NRDCSRS. Non-bold and non-italicized text indicates the result does not exceed the most stringent SRS.
G19. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data. For unvalidated data, it refers to the qualifier assigned by the laboratory.
G20. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.
G21. There is currently no NJDEP SRS and no NJDEP SCC for total Cr. Therefore, total Cr results are compared to the interim NJDEP Residential SCC for Cr⁺³ of 120,000 mg/kg as the cleanup criteria for soil at the Garfield Avenue Group Sites. There is no non-residential SCC for Cr⁺³. Bold values indicate a result that exceeds the interim NJDEP Residential SCC.

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

SPECIFIC NOTES:

- S1. In Grid U39A, the depth interval included in the Sample ID 133-U39A-PB-N-8.1-8.6 does not correspond to the actual depth interval where the sample was collected. The depth interval in the sample ID was inadvertently switched with the depth interval for Sample ID 133-U39A-PB-S-10.3-10.8 (included in Table 5-1) when naming the samples during the field effort. The actual depth interval was updated following review of the GPS-measured pre-construction location elevation and GPS-measured sample start elevation and is provided in the “Depth Interval” column on this table.
- S2. In Grids W38A and X36A, the sidewall samples at locations 133-V38A-SW-E1, 133-V38A-SW-E2, and 133-W36A-SW-E3 (samples 133-V38A-SW-E-6.9-7.4, 133-V38A-SW-E-6.9-7.4X, 133-V38A-SW-E-8.9-9.4, and 133-W36A-SW-E-7.4-7.9) were named with depth intervals based on the pre-remediation surface elevation of the former building slab. However, the samples are located outside the footprint of the former building slab. The sample location elevations and corresponding depth intervals of these sidewall samples have been modified based on the pre-remediation elevation of the nearest PDI location to each sample location outside the footprint of the former building slab. The sample names and measured sample start elevations have not been modified.
- S3. In Grid W38A, the antimony concentration in sample 133-V38A-SW-E-6.9-7.4 (El. 5.8 to 5.3 ft NAVD88) is 91.1 J mg/kg. This concentration is greater than the RDCSRS of 31 mg/kg and less than the NRDCSRS of 450 mg/kg. Compliance with the antimony RDCSRS is demonstrated through spatial averaging. The calculations are included in the Technical Memorandum *PPG Site 133 East, Compliance Averaging for Antimony in Soil (Revision 1)*, AECOM, April 2018. The spatially weighted average antimony concentration is 8 mg/kg, which is compliant with the 31 mg/kg RDCSRS.
- S4. In Grid X26A, sample 133-X26A-PB-15.0-15.5 (El. -1.7 to -2.2 ft NAVD88) was split and analyzed for CCPW metals under two different chains of custody and lab SDGs as part of two different sampling programs. The sample was collected at the same location at the same time.
- S5. In Grid X35A, two borings were installed adjacent to each other at different points in time. The location elevations vary because earthwork modified the surface elevation between the two sampling events.
- S6. In Grid Y24A, sample 133-Y24A-PB-14.0-14.5 (El. -2.4 to -2.9 ft NAVD88) was split and analyzed for CCPW metals under two different chains of custody and lab SDGs as part of two different sampling programs. The sample was collected at the same location at the same time.

Table 5-3
CCPW Metals Analytical Results in the Unsaturated Soil Zone Compared to IGW Soil Screening Levels and Soil Remediation Standard
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

Analyte CAS-RN Units DIGWSSL IGWSRS-GAG													ANTIMONY 7440-36-0 mg/kg N/A 62.7		CHROMIUM 7440-47-3 mg/kg N/A N/A		NICKEL 7440-02-0 mg/kg N/A 170		THALLIUM 7440-28-0 mg/kg 3 N/A		VANADIUM 7440-62-2 mg/kg N/A N/A		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6, G7)	Depth Interval (ft bgs) (G8)	Sample Start Elevation (ft NAVD88) (G4, G7, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Result (G18, G19)	Qualifier (G20, G21)	Result (G18, G19)	Qualifier (G20, G21)	Result (G18, G19)	Qualifier (G20, G21)	Result (G18, G19)	Qualifier (G20, G21)	Result (G18, G19)	Qualifier (G20, G21)	Specific Notes
W32A	133-P3C-W32A	13.1	133-P3C-W32A-6.0-6.5	6.0 - 6.5 ft	7.1	6.6	JB82047-15T	JB82047T	11/18/2014	remaining	N	Y	1.7	RA	24.6	RA	18.4	RA	0.35	RA	30.5	RA	
W32A	133-P3C-W32A	13.1	133-P3C-W32A-6.0-6.5X	6.0 - 6.5 ft	7.1	6.6	JB82047-16T	JB82047T	11/18/2014	remaining	FD	Y	< 0.56	RA	24.7	RA	17.2	RA	0.58	RA	34.3	RA	
W32A	133-W31A-SW-S1	13.1	133-W31A-SW-S-5.9-6.4	5.9 - 6.4 ft	7.2	6.7	JC406-7A	JC406A	07/30/2015	remaining	N	Y	1.4	J	73.5		16.4		< 0.20	U	29.0		
Y28A	133-P3C-Y28A-ME	12.8	133-P3C-Y28A-ME-5.0-5.5	5.0 - 5.5 ft	7.8	7.3	JB96260-20A	JB96260A	06/03/2015	remaining	N	Y	0.46	J	18.3		20.2		0.38	J	25.9		
Y28A	133-P3C-Y28A-ME	12.8	133-P3C-Y28A-ME-6.0-6.5	6.0 - 6.5 ft	6.8	6.3	JB96260-21A	JB96260A	06/03/2015	remaining	N	Y	0.64	J	15.4		23.1		0.47	J	25.3		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-5.0-5.5	5.0 - 5.5 ft	7.7	7.2	JB96260-26A	JB96260A	06/03/2015	remaining	N	Y	< 0.75	U	258		17.3		< 0.46	U	21.5		
Y29A	133-P3C-Y29A-ME	12.7	133-P3C-Y29A-ME-6.0-6.5	6.0 - 6.5 ft	6.7	6.2	JB96260-27A	JB96260A	06/03/2015	remaining	N	Y	< 0.45	U	27.1		19.7		0.88	J	27.2		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-3.0-3.5	3.0 - 3.5 ft	7.7	7.2	JB40310-2A	JB40310A	06/21/2013	remaining	N	Y	3.3	J	79.5		21.8		3.4	J	31.6		S1

Table 5-3
CCPW Metals Analytical Results in the Unsaturated Soil Zone Compared to IGW Soil Screening Levels and Soil Remediation Standard
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
CCPW - Chromate Chemical Production Waste
DIGWSSL - Default Impact to Groundwater Soil Screening Level
El. - elevation
FD - field duplicate sample type
ft - feet
IGW - Impact to Groundwater
IGWSRS-GAG - Impact to Groundwater Soil Remediation Standard - Garfield Avenue Group (site-specific alternative remediation standard as proposed in the *Supplemental Soil Remedial Investigation Report, Final Revision 1*, dated 08/30/18 and approved by NJDEP on 10/22/18)
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
N/A - not applicable
SDG - sample delivery group
TEE - terminal excavation elevation

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
RA - The sample result was rejected due to NJ specific data validation QC requirements; however, the result is usable for project objectives.
U - The analyte was not detected above the sample reporting limit shown.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Row R through CC (extending west to east) and Grid Column 48A through 21A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs. In some cases, the "Sample ID" in the table is a variant of the sample ID in the laboratory report and/or data validation report. In these cases, the "Lab ID" associates the sample results to the laboratory report and/or data validation report.
G7. This table compares sample results from the unsaturated zone to the DIGWSSLs. The groundwater elevation (above which is the unsaturated zone) on this Site was estimated as the 50th percentile groundwater elevation from 13 monitoring wells located on or adjacent to Site 133 East and Site 135 gauged between February 2007 and December 2016. The monitoring well locations and data are included in Attachment 1. The estimated groundwater elevation for this Site is El. 6.2 ft NAVD88.
G8. "Depth Interval" is based on the "Location Elevation."
G9. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G10. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G11. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G12. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G13. "Date Collected" refers to the date the soil sample was collected.
G14. "Sample Status" of "remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location.
G15. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figures 5-3A, 5-3B, 5-3C, and 5-3D.
G16. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
G17. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
G18. "Result" refers to the analytical result which is reported in mg/kg.
G19. Bold text indicates that the result exceeds the DIGWSSL or IGWSRS-GAG. Non-bold text indicates that the result does not exceed the DIGWSSL or IGWSRS-GAG..
G20. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data. For unvalidated data, it refers to the qualifier assigned by the laboratory.
G21. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.

SPECIFIC NOTES:

S1. In Grid Z28A, the thallium concentration in sample 133-P3C-Z28A-3.0-3.5 (El. 7.7 to 7.2 ft NAVD88) is 3.4 J mg/kg. This concentration is greater than the DIGWSSL of 3 mg/kg. Attainment of the DIGWSSL for thallium is achieved through compliance averaging using the arithmetic mean. The calculations are included in the Technical Memorandum *PPG Site 133 East, Compliance Averaging for Thallium in Soil (Revision 2)*, AECOM, July 2018. The average thallium concentration in both functional areas is 1 mg/kg, which is compliant with the 3 mg/kg DIGWSSL.

Table 5-4
Naphthalene Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

Analyte CAS RN Units RDCSRS NRDCSRS													NAPHTHALENE 91-20-3 mg/kg 6 17		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9)	Sample End Elevation (ft NAVD88) (G4, G10)	Lab ID (G11)	Lab SDG (G11)	Date Collected (G12)	Sample Status (G13, G14)	Sample Type (G15)	Validated (Y/N) (G16)	Result (G17, G18)	Qualifier (G19, G20)	Specific Notes
AA21A	133-SI-AA21A-PB	11.3	133-SI-AA21A-PB-14.3-14.8	14.3 - 14.8 ft	-3.0	-3.5	JC4462-2	JC4462	09/22/2015	remaining	N	Y	< 0.023	UJ	
AA21A	133-SI-AA21A-PB	11.3	133-SI-AA21A-PB-14.3-14.8X	14.3 - 14.8 ft	-3.0	-3.5	JC4462-3	JC4462	09/22/2015	remaining	FD	Y	< 0.021	UJ	
AA23A	133-SI-AA23A-PB	11.1	133-SI-AA23A-PB-14.8-15.3	14.8 - 15.3 ft	-3.7	-4.2	JC3446-1R	JC3446R	09/09/2015	remaining	N	Y	< 0.027	UJ	
AA23A	133-SI-AA23A-PB	11.1	133-SI-AA23A-PB-14.8-15.3X	14.8 - 15.3 ft	-3.7	-4.2	JC3446-2R	JC3446R	09/09/2015	remaining	FD	Y	< 0.029	U	
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-14.0-14.5	14.0 - 14.5 ft	-0.8	-1.3	JB62137-4A	JB62137A	03/17/2014	remaining	N	Y	0.0206	J	
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-15.0-15.5	15.0 - 15.5 ft	-1.8	-2.3	JB62137-5A	JB62137A	03/17/2014	remaining	N	Y	0.184		
AA25A	133-P3C-AA25A	13.3	133-P3C-AA25A-15.5-16.0	15.5 - 16.0 ft	-2.3	-2.8	JB62137-6A	JB62137A	03/17/2014	remaining	N	Y	< 0.017	U	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-8.0-8.5	8.0 - 8.5 ft	3.1	2.6	JB40574-5A	JB40574A	06/25/2013	remaining	N	Y	0.527	J	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-10.0-10.5	10.0 - 10.5 ft	1.1	0.6	JB40574-6A	JB40574A	06/25/2013	remaining	N	Y	0.0835	J	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-12.0-12.5	12.0 - 12.5 ft	-0.9	-1.4	JB40574-7A	JB40574A	06/25/2013	remaining	N	Y	< 0.022	U	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-14.0-14.5	14.0 - 14.5 ft	-2.9	-3.4	JB40574-8A	JB40574A	06/25/2013	remaining	N	Y	< 0.028	U	
S41A	133-P3C-S41A	11.1	133-P3C-S41A-14.5-15.0	14.5 - 15.0 ft	-3.4	-3.9	JB40574-9A	JB40574A	06/25/2013	remaining	N	Y	< 0.047	UJ	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-12.0-12.5	12.0 - 12.5 ft	0.8	0.3	JB82214-7A	JB82214A	11/19/2014	remaining	N	Y	0.125	J	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-12.0-12.5X	12.0 - 12.5 ft	0.8	0.3	JB82214-12A	JB82214A	11/19/2014	remaining	FD	Y	0.0988		
T38A	133-P3C-T38A	12.8	133-P3C-T38A-14.0-14.5	14.0 - 14.5 ft	-1.2	-1.7	JB82214-8A	JB82214A	11/19/2014	remaining	N	Y	0.437		
T38A	133-P3C-T38A	12.8	133-P3C-T38A-16.0-16.5	16.0 - 16.5 ft	-3.2	-3.7	JB82214-9A	JB82214A	11/19/2014	remaining	N	Y	< 0.012	U	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-16.5-17.0	16.5 - 17.0 ft	-3.7	-4.2	JB82214-10A	JB82214A	11/19/2014	remaining	N	Y	< 0.012	U	
T38A	133-P3C-T38A	12.8	133-P3C-T38A-17.0-17.5	17.0 - 17.5 ft	-4.2	-4.7	JB82214-11A	JB82214A	11/19/2014	remaining	N	Y	< 0.012	U	
T39A	133-T39A-PB	12.4	133-SI-T39A-PB-7.3-7.8	7.3 - 7.8 ft	5.1	4.6	JB98013-3R	JB98013R	06/26/2015	remaining	N	Y	3.22	J-	
T40A	133-T40A-PB	12.1	133-SI-T40A-PB-6.3-6.8	6.3 - 6.8 ft	5.8	5.3	JB96562-1R	JB96562R	06/09/2015	remaining	N	Y	0.581	J	
T40A	133-T40A-PB	12.1	133-SI-T40A-PB-6.3-6.8X	6.3 - 6.8 ft	5.8	5.3	JB96562-2R	JB96562R	06/09/2015	remaining	FD	Y	< 0.025	UJ	
T42A	133-SI-T42A	12.6	133-SI-T42A-9.0-9.5	9.0 - 9.5 ft	3.6	3.1	JB95366-1R	JB95366R	05/22/2015	remaining	N	Y	1.05	J	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-8.5-9.0	8.5 - 9.0 ft	3.7	3.2	JB63604-16A	JB63604A	04/02/2014	remaining	N	Y	0.0883		
T45A	133-P3C-T45A	12.2	133-P3C-T45A-10.5-11.0	10.5 - 11.0 ft	1.7	1.2	JB63604-17A	JB63604A	04/02/2014	remaining	N	Y	< 0.011	U	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-10.5-11.0X	10.5 - 11.0 ft	1.7	1.2	JB63604-20A	JB63604A	04/02/2014	remaining	FD	Y	< 0.011	U	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-12.5-13.0	12.5 - 13.0 ft	-0.3	-0.8	JB63604-18A	JB63604A	04/02/2014	remaining	N	Y	< 0.014	U	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-14.5-15.0	14.5 - 15.0 ft	-2.3	-2.8	JB63604-19A	JB63604A	04/02/2014	remaining	N	Y	0.0239	J	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-16.5-17.0	16.5 - 17.0 ft	-4.3	-4.8	JB63604-21A	JB63604A	04/02/2014	remaining	N	Y	< 0.018	U	
T45A	133-P3C-T45A	12.2	133-P3C-T45A-17.0-17.5	17.0 - 17.5 ft	-4.8	-5.3	JB63604-22A	JB63604A	04/02/2014	remaining	N	Y	< 0.039	UJ	
T47A	133-P3C-T47AR	10.1	133-P3C-SA-T47A-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JB71606-10A	JB71606A	07/14/2014	remaining	N	Y	0.133		
T47A	133-P3C-T47AR	10.1	133-P3C-SA-T47A-6.0-6.5	6.0 - 6.5 ft	4.1	3.6	JB71606-11A	JB71606A	07/14/2014	remaining	N	Y	< 0.011	U	
U34A	133-SI-U34A-PB	12.6	133-SI-U34A-PB-16.3-16.8	16.3 - 16.8 ft	-3.7	-4.2	JB99799-1	JB99799	07/23/2015	remaining	N	Y	0.192	J-	
U34A	133-SI-U34A-PB	12.6	133-SI-U34A-PB-16.3-16.8X	16.3 - 16.8 ft	-3.7	-4.2	JB99799-2	JB99799	07/23/2015	remaining	FD	Y	0.384	J-	
U36A	133-SI-U36A-PB	12.6	133-SI-U36A-PB-16.0-16.5	16.0 - 16.5 ft	-3.4	-3.9	JB99082-1R	JB99082R	07/14/2015	remaining	N	Y	1.23		
U37A	133-SI-U37A-PB	12.6	133-SI-U37A-PB-15.5-16.0	15.5 - 16.0 ft	-2.9	-3.4	JB98548-1	JB98548	07/07/2015	remaining	N	Y	< 0.052	UJ	
U39A	133-U39A-PB-N	12.4	133-U39A-PB-N-8.1-8.6	10.3 - 10.8 ft	2.1	1.6	JC1883-1	JC1883	07/01/2015	remaining	N	Y	0.0743		S1
U40A	133-P3C-U40A	12.0	133-P3C-U40A-9.0-9.5	9.0 - 9.5 ft	3.0	2.5	JB63022-15A	JB63022A	03/26/2014	remaining	N	Y	0.782	J	
U40A	133-P3C-U40A	12.0	133-P3C-U40A-11.0-11.5	11.0 - 11.5 ft	1.0	0.5	JB63022-16A	JB63022A	03/26/2014	remaining	N	Y	0.0279	J	
U40A	133-P3C-U40A	12.0	133-P3C-U40A-13.0-13.5	13.0 - 13.5 ft	-1.0	-1.5	JB63022-17A	JB63022A	03/26/2014	remaining	N	Y	0.0171	J	
U40A	133-P3C-U40A	12.0	133-P3C-U40A-14.0-14.5	14.0 - 14.5 ft	-2.0	-2.5	JB63022-18A	JB63022A	03/26/2014	remaining	N	Y	0.0472		
U40A	133-P3C-U40A	12.0	133-P3C-U40A-14.5-15.0	14.5 - 15.0 ft	-2.5	-3.0	JB63022-19A	JB63022A	03/26/2014	remaining	N	Y	1.9	J	
U40A	133-SI-U40A	12.0	133-SI-U40A-10.5-11.0	10.5 - 11.0 ft	1.5	1.0	JB96142-2	JB96142	06/03/2015	remaining	N	Y	0.414	J	
U41A	133-SI-U41A	11.8	133-SI-U41A-10.7-11.2	10.7 - 11.2 ft	1.1	0.6	JB96142-1	JB96142	06/03/2015	remaining	N	Y	< 0.011	UJ	
U43A	133-B16-SA	10.5	133-B16-SA-8.5-9.0	8.5 - 9.0 ft	2.0	1.5	JB71691-7A	JB71691A	07/15/2014	remaining	N	Y	< 0.0091	U	
U43A	133-B16-SA	10.5	133-B16-SA-10.5-11.0	10.5 - 11.0 ft	0.0	-0.5	JB71691-8A	JB71691A	07/15/2014	remaining	N	Y	0.0341	J	
U43A	133-P3C-U43A	10.2	133-P3C-U43A-8.5-9.0	8.5 - 9.0 ft	1.7	1.2	JB40574-15A	JB40574A	06/25/2013	remaining	N	Y	0.274		
U43A	133-P3C-U43A	10.2	133-P3C-U43A-10.5-11.0	10.5 - 11.0 ft	-0.3	-0.8	JB40574-16A	JB40574A	06/25/2013	remaining	N	Y	< 0.02	U	

Table 5-4
Naphthalene Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

Analyte CAS RN Units RDCSRS NRDCSRS													NAPHTHALENE 91-20-3 mg/kg 6 17		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9)	Sample End Elevation (ft NAVD88) (G4, G10)	Lab ID (G11)	Lab SDG (G11)	Date Collected (G12)	Sample Status (G13, G14)	Sample Type (G15)	Validated (Y/N) (G16)	Result (G17, G18)	Qualifier (G19, G20)	Specific Notes
U43A	133-P3C-U43A	10.2	133-P3C-U43A-12.5-13.0	12.5 - 13.0 ft	-2.3	-2.8	JB40574-17A	JB40574A	06/25/2013	remaining	N	Y	0.0302	J	
U43A	133-P3C-U43A	10.2	133-P3C-U43A-14.0-14.5	14.0 - 14.5 ft	-3.8	-4.3	JB40574-18A	JB40574A	06/25/2013	remaining	N	Y	< 0.033	U	
U43A	133-P3C-U43A	10.2	133-P3C-U43A-14.5-15.0	14.5 - 15.0 ft	-4.3	-4.8	JB40574-19A	JB40574A	06/25/2013	remaining	N	Y	< 0.057	UJ	
U43A	133-SI-B2A4	10.0	133-SI-B2A4-8.5-9.0	8.5 - 9.0 ft	1.5	1.0	JB92373-18	JB92373	04/13/2015	remaining	N	Y	< 0.01	U	
U43A	133-SI-T43A-SW-E2	12.2	133-SI-T43A-SW-E-10.1-10.6	10.1 - 10.6 ft	2.1	1.6	JB95126-5R	JB95126R	05/20/2015	remaining	N	Y	3.74	J-	
U43A	135-RI-U43A-PB	10.2	135-RI-U43A-PB	7.6 - 8.1 ft	2.6	2.1	JC52137-4R	JC52137	09/29/2017	remaining	N	Y	0.932		
V32A	133-SI-V32A-PB	12.4	133-SI-V32A-PB-13.0-13.5	13.0 - 13.5 ft	-0.6	-1.1	JC229-1R	JC229R	07/28/2015	remaining	N	Y	< 0.026	UJ	
V35A	133-SI-V35A-PB	12.6	133-SI-V35A-PB-17.3-17.8	17.3 - 17.8 ft	-4.7	-5.2	JB99731-1R	JB99731	07/22/2015	remaining	N	Y	3.01	J-	
V36A	133-V36A-PB2	12.6	133-V36A-PB-15.7-16.2R	15.7 - 16.2 ft	-3.1	-3.6	JC24395-2A	JC24395A	07/20/2016	remaining	N	Y	0.681		
V37A	133-V37A-PB	12.6	133-V37A-PB-16.1-16.6	16.1 - 16.6 ft	-3.5	-4.0	JC35627-1	JC35627A	01/17/2017	remaining	N	Y	0.184	J	
V37A	133-V37A-PB	12.6	133-V37A-PB-16.1-16.6X	16.1 - 16.6 ft	-3.5	-4.0	JC35627-2	JC35627A	01/17/2017	remaining	FD	Y	< 0.039	UJ	
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.0-14.5	14.0 - 14.5 ft	-1.6	-2.1	JB40576-13A	JB40576A	06/25/2013	remaining	N	Y	< 0.02	U	
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.5-15.0	14.5 - 15.0 ft	-2.1	-2.6	JB40576-14A	JB40576A	06/25/2013	remaining	N	Y	< 0.028	U	
W29A	133-P3C-W29A	12.4	133-P3C-W29A-14.5-15.0X	14.5 - 15.0 ft	-2.1	-2.6	JB40576-15A	JB40576A	06/25/2013	remaining	FD	Y	< 0.028	U	
W30A	133-W30A-PB2	13.2	133-W30A-PB-13.5-14.0	13.5 - 14.0 ft	-0.3	-0.8	JC6112-3A	JC6112A	10/13/2015	remaining	N	Y	0.485		
W30A	133-W30A-SW-E4	13.2	133-W30A-SW-E-13.0-13.5	13.0 - 13.5 ft	0.2	-0.3	JC6269-4A	JC6269A	10/14/2015	remaining	N	Y	0.178		
W30A	133-W31A-SW-N4	13.1	133-W31A-SW-N-15.1-15.6	15.1 - 15.6 ft	-2.0	-2.5	JC1610-4A	JC1610A	08/14/2015	remaining	N	Y	0.0925		
W31A	133-W31A-PB	13.1	133-W31A-PB-16.2-16.7	16.2 - 16.7 ft	-3.1	-3.6	JC6340-2A	JC6340A	10/15/2015	remaining	N	Y	< 0.027	UJ	
W32A	133-V32A-SW-E1	12.4	133-V32A-SW-E-6.5-7.0	6.5 - 7.0 ft	5.9	5.4	JC310-6A	JC310A	07/29/2015	remaining	N	Y	0.0495		
W32A	133-W31A-SW-S1	13.1	133-W31A-SW-S-5.9-6.4	5.9 - 6.4 ft	7.2	6.7	JC406-7A	JC406A	07/30/2015	remaining	N	Y	0.0180	J	
W35A	133-W35A-PB	12.9	133-W35A-PB-9.9-10.4	9.9 - 10.4 ft	3.0	2.5	JC25689-2A	JC25689A	08/11/2016	remaining	N	Y	0.118	J	
W36A	133-W36A-E-PB	12.7	133-W36A-E-PB-11.4-11.9	11.4 - 11.9 ft	1.3	0.8	JC24571-2A	JC24571A	07/22/2016	remaining	N	Y	12.9		S2
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-15.0-15.5	15.0 - 15.5 ft	-2.1	-2.6	JB65296-20A	JB65296A	04/22/2014	remaining	N	Y	0.575		
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-15.6-16.1	15.6 - 16.1 ft	-2.7	-3.2	JB65296-21A	JB65296A	04/22/2014	remaining	N	Y	0.235		
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-16.1-16.6	16.1 - 16.6 ft	-3.2	-3.7	JB65296-22A	JB65296A	04/22/2014	remaining	N	Y	0.26	J	
W37A	133-V37A-SW-E	12.6	133-V37A-SW-E-14.1-14.6	14.1 - 14.6 ft	-1.5	-2.0	JC35627-6A	JC35627A	01/17/2017	remaining	N	Y	0.952		
W38A	133-V38A-SW-E1	9.4	133-V38A-SW-E-6.9-7.4	3.6 - 4.1 ft	5.8	5.3	JC36658-3A	JC36658A	02/02/2017	remaining	N	Y	3.95		S3
W38A	133-V38A-SW-E1	9.4	133-V38A-SW-E-6.9-7.4X	3.6 - 4.1 ft	5.8	5.3	JC36658-4A	JC36658A	02/02/2017	remaining	FD	Y	5.99		S3
W38A	133-V38A-SW-E2	9.4	133-V38A-SW-E-8.9-9.4	5.6 - 6.1 ft	3.8	3.3	JC36658-2A	JC36658A	02/02/2017	remaining	N	Y	0.525		S3
W38A	135-W39A-SW-N2	9.4	135-W39A-SW-N-5.0-5.5	5.0 - 5.5 ft	4.4	3.9	JC36564-5A	JC36564A	02/01/2017	remaining	N	Y	1.18		
X26A	133-X26A-PB	13.3	133-X26A-PB-15.0-15.5	15.0 - 15.5 ft	-1.7	-2.2	JC2510-3	JC2510	08/27/2015	remaining	N	Y	59.1		S2, S4
X26A	133-X26A-PB	13.3	133-X26A-PB-15.0-15.5	15.0 - 15.5 ft	-1.7	-2.2	JC2535-7A	JC2535A	08/27/2015	remaining	N	Y	71.3	J	S2, S4
X28A	133-SI-X28A-PB	11.9	133-SI-X28A-PB-12.1-12.6	12.1 - 12.6 ft	-0.2	-0.7	JC1602-1R	JC1602R	08/14/2015	remaining	N	Y	7.31	J-	S2
X28A	133-X28A-SW-E5R	11.9	133-X28A-SW-E-11.7-12.2R	11.7 - 12.2 ft	0.2	-0.3	JC5901-9A	JC5901A	10/09/2015	remaining	N	Y	1.34		
X29A	133-W29A-SW-E2	12.0	133-W29A-SW-E-12.7-13.2	12.7 - 13.2 ft	-0.7	-1.2	JC6269-2A	JC6269A	10/14/2015	remaining	N	Y	0.0786		
X29A	133-X29A-SW-E3	13.1	133-X29A-SW-E-10.3-10.8	10.3 - 10.8 ft	2.8	2.3	JC1699-6A	JC1699A	08/17/2015	remaining	N	Y	0.0802		
X29A	133-X29A-SW-E3R	13.1	133-X29A-SW-E-10.3-10.8R	10.3 - 10.8 ft	2.8	2.3	JC2160-4A	JC2160A	08/21/2015	remaining	N	Y	1.7		
X31A	133-SI-X31A-PB	13.1	133-SI-X31A-PB-5.7-6.2	5.7 - 6.2 ft	7.4	6.9	JC6346-1R	JC6346	10/15/2015	remaining	N	Y	0.717	J-	
X31A	133-W31A-SW-E6	13.1	133-W31A-SW-E-15.1-15.6	15.1 - 15.6 ft	-2.0	-2.5	JC3366-2A	JC3366A	09/08/2015	remaining	N	Y	0.377		
X32A	133-SI-X32A-PB2	13.1	133-SI-X32A-PB-4.3-4.8	4.3 - 4.8 ft	8.8	8.3	JC740-1R	JC740	08/04/2015	remaining	N	Y	0.293		
X33A	133-X33A-PB	13.1	133-X33A-PB-7.0-7.5	7.0 - 7.5 ft	6.1	5.6	JC25689-5A	JC25689A	08/11/2016	remaining	N	Y	0.911		
X34A	133-X34A-PB	10.1	133-X34A-PB-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JC25689-4A	JC25689A	08/11/2016	remaining	N	Y	1.07		
X35A	133-X35A-PB	10.8	133-X35A-PB-4.5-5.0	4.5 - 5.0 ft	6.3	5.8	JC25689-3A	JC25689A	08/11/2016	remaining	N	Y	2.39		
X36A	133-W36A-SW-E3	9.9	133-W36A-SW-E-7.4-7.9	4.6 - 5.1 ft	5.3	4.8	JC24571-4A	JC24571A	07/22/2016	remaining	N	Y	2.44		S3
Y24A	133-Y24A-PB	11.6	133-Y24A-PB-14.0-14.5	14.0 - 14.5 ft	-2.4	-2.9	JC6340-4A	JC6340A	10/15/2015	remaining	N	Y	0.0880	J	S5
Y24A	133-Y24A-PB	11.6	133-Y24A-PB-14.0-14.5	14.0 - 14.5 ft	-2.4	-2.9	JC6344-3	JC6344	10/15/2015	remaining	N	Y	< 0.054	UJ	S5
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-14.0-14.5	14.0 - 14.5 ft	-1.0	-1.5	JB82214-21A	JB82214A	11/19/2014	remaining	N	Y	0.127		

Table 5-4
Naphthalene Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

												Analyte CAS RN Units RDCSRS NRDCSRS	NAPHTHALENE 91-20-3 mg/kg 6 17		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9)	Sample End Elevation (ft NAVD88) (G4, G10)	Lab ID (G11)	Lab SDG (G11)	Date Collected (G12)	Sample Status (G13, G14)	Sample Type (G15)	Validated (Y/N) (G16)	Result (G17, G18)	Qualifier (G19, G20)	Specific Notes
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-15.0-15.5	15.0 - 15.5 ft	-2.0	-2.5	JB82214-22A	JB82214A	11/19/2014	remaining	N	Y	24.5		S2
Y27A	133-P3C-Y27A	13.0	133-P3C-Y27A-15.5-16.0	15.5 - 16.0 ft	-2.5	-3.0	JB82214-23A	JB82214A	11/19/2014	remaining	N	Y	0.747		
Y27A	133-X27A-SW-E3-R	13.0	133-X27A-SW-E-14.8-15.3R	14.8 - 15.3 ft	-1.8	-2.3	JC5901-6A	JC5901A	10/09/2015	remaining	N	Y	0.874		
Y27A	133-Y26A-SW-S3R	12.5	133-Y26A-SW-S-14.4-14.9R	14.4 - 14.9 ft	-1.9	-2.4	JC5901-2A	JC5901A	10/09/2015	remaining	N	Y	4.84	J	
Y27A	133-Y26A-SW-S3R	12.5	133-Y26A-SW-S-14.4-14.9RX	14.4 - 14.9 ft	-1.9	-2.4	JC5901-3A	JC5901A	10/09/2015	remaining	FD	Y	1.01	J	
Y27A	133-Y27A-PB	13.0	133-Y27A-PB-10.0-10.5	10.0 - 10.5 ft	3.0	2.5	JC1876-6A	JC1876A	08/19/2015	remaining	N	Y	0.105		
Y28A	133-Y27A-SW-S3	13.0	133-Y27A-SW-S-9.5-10.0	9.5 - 10.0 ft	3.5	3.0	JC2217-5A	JC2217A	08/24/2015	remaining	N	Y	< 0.0067	U	
Y33A	135-Y33A-PB	14.0	135-Y33A-PB-8.3-8.8	8.8 - 9.3 ft	5.2	4.7	JC25852-2A	JC25852A	08/15/2016	remaining	N	Y	0.256		
Z24A	133-SI-Z24A-PB	13.3	133-SI-Z24A-PB-16.8-17.3	16.8 - 17.3 ft	-3.5	-4.0	JC3221-1	JC3221	09/04/2015	remaining	N	Y	< 0.036	UJ	
Z24A	133-Z24A-PB	13.3	133-Z24A-PB-16.8-17.3	16.8 - 17.3 ft	-3.5	-4.0	JC3229-2A	JC3229A	09/04/2015	remaining	N	Y	< 0.0092	U	
Z26A	133-Z26A-SW-S	13.1	133-Z26A-SW-S-10.6-11.1	10.6 - 11.1 ft	2.5	2.0	JC3090-2A	JC3090A	09/03/2015	remaining	N	Y	< 0.0069	U	
Z27A	133-Y27A-SW-E	13.0	133-Y27A-SW-E-9.0-9.5	9.0 - 9.5 ft	4.0	3.5	JC2776-2A	JC2776A	09/01/2015	remaining	N	Y	< 0.0054	U	
Z27A	133-Z27A-PB	13.0	133-Z27A-PB-7.8-8.3	7.8 - 8.3 ft	5.2	4.7	JC2659-8A	JC2659A	08/28/2015	remaining	N	Y	< 0.0072	U	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-3.0-3.5	3.0 - 3.5 ft	7.7	7.2	JB40310-2A	JB40310A	06/21/2013	remaining	N	Y	< 0.023	U	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-5.0-5.5	5.0 - 5.5 ft	5.7	5.2	JB40310-3A	JB40310A	06/21/2013	remaining	N	Y	< 0.022	U	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-7.0-7.5	7.0 - 7.5 ft	3.7	3.2	JB40310-4A	JB40310A	06/21/2013	remaining	N	Y	< 0.029	U	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-7.0-7.5X	7.0 - 7.5 ft	3.7	3.2	JB40310-5A	JB40310A	06/21/2013	remaining	FD	Y	< 0.024	U	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-8.9-9.4	8.9 - 9.4 ft	1.8	1.3	JB40310-6A	JB40310A	06/21/2013	remaining	N	Y	< 0.029	U	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-10.6-11.1	10.6 - 11.1 ft	0.1	-0.4	JB40310-7A	JB40310A	06/21/2013	remaining	N	Y	0.0270	J	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-12.6-13.1	12.6 - 13.1 ft	-1.9	-2.4	JB40310-8A	JB40310A	06/21/2013	remaining	N	Y	0.0855	J	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-14.1-14.6	14.1 - 14.6 ft	-3.4	-3.9	JB40310-9A	JB40310A	06/21/2013	remaining	N	Y	< 0.022	U	
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-14.6-15.1	14.6 - 15.1 ft	-3.9	-4.4	JB40310-10A	JB40310A	06/21/2013	remaining	N	Y	< 0.032	U	
Z30A	133-SI-Z30A	11.5	133-SI-Z30A-6.5-7.0	6.5 - 7.0 ft	5.0	4.5	JB96905-1	JB96905	06/11/2015	remaining	N	Y	7.15	J+	S2

Table 5-4
Naphthalene Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

ACO - Administrative Consent Order
bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
El. - elevation
FD - field duplicate sample type
ft - feet
GPS - global positioning system
JCO - Judicial Consent Order
LSRP - Licensed Site Remediation Professional
mg/kg - milligrams per kilogram
MGP - manufactured gas plant
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
NRDCSRS - Non-Residential Direct Contact Soil Remediation Standard
PDI - Pre-Design InvestigationPSEG - Public Service Electric and Gas Company
RDCSRS - Residential Direct Contact Soil Remediation Standard
SDG - sample delivery group
SRS - Soil Remediation Standard
SVOC - semi-volatile organic compound
TEE - terminal excavation elevation

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
J+ - The result was an estimated value with high bias; the associated numerical value was an approximate concentration of the analyte in the sample.
J- - The result was an estimated value with low bias; the associated numerical value was an approximate concentration of the analyte in the sample.
U - The analyte was not detected above the sample reporting limit shown.
UJ - The analyte was not detected above the sample reporting limit shown and the reporting limit was approximate.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Rows R through CC (extending west to east) and Grid Columns 48A through 21A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88.
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs. In some cases, the "Sample ID" in the table is a variant of the sample ID in the laboratory report and/or data validation report. In these cases, the "Lab ID" associates the sample results to the laboratory report and/or data validation report.
G7. "Depth Interval" is based on the "Location Elevation."
G8. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G9. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G10. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G11. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G12. "Date Collected" refers to the date the soil sample was collected.
G13. "Sample Status" of "remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location.
G14. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figures 5-4A, 5-4B, 5-4C, and 5-4D.
G15. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
G16. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
G17. "Result" refers to the analytical result which is reported in mg/kg.
G18. Bold text indicates that the result exceeds the RDCSRS. Bold and italicized text indicates that the result exceeds the NRDCSRS. Non-bold and non-italicized text indicates that the result does not exceed the most stringent SRS.
G19. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data. For unvalidated data, it refers to the qualifier assigned by the laboratory.
G20. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.

SPECIFIC NOTES:

S1. In Grid U39A, the depth interval included in the Sample ID 133-U39A-PB-N-8.1-8.6 does not correspond to the actual depth interval where the sample was collected. The depth interval in the sample ID was inadvertently switched with the depth interval for Sample ID 133-U39A-PB-S-10.3-10.8 (included in Table 5-1) when naming the samples during the field effort. The actual depth interval was updated following review of the GPS-measured pre-construction location elevation and GPS-measured sample start elevation and is provided in the "Depth Interval" column on this table.

Table 5-4
Naphthalene Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

S2. In Grids W36A, X26A, X28A, Y27A, and Z30A, the naphthalene concentration is greater than the RDCSRS or NRDCSRS. These exceedances are likely related to MGP impacts emanating from Site 114 into Site 133 East. Per the October 2015 *Interim Remedial Action Report for On-Site Soils – Area A and Area B* (AMEC), engineering controls (clean fill) and institutional controls via deed notice will be implemented to prevent exposure to soils with contaminant concentrations that remain at the Site in excess of direct contact criteria. Per the ACO and JCO, PPG and/or PSEG are jointly responsible for remediation of the MGP impacts emanating from Site 114.

S3. In Grids W38A and X36A, the sidewall samples at locations 133-V38A-SW-E1, 133-V38A-SW-E2, and 133-W36A-SW-E3 (samples 133-V38A-SW-E-6.9-7.4, 133-V38A-SW-E-6.9-7.4X, 133-V38A-SW-E-8.9-9.4, and 133-W36A-SW-E-7.4-7.9) were named with depth intervals based on the pre-remediation surface elevation of the former building slab. However, the samples are located outside the footprint of the former building slab. The sample location elevations and corresponding depth intervals of these sidewall samples have been modified based on the pre-remediation elevation of the nearest PDI location to each sample location outside the footprint of the former building slab. The sample names and measured sample start elevations have not been modified.

S4. In Grid X26A, sample 133-X26A-PB-15.0-15.5 (El. -1.7 to -2.2 ft NAVD88) was split and analyzed for naphthalene under two different chains of custody and lab SDGs as part of two different sampling programs. The sample was collected at the same location at the same time.

S5. In Grid Y24A, sample 133-Y24A-PB-14.0-14.5 (El. -2.4 to -2.9 ft NAVD88) was split and analyzed for naphthalene under two different chains of custody and lab SDGs as part of two different sampling programs. The sample was collected at the same location at the same time.

Table 5-5
Naphthalene Analytical Results in the Unsaturated Soil Zone Compared to IGW Soil Screening Levels
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

Analyte CAS RN Units DIGWSSL													NAPHTHALENE 91-20-3 mg/kg 25		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6, G7)	Depth Interval (ft bgs) (G8)	Sample Start Elevation (ft NAVD88) (G4, G7, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Result (G18, G19)	Qualifier (G20, G21)	Specific Notes
W32A	133-W31A-SW-S1	13.1	133-W31A-SW-S-5.9-6.4	5.9 - 6.4 ft	7.2	6.7	JC406-7A	JC406A	07/30/2015	remaining	N	Y	0.0180	J	
X31A	133-SI-X31A-PB	13.1	133-SI-X31A-PB-5.7-6.2	5.7 - 6.2 ft	7.4	6.9	JC6346-1R	JC6346	10/15/2015	remaining	N	Y	0.717	J-	
X32A	133-SI-X32A-PB2	13.1	133-SI-X32A-PB-4.3-4.8	4.3 - 4.8 ft	8.8	8.3	JC740-1R	JC740	08/04/2015	remaining	N	Y	0.293		
Z28A	133-P3C-Z28A	10.7	133-P3C-Z28A-3.0-3.5	3.0 - 3.5 ft	7.7	7.2	JB40310-2A	JB40310A	06/21/2013	remaining	N	Y	< 0.023	U	

Table 5-5
Naphthalene Analytical Results in the Unsaturated Soil Zone Compared to IGW Soil Screening Levels
Site 133 East, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:
bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
DIGWSSL - Default Impact to Groundwater Soil Screening Level
El. - elevation
FD - field duplicate sample type
ft - feet
IGW - Impact to Groundwater
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
SDG - sample delivery group
TEE - terminal excavation elevation

QUALIFIERS:
J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
J- - The result was an estimated value with low bias; the associated numerical value was an approximate concentration of the analyte in the sample.
U - The analyte was not detected above the sample reporting limit shown.

GENERAL NOTES:
G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Rows R through CC (extending west to east) and Grid Columns 48A through 21A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs. In some cases, the "Sample ID" in the table is a variant of the sample ID in the laboratory report and/or data validation report. In these cases, the "Lab ID" associates the sample results to the laboratory report and/or data validation report.
G7. This table compares sample results from the unsaturated zone to the DIGWSSLs. The groundwater elevation (above which is the unsaturated zone) on this Site was estimated as the 50th percentile groundwater elevation from 13 monitoring wells located on or adjacent to Site 133 East and Site 135 gauged between February 2007 and December 2016. The monitoring well locations and data are included in Attachment 1. The estimated groundwater elevation for this Site is El. 6.2 ft NAVD88.
G8. "Depth Interval" is based on the "Location Elevation."
G9. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G10. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G11. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G12. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G13. "Date Collected" refers to the date the soil sample was collected.
G14. "Sample Status" of "remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location.
G15. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figures 5-5A, 5-5B, 5-5C, and 5-5D.
G16. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
G17. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
G18. "Result" refers to the analytical result which is reported in mg/kg.
G19. Bold text indicates that the result exceeds the DIGWSSL. Non-bold text indicates that the result does not exceed the DIGWSSL.
G20. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data. For unvalidated data, it refers to the qualifier assigned by the laboratory.
G21. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.

SPECIFIC NOTE:
None

Appendix D-5

Site 135 North Tables

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criteria
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes (G23)
BB24A	135-BB24A-PB	11.8	135-BB24A-PB-16.2-16.7	16.2 - 16.7 ft	-4.4	-4.9	JC18798-3	JC18798	04/21/2016	remaining	N	Y		< 0.51	RA	S1
BB24A	135-BB24A-PB	11.8	135-BB24A-PB-16.2-16.7X	16.2 - 16.7 ft	-4.4	-4.9	JC18798-4	JC18798	04/21/2016	remaining	FD	Y		< 0.50	RA	S1
BB25A	135-BB25A-PB	11.5	135-BB25A-PB-14.1-14.6	14.1 - 14.6 ft	-2.6	-3.1	JC21493-2	JC21493	06/03/2016	remaining	N	Y		0.41	J	S2
CC22A	135-CC23A-SW-N3	11.0	135-CC23A-SW-N-11.1-11.6	11.1 - 11.6 ft	-0.1	-0.6	JC17367-3R	JC17367R	03/31/2016	removed	N	Y		< 0.16	UJ	S3
CC22A	135-CC23A-SW-N4	11.0	135-CC23A-SW-N-13.1-13.6	13.1 - 13.6 ft	-2.1	-2.6	JC17367-2R	JC17367R	03/31/2016	remaining	N	Y		2.2	J	
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-10.0-10.5	10.0 - 10.5 ft	1.2	0.7	JB37831-12R	JB37831R	05/23/2013	removed	N	Y		3.9	RA	S3
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-12.0-12.5	12.0 - 12.5 ft	-0.8	-1.3	JB37831-13R	JB37831R	05/23/2013	removed	N	Y		0.37	RA	S3
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-12.5-13.0	12.5 - 13.0 ft	-1.3	-1.8	JB37831-14R	JB37831R	05/23/2013	remaining	N	Y		1.3	RA	
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-13.0-13.5	13.0 - 13.5 ft	-1.8	-2.3	JB37831-15R	JB37831R	05/23/2013	remaining	N	Y		3.5	RA	
CC23A	135-B1	10.5	PPG-135-B1G_17.0-17.5_797407	17.0 - 17.5 ft	-6.5	-7.0	797407	B500	01/04/2007	remaining	N	Y		< 3.59	UJ	
CC23A	135-B1	10.5	PPG-135-B1H_20.6-21.1_797408	20.6 - 21.1 ft	-10.1	-10.6	797408	B500	01/04/2007	remaining	N	Y		< 2.53	UJ	
CC23A	135-CC23A-PB	11.0	135-CC23A-PB-14.0-14.5	14.0 - 14.5 ft	-3.0	-3.5	JC17465-2R	JC17465R	04/01/2016	remaining	N	Y		1.4	J	
CC23A	135-CC24A-SW-N	14.0	135-CC24A-SW-N-18.4-18.9	18.4 - 18.9 ft	-4.4	-4.9	JC18798-2	JC18798	04/21/2016	remaining	N	Y		0.56	RA	
CC24A	135-CC24A-E-PB	14.0	135-CC24A-E-PB-20.4-20.9	20.4 - 20.9 ft	-6.4	-6.9	JC18445-2	JC18445	04/15/2016	remaining	N	Y		1.0	RA	
CC24A	135-CC24A-SW-S5	14.0	135-CC24A-SW-S-16.4-16.9	16.4 - 16.9 ft	-2.4	-2.9	JC20248-8R	JC20248R	05/13/2016	removed	N	Y		1.3	J	S4
CC24A	135-CC24A-SW-S6	14.0	135-CC24A-SW-S-18.4-18.9	18.4 - 18.9 ft	-4.4	-4.9	JC20248-7R	JC20248R	05/13/2016	remaining	N	Y		1.1	J	
CC25A	135-CC24A-SW-S3	14.0	135-CC24A-SW-S-12.4-12.9	12.4 - 12.9 ft	1.6	1.1	JC20248-10R	JC20248R	05/13/2016	removed	N	Y		0.79	J	S5
CC25A	135-CC24A-SW-SR	14.0	135-CC24A-SW-S-14.4-14.9R	14.4 - 14.9 ft	-0.4	-0.9	JC20732-2R	JC20732R	05/20/2016	removed	N	Y		3.4	J	S5
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-13.0-13.5	13.0 - 13.5 ft	1.0	0.5	JB48162-2R	JB48162R	09/21/2013	removed	N	Y		0.55	RA	S5
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-15.0-15.5	15.0 - 15.5 ft	-1.0	-1.5	JB48162-3R	JB48162R	09/21/2013	removed	N	Y		9.4	RA	S5
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-17.0-17.5	17.0 - 17.5 ft	-3.0	-3.5	JB48162-4R	JB48162R	09/21/2013	remaining	N	Y		2.7	RA	S5
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-19.0-19.5	19.0 - 19.5 ft	-5.0	-5.5	JB48162-5R	JB48162R	09/21/2013	remaining	N	Y		0.37	RA	S5
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-20.0-20.5	20.0 - 20.5 ft	-6.0	-6.5	JB48162-6R	JB48162R	09/21/2013	remaining	N	Y	FILL (FILL)	22.4	RA	S6
CC25A	EF-78	13.4	EF-B78-15.0	15.0 - 15.5 ft	-1.6	-2.1	460-29902-6	460299021	08/12/2011	removed	N	Y		4.5	J	S5
CC25A	EF-78	13.4	EF-B78-16.0	16.0 - 16.5 ft	-2.6	-3.1	460-29902-7	460299021	08/12/2011	removed	N	Y		9.2	J	S5
CC25A	EF-78	13.4	EF-B78-20.0	20.0 - 20.5 ft	-6.6	-7.1	460-29902-8	460299021	08/12/2011	remaining	N	Y		1.4	J	
CC25A	EF-78	13.4	EF-B78-22.0	22.0 - 22.5 ft	-8.6	-9.1	460-29902-9	460299021	08/12/2011	remaining	N	Y		8.2	J	
CC25A	EF-78	13.4	EF-B78-22.0X	22.0 - 22.5 ft	-8.6	-9.1	460-29902-10	460299021	08/12/2011	remaining	FD	Y		< 0.99	UJ	
DD22A	135-P3C-DD22A	10.6	135-P3C-DD22A-11.0-11.5	11.0 - 11.5 ft	-0.4	-0.9	JB61030-6	JB61030	03/04/2014	removed	N	Y		5.0		S7
DD22A	135-P3C-DD22A	10.6	135-P3C-DD22A-13.0-13.5	13.0 - 13.5 ft	-2.4	-2.9	JB61030-7	JB61030	03/04/2014	remaining	N	Y		0.68	J	
DD22A	135-P3C-DD22A	10.6	135-P3C-DD22A-14.3-14.8	14.3 - 14.8 ft	-3.7	-4.2	JB61030-8	JB61030	03/04/2014	remaining	N	Y		0.82	J	
DD22A	135-P3C-DD22A	10.6	135-P3C-DD22A-14.8-15.3	14.8 - 15.3 ft	-4.2	-4.7	JB61030-9	JB61030	03/04/2014	remaining	N	Y		< 0.085	U	
DD23A	135-DD24A-SW-N	14.0	135-DD24A-SW-N-16.6-17.1	16.6 - 17.1 ft	-2.6	-3.1	JC18798-5R	JC18798R	04/21/2016	remaining	N	Y		17.2	RA	
DD23A	135-P3C-DD23A	14.0	135-P3C-DD23A-15.0-15.5	15.0 - 15.5 ft	-1.0	-1.5	JB48161-8	JB48161	09/21/2013	removed	N	Y		0.38	J	S8
DD23A	135-P3C-DD23A	14.0	135-P3C-DD23A-17.0-17.5	17.0 - 17.5 ft	-3.0	-3.5	JB48161-9	JB48161	09/21/2013	remaining	N	Y		< 0.097	U	
DD23A	135-P3C-DD23A	14.0	135-P3C-DD23A-18.0-18.5	18.0 - 18.5 ft	-4.0	-4.5	JB48161-10	JB48161	09/21/2013	remaining	N	Y		0.40	J	
DD23A	135-P3C-DD23A	14.0	135-P3C-DD23A-18.5-19.0	18.5 - 19.0 ft	-4.5	-5.0	JB48161-11	JB48161	09/21/2013	remaining	N	Y		0.51	J	
DD23A	EF-16	10.9	EF-B16-15.0	15.0 - 15.5 ft	-4.1	-4.6	460-25416-17	460254161	04/15/2011	remaining	N	Y		< 0.62	U	
DD23A	EF-16	10.9	EF-B16-21.0	21.0 - 21.5 ft	-10.1	-10.6	460-25416-19	460254161	04/15/2011	remaining	N	Y		< 0.60	U	
DD24A	135-DD24A-PB2	14.0	135-DD24A-PB-18.6-19.1	18.6 - 19.1 ft	-4.6	-5.1	JC18359-2	JC18359	04/14/2016	remaining	N	Y		1.3	RA	
DD24A	135-DD24A-SW-S2	14.0	135-DD24A-SW-S-14.6-15.1	14.6 - 15.1 ft	-0.6	-1.1	JC19694-5	JC19694	05/05/2016	remaining	N	Y		0.60	RA	
DD24A	135-DD24A-SW-S3	14.0	135-DD24A-SW-S-16.6-17.1	16.6 - 17.1 ft	-2.6	-3.1	JC19694-4	JC19694	05/05/2016	remaining	N	Y		0.40	RA	
DD24A	135-P3C-DD25A	14.0	135-P3C-DD25A-16.0-16.5	16.0 - 16.5 ft	-2.0	-2.5	JB45700-7	JB45700	08/24/2013	remaining	N	Y		0.33	J	
DD24A	135-P3C-DD25A	14.0	135-P3C-DD25A-18.0-18.5	18.0 - 18.5 ft	-4.0	-4.5	JB45700-8R	JB45700R	08/24/2013	remaining	N	Y		0.14	J	
DD24A	135-P3C-DD25A	14.0	135-P3C-DD25A-18.5-19.0	18.5 - 19.0 ft	-4.5	-5.0	JB45700-9R	JB45700R	08/24/2013	remaining	N	Y		< 0.086	UJ	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criteria
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes (G23)
DD24A	135-P3C-DD25A	14.0	135-P3C-DD25A-19.0-19.5	19.0 - 19.5 ft	-5.0	-5.5	JB45700-10	JB45700	08/24/2013	remaining	N	Y		1.6	J	
DD25A	135-DD24A-SW-S1	14.0	135-DD24A-SW-S-12.6-13.1	12.6 - 13.1 ft	1.4	0.9	JC19694-6	JC19694	05/05/2016	remaining	N	Y		0.81	RA	
DD25A	135-DD25A-PB	14.1	135-DD25A-PB-11.7-12.2	11.7 - 12.2 ft	2.4	1.9	JC19694-3	JC19694	05/05/2016	removed	N	Y		0.90	RA	S9
DD25A	135-P3C-DD25AR	14.1	135-P3C-DD25AR-14.0-14.5	14.0 - 14.5 ft	0.1	-0.4	JB62646-39	JB62646	03/21/2014	remaining	N	Y		3.7	RA	
DD25A	135-P3C-DD25AR	14.1	135-P3C-DD25AR-15.0-15.5	15.0 - 15.0 ft	-0.9	-0.9	JB62646-40	JB62646	03/21/2014	remaining	N	Y		0.37	RA	
DD25A	135-P3C-DD25AR	14.1	135-P3C-DD25AR-15.5-16.0	15.5 - 16.0 ft	-1.4	-1.9	JB62646-41T	JB62646T	03/21/2014	remaining	N	Y		2.7	RA	
DD26A	135-DD26A	13.8	135-DD26A-11.0-11.5	11.0 - 11.5 ft	2.8	2.3	JC3983-7	JC3983	09/16/2015	removed	N	Y		< 0.25	UJ	S10
DD26A	135-DD26A	13.8	135-DD26A-13.0-13.5	13.0 - 13.5 ft	0.8	0.3	JC3983-8	JC3983	09/16/2015	removed	N	Y		< 0.31	UJ	S10
DD26A	135-DD26A	13.8	135-DD26A-15.0-15.5	15.0 - 15.5 ft	-1.2	-1.7	JC3983-9	JC3983	09/16/2015	remaining	N	Y		< 0.32	UJ	S10
DD26A	135-DD26A	13.8	135-DD26A-16.3-16.8	16.3 - 16.8 ft	-2.5	-3.0	JC3983-10	JC3983	09/16/2015	remaining	N	Y		< 0.24	UJ	S10
DD26A	135-DD26A	13.8	135-DD26A-16.8-17.3	16.8 - 17.3 ft	-3.0	-3.5	JC3983-11	JC3983	09/16/2015	remaining	N	Y		< 0.61	UJ	S10
EE22A	135-B19	9.9	135-B19A (1.3-1.8)J49116-8	1.3 - 1.8 ft	8.6	8.1	J49116-8	J49116	12/13/2006	remaining	N	Y		< 1.2	UJ	S11
EE22A	135-B19	9.9	135-B19B (3.3-3.8)J49116-9	2.1 - 2.6 ft	7.8	7.3	J49116-9	J49116	12/13/2006	remaining	N	Y		< 1.3	UJ	S11
EE22A	135-B19	9.9	135 B19C(3.3-3.8)J49116-17	3.3 - 3.8 ft	6.6	6.1	J49116-17	J49116	12/13/2006	remaining	N	Y		< 1.3	UJ	S11
EE22A	135-B19	9.9	PPG-135-B19D_5.1-5.6_796867	5.1 - 5.6 ft	4.8	4.3	796867	B400	01/02/2007	remaining	N	Y		< 3.48	UJ	S11
EE22A	135-B19	9.9	PPG-135-B19E_9.4-9.9_796868	9.4 - 9.9 ft	0.5	0.0	796868	B400	01/02/2007	remaining	N	Y		< 3.18	UJ	S11
EE22A	135-B19	9.9	PPG-135-B19F_13.2-13.7_796869	13.2 - 13.7 ft	-3.3	-3.8	796869	B400	01/02/2007	remaining	N	Y		< 3.38	UJ	S11
EE22A	135-B19	9.9	PPG-135-B19G_17.2-18.2_796870	17.2 - 18.2 ft	-7.3	-8.3	796870	B400	01/02/2007	remaining	N	Y		< 3.82	UJ	S11
EE22A	135-B19	9.9	PPG-135-B19GD_17.2-18.2_796871	17.2 - 18.2 ft	-7.3	-8.3	796871	B400	01/02/2007	remaining	FD	Y		< 3.85	UJ	S11
EE22A	135-B19	9.9	PPG-135-B19H_20.2-20.7_796872	20.2 - 20.7 ft	-10.3	-10.8	796872	B400	01/02/2007	remaining	N	Y		< 2.53	UJ	S11
EE22A	CAR-PDI-EE22A	9.8	CAR-PDI-EE22A-7.0-7.5	7.0 - 7.5 ft	2.8	2.3	JC21933-10	JC21933	06/10/2016	remaining	N	Y		< 0.41	UJ	S11
EE22A	CAR-PDI-EE22A	9.8	CAR-PDI-EE22A-11.0-11.5	11.0 - 11.5 ft	-1.2	-1.7	JC21933-8R	JC21933R	06/10/2016	remaining	N	Y		1.0	J	S11
EE22A	CAR-PDI-EE22A	9.8	CAR-PDI-EE22A-12.7-13.2	12.7 - 13.2 ft	-2.9	-3.4	JC21933-9	JC21933	06/10/2016	remaining	N	Y		< 0.32	UJ	S11
EE23A	135-DD23A-SW-E1	9.5	135-DD23A-SW-E-8.1-8.6	3.6 - 4.1 ft	5.9	5.4	JC16958-8	JC16958	03/24/2016	remaining	N	Y		0.51	RA	S12
EE23A	135-DD23A-SW-E2	9.5	135-DD23A-SW-E-10.1-10.6	5.6 - 6.1 ft	3.9	3.4	JC16958-7R	JC16958R	03/24/2016	removed	N	Y		< 0.15	RA	S12, S13
EE23A	135-DD23A-SW-E3	9.5	135-DD23A-SW-E-12.1-12.6	7.6 - 8.1 ft	1.9	1.4	JC16958-6R	JC16958R	03/24/2016	removed	N	Y		1.7	RA	S12, S13
EE23A	135-DD23A-SW-E4	9.5	135-DD23A-SW-E-14.1-14.6	9.6 - 10.1 ft	-0.1	-0.6	JC16958-5R	JC16958R	03/24/2016	removed	N	Y		4.9	RA	S12, S13
EE23A	135-P3C-EE23A	9.5	135-P3C-EE23A-1.0-1.5	1.0 - 1.5 ft	8.5	8.0	JB61030-11	JB61030	03/04/2014	removed	N	Y		0.38	J	S11, S14
EE23A	135-P3C-EE23A	9.5	135-P3C-EE23A-3.0-3.5	3.0 - 3.5 ft	6.5	6.0	JB61030-12	JB61030	03/04/2014	removed	N	Y		< 0.088	U	S11, S13, S14
EE23A	135-P3C-EE23A	9.5	135-P3C-EE23A-7.0-7.5	7.0 - 7.5 ft	2.5	2.0	JB61030-15R	JB61030R	03/04/2014	remaining	N	Y		2.0	J	S11, S14
EE23A	135-P3C-EE23A	9.5	135-P3C-EE23A-9.0-9.5	9.0 - 9.5 ft	0.5	0.0	JB61030-16	JB61030	03/04/2014	remaining	N	Y		0.75	J	S11, S14
EE23A	135-P3C-EE23A	9.5	135-P3C-EE23A-11.0-11.5	11.0 - 11.5 ft	-1.5	-2.0	JB61030-17R	JB61030R	03/04/2014	remaining	N	Y		14.4	J	S11, S14
EE23A	135-P3C-EE23A	9.5	135-P3C-EE23A-11.5-12.0	11.5 - 12.0 ft	-2.0	-2.5	JB61030-18	JB61030	03/04/2014	remaining	N	Y		0.20	J	S11, S14
EE23A	EF-50	9.3	EF-B50-1.5	1.5 - 2.0 ft	7.8	7.3	460-26881-7	460268811	5/25/2011	removed	N	Y		< 0.63	UJ	S11, S14
EE23A	EF-50	9.3	EF-B50-11.0	11.0 - 11.5 ft	-1.7	-2.2	460-26881-3	460268811	05/25/2011	remaining	N	Y		< 0.67	UJ	S11, S14
EE24A	135-DD24A-SW-E1	9.7	135-DD24A-SW-E-10.1-10.6	5.8 - 6.3 ft	3.9	3.4	JC16740-7R	JC16740R	03/22/2016	remaining	N	Y		2.4	J	S15
EE24A	135-DD24A-SW-E2	9.7	135-DD24A-SW-E-12.1-12.6	7.8 - 8.3 ft	1.9	1.4	JC16740-6R	JC16740R	03/22/2016	remaining	N	Y		8.2	J	S15
EE24A	135-DD24A-SW-E3	9.7	135-DD24A-SW-E-14.1-14.6	9.8 - 10.3 ft	-0.1	-0.6	JC16740-5R	JC16740R	03/22/2016	remaining	N	Y		0.68	J	S15
EE24A	135-DD24A-SW-E4	9.7	135-DD24A-SW-E-8.6-9.1	4.3 - 4.8 ft	5.4	4.9	JC19592-3	JC19592	05/04/2016	remaining	N	Y		1.4	J	S15
EE24A	135-DD24A-SW-E5	9.7	135-DD24A-SW-E-16.6-17.1	12.3 - 12.8 ft	-2.6	-3.1	JC19592-2R	JC19592R	05/04/2016	remaining	N	Y		0.92	J	S15
EE24A	135-EE24A-PB	9.7	135-EE24A-PB-3.6-4.1	3.6 - 4.1 ft	6.1	5.6	JC16740-4R	JC16740R	03/22/2016	remaining	N	Y		4.6	J	
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-1.0-1.5	1.0 - 1.5 ft	8.4	7.9	JB61030-19R	JB61030R	03/04/2014	removed	N	Y		7.5	J	S16
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-3.0-3.5	3.0 - 3.5 ft	6.4	5.9	JB61030-20	JB61030	03/04/2014	remaining	N	Y		0.38	J	S16
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-5.0-5.5	5.0 - 5.5 ft	4.4	3.9	JB61030-21	JB61030	03/04/2014	remaining	N	Y		2.1	J	S16
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JB61030-22	JB61030	03/04/2014	remaining	N	Y		0.50	J	S16

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criteria
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20	
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes (G23)
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-9.0-9.5	9.0 - 9.5 ft	0.4	-0.1	JB61030-23R	JB61030R	03/04/2014	remaining	N	Y		4.5	J	S16
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-11.0-11.5	11.0 - 11.5 ft	-1.6	-2.1	JB61030-24R	JB61030R	03/04/2014	remaining	N	Y		0.11	J	S16
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-13.0-13.5	13.0 - 13.5 ft	-3.6	-4.1	JB61030-25	JB61030	03/04/2014	remaining	N	Y		1.1	J	S16
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-14.0-14.5	14.0 - 14.5 ft	-4.6	-5.1	JB61030-26	JB61030	03/04/2014	remaining	N	Y		0.48	J	S16
EE24A	135-P3C-EE24AR	9.4	135-P3C-EE24AR-14.5-15.0	14.5 - 15.0 ft	-5.1	-5.6	JB61030-27	JB61030	03/04/2014	remaining	N	Y		0.22	J	S16
EE25A	135-EE25A-PB	13.6	135-EE25A-PB-9.3-9.8R	9.3 - 9.8 ft	4.3	3.8	JC20353-3	JC20353	05/16/2016	remaining	N	Y		0.32	J	
EE25A	135-EE25A-SW-E	13.6	135-EE25A-SW-E-6.7-7.2	6.7 - 7.2 ft	6.9	6.4	JC20353-2R	JC20353R	05/16/2016	removed	N	Y		2.0	J	S17, S18
EE25A	135-P3C-EE24A	13.6	135-P3C-EE24A-5.0-5.5	5.0 - 5.5 ft	8.6	8.1	JB48162-18R	JB48162R	09/21/2013	removed	N	Y		9.7	RA	S17
EE25A	135-P3C-EE24A	13.6	135-P3C-EE24A-7.0-7.5	7.0 - 7.5 ft	6.6	6.1	JB48162-19	JB48162	09/21/2013	removed	N	Y		0.20	RA	S17
EE25A	135-P3C-EE24A	13.6	135-P3C-EE24A-9.0-9.5	9.0 - 9.5 ft	4.6	4.1	JB48162-20	JB48162	09/21/2013	removed	N	Y		0.43	RA	S17
EE25A	135-P3C-EE24A	13.6	135-P3C-EE24A-11.0-11.5	11.0 - 11.5 ft	2.6	2.1	JB48162-11	JB48162	09/21/2013	remaining	N	Y		0.28	RA	
EE25A	135-P3C-EE24A	13.6	135-P3C-EE24A-13.0-13.5	13.0 - 13.5 ft	0.6	0.1	JB48162-12	JB48162	09/21/2013	remaining	N	Y		0.14	RA	
EE25A	135-P3C-EE24A	13.6	135-P3C-EE24A-15.0-15.5	15.0 - 15.5 ft	-1.4	-1.9	JB48162-13	JB48162	09/21/2013	remaining	N	Y		0.65	RA	
EE25A	135-P3C-EE24A	13.6	135-P3C-EE24A-16.8-17.3	16.8 - 17.3 ft	-3.2	-3.7	JB48162-14	JB48162	09/21/2013	remaining	N	Y		0.56	RA	
EE25A	135-P3C-EE24A	13.6	135-P3C-EE24A-17.3-17.8	17.3 - 17.8 ft	-3.7	-4.2	JB48162-15	JB48162	09/21/2013	remaining	N	Y		1.8	RA	
EE26A	135-EE26A	13.8	135-EE26A-1.5-2.0	1.5 - 2.0 ft	12.3	11.8	JC3983-12R	JC3983R	09/16/2015	removed	N	Y		2.0	J	S19
EE26A	135-EE26A	13.8	135-EE26A-3.0-3.5	3.0 - 3.5 ft	10.8	10.3	JC3983-13R	JC3983R	09/16/2015	removed	N	Y		11.3	J	S19
EE26A	135-EE26A	13.8	135-EE26A-5.0-5.5	5.0 - 5.5 ft	8.8	8.3	JC3983-14R	JC3983R	09/16/2015	removed	N	Y		2.4	J	S19
EE26A	135-EE26A	13.8	135-EE26A-7.0-7.5	7.0 - 7.5 ft	6.8	6.3	JC3983-15	JC3983	09/16/2015	removed	N	Y		1.2	J	S19
EE26A	135-EE26A	13.8	135-EE26A-9.0-9.5	9.0 - 9.5 ft	4.8	4.3	JC3983-16	JC3983	09/16/2015	removed	N	Y		0.28	J	S19
EE26A	135-EE26A	13.8	135-EE26A-11.0-11.5	11.0 - 11.5 ft	2.8	2.3	JC3983-17R	JC3983R	09/16/2015	removed	N	Y		< 0.13	UJ	S19
EE26A	135-EE26A	13.8	135-EE26A-13.0-13.5	13.0 - 13.5 ft	0.8	0.3	JC3983-22	JC3983	09/16/2015	remaining	N	Y		0.37	J	S19
EE26A	135-EE26A	13.8	135-EE26A-15.0-15.5	15.0 - 15.5 ft	-1.2	-1.7	JC3983-20	JC3983	09/16/2015	remaining	N	Y		< 0.30	UJ	S19
EE26A	135-EE26A	13.8	135-EE26A-15.9-16.4	15.9 - 16.4 ft	-2.1	-2.6	JC3983-21R	JC3983R	09/16/2015	remaining	N	Y		0.30	J	S19
EE26A	135-EE26A	13.8	135-EE26A-15.9-16.4X	15.9 - 16.4 ft	-2.1	-2.6	JC3983-19R	JC3983R	09/16/2015	remaining	FD	Y		< 0.14	UJ	S19
EE26A	135-EE26A	13.8	135-EE26A-16.4-16.9	16.4 - 16.9 ft	-2.6	-3.1	JC3983-18	JC3983	09/16/2015	remaining	N	Y		1.9	J	S19
FF23A	135-FF23A	8.7	135-FF23A-1.0-1.5	1.0 - 1.5 ft	7.7	7.2	JC3801-1	JC3801	09/14/2015	remaining	N	Y		2.4	RA	S14, S20
FF23A	135-FF23A	8.7	135-FF23A-3.0-3.5	3.0 - 3.5 ft	5.7	5.2	JC3801-2	JC3801	09/14/2015	remaining	N	Y		0.76	RA	S14, S20
FF23A	135-FF23A	8.7	135-FF23A-5.0-5.5	5.0 - 5.5 ft	3.7	3.2	JC3801-3	JC3801	09/14/2015	remaining	N	Y		0.32	RA	S14, S20
FF23A	135-FF23A	8.7	135-FF23A-5.0-5.5X	5.0 - 5.5 ft	3.7	3.2	JC3801-4	JC3801	09/14/2015	remaining	FD	Y		< 0.29	RA	S14, S20
FF23A	135-FF23A	8.7	135-FF23A-7.0-7.5	7.0 - 7.5 ft	1.7	1.2	JC3801-5R	JC3801R	09/14/2015	remaining	N	Y		3.0	RA	S14, S20
FF23A	135-FF23A	8.7	135-FF23A-9.0-9.5	9.0 - 9.5 ft	-0.3	-0.8	JC3801-6R	JC3801R	09/14/2015	remaining	N	Y		0.38	RA	S14, S20
FF23A	135-FF23A	8.7	135-FF23A-11.0-11.5	11.0 - 11.5 ft	-2.3	-2.8	JC3801-7R	JC3801R	09/14/2015	remaining	N	Y		0.51	RA	S14, S20
FF23A	135-FF23A	8.7	135-FF23A-11.5-12.0	11.5 - 12.0 ft	-2.8	-3.3	JC3801-8R	JC3801R	09/14/2015	remaining	N	Y		0.37	RA	S14, S20
FF23A	135-FF23A	8.7	135-FF23A-12.0-12.5	12.0 - 12.5 ft	-3.3	-3.8	JC3801-9	JC3801	09/14/2015	remaining	N	Y		0.81	RA	S14, S20
FF24A	135-FF24A	9.1	135-FF24A-1.2-1.7	1.2 - 1.7 ft	7.9	7.4	JC3801-14	JC3801	09/14/2015	remaining	N	Y		2.3	RA	S16, S20
FF24A	135-FF24A	9.1	135-FF24A-3.0-3.5	3.0 - 3.5 ft	6.1	5.6	JC3801-15R	JC3801R	09/14/2015	remaining	N	Y		< 0.14	RA	S16, S20
FF24A	135-FF24A	9.1	135-FF24A-5.0-5.5	5.0 - 5.5 ft	4.1	3.6	JC3801-11	JC3801	09/14/2015	remaining	N	Y		< 0.24	RA	S16, S20
FF24A	135-FF24A	9.1	135-FF24A-7.0-7.5	7.0 - 7.5 ft	2.1	1.6	JC3801-12R	JC3801R	09/14/2015	remaining	N	Y		0.55	RA	S16, S20
FF24A	135-FF24A	9.1	135-FF24A-9.0-9.5	9.0 - 9.5 ft	0.1	-0.4	JC3801-13	JC3801	09/14/2015	remaining	N	Y		0.84	RA	S16, S20
FF24A	135-FF24A	9.1	135-FF24A-11.0-11.5	11.0 - 11.5 ft	-1.9	-2.4	JC3801-16R	JC3801R	09/14/2015	remaining	N	Y		0.47	RA	S16, S20
FF24A	135-FF24A	9.1	135-FF24A-12.8-13.3	12.8 - 13.3 ft	-3.7	-4.2	JC3801-18R	JC3801R	09/14/2015	remaining	N	Y		0.57	RA	S16, S20
FF24A	135-FF24A	9.1	135-FF24A-13.3-13.8	13.3 - 13.8 ft	-4.2	-4.7	JC3801-17	JC3801	09/14/2015	remaining	N	Y		< 0.40	RA	S16, S20
FF25A	135-B18	9.0	135 B18A(0.6-1.1)J49116-10	0.6 - 1.1 ft	8.4	7.9	J49116-10	J49116	12/13/2006	remaining	N	Y		< 1.1	UJ	S18, S20
FF25A	135-B18	9.0	135 B18B(2.8-3.3)J49116-11	2.8 - 3.3 ft	6.2	5.7	J49116-11	J49116	12/13/2006	remaining	N	Y		< 1.3	UJ	S18, S20

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criteria
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

Analyte CAS RN Units CrSCC														CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes (G23)
FF25A	135-B18	9.0	135 B18C(4.1-4.6)J49116-12	4.1 - 4.6 ft	4.9	4.4	J49116-12	J49116	12/13/2006	remaining	N	Y		< 1.3	UJ	S18, S20
FF25A	135-B18	9.0	PPG-135-B18D_ 8.0-8.5	8.0 - 8.5 ft	1.0	0.5	795539	B200	12/21/2006	remaining	N	Y		< 2.32	UJ	S18, S20
FF25A	135-B18	9.0	PPG-135-B18E_ 12.0-13.0	12.0 - 13.0 ft	-3.0	-4.0	795540	B200	12/21/2006	remaining	N	Y		< 2.28	UJ	S18, S20
FF25A	135-B18	9.0	PPG-135-B18F_ 13.2-13.7	13.2 - 13.7 ft	-4.2	-4.7	795541	B200	12/21/2006	remaining	N	Y		< 6.64	UJ	S18, S20
FF25A	135-B18	9.0	PPG-135-B18G_ 16.2-16.7	16.2 - 16.7 ft	-7.2	-7.7	795543	B200	12/21/2006	remaining	N	Y		< 5.68	UJ	S18, S20
FF25A	135-B18	9.0	PPG-135-B18H_ 17.5-18.0	17.5 - 18.0 ft	-8.5	-9.0	795544	B200	12/21/2006	remaining	N	Y		< 2.47	UJ	S18, S20

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criteria
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
Chromium Policy - Memorandum from NJDEP Commissioner Lisa P. Jackson to Irene Kropp, Subject: Chromium Moratorium (Chromium Policy), dated February 8, 2007
Cr - chromium
Cr⁺⁶ - hexavalent chromium
CrSCC - Chromium Soil Cleanup Criteria
El. - elevation
FD - field duplicate sample type
ft - feet
Method to Determine Compliance - Letter from Mr. Thomas Cozzi to W. Michael McCabe, Subject: Re: Updated Method to Determine Compliance with the Department's Chromium Policy, Garfield Avenue – Sites 114, 132, 133, 135, 137, and 143, Jersey City, NJ. August 13, 2013
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
NJDEP - New Jersey Department of Environmental Protection
PDI - Pre-Design Investigation
SDG - sample delivery group
TEE - terminal excavation elevation
USCS - Unified Soil Classification System

MATRICIES:

FILL - fill
MM - meadow mat
UND - undisturbed native deposit
UNDno - non-organic undisturbed native deposit
UNDorg - organic undisturbed native deposit

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
RA - The result was rejected due to deficiencies but is considered usable for decision making-purposes.
U - The analyte was not detected above the sample reporting limit shown.
UJ - The analyte was not detected above the sample reporting limit shown and the reporting limit was approximate.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Row BB through FF (extending west to east) and Grid Column 22A through 26A (extending from north to south).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88.
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs.
G7. "Depth Interval" is based on the "Location Elevation."
G8. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G9. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the clean confirmation pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G10. In some grids, the clean confirmation sample was collected prior to excavation and, therefore, a pit bottom sample was not collected. As a result, the clean confirmation sample elevation may vary from the as-built TEE. In addition, sometimes the clean confirmation sample was removed during excavation.
G11. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G12. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G13. "Date Collected" refers to the date the soil sample was collected.
G14. "Status" indicates whether a sample is remaining or removed:
- "Remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location; and
- "Removed" indicates the sample was removed during excavation.
G15. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figure 5-1.
G16. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criteria
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

- G17. “Y” indicates that a sample underwent data validation and “N” indicates that data validation was not conducted.
- G18. For samples with Cr⁺⁶ CrSCC exceedances, the USCS Classification is provided. Where the sample was collected above 20 ft bgs, the matrix (e.g., MM, UND, UNDno, UNDorg, or FILL) is also specified.
- G19. “Result” refers to the analytical result which is reported in mg/kg.
- G20. Bold values indicate a result that exceeds the CrSCC. Non-bold text indicates that the result does not exceed the CrSCC.
- G21. “Qualifier” refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data.
- G22. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.
- G23. In some cases, sloping between grids was required to safely conduct excavation activities due to the variation in excavation depths in adjacent grids.

SPECIFIC NOTES:

- S1. In Grid BB24A, samples from a location (135-BB24A-PB) in Site 133 East were used in the evaluation of compliance for the portion of the grid located within Site 135 North.
- S2. In Grid BB25A, a sample from a location (135-BB25A-PB) in Site 135 South was used in the evaluation of compliance for the portion of the grid located within Site 135 North.
- S3. Grid CC22A was excavated to facilitate sloping into Grids CC23A and DD22A. The removed sidewall sample at location 135-CC23A-SW-N3 (135-CC23A-SW-N-11.1-11.6, El. -0.1 to -0.6 ft NAVD88) was collected at the same elevation as the shallowest remaining soil in the grid (approximately El. -0.4 ft NAVD88) and serves as the confirmation pit bottom sample at the shallowest elevation remaining in the grid. This confirmation sample (135-CC23A-SW-N-11.1-11.6) and the next closest PDI sample at location 135-P3C-CC22A (135-P3C-CC22A-12.0-12.5, El. -0.8 to -1.3 ft NAVD88) were both removed due to the sloping to adjacent grids.
- S4. The southwest side of Grid CC24A was excavated deeper than required for Cr⁺⁶ remediation to remove a concrete foundation. The Cr⁺⁶ confirmation sidewall sample at location 135-CC24A-SW-S5 (135-CC24A-SW-S-16.4-16.9, El. -2.4 ft to -2.9 ft NAVD88) was removed during the excavation of the foundation.
- S5. A portion of Grid CC25A was excavated deeper than required for Cr⁺⁶ remediation to remove a concrete foundation resulting in sloping from west to east within the grid from approximately El. 1.4 to -4.7 ft NAVD88. The removed sidewall sample at location 135-CC24A-SW-S3 (135-CC24A-SW-S-12.4-12.9, El. 1.6 to 1.1 ft NAVD88) was collected at the same elevation as the shallowest remaining soil in the grid (El. 1.4 ft NAVD88); therefore, this sample serves as the confirmation pit bottom sample for the shallowest elevation. This confirmation sample (135-CC24A-SW-S-12.4-12.9) and the confirmation sidewall sample at location 135-CC24A-SW-SR (sample 135-CC24A-SW-S-14.4-14.9R, El. -0.4 to -0.9 ft NAVD88) were removed during the excavation of the foundation. Because the sloping was conducted for concrete removal and not for Cr⁺⁶ remediation, no post-excavation sidewall samples along this slope were collected for Cr⁺⁶ analyses. Non-impacted Cr⁺⁶ soil samples collected from PDI boring 135-P3C-CC25A and historical boring EF-78 between El. 1.0 and -5.5 ft NAVD88 serve as the Cr⁺⁶ confirmation sidewall samples.
- S6. In Grid CC25A, sample 135-P3C-CC25A-20.0-20.5 Cr⁺⁶ result is greater than 20 mg/kg but in compliance with the Chromium Policy per the Method to Determine Compliance because: 1) MM was not encountered, 2) the sample was collected deeper than 20 ft below the pre-remediation elevation, 3) the sample is coarse grained, and 4) the Cr⁺⁶ concentration is less than 1,000 mg/kg.
- S7. In Grid DD22A, additional excavation for non-Cr constituents was required. The Cr⁺⁶ confirmation pit bottom sample 135-P3C-DD22A-11.0-11.5 (El. -0.4 to -0.9 ft NAVD88) was removed during excavation for remediation of the non-Cr constituents.
- S8. In Grid DD23A, additional excavation for non-Cr constituents was required. The Cr⁺⁶ confirmation pit bottom sample 135-P3C-DD23A-15.0-15.5 (El. -1.0 to -1.5 ft NAVD88) was removed during excavation for remediation of non-Cr constituents.
- S9. In Grid DD25A, additional excavation for non-Cr constituents was required. The Cr⁺⁶ confirmation pit bottom sample 135-DD25A-PB-11.7-12.2 (El. 2.4 to 1.9 ft NAVD88) was removed during excavation for remediation of non-Cr constituents.
- S10. In Grid DD26A, excavation was conducted for remediation of non-Cr constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring (135-DD26A) were below the CrSCC. The removed PDI boring sample (135-DD26A-11.0-11.5, El. 2.8 to 2.3 ft NAVD88) from the shallowest interval remaining in the grid serves as the Cr⁺⁶ confirmation sample.
- S11. In Grid EE22A, samples collected from Carteret Avenue were used in the evaluation of compliance for the portion of the grid located within Site 135 North. The Cr⁺⁶ concentrations in these samples (135-B19 and CAR-PDI-EE22A), as well as samples from 135-P3C-EE23A (in adjacent Grid EE23A) were below the CrSCC and serve as clean sidewall samples for the northern extent of the Site 135 North excavation at this location.
- S12. In Grid EE23A, the eastern DD23A sidewall samples at locations 135-DD23A-SW-E1, 135-DD23A-SW-E2, 135-DD23A-SW-E3, and 135-DD23A-SW-E4 (samples 135-DD23A-SW-E-8.1-8.6, 135-DD23A-SW-E-10.1-10.6, 135-DD23A-SW-E-12.1-12.6, and 135-DD23A-SW-E-14.1-14.6, respectively) were named with depth intervals based on the pre-remediation surface elevation of the former slab within Grid DD23A (El. 14.0 ft NAVD88). However, the samples are located within Grid EE23A outside the footprint of the building slab. The pre-remediation elevation of Grid EE23A is approximately El. 9.5 ft NAVD88 based on the measured pre-remediation surface elevation of boring 135-P3C-EE23A. The sample location elevations and corresponding depth intervals of the sidewall samples have been modified based on the pre-remediation elevation of Grid EE23A.
- S13. In Grid EE23A, excavation was deeper than required for Cr⁺⁶ remediation due to the presence of non-Cr constituents. The removed PDI sample (135-P3C-EE23A-3.0-3.5, El. 6.5 to 6.0 ft NAVD88) was collected at the same elevation as the shallowest remaining soil in the grid (El. 6.2 ft NAVD88); therefore, this sample serves as the Cr⁺⁶ confirmation pit bottom sample. The confirmation pit bottom sample and three Cr⁺⁶ confirmation sidewall samples at locations 135-DD23A-SW-E2, 135-DD23A-SW-E3, and 135-DD23A-SW-E4 (samples 135-DD23A-SW-E-10.1-10.6, 135-DD23A-SW-E-12.1-12.6, and 135-DD23A-SW-E-14.1-14.6) were removed during the excavation for remediation of non-Cr constituents.
- S14. In Grid FF23A, the Cr⁺⁶ concentration at 133-FF23A, as well as samples from EF-50 and 135-P3C-EE23A (in adjacent Grid EE23A), were below the CrSCC and serve as clean sidewall samples for the eastern extent of the Site 135 North excavation at this location.
- S15. In Grid EE24A, the sidewall samples at locations 135-DD24A-SW-E1, 135-DD24A-SW-E2, 135-DD24A-SW-E3, 135-DD24A-SW-E4, and 135-DD24A-SW-E5 (samples 135-DD24A-SW-E-10.1-10.6, 135-DD24A-SW-E-12.1-12.6, 135-DD24A-SW-E-14.1-14.6, 135-DD24A-SW-E-8.6-9.1, and 135-DD24A-SW-E-16.6-17.1, respectively) were named with depth intervals based on the pre-remediation surface elevation of the former slab within Grid DD24A (El. 14.0 ft NAVD88). However, the samples are located within Grid EE23A outside the footprint of the building slab. The pre-remediation elevation of Grid EE24A is approximately El. 9.7 ft NAVD88. The sample location elevations and corresponding depth intervals of these samples have been modified based on the pre-remediation elevation of Grid EE24A.
- S16. In Grid FF24A, the Cr⁺⁶ concentration at 133-FF24A, as well as samples from 135-P3C-EE24AR (in adjacent Grid EE24A), were below the CrSCC and serve as clean sidewall samples for the eastern extent of the Site 135 North excavation at this location.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criteria
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

S17. In Grid EE25A, the Cr⁺⁶ eastern sidewall confirmation sample at location 135-EE25A-SW-E (135-EE25A-SW-E-6.7-7.2, El. 6.9 to 6.4 ft NAVD88) was removed during the remediation of non-Cr constituents in the southern portion of Grid EE25A. The removed PDI samples 135-P3C-EE24A-5.0-5.5 (El. 8.6 to 8.1 ft NAVD88) and 135-P3C-EE24A-7.0-7.5 (El. 6.6 to 6.1 ft NAVD88) serve as representative eastern sidewall samples and there was no visual observation of impacted soil along the sidewall. Because the southern portion of Grid EE25A was excavated deeper than El. 4.3 ft NAVD88 for remediation of non-Cr constituents, additional sidewall confirmation samples for Cr⁺⁶ analysis from below El. 4.3 ft NAVD88 were not required. The removed PDI sample 135-P3C-EE24A-9.0-9.5 (El. 4.6 to 4.1 ft NAVD88) serves as the Cr⁺⁶ northern sidewall confirmation sample.

S18. In Grid FF25A, the Cr⁺⁶ concentration at 135-B18, as well as the sidewall samples from 135-P3C-EE25A-SW-E (in adjacent Grid EE25A), were below the CrSCC and serve as clean sidewall samples for the eastern extent of the Site 135 North excavation at this location.

S19. Grid EE26A was excavated for remediation of non-Cr constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-EE26A from El. 12.3 to -3.1 ft NAVD88 were below the CrSCC. Removed PDI boring sample (135-EE26A-13.0-13.5, El. 0.8 to 0.3 ft NAVD88) from the elevation of the shallowest point remaining in the grid (El. 0.6 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample. The soil samples collected from PDI boring 135-EE26A serve as the Cr⁺⁶ confirmation sidewall samples.

S20. In Grids FF23A, FF24A and FF25A, samples collected from Pacific Avenue (from locations 135-FF23A, 135-FF24A, and 135-B18, respectively) were used in the evaluation of compliance for the portion of these grids located within Site 135 North. In each of these grids, excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in the samples collected from these borings were less than the CrSCC.

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

													Analyte CAS RN Units RDCSRS RDCSRS-GAG NRDCSRS	ANTIMONY 7440-36-0 mg/kg 31 N/A 450	CHROMIUM 7440-47-3 mg/kg 120000 N/A N/A	NICKEL 7440-02-0 mg/kg 1600 N/A 23000	THALLIUM 7440-28-0 mg/kg N/A N/A N/A	VANADIUM 7440-62-2 mg/kg N/A 390 1100					
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4)	Sample ID (G5)	Depth Interval (ft bgs) (G6)	Sample Start Elevation (ft NAVD88) (G4, G7, G8)	Sample End Elevation (ft NAVD88) (G4, G9)	Lab ID (G10)	Lab SDG (G10)	Date Collected (G11)	Sample Status (G12, G13)	Sample Type (G14)	Validated (Y/N) (G15)	Result (G16, G17)	Qualifier (G18, G19)	Result (G16, G20)	Qualifier (G18, G19)	Result (G16, G17)	Qualifier (G18, G19)	Result (G16, G17)	Qualifier (G18, G19)	Result (G16, G17)	Qualifier (G18, G19)	Specific Notes
BB25A	135-P3C-BB25A	11.5	135-P3C-BB25A-14.8-15.3	14.8 - 15.3 ft	-3.3	-3.8	JB40310-18	JB40310A	06/21/2013	remaining	N	Y	< 0.28	UJ	118		13.8		0.44	J	26.0		
BB25A	135-P3C-BB25A	11.5	135-P3C-BB25A-15.3-15.8	15.3 - 15.8 ft	-3.8	-4.3	JB40310-19	JB40310A	06/21/2013	remaining	N	Y	< 0.67	UJ	157	J	15.3	J	< 0.83	UJ	35.4	J	
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-12.3-12.8	12.3 - 12.8 ft	-1.1	-1.6	JB40310-26	JB40310A	06/21/2013	remaining	N	Y	< 0.30	UJ	163		16.6		< 0.37	U	19.4		
CC22A	135-P3C-CC22A	11.2	135-P3C-CC22A-12.8-13.3	12.8 - 13.3 ft	-1.6	-2.1	JB40310-27	JB40310A	06/21/2013	remaining	N	Y	< 0.51	UJ	114	J	13.1	J	< 0.64	UJ	30.7	J	
CC23A	135-B1	10.5	PPG-135-B1G 17.0-17.5 797407	17.0 - 17.5 ft	-6.5	-7.0	797407	B500	01/04/2007	remaining	N	Y	< 2.1	UJ	35.9		28.2		< 1.7	U	42.2		
CC23A	135-B1	10.5	PPG-135-B1H 20.6-21.1 797408	20.6 - 21.1 ft	-10.1	-10.6	797408	B500	01/04/2007	remaining	N	Y	< 1.5	UJ	53.7		18.5		< 1.2	U	17.1		
DD23A	EF-16	10.9	EF-B16-16.0	16.0 - 16.5 ft	-5.1	-5.6	460-25416-18	460254161	04/15/2011	remaining	N	Y	< 2.0	U	178		9.7	J	< 2.2	U	14.6	J	
DD23A	EF-16	10.9	EF-B16-21.0	21.0 - 21.5 ft	-10.1	-10.6	460-25416-19	460254161	04/15/2011	remaining	N	Y	< 1.1	U	17.3		11.9		< 1.2	U	14.5		
DD24A	135-P3C-DD25A	14.0	135-P3C-DD25A-18.5-19.0	18.5 - 19.0 ft	-4.5	-5.0	JB45700-9A	JB45700A	08/24/2013	remaining	N	Y	< 0.30	UJ	15.1		14.9	J	< 0.37	U	22.0	J	
DD24A	135-P3C-DD25A	14.0	135-P3C-DD25A-19.0-19.5	19.0 - 19.5 ft	-5.0	-5.5	JB45700-10A	JB45700A	08/24/2013	remaining	N	Y	< 0.88	UJ	25.4	J	11.6	J	< 1.1	UJ	25.7	J	
EE23A	EF-50	9.3	EF-B50-12.0	12.0 - 12.5 ft	-2.7	-3.2	460-26881-4	460268811	05/25/2011	remaining	N	Y	< 1.1	U							28.3		
EE23A	EF-50	9.3	EF-B50-12.0X	12.0 - 12.5 ft	-2.7	-3.2	460-26881-5	460268811	05/25/2011	remaining	FD	Y	< 1.1	U							18.1		
EE25A	135-EE25A-PB	13.6	135-EE25A-PB-9.3-9.8	9.3 - 9.8 ft	4.3	3.8	JC19694-2	JC19694A	05/05/2016	remaining	N	Y	16.8		20.8		18.1		< 0.54	U	21.6		

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 135 North, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
CCPW - Chromate Chemical Production Waste
Cr - chromium
Cr⁺³ - trivalent chromium
FD - field duplicate sample type
ft - feet
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
NJDEP - New Jersey Department of Environmental Protection
NRDCSRS - Non-Residential Direct Contact Soil Remediation Standard
N/A - not applicable
RDCSRS - Residential Direct Contact Soil Remediation Standard
RDCSRS-GAG - Residential Direct Contact Soil Remediation Standard - Garfield Avenue Group (alternative remediation standard approved by the New Jersey Department of Environmental Protection on December 28, 2016)
SCC - Soil Cleanup Criteria
SDG - sample delivery group
SRS - Soil Remediation Standard

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
U - The analyte was not detected above the sample reporting limit shown.
UJ - The analyte was not detected above the sample reporting limit shown and the reporting limit was approximate.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Row BB through FF (extending west to east) and Grid Column 22A through 26A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs.
G6. "Depth Interval" is based on the "Location Elevation."
G7. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G8. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G9. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G10. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G11. "Date Collected" refers to the date the soil sample was collected.
G12. "Sample Status" of "remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location.
G13. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figure 5-2.
G14. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
G15. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
G16. "Result" refers to the analytical result which is reported in mg/kg. A blank entry indicates that the sample was not tested for that analyte.
G17. Bold text indicates that the result exceeds the RDCSRS or RDCSRS-GAG. Bold and italicized text indicates that the result exceeds the NRDCSRS. Non-bold and non-italicized text indicates that the result does not exceed the most stringent SRS.
G18. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data.
G19. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.
G20. There is currently no NJDEP SRS and no NJDEP SCC for total Cr. Therefore, total Cr results are compared to the interim NJDEP Residential SCC for Cr⁺³ of 120,000 mg/kg as the cleanup criteria for soil at the Garfield Avenue Group Sites. There is no non-residential SCC for Cr⁺³. Bold values indicate a result that exceeds the interim NJDEP Residential SCC.

SPECIFIC NOTES:

None.

Appendix D-6

Site 135 South Tables

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
AA26A	133-AA26A-N-SW-S	11.4	133-AA26A-N-SW-S-6.6-7.1	6.6 - 7.1 ft	4.8	4.3	JC19057-5	JC19057	04/26/2016	remaining	N	Y		0.49	J	S1, S2	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-5.0-5.5	5.0 - 5.5 ft	6.4	5.9	JB64207-3R	JB64207R	04/09/2014	removed	N	Y		0.27	J	S1, S2	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-7.0-7.5	7.0 - 7.5 ft	4.4	3.9	JB64207-4R	JB64207R	04/09/2014	removed	N	Y		0.58	J	S1, S2	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-9.0-9.5	9.0 - 9.5 ft	2.4	1.9	JB64207-5	JB64207	04/09/2014	remaining	N	Y		0.73	J	S1, S2	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-11.0-11.5	11.0 - 11.5 ft	0.4	-0.1	JB64207-6R	JB64207R	04/09/2014	remaining	N	Y		0.34	J	S1, S2	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-13.0-13.5	13.0 - 13.5 ft	-1.6	-2.1	JB64207-7R	JB64207R	04/09/2014	remaining	N	Y		0.75	J	S1, S2	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-13.5-14.0	13.5 - 14.0 ft	-2.1	-2.6	JB64207-8R	JB64207R	04/09/2014	remaining	N	Y		0.41	J	S1, S2	
AA26A	133-P3C-AA26A	11.4	133-P3C-AA26A-14.0-14.5	14.0 - 14.5 ft	-2.6	-3.1	JB64207-9	JB64207	04/09/2014	remaining	N	Y		9.7	J	S1, S2	
AA26A	133-Z26A-SW-E1	13.1	133-Z26A-SW-E-10.5-11.0	10.5 - 11.0 ft	2.6	2.1	JC19057-2	JC19057	04/26/2016	remaining	N	Y		< 0.39	UJ	S1, S2	
AA26A	135-AA26A-N-SW-S	11.4	133-AA26A-N-SW-S-8.6-9.1	8.6 - 9.1 ft	2.8	2.3	JC20733-4R	JC20733R	05/20/2016	remaining	N	Y		0.40	J	S1, S2	
AA26A	135-AA26A-PB-N2	11.4	133-AA26A-PB-N-10.2-10.7	10.2 - 10.7 ft	1.2	0.7	JC20733-5R	JC20733R	05/20/2016	remaining	N	Y		0.89	J	S1, S2	
AA27A	133-B18	10.4	133-B18D (4.5-5.0)J49295-15R	4.5 - 5.0 ft	5.9	5.4	J49295-15R	J49295	12/14/2006	remaining	N	Y		< 1.6	U	S1, S3	
AA27A	133-B18	10.4	PPG-133-B18E 8.5-9.0 797398	8.5 - 9.0 ft	1.9	1.4	797398	B500	01/04/2007	remaining	N	Y		< 3.66	UJ	S1, S3	
AA27A	133-B18	10.4	PPG-133-B18F 12.0-13.0 797399	12.0 - 13.0 ft	-1.6	-2.6	797399	B500	01/04/2007	remaining	N	Y		< 2.53	UJ	S1, S3	
AA27A	133-B18	10.4	PPG-133-B18G 16.0-17.0 797400	16.0 - 17.0 ft	-5.6	-6.6	797400	B500	01/04/2007	remaining	N	Y		< 3.52	UJ	S1, S3	
AA27A	133-B18	10.4	PPG-133-B18GD 16.0-17.0 797401	16.0 - 17.0 ft	-5.6	-6.6	797401	B500	01/04/2007	remaining	FD	Y		< 3.62	UJ	S1, S3	
AA27A	133-B18	10.4	PPG-133-B18H 20.2-20.7 797402	20.2 - 20.7 ft	-9.8	-10.3	797402	B500	01/04/2007	remaining	N	Y		< 2.31	UJ	S1, S3	
AA27A	133-P3C-AA27A	10.4	133-P3C-AA27A-6.5-7.0	6.5 - 7.0 ft	3.9	3.4	JB37688-4	JB37688	05/22/2013	remaining	N	Y		0.11	RA	S1, S3, S4	
AA27A	133-P3C-AA27A	10.4	133-P3C-AA27A-10.5-11.0	10.5 - 11.0 ft	-0.1	-0.6	JB37688-1	JB37688	05/22/2013	remaining	N	Y		0.95	RA	S1, S3, S4	
AA27A	133-P3C-AA27A	10.4	133-P3C-AA27A-14.2-14.7	14.2 - 14.7 ft	-3.8	-4.3	JB37688-2	JB37688	05/22/2013	remaining	N	Y		0.36	RA	S1, S3, S4	
AA27A	133-P3C-AA27A	10.4	133-P3C-AA27A-14.7-15.2	14.7 - 15.2 ft	-4.3	-4.8	JB37688-3	JB37688	05/22/2013	remaining	N	Y		0.48	RA	S1, S3, S4	
AA27A	133-P3C-AA27A-ME	11.7	133-P3C-AA27A-5.0-5.5	5.0 - 5.5 ft	6.7	6.2	JB96555-4	JB96555	06/08/2015	removed	N	Y		< 0.35	UJ	S1, S3, S4	
AA27A	133-P3C-AA27A-ME	11.7	133-P3C-AA27A-7.0-7.5	7.0 - 7.5 ft	4.7	4.2	JB96555-5R	JB96555R	06/08/2015	remaining	N	Y		0.54	J	S1, S3, S4	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-3.0-3.5	3.0 - 3.5 ft	7.1	6.6	JB65662-2R	JB65662R	04/25/2014	removed	N	Y		6.8	J	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-4.5-5.0	4.5 - 5.0 ft	5.6	5.1	JB37688-11	JB37688	05/22/2013	removed	N	Y		0.26	RA	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-6.5-7.0	6.5 - 7.0 ft	3.6	3.1	JB37688-12	JB37688	05/22/2013	removed	N	Y		< 0.10	RA	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-6.5-7.0X	6.5 - 7.0 ft	3.6	3.1	JB37688-13R	JB37688R	05/22/2013	removed	FD	Y		< 0.31	RA	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-8.5-9.0	8.5 - 9.0 ft	1.6	1.1	JB37688-14R	JB37688R	05/22/2013	removed	N	Y		< 0.34	RA	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-10.5-11.0	10.5 - 11.0 ft	-0.4	-0.9	JB37688-6R	JB37688R	05/22/2013	remaining	N	Y		< 0.31	RA	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-12.5-13.0	12.5 - 13.0 ft	-2.4	-2.9	JB37688-7	JB37688	05/22/2013	remaining	N	Y		0.33	RA	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-14.5-15.0	14.5 - 15.0 ft	-4.4	-4.9	JB37688-8	JB37688	05/22/2013	remaining	N	Y		0.33	RA	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-15.3-15.8	15.3 - 15.8 ft	-5.2	-5.7	JB37688-9	JB37688	05/22/2013	remaining	N	Y		0.16	RA	S1, S5	
AA28A	135-P3C-AA28A	10.1	135-P3C-AA28A-15.8-16.3	15.8 - 16.3 ft	-5.7	-6.2	JB37688-10	JB37688	05/22/2013	remaining	N	Y		1.2	RA	S1, S5	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-5.0-5.5	5.0 - 5.5 ft	7.6	7.1	JB65408-3	JB65408	04/23/2014	removed	N	Y		3.5	J	S1, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-7.0-7.5	7.0 - 7.5 ft	5.6	5.1	JB65408-4	JB65408	04/23/2014	removed	N	Y		0.77	J	S1, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-9.0-9.5	9.0 - 9.5 ft	3.6	3.1	JB65408-5	JB65408	04/23/2014	remaining	N	Y		0.22	J	S1, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-11.0-11.5	11.0 - 11.5 ft	1.6	1.1	JB65408-6	JB65408	04/23/2014	remaining	N	Y		1.5	J	S1, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-13.0-13.5	13.0 - 13.5 ft	-0.4	-0.9	JB65408-7	JB65408	04/23/2014	remaining	N	Y		1.5	J	S1, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-15.0-15.5	15.0 - 15.5 ft	-2.4	-2.9	JB65408-8	JB65408	04/23/2014	remaining	N	Y		1.5	J	S1, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-16.0-16.5	16.0 - 16.5 ft	-3.4	-3.9	JB65408-9	JB65408	04/23/2014	remaining	N	Y		0.42	J	S1, S6	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-16.5-17.0	16.5 - 17.0 ft	-3.9	-4.4	JB65408-10R	JB65408R	04/23/2014	remaining	N	Y		2.3	J	S1, S6	
AA30A	135-AA30A	1.3	135-AA30A-0.7-1.2	0.7 - 1.2 ft	0.6	0.1	JC16833-2	JC16833	03/23/2016	removed	N	Y		1.8	J	S7	
AA30A	135-AA30A	1.3	135-AA30A-2.7-3.2	2.7 - 3.2 ft	-1.4	-1.9	JC17280-2	JC17280	03/30/2016	remaining	N	Y		0.44	RA	S7	
AA30A	135-AA30A	1.3	135-AA30A-4.7-5.2	4.7 - 5.2 ft	-3.4	-3.9	JC17280-3R	JC17280R	03/30/2016	remaining	N	Y		< 0.14	RA	S7	
AA30A	135-AA30A	1.3	135-AA30A-5.2-5.7	5.2 - 5.7 ft	-3.9	-4.4	JC17280-4R	JC17280R	03/30/2016	remaining	N	Y		0.42	RA	S7	
AA31A	135-AA31A	1.3	135-AA31A-0.7-1.2	0.7 - 1.2 ft	0.6	0.1	JC16833-3R	JC16833R	03/23/2016	removed	N	Y		0.51	J	S8	
AA31A	135-AA31A	1.3	135-AA31A-2.5-3.0	2.5 - 3.0 ft	-1.2	-1.7	JC17280-5R	JC17280R	03/30/2016	remaining	N	Y		< 0.18	RA	S8	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
AA31A	135-AA31A	1.3	135-AA31A-4.5-5.0	4.5 - 5.0 ft	-3.2	-3.7	JC17280-6R	JC17280R	03/30/2016	remaining	N	Y		0.56	RA	S8	
AA31A	135-AA31AR	1.3	135-AA31A-5.0-5.5	5.0 - 5.5 ft	-3.7	-4.2	JC21934-2	JC21934	06/08/2016	remaining	N	Y		2.2	RA	S8	
AA32A	135-AA32A	13.9	135-AA32A-5.5-6.0	5.5 - 6.0 ft	8.4	7.9	JC3094-3R	JC3094R	09/03/2015	removed	N	Y		1.5	J	S9	
AA32A	135-AA32A	13.9	135-AA32A-7.5-8.0	7.5 - 8.0 ft	6.4	5.9	JC3094-4	JC3094	09/03/2015	remaining	N	Y		0.30	J	S9	
AA32A	135-AA32A	13.9	135-AA32A-9.5-10.0	9.5 - 10.0 ft	4.4	3.9	JC3094-5	JC3094	09/03/2015	remaining	N	Y		0.47	J	S9	
AA32A	135-AA32A	13.9	135-AA32A-11.5-12.0	11.5 - 12.0 ft	2.4	1.9	JC3094-6	JC3094	09/03/2015	remaining	N	Y		< 0.32	UJ	S9	
AA32A	135-AA32A	13.9	135-AA32A-13.5-14.0	13.5 - 14.0 ft	0.4	-0.1	JC3094-7	JC3094	09/03/2015	remaining	N	Y		< 0.27	UJ	S9	
AA32A	135-AA32A	13.9	135-AA32A-15.4-15.9	15.4 - 15.9 ft	-1.5	-2.0	JC3094-8R	JC3094R	09/03/2015	remaining	N	Y		0.30	J	S9	
AA32A	135-AA32A	13.9	135-AA32A-15.9-16.4	15.9 - 16.4 ft	-2.0	-2.5	JC3094-9R	JC3094R	09/03/2015	remaining	N	Y		0.60	J	S9	
AA32A	135-AA32A-PCPB	13.9	135-AA32A-PCPB-14.1-14.6	14.1 - 14.6 ft	-0.2	-0.7	JC26184-1	JC26184	08/19/2016	remaining	N	Y		0.96	J	S9	
AA33A	135-P3C-AA33A	13.9	135-P3C-AA33A-5.0-5.5	5.0 - 5.5 ft	8.9	8.4	JB62807-3	JB62807	03/22/2014	remaining	N	Y		1.6	J		
AA33A	135-P3C-AA33A	13.9	135-P3C-AA33A-7.0-7.5	7.0 - 7.5 ft	6.9	6.4	JB62807-4R	JB62807R	03/22/2014	remaining	N	Y		3.4	J		
AA33A	135-P3C-AA33A	13.9	135-P3C-AA33A-9.0-9.5	9.0 - 9.5 ft	4.9	4.4	JB62807-5	JB62807	03/22/2014	remaining	N	Y		0.71	J		
AA33A	135-P3C-AA33A	13.9	135-P3C-AA33A-11.0-11.5	11.0 - 11.5 ft	2.9	2.4	JB62807-6	JB62807	03/22/2014	remaining	N	Y		0.43	J		
AA33A	135-P3C-AA33A	13.9	135-P3C-AA33A-13.0-13.5	13.0 - 13.5 ft	0.9	0.4	JB62807-7	JB62807	03/22/2014	remaining	N	Y		0.29	J		
AA33A	135-P3C-AA33A	13.9	135-P3C-AA33A-15.0-15.5	15.0 - 15.5 ft	-1.1	-1.6	JB62807-8	JB62807	03/22/2014	remaining	N	Y		1.5	J		
AA33A	135-P3C-AA33A	13.9	135-P3C-AA33A-15.5-16.0	15.5 - 16.0 ft	-1.6	-2.1	JB62807-9	JB62807	03/22/2014	remaining	N	Y		1.1	J		
AA34A	135-P3C-AA34A	13.9	135-P3C-AA34A-5.0-5.5	5.0 - 5.5 ft	8.9	8.4	JB62807-13	JB62807	03/22/2014	remaining	N	Y		0.66	J		
AA34A	135-P3C-AA34A	13.9	135-P3C-AA34A-7.0-7.5	7.0 - 7.5 ft	6.9	6.4	JB62807-14	JB62807	03/22/2014	remaining	N	Y		0.22	J		
AA34A	135-P3C-AA34A	13.9	135-P3C-AA34A-7.0-7.5X	7.0 - 7.5 ft	6.9	6.4	JB62807-15	JB62807	03/22/2014	remaining	FD	Y		0.15	J		
AA34A	135-P3C-AA34A	13.9	135-P3C-AA34A-9.0-9.5	9.0 - 9.5 ft	4.9	4.4	JB62807-16R	JB62807R	03/22/2014	remaining	N	Y		< 0.14	UJ		
AA34A	135-P3C-AA34A	13.9	135-P3C-AA34A-11.0-11.5	11.0 - 11.5 ft	2.9	2.4	JB62807-17	JB62807	03/22/2014	remaining	N	Y		0.42	J		
AA34A	135-P3C-AA34A	13.9	135-P3C-AA34A-13.0-13.5	13.0 - 13.5 ft	0.9	0.4	JB62807-18	JB62807	03/22/2014	remaining	N	Y		0.23	J		
AA34A	135-P3C-AA34A	13.9	135-P3C-AA34A-14.5-15.0	14.5 - 15.0 ft	-0.6	-1.1	JB62807-19	JB62807	03/22/2014	remaining	N	Y		< 0.13	UJ		
AA34A	135-P3C-AA34A	13.9	135-P3C-AA34A-15.0-15.5	15.0 - 15.5 ft	-1.1	-1.6	JB62807-20	JB62807	03/22/2014	remaining	N	Y		0.37	J		
AA35A	135-AA35A	14.0	135-AA35A-6.0-6.5	6.0 - 6.5 ft	8.0	7.5	JC2503-5	JC2503	08/27/2015	removed	N	Y		0.48	RA	S10	
AA35A	135-AA35A	14.0	135-AA35A-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC2503-6R	JC2503R	08/27/2015	remaining	N	Y		0.32	RA		
AA35A	135-AA35A	14.0	135-AA35A-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC2503-7R	JC2503R	08/27/2015	remaining	N	Y		0.67	RA		
AA35A	135-AA35A	14.0	135-AA35A-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC2503-8R	JC2503R	08/27/2015	remaining	N	Y		< 0.16	RA		
AA35A	135-AA35A	14.0	135-AA35A-14.0-14.5	14.0 - 14.5 ft	0.0	-0.5	JC2503-9	JC2503	08/27/2015	remaining	N	Y		0.85	RA		
AA35A	135-AA35A	14.0	135-AA35A-15.4-15.9	15.4 - 15.9 ft	-1.4	-1.9	JC2503-10R	JC2503R	08/27/2015	remaining	N	Y		1.0	RA		
AA35A	135-AA35A	14.0	135-AA35A-15.9-16.4	15.9 - 16.4 ft	-1.9	-2.4	JC2503-11R	JC2503R	08/27/2015	remaining	N	Y		1.6	RA		
AA35A	135-AA35A-PB	14.0	135-AA35A-PB-6.2-6.7	6.2 - 6.7 ft	7.8	7.3	JC23893-2R	JC23893R	07/12/2016	removed	N	Y		0.56	J	S10	
AA35A	135-BB35A	14.0	135-BB35A-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC2919-3	JC2919	09/02/2015	remaining	N	Y		0.77	J		
AA35A	135-BB35A	14.0	135-BB35A-14.9-15.4	14.9 - 15.4 ft	-0.9	-1.4	JC2919-4	JC2919	09/02/2015	remaining	N	Y		< 0.24	UJ		
AA35A	135-BB35A	14.0	135-BB35A-15.4-15.9	15.4 - 15.9 ft	-1.4	-1.9	JC2919-5R	JC2919R	09/02/2015	remaining	N	Y		2.5	J		
AA35A	135-BB35A	14.0	135-BB35A-15.9-16.4	15.9 - 16.4 ft	-1.9	-2.4	JC2919-6R	JC2919R	09/02/2015	remaining	N	Y		0.65	J		
AA36A	135-AA36A	14.0	135-AA36A-5.0-5.5	5.0 - 5.5 ft	9.0	8.5	JC2661-3R	JC2661R	08/28/2015	remaining	N	Y		2.3	J		
AA36A	135-AA36A	14.0	135-AA36A-7.0-7.5	7.0 - 7.5 ft	7.0	6.5	JC2661-4	JC2661	08/28/2015	remaining	N	Y		1.1	J		
AA36A	135-AA36A	14.0	135-AA36A-9.0-9.5	9.0 - 9.5 ft	5.0	4.5	JC2661-5	JC2661	08/28/2015	remaining	N	Y		1.1	J		
AA36A	135-AA36A	14.0	135-AA36A-11.0-11.5	11.0 - 11.5 ft	3.0	2.5	JC2661-6	JC2661	08/28/2015	remaining	N	Y		0.95	J		
AA36A	135-AA36A	14.0	135-AA36A-13.0-13.5	13.0 - 13.5 ft	1.0	0.5	JC2661-7	JC2661	08/28/2015	remaining	N	Y		1.8	J		
AA36A	135-AA36A	14.0	135-AA36A-15.0-15.5	15.0 - 15.5 ft	-1.0	-1.5	JC2661-8R	JC2661R	08/28/2015	remaining	N	Y		0.68	J		
AA36A	135-AA36A	14.0	135-AA36A-15.5-16.0	15.5 - 16.0 ft	-1.5	-2.0	JC2661-9R	JC2661R	08/28/2015	remaining	N	Y		1.0	J		
AA37A	135-AA37A	14.0	135-AA37A-3.0-3.5	3.0 - 3.5 ft	11.0	10.5	JC3368-2	JC3368	09/08/2015	removed	N	Y		0.93	RA	S11	
AA37A	135-AA37A	14.0	135-AA37A-5.0-5.5	5.0 - 5.5 ft	9.0	8.5	JC3368-3	JC3368	09/08/2015	removed	N	Y		0.33	RA	S11	
AA37A	135-AA37A	14.0	135-AA37A-7.0-7.5	7.0 - 7.5 ft	7.0	6.5	JC3368-4	JC3368	09/08/2015	remaining	N	Y		0.27	RA		

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
AA37A	135-AA37A	14.0	135-AA37A-9.0-9.5	9.0 - 9.5 ft	5.0	4.5	JC3368-5	JC3368	09/08/2015	remaining	N	Y		0.79	RA		
AA37A	135-AA37A	14.0	135-AA37A-11.0-11.5	11.0 - 11.5 ft	3.0	2.5	JC3368-6	JC3368	09/08/2015	remaining	N	Y		< 0.31	RA		
AA37A	135-AA37A	14.0	135-AA37A-13.0-13.5	13.0 - 13.5 ft	1.0	0.5	JC3368-7R	JC3368R	09/08/2015	remaining	N	Y		< 0.14	RA		
AA37A	135-AA37A	14.0	135-AA37A-15.0-15.5	15.0 - 15.5 ft	-1.0	-1.5	JC3368-8R	JC3368R	09/08/2015	remaining	N	Y		0.28	RA		
AA37A	135-AA37A	14.0	135-AA37A-16.4-16.9	16.4 - 16.9 ft	-2.4	-2.9	JC3368-9	JC3368	09/08/2015	remaining	N	Y		< 0.23	RA		
AA37A	135-AA37A	14.0	135-AA37A-16.4-16.9X	16.4 - 16.9 ft	-2.4	-2.9	JC3368-10	JC3368	09/08/2015	remaining	FD	Y		0.24	RA		
AA37A	135-AA37A	14.0	135-AA37A-16.9-17.4	16.9 - 17.4 ft	-2.9	-3.4	JC3368-11	JC3368	09/08/2015	remaining	N	Y		1.2	RA		
AA38A	135-AA38A	11.1	135-AA38A-1.0-1.5	1.0 - 1.5 ft	10.1	9.6	JC2722-1	JC2722	08/31/2015	remaining	N	Y		3.4	J	S12	
AA38A	135-AA38A	11.1	135-AA38A-3.0-3.5	3.0 - 3.5 ft	8.1	7.6	JC2722-2R	JC2722R	08/31/2015	remaining	N	Y		0.67	J	S12	
AA38A	135-AA38A	11.1	135-AA38A-5.0-5.5	5.0 - 5.5 ft	6.1	5.6	JC2722-3R	JC2722R	08/31/2015	remaining	N	Y		1.1	J	S12	
AA38A	135-AA38A	11.1	135-AA38A-7.0-7.5	7.0 - 7.5 ft	4.1	3.6	JC2722-4R	JC2722R	08/31/2015	remaining	N	Y		0.34	J	S12	
AA38A	135-AA38A	11.1	135-AA38A-9.0-9.5	9.0 - 9.5 ft	2.1	1.6	JC2722-5R	JC2722R	08/31/2015	remaining	N	Y		0.82	J	S12	
AA38A	135-AA38A	11.1	135-AA38A-11.0-11.5	11.0 - 11.5 ft	0.1	-0.4	JC2722-9	JC2722	08/31/2015	remaining	N	Y		< 0.23	UJ	S12	
AA38A	135-AA38A	11.1	135-AA38A-13.0-13.5	13.0 - 13.5 ft	-1.9	-2.4	JC2722-10R	JC2722R	08/31/2015	remaining	N	Y		0.83	J	S12	
AA38A	135-AA38A	11.1	135-AA38A-15.0-15.5	15.0 - 15.5 ft	-3.9	-4.4	JC2722-6R	JC2722R	08/31/2015	remaining	N	Y		0.27	J	S12	
AA38A	135-AA38A	11.1	135-AA38A-16.5-17.0	16.5 - 17.0 ft	-5.4	-5.9	JC2722-7R	JC2722R	08/31/2015	remaining	N	Y		0.98	J	S12	
AA38A	135-AA38A	11.1	135-AA38A-17.0-17.5	17.0 - 17.5 ft	-5.9	-6.4	JC2722-8R	JC2722R	08/31/2015	remaining	N	Y		1.5	J	S12	
BB25A	135-BB25A-PB	11.5	135-BB25A-PB-14.1-14.6	14.1 - 14.6 ft	-2.6	-3.1	JC21493-2	JC21493	06/03/2016	remaining	N	Y		0.41	J	S13, S14	
BB25A	135-BB25A-SW-W	11.5	135-BB25A-SW-W-12.0-12.5	12.0 - 12.5 ft	-0.5	-1.0	JC21797-2	JC21797	06/07/2016	removed	N	Y		0.97	RA	S13, S15	
BB26A	135-BB25A-SW-S1	11.5	135-BB25A-SW-S-8.1-8.6	8.1 - 8.6 ft	3.4	2.9	JC21493-5R	JC21493R	06/03/2016	removed	N	Y		7.9	J	S1, S16	
BB26A	135-BB25A-SW-S2	11.5	135-BB25A-SW-S-10.1-10.6	10.1 - 10.6 ft	1.4	0.9	JC21493-4	JC21493	06/03/2016	removed	N	Y		1.2	J	S1, S16	
BB26A	135-BB25A-SW-S3	11.5	135-BB25A-SW-S-12.1-12.6	12.1 - 12.6 ft	-0.6	-1.1	JC21493-3	JC21493	06/03/2016	removed	N	Y		0.73	J	S1, S16	
BB26A	135-BB26A-PB	12.1	135-BB26A-PB-6.7-7.2	6.7 - 7.2 ft	5.4	4.9	JC20248-6R	JC20248R	05/13/2016	removed	N	Y		0.45	J	S1, S16	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-7.0-7.5	7.0 - 7.5 ft	5.1	4.6	JB37831-2	JB37831	05/23/2013	removed	N	Y		0.49	RA	S1, S16	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-7.0-7.5X	7.0 - 7.5 ft	5.1	4.6	JB37831-3R	JB37831R	05/23/2013	removed	FD	Y		1.1	RA	S1, S16	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-9.0-9.5	9.0 - 9.5 ft	3.1	2.6	JB37831-4	JB37831	05/23/2013	removed	N	Y		0.24	RA	S1, S16	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-11.0-11.5	11.0 - 11.5 ft	1.1	0.6	JB37831-5R	JB37831R	05/23/2013	removed	N	Y		< 0.37	RA	S1, S16	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-12.7-13.2	12.7 - 13.2 ft	-0.6	-1.1	JB37831-6R	JB37831R	05/23/2013	remaining	N	Y		3.3	RA	S1, S16	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-14.6-15.1	14.6 - 15.1 ft	-2.5	-3.0	JB37831-7	JB37831	05/23/2013	remaining	N	Y		0.43	RA	S1, S16	
BB26A	135-P3C-BB26A	12.1	135-P3C-BB26A-15.1-15.6	15.1 - 15.6 ft	-3.0	-3.5	JB37831-8	JB37831	05/23/2013	remaining	N	Y		1.7	RA	S1, S16	
BB27A	135-BB27A	11.6	135-BB27A-8.0-8.5	8.0 - 8.5 ft	3.6	3.1	JC2161-6R	JC2161R	08/21/2015	removed	N	Y		0.52	RA	S17	
BB27A	135-BB27A	11.6	135-BB27A-10.0-10.5	10.0 - 10.5 ft	1.6	1.1	JC2161-7	JC2161	08/21/2015	remaining	N	Y		1.6	RA	S17	
BB27A	135-BB27A	11.6	135-BB27A-12.0-12.5	12.0 - 12.5 ft	-0.4	-0.9	JC2161-8R	JC2161R	08/21/2015	remaining	N	Y		0.20	RA	S17	
BB27A	135-BB27A	11.6	135-BB27A-14.0-14.5	14.0 - 14.5 ft	-2.4	-2.9	JC2161-9R	JC2161R	08/21/2015	remaining	N	Y		1.5	RA	S17	
BB27A	135-BB27A	11.6	135-BB27A-15.0-15.5	15.0 - 15.5 ft	-3.4	-3.9	JC2161-10R	JC2161R	08/21/2015	remaining	N	Y		0.54	RA	S17	
BB27A	135-BB27A	11.6	135-BB27A-15.5-16.0	15.5 - 16.0 ft	-3.9	-4.4	JC2161-11	JC2161	08/21/2015	remaining	N	Y		< 0.61	RA	S17	
BB27A	135-BB27A	11.6	135-BB27AR-16.0-16.5	16.0 - 16.5 ft	-4.4	-4.9	JC14689-2R	JC14689R	02/23/2016	remaining	N	Y		1.4	J	S17	
BB27A	135-BB27A-PB	11.6	135-BB27A-PB-8.6-9.1	8.6 - 9.1 ft	3.0	2.5	JC28300-7	JC28300	09/23/2016	remaining	N	Y		5.8	J	S17	
BB27A	135-BB27A-PB	11.6	135-BB27A-PB-8.6-9.1X	8.6 - 9.1 ft	3.0	2.5	JC28300-8	JC28300	09/23/2016	remaining	FD	Y		1.3	J	S17	
BB27A	135-BB27A-SW-W2	11.6	135-BB27A-SW-W-11.4-11.9	11.4 - 11.9 ft	0.2	-0.3	JC28633-3R	JC28633R	09/29/2016	remaining	N	Y		0.87	J	S17	
BB28A	135-BB28A	14.0	135-BB28A-9.5-10.0	9.5 - 10.0 ft	4.5	4.0	JC4102-37R	JC4102R	09/17/2015	removed	N	Y		0.24	J	S18, S19	
BB28A	135-BB28A	14.0	135-BB28A-11.5-12.0	11.5 - 12.0 ft	2.5	2.0	JC4102-36R	JC4102R	09/17/2015	removed	N	Y		< 0.18	UJ	S18, S19	
BB28A	135-BB28A	14.0	135-BB28A-13.5-14.0	13.5 - 14.0 ft	0.5	0.0	JC4102-35	JC4102	09/17/2015	removed	N	Y		0.28	J	S18, S19	
BB28A	135-BB28A	14.0	135-BB28A-15.8-16.3	15.8 - 16.3 ft	-1.8	-2.3	JC4102-34	JC4102	09/17/2015	remaining	N	Y		0.46	J	S18	
BB28A	135-BB28A	14.0	135-BB28A-16.3-16.8	16.3 - 16.8 ft	-2.3	-2.8	JC4102-33	JC4102	09/17/2015	remaining	N	Y		2.6	J	S18	
BB29A	135-P3C-BB29A	13.8	135-P3C-BB29A-6.0-6.5	6.0 - 6.5 ft	7.8	7.3	JB62646-3	JB62646	03/21/2014	removed	N	Y		0.39	RA	S19	
BB29A	135-P3C-BB29A	13.8	135-P3C-BB29A-8.0-8.5	8.0 - 8.5 ft	5.8	5.3	JB62646-4	JB62646	03/21/2014	removed	N	Y		0.31	RA	S19	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
BB29A	135-P3C-BB29A	13.8	135-P3C-BB29A-10.0-10.5	10.0 - 10.5 ft	3.8	3.3	JB62646-5R	JB62646R	03/21/2014	remaining	N	Y		0.25	RA	S19	
BB29A	135-P3C-BB29A	13.8	135-P3C-BB29A-12.0-12.5	12.0 - 12.5 ft	1.8	1.3	JB62646-6R	JB62646R	03/21/2014	remaining	N	Y		0.38	RA	S19, S20	
BB29A	135-P3C-BB29A	13.8	135-P3C-BB29A-14.0-14.5	14.0 - 14.5 ft	-0.2	-0.7	JB62646-7	JB62646	03/21/2014	remaining	N	Y		0.37	RA	S19, S20	
BB29A	135-P3C-BB29A	13.8	135-P3C-BB29A-16.0-16.5	16.0 - 16.5 ft	-2.2	-2.7	JB62646-8R	JB62646R	03/21/2014	remaining	N	Y		0.52	RA	S19	
BB29A	135-P3C-BB29A	13.8	135-P3C-BB29A-16.5-17.0	16.5 - 17.0 ft	-2.7	-3.2	JB62646-9R	JB62646R	03/21/2014	remaining	N	Y		2.2	RA	S19	
BB30A	135-CC30A-SW-W2	13.9	135-CC30A-SW-W-4.4-4.9	4.4 - 4.9 ft	9.5	9.0	JC26326-4	JC26326	08/23/2016	removed	N	Y		8.8	J	S21	
BB30A	135-CC30A-SW-W3R	13.9	135-CC30A-SW-W-6.4-6.9R	6.4 - 6.9 ft	7.5	7.0	JC27307-2R	JC27307R	09/09/2016	remaining	N	Y		5.3	J		
BB30A	135-CC30A-SW-W4R	13.9	135-CC30A-SW-W-8.4-8.9R	8.4 - 8.9 ft	5.5	5.0	JC27307-3	JC27307	09/09/2016	remaining	N	Y		1.4	J		
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-2.0-2.5	2.0 - 2.5 ft	8.3	7.8	JB62646-10R	JB62646R	03/21/2014	remaining	N	Y		15.2	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-4.0-4.5	4.0 - 4.5 ft	6.3	5.8	JB62646-11R	JB62646R	03/21/2014	remaining	N	Y		1.3	RA	S21, S22	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-6.0-6.5	6.0 - 6.5 ft	4.3	3.8	JB62646-21	JB62646	03/21/2014	remaining	N	Y		1.9	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-8.0-8.5	8.0 - 8.5 ft	2.3	1.8	JB62646-12	JB62646	03/21/2014	remaining	N	Y		0.45	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-8.0-8.5X	8.0 - 8.5 ft	2.3	1.8	JB62646-13	JB62646	03/21/2014	remaining	FD	Y		0.28	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-10.0-10.5	10.0 - 10.5 ft	0.3	-0.2	JB62646-14	JB62646	03/21/2014	remaining	N	Y		0.44	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-12.0-12.5	12.0 - 12.5 ft	-1.7	-2.2	JB62646-15R	JB62646R	03/21/2014	remaining	N	Y		0.29	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-14.0-14.5	14.0 - 14.5 ft	-3.7	-4.2	JB62646-16R	JB62646R	03/21/2014	remaining	N	Y		0.29	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-16.0-16.5	16.0 - 16.5 ft	-5.7	-6.2	JB62646-17R	JB62646R	03/21/2014	remaining	N	Y		0.35	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-17.5-18.0	17.5 - 18.0 ft	-7.2	-7.7	JB62646-18	JB62646	03/21/2014	remaining	N	Y		0.32	RA	S21	
BB30A	135-P3C-BB30A	10.4	135-P3C-BB30A-18.0-18.5	18.0 - 18.5 ft	-7.7	-8.2	JB62646-19	JB62646	03/21/2014	remaining	N	Y		0.86	RA	S21	
BB31A	135-BB31A	1.3	135-BB31A-0.7-1.2	0.7 - 1.2 ft	0.6	0.1	JC16833-4R	JC16833R	03/23/2016	removed	N	Y		1.5	J	S22	
BB31A	135-BB31A	1.3	135-BB31A-2.7-3.2	2.7 - 3.2 ft	-1.4	-1.9	JC17280-7R	JC17280R	03/30/2016	remaining	N	Y		0.29	RA	S22	
BB31A	135-BB31A	1.3	135-BB31A-4.7-5.2	4.7 - 5.2 ft	-3.4	-3.9	JC17280-8R	JC17280R	03/30/2016	remaining	N	Y		< 0.14	RA	S22	
BB31A	135-BB31A	1.3	135-BB31A-5.2-5.7	5.2 - 5.7 ft	-3.9	-4.4	JC17280-9	JC17280	03/30/2016	remaining	N	Y		0.56	RA	S22	
BB32A	135-BB32A	14.7	135-BB32A-3.0-3.5	3.0 - 3.5 ft	11.7	11.2	JC3893-2	JC3893	09/15/2015	removed	N	Y		1.2	J	S23	
BB32A	135-BB32A	14.7	135-BB32A-5.0-5.5	5.0 - 5.5 ft	9.7	9.2	JC3893-3	JC3893	09/15/2015	removed	N	Y		0.49	J	S23	
BB32A	135-BB32A	14.7	135-BB32A-7.0-7.5	7.0 - 7.5 ft	7.7	7.2	JC3893-4	JC3893	09/15/2015	removed	N	Y		4.1	J	S23	
BB32A	135-BB32A	14.7	135-BB32A-9.0-9.5	9.0 - 9.5 ft	5.7	5.2	JC3893-5	JC3893	09/15/2015	removed	N	Y		0.32	J	S23	
BB32A	135-BB32A	14.7	135-BB32A-11.0-11.5	11.0 - 11.5 ft	3.7	3.2	JC3893-6	JC3893	09/15/2015	removed	N	Y		< 0.29	UJ	S23	
BB32A	135-BB32A	14.7	135-BB32A-13.0-13.5	13.0 - 13.5 ft	1.7	1.2	JC3893-7	JC3893	09/15/2015	removed	N	Y		< 0.26	UJ	S23	
BB32A	135-BB32A	14.7	135-BB32A-15.0-15.5	15.0 - 15.5 ft	-0.3	-0.8	JC3893-8	JC3893	09/15/2015	remaining	N	Y		< 0.32	UJ	S23	
BB32A	135-BB32A	14.7	135-BB32A-15.5-16.0	15.5 - 16.0 ft	-0.8	-1.3	JC3893-9	JC3893	09/15/2015	remaining	N	Y		< 0.26	UJ	S23	
BB32A	135-BB32A	14.7	135-BB32A-16.0-16.5	16.0 - 16.5 ft	-1.3	-1.8	JC3893-10	JC3893	09/15/2015	remaining	N	Y		< 0.50	UJ	S23	
BB32A	135-BB32A-PCPB	14.7	135-BB32A-PCPB-14.8-15.3	14.8 - 15.3 ft	-0.1	-0.6	JC26184-2	JC26184	08/19/2016	remaining	N	Y		1.4	J	S23	
BB33A	135-BB33A	13.9	135-BB33A-5.3-5.8	5.3 - 5.8 ft	8.6	8.1	JC3228-3	JC3228	09/04/2015	remaining	N	Y		1.4	RA		
BB33A	135-BB33A	13.9	135-BB33A-5.3-5.8X	5.3 - 5.8 ft	8.6	8.1	JC3228-7	JC3228	09/04/2015	remaining	FD	Y		2.7	RA		
BB33A	135-BB33A	13.9	135-BB33A-7.3-7.8	7.3 - 7.8 ft	6.6	6.1	JC3228-4	JC3228	09/04/2015	remaining	N	Y		1.1	RA		
BB33A	135-BB33A	13.9	135-BB33A-9.3-9.8	9.3 - 9.8 ft	4.6	4.1	JC3228-5R	JC3228R	09/04/2015	remaining	N	Y		< 0.16	RA		
BB33A	135-BB33A	13.9	135-BB33A-11.3-11.8	11.3 - 11.8 ft	2.6	2.1	JC3228-6	JC3228	09/04/2015	remaining	N	Y		0.50	RA	S24	
BB33A	135-BB33A	13.9	135-BB33A-13.3-13.8	13.3 - 13.8 ft	0.6	0.1	JC3228-8	JC3228	09/04/2015	remaining	N	Y		0.35	RA	S24	
BB33A	135-BB33A	13.9	135-BB33A-15.3-15.8	15.3 - 15.8 ft	-1.4	-1.9	JC3228-9	JC3228	09/04/2015	remaining	N	Y		0.36	RA		
BB33A	135-BB33A	13.9	135-BB33A-16.5-17.0	16.5 - 17.0 ft	-2.6	-3.1	JC3228-10	JC3228	09/04/2015	remaining	N	Y		0.35	RA		
BB33A	135-BB33A	13.9	135-BB33A-17.0-17.5	17.0 - 17.5 ft	-3.1	-3.6	JC3228-11	JC3228	09/04/2015	remaining	N	Y		0.62	RA		
BB33A	135-BB33A-PB	13.9	135-BB33A-PB-3.7-4.2	3.7 - 4.2 ft	10.2	9.7	JC22264-2R	JC22264R	06/15/2016	removed	N	Y		9.1	J	S25	
BB34A	135-BB34A	14.0	135-BB34A-1.5-2.0	1.5 - 2.0 ft	12.5	12.0	JC3368-12R	JC3368R	09/08/2015	removed	N	Y		18.3	RA	S26	
BB34A	135-BB34A	14.0	135-BB34A-3.0-3.5	3.0 - 3.5 ft	11.0	10.5	JC3368-13R	JC3368R	09/08/2015	removed	N	Y		3.7	RA	S26	
BB34A	135-BB34A	14.0	135-BB34A-5.0-5.5	5.0 - 5.5 ft	9.0	8.5	JC3368-14R	JC3368R	09/08/2015	remaining	N	Y		2.1	RA	S10, S26	
BB34A	135-BB34A	14.0	135-BB34A-7.0-7.5	7.0 - 7.5 ft	7.0	6.5	JC3368-15R	JC3368R	09/08/2015	remaining	N	Y		< 0.16	RA	S26	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
BB34A	135-BB34A	14.0	135-BB34A-9.0-9.5	9.0 - 9.5 ft	5.0	4.5	JC3368-16R	JC3368R	09/08/2015	remaining	N	Y		< 0.17	RA	S26	
BB34A	135-BB34A	14.0	135-BB34A-11.0-11.5	11.0 - 11.5 ft	3.0	2.5	JC3368-17R	JC3368R	09/08/2015	remaining	N	Y		< 0.15	RA	S26	
BB34A	135-BB34A	14.0	135-BB34A-13.0-13.5	13.0 - 13.5 ft	1.0	0.5	JC3368-18	JC3368	09/08/2015	remaining	N	Y		0.40	RA	S26	
BB34A	135-BB34A	14.0	135-BB34A-15.0-15.5	15.0 - 15.5 ft	-1.0	-1.5	JC3368-19R	JC3368R	09/08/2015	remaining	N	Y		< 0.14	RA	S26	
BB34A	135-BB34A	14.0	135-BB34A-15.5-16.0	15.5 - 16.0 ft	-1.5	-2.0	JC3368-20	JC3368	09/08/2015	remaining	N	Y		< 0.34	RA	S26	
BB35A	135-BB35AR	11.5	135-BB35AR-1.0-1.5	1.0 - 1.5 ft	10.5	10.0	JC14857-10R	JC14857R	02/25/2016	remaining	N	Y		3.6	RA	S10, S12	
BB35A	135-BB35AR	11.5	135-BB35AR-3.0-3.5	3.0 - 3.5 ft	8.5	8.0	JC14857-15R	JC14857R	02/25/2016	remaining	N	Y		7.1	RA	S10, S12	
BB35A	135-BB35AR	11.5	135-BB35AR-5.0-5.5	5.0 - 5.5 ft	6.5	6.0	JC14857-16R	JC14857R	02/25/2016	remaining	N	Y		2.0	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-7.0-7.5	7.0 - 7.5 ft	4.5	4.0	JC14857-17R	JC14857R	02/25/2016	remaining	N	Y		< 0.17	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-7.0-7.5X	7.0 - 7.5 ft	4.5	4.0	JC14857-18R	JC14857R	02/25/2016	remaining	FD	Y		1.4	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-9.0-9.5	9.0 - 9.5 ft	2.5	2.0	JC14857-19	JC14857	02/25/2016	remaining	N	Y		0.50	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-11.0-11.5	11.0 - 11.5 ft	0.5	0.0	JC14857-11R	JC14857R	02/25/2016	remaining	N	Y		0.75	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-13.0-13.5	13.0 - 13.5 ft	-1.5	-2.0	JC14857-12	JC14857	02/25/2016	remaining	N	Y		0.59	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-14.0-14.5	14.0 - 14.5 ft	-2.5	-3.0	JC14857-13	JC14857	02/25/2016	remaining	N	Y		0.38	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-14.5-15.0	14.5 - 15.0 ft	-3.0	-3.5	JC15136-2	JC15136	03/01/2016	remaining	N	Y		1.0	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-15.0-15.5	15.0 - 15.5 ft	-3.5	-4.0	JC14857-14	JC14857	02/25/2016	remaining	N	Y		1.6	RA	S12	
BB35A	135-BB35AR	11.5	135-BB35AR-15.5-16.0	15.5 - 16.0 ft	-4.0	-4.5	JC15136-3	JC15136	03/01/2016	remaining	N	Y		0.42	RA	S12	
BB36A	135-AA36A-SW-E	11.4	135-AA36A-SW-E-3.3-3.8	0.7 - 1.2 ft	10.7	10.2	JC24868-3	JC24868	07/28/2016	remaining	N	Y		4.5	J	S10, S12, S27	
BB36A	135-BB36A	11.4	135-BB36A-1.5-2.0	1.5 - 2.0 ft	9.9	9.4	JC14857-20	JC14857	02/25/2016	remaining	N	Y		0.33	RA	S12	
BB36A	135-BB36A	11.4	135-BB36A-3.5-4.0	3.5 - 4.0 ft	7.9	7.4	JC14857-24	JC14857	02/25/2016	remaining	N	Y		0.48	RA	S12	
BB36A	135-BB36A	11.4	135-BB36A-5.5-6.0	5.5 - 6.0 ft	5.9	5.4	JC14857-25	JC14857	02/25/2016	remaining	N	Y		0.63	RA	S12	
BB36A	135-BB36A	11.4	135-BB36A-7.5-8.0	7.5 - 8.0 ft	3.9	3.4	JC14857-26	JC14857	02/25/2016	remaining	N	Y		0.95	RA	S12	
BB36A	135-BB36A	11.4	135-BB36A-9.5-10.0	9.5 - 10.0 ft	1.9	1.4	JC14857-27T	JC14857T	02/25/2016	remaining	N	Y		0.51	RA	S12	
BB36A	135-BB36A	11.4	135-BB36A-11.5-12.0	11.5 - 12.0 ft	-0.1	-0.6	JC14857-21	JC14857	02/25/2016	remaining	N	Y		1.1	RA	S12	
BB36A	135-BB36A	11.4	135-BB36A-13.5-14.0	13.5 - 14.0 ft	-2.1	-2.6	JC14857-22	JC14857	02/25/2016	remaining	N	Y		0.77	RA	S12	
BB36A	135-BB36A	11.4	135-BB36A-14.0-14.5	14.0 - 14.5 ft	-2.6	-3.1	JC14857-23	JC14857	02/25/2016	remaining	N	Y		7.3	RA	S12	
CC25A	135-CC24A-SW-S3	14.0	135-CC24A-SW-S-12.4-12.9	12.4 - 12.9 ft	1.6	1.1	JC20248-10R	JC20248R	05/13/2016	removed	N	Y		0.79	J	S28, S29	
CC25A	135-CC24A-SW-SR	14.0	135-CC24A-SW-S-14.4-14.9R	14.4 - 14.9 ft	-0.4	-0.9	JC20732-2R	JC20732R	05/20/2016	removed	N	Y		3.4	J	S28, S29	
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-13.0-13.5	13.0 - 13.5 ft	1.0	0.5	JB48162-2R	JB48162R	09/21/2013	removed	N	Y		0.55	RA	S28, S29	
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-15.0-15.5	15.0 - 15.5 ft	-1.0	-1.5	JB48162-3R	JB48162R	09/21/2013	removed	N	Y		9.4	RA	S28, S29	
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-17.0-17.5	17.0 - 17.5 ft	-3.0	-3.5	JB48162-4R	JB48162R	09/21/2013	remaining	N	Y		2.7	RA	S28, S29	
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-19.0-19.5	19.0 - 19.5 ft	-5.0	-5.5	JB48162-5R	JB48162R	09/21/2013	remaining	N	Y		0.37	RA	S28, S29	
CC25A	135-P3C-CC25A	14.0	135-P3C-CC25A-20.0-20.5	20.0 - 20.5 ft	-6.0	-6.5	JB48162-6R	JB48162R	09/21/2013	remaining	N	Y	FILL	22.4	RA	S28, S30	
CC25A	EF-78	13.4	EF-B78-15.0	15.0 - 15.5 ft	-1.6	-2.1	460-29902-6	460299021	08/12/2011	removed	N	Y		4.5	J	S28, S29	
CC25A	EF-78	13.4	EF-B78-16.0	16.0 - 16.5 ft	-2.6	-3.1	460-29902-7	460299021	08/12/2011	removed	N	Y		9.2	J	S28, S29	
CC25A	EF-78	13.4	EF-B78-20.0	20.0 - 20.5 ft	-6.6	-7.1	460-29902-8	460299021	08/12/2011	remaining	N	Y		1.4	J	S28	
CC25A	EF-78	13.4	EF-B78-22.0	22.0 - 22.5 ft	-8.6	-9.1	460-29902-9	460299021	08/12/2011	remaining	N	Y		8.2	J	S28	
CC25A	EF-78	13.4	EF-B78-22.0X	22.0 - 22.5 ft	-8.6	-9.1	460-29902-10	460299021	08/12/2011	remaining	FD	Y		< 0.99	UJ	S28	
CC26A	135-P3C-CC26A	13.6	135-P3C-CC26A-11.0-11.5	11.0 - 11.5 ft	2.6	2.1	JB45699-5R	JB45699R	08/24/2013	removed	N	Y		7.9	J	S31	
CC26A	135-P3C-CC26A	13.6	135-P3C-CC26A-13.0-13.5	13.0 - 13.5 ft	0.6	0.1	JB45699-6R	JB45699R	08/24/2013	removed	N	Y		0.55	J	S31	
CC26A	135-P3C-CC26A	13.6	135-P3C-CC26A-15.0-15.5	15.0 - 15.5 ft	-1.4	-1.9	JB45699-7	JB45699	08/24/2013	remaining	N	Y		0.17	J	S31	
CC26A	135-P3C-CC26A	13.6	135-P3C-CC26A-17.0-17.5	17.0 - 17.5 ft	-3.4	-3.9	JB45699-8	JB45699	08/24/2013	remaining	N	Y		0.55	J	S31	
CC26A	135-P3C-CC26A	13.6	135-P3C-CC26A-18.5-19.0	18.5 - 19.0 ft	-4.9	-5.4	JB45699-9R	JB45699R	08/24/2013	remaining	N	Y		0.14	J	S31	
CC26A	135-P3C-CC26A	13.6	135-P3C-CC26A-19.0-19.5	19.0 - 19.5 ft	-5.4	-5.9	JB45699-10R	JB45699R	08/24/2013	remaining	N	Y		2.7	J	S31	
CC27A	135-P3C-CC27A	13.6	135-P3C-CC27A-10.0-10.5	10.0 - 10.5 ft	3.6	3.1	JB62646-26T	JB62646T	03/21/2014	removed	N	Y		0.52	RA	S32	
CC27A	135-P3C-CC27A	13.6	135-P3C-CC27A-12.0-12.5	12.0 - 12.5 ft	1.6	1.1	JB62646-27	JB62646	03/21/2014	removed	N	Y		1.4	RA	S32	
CC27A	135-P3C-CC27A	13.6	135-P3C-CC27A-14.0-14.5	14.0 - 14.5 ft	-0.4	-0.9	JB62646-28	JB62646	03/21/2014	remaining	N	Y		0.33	RA	S32	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
CC27A	135-P3C-CC27A	13.6	135-P3C-CC27A-16.0-16.5	16.0 - 16.5 ft	-2.4	-2.9	JB62646-29T	JB62646T	03/21/2014	remaining	N	Y		3.0	RA	S32	
CC27A	135-P3C-CC27A	13.6	135-P3C-CC27A-17.0-17.5	17.0 - 17.5 ft	-3.4	-3.9	JB62646-30	JB62646	03/21/2014	remaining	N	Y		14.3	RA	S32	
CC27A	135-P3C-CC27A	13.6	135-P3C-CC27A-17.0-17.5X	17.0 - 17.5 ft	-3.4	-3.9	JB62646-31	JB62646	03/21/2014	remaining	FD	Y		0.59	RA	S32	
CC27A	135-P3C-CC27A	13.6	135-P3C-CC27A-17.5-18.0	17.5 - 18.0 ft	-3.9	-4.4	JB62646-32	JB62646	03/21/2014	remaining	N	Y		2.4	RA	S32	
CC28A	135-CC28A	13.5	135-CC28A-10.0-10.5	10.0 - 10.5 ft	3.5	3.0	JC14857-28	JC14857	02/25/2016	removed	N	Y		0.80	RA	S33	
CC28A	135-CC28A	13.5	135-CC28A-10.0-10.5X	10.0 - 10.5 ft	3.5	3.0	JC14857-29	JC14857	02/25/2016	removed	FD	Y		0.49	RA	S33	
CC28A	135-CC28A	13.5	135-CC28A-12.0-12.5	12.0 - 12.5 ft	1.5	1.0	JC14857-30	JC14857	02/25/2016	removed	N	Y		1.8	RA	S20, S33	
CC28A	135-CC28A	13.5	135-CC28A-14.0-14.5	14.0 - 14.5 ft	-0.5	-1.0	JC14857-31	JC14857	02/25/2016	remaining	N	Y		0.27	RA	S20, S33	
CC28A	135-CC28A	13.5	135-CC28A-16.0-16.5	16.0 - 16.5 ft	-2.5	-3.0	JC14857-32	JC14857	02/25/2016	remaining	N	Y		4.4	RA	S33	
CC28A	135-CC28A	13.5	135-CC28A-18.0-18.5	18.0 - 18.5 ft	-4.5	-5.0	JC14857-33	JC14857	02/25/2016	remaining	N	Y		1.3	RA	S33	
CC28A	135-CC28A	13.5	135-CC28A-18.5-19.0	18.5 - 19.0 ft	-5.0	-5.5	JC14857-34	JC14857	02/25/2016	remaining	N	Y		2.7	RA	S33	
CC28A	135-CC28A	13.5	135-CC28A-19.0-19.5	19.0 - 19.5 ft	-5.5	-6.0	JC14857-35T	JC14857T	02/25/2016	remaining	N	Y		1.5	RA	S33	
CC29A	EF-77	13.4	EF-B77-10.0	10.0 - 10.5 ft	3.4	2.9	460-29620-10	460296201	08/05/2011	removed	N	Y		< 0.66	UJ	S20, S34	
CC29A	EF-77	13.4	EF-B77-15.0	15.0 - 15.5 ft	-1.6	-2.1	460-29620-11	460296201	08/05/2011	remaining	N	Y		< 0.70	UJ	S20	
CC29A	EF-77	13.4	EF-B77-16.0	16.0 - 16.5 ft	-2.6	-3.1	460-29620-16	460296201	08/05/2011	remaining	N	Y		< 1.4	UJ	S20	
CC29A	EF-77	13.4	EF-B77-20.0	20.0 - 20.5 ft	-6.6	-7.1	460-29620-13	460296201	08/05/2011	remaining	N	Y		< 1.6	UJ	S20	
CC29A	EF-77	13.4	EF-B77-22.0	22.0 - 22.5 ft	-8.6	-9.1	460-29620-12	460296201	08/05/2011	remaining	N	Y		< 0.60	UJ	S20	
CC30A	135-CC30A	13.9	135-CC30A-11.5-12.0	11.5 - 12.0 ft	2.4	1.9	JC4102-27R	JC4102R	09/17/2015	remaining	N	Y		0.35	J	S20	
CC30A	135-CC30A	13.9	135-CC30A-13.5-14.0	13.5 - 14.0 ft	0.4	-0.1	JC4102-26R	JC4102R	09/17/2015	remaining	N	Y		< 0.13	UJ	S20	
CC30A	135-CC30A	13.9	135-CC30A-15.5-16.0	15.5 - 16.0 ft	-1.6	-2.1	JC4102-25R	JC4102R	09/17/2015	remaining	N	Y		< 0.16	UJ		
CC30A	135-CC30A	13.9	135-CC30A-16.2-16.7	16.2 - 16.7 ft	-2.3	-2.8	JC4102-24R	JC4102R	09/17/2015	remaining	N	Y		0.65	J		
CC30A	135-CC30A	13.9	135-CC30A-16.7-17.2	16.7 - 17.2 ft	-2.8	-3.3	JC4102-23R	JC4102R	09/17/2015	remaining	N	Y		2.5	J		
CC30A	135-CC30A-PB	13.9	135-CC30A-PB-10.4-10.9	10.4 - 10.9 ft	3.5	3.0	JC26182-2	JC26182	08/19/2016	remaining	N	Y		0.49	J		
CC30A	135-CC30A-PB	13.9	135-CC30A-PB-10.4-10.9X	10.4 - 10.9 ft	3.5	3.0	JC26182-3	JC26182	08/19/2016	remaining	FD	Y		0.49	J		
CC31A	135-CC31A	13.6	135-CC31A-2.0-2.5	2.0 - 2.5 ft	11.6	11.1	JC14857-6R	JC14857R	02/25/2016	removed	N	Y		10.2	RA	S35	
CC31A	135-CC31A	13.6	135-CC31A-4.0-4.5	4.0 - 4.5 ft	9.6	9.1	JC14857-7	JC14857	02/25/2016	removed	N	Y		1.8	RA	S35	
CC31A	135-CC31A	13.6	135-CC31A-6.0-6.5	6.0 - 6.5 ft	7.6	7.1	JC14857-8	JC14857	02/25/2016	removed	N	Y		0.41	RA	S35	
CC31A	135-CC31A	13.6	135-CC31A-8.0-8.5	8.0 - 8.5 ft	5.6	5.1	JC14857-9	JC14857	02/25/2016	removed	N	Y		0.38	RA	S22, S35	
CC31A	135-CC31A	13.6	135-CC31A-10.0-10.5	10.0 - 10.5 ft	3.6	3.1	JC14857-1R	JC14857R	02/25/2016	remaining	N	Y		< 0.16	RA	S35	
CC31A	135-CC31A	13.6	135-CC31A-12.0-12.5	12.0 - 12.5 ft	1.6	1.1	JC14857-2	JC14857	02/25/2016	remaining	N	Y		1.2	RA	S35	
CC31A	135-CC31A	13.6	135-CC31A-14.0-14.5	14.0 - 14.5 ft	-0.4	-0.9	JC14857-3	JC14857	02/25/2016	remaining	N	Y		1.8	RA	S35	
CC31A	135-CC31A	13.6	135-CC31A-16.0-16.5	16.0 - 16.5 ft	-2.4	-2.9	JC14857-4R	JC14857R	02/25/2016	remaining	N	Y		< 0.15	RA	S35	
CC31A	135-CC31A	13.6	135-CC31A-16.5-17.0	16.5 - 17.0 ft	-2.9	-3.4	JC14857-5R	JC14857R	02/25/2016	remaining	N	Y		0.83	RA	S35	
CC32A	135-CC32A	10.0	135-CC32A-1.0-1.5	1.0 - 1.5 ft	9.0	8.5	JC2781-1R	JC2781R	09/01/2015	remaining	N	Y		5.2	RA	S12	
CC32A	135-CC32A	10.0	135-CC32A-2.0-2.5	2.0 - 2.5 ft	8.0	7.5	JC2781-3R	JC2781R	09/01/2015	remaining	N	Y		< 0.13	RA	S12	
CC32A	135-CC32A	10.0	135-CC32A-4.0-4.5	4.0 - 4.5 ft	6.0	5.5	JC2781-4R	JC2781R	09/01/2015	remaining	N	Y		0.32	RA	S12	
CC32A	135-CC32A	10.0	135-CC32A-4.0-4.5X	4.0 - 4.5 ft	6.0	5.5	JC2781-5R	JC2781R	09/01/2015	remaining	FD	Y		0.32	RA	S12	
CC32A	135-CC32A	10.0	135-CC32A-6.0-6.5	6.0 - 6.5 ft	4.0	3.5	JC2781-6R	JC2781R	09/01/2015	remaining	N	Y		0.65	RA	S12, S24	
CC32A	135-CC32A	10.0	135-CC32A-8.0-8.5	8.0 - 8.5 ft	2.0	1.5	JC2781-7R	JC2781R	09/01/2015	remaining	N	Y		0.26	RA	S12, S24	
CC32A	135-CC32A	10.0	135-CC32A-10.0-10.5	10.0 - 10.5 ft	0.0	-0.5	JC2781-8R	JC2781R	09/01/2015	remaining	N	Y		0.54	RA	S12	
CC32A	135-CC32A	10.0	135-CC32A-12.0-12.5	12.0 - 12.5 ft	-2.0	-2.5	JC2781-9R	JC2781R	09/01/2015	remaining	N	Y		0.74	RA	S12	
CC32A	135-CC32A	10.0	135-CC32A-14.0-14.5	14.0 - 14.5 ft	-4.0	-4.5	JC2781-10R	JC2781R	09/01/2015	remaining	N	Y		< 0.13	RA	S12	
CC32A	135-CC32A	10.0	135-CC32A-15.5-16.0	15.5 - 16.0 ft	-5.5	-6.0	JC2781-11R	JC2781R	09/01/2015	remaining	N	Y		0.70	RA	S12	
CC32A	135-CC32A	10.0	135-CC32A-16.0-16.5	16.0 - 16.5 ft	-6.0	-6.5	JC2781-12	JC2781	09/01/2015	remaining	N	Y		0.87	RA	S12	
CC33A	EF-19	10.3	EF-B19-0.8	0.8 - 1.3 ft	9.5	9.0	460-25550-31	460255501	04/19/2011	remaining	N	Y		< 0.56	UJ	S12, S24	
CC33A	EF-19	10.3	EF-B19-2.0	2.0 - 2.5 ft	8.3	7.8	460-25550-32	460255501	04/19/2011	remaining	N	Y		< 0.57	UJ	S12, S24	
CC33A	EF-19	10.3	EF-B19-4.0	4.0 - 4.5 ft	6.3	5.8	460-25550-34	460255501	04/19/2011	remaining	N	Y		2.8	J	S12, S24	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXAVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
CC33A	EF-19	10.3	EF-B19-6.0	6.0 - 6.5 ft	4.3	3.8	460-25550-16	460255501	04/19/2011	remaining	N	Y		< 0.59	UJ	S12, S24	
CC33A	EF-19	10.3	EF-B19-10.0	10.0 - 10.5 ft	0.3	-0.2	460-25550-17	460255501	04/19/2011	remaining	N	Y		< 0.58	UJ	S12, S24	
CC33A	EF-19	10.3	EF-B19-15.0	15.0 - 15.5 ft	-4.7	-5.2	460-25550-19	460255501	04/19/2011	remaining	N	Y		< 0.59	UJ	S12, S24	
CC33A	EF-19	10.3	EF-B19-15.0X	15.0 - 15.5 ft	-4.7	-5.2	460-25550-20	460255501	04/19/2011	remaining	FD	Y		< 0.59	UJ	S12, S24	
CC33A	EF-19	10.3	EF-B19-22.5	22.5 - 23.0 ft	-12.2	-12.7	460-25550-23	460255501	04/19/2011	remaining	N	Y		< 0.95	UJ	S12, S24	
DD26A	135-DD26A	13.8	135-DD26A-11.0-11.5	11.0 - 11.5 ft	2.8	2.3	JC3983-7	JC3983	09/16/2015	removed	N	Y		< 0.25	UJ	S28, S36	
DD26A	135-DD26A	13.8	135-DD26A-13.0-13.5	13.0 - 13.5 ft	0.8	0.3	JC3983-8	JC3983	09/16/2015	removed	N	Y		< 0.31	UJ	S28, S36	
DD26A	135-DD26A	13.8	135-DD26A-15.0-15.5	15.0 - 15.5 ft	-1.2	-1.7	JC3983-9	JC3983	09/16/2015	remaining	N	Y		< 0.32	UJ	S28, S36	
DD26A	135-DD26A	13.8	135-DD26A-16.3-16.8	16.3 - 16.8 ft	-2.5	-3.0	JC3983-10	JC3983	09/16/2015	remaining	N	Y		< 0.24	UJ	S28, S36	
DD26A	135-DD26A	13.8	135-DD26A-16.8-17.3	16.8 - 17.3 ft	-3.0	-3.5	JC3983-11	JC3983	09/16/2015	remaining	N	Y		< 0.61	UJ	S28, S36	
DD27A	135-DD27A	13.4	135-DD27A-3.0-3.5	3.0 - 3.5 ft	10.4	9.9	JC4102-22R	JC4102R	09/17/2015	removed	N	Y		2.0	RA	S37	
DD27A	135-DD27A	13.4	135-DD27A-5.0-5.5	5.0 - 5.5 ft	8.4	7.9	JC4102-21R	JC4102R	09/17/2015	removed	N	Y		1.3	RA	S37	
DD27A	135-DD27A	13.4	135-DD27A-5.0-5.5X	5.0 - 5.5 ft	8.4	7.9	JC4102-14	JC4102	09/17/2015	removed	FD	Y		0.71	RA	S37	
DD27A	135-DD27A	13.4	135-DD27A-7.0-7.5	7.0 - 7.5 ft	6.4	5.9	JC4102-20R	JC4102R	09/17/2015	removed	N	Y		0.74	RA	S37	
DD27A	135-DD27A	13.4	135-DD27A-9.0-9.5	9.0 - 9.5 ft	4.4	3.9	JC4102-19	JC4102	09/17/2015	removed	N	Y		0.29	RA	S37	
DD27A	135-DD27A	13.4	135-DD27A-11.0-11.5	11.0 - 11.5 ft	2.4	1.9	JC4102-18R	JC4102R	09/17/2015	removed	N	Y		1.0	RA	S37	
DD27A	135-DD27A	13.4	135-DD27A-13.0-13.5	13.0 - 13.5 ft	0.4	-0.1	JC4102-17R	JC4102R	09/17/2015	remaining	N	Y		< 0.21	RA	S37	
DD27A	135-DD27A	13.4	135-DD27A-15.0-15.5	15.0 - 15.5 ft	-1.6	-2.1	JC4102-16	JC4102	09/17/2015	remaining	N	Y		< 0.27	RA	S37	
DD27A	135-DD27A	13.4	135-DD27A-15.5-16.0	15.5 - 16.0 ft	-2.1	-2.6	JC4102-15R	JC4102R	09/17/2015	remaining	N	Y		1.6	J	S37	
DD27A	135-DD28A-SW-N	13.4	135-DD28A-SW-N-12.2-12.7	12.2 - 12.7 ft	1.2	0.7	JC29231-3	JC29231	10/07/2016	remaining	N	Y		< 0.44	UJ		
DD28A	135-DD28A	13.4	135-DD28A-15.0-15.5	15.0 - 15.5 ft	-1.6	-2.1	JC4269-9	JC4269	09/18/2015	remaining	N	Y		< 0.30	UJ	S38	
DD28A	135-DD28A	13.4	135-DD28A-17.0-17.5	17.0 - 17.5 ft	-3.6	-4.1	JC4269-10	JC4269	09/18/2015	remaining	N	Y		0.47	J	S38	
DD28A	135-DD28A	13.4	135-DD28A-17.5-18.0	17.5 - 18.0 ft	-4.1	-4.6	JC4269-11R	JC4269R	09/18/2015	remaining	N	Y		< 0.13	UJ	S38	
DD28A	135-DD28A	13.4	135-DD28A-18.0-18.5	18.0 - 18.5 ft	-4.6	-5.1	JC4269-12	JC4269	09/18/2015	remaining	N	Y		0.99	J	S38	
DD28A	135-DD28A-E-PB	13.4	135-DD28A-E-PB-14.2-14.7	14.2 - 14.7 ft	-0.8	-1.3	JC28300-2	JC28300	09/22/2016	remaining	N	Y		0.79	J	S38	
DD28A	135-DD28A-E-PB2	13.4	135-DD28A-E-PB-14.2-14.7R	14.2 - 14.7 ft	-0.8	-1.3	JC28407-2	JC28407	09/26/2016	remaining	N	Y		0.40	J	S38	
DD28A	135-DD28A-E-SW-W	13.4	135-DD28A-E-SW-W-12.2-12.7	12.2 - 12.7 ft	1.2	0.7	JC28407-4	JC28407	09/26/2016	remaining	N	Y		0.87	J	S38	
DD28A	135-DD28A-SW-E3	13.4	135-DD28A-SW-E-8.2-8.7	8.2 - 8.7 ft	5.2	4.7	JC29231-6R	JC29231R	10/07/2016	remaining	N	Y		0.36	J	S12, S38	
DD28A	135-DD28A-SW-E4	13.4	135-DD28A-SW-E-10.2-10.7	10.2 - 10.7 ft	3.2	2.7	JC29231-5R	JC29231R	10/07/2016	remaining	N	Y		2.9	J	S12, S38	
DD28A	135-DD28A-SW-E4	13.4	135-DD28A-SW-E-10.2-10.7X	10.2 - 10.7 ft	3.2	2.7	JC29231-11	JC29231	10/07/2016	remaining	FD	Y		2.3	J	S12, S38	
DD28A	135-DD28A-SW-E5	13.4	135-DD28A-SW-E-12.2-12.7	12.2 - 12.7 ft	1.2	0.7	JC29231-4R	JC29231R	10/07/2016	remaining	N	Y		0.81	J	S12, S38	
DD28A	135-DD28A-W-PB	13.4	135-DD28A-W-PB-11.7-12.2	11.7 - 12.2 ft	1.7	1.2	JC28300-3	JC28300	09/22/2016	remaining	N	Y		1.4	J	S38	
DD28A	135-DD28A-W-PB2	13.4	135-DD28A-W-PB-11.7-12.2R	11.7 - 12.2 ft	1.7	1.2	JC28407-3	JC28407	09/26/2016	remaining	N	Y		0.57	J	S38	
DD29A	135-DD28A-SW-S2	13.4	135-DD28A-SW-S-12.4-12.9	12.4 - 12.9 ft	1.0	0.5	JC29762-2R	JC29762R	10/13/2016	remaining	N	Y		0.75	J		
DD29A	135-DD29A	13.4	135-DD29A-11.0-11.5	11.0 - 11.5 ft	2.4	1.9	JC4102-8R	JC4102R	09/17/2015	remaining	N	Y		< 0.14	RA	S20	
DD29A	135-DD29A	13.4	135-DD29A-13.0-13.5	13.0 - 13.5 ft	0.4	-0.1	JC4102-7R	JC4102R	09/17/2015	remaining	N	Y		< 0.13	RA	S20	
DD29A	135-DD29A	13.4	135-DD29A-15.0-15.5	15.0 - 15.5 ft	-1.6	-2.1	JC4102-6R	JC4102R	09/17/2015	remaining	N	Y		0.35	RA		
DD29A	135-DD29A	13.4	135-DD29A-15.0-15.5X	15.0 - 15.5 ft	-1.6	-2.1	JC4102-5	JC4102	09/17/2015	remaining	FD	Y		0.25	RA		
DD29A	135-DD29A	13.4	135-DD29A-17.0-17.5	17.0 - 17.5 ft	-3.6	-4.1	JC4102-4R	JC4102R	09/17/2015	remaining	N	Y		0.30	RA		
DD29A	135-DD29A	13.4	135-DD29A-17.9-18.4	17.9 - 18.4 ft	-4.5	-5.0	JC4102-3R	JC4102R	09/17/2015	remaining	N	Y		< 0.14	RA		
DD29A	135-DD29A	13.4	135-DD29A-18.4-18.9	18.4 - 18.9 ft	-5.0	-5.5	JC4102-2R	JC4102R	09/17/2015	remaining	N	Y		< 1.8	RA		
DD29A	135-DD29A-PB	13.4	135-DD29A-PB-10.5-11.0	10.5 - 11.0 ft	2.9	2.4	JC28300-4R	JC28300R	09/22/2016	remaining	N	Y		1.3	J	S39	
DD29A	135-DD29A-PB	13.4	135-DD29A-PB-10.5-11.0X	10.5 - 11.0 ft	2.9	2.4	JC28300-5R	JC28300R	09/22/2016	remaining	FD	Y		1.8	J	S39	
DD29A	135-DD29A-PB2	13.4	135-DD29A-PB-10.5-11.0R	10.5 - 11.0 ft	2.9	2.4	JC28557-5	JC28557	09/28/2016	remaining	N	Y		1.3	RA	S39	
DD29A	135-DD29A-SW-E1	13.4	135-DD29A-SW-E-4.2-4.7	4.2 - 4.7 ft	9.2	8.7	JC29762-3R	JC29762R	10/13/2016	remaining	N	Y		2.8	J	S12, S40	
DD29A	135-DD29A-SW-E2	13.4	135-DD29A-SW-E-6.5-7.0	6.5 - 7.0 ft	6.9	6.4	JC29231-10R	JC29231R	10/07/2016	remaining	N	Y		0.49	J	S12, S40	
DD29A	135-DD29A-SW-E3	13.4	135-DD29A-SW-E-8.5-9.0	8.5 - 9.0 ft	4.9	4.4	JC29231-9	JC29231	10/07/2016	remaining	N	Y		0.97	J	S12	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
DD30A	135-CC30A-SW-E1	10.2	135-CC30A-SW-E-4.4-4.9	0.7 - 1.2 ft	9.5	9.0	JC26570-5R	JC26570R	08/26/2016	remaining	N	Y		0.77	J	S27	
DD30A	135-CC30A-SW-E2	10.2	135-CC30A-SW-E-6.4-6.9	2.7 - 3.2 ft	7.5	7.0	JC26570-4R	JC26570R	08/26/2016	remaining	N	Y		2.1	J	S27, S40	
DD30A	135-CC30A-SW-E3	13.9	135-CC30A-SW-E-8.4-8.9	8.4 - 8.9 ft	5.5	5.0	JC26570-2	JC26570	08/26/2016	remaining	N	Y		2.3	J		
DD30A	135-CC30A-SW-E3	13.9	135-CC30A-SW-E-8.4-8.9X	8.4 - 8.9 ft	5.5	5.0	JC26570-3R	JC26570R	08/26/2016	remaining	FD	Y		1.4	J		
DD30A	135-DD30A	10.2	135-DD30A-0.5-1.0	0.5 - 1.0 ft	9.7	9.2	JC2781-13R	JC2781R	09/01/2015	remaining	N	Y		18.6	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-2.5-3.0	2.5 - 3.0 ft	7.7	7.2	JC2781-14R	JC2781R	09/01/2015	remaining	N	Y		< 0.12	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-4.5-5.0	4.5 - 5.0 ft	5.7	5.2	JC2781-15R	JC2781R	09/01/2015	remaining	N	Y		< 0.16	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-6.5-7.0	6.5 - 7.0 ft	3.7	3.2	JC2781-16R	JC2781R	09/01/2015	remaining	N	Y		0.55	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-8.5-9.0	8.5 - 9.0 ft	1.7	1.2	JC2781-17R	JC2781R	09/01/2015	remaining	N	Y		0.15	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-10.5-11.0	10.5 - 11.0 ft	-0.3	-0.8	JC2781-18R	JC2781R	09/01/2015	remaining	N	Y		0.34	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-12.5-13.0	12.5 - 13.0 ft	-2.3	-2.8	JC2781-19R	JC2781R	09/01/2015	remaining	N	Y		< 0.13	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-14.5-15.0	14.5 - 15.0 ft	-4.3	-4.8	JC2781-20R	JC2781R	09/01/2015	remaining	N	Y		< 0.13	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-15.4-15.9	15.4 - 15.9 ft	-5.2	-5.7	JC2781-21R	JC2781R	09/01/2015	remaining	N	Y		< 0.14	RA	S12	
DD30A	135-DD30A	10.2	135-DD30A-15.9-16.4	15.9 - 16.4 ft	-5.7	-6.2	JC2781-22	JC2781	09/01/2015	remaining	N	Y		0.68	RA	S12	
EE26A	135-EE26A	13.8	135-EE26A-1.5-2.0	1.5 - 2.0 ft	12.3	11.8	JC3983-12R	JC3983R	09/16/2015	removed	N	Y		2.0	J	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-3.0-3.5	3.0 - 3.5 ft	10.8	10.3	JC3983-13R	JC3983R	09/16/2015	removed	N	Y		11.3	J	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-5.0-5.5	5.0 - 5.5 ft	8.8	8.3	JC3983-14R	JC3983R	09/16/2015	removed	N	Y		2.4	J	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-7.0-7.5	7.0 - 7.5 ft	6.8	6.3	JC3983-15	JC3983	09/16/2015	removed	N	Y		1.2	J	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-9.0-9.5	9.0 - 9.5 ft	4.8	4.3	JC3983-16	JC3983	09/16/2015	removed	N	Y		0.28	J	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-11.0-11.5	11.0 - 11.5 ft	2.8	2.3	JC3983-17R	JC3983R	09/16/2015	removed	N	Y		< 0.13	UJ	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-13.0-13.5	13.0 - 13.5 ft	0.8	0.3	JC3983-22	JC3983	09/16/2015	remaining	N	Y		0.37	J	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-15.0-15.5	15.0 - 15.5 ft	-1.2	-1.7	JC3983-20	JC3983	09/16/2015	remaining	N	Y		< 0.30	UJ	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-15.9-16.4	15.9 - 16.4 ft	-2.1	-2.6	JC3983-21R	JC3983R	09/16/2015	remaining	N	Y		0.30	J	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-15.9-16.4X	15.9 - 16.4 ft	-2.1	-2.6	JC3983-19R	JC3983R	09/16/2015	remaining	FD	Y		< 0.14	UJ	S28, S41	
EE26A	135-EE26A	13.8	135-EE26A-16.4-16.9	16.4 - 16.9 ft	-2.6	-3.1	JC3983-18	JC3983	09/16/2015	remaining	N	Y		1.9	J	S28, S41	
EE27A	135-EE27A	9.7	135-EE27A-1.2-1.7	1.2 - 1.7 ft	8.5	8.0	JC2781-23R	JC2781R	09/01/2015	remaining	N	Y		< 0.13	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-2.0-2.5	2.0 - 2.5 ft	7.7	7.2	JC2781-24R	JC2781R	09/01/2015	remaining	N	Y		0.36	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-4.0-4.5	4.0 - 4.5 ft	5.7	5.2	JC2781-25R	JC2781R	09/01/2015	remaining	N	Y		< 0.13	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-4.0-4.5X	4.0 - 4.5 ft	5.7	5.2	JC2781-26R	JC2781R	09/01/2015	remaining	FD	Y		< 0.13	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-6.0-6.5	6.0 - 6.5 ft	3.7	3.2	JC2781-27R	JC2781R	09/01/2015	remaining	N	Y		< 0.15	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-8.0-8.5	8.0 - 8.5 ft	1.7	1.2	JC2781-28R	JC2781R	09/01/2015	remaining	N	Y		0.50	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-10.0-10.5	10.0 - 10.5 ft	-0.3	-0.8	JC2781-29R	JC2781R	09/01/2015	remaining	N	Y		0.35	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-12.0-12.5	12.0 - 12.5 ft	-2.3	-2.8	JC2781-30R	JC2781R	09/01/2015	remaining	N	Y		0.32	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-14.0-14.5	14.0 - 14.5 ft	-4.3	-4.8	JC2781-31R	JC2781R	09/01/2015	remaining	N	Y		0.23	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-15.7-16.2	15.7 - 16.2 ft	-6.0	-6.5	JC2781-32R	JC2781R	09/01/2015	remaining	N	Y		0.19	RA	S12	
EE27A	135-EE27A	9.7	135-EE27A-16.2-16.7	16.2 - 16.7 ft	-6.5	-7.0	JC2781-33	JC2781	09/01/2015	remaining	N	Y		1.3	RA	S12	
EE28A	135-DD28A-SW-E1	13.4	135-DD28A-SW-E-4.2-4.7	4.2 - 4.7 ft	9.2	8.7	JC29231-8R	JC29231R	10/07/2016	remaining	N	Y		2.3	J	S12	
EE28A	135-DD28A-SW-E2	13.4	135-DD28A-SW-E-6.2-6.7	6.2 - 6.7 ft	7.2	6.7	JC29231-7	JC29231	10/07/2016	remaining	N	Y		0.43	J	S12, S40	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-6.0-6.5	6.0 - 6.5 ft	3.4	2.9	JB65204-5R	JB65204R	04/21/2014	removed	N	Y		1.5	J	S1, S4, S42	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-6.0-6.5X	6.0 - 6.5 ft	3.4	2.9	JB65204-6R	JB65204R	04/21/2014	removed	FD	Y		1.9	J	S1, S4, S42	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JB65204-13	JB65204	04/21/2014	removed	N	Y		0.61	J	S1, S4, S42	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-8.0-8.5	8.0 - 8.5 ft	1.4	0.9	JB65204-7R	JB65204R	04/21/2014	removed	N	Y		0.72	J	S1, S4, S42	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-10.0-10.5	10.0 - 10.5 ft	-0.6	-1.1	JB65204-8R	JB65204R	04/21/2014	remaining	N	Y		2.0	J	S1, S4, S42	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-12.0-12.5	12.0 - 12.5 ft	-2.6	-3.1	JB65204-9R	JB65204R	04/21/2014	remaining	N	Y		0.67	J	S1, S4, S42	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-14.0-14.5	14.0 - 14.5 ft	-4.6	-5.1	JB65204-10R	JB65204R	04/21/2014	remaining	N	Y		0.89	J	S1, S4, S42	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-15.3-15.8	15.3 - 15.8 ft	-5.9	-6.4	JB65204-11R	JB65204R	04/21/2014	remaining	N	Y		2.0	J	S1, S4, S42	
V40A	133-P3C-V40A	9.4	133-P3C-V40A-15.8-16.3	15.8 - 16.3 ft	-6.4	-6.9	JB65204-12R	JB65204R	04/21/2014	remaining	N	Y		3.4	J	S1, S4, S42	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-11.0-11.5	11.0 - 11.5 ft	2.7	2.2	JB42618-13R	JB42618R	07/19/2013	removed	N	Y		< 0.074	UJ	S1, S4, S42	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-13.0-13.5	13.0 - 13.5 ft	0.7	0.2	JB42618-14R	JB42618R	07/19/2013	removed	N	Y		< 0.080	UJ	S1, S4, S42	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-15.0-15.5	15.0 - 15.5 ft	-1.3	-1.8	JB42618-15	JB42618	07/19/2013	removed	N	Y		< 0.087	UJ	S1, S4, S42	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-15.5-16.0	15.5 - 16.0 ft	-1.8	-2.3	JB42618-16	JB42618	07/19/2013	removed	N	Y		0.32	J	S1, S4, S42	
V40A	135-P3C-V41A	13.7	135-P3C-V41A-15.5-16.0X	15.5 - 16.0 ft	-1.8	-2.3	JB42618-17	JB42618	07/19/2013	removed	FD	Y		0.17	J	S1, S4, S42	
V41A	ASM-V41AR	10.1	ASM-V41AR-8.0-8.5	8.0 - 8.5 ft	2.1	1.6	JC31135-8	JC31135	11/04/2016	remaining	N	Y		< 0.35	UJ	S1, S43	
V41A	ASM-V41AR	10.1	ASM-V41AR-10.0-10.5	10.0 - 10.5 ft	0.1	-0.4	JC31135-4	JC31135	11/04/2016	remaining	N	Y		< 0.35	UJ	S1, S43	
V41A	ASM-V41AR	10.1	ASM-V41AR-12.0-12.5	12.0 - 12.5 ft	-1.9	-2.4	JC31135-5R	JC31135R	11/04/2016	remaining	N	Y		0.80	J	S1, S43	
V41A	ASM-V41AR	10.1	ASM-V41AR-13.0-13.5	13.0 - 13.5 ft	-2.9	-3.4	JC31135-6R	JC31135R	11/04/2016	remaining	N	Y		0.58	J	S1, S43	
V41A	ASM-V41AR	10.1	ASM-V41AR-13.5-14.0	13.5 - 14.0 ft	-3.4	-3.9	JC31135-7R	JC31135R	11/04/2016	remaining	N	Y		0.56	J	S1, S43	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-7.0-7.5	7.0 - 7.5 ft	5.9	5.4	JB65296-16	JB65296	04/22/2014	removed	N	Y		1.9		S1, S44	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-9.0-9.5	9.0 - 9.5 ft	3.9	3.4	JB65296-17	JB65296	04/22/2014	removed	N	Y		0.85		S1, S44	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-11.0-11.5	11.0 - 11.5 ft	1.9	1.4	JB65296-18R	JB65296R	04/22/2014	removed	N	Y		0.24	J	S1, S44	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-13.0-13.5	13.0 - 13.5 ft	-0.1	-0.6	JB65296-19	JB65296	04/22/2014	removed	N	Y		0.30	J	S1, S44	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-15.0-15.5	15.0 - 15.5 ft	-2.1	-2.6	JB65296-20	JB65296	04/22/2014	remaining	N	Y		0.39	J	S1, S44	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-15.6-16.1	15.6 - 16.1 ft	-2.7	-3.2	JB65296-21	JB65296	04/22/2014	remaining	N	Y		0.29	J	S1, S44	
W37A	133-P3C-W37AR	12.9	133-P3C-W37AR-16.1-16.6	16.1 - 16.6 ft	-3.2	-3.7	JB65296-22	JB65296	04/22/2014	remaining	N	Y		3.7	J	S1, S44	
W37A	133-V37A-SW-E	12.6	133-V37A-SW-E-14.1-14.6	14.1 - 14.6 ft	-1.5	-2.0	JC35627-6R	JC35627R	01/17/2017	remaining	N	Y		16.4	J	S1	
W38A	133-V38A-SW-E1	9.4	133-V38A-SW-E-6.9-7.4	3.6 - 4.1 ft	5.8	5.3	JC36658-3	JC36658	02/02/2017	remaining	N	Y		< 0.44	RA	S1, S27	
W38A	133-V38A-SW-E1	9.4	133-V38A-SW-E-6.9-7.4X	3.6 - 4.1 ft	5.8	5.3	JC36658-4	JC36658	02/02/2017	remaining	FD	Y		< 0.44	RA	S1, S27	
W38A	133-V38A-SW-E2	9.4	133-V38A-SW-E-8.9-9.4	5.6 - 6.1 ft	3.8	3.3	JC36658-2	JC36658	02/02/2017	remaining	N	Y		< 0.43	RA	S1, S27	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-1.0-1.5	1.0 - 1.5 ft	8.4	7.9	JB65079-2	JB65079	04/18/2014	removed	N	Y		0.78	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-3.0-3.5	3.0 - 3.5 ft	6.4	5.9	JB65079-3	JB65079	04/18/2014	removed	N	Y		10.3	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-5.0-5.5	5.0 - 5.5 ft	4.4	3.9	JB36930-1	JB36930	05/13/2013	remaining	N	Y		2.7	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JB36930-2R	JB36930R	05/13/2013	remaining	N	Y		0.24	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-8.5-9.0	8.5 - 9.0 ft	0.9	0.4	JB36930-3R	JB36930R	05/13/2013	remaining	N	Y		1.0	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-10.5-11.0	10.5 - 11.0 ft	-1.1	-1.6	JB36930-4	JB36930	05/13/2013	remaining	N	Y		0.64	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-12.5-13.0	12.5 - 13.0 ft	-3.1	-3.6	JB36930-5R	JB36930R	05/13/2013	remaining	N	Y		0.70	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-14.5-15.0	14.5 - 15.0 ft	-5.1	-5.6	JB36930-6R	JB36930R	05/13/2013	remaining	N	Y		0.69	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-16.0-16.5	16.0 - 16.5 ft	-6.6	-7.1	JB36930-7R	JB36930R	05/13/2013	remaining	N	Y		0.76	J	S1, S45	
W38A	135-P3C-W38A	9.4	135-P3C-W38A-16.5-17.0	16.5 - 17.0 ft	-7.1	-7.6	JB36930-8R	JB36930R	05/13/2013	remaining	N	Y		1.4	J	S1, S45	
W38A	135-W39A-SW-N2	9.4	135-W39A-SW-N-5.0-5.5	5.0 - 5.5 ft	4.4	3.9	JC36564-5R	JC36564R	02/01/2017	remaining	N	Y		< 0.16	RA	S1	
W38A	135-W39A-SW-N3	9.4	135-W39A-SW-N-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JC36564-4R	JC36564R	02/01/2017	remaining	N	Y		< 0.15	RA	S1	
W38A	135-W39A-SW-NR1	9.4	135-W39A-SW-N-3.0-3.5R	3.0 - 3.5 ft	6.4	5.9	JC37447-2R	JC37447R	02/17/2017	remaining	N	Y		1.2	J	S1	
W38A	135-X38A-SW-W1	13.6	135-X38A-SW-W-7.4-7.9	7.4 - 7.9 ft	6.2	5.7	JC36500-5	JC36500	01/31/2017	remaining	N	Y		< 0.45	UJ	S1	
W38A	135-X38A-SW-W2	13.6	135-X38A-SW-W-9.4-9.9	9.4 - 9.9 ft	4.2	3.7	JC36500-4	JC36500	01/31/2017	remaining	N	Y		< 0.41	UJ	S1	
W39A	135-B3	9.3	135B3C_10.5-10.8 802273	10.5 - 10.8 ft	-1.2	-1.5	802273	C243	01/24/2007	remaining	N	Y		< 3.09	UJ	S1	
W39A	135-B3	9.3	135B3D_16.0-16.5 802274	16.0 - 16.5 ft	-6.7	-7.2	802274	C243	01/24/2007	remaining	N	Y		< 3.6	UJ	S1	
W39A	135-P3C-W39A	9.4	135-P3C-W39A-9.0-9.5	9.0 - 9.5 ft	0.4	-0.1	JB37527-4R	JB37527R	05/20/2013	remaining	N	Y		0.12	J	S1	
W39A	135-P3C-W39A	9.4	135-P3C-W39A-11.0-11.5	11.0 - 11.5 ft	-1.6	-2.1	JB37527-5R	JB37527R	05/20/2013	remaining	N	Y		0.46	J	S1	
W39A	135-P3C-W39A	9.4	135-P3C-W39A-13.0-13.5	13.0 - 13.5 ft	-3.6	-4.1	JB37527-6	JB37527	05/20/2013	remaining	N	Y		1.7	J	S1	
W39A	135-P3C-W39A	9.4	135-P3C-W39A-13.5-14.0	13.5 - 14.0 ft	-4.1	-4.6	JB37527-7R	JB37527R	05/20/2013	remaining	N	Y		< 0.099	UJ	S1	
W39A	135-P3C-W39A	9.4	135-P3C-W39A-14.0-14.5	14.0 - 14.5 ft	-4.6	-5.1	JB37527-8	JB37527	05/20/2013	remaining	N	Y		1.0	J	S1	
W40A	135-P3C-W40A	13.3	135-P3C-W40A-9.0-9.5	9.0 - 9.5 ft	4.3	3.8	JB65201-6	JB65201	04/21/2014	removed	N	Y		11.1	J	S46	
W40A	135-P3C-W40A	13.3	135-P3C-W40A-11.0-11.5	11.0 - 11.5 ft	2.3	1.8	JB65201-7	JB65201	04/21/2014	removed	N	Y		0.22	J	S46	
W40A	135-P3C-W40A	13.3	135-P3C-W40A-13.0-13.5	13.0 - 13.5 ft	0.3	-0.2	JB65201-8	JB65201	04/21/2014	removed	N	Y		0.56	J	S46	
W40A	135-P3C-W40A	13.3	135-P3C-W40A-13.0-13.5X	13.0 - 13.5 ft	0.3	-0.2	JB65201-9	JB65201	04/21/2014	removed	FD	Y		0.97	J	S46	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
W40A	135-P3C-W40A	13.3	135-P3C-W40A-14.4-14.9	14.4 - 14.9 ft	-1.1	-1.6	JB65201-10	JB65201	04/21/2014	removed	N	Y		0.94	J	S46	
W40A	135-P3C-W40A	13.3	135-P3C-W40A-14.9-15.4	14.9 - 15.4 ft	-1.6	-2.1	JB65201-11	JB65201	04/21/2014	removed	N	Y		1.1	J	S46	
W40A	135-W39A-SW-S	9.4	135-W39A-SW-S-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JC36564-9R	JC36564R	02/01/2017	remaining	N	Y		< 0.16	RA		
W41A	135-W41A	13.9	135-W41A-16.3-16.8	16.3 - 16.8 ft	-2.4	-2.9	JC3527-7	JC3527	09/10/2015	remaining	N	Y		< 0.54	RA	S47	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-6.5-7.0	6.5 - 7.0 ft	4.3	3.8	JB37620-9	JB37620	05/21/2013	remaining	N	Y		0.50	J	S1, S4	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-6.5-7.0X	6.5 - 7.0 ft	4.3	3.8	JB37620-10R	JB37620R	05/21/2013	remaining	FD	Y		0.56	J	S1, S4	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-8.5-9.0	8.5 - 9.0 ft	2.3	1.8	JB37620-11R	JB37620R	05/21/2013	remaining	N	Y		0.59	J	S1, S4	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-10.5-11.0	10.5 - 11.0 ft	0.3	-0.2	JB37620-12R	JB37620R	05/21/2013	remaining	N	Y		0.38	J	S1, S4	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-12.5-13.0	12.5 - 13.0 ft	-1.7	-2.2	JB37620-13	JB37620	05/21/2013	remaining	N	Y		< 0.093	RA	S1, S4	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-14.5-15.0	14.5 - 15.0 ft	-3.7	-4.2	JB37620-14T	JB37620T	05/21/2013	remaining	N	Y		3.0	RA	S1, S4	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-15.5-16.0	15.5 - 16.0 ft	-4.7	-5.2	JB37620-15	JB37620	05/21/2013	remaining	N	Y		0.76	RA	S1, S4	
X35A	133-P3C-X35A	10.8	133-P3C-X35A-16.0-16.5	16.0 - 16.5 ft	-5.2	-5.7	JB37620-16	JB37620	05/21/2013	remaining	N	Y		0.88	RA	S1, S4	
X35A	133-P3C-X35A-ME	12.7	133-P3C-X35A-ME-8.5-9.0	8.5 - 9.0 ft	4.2	3.7	JB96555-13	JB96555	06/08/2015	remaining	N	Y		< 0.28	UJ	S1, S4	
X35A	133-W35A-SW-E	12.9	133-W35A-SW-E-7.9-8.4	7.9 - 8.4 ft	5.0	4.5	JC25915-7R	JC25915R	08/16/2016	remaining	N	Y		1.1	J	S1	
X35A	133-X35A-PB	10.8	133-X35A-PB-4.5-5.0	4.5 - 5.0 ft	6.3	5.8	JC25689-3R	JC25689R	08/11/2016	remaining	N	Y		1.0	J	S1	
X36A	133-W36A-SW-E2	9.9	133-W36A-SW-E-5.4-5.9	2.6 - 3.1 ft	7.3	6.8	JC24571-5R	JC24571R	07/22/2016	removed	N	Y		5.0	RA	S1, S27, S48	
X36A	133-W36A-SW-E3	9.9	133-W36A-SW-E-7.4-7.9	4.6 - 5.1 ft	5.3	4.8	JC24571-4	JC24571	07/22/2016	remaining	N	Y		0.75	RA	S1, S27	
X36A	133-W36A-SW-E4	9.9	133-W36A-SW-E-9.4-9.9	6.6 - 7.1 ft	3.3	2.8	JC24571-3	JC24571	07/22/2016	remaining	N	Y		0.70	RA	S1, S27	
X36A	135-P3C-X36A	9.9	135-P3C-X36A-6.0-6.5	6.0 - 6.5 ft	3.9	3.4	JB36931-3R	JB36931R	05/13/2013	remaining	N	Y		0.41	J	S1, S49	
X36A	135-P3C-X36A	9.9	135-P3C-X36A-8.0-8.5	8.0 - 8.5 ft	1.9	1.4	JB36931-1	JB36931	05/13/2013	remaining	N	Y		0.37	J	S1, S49	
X36A	135-P3C-X36A	9.9	135-P3C-X36A-8.0-8.5X	8.0 - 8.5 ft	1.9	1.4	JB36931-2	JB36931	05/13/2013	remaining	FD	Y		0.36	J	S1, S49	
X36A	135-P3C-X36A	9.9	135-P3C-X36A-10.0-10.5	10.0 - 10.5 ft	-0.1	-0.6	JB36931-4	JB36931	05/13/2013	remaining	N	Y		0.62	J	S1, S49	
X36A	135-P3C-X36A	9.9	135-P3C-X36A-12.0-12.5	12.0 - 12.5 ft	-2.1	-2.6	JB36931-5	JB36931	05/13/2013	remaining	N	Y		0.15	J	S1, S49	
X36A	135-P3C-X36A	9.9	135-P3C-X36A-14.0-14.5	14.0 - 14.5 ft	-4.1	-4.6	JB36931-6R	JB36931R	05/13/2013	remaining	N	Y		1.1	J	S1, S49	
X36A	135-P3C-X36A	9.9	135-P3C-X36A-16.0-16.5	16.0 - 16.5 ft	-6.1	-6.6	JB36931-7	JB36931	05/13/2013	remaining	N	Y		0.18	J	S1, S49	
X36A	135-P3C-X36A	9.9	135-P3C-X36A-16.5-17.0	16.5 - 17.0 ft	-6.6	-7.1	JB36931-8	JB36931	05/13/2013	remaining	N	Y		0.61	J	S1, S49	
X36A	135-P3C-X36AR	12.4	135-P3C-X36AR-0.0-0.5	0.0 - 0.5 ft	12.4	11.9	JB83043-3	JB83043	12/02/2014	removed	N	Y		13.9		S1, S49	
X36A	135-X35A-SW-S	10.8	135-X35A-SW-S-2.5-3.0	2.5 - 3.0 ft	8.3	7.8	JC26798-2	JC26798	08/31/2016	remaining	N	Y		7.3	J	S1	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-1.0-1.5	1.0 - 1.5 ft	8.8	8.3	JB65079-4	JB65079	04/18/2014	removed	N	Y		0.56	J	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-3.0-3.5	3.0 - 3.5 ft	6.8	6.3	JB65079-5	JB65079	04/18/2014	removed	N	Y		0.72	J	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-5.0-5.5	5.0 - 5.5 ft	4.8	4.3	JB37527-9R	JB37527R	05/20/2013	removed	N	Y		0.39	J	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-7.0-7.5	7.0 - 7.5 ft	2.8	2.3	JB37527-10R	JB37527R	05/20/2013	removed	N	Y		< 0.11	UJ	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-9.0-9.5	9.0 - 9.5 ft	0.8	0.3	JB37527-11R	JB37527R	05/20/2013	removed	N	Y		0.47	J	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-10.5-11.0	10.5 - 11.0 ft	-0.7	-1.2	JB37527-12R	JB37527R	05/20/2013	removed	N	Y		0.56	J	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-12.5-13.0	12.5 - 13.0 ft	-2.7	-3.2	JB37527-13R	JB37527R	05/20/2013	remaining	N	Y		0.95	J	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-14.5-15.0	14.5 - 15.0 ft	-4.7	-5.2	JB37527-14	JB37527	05/20/2013	remaining	N	Y		0.42	J	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-15.7-16.2	15.7 - 16.2 ft	-5.9	-6.4	JB37527-15	JB37527	05/20/2013	remaining	N	Y		0.26	J	S1, S50	
X37A	135-P3C-X37A	9.8	135-P3C-X37A-16.2-16.7	16.2 - 16.7 ft	-6.4	-6.9	JB37527-16	JB37527	05/20/2013	remaining	N	Y		3.9	J	S1, S50	
X38A	135-P3C-X38A	13.6	135-P3C-X38A-13.0-13.5	13.0 - 13.5 ft	0.6	0.1	JB65510-8R	JB65510R	04/24/2014	remaining	N	Y		0.23	J		
X38A	135-P3C-X38A	13.6	135-P3C-X38A-15.0-15.5	15.0 - 15.5 ft	-1.4	-1.9	JB65510-10	JB65510	04/24/2014	remaining	N	Y		0.29	J		
X38A	135-P3C-X38A	13.6	135-P3C-X38A-15.5-16.0	15.5 - 16.0 ft	-1.9	-2.4	JB65510-11R	JB65510R	04/24/2014	remaining	N	Y		2.2	J		
X38A	135-X38A-PB	13.6	135-X38A-PB-13.4-13.9	13.4 - 13.9 ft	0.2	-0.3	JC36500-1	JC36500	01/31/2017	remaining	N	Y		< 0.44	UJ		
X38A	135-X38A-SW-W3	13.6	135-X38A-SW-W-11.4-11.9	11.4 - 11.9 ft	2.2	1.7	JC36500-3	JC36500	01/31/2017	remaining	N	Y		< 0.47	UJ		
X38A	135-Y38A-SW-W3	13.9	135-Y38A-SW-W-14.0-14.5	14.0 - 14.5 ft	-0.1	-0.6	JC34350-1R	JC34350R	12/22/2016	remaining	N	Y		1.4	RA		
X39A	135-P3C-X39A	9.7	135-P3C-X39A-3.5-4.0	3.5 - 4.0 ft	6.2	5.7	JB65408-12	JB65408	04/23/2014	removed	N	Y		2.2	J	S51	
X39A	135-P3C-X39A	9.7	135-P3C-X39A-5.5-6.0	5.5 - 6.0 ft	4.2	3.7	JB65408-13	JB65408	04/23/2014	removed	N	Y		1.9	J	S51	
X39A	135-P3C-X39A	9.7	135-P3C-X39A-5.5-6.0X	5.5 - 6.0 ft	4.2	3.7	JB65408-14	JB65408	04/23/2014	removed	FD	Y		1.7	J	S51	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
X39A	135-P3C-X39A	9.7	135-P3C-X39A-7.5-8.0	7.5 - 8.0 ft	2.2	1.7	JB65408-15	JB65408	04/23/2014	remaining	N	Y		1.9	J		
X39A	135-P3C-X39A	9.7	135-P3C-X39A-9.5-10.0	9.5 - 10.0 ft	0.2	-0.3	JB65408-16	JB65408	04/23/2014	remaining	N	Y		0.65	J		
X39A	135-P3C-X39A	9.7	135-P3C-X39A-11.5-12.0	11.5 - 12.0 ft	-1.8	-2.3	JB65408-17	JB65408	04/23/2014	remaining	N	Y		0.75	J		
X39A	135-P3C-X39A	9.7	135-P3C-X39A-13.5-14.0	13.5 - 14.0 ft	-3.8	-4.3	JB65408-18	JB65408	04/23/2014	remaining	N	Y		0.74	J		
X39A	135-P3C-X39A	9.7	135-P3C-X39A-15.5-16.0	15.5 - 16.0 ft	-5.8	-6.3	JB65408-19R	JB65408R	04/23/2014	remaining	N	Y		1.5	J		
X39A	135-P3C-X39A	9.7	135-P3C-X39A-16.0-16.5	16.0 - 16.5 ft	-6.3	-6.8	JB65408-20	JB65408	04/23/2014	remaining	N	Y		7.2	J		
X39A	135-W39A-SW-E	9.4	135-W39A-SW-E-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JC36564-7	JC36564	02/01/2017	remaining	N	Y		< 0.41	RA		
X39A	135-X38A-SW-S	13.6	135-X38A-SW-S-11.4-11.9	11.4 - 11.9 ft	2.2	1.7	JC36500-2	JC36500	01/31/2017	remaining	N	Y		< 0.43	UJ		
X40A	135-P3C-X40A	13.9	135-P3C-X40A-7.0-7.5	7.0 - 7.5 ft	6.9	6.4	JB62807-24	JB62807	03/22/2014	removed	N	Y		0.94	RA	S52	
X40A	135-P3C-X40A	13.9	135-P3C-X40A-9.0-9.5	9.0 - 9.5 ft	4.9	4.4	JB62807-25	JB62807	03/22/2014	removed	N	Y		0.23	RA	S52	
X40A	135-P3C-X40A	13.9	135-P3C-X40A-11.0-11.5	11.0 - 11.5 ft	2.9	2.4	JB62807-26T	JB62807T	03/22/2014	removed	N	Y		0.21	RA	S52	
X40A	135-P3C-X40A	13.9	135-P3C-X40A-11.0-11.5X	11.0 - 11.5 ft	2.9	2.4	JB62807-27	JB62807	03/22/2014	removed	FD	Y		0.92	RA	S52	
X40A	135-P3C-X40A	13.9	135-P3C-X40A-13.0-13.5	13.0 - 13.5 ft	0.9	0.4	JB62807-28T	JB62807T	03/22/2014	removed	N	Y		0.53	RA	S52	
X40A	135-P3C-X40A	13.9	135-P3C-X40A-15.0-15.5	15.0 - 15.5 ft	-1.1	-1.6	JB62807-29T	JB62807T	03/22/2014	removed	N	Y		0.17	RA	S52	
X40A	135-P3C-X40A	13.9	135-P3C-X40A-17.0-17.5	17.0 - 17.5 ft	-3.1	-3.6	JB62807-30T	JB62807T	03/22/2014	remaining	N	Y		0.25	RA	S52	
X40A	135-P3C-X40A	13.9	135-P3C-X40A-17.5-18.0	17.5 - 18.0 ft	-3.6	-4.1	JB62807-31	JB62807	03/22/2014	remaining	N	Y		0.34	RA	S52	
X41A	135-P3C-X41A	13.9	135-P3C-X41A-11.0-11.5	11.0 - 11.5 ft	2.9	2.4	JB62807-37T	JB62807T	03/22/2014	removed	N	Y		0.26	RA	S53	
X41A	135-P3C-X41A	13.9	135-P3C-X41A-13.0-13.5	13.0 - 13.5 ft	0.9	0.4	JB62807-38T	JB62807T	03/22/2014	removed	N	Y		0.66	RA	S53	
X41A	135-P3C-X41A	13.9	135-P3C-X41A-15.0-15.5	15.0 - 15.5 ft	-1.1	-1.6	JB62807-39	JB62807	03/22/2014	removed	N	Y		0.40	RA	S53	
X41A	135-P3C-X41A	13.9	135-P3C-X41A-16.0-16.5	16.0 - 16.5 ft	-2.1	-2.6	JB62807-40T	JB62807T	03/22/2014	remaining	N	Y		0.18	RA	S53	
X41A	135-P3C-X41A	13.9	135-P3C-X41A-16.5-17.0	16.5 - 17.0 ft	-2.6	-3.1	JB62807-41	JB62807	03/22/2014	remaining	N	Y		0.34	RA	S53	
X42A	135-X42A	13.8	135-X42A-12.5-13.0	12.5 - 13.0 ft	1.3	0.8	JC3440-7R	JC3440R	09/09/2015	removed	N	Y		0.47	J	S54	
X42A	135-X42A	13.8	135-X42A-14.5-15.0	14.5 - 15.0 ft	-0.7	-1.2	JC3440-8R	JC3440R	09/09/2015	removed	N	Y		< 0.16	UJ	S54	
X42A	135-X42A	13.8	135-X42A-16.3-16.8	16.3 - 16.8 ft	-2.5	-3.0	JC3440-9R	JC3440R	09/09/2015	remaining	N	Y		0.19	J		
X42A	135-X42A	13.8	135-X42A-16.3-16.8X	16.3 - 16.8 ft	-2.5	-3.0	JC3440-11R	JC3440R	09/09/2015	remaining	FD	Y		< 0.25	UJ		
X42A	135-X42A	13.8	135-X42A-16.8-17.3	16.8 - 17.3 ft	-3.0	-3.5	JC3440-10	JC3440	09/09/2015	remaining	N	Y		< 0.44	UJ		
X42A	ASM-X42A-SW-E	13.8	ASM-X42A-SW-E-10.5-11.0	10.5 - 11.0 ft	3.3	2.8	JC51717-2	JC51717	09/25/2017	removed	N	Y		4.9	J	S55	
Y32A	133-B17	10.2	133-B17C (4.0-4.5)J49295-20R	4.0 - 4.5 ft	6.2	5.7	J49295-20R	J49295	12/14/2006	removed	N	Y		< 1.8	U	S1, S56	
Y32A	133-B17	10.2	PPG-133-B17D 8.0-8.5 796979	8.0 - 8.5 ft	2.2	1.7	796979	B441	01/03/2007	remaining	N	Y		< 2.88	UJ	S1	
Y32A	133-B17	10.2	PPG-133-B17E 12.2-13.2 796980	12.2 - 13.2 ft	-2.0	-3.0	796980	B441	01/03/2007	remaining	N	Y		< 3.5	UJ	S1	
Y32A	133-B17	10.2	PPG-133-B17ED 12.2-13.2 796981	12.2 - 13.2 ft	-2.0	-3.0	796981	B441	01/03/2007	remaining	FD	Y		< 3.55	UJ	S1	
Y32A	133-B17	10.2	PPG-133-B17F 13.4-13.9 796982	13.4 - 13.9 ft	-3.2	-3.7	796982	B441	01/03/2007	remaining	N	Y		< 4.5	UJ	S1	
Y32A	133-B17	10.2	PPG-133-B17G 17.5-18.5 796983	17.5 - 18.5 ft	-7.3	-8.3	796983	B441	01/03/2007	remaining	N	Y		< 3.51	UJ	S1	
Y32A	133-B17	10.2	PPG-133-B17H 21.5-22.0 796984	21.5 - 22.0 ft	-11.3	-11.8	796984	B441	01/03/2007	remaining	N	Y		< 2.8	UJ	S1	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-6.0-6.5	6.0 - 6.5 ft	6.2	5.7	JB37583-1R	JB37583R	05/21/2013	removed	N	Y		1.6	J	S1, S56	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-8.0-8.5	8.0 - 8.5 ft	4.2	3.7	JB37583-2	JB37583	05/21/2013	remaining	N	Y		0.44	J	S1	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-10.0-10.5	10.0 - 10.5 ft	2.2	1.7	JB37583-3	JB37583	05/21/2013	remaining	N	Y		0.23	J	S1	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-12.0-12.5	12.0 - 12.5 ft	0.2	-0.3	JB37583-4	JB37583	05/21/2013	remaining	N	Y		0.34	J	S1	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-14.3-14.8	14.3 - 14.8 ft	-2.1	-2.6	JB37583-5	JB37583	05/21/2013	remaining	N	Y		0.48	J	S1	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-14.8-15.3	14.8 - 15.3 ft	-2.6	-3.1	JB37583-6R	JB37583R	05/21/2013	remaining	N	Y		1.9	J	S1	
Y33A	133-P3C-Y33A	12.3	133-P3C-Y33A-15.0-15.5	15.0 - 15.5 ft	-2.7	-3.2	JB97654-3	JB97654	06/22/2015	remaining	N	Y		2.5	RA	S1	
Y33A	133-P3C-Y33A-ME	12.6	133-P3C-Y33A-ME-9.0-9.5	9.0 - 9.5 ft	3.6	3.1	JB96555-18R	JB96555R	06/08/2015	remaining	N	Y		0.47	J	S1	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-4.7-5.2	4.7 - 5.2 ft	5.2	4.7	JB37690-15	JB37690	05/22/2013	remaining	N	Y		2.7	RA	S1	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-6.7-7.2	6.7 - 7.2 ft	3.2	2.7	JB37690-16	JB37690	05/22/2013	remaining	N	Y		0.46	RA	S1	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-8.7-9.2	8.7 - 9.2 ft	1.2	0.7	JB37690-7	JB37690	05/22/2013	remaining	N	Y		1.2	J	S1	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-10.5-11.0	10.5 - 11.0 ft	-0.6	-1.1	JB37690-6R	JB37690R	05/22/2013	remaining	N	Y		1.2	J	S1	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-12.5-13.0	12.5 - 13.0 ft	-2.6	-3.1	JB37690-3R	JB37690R	05/22/2013	remaining	N	Y		0.13	J	S1	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-14.1-14.6	14.1 - 14.6 ft	-4.2	-4.7	JB37690-5R	JB37690R	05/22/2013	remaining	N	Y		0.38	J	S1	
Y33A	135-P3C-Y33A	9.9	135-P3C-Y33A-14.6-15.1	14.6 - 15.1 ft	-4.7	-5.2	JB37690-4R	JB37690R	05/22/2013	remaining	N	Y		1.7	J	S1	
Y33A	135-Y33A-PB	14.0	135-Y33A-PB-8.3-8.8	8.8 - 9.3 ft	5.2	4.7	JC25852-2	JC25852	08/15/2016	remaining	N	Y		0.63	J	S1, S57	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-6.5-7.0	6.5 - 7.0 ft	3.3	2.8	JB37620-19T	JB37620T	05/21/2013	remaining	N	Y		< 0.35	RA	S1, S57	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-8.5-9.0	8.5 - 9.0 ft	1.3	0.8	JB37620-18	JB37620	05/21/2013	remaining	N	Y		0.19	RA	S1	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-8.5-9.0X	8.5 - 9.0 ft	1.3	0.8	JB37620-20T	JB37620T	05/21/2013	remaining	FD	Y		< 0.29	RA	S1	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-10.5-11.0	10.5 - 11.0 ft	-0.8	-1.3	JB37620-21	JB37620	05/21/2013	remaining	N	Y		< 0.10	RA	S1	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-12.5-13.0	12.5 - 13.0 ft	-2.8	-3.3	JB37620-22T	JB37620T	05/21/2013	remaining	N	Y		< 0.26	RA	S1	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-14.0-14.5	14.0 - 14.5 ft	-4.3	-4.8	JB37620-23T	JB37620T	05/21/2013	remaining	N	Y		1.0	RA	S1	
Y34A	135-P3C-Y34A	9.8	135-P3C-Y34A-14.5-15.0	14.5 - 15.0 ft	-4.8	-5.3	JB37620-24T	JB37620T	05/21/2013	remaining	N	Y		2.1	RA	S1	
Y34A	135-Y34A-PB	9.8	135-Y34A-PB-6.7-7.2	6.7 - 7.2 ft	3.1	2.6	JC25216-2	JC25216	08/04/2016	remaining	N	Y		< 0.35	UJ	S1	
Y35A	135-X35A-SW-E	14.1	135-X35A-SW-E-2.5-3.0	5.8 - 6.3 ft	8.3	7.8	JC26798-3R	JC26798R	08/31/2016	remaining	N	Y		3.0	J	S58	
Y35A	135-Y34A-SW-S1	14.1	135-Y34A-SW-S-2.7-3.2	7.0 - 7.5 ft	7.1	6.6	JC25216-8	JC25216	08/04/2016	remaining	N	Y		< 0.34	UJ	S58	
Y35A	135-Y34A-SW-S2	14.1	135-Y34A-SW-S-4.7-5.2	9.0 - 9.5 ft	5.1	4.6	JC25216-7	JC25216	08/04/2016	remaining	N	Y		1.0	J	S58	
Y35A	135-Y35A	14.1	135-Y35A-5.0-5.5	5.0 - 5.5 ft	9.1	8.6	JC2395-4R	JC2395R	08/26/2015	removed	N	Y		0.82	J	S59	
Y35A	135-Y35A	14.1	135-Y35A-7.0-7.5	7.0 - 7.5 ft	7.1	6.6	JC2395-5R	JC2395R	08/26/2015	remaining	N	Y		8.0	J	S59	
Y35A	135-Y35A	14.1	135-Y35A-9.0-9.5	9.0 - 9.5 ft	5.1	4.6	JC2395-6R	JC2395R	08/26/2015	remaining	N	Y		< 0.15	UJ	S59	
Y35A	135-Y35A	14.1	135-Y35A-11.0-11.5	11.0 - 11.5 ft	3.1	2.6	JC2395-7R	JC2395R	08/26/2015	remaining	N	Y		0.79	J	S59	
Y35A	135-Y35A	14.1	135-Y35A-13.0-13.5	13.0 - 13.5 ft	1.1	0.6	JC2395-8R	JC2395R	08/26/2015	remaining	N	Y		0.37	J	S59	
Y35A	135-Y35A	14.1	135-Y35A-15.0-15.5	15.0 - 15.5 ft	-0.9	-1.4	JC2395-9	JC2395	08/26/2015	remaining	N	Y		0.73	J	S59	
Y35A	135-Y35A	14.1	135-Y35A-15.0-15.5X	15.0 - 15.5 ft	-0.9	-1.4	JC2395-12R	JC2395R	08/26/2015	remaining	FD	Y		1.2	RA	S59	
Y35A	135-Y35A	14.1	135-Y35A-15.7-16.2	15.7 - 16.2 ft	-1.6	-2.1	JC2395-10R	JC2395R	08/26/2015	remaining	N	Y		0.62	J	S59	
Y35A	135-Y35A	14.1	135-Y35A-16.2-16.7	16.2 - 16.7 ft	-2.1	-2.6	JC2395-11R	JC2395R	08/26/2015	remaining	N	Y		1.8	J	S59	
Y36A	135-Y36A	13.9	135-Y36A-3.5-4.0	3.5 - 4.0 ft	10.4	9.9	JC2661-12R	JC2661R	08/28/2015	removed	N	Y		3.5	J	S60	
Y36A	135-Y36A	13.9	135-Y36A-5.5-6.0	5.5 - 6.0 ft	8.4	7.9	JC2661-13R	JC2661R	08/28/2015	remaining	N	Y		6.0	J	S60	
Y36A	135-Y36A	13.9	135-Y36A-7.5-8.0	7.5 - 8.0 ft	6.4	5.9	JC2661-14	JC2661	08/28/2015	remaining	N	Y		4.3	J	S60	
Y36A	135-Y36A	13.9	135-Y36A-9.5-10.0	9.5 - 10.0 ft	4.4	3.9	JC2661-15R	JC2661R	08/28/2015	remaining	N	Y		3.8	J	S60	
Y36A	135-Y36A	13.9	135-Y36A-11.5-12.0	11.5 - 12.0 ft	2.4	1.9	JC2661-16	JC2661	08/28/2015	remaining	N	Y		7.0	J	S60	
Y36A	135-Y36A	13.9	135-Y36A-13.5-14.0	13.5 - 14.0 ft	0.4	-0.1	JC2661-17	JC2661	08/28/2015	remaining	N	Y		8.0	J	S60	
Y36A	135-Y36A	13.9	135-Y36A-15.5-16.0	15.5 - 16.0 ft	-1.6	-2.1	JC2661-18	JC2661	08/28/2015	remaining	N	Y		3.1	J	S60	
Y36A	135-Y36A	13.9	135-Y36A-15.5-16.0X	15.5 - 16.0 ft	-1.6	-2.1	JC2661-20	JC2661	08/28/2015	remaining	FD	Y		0.90	J	S60	
Y36A	135-Y36A	13.9	135-Y36A-16.0-16.5	16.0 - 16.5 ft	-2.1	-2.6	JC2661-19	JC2661	08/28/2015	remaining	N	Y		4.5	J	S60	
Y37A	135-Y37A	14.0	135-Y37A-5.5-6.0	5.5 - 6.0 ft	8.5	8.0	JC2503-13R	JC2503R	08/27/2015	removed	N	Y		1.9	RA	S61	
Y37A	135-Y37A	14.0	135-Y37A-7.5-8.0	7.5 - 8.0 ft	6.5	6.0	JC2503-14R	JC2503R	08/27/2015	removed	N	Y		2.2	RA	S61	
Y37A	135-Y37A	14.0	135-Y37A-8.5-9.0	8.5 - 9.0 ft	5.5	5.0	JC2503-15R	JC2503R	08/27/2015	remaining	N	Y		4.7	RA		
Y37A	135-Y37A	14.0	135-Y37A-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC2503-16	JC2503	08/27/2015	remaining	N	Y		0.37	RA		
Y37A	135-Y37A	14.0	135-Y37A-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC2503-17R	JC2503R	08/27/2015	remaining	N	Y		0.17	RA		
Y37A	135-Y37A	14.0	135-Y37A-14.0-14.5	14.0 - 14.5 ft	0.0	-0.5	JC2503-18	JC2503	08/27/2015	remaining	N	Y		< 0.28	RA		
Y37A	135-Y37A	14.0	135-Y37A-15.5-16.0	15.5 - 16.0 ft	-1.5	-2.0	JC2503-19R	JC2503R	08/27/2015	remaining	N	Y		0.44	RA		
Y37A	135-Y37A	14.0	135-Y37A-15.5-16.0X	15.5 - 16.0 ft	-1.5	-2.0	JC2503-21R	JC2503R	08/27/2015	remaining	FD	Y		1.4	RA		
Y37A	135-Y37A	14.0	135-Y37A-16.0-16.5	16.0 - 16.5 ft	-2.0	-2.5	JC2503-20R	JC2503R	08/27/2015	remaining	N	Y		1.1	RA		
Y37A	135-Y37A-PB	14.0	135-Y37A-PB-3.5-4.0	3.5 - 4.0 ft	10.5	10.0	JC26326-6R	JC26326R	08/23/2016	removed	N	Y		5.3	J	S61	
Y37A	135-Y38A-SW-N1	13.9	135-Y38A-SW-N-6.0-6.5	6.0 - 6.5 ft	7.9	7.4	JC34244-10	JC34244	12/21/2016	removed	N	Y		0.99	RA	S61	
Y37A	135-Y38A-SW-N2	13.9	135-Y38A-SW-N-8.0-8.5	8.0 - 8.5 ft	5.9	5.4	JC34244-9	JC34244	12/21/2016	remaining	N	Y		< 0.46	RA		
Y37A	135-Y38A-SW-N3	13.9	135-Y38A-SW-N-10.0-10.5	10.0 - 10.5 ft	3.9	3.4	JC34244-8	JC34244	12/21/2016	remaining	N	Y		0.60	RA		
Y37A	135-Y38A-SW-N4	13.9	135-Y38A-SW-N-12.0-12.5	12.0 - 12.5 ft	1.9	1.4	JC34244-12	JC34244	12/21/2016	remaining	N	Y		1.0	RA		
Y37A	135-Y38A-SW-N5	13.9	135-Y38A-SW-N-14.0-14.5	14.0 - 14.5 ft	-0.1	-0.6	JC34244-7	JC34244	12/21/2016	remaining	N	Y		0.68	RA		

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Y38A	135-Y38A-PB	13.9	135-Y38A-PB-16.0-16.5	16.0 - 16.5 ft	-2.1	-2.6	JC34244-1R	JC34244R	12/21/2016	removed	N	Y		3.8	RA	S62	
Y38A	135-Y38A-SW-S5	13.9	135-Y38A-SW-S-14.0-14.5	14.0 - 14.5 ft	-0.1	-0.6	JC34244-2R	JC34244R	12/21/2016	remaining	N	Y		1.4	RA		
Y39A	135-Y38A-SW-S2	13.9	135-Y38A-SW-S-8.0-8.5	8.0 - 8.5 ft	5.9	5.4	JC34244-4	JC34244	12/21/2016	remaining	N	Y		0.95	RA		
Y39A	135-Y38A-SW-S3	13.9	135-Y38A-SW-S-10.0-10.5	10.0 - 10.5 ft	3.9	3.4	JC34244-3	JC34244	12/21/2016	remaining	N	Y		0.62	RA		
Y39A	135-Y38A-SW-S4	13.9	135-Y38A-SW-S-12.0-12.5	12.0 - 12.5 ft	1.9	1.4	JC34244-13R	JC34244R	12/21/2016	remaining	N	Y		< 0.33	RA		
Y39A	135-Y39A	14.0	135-Y39A-5.5-6.0	5.5 - 6.0 ft	8.5	8.0	JC2289-3	JC2289	08/25/2015	removed	N	Y		0.94	J	S63	
Y39A	135-Y39A	14.0	135-Y39A-7.5-8.0	7.5 - 8.0 ft	6.5	6.0	JC2289-4	JC2289	08/25/2015	remaining	N	Y		0.89	J	S63	
Y39A	135-Y39A	14.0	135-Y39A-8.5-9.0	8.5 - 9.0 ft	5.5	5.0	JC2289-5R	JC2289R	08/25/2015	remaining	N	Y		0.38	J	S63	
Y39A	135-Y39A	14.0	135-Y39A-10.5-11.0	10.5 - 11.0 ft	3.5	3.0	JC2289-6R	JC2289R	08/25/2015	remaining	N	Y		0.77	J	S63	
Y39A	135-Y39A	14.0	135-Y39A-12.5-13.0	12.5 - 13.0 ft	1.5	1.0	JC2289-7	JC2289	08/25/2015	remaining	N	Y		1.1	J	S63	
Y39A	135-Y39A	14.0	135-Y39A-14.5-15.0	14.5 - 15.0 ft	-0.5	-1.0	JC2289-8R	JC2289R	08/25/2015	remaining	N	Y		0.37	J	S63	
Y39A	135-Y39A	14.0	135-Y39A-15.5-16.0	15.5 - 16.0 ft	-1.5	-2.0	JC2289-9R	JC2289R	08/25/2015	remaining	N	Y		0.28	J	S63	
Y39A	135-Y39A	14.0	135-Y39A-15.5-16.0X	15.5 - 16.0 ft	-1.5	-2.0	JC2289-11	JC2289	08/25/2015	remaining	FD	Y		< 0.24	UJ	S63	
Y39A	135-Y39A	14.0	135-Y39A-16.0-16.5	16.0 - 16.5 ft	-2.0	-2.5	JC2289-10	JC2289	08/25/2015	remaining	N	Y		2.1	J	S63	
Y40A	135-Y40A	13.9	135-Y40A-4.5-5.0	4.5 - 5.0 ft	9.4	8.9	JC3666-5R	JC3666R	09/11/2015	removed	N	Y		7.8	J	S64	
Y40A	135-Y40A	13.9	135-Y40A-6.5-7.0	6.5 - 7.0 ft	7.4	6.9	JC3666-6R	JC3666R	09/11/2015	remaining	N	Y		8.9	J	S64	
Y40A	135-Y40A	13.9	135-Y40A-8.5-9.0	8.5 - 9.0 ft	5.4	4.9	JC3666-7	JC3666	09/11/2015	remaining	N	Y		< 0.24	UJ	S64	
Y40A	135-Y40A	13.9	135-Y40A-10.5-11.0	10.5 - 11.0 ft	3.4	2.9	JC3666-8	JC3666	09/11/2015	remaining	N	Y		1.1	J	S64	
Y40A	135-Y40A	13.9	135-Y40A-12.5-13.0	12.5 - 13.0 ft	1.4	0.9	JC3666-9R	JC3666R	09/11/2015	remaining	N	Y		0.28	J	S64	
Y40A	135-Y40A	13.9	135-Y40A-14.5-15.0	14.5 - 15.0 ft	-0.6	-1.1	JC3666-10	JC3666	09/11/2015	remaining	N	Y		< 0.25	UJ	S64	
Y40A	135-Y40A	13.9	135-Y40A-15.5-16.0	15.5 - 16.0 ft	-1.6	-2.1	JC3666-12	JC3666	09/11/2015	remaining	N	Y		< 0.29	UJ	S64	
Y40A	135-Y40A	13.9	135-Y40A-16.0-16.5	16.0 - 16.5 ft	-2.1	-2.6	JC3666-11	JC3666	09/11/2015	remaining	N	Y		< 0.39	UJ	S64	
Y40A	135-Z40A-SW-W1	14.0	135-Z40A-SW-W-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC35023-8	JC35023	01/06/2017	remaining	N	Y		2.7	J		
Y40A	135-Z40A-SW-W2	14.0	135-Z40A-SW-W-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC35023-7	JC35023	01/06/2017	remaining	N	Y		2.5	J		
Y40A	135-Z40A-SW-W3	14.0	135-Z40A-SW-W-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC35023-6	JC35023	01/06/2017	remaining	N	Y		1.2	J		
Y40A	135-Z40A-SW-W4	14.0	135-Z40A-SW-W-6.0-6.5	6.0 - 6.5 ft	8.0	7.5	JC35919-3	JC35919	01/20/2017	remaining	N	Y		1.1	J		
Y41A	135-Y41A	14.0	135-Y41A-4.5-5.0	4.5 - 5.0 ft	9.5	9.0	JC3527-14R	JC3527R	09/10/2015	removed	N	Y		5.7	RA	S65	
Y41A	135-Y41A	14.0	135-Y41A-6.5-7.0	6.5 - 7.0 ft	7.5	7.0	JC3527-13	JC3527	09/10/2015	removed	N	Y		6.6	RA	S65	
Y41A	135-Y41A	14.0	135-Y41A-8.5-9.0	8.5 - 9.0 ft	5.5	5.0	JC3527-15R	JC3527R	09/10/2015	removed	N	Y		0.27	RA	S65	
Y41A	135-Y41A	14.0	135-Y41A-10.5-11.0	10.5 - 11.0 ft	3.5	3.0	JC3527-16R	JC3527R	09/10/2015	removed	N	Y		0.51	RA	S65	
Y41A	135-Y41A	14.0	135-Y41A-12.5-13.0	12.5 - 13.0 ft	1.5	1.0	JC3527-17	JC3527	09/10/2015	remaining	N	Y		< 0.28	RA	S65	
Y41A	135-Y41A	14.0	135-Y41A-12.5-13.0X	12.5 - 13.0 ft	1.5	1.0	JC3527-18	JC3527	09/10/2015	remaining	FD	Y		< 0.27	RA	S65	
Y41A	135-Y41A	14.0	135-Y41A-14.5-15.0	14.5 - 15.0 ft	-0.5	-1.0	JC3527-19	JC3527	09/10/2015	remaining	N	Y		< 0.26	RA	S65	
Y41A	135-Y41A	14.0	135-Y41A-15.5-16.0	15.5 - 16.0 ft	-1.5	-2.0	JC3527-20	JC3527	09/10/2015	remaining	N	Y		< 0.28	RA	S65	
Y41A	135-Y41A	14.0	135-Y41A-16.0-16.5	16.0 - 16.5 ft	-2.0	-2.5	JC3527-21	JC3527	09/10/2015	remaining	N	Y		< 0.34	RA	S65	
Y41A	135-Z40A-SW-S1	14.0	135-Z40A-SW-S-6.0-6.5	6.0 - 6.5 ft	8.0	7.5	JC35023-5	JC35023	01/06/2017	remaining	N	Y		2.8	J		
Y41A	135-Z40A-SW-S2	14.0	135-Z40A-SW-S-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC35023-4	JC35023	01/06/2017	remaining	N	Y		14.2	J		
Y41A	135-Z40A-SW-S3	14.0	135-Z40A-SW-S-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC35023-3	JC35023	01/06/2017	remaining	N	Y		0.47	J		
Y41A	135-Z40A-SW-S4	14.0	135-Z40A-SW-S-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC35023-2	JC35023	01/06/2017	remaining	N	Y		1.4	J		
Y42A	135-Y42A	13.7	135-Y42A-8.5-9.0	8.5 - 9.0 ft	5.2	4.7	JC3440-17	JC3440	09/09/2015	removed	N	Y		< 0.24	UJ	S66	
Y42A	135-Y42A	13.7	135-Y42A-10.5-11.0	10.5 - 11.0 ft	3.2	2.7	JC3440-18R	JC3440R	09/09/2015	remaining	N	Y		2.6	J		
Y42A	135-Y42A	13.7	135-Y42A-12.5-13.0	12.5 - 13.0 ft	1.2	0.7	JC3440-19R	JC3440R	09/09/2015	remaining	N	Y		0.66	J		
Y42A	135-Y42A	13.7	135-Y42A-14.5-15.0	14.5 - 15.0 ft	-0.8	-1.3	JC3440-20R	JC3440R	09/09/2015	remaining	N	Y		2.3	J		
Y42A	135-Y42A	13.7	135-Y42A-16.0-16.5	16.0 - 16.5 ft	-2.3	-2.8	JC3440-21	JC3440	09/09/2015	remaining	N	Y		< 0.25	UJ		
Y42A	135-Y42A	13.7	135-Y42A-16.5-17.0	16.5 - 17.0 ft	-2.8	-3.3	JC3440-22	JC3440	09/09/2015	remaining	N	Y		< 0.32	UJ		
Y42A	135-Y42A-SW-E1	14.4	135-Y42A-SW-E-5.7-6.2	5.7 - 6.2 ft	8.7	8.2	JC49444-3R	JC49444R	08/23/2017	remaining	N	Y		2.7	J	S12	
Y42A	135-Y42A-SW-E1	14.4	135-Y42A-SW-E-5.7-6.2X	5.7 - 6.2 ft	8.7	8.2	JC49444-4R	JC49444R	08/23/2017	remaining	FD	Y		1.5	J	S12	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Y42A	135-Y42A-SW-E2	14.4	135-Y42A-SW-E-7.7-8.2	7.7 - 8.2 ft	6.7	6.2	JC49444-2	JC49444	08/23/2017	remaining	N	Y		2.0	J	S12	
Z29A	135-B2	10.3	135-B2C (3.4-3.8)J49295-9R	3.4 - 3.8 ft	6.9	6.5	J49295-9R	J49295	12/14/2006	removed	N	Y		< 1.6	U	S1, S67	
Z29A	135-B2	10.3	135-B2D (4.5-5.0)J49295-10R	4.5 - 5.0 ft	5.8	5.3	J49295-10R	J49295	12/14/2006	removed	N	Y		< 1.8	U	S1, S67	
Z29A	135-B2	10.3	PPG-135-B2E 8.5-9.0 796987	8.5 - 9.0 ft	1.8	1.3	796987	B441	01/03/2007	remaining	N	Y		< 3.15	UJ	S1	
Z29A	135-B2	10.3	PPG-135-B2F 12.5-13.0 796988	12.5 - 13.0 ft	-2.2	-2.7	796988	B441	01/03/2007	remaining	N	Y		< 3.92	UJ	S1	
Z29A	135-B2	10.3	PPG-135-B2G 13.7-14.2 796989	13.7 - 14.2 ft	-3.4	-3.9	796989	B441	01/03/2007	remaining	N	Y		< 2.4	UJ	S1	
Z29A	135-B2	10.3	PPG-135-B2H 16.0-16.5 796990	16.0 - 16.5 ft	-5.7	-6.2	796990	B441	01/03/2007	remaining	N	Y		< 5.9	UJ	S1	
Z29A	135-B2	10.3	PPG-135-B2I 20.0-20.5 796991	20.0 - 20.5 ft	-9.7	-10.2	796991	B441	01/03/2007	remaining	N	Y		< 3.51	UJ	S1	
Z29A	135-B2	10.3	PPG-135-B2J 22.2-22.7 796992	22.2 - 22.7 ft	-11.9	-12.4	796992	B441	01/03/2007	remaining	N	Y		< 2.77	UJ	S1	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-6.5-7.0	6.5 - 7.0 ft	3.9	3.4	JB37690-8	JB37690	05/22/2013	remaining	N	Y		0.98	J	S1	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-6.5-7.0X	6.5 - 7.0 ft	3.9	3.4	JB37690-17	JB37690	05/22/2013	remaining	FD	Y		0.80	RA	S1	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-10.5-11.0	10.5 - 11.0 ft	-0.1	-0.6	JB37690-10	JB37690	05/22/2013	remaining	N	Y		0.26	J	S1	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-12.5-13.0	12.5 - 13.0 ft	-2.1	-2.6	JB37690-11	JB37690	05/22/2013	remaining	N	Y		0.54	J	S1	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-14.5-15.0	14.5 - 15.0 ft	-4.1	-4.6	JB37690-12	JB37690	05/22/2013	remaining	N	Y		0.52	J	S1	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-15.5-16.0	15.5 - 16.0 ft	-5.1	-5.6	JB37690-13	JB37690	05/22/2013	remaining	N	Y		0.35	J	S1	
Z29A	133-P3C-Z29A	10.4	133-P3C-Z29A-16.0-16.5	16.0 - 16.5 ft	-5.6	-6.1	JB37690-14	JB37690	05/22/2013	remaining	N	Y		13.4	J	S1	
Z30A	133-P3C-Z30A-ME	11.5	133-P3C-Z30A-ME-5.0-5.5	5.0 - 5.5 ft	6.5	6.0	JB96803-4	JB96803	06/11/2015	remaining	N	Y		< 0.28	RA	S1, S68	
Z30A	133-P3C-Z30A-ME	11.5	133-P3C-Z30A-ME-7.0-7.5	7.0 - 7.5 ft	4.5	4.0	JB96803-5R	JB96803R	06/11/2015	remaining	N	Y		< 1.1	RA	S1, S68	
Z30A	133-Y30A-SW-E1	10.2	133-Y30A-SW-E-7.2-7.7	4.3 - 4.8 ft	5.9	5.4	JC20436-11R	JC20436R	05/17/2016	remaining	N	Y		0.52	J	S1, S27	
Z30A	133-Y30A-SW-E2	10.2	133-Y30A-SW-E-9.2-9.7	6.3 - 6.8 ft	3.9	3.4	JC20436-10R	JC20436R	05/17/2016	remaining	N	Y		0.76	J	S1, S27	
Z30A	133-Y30A-SW-E3	10.2	133-Y30A-SW-E-11.2-11.7	8.3 - 8.8 ft	1.9	1.4	JC20436-9R	JC20436R	05/17/2016	remaining	N	Y		16.0	J	S1, S27	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-3.0-3.5	3.0 - 3.5 ft	7.2	6.7	JB65662-7R	JB65662R	04/25/2014	removed	N	Y		0.80	J	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-5.0-5.5	5.0 - 5.5 ft	5.2	4.7	JB37690-2R	JB37690R	05/22/2013	remaining	N	Y		0.20	J	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-6.5-7.0	6.5 - 7.0 ft	3.7	3.2	JB37690-1R	JB37690R	05/22/2013	remaining	N	Y		0.35	J	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-8.5-9.0	8.5 - 9.0 ft	1.7	1.2	JB37690-24	JB37690	05/22/2013	remaining	N	Y		0.39	RA	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-10.5-11.0	10.5 - 11.0 ft	-0.3	-0.8	JB37690-18	JB37690	05/22/2013	remaining	N	Y		0.71	RA	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-12.5-13.0	12.5 - 13.0 ft	-2.3	-2.8	JB37690-19	JB37690	05/22/2013	remaining	N	Y		2.3	RA	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-14.5-15.0	14.5 - 15.0 ft	-4.3	-4.8	JB37690-20	JB37690	05/22/2013	remaining	N	Y		< 0.14	RA	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-15.4-15.9	15.4 - 15.9 ft	-5.2	-5.7	JB37690-21	JB37690	05/22/2013	remaining	N	Y		< 0.084	RA	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-15.4-15.9X	15.4 - 15.9 ft	-5.2	-5.7	JB37690-22T	JB37690T	05/22/2013	remaining	FD	Y		< 0.30	RA	S1, S68	
Z30A	135-P3C-Z30A	10.2	135-P3C-Z30A-15.9-16.4	15.9 - 16.4 ft	-5.7	-6.2	JB37690-23	JB37690	05/22/2013	remaining	N	Y		1.1	J	S1, S68	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-3.0-3.5	3.0 - 3.5 ft	7.1	6.6	JB65510-13R	JB65510R	04/24/2014	removed	N	Y		4.5	J	S1, S69	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-5.0-5.5	5.0 - 5.5 ft	5.1	4.6	JB37583-8	JB37583	05/21/2013	remaining	N	Y		0.60	J	S1, S69	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-5.0-5.5X	5.0 - 5.5 ft	5.1	4.6	JB37583-9	JB37583	05/21/2013	remaining	FD	Y		< 0.14	UJ	S1, S69	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-6.5-7.0	6.5 - 7.0 ft	3.6	3.1	JB37583-10	JB37583	05/21/2013	remaining	N	Y		1.1	J	S1, S69	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-8.5-9.0	8.5 - 9.0 ft	1.6	1.1	JB37583-11	JB37583	05/21/2013	remaining	N	Y		0.23	J	S1, S69	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-10.5-11.0	10.5 - 11.0 ft	-0.4	-0.9	JB37583-12R	JB37583R	05/21/2013	remaining	N	Y		0.17	J	S1, S69	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-12.5-13.0	12.5 - 13.0 ft	-2.4	-2.9	JB37583-13	JB37583	05/21/2013	remaining	N	Y		0.68	J	S1, S69	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-14.5-15.0	14.5 - 15.0 ft	-4.4	-4.9	JB37583-14R	JB37583R	05/21/2013	remaining	N	Y		< 0.089	UJ	S1, S69	
Z31A	135-P3C-Z31A	10.1	135-P3C-Z31A-15.0-15.5	15.0 - 15.5 ft	-4.9	-5.4	JB37583-15	JB37583	05/21/2013	remaining	N	Y		1.6	J	S1, S69	
Z32A	135-P3C-Z32A	10.2	135-P3C-Z32A-3.0-3.5	3.0 - 3.5 ft	7.2	6.7	JB65201-13R	JB65201R	04/21/2014	removed	N	Y		17.0	J	S70	
Z32A	135-P3C-Z32A	10.2	135-P3C-Z32A-5.0-5.5	5.0 - 5.5 ft	5.2	4.7	JB37583-16R	JB37583R	05/21/2013	remaining	N	Y		0.41	J	S70	
Z32A	135-P3C-Z32A	10.2	135-P3C-Z32A-7.0-7.5	7.0 - 7.5 ft	3.2	2.7	JB37583-17	JB37583	05/21/2013	remaining	N	Y		0.89	J	S70	
Z32A	135-P3C-Z32A	10.2	135-P3C-Z32A-8.0-8.5	8.0 - 8.5 ft	2.2	1.7	JB37583-18	JB37583	05/21/2013	remaining	N	Y		0.35	J	S70	
Z32A	135-P3C-Z32A	10.2	135-P3C-Z32A-10.0-10.5	10.0 - 10.5 ft	0.2	-0.3	JB37583-19	JB37583	05/21/2013	remaining	N	Y		0.29	J	S70	
Z32A	135-P3C-Z32A	10.2	135-P3C-Z32A-12.0-12.5	12.0 - 12.5 ft	-1.8	-2.3	JB37583-20R	JB37583R	05/21/2013	remaining	N	Y		< 0.10	UJ	S70	
Z32A	135-P3C-Z32A	10.2	135-P3C-Z32A-14.3-14.8	14.3 - 14.8 ft	-4.1	-4.6	JB37583-21R	JB37583R	05/21/2013	remaining	N	Y		< 0.086	UJ	S70	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Z32A	135-P3C-Z32A	10.2	135-P3C-Z32A-14.8-15.3	14.8 - 15.3 ft	-4.6	-5.1	JB37583-22	JB37583	05/21/2013	remaining	N	Y		1.3	J	S70	
Z33A	135-Y33A-SW-E	14.0	135-Y33A-SW-E-6.8-7.3	6.8 - 7.3 ft	7.2	6.7	JC25852-3R	JC25852R	08/15/2016	remaining	N	Y		0.82	J		
Z33A	135-Z33A	13.9	135-Z33A-5.5-6.0	5.5 - 6.0 ft	8.4	7.9	JC3094-13R	JC3094R	09/03/2015	removed	N	Y		0.53	J	S71	
Z33A	135-Z33A	13.9	135-Z33A-7.5-8.0	7.5 - 8.0 ft	6.4	5.9	JC3094-14R	JC3094R	09/03/2015	remaining	N	Y		0.35	J		
Z33A	135-Z33A	13.9	135-Z33A-7.5-8.0X	7.5 - 8.0 ft	6.4	5.9	JC3094-16T	JC3094T	09/03/2015	remaining	FD	Y		< 0.13	UJ		
Z33A	135-Z33A	13.9	135-Z33A-9.5-10.0	9.5 - 10.0 ft	4.4	3.9	JC3094-15	JC3094	09/03/2015	remaining	N	Y		< 0.27	UJ		
Z33A	135-Z33A	13.9	135-Z33A-11.5-12.0	11.5 - 12.0 ft	2.4	1.9	JC3094-17T	JC3094T	09/03/2015	remaining	N	Y		< 0.17	UJ		
Z33A	135-Z33A	13.9	135-Z33A-13.5-14.0	13.5 - 14.0 ft	0.4	-0.1	JC3094-20T	JC3094T	09/03/2015	remaining	N	Y		< 0.17	UJ		
Z33A	135-Z33A	13.9	135-Z33A-15.4-15.9	15.4 - 15.9 ft	-1.5	-2.0	JC3094-18	JC3094	09/03/2015	remaining	N	Y		0.36	J		
Z33A	135-Z33A	13.9	135-Z33A-15.9-16.4	15.9 - 16.4 ft	-2.0	-2.5	JC3094-19	JC3094	09/03/2015	remaining	N	Y		< 0.45	UJ		
Z33A	135-Z33A-PB	13.9	135-Z33A-PB-4.6-5.1	4.6 - 5.1 ft	9.3	8.8	JC24868-2	JC24868	07/28/2016	removed	N	Y		3.1	J	S71	
Z34A	135-Y34A-SW-E1	14.0	135-Y34A-SW-E-0.7-1.2	4.9 - 5.4 ft	9.1	8.6	JC25216-4	JC25216	08/04/2016	remaining	N	Y		< 0.34	UJ	S58	
Z34A	135-Y34A-SW-E2	14.0	135-Y34A-SW-E-2.7-3.2	6.9 - 7.4 ft	7.1	6.6	JC25216-5	JC25216	08/04/2016	remaining	N	Y		< 0.49	UJ	S58	
Z34A	135-Y34A-SW-E3	14.0	135-Y34A-SW-E-4.7-5.2	8.9 - 9.4 ft	5.1	4.6	JC25216-3	JC25216	08/04/2016	remaining	N	Y		0.53	J	S58	
Z34A	135-Z34A	14.0	135-Z34A-5.0-5.5	5.0 - 5.5 ft	9.0	8.5	JC3094-22T	JC3094T	09/03/2015	remaining	N	Y		< 0.16	UJ		
Z34A	135-Z34A	14.0	135-Z34A-7.0-7.5	7.0 - 7.5 ft	7.0	6.5	JC3094-23T	JC3094T	09/03/2015	remaining	N	Y		0.54	J		
Z34A	135-Z34A	14.0	135-Z34A-9.0-9.5	9.0 - 9.5 ft	5.0	4.5	JC3094-24T	JC3094T	09/03/2015	remaining	N	Y		< 0.15	UJ		
Z34A	135-Z34A	14.0	135-Z34A-11.0-11.5	11.0 - 11.5 ft	3.0	2.5	JC3094-25T	JC3094T	09/03/2015	remaining	N	Y		0.23	J		
Z34A	135-Z34A	14.0	135-Z34A-13.0-13.5	13.0 - 13.5 ft	1.0	0.5	JC3094-26T	JC3094T	09/03/2015	remaining	N	Y		0.94	J		
Z34A	135-Z34A	14.0	135-Z34A-15.0-15.5	15.0 - 15.5 ft	-1.0	-1.5	JC3094-27	JC3094	09/03/2015	remaining	N	Y		< 0.28	UJ		
Z34A	135-Z34A	14.0	135-Z34A-15.5-16.0	15.5 - 16.0 ft	-1.5	-2.0	JC3094-28T	JC3094T	09/03/2015	remaining	N	Y		< 0.13	UJ		
Z34A	135-Z34A	14.0	135-Z34A-16.0-16.5	16.0 - 16.5 ft	-2.0	-2.5	JC3094-29	JC3094	09/03/2015	remaining	N	Y		< 0.41	UJ		
Z35A	135-P3C-Z35A	14.2	135-P3C-Z35A-5.0-5.5	5.0 - 5.5 ft	9.2	8.7	JB62481-13	JB62481	03/20/2014	removed	N	Y		6.9	J	S72	
Z35A	135-P3C-Z35A	14.2	135-P3C-Z35A-7.0-7.5	7.0 - 7.5 ft	7.2	6.7	JB62481-14	JB62481	03/20/2014	remaining	N	Y		3.2	J	S72	
Z35A	135-P3C-Z35A	14.2	135-P3C-Z35A-9.0-9.5	9.0 - 9.5 ft	5.2	4.7	JB62481-15R	JB62481R	03/20/2014	remaining	N	Y		7.0	J	S72	
Z35A	135-P3C-Z35A	14.2	135-P3C-Z35A-11.0-11.5	11.0 - 11.5 ft	3.2	2.7	JB62481-16R	JB62481R	03/20/2014	remaining	N	Y		0.77	J	S72	
Z35A	135-P3C-Z35A	14.2	135-P3C-Z35A-13.0-13.5	13.0 - 13.5 ft	1.2	0.7	JB62481-17R	JB62481R	03/20/2014	remaining	N	Y		0.28	J	S72	
Z35A	135-P3C-Z35A	14.2	135-P3C-Z35A-15.0-15.5	15.0 - 15.5 ft	-0.8	-1.3	JB62481-18R	JB62481R	03/20/2014	remaining	N	Y		0.86	J	S72	
Z35A	135-P3C-Z35A	14.2	135-P3C-Z35A-15.5-16.0	15.5 - 16.0 ft	-1.3	-1.8	JB62481-19R	JB62481R	03/20/2014	remaining	N	Y		0.40	J	S72	
Z36A	135-Z36A	14.2	135-Z36A-5.0-5.5	5.0 - 5.5 ft	9.2	8.7	JC2395-15R	JC2395R	08/26/2015	removed	N	Y		3.1	RA	S73	
Z36A	135-Z36A	14.2	135-Z36A-7.0-7.5	7.0 - 7.5 ft	7.2	6.7	JC2395-16R	JC2395R	08/26/2015	remaining	N	Y		0.76	RA		
Z36A	135-Z36A	14.2	135-Z36A-9.0-9.5	9.0 - 9.5 ft	5.2	4.7	JC2395-17R	JC2395R	08/26/2015	remaining	N	Y		< 0.16	RA		
Z36A	135-Z36A	14.2	135-Z36A-11.0-11.5	11.0 - 11.5 ft	3.2	2.7	JC2395-18R	JC2395R	08/26/2015	remaining	N	Y		< 0.49	RA		
Z36A	135-Z36A	14.2	135-Z36A-13.0-13.5	13.0 - 13.5 ft	1.2	0.7	JC2395-19R	JC2395R	08/26/2015	remaining	N	Y		0.61	RA		
Z36A	135-Z36A	14.2	135-Z36A-15.0-15.5	15.0 - 15.5 ft	-0.8	-1.3	JC2395-20R	JC2395R	08/26/2015	remaining	N	Y		0.90	RA		
Z36A	135-Z36A	14.2	135-Z36A-15.7-16.2	15.7 - 16.2 ft	-1.5	-2.0	JC2395-21R	JC2395R	08/26/2015	remaining	N	Y		0.96	RA		
Z36A	135-Z36A	14.2	135-Z36A-16.2-16.7	16.2 - 16.7 ft	-2.0	-2.5	JC2395-22	JC2395	08/26/2015	remaining	N	Y		< 0.49	RA		
Z37A	135-P3C-Z37A	13.9	135-P3C-Z37A-5.0-5.5	5.0 - 5.5 ft	8.9	8.4	JB62481-22R	JB62481R	03/20/2014	remaining	N	Y		1.6	J		
Z37A	135-P3C-Z37A	13.9	135-P3C-Z37A-7.0-7.5	7.0 - 7.5 ft	6.9	6.4	JB62481-23R	JB62481R	03/20/2014	remaining	N	Y		0.53	J		
Z37A	135-P3C-Z37A	13.9	135-P3C-Z37A-9.0-9.5	9.0 - 9.5 ft	4.9	4.4	JB62481-24R	JB62481R	03/20/2014	remaining	N	Y		0.37	J		
Z37A	135-P3C-Z37A	13.9	135-P3C-Z37A-11.0-11.5	11.0 - 11.5 ft	2.9	2.4	JB62481-25R	JB62481R	03/20/2014	remaining	N	Y		0.92	J		
Z37A	135-P3C-Z37A	13.9	135-P3C-Z37A-13.0-13.5	13.0 - 13.5 ft	0.9	0.4	JB62481-26R	JB62481R	03/20/2014	remaining	N	Y		0.45	J		
Z37A	135-P3C-Z37A	13.9	135-P3C-Z37A-13.0-13.5X	13.0 - 13.5 ft	0.9	0.4	JB62481-27R	JB62481R	03/20/2014	remaining	FD	Y		0.43	J		
Z37A	135-P3C-Z37A	13.9	135-P3C-Z37A-15.0-15.5	15.0 - 15.5 ft	-1.1	-1.6	JB62481-28	JB62481	03/20/2014	remaining	N	Y		0.95	J		
Z37A	135-P3C-Z37A	13.9	135-P3C-Z37A-15.5-16.0	15.5 - 16.0 ft	-1.6	-2.1	JB62481-29R	JB62481R	03/20/2014	remaining	N	Y		1.2	J		
Z38A	135-Y38A-SW-E1	13.9	135-Y38A-SW-E-8.0-8.5	8.0 - 8.5 ft	5.9	5.4	JC34136-5R	JC34136R	12/21/2016	remaining	N	Y		0.82	J		
Z38A	135-Y38A-SW-E2	13.9	135-Y38A-SW-E-10.0-10.5	10.0 - 10.5 ft	3.9	3.4	JC34136-4	JC34136	12/21/2016	remaining	N	Y		0.57	J		

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

														Analyte CAS RN Units CrSCC	CHROMIUM (HEXVALENT) 18540-29-9 mg/kg 20		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Matrix (G18)	Result (G19, G20)	Qualifier (G21, G22)	Specific Notes	
Z38A	135-Y38A-SW-E3	13.9	135-Y38A-SW-E-12.0-12.5	12.0 - 12.5 ft	1.9	1.4	JC34136-3	JC34136	12/21/2016	remaining	N	Y		0.95	J		
Z38A	135-Y38A-SW-E4	13.9	135-Y38A-SW-E-14.0-14.5	14.0 - 14.5 ft	-0.1	-0.6	JC34244-6	JC34244	12/21/2016	removed	N	Y		0.80	RA	S74	
Z38A	135-Y38A-SW-E5	13.9	135-Y38A-SW-E-6.0-6.5	6.0 - 6.5 ft	7.9	7.4	JC35919-1R	JC35919R	01/20/2017	remaining	N	Y		2.9	J		
Z38A	135-Y38A-SW-E5	13.9	135-Y38A-SW-E-6.0-6.5X	6.0 - 6.5 ft	7.9	7.4	JC35919-2R	JC35919R	01/20/2017	remaining	FD	Y		1.4	J		
Z38A	135-Z38A	14.0	135-Z38A-5.0-5.5	5.0 - 5.5 ft	9.0	8.5	JC2218-4R	JC2218R	08/24/2015	removed	N	Y		1.4	J	S74	
Z38A	135-Z38A	14.0	135-Z38A-7.0-7.5	7.0 - 7.5 ft	7.0	6.5	JC2218-5R	JC2218R	08/24/2015	remaining	N	Y		< 0.15	UJ		
Z38A	135-Z38A	14.0	135-Z38A-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC2218-6R	JC2218R	08/24/2015	remaining	N	Y		< 0.16	UJ		
Z38A	135-Z38A	14.0	135-Z38A-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC2218-7R	JC2218R	08/24/2015	remaining	N	Y		0.22	J		
Z38A	135-Z38A	14.0	135-Z38A-11.3-11.8	11.3 - 11.8 ft	2.7	2.2	JC2218-8R	JC2218R	08/24/2015	remaining	N	Y		0.25	J		
Z38A	135-Z38A	14.0	135-Z38A-11.3-11.8X	11.3 - 11.8 ft	2.7	2.2	JC2218-9R	JC2218R	08/24/2015	remaining	FD	Y		0.75	J		
Z38A	135-Z38A	14.0	135-Z38A-11.8-12.3	11.8 - 12.3 ft	2.2	1.7	JC2218-10R	JC2218R	08/24/2015	remaining	N	Y		2.2	J		
Z39A	135-Z39A	14.0	135-Z39A-6.0-6.5	6.0 - 6.5 ft	8.0	7.5	JC2218-13R	JC2218R	08/24/2015	remaining	N	Y		14.7	J		
Z39A	135-Z39A	14.0	135-Z39A-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC2218-14R	JC2218R	08/24/2015	remaining	N	Y		0.35	J		
Z39A	135-Z39A	14.0	135-Z39A-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC2218-19	JC2218	08/24/2015	remaining	N	Y		0.91	J		
Z39A	135-Z39A	14.0	135-Z39A-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC2218-15R	JC2218R	08/24/2015	remaining	N	Y		0.38	J		
Z39A	135-Z39A	14.0	135-Z39A-14.0-14.5	14.0 - 14.5 ft	0.0	-0.5	JC2218-16	JC2218	08/24/2015	remaining	N	Y		< 0.29	UJ		
Z39A	135-Z39A	14.0	135-Z39A-15.0-15.5	15.0 - 15.5 ft	-1.0	-1.5	JC2218-17R	JC2218R	08/24/2015	remaining	N	Y		< 0.14	UJ		
Z39A	135-Z39A	14.0	135-Z39A-15.5-16.0	15.5 - 16.0 ft	-1.5	-2.0	JC2218-18R	JC2218R	08/24/2015	remaining	N	Y		2.6	J		
Z39A	135-Z39A-PB	14.0	135-Z39A-PB-6.1-6.6	6.1 - 6.6 ft	7.9	7.4	JC34136-1	JC34136	12/21/2016	remaining	N	Y		4.4	J		
Z39A	135-Z39A-SW-E	14.0	135-Z39A-SW-E-4.1-4.6	4.1 - 4.6 ft	9.9	9.4	JC34136-2	JC34136	12/21/2016	remaining	N	Y		7.5	J		
Z39A	135-Z40A-SW-N1	14.0	135-Z40A-SW-N-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC35023-15	JC35023	01/06/2017	remaining	N	Y		2.0	J		
Z39A	135-Z40A-SW-N2	14.0	135-Z40A-SW-N-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC35023-14	JC35023	01/06/2017	remaining	N	Y		1.5	J		
Z39A	135-Z40A-SW-N3	14.0	135-Z40A-SW-N-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC35023-13	JC35023	01/06/2017	remaining	N	Y		0.51	J		
Z40A	135-Z40A	14.0	135-Z40A-3.0-3.5	3.0 - 5.5 ft	11.0	10.5	JC2289-14R	JC2289R	08/25/2015	removed	N	Y		1.0	J	S75	
Z40A	135-Z40A	14.0	135-Z40A-5.0-5.5	5.0 - 5.5 ft	9.0	8.5	JC2289-15R	JC2289R	08/25/2015	removed	N	Y		1.7	J	S75	
Z40A	135-Z40A	14.0	135-Z40A-14.0-14.5	14.0 - 14.5 ft	0.0	-0.5	JC2289-21	JC2289	08/25/2015	remaining	N	Y		< 0.44	UJ		
Z40A	135-Z40A-PB	14.0	135-Z40A-PB-14.0-14.5	14.0 - 14.5 ft	0.0	-0.5	JC35023-1	JC35023	01/06/2017	remaining	N	Y		1.4	J		
Z40A	135-Z40A-SW-E1	14.0	135-Z40A-SW-E-6.0-6.5	6.0 - 6.5 ft	8.0	7.5	JC35023-12	JC35023	01/06/2017	remaining	N	Y		1.8	J	S12, S75	
Z40A	135-Z40A-SW-E2	14.0	135-Z40A-SW-E-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC35023-11	JC35023	01/06/2017	remaining	N	Y		1.6	J	S12	
Z40A	135-Z40A-SW-E3	14.0	135-Z40A-SW-E-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC35023-10	JC35023	01/06/2017	remaining	N	Y		1.4	J	S12	
Z40A	135-Z40A-SW-E4	14.0	135-Z40A-SW-E-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC35023-9	JC35023	01/06/2017	remaining	N	Y		0.46	J	S12	
Z41A	135-Z41A	10.6	135-Z41-0.1-0.6	0.1 - 0.6 ft	10.5	10.0	JC2722-12	JC2722	08/31/2015	remaining	N	Y		2.1	J	S12	
Z41A	135-Z41A	10.6	135-Z41-1.5-2.0	1.5 - 2.0 ft	9.1	8.6	JC2722-13R	JC2722R	08/31/2015	remaining	N	Y		4.9	J	S12	
Z41A	135-Z41A	10.6	135-Z41-3.5-4.0	3.5 - 4.0 ft	7.1	6.6	JC2722-14R	JC2722R	08/31/2015	remaining	N	Y		4.8	J	S12	
Z41A	135-Z41A	10.6	135-Z41-5.5-6.0	5.5 - 6.0 ft	5.1	4.6	JC2722-15R	JC2722R	08/31/2015	remaining	N	Y		0.92	J	S12	
Z41A	135-Z41A	10.6	135-Z41-7.5-8.0	7.5 - 8.0 ft	3.1	2.6	JC2722-16R	JC2722R	08/31/2015	remaining	N	Y		< 0.49	UJ	S12	
Z41A	135-Z41A	10.6	135-Z41-9.5-10.0	9.5 - 10.0 ft	1.1	0.6	JC2722-17	JC2722	08/31/2015	remaining	N	Y		0.53	J	S12	
Z41A	135-Z41A	10.6	135-Z41-11.5-12.0	11.5 - 12.0 ft	-0.9	-1.4	JC2722-18R	JC2722R	08/31/2015	remaining	N	Y		0.32	J	S12	
Z41A	135-Z41A	10.6	135-Z41-12.5-13.0	12.5 - 13.0 ft	-1.9	-2.4	JC2722-19R	JC2722R	08/31/2015	remaining	N	Y		0.45	J	S12	
Z41A	135-Z41A	10.6	135-Z41-12.5-13.0X	12.5 - 13.0 ft	-1.9	-2.4	JC2722-20R	JC2722R	08/31/2015	remaining	FD	Y		0.40	J	S12	
Z41A	135-Z41A	10.6	135-Z41-13.0-13.5	13.0 - 13.5 ft	-2.4	-2.9	JC2722-21	JC2722	08/31/2015	remaining	N	Y		1.4	J	S12	
Z41A	135-Z41A	10.6	135-Z41-13.5-14.0	13.5 - 14.0 ft	-2.9	-3.4	JC2722-22R	JC2722R	08/31/2015	remaining	N	Y		0.86	J	S12	

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
CCPW - Chromate Chemical Production Waste
Chromium Policy - Memorandum from NJDEP Commissioner Lisa P. Jackson to Irene Kropp, Subject: Chromium Moratorium (Chromium Policy), dated February 8, 2007
Cr - chromium
Cr⁺⁶ - hexavalent chromium
CrSCC - Chromium Soil Cleanup Criteria
El. - elevation
FD - field duplicate sample type
ft - feet
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
NJDEP - New Jersey Department of Environmental Protection
PDI - Pre-Design Investigation
RAR - Remedial Action Report
RI - Remedial Investigation
SDG - sample delivery group
TEE - terminal excavation elevation
USCS - Unified Soil Classification System

MATRICES:

FILL - fill
MM - meadow mat
UND - undisturbed native deposit
UNDno - non-organic undisturbed native deposit
UNDorg - organic undisturbed native deposit

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
J- - The analyte was positively identified; the associated numerical value is an estimated quantity with a potential low bias.
RA - The result was rejected due to deficiencies but is considered usable for decision making-purposes.
U - The analyte was not detected above the sample reporting limit shown.
UJ - The analyte was not detected above the sample reporting limit shown and the reporting limit was approximate.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Row V through EE (extending west to east) and Grid Column 42A through 25A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88.
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs. In some cases, the "Sample ID" in the table is a variant of the sample ID in the laboratory report and/or data validation report. In these cases, the "Lab ID" associates the sample results to the laboratory report and/or data validation report.
G7. "Depth Interval" is based on the "Location Elevation."
G8. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G9. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the clean confirmation pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G10. In some grids, the clean confirmation sample was collected prior to excavation and, therefore, a pit bottom sample was not collected. As a result, the clean confirmation sample elevation may vary from the as-built TEE. In addition, sometimes the clean confirmation sample was removed during excavation.
G11. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G12. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G13. "Date Collected" refers to the date the soil sample was collected.
G14. "Sample Status" indicates whether a sample is remaining or removed:
- "Remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location; and
- "Removed" indicates the sample was removed during excavation.
G15. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figures 5-1A, 5-1B, and 5-1C.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

G16. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
G17. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
G18. For samples with Cr⁺⁶ CrSCC exceedances, the USCS Classification is provided. Where the sample was collected above 20 ft bgs, the matrix (e.g., MM, UND, UNDno, UNDorg, or FILL) is also specified. In the event that a post-excavation sample supersedes a sample with Cr⁺⁶ CrSCC exceedances, the USCS Classification, and matrix if applicable, for the post-excavation sample is also provided.
G19. "Result" refers to the analytical result which is reported in mg/kg.
G20. Bold text indicates that the result exceeds the CrSCC. Non-bold text indicates that the result does not exceed the CrSCC.
G21. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data. For unvalidated data, it refers to the qualifier assigned by the laboratory.
G22. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.

SPECIFIC NOTES:

- S1. The portions of Grids AA26A, AA27A, AA28A, AA29A, BB26A, V40A, V41A, W37A, W38A, W39A, X35A, X36A, X37A, Y32A, Y33A, Y34A, Z29A, Z30A, and Z31A located in Site 135 South were excavated concurrently with the portion of these grids located in Site 133 East. Remaining samples located within these grids, in their entirety (i.e., on both sites), are included in this table.
- S2. Grid AA26A was excavated as a split grid with two distinct as-built TEEs. The PDI sample 133-P3C-AA26A-5.0-5.5 (El. 6.4 to 5.9 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample for the southern portion of the grid. The southern Cr⁺⁶ confirmation pit bottom sample 133-P3C-AA26A-5.0-5.5 and the PDI sample 133-P3C-AA26A-7.0-7.5 (El. 4.4 to 3.9 ft NAVD88) were removed due to sloping towards the deeper northern portion of the grid.
- S3. Grid AA27A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from historical boring 133-B18 and PDI borings 133-P3C-AA27A and 133-P3C-AA27A-ME were less than the CrSCC. The removed PDI sample 133-P3C-AA27A-5.0-5.5 (El. 6.7 to 6.2 ft NAVD88) from the closest interval above the remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.
- S4. In Grids AA27A, V40A, and X35A, multiple borings were installed adjacent to each other at different points in time. The location elevations vary because earthwork modified the surface elevation between the two sampling events.
- S5. Grid AA28A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from PDI boring 135-P3C-AA28A were less than the CrSCC. The removed PDI samples from boring 135-P3C-AA28A between El. 7.1 and 1.1 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom and west, north, and south sidewall samples.
- S6. Grid AA29A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-AA29A were less than the CrSCC. The removed PDI sample 135-P3C-AA29A-5.0-5.5 (El. 7.6 to 7.1 ft NAVD88) from the closest interval above the remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.
- S7. Grid AA30A was excavated to remove a concrete foundation. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-AA30A were less than the CrSCC. The removed PDI sample 135-AA30A-0.7-1.2 (El. 0.6 to 0.1 ft NAVD88) from the closest interval above the remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample. The pre-remediation surface elevation (basement foundation surface) in this grid (El. 1.3 ft NAVD88) was approximately 11 ft below the pre-remediation surface elevation of the adjacent building slab due to the presence of a basement foundation. The grid did not contain Cr⁺⁶-impacted soil above the basement foundation surface (El. 1.3 ft NAVD88); therefore, confirmation sidewall samples were not required or collected in this grid.
- S8. Grid AA31A was excavated to remove a concrete foundation. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI borings 135-AA31A and 135-AA31AR were less than the CrSCC. The removed PDI sample 135-AA31A-0.7-1.2 (El. 0.6 to 0.1 ft NAVD88) from the closest interval above the remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample. The pre-remediation surface elevation (basement foundation surface) in this grid (El. 1.3 ft NAVD88) was approximately 11 ft below the pre-remediation surface elevation of the adjacent building slab elevation in Site 135 South due to the presence of a basement foundation. The grid did not contain Cr⁺⁶-impacted soil above the basement foundation surface (El. 1.3 ft NAVD88); therefore, confirmation sidewall samples were not required or collected in this grid.
- S9. The northern portion of Grid AA32A was excavated to remove a concrete foundation. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-AA32A were less than the CrSCC. The northern portion of the grid was excavated to El. -0.2 ft NAVD88 and a Cr⁺⁶ confirmation post-concrete pit bottom sample (135-AA32A-PCPB-14.1-14.6 [El. -0.2 to -0.7 ft NAVD88]) was collected. The PDI sample 135-AA32A-5.5-6.0 (El. 8.4 to 7.9 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample for the southern portion of the grid. The pre-remediation surface elevation (basement foundation surface) in this grid (El. 1.3 ft NAVD88) was approximately 11 ft below the pre-remediation surface elevation of the adjacent building slab due to the presence of a basement foundation. The grid did not contain Cr⁺⁶-impacted soil above the basement foundation surface (El. 1.3 ft NAVD88); therefore, confirmation sidewall samples were not required or collected in this grid.
- S10. Grid AA35A was excavated deeper than required for Cr⁺⁶ remediation due to the presence of non-Cr⁺⁶ constituents. The Cr⁺⁶ confirmation pit bottom sample 135-AA35A-PB-6.2-6.7 (El. 7.8 to 7.3 ft NAVD88) and the PDI sample 135-AA35A-6.0-6.5 (El. 8.0 to 7.5 ft NAVD88), that serves as a confirmation sidewall sample between Grid AA35A and Grid BB35A, were removed during excavation for remediation of the non-Cr⁺⁶ constituents. PDI samples 135-BB35AR-1.0-1.5 (El. 10.5 to 10.0 ft NAVD88) and 135-BB35A-3.0-3.5 (El. 8.5 to 8.0 ft NAVD88) from adjacent Grid BB35A serve as the confirmation sidewall samples along the eastern extent of the excavation. Sidewall sample 135-AA36A-SW-E-3.3-3.8 (El. 10.7 to 10.2 ft NAVD88) and PDI sample 135-BB34A-5.0-5.5 (El. 9.0 to 8.5 ft NAVD88) from adjacent Grids BB36A and BB34A, respectively, provide further evidence that Cr⁺⁶ is horizontally delineated at the eastern property boundary in this area. In addition, no visible CCPW was observed along the sidewall at this location.
- S11. Grid AA37A was excavated deeper than required for Cr⁺⁶ remediation to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. The removed PDI sample 135-AA37A-5.0-5.5 (El. 9.0 to 8.5 ft NAVD88) from the closest interval above the remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample. The PDI sample 135-AA37A-3.0-3.5 from El. 11.0 to 10.5 ft NAVD88 serves as the eastern Cr⁺⁶ confirmation sidewall sample.
- S12. In Grids AA38A, BB35A, BB36A, CC32A, CC33A, DD28A, DD29A, DD30A, EE27A, EE28A, Y42A, Z40A, and Z41A, samples collected from Pacific Avenue were used in the evaluation of compliance for the portion of these grids located within Site 135 South.
- S13. The portion of Grid BB25A located in Site 135 South was excavated concurrently with the portions of this grid located in Site 135 North and Site 133 East. Remaining and removed samples necessary for confirmation, which are located within this grid in its entirety (i.e., on all three sites), are included in this table.
- S14. In Grid BB25A, excavation for Cr⁺⁶ remediation was conducted to El. -2.6 ft NAVD88 and a Cr⁺⁶ confirmation pit bottom sample (135-BB25A-PB-14.1-14.6 [El. -2.6 to -3.1 ft NAVD88]) was collected. A portion of Grid BB25A was excavated deeper to remove the former building footprint, which resulted in sloping from the pit bottom El. -2.6 ft NAVD88 to El. -4.6 ft NAVD88. Since the sloping was not due to Cr⁺⁶ remediation, no sidewall samples were required.
- S15. In Grid BB25A, the Cr⁺⁶ western confirmation sidewall sample at location 135-BB25A-SW-W (135-BB25A-SW-W-12.0-12.5 [El. -0.5 to -1.0 ft NAVD88]) was removed due to sloping towards adjacent Grids AA24A and BB24A.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

- S16. Grid BB26A was excavated deeper than required for Cr⁺⁶ remediation due to presence of non-Cr⁺⁶ constituents. The excavation for non-Cr⁺⁶ constituents removed the Grid BB25A Cr⁺⁶ southern confirmation sidewall samples at locations 135-BB25A-SW-S1 (135-BB25A-SW-S-8.1-8.6 [El. 3.4 to 2.9 ft NAVD88]), 135-BB25A-SW-S2 (135-BB25A-SW-S-10.1-10.6 [El. 1.4 to 0.9 ft NAVD88]), and 135-BB25A-SW-S3 (135-BB25A-SW-S-12.1-12.6 [El. -0.6 to -1.1 ft NAVD88]). The Grid BB26A confirmation pit bottom sample (135-BB26A-PB-6.7-7.2 [El. 5.4 to 4.9 ft NAVD88]) and the clean PDI samples from boring 135-P3C-BB26A (between El. 5.1 and 0.6 ft NAVD88) serve as the confirmation sidewall samples between Grids BB26A and AA26A.
- S17. In Grid BB27A, excavation was deeper than required for Cr⁺⁶ remediation due to the presence of non-Cr⁺⁶ constituents. The removed PDI sample135-BB27A-8.0-8.5 (El. 3.6 to 3.1 ft NAVD88) from the same elevation as the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation sample. Sidewall samples between the northeastern portion of the grid (approximately El. -2.7 ft NAVD88) and the western portion of the grid (approximately El. 3.4 ft NAVD88) were not required because excavation below El. 3.4 ft NAVD88 in Grids BB26A and CC27A was for remediation of non-Cr⁺⁶ constituents only, as described in Specific Notes S16 and S32. No sidewall sample between Grids BB27A and AA27A was required because the elevation difference between the removed PDI sample 135-BB27A-8.0-8.5 (El. 3.6 to 3.1 ft NAVD88) that serves as the pit bottom confirmation sample in Grid BB27A and the as-built TEE of Grid AA27A (El. 5.3 ft NAVD88) was less than two feet.
- S18. Grid BB28A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-BB28A were less than the CrSCC. The removed PDI samples from boring 135-BB28A between El. 4.5 and 0.0 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom, south, east, and north sidewall samples.
- S19. Grid BB29A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-BB29A were less than the CrSCC. The removed PDI samples from boring 135-P3C-BB29A between El. 7.8 and 5.3 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom for Grid BB29A and as the sidewall samples between Grids BB29A and BB30A. Because the sloping between Grid BB28A and Grid BB29A was conducted for remediation of non-Cr⁺⁶ constituents (see Specific Note S18), no post-excavation sidewall samples were collected along this slope for Cr⁺⁶ analysis; non-impacted Cr⁺⁶ soil samples collected from PDI boring 135-BB28A in Grid BB28A between El. 4.5 and 0.0 ft NAVD88 serve as the Cr⁺⁶ confirmation sidewall samples.
- S20. In Grid CC29A, a sample was not collected between El. 2.9 and -1.6 ft NAVD88. Although the Method to Determine Compliance requires samples at 2-ft intervals between the as-built TEE and the shallower of MM or UND or 20 ft bgs, no additional sampling is required in this grid as this sampling approach was presented in the *Site 135 South Terminal Excavation Elevation Submittal (Revision 1)* dated March 17, 2016 and approved by NJDEP/Weston Solutions Inc. via email on April 19, 2016. Visible CCPW or Cr⁺⁶ at concentrations greater than the CrSCC were not encountered at any interval in boring EF-77. The grid was excavated for remediation of non-Cr⁺⁶ constituents only. In addition, samples from adjacent Grid CC28A (135-CC28A-12.0-12.5 [El. 1.5 to 1.0 ft NAVD88] and 135-CC28A-14.0-14.5 [El. -0.5 to -1.0 ft NAVD88]), Grid CC30A (135-CC30A-11.5-12.0 [El. 2.4 to 1.9 ft NAVD88] and 135-CC30A-13.5-14.0 [El. 0.4 to -0.1 ft NAVD88]), Grid BB29A (135-P3C-BB29A-12.0-12.5 [El. 1.8 to 1.3 ft NAVD88] and 135-P3C-BB29A-14.0-14.5 [El. -0.2 to -0.7 ft NAVD88]) and Grid DD29A (135-DD29A-11.0-11.5 [El. 2.4 to 1.9 ft NAVD88] and 135-DD29A-13.0-13.5 [El. 0.4 to -0.1 ft NAVD88]) document compliance between El. 2.9 and -1.6 ft NAVD88 in Grid CC29A. The Cr⁺⁶ results for these samples were less than 20 mg/kg.
- S21. Grid BB30A was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-BB30A were less than the CrSCC. A PDI sample was not collected above El. 8.3 ft NAVD88 so the removed sidewall sample at location 135-CC30A-SW-W2 (135-CC30A-SW-W-4.4-4.9 [El. 9.5 to 9.0 ft NAVD88]) is included as the confirmation pit bottom sample.
- S22. The majority of Grid BB31A was excavated in order to remove a concrete foundation. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-BB31A were less than the CrSCC. The removed PDI sample 135-BB31A-0.7-1.2 (El. 0.6 to 0.1 ft NAVD88) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample. The pre-remediation surface elevation (basement foundation surface) in this grid (El. 1.3 ft NAVD88) was approximately 11 ft below the pre-remediation surface elevation of the adjacent building slab due to the presence of a basement foundation. The grid did not contain Cr⁺⁶-impacted soil above the basement foundation surface (El. 1.3 ft NAVD88); therefore, confirmation sidewall samples were not required or collected in this grid. Sample135-P3C-BB30A-4.0-4.5 (El. 6.3 to 5.8 ft NAVD88) in adjacent Grid BB30A and sample135-CC31A-8.0-8.5 (El. 5.6 to 5.1 ft NAVD88) in adjacent Grid CC31A serve as the confirmation of compliance for the portion of soil outside the foundation footprint remaining in place up to El. 5.7 ft NAVD88 in the northeast corner of Grid BB31A.
- S23. The northern portion of Grid BB32A was excavated to remove a concrete foundation. The southern portion of the grid was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. The northern portion of the grid was excavated to El. -0.1 ft NAVD88 and a Cr⁺⁶ confirmation post-concrete removal pit bottom sample (135-BB32A-PCPB-14.8-15.3 [El. -0.1 to -0.6 ft NAVD88]) was collected at the as-built TEE (El. -0.1 ft NAVD88). The PDI samples from location 135-BB32A between El. 11.7 and 1.2 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom for the southern portion of the grid, as the confirmation sidewall samples for the slope within the grid itself, and as the eastern confirmation sidewall samples for the Site 135 excavation in Column 32A.
- S24. In Grid CC33A, a sample was not collected between El. 4.3 and 0.3 ft NAVD88. Although the Method to Determine Compliance requires samples at 2-ft intervals between the as-built TEE and the shallower of MM or UND or 20 ft bgs, no additional sampling is required in this grid as this sampling approach was presented in the *Site 135 South Terminal Excavation Elevation Submittal (Revision 1)* dated March 17, 2016 and approved by NJDEP/Weston Solutions Inc. via email on April 19, 2016. Visible CCPW or Cr⁺⁶ at concentrations greater than 20 mg/kg were not encountered at any interval in boring EF-19. The portion of the grid within the Site 135 South boundary was excavated to allow for the placement of an engineering control. In addition, samples from adjacent Grid CC32A (135-CC32A-6.0-6.5 [El. 4.0 to 3.5 ft NAVD88] and 135-CC32A-8.0-8.5 [El. 2.0 to 1.5 ft NAVD88]) and Grid BB33A (135-BB33A-11.3-11.8 [El. 2.6 to 2.1 ft NAVD88] and 135-BB33A-13.3-13.8 [El. 0.6 to 0.1 ft NAVD88]) document compliance at this interval in Grid CC33A. The Cr⁺⁶ results for these samples were less than 20 mg/kg.
- S25. In Grid BB33A, the confirmation pit bottom sample 135-BB33A-PB-3.7-4.2 (El. 10.2 to 9.7 ft NAVD88) was removed to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters.
- S26. Grid BB34A was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-BB34A were less than the CrSCC. The removed PDI samples from boring 135-BB34A from El. 12.5 to 10.5 ft NAVD88 serve as the eastern Cr⁺⁶ confirmation sidewall samples.
- S27. In Grids BB36A, DD30A, W38A, X36A, and Z30A, the sidewall samples at locations 135-AA36A-SW-E, 135-CC30A-SW-E1, 135-CC30A-SW-E2, 133-V38A-SW-E1, 133-V38A-SW-E2, 133-W36A-SW-E2, 133-W36A-SW-E3, 133-W36A-SW-E4, 133-Y30A-SW-E1, 133-Y30A-SW-E2, and 133-Y30A-SW-E3 (samples 135-AA36A-SW-E-3.3-3.8, 135-CC30A-SW-E-4.4-4.9, 135-CC30A-SW-E-6.4-6.9, 133-V38A-SW-E-6.9-7.4, 133-V38A-SW-E-6.9-7.4X, 133-V38A-SW-E-8.9-9.4, 133-W36A-SW-E-5.4-5.9, 133-W36A-SW-E-7.4-7.9, 133-W36A-SW-E-9.4-9.9, 133-Y30A-SW-E-7.2-7.7, 133-Y30A-SW-E-9.2-9.7, and 133-Y30A-SW-E-11.2-11.7) were named with depth intervals based on the pre-remediation surface elevation of the former slab (average El. 12.7 ft NAVD88). However, the samples are located outside the footprint of the building slab. The sample location elevations and corresponding depth intervals of these sidewall samples have been modified based on the pre-remediation elevation of the nearest PDI location to each sample location outside the footprint of the building slab. The sample names and measured sample start elevations have not been modified.
- S28. The portions of Grids CC25A, DD26A, and EE26A located in Site 135 South were excavated concurrently with the portions of these grids located in Site 135 North. Remaining samples located within these grids, in their entirety (i.e., on both sites), are included in this table.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

S29. A portion of Grid CC25A was excavated deeper than required for Cr⁺⁶ remediation to remove a concrete foundation resulting in sloping from west to east within the grid from approximately El. 1.4 to -4.7 ft NAVD88. The removed sidewall sample at location 135-CC24A-SW-S3 (135-CC24A-SW-S-12.4-12.9, El. 1.6 to 1.1 ft NAVD88) was collected at the same elevation as the shallowest remaining soil in the grid (El. 1.4 ft NAVD88); therefore, this sample serves as the confirmation pit bottom sample for the shallowest elevation. This confirmation sample (135-CC24A-SW-S-12.4-12.9) and the confirmation sidewall sample at location 135-CC24A-SW-SR (sample 135-CC24A-SW-S-14.4-14.9R, El. -0.4 to -0.9 ft NAVD88) were removed during the excavation of the foundation. Because the sloping was conducted for concrete removal and not for Cr⁺⁶ remediation, no post-excavation sidewall samples along this slope were collected for Cr⁺⁶ analyses. Clean Cr⁺⁶ soil samples collected from PDI boring 135-P3C-CC25A and historical boring EF-78 between El. 1.0 and -5.5 ft NAVD88 serve as the Cr⁺⁶ confirmation sidewall samples.

S30. In Grid CC25A, the Cr⁺⁶ concentration in sample 135-P3C-CC25A-20.0-20.5 is greater than 20 mg/kg but in compliance with the Chromium Policy per the Method to Determine Compliance because: 1) MM was not encountered, 2) the sample was collected deeper than 20 ft below the pre-remediation elevation, 3) the sample is coarse grained, and 4) the Cr⁺⁶ concentration is less than 1,000 mg/kg.

S31. Grid CC26A was excavated for remediation of non-Cr⁺⁶ constituents and to remove a concrete foundation. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-CC26A were less than the CrSCC. The removed PDI sample 135-P3C-CC26A-11.0-11.5 (El. 2.6 to 2.1 ft NAVD88) at the elevation of the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation sample. Because the excavation from El. -5.1 ft NAVD88 in adjacent Grid CC25A to El. 2.3 ft NAVD88 in Grid CC26A was due to the removal of a concrete foundation (as described in Specific Note S29), no post-excavation sidewall samples along this slope were collected for Cr⁺⁶ analysis.

S32. Grid CC27A was excavated for remediation of non-Cr⁺⁶ constituents and to remove a concrete foundation. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-CC27A were less than the CrSCC. The removed PDI sample 135-P3C-CC27A-10.0-10.5 (El. 3.6 to 3.1 ft NAVD88) from the closest interval above the shallowest remaining soil serves as the Cr⁺⁶ confirmation sample. Because the sloping from the northwest to southeast within the grid from approximately El. 3.0 to -2.8 ft NAVD88 was due to non-Cr⁺⁶ remediation and removal of a concrete foundation, no post-excavation sidewall samples along this slope were collected for Cr⁺⁶ analysis.

S33. Grid CC28A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-CC28A were less than the CrSCC. The removed PDI samples 135-CC28A-10.0-10.5 and 135-CC28A-10.0-10.5X (El. 3.5 to 3.0 ft NAVD88) serve as the Cr⁺⁶ confirmation pit bottom samples at the elevation of the shallowest soil remaining in the grid. Removed PDI sample 135-CC28A-12.0-12.5 (El. 1.5 to 1.0 ft NAVD88) serves as the confirmation sidewall sample between the eastern and western portions of the grid.

S34. In Grid CC29A, the RI sample EF-B77-10.0 (El. 3.4 to 2.9 ft NAVD88), which falls on the grid line between Grids CC28A and CC29A, serves as the Cr⁺⁶ confirmation pit bottom sample for Grid CC29A. The use of samples from location EF-77 as confirmation for Grid CC29A was presented to NJDEP/Weston Solutions Inc. in the *Site 135 South Terminal Excavation Elevation Submittal (Revision 1)* dated March 17, 2016. NJDEP/Weston Solutions, Inc. concurred with the use of samples from this boring via email on April 19, 2016. The grid was excavated for remediation of non-Cr⁺⁶ constituents only, removing the sample that serves as the confirmation pit bottom (EF-B77-10.0).

S35. Grid CC31A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-CC31A were below the CrSCC. The removed PDI samples from boring 135-CC31A from El. 11.6 to 5.1 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom and southern and eastern sidewall samples. The slope between El. -0.2 and 4.5 ft NAVD88 is described in Specific Note S22.

S36. In Grid DD26A, excavation was conducted for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring (135-DD26A) were less than the CrSCC. The removed PDI boring sample (135-DD26A-11.0-11.5, El. 2.8 to 2.3 ft NAVD88) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation sample.

S37. Grid DD27A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-DD27A were less than the CrSCC. Removed PDI boring sample (135-DD27A-11.0-11.5 [El. 2.4 to 1.9 ft NAVD88]) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample. The soil samples collected from PDI boring 135-DD27A between El. 10.4 and 1.9 ft NAVD88 serve as the Cr⁺⁶ confirmation sidewall samples in the eastern extent of the excavation in Column 27A.

S38. Grid DD28A was excavated as a split grid with two distinct as-built TEEs (east to El. -0.8 ft NAVD88 and west to El. 1.7 ft NAVD88). In both the east and west portions of the grid, two pit bottom sample pairs (135-DD28A-E-PB-14.2-14.7/135-DD28A-E-PB-14.2-14.7R in the eastern portion and 135-DD28A-W-PB-11.7-12.2/135-DD28A-W-PB-11.7-12.2R in the western portion) were collected and analyzed for Cr⁺⁶; both samples in each pair were collected from the same location and elevation on two different dates. The second east and west pit bottom samples were collected for analysis of additional non-Cr⁺⁶ parameters.

S39. In Grid DD29A, two pit bottom samples (135-DD29A-PB-10.5-11.0, and duplicate sample 135-DD29A-PB-10.5-11.0X, and 135-DD29A-PB-10.5-11.0R) were collected and analyzed for Cr⁺⁶ from the same location on two different dates. The second sample was collected for analysis of additional non-Cr parameters.

S40. In Grid DD29A, the sidewall sample start elevation difference between sidewall samples at locations 135-DD29A-SW-E1 (135-DD29A-SW-E-4.2-4.7 [El. 9.2 to 8.7 ft NAVD88]) and 135-DD29A-SW-E2 (135-DD29A-SW-E-6.5-7.0 [El. 6.9 to 6.4 ft NAVD88]) is approximately 2.3 ft which exceeds the 2-ft required sidewall sampling interval. Sidewall samples 135-CC30A-SW-E-6.4-6.9 (El. 7.5 to 7.0 ft NAVD88) from adjacent Grid DD30A and 135-DD28A-SW-E-6.2-6.7 (El. 7.2 to 6.7 ft NAVD88) from adjacent Grid EE28A provide further evidence that Cr⁺⁶ is horizontally delineated at the eastern property boundary in this area.

S41. Grid EE26A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-EE26A from El. 12.3 to -3.1 ft NAVD88 were less than the CrSCC. Removed PDI boring sample (135-EE26A-13.0-13.5, El. 0.8 to 0.3 ft NAVD88) from the elevation of the shallowest point remaining in the grid (El. 0.6 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample. The soil samples collected from PDI boring 135-EE26A serve as the eastern Cr⁺⁶ confirmation sidewall samples.

S42. Grid V40A required excavation to an as-built TEE of El. 3.4 ft NAVD88 for Cr⁺⁶ remediation. The removed PDI sample 133-P3C-V40A-6.0-6.5 (El. 3.4 to 2.9 ft NAVD88), and the associated field duplicate, serves as the Cr⁺⁶ confirmation pit bottom sample. Additional excavation was conducted in the northern and western portions of the grid to El. 2.8 ft NAVD88 for non-Cr⁺⁶ remediation. Excavation in the southeast corner of the grid was conducted to the same elevation as Grid W41A (El. -2.4 ft NAVD88), so that removed PDI samples from borings 133-P3C-V40A and 135-P3C-V41A serve as western confirmation sidewall samples for the west to east slope from El. 2.8 to -2.4 ft NAVD88 in Grids V40A and V41A. These PDI samples horizontally delineate the Cr⁺⁶ encountered within Grid W41A.

S43. A portion of Grid V41A and adjacent Grid V42A were excavated as part of the Al Smith Moving property remediation. Sampling results for the Al Smith Moving property do not reflect soil remaining in place in Site 135 South and will be reported in the Al Smith Moving property RAR submittal.

S44. Grid W37A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 133-P3C-W37AR were less than the CrSCC. The removed PDI samples from boring 133-P3C-W37AR between El. 5.9 to -0.6 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom and sidewall samples.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

- S45. Grid W38A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in all samples collected from the PDI boring 133-P3C-W38A were less than the CrSCC. The PDI sample 135-P3C-W38A-1.0-1.5 (El. 8.4 to 7.9 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample. This sample and the PDI sample 135-P3C-W38A-3.0-3.5 (El. 6.4 to 5.9 ft NAVD88) were removed for constructability purposes and sloping into adjacent grids.
- S46. Grid W40A required excavation to El. 6.3 ft NAVD88 for the remediation of Cr⁺⁶. The northern portion of the grid was further excavated (to between El. 2.4 and 3.9 ft NAVD88) for the remediation of non-Cr⁺⁶ constituents. PDI sample 135-P3C-W40A-9.0-9.5 (El. 4.3 to 3.8 ft NAVD88) from the closest interval above the remaining soil in the shallowest part of the grid serves as the Cr⁺⁶ confirmation pit bottom sample. The southern portion of the grid was excavated to the same elevation as Grid W41A (El. -2.4 ft NAVD88) so that removed PDI samples from boring 135-P3C-W40A serve as confirmation sidewall samples for the north to south slope from El. 3.9 to -2.4 ft NAVD88. These PDI samples horizontally delineate the Cr⁺⁶ encountered within Grid W41A.
- S47. Partial Grid W42A was excavated to the same elevation as Grid W41A as part of Site 135 South. Sample 135-W41A-16.3-16.8 (El. -2.4 to -2.9 ft NAVD88) from adjacent Grid W41A serves as the confirmation pit bottom sample for the portion of Grid W42A that was excavated as part of Site 135 South. The southern portion of the grid was excavated as part of the Al Smith Moving property remediation. Sampling results for the Al Smith Moving property do not reflect soil remaining in place in Site 135 South and will be reported in the Al Smith Moving property RAR submittal.
- S48. In Grid X36A, the Cr⁺⁶ eastern confirmation sidewall sample at location 133-W36A-SW-E2 (133-W36A-SW-E-5.4-5.9 [El. 7.3 to 6.8 ft NAVD88]) was removed due to sloping towards adjacent Grid X37A.
- S49. Grid X36A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from PDI borings 135-P3C-X36AR and 135-P3C-X36A were less than the CrSCC. The removed PDI sample 135-P3C-X36AR-0.0-0.5 (El. 12.4 to 11.9 ft NAVD88) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.
- S50. Grid X37A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-X37A were less than the CrSCC. The removed PDI samples from boring 135-P3C-X37A between El. 8.8 and -1.2 ft NAVD88 serve as the Cr⁺⁶ confirmation pit bottom and sidewall samples.
- S51. In Grid X39A, excavation was deeper than required for Cr⁺⁶ remediation due to the presence of non-Cr⁺⁶ constituents. The removed PDI sample 135-P3C-X39A-5.5-6.0 (and field duplicate 135-P3C-X39A-5.5-6.0X [El. 4.2 to 3.7 ft NAVD88]) from the shallowest remaining soil in the grid (El. 3.8 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample. The removed PDI sample 135-P3C-X39A-3.5-4.0 (El. 6.2 to 5.7 ft NAVD88) serves as the confirmation sidewall sample between Grids X39A and Y39A.
- S52. Grid X40A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-X40A were less than the CrSCC. The removed PDI sample 135-P3C-X40A-9.0-9.5 (El. 4.9 to 4.4 ft NAVD88) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample. The southwest portion of the grid was excavated to the same elevation as Grid W41A (El. -2.4 ft NAVD88) so that removed PDI samples from boring 135-P3C-X40A between El. 2.9 and -1.6 ft NAVD88 serve as confirmation sidewall samples for the northeast to southwest slope from El. 3.9 to -2.4 ft NAVD88. These PDI samples horizontally delineate the Cr⁺⁶ encountered within Grid W41A. Removed PDI samples 135-P3C-X40A-7.0-7.5 (El. 6.9 to 6.4 ft NAVD88) and 135-P3C-X40A-9.0-9.5 (El. 4.9 to 4.4 ft NAVD88) serve as the confirmation sidewall samples between Grids X40A and Y40A.
- S53. Grid X41A required excavation to El. 2.9 ft NAVD88 to remove visible CCPW. The removed PDI sample 135-P3C-X41A-11.0-11.5 (El. 2.9 to 2.4 ft NAVD88) from the shallowest remaining soil in the grid (El. 2.9 ft NAVD88) serves as the Cr⁺⁶ confirmation sample. The western portion of the grid was further excavated to the same elevation as Grid W41A (El. -2.4 ft NAVD88) so that removed PDI samples from boring 135-P3C-X41A between El. 2.9 and -1.6 ft NAVD88 serve as confirmation sidewall samples for the east to west slope from El. 2.9 to -2.4 ft NAVD88. These PDI samples horizontally delineate the Cr⁺⁶ encountered within Grid W41A.
- S54. Grid X42A required excavation to El. 2.9 ft NAVD88 to remove visible CCPW. The grid was further excavated to El. 1.3 ft NAVD88 to limit the total number of sidewall samples that required collection and analysis. The removed PDI sample 135-X42A-12.5-13.0 (El. 1.3 to 0.8 ft NAVD88) from the interval of the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation sample. The northwest portion of the grid was further excavated to the same elevation as Grid W41A (El. -2.4 ft NAVD88), so that removed PDI samples from boring 135-P3C-X42A between El. 1.3 and -1.2 ft NAVD88 serve as confirmation sidewall samples for the east to west slope from El. 1.3 to -2.4 ft NAVD88. These PDI samples horizontally delineate the Cr⁺⁶ encountered within Grid W41A. The southern portion of Grid X42A was also excavated as part of the Al Smith Moving property remediation. Sampling results for the Al Smith Moving property will be reported in the Al Smith Moving property RAR submittal.
- S55. In Grid X42A, sidewall sample ASM-X42A-SW-E-10.5-11.0 (El. 3.2 to 2.8 ft NAVD88) from location ASM-X42A-SW-E located on Al Smith Moving property was used in the evaluation of compliance for the portion of these grids located within Site 135 South. This sample serves as the confirmation sidewall sample between Grids X42A and Y42A and was removed due to scraping to confirm that all of Grid X42A was taken down to a consistent elevation of 1.3 ft NAVD88. Sampling results for the Al Smith Moving property will be reported in the Al Smith Moving property RAR submittal.
- S56. In Grid Y32A, excavation was deeper than required for Cr⁺⁶ remediation due to the presence of non-Cr⁺⁶ constituents. The removed historical sample 133-B17C (4.0-4.5)J49295-20R (El. 6.2 to 5.7 ft NAVD88) and the removed PDI sample 133-P3C-Y32A-6.0-6.5 (El. 6.2 to 5.7 ft NAVD88) serve as the Cr⁺⁶ confirmation pit bottom samples.
- S57. In Grid Y34A, the final elevation difference between Grid Y34A and Grid Y33A is 2.1 ft. However, the elevation difference between the PDI sample 135-P3C-Y34A-6.5-7.0 (El. 3.3 to 2.8 ft NAVD88) in Grid Y34A and the Grid Y33A Cr⁺⁶ confirmation pit bottom sample 135-Y33A-PB-8.3-8.8 (El. 5.2 to 4.7 ft NAVD88) is 1.9 ft. The interval from El. 3.3 to 3.1 ft NAVD88 in Grid Y34A was removed due to scraping of the grid; therefore, Cr⁺⁶ sidewall samples between Grids Y33A and Y34A were not required.
- S58. In Grids Y35A and Z34A, the sidewall samples at locations 135-X35A-SW-E, 135-Y34A-SW-S1, 135-Y34A-SW-S2, 135-Y34A-SW-E1, 135-Y34A-SW-E2, and 135-Y34A-SW-E3 (samples 135-X35A-SW-E-2.5-3.0, 135-Y34A-SW-S-2.7-3.2, 135-Y34A-SW-S-4.7-5.2, 135-Y34A-SW-E-0.7-1.2, 135-Y34A-SW-E-2.7-3.2, and 135-Y34A-SW-E-4.7-5.2) were named with depth intervals based on the pre-remediation surface elevation outside of the footprint of the former slab. However, the samples are located within the footprint of the building slab. The sample location elevations and corresponding depth intervals of the sidewall samples have been modified based on the pre-remediation elevation of the nearest PDI location to each sidewall sample location within the footprint of the building slab. The sample names and measured sample start elevations have not been modified.
- S59. Grid Y35A was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-Y35A were less than the CrSCC. The removed PDI sample 135-Y35A-5.0-5.5 (El. 9.1 to 8.6 ft NAVD88) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.
- S60. Grid Y36A was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-Y36A were less than the CrSCC. The removed PDI sample 135-Y36A-3.5-4.0 (El. 10.4 to 9.9 ft NAVD88) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.

Table 5-1
Cr⁺⁶ Analytical Results for In-Place Soil Compared to Chromium Soil Cleanup Criterion
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

- S61. Grid Y37A was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters, removing the clean Cr⁺⁶ pit bottom sample 135-Y37A-PB-3.5-4.0. PDI samples 135-Y37A-5.5-6.0 and 135-Y37A-7.5-8.0 and sidewall sample 135-Y38A-SW-N-6.0-6.5 from location 135-Y38A-SW-N1 were removed due to sloping towards adjacent grids and to accommodate the placement of the clean fill cap (engineering control). They are included in the dataset because soil remains in place within Grid Y37A at these elevations.
- S62. Grid Y38A was excavated deeper than required for Cr⁺⁶ remediation due to the presence of non-Cr⁺⁶ constituents. The Cr⁺⁶ confirmation pit bottom sample 135-Y38A-PB-16.0-16.5 (El. -2.1 to -2.6 ft NAVD88) was removed during excavation for remediation of the non-Cr⁺⁶ constituents.
- S63. Grid Y39A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-Y39A were less than the CrSCC. Removed PDI boring sample 135-Y39A-5.5-6.0 (El. 8.5 to 8.0 ft NAVD88) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.
- S64. Grid Y40A was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-Y40A were less than the CrSCC. The removed PDI sample 135-Y40A-4.5-5.0 (El. 9.4 to 8.9 ft NAVD88) from the closest interval above the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.
- S65. In Grid Y41A, excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-Y41A were less than the CrSCC. The western portion of the grid was further excavated to the same elevation as the eastern portion of Grid X41A (El. 2.9 ft NAVD88) so that removed PDI samples from boring 135-Y41A between El. 9.5 and 3.0 ft NAVD88 serve as confirmation sidewall samples for the west to east slope from El. 10.7 ft NAVD88 in Grid Z41A to El. 2.9 ft NAVD88 in Grid Y41A. These PDI samples horizontally delineate the eastern extent of visible CCPW encountered in Grid X41A.
- S66. In Grid Y42A, excavation was deeper than required for Cr⁺⁶ remediation due to the presence of non-Cr⁺⁶ constituents. The removed PDI sample 135-Y42A-8.5-9.0 (El. 5.2 to 4.7 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample.
- S67. In Grid Z29A, the historical sample 135-B2C (3.4-3.8)J49295-9R (El. 6.9 to 6.5 ft NAVD88), which falls on the grid line between Grids Z29A and AA29A, serves as the Cr⁺⁶ confirmation pit bottom sample for Grid Z29A as presented to NJDEP/Weston Solutions, Inc. in the *PPG Target Excavation Depths in Phase 3B and 3C* dated August 19, 2013. NJDEP/Weston Solutions, Inc. concurred with this sample serving as the confirmation sample via email on September 4, 2013. This sample and historical sample 135-B2D (4.5-5.0)J49295-10R (El. 5.8 to 5.3 ft NAVD88) were removed during concrete removal in Grid AA30A.
- S68. Grid Z30A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI borings 133-P3C-Z30A and 133-P3C-Z30A-ME were less than the CrSCC. The removed PDI sample 133-P3C-Z30A-3.0-3.5 (El. 7.2 to 6.7 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample.
- S69. Grid Z31A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-Z31A were less than the CrSCC. The removed PDI sample 135-P3C-Z31A-3.0-3.5 (El. 7.1 to 6.6 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample.
- S70. Grid Z32A was excavated for remediation of non-Cr⁺⁶ constituents only. Excavation for the remediation of Cr⁺⁶ was not required because the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-Z32A were less than the CrSCC. The removed PDI sample 135-P3C-Z32A-3.0-3.5 (El. 7.2 to 6.7 ft NAVD88) serves as the Cr⁺⁶ confirmation pit bottom sample.
- S71. Grid Z33A was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters, removing the confirmation pit bottom sample 135-Z33A-PB-4.6-5.1(El. 9.3 to 8.8 ft NAVD88). PDI sample 135-Z33A-5.5-6.0 (El. 8.4 to 7.9 ft NAVD88) was removed due to sloping towards adjacent grids. The data for sample 135-Z33A-5.5-6.0 are included in this table as soil remains in the grid at El. 8.4 ft NAVD88.
- S72. Grid Z35A was excavated to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. Excavation for the remediation of Cr⁺⁶ was not required since the Cr⁺⁶ concentrations in samples collected from the PDI boring 135-P3C-Z35A were less than the CrSCC. The removed PDI sample 135-P3C-Z35A-5.0-5.5 (El. 9.2 to 8.7 ft NAVD88) from the same elevation as the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.
- S73. Grid Z36A was excavated deeper than required for Cr⁺⁶ remediation to accommodate the placement of a clean fill cap (engineering control) for non-Cr⁺⁶ parameters. The removed PDI sample 135-Z36A-5.0-5.5 (El. 9.2 to 8.7 ft NAVD88) from the same elevation as the shallowest remaining soil in the grid serves as the Cr⁺⁶ confirmation pit bottom sample.
- S74. In Grid Z38A, the Cr⁺⁶ confirmation sample 135-Z38A-5.0-5.5 (El. 9.0 to 8.5 ft NAVD88) was removed due to sloping towards adjacent Grid Y38A. The confirmation sidewall sample from location 135-Y38A-SW-E4 (sample 135-Y38A-SW-E-14.0-14.5) was removed for remediation of non-Cr⁺⁶ constituents.
- S75. In Grid Z40A, a sidewall sample was not collected between the sidewall sample location 135-Z40A-SW-E1 (sample 135-Z40A-SW-E-6.0-6.5 [El. 8.0 to 7.5 ft NAVD88]) and the surface (approximately El. 12 ft NAVD88). Removed PDI samples 135-Z40A-3.0-3.5 (El. 11.0 to 10.5 NAVD88) and 135-Z40A-5.0-5.5 (El. 9.0 to 8.5 ft NAVD88) serve as representative eastern sidewall samples for this interval. Additionally, there was no visual observation of impacted soil along the sidewall.

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

													Analyte CAS RN Units RDCSRS RDCSRS-GAG NRDCSRS	ANTIMONY 7440-36-0 mg/kg 31 N/A 450		CHROMIUM 7440-47-3 mg/kg 120000 N/A N/A		NICKEL 7440-02-0 mg/kg 1600 N/A 23000		THALLIUM 7440-28-0 mg/kg N/A N/A N/A		VANADIUM 7440-62-2 mg/kg N/A 390 1100		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9)	Sample End Elevation (ft NAVD88) (G4, G10)	Lab ID (G11)	Lab SDG (G11)	Date Collected (G12)	Sample Status (G13, G14)	Sample Type (G15)	Validated (Y/N) (G16)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G21)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Specific Notes	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-9.0-9.5	9.0 - 9.5 ft	3.6	3.1	JB65408-5A	JB65408A	04/23/2014	remaining	N	Y	< 0.42	U		13.4		15.5		< 0.64	U		20.5	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-11.0-11.5	11.0 - 11.5 ft	1.6	1.1	JB65408-6A	JB65408A	04/23/2014	remaining	N	Y	< 0.37	U		14.4		16.0		< 0.56	U		26.7	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-13.0-13.5	13.0 - 13.5 ft	-0.4	-0.9	JB65408-7A	JB65408A	04/23/2014	remaining	N	Y	2.0	J		41.8	J	23.4	J	1.7	J		61.9	J
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-15.0-15.5	15.0 - 15.5 ft	-2.4	-2.9	JB65408-8A	JB65408A	04/23/2014	remaining	N	Y	< 0.46	U		105		18.8		< 0.70	U		23.7	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-16.0-16.5	16.0 - 16.5 ft	-3.4	-3.9	JB65408-9A	JB65408A	04/23/2014	remaining	N	Y	< 0.48	U		24.8		22.2		< 0.73	U		36.5	
AA29A	135-P3C-AA29A	12.6	135-P3C-AA29A-16.5-17.0	16.5 - 17.0 ft	-3.9	-4.4	JB65408-10A	JB65408A	04/23/2014	remaining	N	Y	< 0.80	UJ		29.4	J	18.4	J	1.4	J		41.9	J
AA31A	135-AA31A	1.3	135-AA31A-2.5-3.0	2.5 - 3.0 ft	-1.2	-1.7	JC17280-5A	JC17280A	03/30/2016	remaining	N	Y	< 0.50	U		20.8		15.1		< 0.68	U		22.7	
AA31A	135-AA31A	1.3	135-AA31A-4.5-5.0	4.5 - 5.0 ft	-3.2	-3.7	JC17280-6A	JC17280A	03/30/2016	remaining	N	Y	< 0.52	U		44.1		19.7		< 0.71	U		24.8	
AA36A	135-SI-AA36A	11.7	135-SI-AA36A-9.5-10.0	9.5 - 10.0 ft	2.2	1.7	JC2671-3	JC2671	08/28/2015	remaining	N	Y	1.2	J		303		28.3		< 0.46	U		25.6	
BB25A	135-P3C-BB25A	11.5	135-P3C-BB25A-14.8-15.3	14.8 - 15.3 ft	-3.3	-3.8	JB40310-18	JB40310A	06/21/2013	remaining	N	Y	< 0.28	UJ		118		13.8		0.44	J		26.0	
BB25A	135-P3C-BB25A	11.5	135-P3C-BB25A-15.3-15.8	15.3 - 15.8 ft	-3.8	-4.3	JB40310-19	JB40310A	06/21/2013	remaining	N	Y	< 0.67	UJ		157	J	15.3	J	< 0.83	UJ		35.4	J
BB32A	135-BB32A	14.7	135-BB32A-15.0-15.5	15.0 - 15.5 ft	-0.3	-0.8	JC3893-8A	JC3893A	09/15/2015	remaining	N	Y	0.67	J		13.0		14.5		< 0.31	U		18.2	
BB32A	135-BB32A	14.7	135-BB32A-15.5-16.0	15.5 - 16.0 ft	-0.8	-1.3	JC3893-9A	JC3893A	09/15/2015	remaining	N	Y	0.75	J		18.4		16.1		< 0.26	U		22.5	
BB32A	135-BB32A	14.7	135-BB32A-16.0-16.5	16.0 - 16.5 ft	-1.3	-1.8	JC3893-10A	JC3893A	09/15/2015	remaining	N	Y	1.2	J		23.2	J	10.4	J	< 0.51	UJ		30.5	J
CC28A	135-CC28A	13.5	135-CC28A-14.0-14.5	14.0 - 14.5 ft	-0.5	-1.0	JC14857-31A	JC14857A	02/25/2016	remaining	N	Y	2.5	J		12.6		14.4		< 0.24	U		16.5	
CC28A	135-CC28A	13.5	135-CC28A-16.0-16.5	16.0 - 16.5 ft	-2.5	-3.0	JC14857-32A	JC14857A	02/25/2016	remaining	N	Y	2.1	J		38.9		18.9		< 0.19	U		22.6	
CC28A	135-CC28A	13.5	135-CC28A-18.0-18.5	18.0 - 18.5 ft	-4.5	-5.0	JC14857-33A	JC14857A	02/25/2016	remaining	N	Y	2.5	J		26.3		14.3		< 0.34	U		19.0	
CC28A	135-CC28A	13.5	135-CC28A-18.5-19.0	18.5 - 19.0 ft	-5.0	-5.5	JC14857-34A	JC14857A	02/25/2016	remaining	N	Y	< 0.59	U		30.6		22.2		< 0.91	U		38.3	
CC28A	135-CC28A	13.5	135-CC28A-19.0-19.5	19.0 - 19.5 ft	-5.5	-6.0	JC14857-35A	JC14857A	02/25/2016	remaining	N	Y	< 0.30	UJ		18.2	J	18.2	J	< 0.19	UJ		28.1	J
CC31A	135-CC31A	13.6	135-CC31A-10.0-10.5	10.0 - 10.5 ft	3.6	3.1	JC14857-1A	JC14857A	02/25/2016	remaining	N	Y	2.1	J		28.4		19.4		0.61	J		22.9	
CC31A	135-CC31A	13.6	135-CC31A-12.0-12.5	12.0 - 12.5 ft	1.6	1.1	JC14857-2A	JC14857A	02/25/2016	remaining	N	Y	1.6	J		19.5		27.8		0.56	J		30.4	
CC31A	135-CC31A	13.6	135-CC31A-14.0-14.5	14.0 - 14.5 ft	-0.4	-0.9	JC14857-3A	JC14857A	02/25/2016	remaining	N	Y	1.7	J		23.2	J	17.5	J	< 0.32	UJ		34.1	J
CC31A	135-CC31A	13.6	135-CC31A-16.0-16.5	16.0 - 16.5 ft	-2.4	-2.9	JC14857-4A	JC14857A	02/25/2016	remaining	N	Y	0.50	J		25.3		19.9		< 0.25	U		44.4	
CC31A	135-CC31A	13.6	135-CC31A-16.5-17.0	16.5 - 17.0 ft	-2.9	-3.4	JC14857-5A	JC14857A	02/25/2016	remaining	N	Y	< 0.84	UJ		27.2	J	14.8	J	< 0.51	UJ		36.8	J
DD28A	135-DD28A-E-PB2	13.4	135-DD28A-E-PB-14.2-14.7R	14.2 - 14.7 ft	-0.8	-1.3	JC28407-2A	JC28407A	09/26/2016	remaining	N	Y	1.9	J		20.1		12.6		< 0.55	U		26.1	
DD28A	135-DD28A-E-SW-W	13.4	135-DD28A-E-SW-W-12.2-12.7	12.2 - 12.7 ft	1.2	0.7	JC28407-4A	JC28407A	09/26/2016	remaining	N	Y	0.49	J		14.2		10.5		< 0.47	U		18.6	
DD28A	135-DD28A-W-PB2	13.4	135-DD28A-W-PB-11.7-12.2R	11.7 - 12.2 ft	1.7	1.2	JC28407-3A	JC28407A	09/26/2016	remaining	N	Y	2.7	J		56.5		23.5		0.83	J		33.6	
DD29A	135-DD29A-PB2	13.4	135-DD29A-PB-10.5-11.0R	10.5 - 11.0 ft	2.9	2.4	JC28557-5A	JC28557A	09/28/2016	remaining	N	Y	11.3			238		27.9		0.67	J		30.2	
W38A	135-W39A-SW-N2	9.4	135-W39A-SW-N-5.0-5.5	5.0 - 5.5 ft	4.4	3.9	JC36564-5A	JC36564A	02/01/2017	remaining	N	Y	1.2	J		40.6		14.0		< 0.40	U		25.1	
W38A	135-W39A-SW-N3	9.4	135-W39A-SW-N-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JC36564-4A	JC36564A	02/01/2017	remaining	N	Y	< 0.40	U		1120		16.7		< 0.55	U		30.6	
W38A	135-X38A-SW-W1	13.6	135-X38A-SW-W-7.4-7.9	7.4 - 7.9 ft	6.2	5.7	JC36500-5	JC36500	01/31/2017	remaining	N	Y	6.1			238		28.0		1.0	J		34.0	
W38A	135-X38A-SW-W2	13.6	135-X38A-SW-W-9.4-9.9	9.4 - 9.9 ft	4.2	3.7	JC36500-4A	JC36500A	01/31/2017	remaining	N	Y	4.6			113		22.8		1.1	J		35.8	
W39A	135-B3	9.3	135B3C 10.5-10.8 802273	10.5 - 10.8 ft	-1.2	-1.5	802273	C243	01/24/2007	remaining	N	Y	< 1.5	UJ		58.4	J	15.3		< 1.5	U		28.3	
W39A	135-B3	9.3	135B3D 16.0-16.5 802274	16.0 - 16.5 ft	-6.7	-7.2	802274	C243	01/24/2007	remaining	N	Y	< 1.8	UJ		31.7	J	26.1		< 1.7	U		35.8	
W39A	135-W39A-PB	9.4	135-W39A-PB-9.0-9.5	9.0 - 9.5 ft	0.4	-0.1	JC36564-2	JC36564A	02/01/2017	remaining	N	Y	1.0	J		19.8		16.3		< 0.40	U		19.6	
W39A	135-W39A-PB	9.4	135-W39A-PB-9.0-9.5X	9.0 - 9.5 ft	0.4	-0.1	JC36564-3	JC36564A	02/01/2017	remaining	FD	Y	1.4	J		22.2		16.5		< 0.61	U		25.3	
W40A	135-W39A-SW-S	9.4	135-W39A-SW-S-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JC36564-9A	JC36564A	02/01/2017	remaining	N	Y	2.8			169		14.5		0.48	J		25.6	
X37A	133-P3C-W37A	12.9	133-P3C-W37A-15.7-16.2	15.7 - 16.2 ft	-2.8	-3.3	JB40483-10	JB40483A	06/24/2013	remaining	N	Y	0.41	J		21.0		13.1		< 0.36	U		29.9	J
X37A	133-P3C-W37A	12.9	133-P3C-W37A-16.2-16.7	16.2 - 16.7 ft	-3.3	-3.8	JB40483-11	JB40483A	06/24/2013	remaining	N	Y	< 0.63	UJ		50.6		25.4		< 0.78	U		59.8	J
X38A	135-X38A-PB	13.6	135-X38A-PB-13.4-13.9	13.4 - 13.9 ft	0.2	-0.3	JC36500-1A	JC36500A	01/31/2017	remaining	N	Y	1.3	J		19.7		20.2		0.60	J		22.2	
X38A	135-X38A-SW-W3	13.6	135-X38A-SW-W-11.4-11.9	11.4 - 11.9 ft	2.2	1.7	JC36500-3A	JC36500A	01/31/2017	remaining	N	Y	1.6	J		25.6		22.2		< 0.64	U		27.6	
X38A	135-Y38A-SW-W3	13.9	135-Y38A-SW-W-14.0-14.5	14.0 - 14.5 ft	-0.1	-0.6	JC34350-1A	JC34350A	12/22/2016	remaining	N	Y	5.5			59.6		20.3		< 0.59	U		32.0	
X39A	135-W39A-SW-E	9.4	135-W39A-SW-E-7.0-7.5	7.0 - 7.5 ft	2.4	1.9	JC36564-7A	JC36564A	02/01/2017	remaining	N	Y	< 0.29	U		19.6		14.5		< 0.40	U		24.2	
X39A	135-X38A-SW-S	13.6	135-X38A-SW-S-11.4-11.9	11.4 - 11.9 ft	2.2	1.7	JC36500-2A	JC36500A	01/31/2017	remaining	N	Y	2.6	J		43.1		20.4		0.84	J		25.5	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-8.0-8.5	8.0 - 8.5 ft	4.2	3.7	JB37583-2	JB37583	05/21/2013	remaining	N	Y	2.2	J		104		16.2		0.62	J		22.1	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-10.0-10.5	10.0 - 10.5 ft	2.2	1.7	JB37583-3	JB37583	05/21/2013	remaining	N	Y	0.69	J		23.4		19.4		0.77	J		24.3	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-12.0-12.5	12.0 - 12.5 ft	0.2	-0.3	JB37583-4	JB37583	05/21/2013	remaining	N	Y	1.5	J		43.8		15.6		1.4	J		25.6	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-14.3-14.8	14.3 - 14.8 ft	-2.1	-2.6	JB37583-5	JB37583	05/21/2013	remaining	N	Y	0.31	J		18.5		13.9		< 0.32	U		25.5	
Y32A	133-P3C-Y32A	12.2	133-P3C-Y32A-14.8-15.3	14.8 - 15.3 ft	-2.6	-3.1	JB37583-6	JB37583	05/21/2013	remaining	N	Y	< 0.45	UJ		27.4	J	9.0	J	1.9	J		30.8	J
Y33A	133-P3C-Y33A-ME	12.6	133-P3C-Y33A-ME-9.0-9.5	9.0 - 9.5 ft	3.6	3.1	JB96555-18A	JB96555A	06/08/2015	remaining	N	Y	6.4	J		28.9		14.2		< 0.30	UJ		35.8	
Y34A	135-Y34A-PB	9.																						

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

													Analyte CAS RN Units RDCSRS RDCSRS-GAG NRDCSRS	ANTIMONY 7440-36-0 mg/kg 31 N/A 450		CHROMIUM 7440-47-3 mg/kg 120000 N/A N/A		NICKEL 7440-02-0 mg/kg 1600 N/A 23000		THALLIUM 7440-28-0 mg/kg N/A N/A N/A		VANADIUM 7440-62-2 mg/kg N/A 390 1100		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6)	Depth Interval (ft bgs) (G7)	Sample Start Elevation (ft NAVD88) (G4, G8, G9)	Sample End Elevation (ft NAVD88) (G4, G10)	Lab ID (G11)	Lab SDG (G11)	Date Collected (G12)	Sample Status (G13, G14)	Sample Type (G15)	Validated (Y/N) (G16)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G21)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Result (G17, G18)	Qualifier (G19, G20)	Specific Notes	
Y36A	135-Y36A	13.9	135-Y36A-15.5-16.0X	15.5 - 16.0 ft	-1.6	-2.1	JC2661-20A	JC2661A	08/28/2015	remaining	FD	Y	< 0.46	U		18.4		12.9		1.2	J		30.6	
Y36A	135-Y36A	13.9	135-Y36A-16.0-16.5	16.0 - 16.5 ft	-2.1	-2.6	JC2661-19A	JC2661A	08/28/2015	remaining	N	Y	< 0.77	UJ		22.8	J	25.0	J	< 0.47	UJ		30.2	J
Y37A	135-Y38A-SW-N2	13.9	135-Y38A-SW-N-8.0-8.5	8.0 - 8.5 ft	5.9	5.4	JC34244-9A	JC34244A	12/21/2016	remaining	N	Y	20.6			49.2		24.6		< 0.64	U		38.5	
Y37A	135-Y38A-SW-N3	13.9	135-Y38A-SW-N-10.0-10.5	10.0 - 10.5 ft	3.9	3.4	JC34244-8A	JC34244A	12/21/2016	remaining	N	Y	20.1			46.2		22.0		< 2.7	U		29.4	
Y37A	135-Y38A-SW-N4	13.9	135-Y38A-SW-N-12.0-12.5	12.0 - 12.5 ft	1.9	1.4	JC34244-12A	JC34244A	12/21/2016	remaining	N	Y	37.6			38.4		34.8		< 0.60	U		23.0	
Y37A	135-Y38A-SW-N5	13.9	135-Y38A-SW-N-14.0-14.5	14.0 - 14.5 ft	-0.1	-0.6	JC34244-7A	JC34244A	12/21/2016	remaining	N	Y	28.1			959		24.4		< 11	U		33.7	S2
Y39A	135-Y38A-SW-S2	13.9	135-Y38A-SW-S-8.0-8.5	8.0 - 8.5 ft	5.9	5.4	JC34244-4A	JC34244A	12/21/2016	remaining	N	Y	8.4			23.6		16.1		< 1.0	U		19.8	
Y39A	135-Y38A-SW-S3	13.9	135-Y38A-SW-S-10.0-10.5	10.0 - 10.5 ft	3.9	3.4	JC34244-3A	JC34244A	12/21/2016	remaining	N	Y	3.7			24.2		17.9		< 0.55	U		26.0	
Y39A	135-Y38A-SW-S4	13.9	135-Y38A-SW-S-12.0-12.5	12.0 - 12.5 ft	1.9	1.4	JC34244-13A	JC34244A	12/21/2016	remaining	N	Y	3.6			24.0		16.3		< 0.39	U		26.6	
Y38A	135-Y38A-SW-S5	13.9	135-Y38A-SW-S-14.0-14.5	14.0 - 14.5 ft	-0.1	-0.6	JC34244-2A	JC34244A	12/21/2016	remaining	N	Y	3.1			34.8		17.6		< 0.39	U		26.0	
Y40A	135-Z40A-SW-W1	14.0	135-Z40A-SW-W-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC35023-8A	JC35023A	01/06/2017	remaining	N	Y	9.7			57.0		33.5		8.8	J		46.7	
Y40A	135-Z40A-SW-W2	14.0	135-Z40A-SW-W-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC35023-7A	JC35023A	01/06/2017	remaining	N	Y	2.5			48.0		23.0		< 0.50	U		39.9	
Y40A	135-Z40A-SW-W3	14.0	135-Z40A-SW-W-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC35023-6A	JC35023A	01/06/2017	remaining	N	Y	2.7			96.7		23.6		< 0.54	U		44.8	
Y41A	135-Z40A-SW-S1	14.0	135-Z40A-SW-S-6.0-6.5	6.0 - 6.5 ft	8.0	7.5	JC35023-5A	JC35023A	01/06/2017	remaining	N	Y	1.5	J		99.0		19.6		< 0.48	U		27.2	
Y41A	135-Z40A-SW-S2	14.0	135-Z40A-SW-S-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC35023-4A	JC35023A	01/06/2017	remaining	N	Y	3.2			271		31.5		< 0.49	U		38.9	
Y41A	135-Z40A-SW-S3	14.0	135-Z40A-SW-S-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC35023-3A	JC35023A	01/06/2017	remaining	N	Y	3.1			177		28.4		3.9	J		34.2	
Y41A	135-Z40A-SW-S4	14.0	135-Z40A-SW-S-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC35023-2A	JC35023A	01/06/2017	remaining	N	Y	6.0	J		1530		29.6		< 0.55	U		29.6	
Y42A	135-Y42A	13.7	135-Y42A-10.5-11.0	10.5 - 11.0 ft	3.2	2.7	JC3440-18A	JC3440A	09/09/2015	remaining	N	Y	1.4	J		24.1		22.3		0.61	J		29.7	
Y42A	135-Y42A	13.7	135-Y42A-12.5-13.0	12.5 - 13.0 ft	1.2	0.7	JC3440-19A	JC3440A	09/09/2015	remaining	N	Y	3.9	J		22.4		18.8		< 0.58	U		28.3	
Y42A	135-Y42A	13.7	135-Y42A-14.5-15.0	14.5 - 15.0 ft	-0.8	-1.3	JC3440-20A	JC3440A	09/09/2015	remaining	N	Y	< 0.37	U		16.3		10.3		0.84	J		26.0	
Y42A	135-Y42A	13.7	135-Y42A-16.0-16.5	16.0 - 16.5 ft	-2.3	-2.8	JC3440-21A	JC3440A	09/09/2015	remaining	N	Y	< 0.32	U		25.4		16.0		0.59	J		33.9	
Y42A	135-Y42A	13.7	135-Y42A-16.5-17.0	16.5 - 17.0 ft	-2.8	-3.3	JC3440-22A	JC3440A	09/09/2015	remaining	N	Y	< 0.63	U		34.2		27.8		< 0.39	U		40.9	
Z29A	135-B2	10.3	PPG-135-B2E 8.5-9.0 796987	8.5 - 9.0 ft	1.8	1.3	796987	B441	01/03/2007	remaining	N	Y	< 1.8	UJ		11.5		9.9		< 1.5	U		15	
Z29A	135-B2	10.3	PPG-135-B2F 12.5-13.0 796988	12.5 - 13.0 ft	-2.2	-2.7	796988	B441	01/03/2007	remaining	N	Y	< 2.3	UJ		92.5		13.1		< 1.8	U		20	
Z29A	135-B2	10.3	PPG-135-B2G 13.7-14.2 796989	13.7 - 14.2 ft	-3.4	-3.9	796989	B441	01/03/2007	remaining	N	Y	< 1.4	UJ		13.8		10.3		< 1.1	U		22.4	
Z29A	135-B2	10.3	PPG-135-B2H 16.0-16.5 796990	16.0 - 16.5 ft	-5.7	-6.2	796990	B441	01/03/2007	remaining	N	Y	< 3.4	UJ		26.5		6.8		< 1.4	U		21.2	
Z29A	135-B2	10.3	PPG-135-B2I 20.0-20.5 796991	20.0 - 20.5 ft	-9.7	-10.2	796991	B441	01/03/2007	remaining	N	Y	< 2	UJ		27.6		21.6		< 1.7	U		27.9	
Z29A	135-B2	10.3	PPG-135-B2J 22.2-22.7 796992	22.2 - 22.7 ft	-11.9	-12.4	796992	B441	01/03/2007	remaining	N	Y	< 1.6	UJ		9.7		9.3		< 1.3	U		11.8	
Z38A	135-Y38A-SW-E1	13.9	135-Y38A-SW-E-8.0-8.5	8.0 - 8.5 ft	5.9	5.4	JC34136-5A	JC34136A	12/21/2016	remaining	N	Y	4.2			20.2		28.6		< 0.49	U		31.0	
Z38A	135-Y38A-SW-E2	13.9	135-Y38A-SW-E-10.0-10.5	10.0 - 10.5 ft	3.9	3.4	JC34136-4A	JC34136A	12/21/2016	remaining	N	Y	12.3			22.9		27.3		< 0.70	U		41.7	
Z38A	135-Y38A-SW-E3	13.9	135-Y38A-SW-E-12.0-12.5	12.0 - 12.5 ft	1.9	1.4	JC34136-3A	JC34136A	12/21/2016	remaining	N	Y	138			40.5		89.0		< 0.61	U		53.9	S2
Z39A	135-Z39A-PB	14.0	135-Z39A-PB-6.1-6.6	6.1 - 6.6 ft	7.9	7.4	JC34136-1A	JC34136A	12/21/2016	remaining	N	Y	2.1	J		187		23.5		< 0.46	U		37.2	
Z39A	135-Z39A-SW-E	14.0	135-Z39A-SW-E-4.1-4.6	4.1 - 4.6 ft	9.9	9.4	JC34136-2A	JC34136A	12/21/2016	remaining	N	Y	2.8			139		20.4		< 0.43	U		31.5	
Z39A	135-Z40A-SW-N1	14.0	135-Z40A-SW-N-8.0-8.5	8.0 - 8.5 ft	6.0	5.5	JC35023-15A	JC35023A	01/06/2017	remaining	N	Y	1.8	J		25.3		21.0		< 0.54	U		30.9	
Z39A	135-Z40A-SW-N2	14.0	135-Z40A-SW-N-10.0-10.5	10.0 - 10.5 ft	4.0	3.5	JC35023-14A	JC35023A	01/06/2017	remaining	N	Y	7.6			33.9		21.4		1.1	J		37.6	
Z39A	135-Z40A-SW-N3	14.0	135-Z40A-SW-N-12.0-12.5	12.0 - 12.5 ft	2.0	1.5	JC35023-13A	JC35023A	01/06/2017	remaining	N	Y	1.5	J		18.6		17.0		< 0.41	U		27.6	
Z40A	135-Z40A-PB	14.0	135-Z40A-PB-14.0-14.5	14.0 - 14.5 ft	0.0	-0.5	JC35023-1A	JC35023A	01/06/2017	remaining	N	Y	< 0.37	UJ		17.1		11.3		< 0.50	U		28.0	

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
CCPW - Chromate Chemical Production Waste
Cr - chromium
Cr⁺³ - trivalent chromium
El. - elevation
FD - field duplicate sample type
ft - feet
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
N/A - not applicable
NJDEP - New Jersey Department of Environmental Protection
NRDCSRS - Non-Residential Direct Contact Soil Remediation Standard
RDCSRS - Residential Direct Contact Soil Remediation Standard
RDCSRS-GAG - Residential Direct Contact Soil Remediation Standard - Garfield Avenue Group (alternative remediation standard approved by the New Jersey Department of Environmental Protection on December 28, 2016)
SCC - Soil Cleanup Criteria
SDG - sample delivery group
SRS - Soil Remediation Standard
TEE - terminal excavation elevation

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
U - The analyte was not detected above the sample reporting limit shown.
UJ - The analyte was not detected above the sample reporting limit shown and the reporting limit was approximate.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Row V through EE (extending west to east) and Grid Column 42A through 25A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88.
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs. In some cases, the "Sample ID" in the table is a variant of the sample ID in the laboratory report and/or data validation report. In these cases, the "Lab ID" associates the sample results to the laboratory report and/or data validation report.
G7. "Depth Interval" is based on the "Location Elevation."
G8. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G9. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G10. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G11. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G12. "Date Collected" refers to the date the soil sample was collected.
G13. "Sample Status" of "remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location.
G14. The post-excavation survey points and 1-ft post-excavation contours representing the as-built post-terminal excavation elevations are provided on Figures 5-2A, 5-2B, and 5-2C.
G15. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
G16. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
G17. "Result" refers to the analytical result which is reported in mg/kg. A blank entry indicates that the sample was not tested for that analyte.
G18. Bold text indicates a result that exceeds the RDCSRS or the RDCSRS-GAG. Bold and italicized text indicates a result that exceeds the NRDCSRS. Non-bold and non-italicized text indicates the result does not exceed the most stringent SRS.
G19. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data. For unvalidated data, it refers to the qualifier assigned by the laboratory.
G20. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.
G21. There is currently no NJDEP SRS and no NJDEP SCC for total Cr. Therefore, total Cr results are compared to the interim NJDEP Residential SCC for Cr⁺³ of 120,000 mg/kg as the cleanup criteria for soil at the Garfield Avenue Group Sites. There is no non-residential SCC for Cr⁺³. Bold values indicate a result that exceeds the interim NJDEP Residential SCC.

SPECIFIC NOTES:

S1. In Grid AA31A, the pre-remediation surface elevation (El. 1.3 ft NAVD88) was approximately 11 ft below the pre-remediation surface elevation of the adjacent building slab in Site 135 South due to the presence of a basement foundation.

Table 5-2
CCPW Metals Analytical Results for In-Place Soil Compared to Soil Remediation Standards
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

S2. In Grids Y37A and Z38A, the antimony concentrations in samples 135-Y38A-SW-N-12.0-12.5 and 135-Y38A-SW-E-12.0-12.5 are greater than the RDCSRS of 31 mg/kg and less than the NRDCSRS of 450 mg/kg. Compliance with the antimony RDCSRS is demonstrated through spatial averaging. The calculations are included in the Technical Memorandum *PPG Site 135 South, Compliance Averaging for Antimony in Soil (Revision 1)*, AECOM, May 2018. The spatially weighted average antimony concentration is 14 mg/kg, which is compliant with the 31 mg/kg RDCSRS.

Table 5-3
CCPW Metals Analytical Results in the Unsaturated Soil Zone Compared to IGW Soil Screening Levels and Soil Remediation Standards
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

Analyte CAS-RN Units DIGWSSL IGWSRS-GAG													ANTIMONY 7440-36-0 mg/kg N/A 62.7		CHROMIUM 7440-47-3 mg/kg N/A N/A		NICKEL 7440-02-0 mg/kg N/A 170		THALLIUM 7440-28-0 mg/kg 3 N/A		VANADIUM 7440-62-2 mg/kg N/A N/A		
Grid ID (G1)	Location ID (G2)	Location Elevation (ft NAVD88) (G3, G4, G5)	Sample ID (G6, G7)	Depth Interval (ft bgs) (G8)	Sample Start Elevation (ft NAVD88) (G4, G7, G9, G10)	Sample End Elevation (ft NAVD88) (G4, G11)	Lab ID (G12)	Lab SDG (G12)	Date Collected (G13)	Sample Status (G14, G15)	Sample Type (G16)	Validated (Y/N) (G17)	Result (G18, G19)	Qualifier (G20, G21)	Result (G18, G19)	Qualifier (G20, G21)	Result (G18, G19)	Qualifier (G20, G21)	Result (G18, G19)	Qualifier (G20, G21)	Result (G18, G19)	Qualifier (G20, G21)	Specific Notes
Y36A	135-Y36A	13.9	135-Y36A-5.5-6.0	5.5 - 6.0 ft	8.4	7.9	JC2661-13A	JC2661A	08/28/2015	remaining	N	Y	1.5	J	57.6		20.5		0.81	J	27.1		
Y36A	135-Y36A	13.9	135-Y36A-7.5-8.0	7.5 - 8.0 ft	6.4	5.9	JC2661-14A	JC2661A	08/28/2015	remaining	N	Y	4.3		42.4		20.4		1.1	J	32.0		
Y41A	135-Z40A-SW-S1	14.0	135-Z40A-SW-S-6.0-6.5	6.0 - 6.5 ft	8.0	7.5	JC35023-5A	JC35023A	01/06/2017	remaining	N	Y	1.5	J	99.0		19.6		< 0.48	U	27.2		
Z39A	135-Z39A-PB	14.0	135-Z39A-PB-6.1-6.6	6.1 - 6.6 ft	7.9	7.4	JC34136-1A	JC34136A	12/21/2016	remaining	N	Y	2.1	J	187		23.5		< 0.46	U	37.2		
Z39A	135-Z39A-SW-E	14.0	135-Z39A-SW-E-4.1-4.6	4.1 - 4.6 ft	9.9	9.4	JC34136-2A	JC34136A	12/21/2016	remaining	N	Y	2.8		139		20.4		< 0.43	U	31.5		

Table 5-3
CCPW Metals Analytical Results in the Unsaturated Soil Zone Compared to IGW Soil Screening Levels and Soil Remediation Standards
Site 135 South, Garfield Avenue Group
PPG, Jersey City, New Jersey

ABBREVIATIONS:

bgs - below ground surface
CAS RN - Chemical Abstracts Service Registry Number
CCPW - Chromate Chemical Production Waste
DIGWSSL - Default Impact to Groundwater Soil Screening Level
El. - elevation
FD - field duplicate sample type
ft - feet
IGW - Impact to Groundwater
IGWSRS-GAG - Impact to Groundwater Soil Remediation Standard - Garfield Avenue Group (site-specific alternative remediation standard as proposed in the *Supplemental Soil Remedial Investigation Report, Final Revision 1*, dated 08/30/18 and approved by NJDEP on 10/22/18)
mg/kg - milligrams per kilogram
N - normal sample type
NAVD88 - North American Vertical Datum of 1988
N/A - not applicable
SDG - sample delivery group
TEE - terminal excavation elevation

QUALIFIERS:

J - The result was an estimated value; the associated numerical value was an approximate concentration of the analyte in the sample.
U - The analyte was not detected above the sample reporting limit shown.

GENERAL NOTES:

G1. "Grid ID" refers to an area, typically 30 ft by 30 ft, identified as Grid Row V through EE (extending west to east) and Grid Column 43A through 25A (extending from south to north).
G2. "Location ID" refers to the location name where samples were collected.
G3. "Location Elevation" refers to the pre-remediation surface elevation for samples collected from the pit bottom, and the surface elevation of the sample location when the sample was collected via boring or test pit.
G4. Elevation vertical datum is NAVD88, in U.S. survey ft.
G5. For some borings, the Location Elevations presented in this table were revised compared to the Location Elevations used in the proposed TEE Technical Memoranda. The revisions were based on a review of available survey data for individual locations, site-wide topographical surveys, and field notes to provide the most accurate and representative ground surface elevations. In addition, ground surface elevations for borings advanced prior to 2011 were reviewed and, if necessary, converted from the site-specific vertical datum used prior to 2011 into NAVD88
G6. "Sample ID" refers to the name of a sample collected at a given location and is unique to the depth of the sample collected. The depth listed in the Sample ID may not necessarily correspond to the actual sample depth interval due to corrections made as a result of post-field work review of surveyed surface elevations and/or boring logs. In some cases, the "Sample ID" in the table is a variant of the sample ID in the laboratory report and/or data validation report. In these cases, the "Lab ID" associates the sample results to the laboratory report and/or data validation report.
G7. This table compares sample results from the unsaturated zone to the DIGWSSLs and IGWSRS-GAGs. The groundwater elevation (above which is the unsaturated zone) on this Site was estimated as the 50th percentile groundwater elevation from 13 monitoring wells located on or adjacent to Site 133 East and Site 135 gauged between February 2007 and December 2016. The monitoring well locations and data are included in Attachment 1. The estimated groundwater elevation for this Site is El. 6.2 ft NAVD88.
G8. "Depth Interval" is based on the "Location Elevation."
G9. "Sample Start Elevation" refers to the start of the sample interval. There may be up to 0.1 ft variation between the listed Sample Start Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G10. In some grids, there may be up to 0.1 ft variation between the sample start elevation of the pit bottom or sidewall sample and the post-excavation elevation survey point due to rounding of the numbers.
G11. "Sample End Elevation" refers to the end of the sample interval. There may be up to 0.1 ft variation between the listed Sample End Elevation and the elevation calculated using the Location Elevation and Depth Interval due to rounding of the numbers.
G12. "Lab ID" refers to the identification number assigned to the sample by the analytical laboratory performing the sample analysis. "Lab SDG" refers to the delivery group number assigned to the sample by the analytical laboratory.
G13. "Date Collected" refers to the date the soil sample was collected.
G14. "Sample Status" of "remaining" indicates the soil in that interval is outside the excavation footprint, and remains in-place at that location.
G15. The post-excavation survey points and 1-ft post-excavation contours representing the as-built terminal excavation elevations are provided on Figures 5-3A, 5-3B, and 5-3C.
G16. "Sample Type" indicates whether the sample type is normal (N) or a field duplicate (FD).
G17. "Y" indicates that a sample underwent data validation and "N" indicates that data validation was not conducted.
G18. "Result" refers to the analytical result which is reported in mg/kg.
G19. Bold text indicates that the result exceeds the DIGWSSL or IGWSRS-GAG. Non-bold text indicates that the result does not exceed the DIGWSSL or IGWSRS-GAG.
G20. "Qualifier" refers to the data qualifier assigned by the data validation team reviewing the data from the laboratory for validated data. For unvalidated data, it refers to the qualifier assigned by the laboratory.
G21. Non-detect results are shown on this table using the Method Detection Limit, if available; otherwise they are shown at the Reporting Limit.

SPECIFIC NOTE:

None

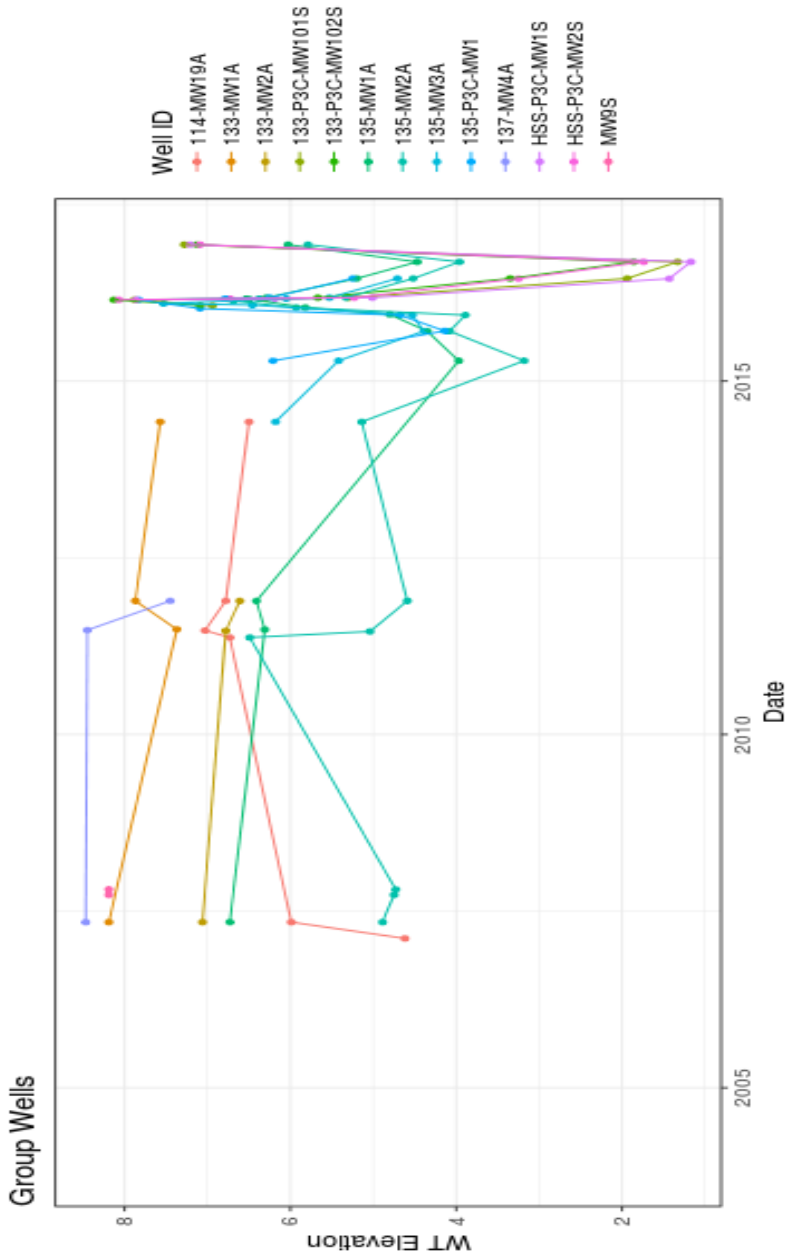
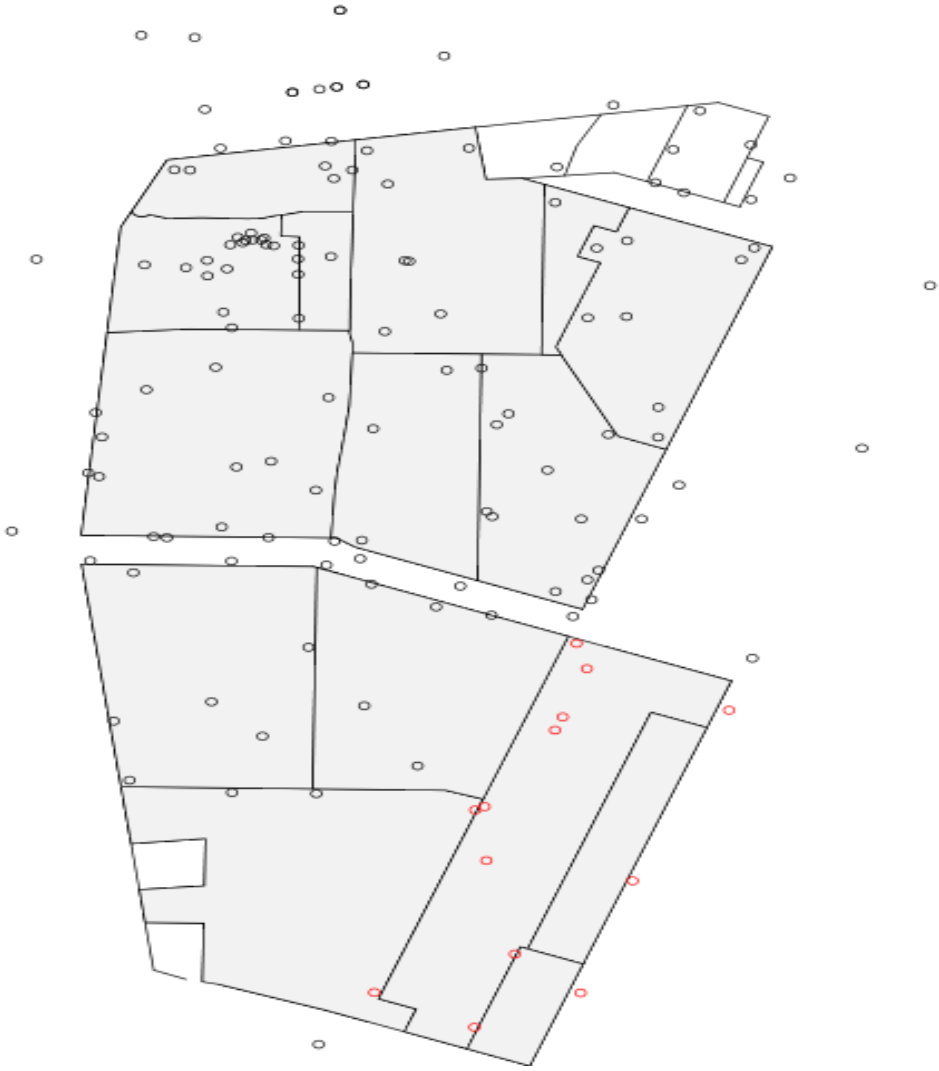
Appendix D-7

Attachment 1 - Historical Water Table Elevations

Pinned Wells
(shown in red on map)

114-MW19A
135-MW2A MW9S
133-P3C-MW101S
HSS-P3C-MW1S
133-MW2A 135-MW1A
135-MW3A
135-P3C-MW1
133-P3C-MW102S
HSS-P3C-MW2S
133-MW1A 137-MW4A

Pin Brushed Well(s)
Unpin Brushed Well(s)



Percentile	Elevation (ft)
50%	6.2
60%	6.5
70%	6.8
80%	7.1
90%	7.9
100%	8.5