



**New Jersey Department of Environmental Protection**  
Site Remediation Program

**COVER/CERTIFICATION FORM**

(Submit with Remedial Phase Report, Receptor Evaluation, and CEA Forms)

Date Stamp  
(For Department use only)

**SECTION A. SITE INFORMATION**

Site Name: Hudson County Chromate Site 156

AKAs: HCC Site 156; Metropolis Towers; Gregory Park Apartments; 270 Henderson St.; 280 Gregory Park Plaza

Street Address: 270-280 Luis Munoz Marin Blvd (aka 270-280 Henderson Street)

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07302

Program Interest (PI) Number(s): G000008770

Case Tracking Number(s) for this submission: 104063

Date Remediation Initiated Pursuant to N.J.A.C. 7:26C-2: 07/19/1990

State Plane Coordinates for a central location at the site: Easting: 619397 Northing: 686772

List current Municipal Block and Lot Numbers of the Site:

Block # <u>13101</u>	Lot #(s) <u>1</u>	Block # _____	Lot #(s) _____
Block # <u>13101</u>	Lot #(s) <u>2</u>	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____
Block # _____	Lot #(s) _____	Block # _____	Lot #(s) _____

**SECTION B. SUBMISSION STATUS**

1. Indicate how the Electronic Data Deliverable (EDD) for this submission is being provided to the NJDEP:

- Via Email at [srpedd@dep.state.nj.us](mailto:srpedd@dep.state.nj.us) (attach NJDEP confirmation email); or
- CD (attach to this submission)
- Not Applicable – No EDD

2. Complete the following Submission and Permit Status Table:

Remedial Phase Documents	N/A	Included in this Submission	Previously Submitted	Date of Submission	Date of Revised Submission	Date of Previous NJDEP Approval	Date of Document Withdrawal
Preliminary Assessment Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Site Investigation Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Remedial Investigation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	09/29/1993			
Remedial Action Work Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11/16/2012		01/22/2013	
Remedial Action Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Response Action Outcome	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<b>Other Submissions</b>							
Alternative Soil Remediation Standard and/or Screening level Application Form	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Case Inventory Document		<input checked="" type="checkbox"/>					
Classification Exception Area / Well Restriction Area (CEA/WRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Discharge to Ground Water Permit by Rule Authorization Request	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

IEC Engineered System Response Action Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Immediate Environmental Concern Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
LNAPL Interim Remedial Measure Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Public Notification	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Receptor Evaluation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Technical Impracticability Determination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Vapor Concern Mitigation Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Permit Application – list:	<input type="checkbox"/>						
Soil Erosion and Sediment Control		<input checked="" type="checkbox"/>	<input type="checkbox"/>	07/18/2017			
Treatment Works Approval		<input checked="" type="checkbox"/>	<input type="checkbox"/>	08/19/2013			
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
Radionuclide Remedial Action Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Radionuclide Remedial Action Workplan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Radionuclide Remedial Investigation Report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Radionuclide Remedial Investigation Workplan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

**SECTION C. SITE USE**

**Current Site Use:** (check all that apply)

- Industrial
- Residential
- Commercial
- School or child care
- Other: \_\_\_\_\_
- Agricultural
- Park or recreational use
- Vacant
- Government

**Intended Future Site Use, if known:** (check all that apply)

- Industrial
- Residential
- Commercial
- School or child care
- Other: \_\_\_\_\_
- Park or recreational use
- Vacant
- Government
- Future site use unknown

**SECTION D. CASE TYPE:** (check all that apply)

- Administrative Consent Order (ACO)
- Brownfield Development Area (BDA)
- Child Care Facility
- Chrome Site (Chromate chemical production waste)
- Coal Gas
- Due Diligence with RAO
- Hazardous Discharge Remediation Fund (HDSRF) Grant/Loan
- ISRA
- Landfill (SRP subject only)
- Regulated Underground Storage Tank (UST)
- Remediation Agreement (RA)/Remediation Certification
- School Development Authority (SDA)
- School facility
- Spill Act Defense – Government Entity
- Spill Act Discharge
- UST Grant/Loan
- Other: \_\_\_\_\_

**Federal Case** (check all that apply)

- RCRA GPRA 2020
- CERCLA/NPL
- USDOD
- USDOE

1. Is the party conducting remediation a government entity? .....  Yes  No  
 If "Yes," check one:  Federal  State  Municipal  County

**SECTION E. PUBLIC FUNDS**

Did the remediation utilize public funds? .....  Yes  No

If "Yes," check applicable:

- UST Grant
- HDSRF Grant
- Spill Fund
- UST Loan
- HDSRF Loan
- Schools Development Authority
- Brownfield Reimbursement Program
- Landfill Reimbursement Program
- Environmental Infrastructure Trust

**SECTION F. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION**

Full Legal Name of the Person Responsible for Conducting the Remediation: PPG Industries, Inc.

Representative First Name: Mark Representative Last Name: Terril

Title: Corporate Director, Environmental Affairs

Phone Number: (412) 434-2708 Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

Mailing Address: 440 College Park Drive

City/Town: Monroeville State: PA Zip Code: 15146

Email Address: terril@ppg.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

*I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.*

Signature: 

Date: 

Name/Title: Corporate Director, Environmental Affairs

**For CEA Submissions:**

Check this box if the person above is also the property owner of the site or their representative. If this person is not the site property owner, please ensure the site property owner's name and address is in the first line of the table in Section E.2 of the Classification Exception Area / Well Restriction Area (CEA/WRA) Fact Sheet Form.

**SECTION G. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT**

LSRP ID Number: \_\_\_\_\_  
First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Email Address: \_\_\_\_\_

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

*I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:*

**[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:**

- directly oversaw and supervised all of the referenced remediation, and/or*
- personally reviewed and accepted all of the referenced remediation presented herein.*

*I believe that the information contained herein, and including all attached documents, is true, accurate and complete.*

*It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.*

*My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.*

*I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.*

LSRP Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
LSRP Name/Title: \_\_\_\_\_  
Company Name: \_\_\_\_\_

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice  
Site Remediation Program  
NJ Department of Environmental Protection  
401-05H  
PO Box 420  
Trenton, NJ 08625-0420

Hudson County  
**Case Name:** Chromium Site 156  
**PI #:** G000008770

**IMPORTANT:** 1) Do not delete or copy and paste across multiple columns because it can disrupt hidden equations.  
 2) If pasting from a Word document, use the Paste option: **Match Destination Formatting**  
 3) If the text turns red you have exceeded the character limit for that column

Case Inventory Document Version 1.4 02/23/17

AOC ID	AOC Type	AOC Description	Confirmed Contamination	AOC Status	Status Date	Incident #	DEP AOC Number	Contaminated Media	Contaminants of Concern	Additional Contaminants of Concern	Additional Contaminants of Concern	Applicable Remediation Standard	Exposure Route	Additional Exposure Route	RA Type	Additional RA Type	Additional RA Type	Was an Order of Magnitude Evaluation Conducted?	Activity
Site 156 - AOC 1	Other areas of concern - Other discharge area	CCPW Impacts to Soil (Beyond AOC 3 Footprint)	Yes	RAR	7/19/2018			Soil	Metals	Not Applicable	Not Applicable	AOC Specific ARS and Remediation Standards	Ingestion/Dermal	Inhalation	Excavation			Yes	Soil remedial action (RA) conducted in 2013-14 per the approved 11/2012 remedial action work plan (RAWP). Draft remedial action report (RAR) submitted to NJDEP 10/2014. Revised RAR figures and tables submitted 01/2015 and 04/2015. Residual hexavalent chromium (Cr+6) soil contamination identified during figure preparation. NJDEP approved work plans submitted 2/2016. In 4/2016, test pits excavated at borings PPG1-T02 and LA1-1; and soil samples collected to provide additional confirmation of 2013-14 RA and to remove soil contamination at borings LB3 and PS3-1, but additional Cr+6 exceedances found at CS LB3, CS PS3-1 and CS LB5. In 10/2016, soil samples from test pit excavated at CS LB3 and CS PS3-1, and borings excavated around CS LB5 found additional Cr+6 exceedances. NJDEP approved work plan submitted 3/1/2017 for Cr+6 delineation. Excavation of residual conducted in 09-10/2017. Draft RAR submitted 3/29/2017. Final RAR was submitted 7/19/2018. Alternate remediation standards (ARS) were used as follows: Impact to Groundwater Soil Remediation Standards (IGWSSRS) for nickel Layout Area 1 is 411 mg/kg, Layout Area 2 is 322 mg/kg, Layout Area 3 is 565 mg/kg; and, Residential Direct Contact Soil Remediation Standard for vanadium is 370 mg/kg (approved by NJDEP in a letter dated December 12, 2011). The antimony concentration exceeded the Default Impact to Groundwater Soil Screening Level (DIGWSSL) for the following samples: LA1-1 (3.0-3.5); 156-PE-57N_C0-6; 156-PE-82_B12-18; 156-B73B_1.5-2.0X; 156-B76W_3-4b; 156-B76W_3-4bd; and 156-B97_A2-3. Compliance with the DIGWSSL was attained through compliance averaging. A memorandum documenting the averaging is provided in Appendix O.
Site 156 - AOC 2	Other areas of concern - Other discharge area	CCPW Impacts to Groundwater	Yes	RI	6/15/2018			Ground Water	Metals	Not Applicable	Not Applicable	Remediation Standards	Ground Water					No	1993 - Total chromium (Cr) and Cr+6 were detected at concentrations of up to 1,630 µg/L and 476 µg/L, respectively. In 2006, well MW-2 50 µg/L for hexavalent chromium. In 9/2014, Cr was detected at 188 µg/L in a grab groundwater sample from a test pit in the Bldg No. 2 Boiler Room. Well MW-2 was removed during 2013-14 RA and MW-5 was removed in 4/2016 test pit. Wells MW-5R, MW-6 through MW-10 were installed in 4/2016. Groundwater sampled from all site wells in 5/2016 and 6/2016. Groundwater exceeded GWQS for Cr at MW-8. There were no other exceedances. MW-8 removed by CS LB3 test pit and replaced with MW-8R in 10/2016. Shallow well 156-MW8A and intermediate well 156-MW8B were installed in 11/2017 and sampled 11/2017 and 12/2017. Cr compliant with GWQS. Thallium exceedance of GWQS in 156-MW8B is not considered chrome-related. The final remedial investigation report was submitted June 15, 2018.
Site 156 - AOC 3	Other areas of concern - Any area suspected of containing contaminants	CCPW Impacts to Building No. 2 Boiler Room - Concrete and Soils	Yes	RAR	12/21/2017			Mixed Media	Metals	Not Applicable	Not Applicable	Remediation Standards	Ingestion/Dermal	Inhalation	Containment	Other (specify in Activity column)		No	The area of Cr+6 contamination in the concrete floor and column, as well as underlying soils, has been delineated as documented in the RIR, and remediated pursuant to the RAWP which includes a Deed Notice with Engineering Controls. The RIR/RAWP was submitted to NJDEP in 11/2017. The RAR is on hold pending repairs to the engineering control.



**New Jersey Department of Environmental Protection  
Site Remediation Program**

**ALTERNATIVE OR NEW REMEDIATION STANDARD  
AND/OR SCREENING LEVEL APPLICATION FORM**

Date Stamp  
(For Department use only)

**NOTE:** This form shall be completed for all contaminants for which a direct contact exposure pathway alternative or new remediation standard, alternative impact to ground water soil remediation standard, alternative vapor intrusion screening level, ecological risk-based remediation goal, and/or ecological risk management decision goal is being implemented and/or requested for a site or area of concern. The form shall be used regardless of whether Department pre-approval is required.

**SECTION A. SITE NAME AND LOCATION**

Site Name: Hudson County Chromate 156

List all AKAs: HCC Site 156; Metropolis Towers; Gregory Park Apartments; 270 Henderson St.; 280 Gregory Park Plaza

Street Address: 270-280 Luis Munoz Marin Blvd (aka 270-280 Henderson Street)

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07302

Program Interest (PI) Number(s): G000008770

Case Tracking Number(s): 104063

**SECTION B. REMEDIATION STANDARD NOTIFICATION SPREADSHEET** Note: There are site-specific impact to groundwater nickel standards for three excavation areas.

Complete and attach the Remediation Standard Notification Spreadsheet which can be found at:  
<http://www.nj.gov/dep/srp/srra/forms/>. This form will not be processed by the NJDEP if the spreadsheet is not attached.

**SECTION C. PURPOSE FOR SUBMISSION**

Note: NJDEP approved use of 1999 RDCSRs

Pre-Approval Required: for Vanadium. Letter attached.

No Pre-Approval Required:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Ingestion/Dermal Alternative Soil Remediation Standard                           | <input type="checkbox"/> Inhalation Alternative Soil Remediation Standard<br>(Calculation Spreadsheet) |
| <input type="checkbox"/> Inhalation Alternative Soil Remediation Standard<br>(New Toxicity Data, New Modeling, etc.) | <input checked="" type="checkbox"/> Impact to Groundwater Alternative Soil Remediation Standard        |
| <input type="checkbox"/> Development of New Remediation Standard   | <input type="checkbox"/> Vapor Intrusion Alternative Screening Level                                   |
| <input type="checkbox"/> Ecological Risk Based Remediation Goal  | <input type="checkbox"/> Development of New Vapor Intrusion Screening Level                            |
| <input type="checkbox"/> Ecological Risk Management Decision Goal  |  |

**SECTION D. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION**

Full Legal Name of the Person Responsible for Conducting the Remediation: PPG Industries, Inc.

Representative First Name: Mark Representative Last Name: Terril

Title: Corporate Director, Environmental Affairs

Phone Number: (721) 325-5060 Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

Mailing Address: 440 College Park Drive

City/Town: Monroeville State: PA Zip Code: 15146

Email Address: terril@ppg.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

*I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.*

Signature: *Mark Terril* Date: July 13, 2018

Name/Title: Corporate Director, Environmental Affairs No changes to contact information since last submittal

**SECTION E. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT**

LSRP ID Number: \_\_\_\_\_  
First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Email Address: \_\_\_\_\_

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

*I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:*

**[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:**

- directly oversaw and supervised all of the referenced remediation, and/or*
- personally reviewed and accepted all of the referenced remediation presented herein.*

*I believe that the information contained herein, and including all attached documents, is true, accurate and complete.*

*It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.*

*My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.*

*I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.*

LSRP Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
LSRP Name/Title: \_\_\_\_\_  
Company Name: \_\_\_\_\_

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice  
Site Remediation Program  
NJ Department of Environmental Protection  
401-05H  
PO Box 420  
Trenton, NJ 08625-0420



REMEDICATION STANDARD NOTIFICATION SPREADSHEET

Instructions

Clear Form

Site Name: Hudson County Chromate 156

Program Interest Number: G000008770

ALTERNATIVE STANDARDS OR SCREENING LEVELS REQUESTED/IMPLEMENTED

Chemical Name	CAS	Concentration Range on Site (include units)	ARS / Screening Level	Scenario	Type of Standard	Default Remediation Standard / Screening level (include units)	Proposed Remediation Standard / Screening level (include units)
Nickel	7440-02-0100	4.5-140 mg/kg	Impact to Ground Water – SPLP	NA	Alternative	48 mg/kg	411 mg/kg
Nickel	7440-02-0100	0.75-185 mg/kg	Impact to Ground Water – SPLP	NA	Alternative	48 mg/kg	322 mg/kg
Nickel	7440-02-0100	4.3-141 mg/kg	Impact to Ground Water – SPLP	NA	Alternative	48 mg/kg	565 mg/kg
Vanadium	7440-62-2	6.5-299 mg/kg	Ingestion-Dermal Exposure Pathway	Residential	New	78 mg/kg	370 mg/kg



**Attachment A-1**  
**NJDEP Approval**  
**of 1999 RDCSRS**  
**for Vanadium**



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Site Remediation Program
401 E. State Street, 6th Floor
P. O. Box 028

Trenton, New Jersey 08625-0028
Tel. #(609) 292-1250

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

M. Michael McCabe
Site Administrator
Jersey City PPG Chromium Sites

12/16/11

Subject: Adequacy of Response to Comments on July 2006 Remedial Action Work Plan and the July 2010 Remedial Action Work Plan Addendum; Metropolis Towers, Site 146, Jersey City, New Jersey

Dear Mr. McCabe:

With the exceptions noted below, PPG Industries (PPG) has adequately addressed the New Jersey Department of Environmental Protection (Department) comments, dated September 20, 2010 on the July 2006 Remedial Action Work Plan (RAWP) and July 2010 Remedial Action Work Plan Addendum (RAWP Addendum) developed by Civic & Environmental Consultants, Inc. (CEC) for PPG. Note that since a revised RAWP has not yet been submitted by PPG, it was not possible to assess how the comments were addressed in the revised RAWP/RAWP Addendum.

Prior comments for which response was not considered fully adequate:

General Comment 2: NJDEP had considered the July 2006 version of the RAWP as approvable with revisions. Therefore, per the requirements set forth in New Jersey Administrative Code (N.J.A.C.) 7:26E-1.3(c)2, since the RAWP had been submitted prior to 2 December 2008 and it that (generally) met the requirements of N.J.A.C. 7:26E-6, the soil cleanup criteria in place prior to promulgation of the Soil Remediation Standards (promulgated 2 June 2008) established for the contaminants of concern are applicable provided that the Soil Remediation Standards are not an order of magnitude or more lower than the pre-June 2008 soil cleanup criteria. A comparison of the pre-June 2008 soil cleanup criteria and the Soil Remediation Standards specific to residential property use for the site-specific contaminants of concern are provided below:

Table with 3 columns: Contaminant of Concern, May 1999 Soil Cleanup Criterion (mg/kg), June 2008 Soil Remediation Standard (mg/kg). Rows include Hexavalent Chromium, Trivalent Chromium, Antimony, Nickel, Thallium, and Vanadium.

- Notes:** (1) This value is the soil cleanup criteria for non-residential soil; however, the July 2006 version of the RAWP notes that the most stringent cleanup criteria was used.
- (2) This standard was identified in the July 2006 version of the RAWP as being applicable to total chromium, while it is identified in the soil cleanup criteria for trivalent chromium.
- (3) Based on the Commissioner's Chromium Policy memo dated 8 February 2007.
- (4) Based on April 2010 NJDEP Memo "Chromium Soil Cleanup Criteria"

As can be seen in the table above, none of the contaminant of concern had a reduction in standard of an order of magnitude or more, therefore, PPG may use the May 1999 soil cleanup criteria in lieu of the 2008 soil remedial standards should they choose.

Note that since the 2006 RAWP deferred the impact to groundwater soil remediation pathway, this pathway now needs to be evaluated to determine that soils remaining following remedial excavation do not adversely impact groundwater.

Note that remedial standards for the PPG chromium sites have been established under the 2009 Joint Consent Order.

Response: PPG acknowledges the NJDEP decision to use the May 1999 soil cleanup criteria as remedial standards at this site. PPG will pursue the Impact to Groundwater (IGW) requirements by obtaining samples from the three highest concentration hexavalent chromium post-excavation samples that are less than 20 mg/kg from each Area and performing the IGW protocol to demonstrate compliance for chemicals of concern. If approved, this approach will be incorporated into the Final RAWP.

***Adequacy of Response: The response is adequate. However, the Department recommends that PPG consider performing the IGW assessment in advance of the remedial excavation, particularly if PPG intends, as indicated in the draft RAWP, to backfill upon reaching remedial limits established by pre-excavation sample results. Should these samples be collected following excavation and the excavation backfilled prior to completing the IGW assessment, there might be a need to revisit/reexcavate certain areas if the IGW assessment determines that there is a residual risk associated with soils remaining following the remedial excavation.***

General Comment 3: Together, the July 2006 RAWP, July 2006 RAWP Investigation (Appendix D of the July 2006 RAWP), the July 2010 RAWP Addendum, and the August 2010 PAMP contain inconsistencies which preclude the accurate and clear presentation of the current proposed remedial action. As presented, these documents are confusing and may cause issues with implementability of the remediation in the field.

The 2006 RAWP must be revised in "track-changes" format to clearly identify which portions of the 2006 RAWP have been superseded by the 2010 RAWP Addendum (strike out text that no longer applies and identify which section(s) of the RAWP Addendum apply in its place), and must clearly call out figures and tables in the RAWP and RAWP Addendum that have been superseded. The revised 2006 RAWP and 2010 RAWP Addendum must also be revised to address the deficiencies noted later in this comment letter. Because of the confusion engendered by this group of documents, the Technical Execution Plan must be submitted for Department

review and approval. Development of a singular set of tables and figures is required in the Technical Execution Plan.

Response: The 2006 RAWP superseded sections have been identified in the addendum and the Figures that supersede those in the 2006 document are identified.

Before producing a Technical Execution plan, PPG would like the NJDEP to define what the requirements of the Technical Execution Plan include; this is not a document that is defined in the Technical Regulations or the JCO. Before agreeing to provide an additional document subject to review, PPG requests the approval of the RAWP before pursuing preparation of another document.

***Adequacy of Response: A Technical Execution Plan (TEP) is not required. However, the RAWP/RAWP Addendum must be revised to be sufficiently clear (e.g., a singular set of figures/tables/documents, clarity on which portion of the 2006 RAWP are superseded by which sections of the April 2012 RAWP, etc.)***

General Comment 3, continued: For example, as per N.J.A.C. 7:26E-6.2(a)(6), figures must be provided that identify location, depth and concentration of all contaminants in excess of the remediation standard; and sample locations, depths and parameters for all post-construction samples. The figures do not have the analytical data posted to the sample locations. Additionally, there are discrepancies between sample identification numbers presented on the tables and figures that make it difficult to correlate the data from the tables to the figures. Additionally, a sampling summary table for all proposed post remediation samples is required pursuant to N.J.A.C. 7:26E-6.2(a)2. As per N.J.A.C. 7:26E-6.2(a)6, the remedial area detail maps must include the volume of each remedial media being remediated and the vertical extent of the area being remediated.

In addition, to assist in clarification of the proposed work, an Executive Summary should be added to the RAWP Addendum (and also included in the Technical Execution Plan) giving the reader an overview of where and how deep the contaminated zones are, the nomenclature for each, and the order in which they will be addressed. The summary should also include the totals of soil being removed and hauled away, soil being removed and used a clean backfill, and soil being imported as make-up fill. Because the Technical Execution Plan must be approved prior to implementation, PPG must build this approval into the schedule.

Response: The 2006 RAWP superseded sections have been identified in the addendum and the figures that supersede those in the 2006 document are identified as requested. Additionally, the figures and tables have been updated.

PPG is unsure about the requirements of the Technical Execution Plan include, as this document is not defined in the Technical Regulations or the Joint Consent Order (“JCO”). We would like to schedule a quick call to discuss the requirements of this document prior to submittal of the revised RAWP and RAWP Addendum.

In regards to the specific requirements of the scaled site map:

- i. The location of remedial treatment units is present and indicated numerous times on various drawings.
- ii. The volume of each medium to be remediated is subject to change in the field during remedial activities, so an estimate of the volumes to be remediated has been added to the remedial area details.
- iii. The estimated vertical and horizontal extents of the area to be remediated are included in the remedial area details and on the excavation plans.
- iv. The location, depth, and concentration of all contaminants in excess of the remediation standards are shown on the excavation plans.
- v. The sample locations, depths, and parameters for all post-construction samples are shown on the excavation plans.

An Executive Summary shall be added to the final RAWP and shall be included in the Technical Execution Plan, once the details and content of that document have been discussed and defined.

***Adequacy of Response: The Department believes that a call would benefit the execution of this program. As noted earlier, a TEP is not required; however, the RAWP/RAWP Addendum must be amended to fully address these comments previously submitted.***

General Comment 4: Methods identified for dust suppression and air monitoring are not adequate as proposed in the PAMP. Most notably, there does not appear to be any buffer zone between air monitoring stations and the public, and dust control measures are reactive, not proactive. The Department requires a conference call to further discuss these issues. Supplemental comments on this issue will be provided following the conference call.

Response: As discussed with the Department, the location of the public (residents) on the site precludes the existence of much of a buffer zone between the excavation areas, the air monitoring stations and the public. The public will be excluded from the construction area through the use of barriers and fencing. A revised air monitoring program has been developed that includes consideration of both ground level and elevated sampling at the perimeter of the construction area. The revised air monitoring program will also include continuous real-time PM10 monitoring using hand-held instruments near the excavations to allow proactive dust control to be implemented and to verify that dust control measures are being successful in controlling dust levels to be below the allowable limits at and above the construction area.

***Adequacy of Response: The PAMP proposes a real-time action level of 339 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), averaged over 15 minutes, for all excavation areas. For areas where there is no spatial buffer between the general public and excavation activities, a more conservative averaging time of 5 minutes will be required, with a 1-minute averaging time as an “early warning” mechanism. Additionally, consistent with the goals established in the Garfield Avenue Site Dust Control Plan, PPG should meet the objectives of “no visible dust” for all work areas, and shall update the PAMP to reflect the “no visible dust” goal. As total dust and hexavalent chromium air results are available, PPG must evaluate the data to determine whether***

***there is a correlation between the dust and hexavalent chromium concentrations. The real-time dust action level may need to be revised based on the data assessment.***

General Comment 6: The tenant parking density at the property must be evaluated, and contingencies developed for tenant parking spaces consumed during the various stages of the remedial action.

Response: Previous meetings with the former building owner made them aware of the influence of remedial action on the availability of parking spaces. The current building owner has been made aware of the influence of remedial action on the number of parking spaces available to tenants. This impact will be addressed through the site access agreement with the property owner. A survey of parking spaces was performed over four weeks in September 2010 and this information will be discussed with the building management.

***Adequacy of Response: The Department expects PPG to work out the parking impacts to the satisfaction of building management and the tenants.***

General Comment 7: It is not clear from reading the RAWP and RAWP Addendum which data have undergone validation and which have not. As the data are being relied upon to determine limits of remediation, these data must undergo validation to ensure that they are accurate and may be relied upon for remedial decision-making. Validation reports must be provided as an attachment to the revised RAWP, and must include identification information to allow the reviewer to understand which investigation (and which attachment, if the revised RAWP will be organized in that manner) each validation report relates to. If any of the data are determined to be invalid (must be rejected), those data must be removed from the report and the data presentation must be revised to reflect that that particular data point does not exist for that analyte.

Response: Validation had not been performed on any of the data collected after the original RAWP submittal in July 2006. Validation of data collected after that date is being performed with the intent of incorporating the validated data into the final RAWP.

***Adequacy of Response: Incorporation of the validated data is appropriate. However, the validation reports for those samples which will be relied upon for remedial decision making (e.g., clean post-excavation samples, samples beyond the limits of excavation) must be provided as attachment(s) to the RAWP.***

General Comment 9: PPG shall ensure that all receptor evaluation requirements specified in N.J.A.C. 7:26E-1.15 through 1.19 are met by the deadlines identified in the regulations.

Response: A receptor evaluation was not submitted for either the Site Investigation report or the Remedial Action Work Plan because the original submission of these documents predates the requirement. PPG submitted a Receptor Evaluation on June 6, 2011.

***Adequacy of Response: A Receptor Evaluation Report, which addressed the Department's 6/29/11 comments on the Receptor Evaluation form, was submitted by AECOM on behalf of PPG on 9/20/11. Please confirm that the finalized RE forms were distributed as per N.J.A.C. 7:26E-1.15(e).***

Section-Specific Comment 1: All submittals to NJDEP must be certified by PPG as required by N.J.A.C. 7:26E-1.5(a).

Response: The certification page will be included with the final FSWP document.

***Adequacy of Response: As required by N.J.A.C. 7:26E-1.5, all submittals must be certified, not just the finalized submittal.***

Section-Specific Comment 12 - Section 6.4, page 16: The current dewatering plan is not clearly defined. Additional detail regarding the dewatering plan and contingency dewatering measures are required. Adequate dewatering will allow for excavated soils to be acceptably direct loaded for off-site disposal, or managed on site, and will facilitate visual inspection of in-situ soils to verify all visible CCPW has been removed. Additional detail regarding the Passaic Valley Sewerage Commissioners (PVSC) permit, the anticipated dewatering rates, if the water will be discharged directly to a sewer, if a NJDEP Treatment Works Approval and/or Water Allocation Permit or notification is required must be provided. Please explain whether dewatering beneath the meadow-mat will be required to prevent upward seepage which could result in wet bottom sediments despite dewatering of the excavation sidewalls above the meadow-mat.

Response: See Section 7.3 for additional information on dewatering. The approved PVSC authorization to discharge will address the issues identified related to rates, volumes, direct discharge to sewer and whether a NJDEP Treatment Works Approval or Water Allocation permit or notification is required. This permit is part of project documents governing remedial work and will be provided upon approval by the PVSC. Dewatering below the meadow mat is not anticipated to complete the planned excavation activities.

***Adequacy of Response: The Department requests that the dewatering details described in the initial comment be provided to the Department through a series of status conference calls during the remedial design/implementation process, similar to those held for Site 114.***

Section-Specific Comment 15 - Section 7.1, page 17, second paragraph, last sentence: For any non-chromium and non-CCPW-related soils intended to be used for backfill, a soil reuse plan must be prepared in accordance with N.J.A.C. 7:26E-6.4(d) and approved by the Department. Any soil with chromium being proposed for reuse must not contain hexavalent chromium at a concentration of 20 milligrams per kilogram (mg/kg) or greater, which must be demonstrated through analytical results. Note that the information provided in RAWP Addendum Section 4 does not meet all the technical requirements set forth in N.J.A.C. 7:26E-6.4(d).

Response: Please provide what specifically needs to be added to RAWP Addendum Section 4 to comply with the technical requirements set forth in N.J.A.C. 7:26E-6.4(d). This information or analyses will be added to the final RAWP.

***Adequacy of Response: This issue requires further discussion with the Department.***

Section-Specific Comment 17 - Section 7.2, page 18, first paragraph: The “pre-excavation delineation” approach presented by CEC (slides 21 and 22) in the June 17, 2010 meeting at AECOM’s Piscataway office should be included in the revised RAWP, except that there shall be

samples for every 2-foot vertical interval as described in Section 7.4.1 of the work plan. The complete horizontal and vertical pre-delineation data set and supporting figures clearly providing point-by-point compliance to support the extent of the excavations must be provided to, and approved by the NJDEP prior to the commencement of the soil remedial action.

Response: The data and presentation of this information has been included in the RAWP for each remedial area and on Figure 3 Pre-Excavation Boring Locations.

***Adequacy of Response: As discussed during the December 12, 2011 Master Schedule call, Weston and PPG/CEC will have a phone call to discuss the required figures and tables needed for a compliant RAWP.***

Section-Specific Comment 18 - Section 7.2, page 18, second paragraph: Free liquids are not permitted to discharge from the lined and loaded haul trucks. As the effectiveness of the dewatering efforts are not known at this time, the RAWP must be revised to include additional detail regarding the material and construction of the truck liners, and contingency measures to prevent any discharge of free liquids from the loaded haul trucks.

Haul truck tire washing is mandatory prior to leaving the site. Additionally, truck exteriors must be inspected and all soils removed/truck decontaminated prior to the vehicles departing the site.

Response: Material and construction of the truck liners is more appropriately addressed in technical specifications for bid. The type of truck liner to be used shall be a transport contractor decision appropriate to the containment results required. Inspection of the integrity of the truck liners prior to loading is integral to the proper functioning of a truck liner. Trucks will be staged on the decontamination pad following loading and visually inspected for leakage. Trucks with leaking liners will remain on the truck decontamination pad until such time as they can be unloaded, decontaminated, and released for liner repair. Due to the amount of paved surfaces on this site and the intent to load on hard surfaces, the requirement for haul truck tire washing will be evaluated through visual inspection and reaction to the conditions of the specific truck tire.

***Adequacy of Response: This response is not adequate. The Department requires that the RAWP be revised to include additional detail regarding material and construction of truck liners, and contingency measures to prevent releases of free liquids from the loaded haul trucks. Further, the Department requires that haul truck tire washing is mandatory prior to leaving the site, and that the RAWP document the inspection of all truck exteriors and decontamination/removal of soil from truck exteriors, as necessary, prior to vehicles departing from the site.***

Section-Specific Comment 21 - Section 7.3, page 19, second paragraph, first sentence: The RAWP must provide additional dewatering detail to ensure the ability to direct-load excavated materials. See Section-Specific Comment 12.

Response: At this site, materials to be excavated are primarily granular fill and construction debris which reduces material water-holding capacity. Additionally, ground water elevations have been decreasing with time reducing the anticipated need for dewatering.



**Adequacy of Response:** *See discussion of adequacy of response for Section-Specific Comment 12.*

Section-Specific Comment 27 - Section 7.5, page 22, first paragraph, fifth sentence: All haul trucks must go through the truck tire wash before exiting the site.

Response: This is addressed in the soil erosion and sediment control plan. Also see Response to Section-specific Comment 18.

**Adequacy of Response:** *See assessment of adequacy of response to Section-Specific Comment 18.*

Section-Specific Comment 28 - Section 7.5, page 23, first paragraph: Dust suppression must be proactively implemented during any and all intrusive site work. Dust control measures must be in place for working and non-working hours (i.e. 24 hours per day) for any open excavation or stockpiled materials.

Response: Section 7.5 of the RAWP provides general contamination migration control measures; specific measures for dust control are provided in RAWP Appendix E Perimeter Air Monitoring Plan which was superseded by the August 2010 update submitted as part of the RAWP Addendum. Proposed revisions to the Perimeter Air Monitoring Plan will include the following. Dust suppression will be proactively implemented during intrusive site work during the standard 8-hour work day. At the end of each work day and during non-working periods (e.g. weekends), excavation areas and any stockpiled excavated material will be stabilized using engineering controls to mitigate the production of fugitive dusts during non-work periods. The stabilization will be performed through use of wind screens, chemical binders or tarps depending on the materials and conditions present onsite.

**Adequacy of Response:** *The approved RAWP must be wholly consistent with the approved PAMP.*

Section-Specific Comment 29 - Section 7.6, page 23, second paragraph, second sentence: A certification to document the quality of the fill is not acceptable. As the NJDEP indicated during the June 17, 2010 meeting at AECOM's office, any imported fill must have analytical data to demonstrate compliance with all 2008 NJDEP Soil Remediation Standards. The RAWP Addendum did not incorporate the testing requirements to document the cleanliness of the imported clean backfill, as had been indicated in an interim submittal.

Response: N.J.A.C. 7:26E-6.4(b)2(iv) states that "documentation of the quality of the fill shall be provided by a certification stating that it is virgin material from a commercial or noncommercial source or decontaminated recycled soil." Therefore, additional analytical data should not be required.

**Adequacy of Response:** *See assessment of adequacy of response to Section-Specific Comment 15.*

Section-Specific Comment 32 - Section 7.7.2 and 7.7.3: These sections of the RAWP were not reviewed because of major changes provided in 2010 RAWP Addendum. Please confirm that the RAWP Addendum supersedes these sections of the 2006 RAWP.

Response: A new Section 7.7 was not provided as part of the 2010 RAWP Addendum or was it indicated as being superseded.

***Adequacy of Response: PPG must clarify how the RAWP and RAWP Addendum work together to describe with sufficient clarity the remedial plan for the site. Also see assessment of adequacy of response to Section-Specific Comment 17.***

Section-Specific Comment 34 - Section 8.0, page 38, third paragraph, second sentence and last paragraph: Dust controls must be proactively implemented during all site work. See Section-Specific Comment 28. In addition, there must be only one dust action level for the site.

Response: Section 8.0 of the RAWP provides a summary of the Perimeter Air Monitoring Plan (PAMP) and was not meant to provide complete details of the plan. Revisions to the updated August 2010 PAMP submitted as part of the RAWP Addendum will include the following. In addition to construction zone perimeter ground level and elevated monitoring. Ground-level locations will include continuous real-time PM10 sampling and integrated Cr+6 and PM10 sampling. Elevated locations at first-balcony level, mid-building and rooftop will include sampling for real-time PM10 sampling and integrated Cr+6 and PM10 sampling. The revised air monitoring program will also include continuous real-time PM10 monitoring using hand-held instruments near the excavations to allow proactive dust control to be implemented and to verify that dust control measures are being successful in controlling dust levels to be below the allowable limits at and above the construction area. The Particulate Action Level (PAL) for respirable (PM10) particulates (independent of chemical concentration in dust) is 339 ug/m<sup>3</sup> as indicated in Section 2.3 of the August 2010 PAMP.

***Adequacy of Response: See assessment of adequacy of response to Section-Specific Comment 28.***

Section-Specific Comment 35 - Section 8.0, page 38, last paragraph: The Department requires a conference call to further discuss these issues. Comments on this section of the RAWP are deferred until after the call.

Response: Please coordinate this call with Dave Claassen of PPG Industries, Inc.

***Adequacy of Response: These discussions occurred over a series of meetings and conference calls during the January/February 2011 time frame.***

Section-Specific Comment 41 - Section 10.0, page 41: A verified list of required State, local, and Federal permits must be provided. The applicability determination of the NJDEP Treatment Works Approval must be finalized to avoid unwarranted project schedule delays. An applicability determination of the need for a Water Allocation Permit or Temporary Dewatering Permit must be made based on dewatering calculations (see Section-Specific Comment 12).

Response: See Response to Section-Specific Comment 12.

**Adequacy of Response:** *See assessment of adequacy of response to Section-Specific Comment 12.*

Section-Specific Comment 44 - Section 13.0, page 44: In lieu of the proposed periodic progress reports, the Department anticipates that weekly progress teleconferences, with follow-up teleconference minutes submitted via email, will be adequate. Any proposed modifications to the approved RAWP would require written approval prior to implementation in the field.

Response: Weekly teleconferences with follow-up minutes via email as an approved alternative will be included. PPG would like clarification on what is intended by “any proposed modifications to the approved RAWP would require written approval prior to implementation in the field.” Small scale changes and modifications are expected as a part of any field project based on field conditions, weather, equipment, etc., and holding PPG to a strict interpretation of this could easily result in severe impediments to proceeding with remedial action construction.

**Adequacy of Response:** *Proposed modifications to the approved RAWP would require written approval prior to implementation in the field. In order to alleviate “severe impediments to proceeding with remedial action construction,” conditions which might require a requested revision to the approved RAWP should be anticipated. As has been demonstrated during implementation of the Interim Remedial Measure #1 at the Garfield Avenue Site, use of field change request forms has allowed for timely Department review and approval of revisions to field procedures authorized in that approved work plan.*

Section-Specific Comment 45 - Section 14.0, page 45: The revised remedial schedule, provided as Figure 15 of the July 2010 RAWP Addendum, appears out of date. In accordance with 7:26E-6.5(c), within 30 calendar days of RAWP approval an updated remedial action schedule must be submitted to the Department.

Response: The remedial schedule provided as Figure 15 is a segment of the current JCO schedule for Site 156 Metropolis Towers activities.

**Adequacy of Response:** *In accordance with 7:26E-6.5(c), an updated remedial action schedule must be submitted to the Department within 30 calendar days of RAWP approval.*

Section-Specific Comment 49 - Figure 2: Please correct inconsistencies on Figure 2. The figure uses three different symbols to designate remedial investigation locations. The remedial investigation location symbols used on the map are not represented accurately in the legend; and the soil boring and monitoring well symbols in the legend are identical. Some of the remedial investigation locations on the map do not have labels.

The text (page 7) states there are 68 soil borings and 5 well locations associated with the PPG remedial investigation. However, there are more than 73 remedial investigation sample locations depicted in Figure 2.

Twenty-one of the 68 remedial investigation soil boring locations and PPG1-MW2 are not depicted and labeled in Figure 2. A “PPG1-B05” and “PPG1-B5” are depicted on Figure 2. The PPG-T01 through PPG1-T04 soil sample locations included in Appendix A are not illustrated on Figure 2. Non-remedial investigation sample locations should not be included (or included in gray) in Figure 2. Please ensure all PPG remedial investigation sample locations are depicted and correctly labeled on Figure 2.

Response: The copy of Figure 2 provided on the RAWP CDs incorporated data from the RAWP Investigation (RAWP Appendix D) and the RAWP Addendum in error. Please refer to Figure 2 from the hard copy versions of the 2006 RAWP. The figure will be reviewed for inconsistencies and updated as necessary.

There were 58 soil borings and 5 well locations associated with the original RI. Additionally, “PPG1-B5” has been corrected to read “PPG1-B51” and PPGT01 through PPGT04 have been added to Figure 2.

**Adequacy of Response:** *See assessment of adequacy of response to Section-Specific Comment 17.*

Section-Specific Comment 50 - Figure 3: A “LB7” and a “LB-7” are depicted on Figure 3. LB-17 is not shown on Figure 3. All non-Langan sample locations should not be included (or included in gray) in Figure 3. Please ensure all Langan Supplemental Investigation sample locations are depicted and correctly labeled on Figure 3.

Response: The designations “LB7” and “LB-7” are shown per the drawing obtained for the Langan Supplemental Investigation and were not re-designated.

**Adequacy of Response:** *PPG must conduct due diligence to ensure that the data on which remedial decisions are being made are accurately located and represent the actual samples collected from those locations. Figure 3 must be revised to identify the location of Langan sample LB-17, at a minimum. Also see assessment of adequacy of response to Section-Specific Comment 17.*

Section-Specific Comment 51 - Figure 4: Sample locations PE-30 through PE-35 are not depicted on Figure 4. All non-Pre-Remedial boring locations should not be included in Figure 4. Please ensure all Pre-Remedial sample locations are depicted and correctly labeled on Figure 4.

Response: Figure 4 does not present locations for PE-30 through PE-35 because borings with these designations were not installed.

**Adequacy of Response:** *Please provide a note on Figure 4 to provide clarity for future users of the report.*

Section-Specific Comment 54 - Figure 6: The number and location of post-excavation sidewall sample locations shall be a minimum frequency of 1 location for every 30 linear feet of each sidewall. Post-excavation bottom samples must be at a minimum frequency of 1 sample per 900 square feet of bottom area.

Response: Figure 6 does not show the locations or number of post excavation sidewall or floor samples. Post excavation samples for Area A are shown on RAWP Addendum Figure 19.

***Adequacy of Response: If it is the intent to not include post-excavation sidewall samples on Figure 6, the legend designation for “sidewall sample location” should be removed to increase clarity. Also note that sidewall samples indicated on Figure 19 for excavation Area A do not meet the minimum requirements since 50 feet separates PPG-B01 and PE-3. Finally, figures should include the results of all sampling, including the sampling program conducted per the July 2011 Pre-Remedial Sampling & Analysis Plan.***

Section-Specific Comment 55 - Figure 7: No post-excavation sidewall sample locations are shown on Figure 7 in Appendix A of the July 2010 RAWP Addendum. The number and location of post-excavation sidewall sample locations shall be a minimum frequency of 1 location for every 30 linear feet of each sidewall. There are three sidewalls identified in the remedial excavation that do not have any post-remediation samples identified. Post-excavation bottom samples must be at a minimum frequency of 1 sample per 900 square feet of bottom area.

Response: Figure 7 does not show the locations or number of post excavation sidewall or floor samples. Post excavation samples for Area B are shown on RAWP Addendum Figure 17 Layout 1.

***Adequacy of Response: As shown on Figure 17 of the RAWP Addendum, 45 feet separates the proposed post-excavation sidewall sample along the eastern edge of excavation Area B and sample location PE-6. This does not satisfy the minimum sampling frequencies established by the Department. The final figures should include the findings of the sampling program conducted per the July 2011 Pre-Remedial Sampling & Analysis Plan.***

Section-Specific Comment 57 - Figure 9: No post-excavation sidewall sample locations are shown on Figure 9 of the July 2006 RAWP. The number and location of post-excavation sidewall sample locations shall be a minimum frequency of 1 location for every 30 linear feet of each sidewall. Post-excavation bottom samples must be at a minimum frequency of 1 sample per 900 square feet of bottom area.

Response: Figure 9 does not show the locations or number of post excavation sidewall or floor samples. Post excavation samples for Area D are shown on RAWP Addendum Figure 17 – Layout 3.

***Adequacy of Response: See assessment of adequacy of response to Section-Specific Comment 17.***

Section-Specific Comment 59 - Figure 11: The Remedial Area F is not consistently depicted on Figure 11 of the July 2006 RAWP and Figure 14 of the July 2006 RAWP. Figure 11 must be updated to reflect the extent of the more currently proposed excavation. For Remedial Area F (Figure 11, July 2006 RAWP), there are distances approaching 60 feet (between PE-16 and PPG1-B12) with no sidewall post-excavation data. In addition, there are no proposed post-

excavation sidewall sample locations are shown for Remedial Area F-1. The number and location of post-excavation sidewall sample locations for Remedial Areas F and F-1 shall be a minimum frequency of 1 location for every 30 linear feet of each sidewall. Post-excavation bottom samples must be at a minimum frequency of 1 sample per 900 square feet of bottom area.

Response: The depictions of Area F on Figure 11 and Figure 14 of the July 2006 RAWP appear to be the same. An additional Pre-excavation boring will be installed between PE-21 and PPG-B12 and between PPG-B12 and PE-36 to meet the required sampling intervals. For Remedial Area F-1, RAWP Addendum Figure 21 identifies the location of 12 sidewall and 1 excavation floor sample.

**Adequacy of Response:** *See assessment of adequacy of response to Section-Specific Comment 17.*

Section-Specific Comment 60 - Figure 12: Figure 12 of the July 2010 RAWP Addendum must be modified to include the requirements specified in N.J.A.C. 7:26E-6-2(a)(6).

Response: Due to current complexity of the drawings and the presence of this information on other RAWP drawings, a key to the location of the information specified in N.J.A.C. 7:26E-6.2(a)(6) will be added to Figure 12.

**Adequacy of Response:** *See assessment of adequacy of response to Section-Specific Comment 17.*

Section-Specific Comment 61 - Figure 13: Figure 13 of the July 2010 RAWP Addendum must be modified to include the requirements specified in N.J.A.C. 7:26E-6-2(a)(6).

Response: Due to current complexity of the drawings and the presence of this information on other RAWP drawings, a key to the location of the information specified in N.J.A.C. 7:26E-6.2(a)(6) will be added to Figure 13.

**Adequacy of Response:** *See assessment of adequacy of response to Section-Specific Comment 17.*

Section-Specific Comment 62 - Figure 14: Figure 14 of the July 2006 RAWP must be modified to include the requirements specified in N.J.A.C. 7:26E-6-2(a)(6).

Response: Due to current complexity of the drawings and the presence of this information on other RAWP drawings, a key to the location of the information specified in N.J.A.C. 7:26E-6.2(a)(6) will be added to Figure 14.

**Adequacy of Response:** *See assessment of adequacy of response to Section-Specific Comment 17.*

Section-Specific Comment 63 - Figure 15: See Section-Specific Comment 45.

Response: See Section-Specific Response to Comment 45.

**Adequacy of Response:** *See assessment of adequacy of Response to Comment 45.*

Section-Specific Comment 68 - Appendix F, Section 6.1: Personal worker air monitoring shall be designed to ensure compliance with the applicable Occupational Safety and Health Administration (OSHA) standard, as outlined in 29 CFR 1926.1126. This section does not discuss if upgraded levels of respiratory protection will be required for workers within the exclusion zone until sample data indicates no exposure above the permissible exposure limit (PEL). Revise text to document compliance with the OSHA standard.

Response: Evaluation of soil concentrations relative to Cr+6 PELs allow real-time dust monitoring to be used concurrently with time-integrated occupational health sampling for verification.

***Adequacy of Response: The response provided does not directly indicate intent to comply with the provisions of 29 CFR 1926.1126. The HASP shall be revised to specifically address the requirements of 29 CFR 1926.1126.***

Section-Specific Comment 73 - 2010 RAWP ADDENDUM, Section 2, first paragraph: Provide a copy of the conditional approval of the 2006 Sampling and Analysis Plan for RAWP Implementation, along with a point-by-point summary table of the NJDEP conditions to the approval for the February 23, 2006 Sampling Analysis Plan for the RAWP and CEC's disposition. The summary table must identify specifically where each condition and respective disposition is presented in the June 2006 RAWP Investigation or the July 2010 RAWP Addendum.

Response: After a search of old files, PPG found it did not have a copy of the conditional approval of the 2006 Sampling and Analysis Plan for RAWP Implementation to use as a basis for this evaluation.

***Adequacy of Response: Reference to the conditional approval must be removed from the text.***

Section-Specific Comment 74 - 2010 RAWP ADDENDUM, Section 2, third paragraph, bullets: Provide NJDEP laboratory certification numbers. Per N.J.A.C. 7:26E-2.1(a)(1)(ii), only those laboratories certified for analysis as required under N.J.A.C. 7:18 may be used for analysis of samples required to fulfill requirements of the Site Remediation Program.

Response: The laboratory certification numbers follow the lab names in the referenced bullet list.

***Adequacy of Response: The certification numbers identified in the bullets are identified as being provided by NELAC, not by the Department's Office of Quality Assurance (OQA). Please confirm that these numbers are also NJDEP/OQA certification numbers.***

Section-Specific Comment 75 - 2010 RAWP ADDENDUM, Section 3.2, page 8, second paragraph: The analytical results for all samples are provided in Table 1. However, evaluation of the data is not possible because the sample identification numbers (IDs) provided in Table 1 do not align with the boring IDs provided in the embedded table on pages 7-8 and Figure 8. See General Comment 3.

Response: Table 1 presents the complete sample designation consisting of a Site prefix (156) followed by a one to two letter boring type (e.g. I, CE, PE) followed by a one to two digit boring type number (e.g. 1, 10) followed by the numeric top of the sample depth below ground surface, a hyphen, the numeric bottom of the sample depth below ground surface, and a letter sample sequence. For brevity during discussion, the locations are referred to by the one or two letter boring type and boring number. Since the letter I appears similar to the number 1, a hyphen is inserted in discussions, imbedded tables, and on figures to separate the boring type and the boring type number for clarity.

***Adequacy of Response: It is not clear. If boring numbers are identified within the text and on figures, the corresponding boring number should be added in the tables for each column presenting analytical results for samples collected from that boring. Also see assessment of adequacy of response to Section-Specific Comment 17.***

Section-Specific Comment 78 - 2010 RAWP ADDENDUM, Section 4.0, Soil Reuse Plan, pages 11-13: The plan, as presented, is not acceptable; and must be prepared in accordance with N.J.A.C. 7:26E-6.4(d). See Section-Specific Comment 15. Additionally, “additional certified clean offsite fill” must be laboratory tested to confirm it meets all applicable NJDEP soil remediation standards, including those for protection of groundwater. See Section-Specific Comment 29.

Response: Please specifically identify what this section is missing to be in compliance with N.J.A.C. 7:26E-6.4(d). N.J.A.C. 7:26E-6.4(b)2(iv) allows for the use of certified virgin fill from a commercial or noncommercial source or decontaminated recycled soil.

***Adequacy of Response: See assessment of adequacy of response to Section-Specific Comment 15 and Section-Specific Comment 29.***

Section-Specific Comment 79 - 2010 RAWP ADDENDUM, Section 4.0, pages 12-13: Note that specific requirements for determination of the suitability of concrete for recycling must be met, per the “Guidance for Characterization of Concrete and Clean Material Certification for Recycling” (NJDEP, July 6, 2009), including the prohibition of data averaging to determine compliance with remedial standards. Also, please provide specific details regarding the “erosion control measures.”

Response: The specific requirements that are not met in the NJDEP concrete recycling guidance have not been identified in the comment. Concrete core sampling and analysis was performed in March of 2006 prior to the issuance of the NJDEP concrete recycling guidance. Concrete core analysis was based on known site prior use and the chemicals of concern identified at the site. Data averaging was not part of the concrete core investigation.

***Adequacy of Response: The Department reiterates that PPG/CEC need to be familiar with all applicable guidance documents. Current guidance may be found at <http://www.nj.gov/dep/srp/guidance/>.***

Section-Specific Comment 80 - 2010 RAWP ADDENDUM, Section 5.1, page 15, second paragraph, second and third sentences: Collection of samples over a 1-foot interval is not in compliance with the requirements of N.J.A.C. 7:26E-3.6(a)(5), which requires that soil “samples



be collected in discrete six inch increments.” Please explain the sampling methodology; collecting a 1-foot sample may be acceptable in this instance. Also, please specify on appropriate tables and figures which sample results are associated with samples that were collected in 1-foot increments.

Response: The 1-foot interval or 2-foot interval were the initial sampling interval sizes retrieved from the boring not the size of the sample placed in laboratory soil sample jars. Each sample placed into a laboratory soil sample container consisted of a 6-inch interval selected based on visual examination from the materials retrieved from the boring.

***Adequacy of Response: The text, as written, suggests that a 1-foot sample was mixed in the field and the aliquot collected represented a mixture of the 1-foot sample length. Please clarify the language in the revised RAWP to be consistent with actual field activities.***

Section-Specific Comment 84 - 2010 RAWP ADDENDUM, Table 3: Hexavalent chromium analytical results are required for soils proposed for reuse.

Response: Hexavalent chromium results are all below 20 mg/kg in soils proposed for reuse.

***Adequacy of Response: See assessment of adequacy of Response to Section-Specific Comment 15.***

Section-Specific Comment 85 - 2010 RAWP ADDENDUM, Figures 16-21: The legend must be updated to include the symbol and explanation for the elevation contours within the remedial action areas. See General Comment 3.

Response: The meaning of elevation contours is provided under each view-pane on Figures 16-21.

***Adequacy of Response: The legend must be updated to include the symbol and explanation for the elevation contours within the remedial action areas. Also see assessment of adequacy of Response to Section-Specific Comment 17.***

Section-Specific Comment 86 - 2010 RAWP ADDENDUM, Figure 21: There are 900 square foot circular areas depicted without a known sample with hexavalent chromium less than 20 mg/kg. There are perimeter sidewall lengths greater than 30 feet where no sample results or proposed samples are depicted. The number and location of post-excavation sidewall sample locations shall be a minimum frequency of 1 location for every 30 linear feet of each sidewall, and the number of post-excavation bottom samples shall be a minimum frequency of one sample for every 900 square feet of excavation bottom.

Response: The issues identified have been addressed in the responses to previous comments: See Section-specific Responses to Comments 56 and 59.

***Adequacy of Response: See assessment of adequacy of response to Section-Specific Comment 56 and Section-Specific Comment 29.***

Section-Specific Comment 87 - 2010 RAWP ADDENDUM, Figure 22: The cross-sections should depict sample point locations and concentrations used to construct the zone projected to include soil with hexavalent chromium greater than 20 mg/kg, and the boundaries of the proposed excavations. The cross-sections should also depict anticipated limits of remedial excavation in addition to the limits of anticipated contaminant exceedance of remedial standards.

Response: The cross-sections are summary information based on the contours from Figures 16-21 that represent the proposed excavation limits. The proposed excavation limits from Figure 16-21 are based on last overlying and first underlying samples with concentration < 20 mg/kg Cr+6 and below regulatory limits for antimony, nickel, vanadium, and thallium. Depicting the concentrations used to construct these zones would only demonstrate they are all less than regulatory limits. An explanatory note indicating the above will be added to Figure 22 indicating that the concentrations used to construct the proposed limits of excavation are all below regulatory limits.

***Adequacy of Response: As per N.J.A.C. 7:26E-6.2(a)6, the RAWP must include a scaled site map that includes, among other information, the location, depth, and concentration of all contaminants in excess of the remediation standard, and sample locations, depths, and parameters for all post-construction samples. Since PPG is using pre-excavation samples in lieu of post-construction samples, the map must provide the locations and concentrations of those samples identifying areas requiring remedial excavation as well as all those which will be used to determine the limits of excavation. Due to the complexity of the planned cut lines at the Metropolis Towers site, this requirement must not be met with an explanatory note, and must be applied both to figures showing plan view and cross section of the excavation areas. Also see assessment of adequacy of response to Section-Specific Comment 17.***

Section-Specific Comment 88 - PERIMETER AIR MONITORING PLAN, General: The PAMP provides for a site-specific acceptable air concentration (AAC) of 1.58 micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ), which is equivalent to 1,580 nanograms per cubic meter of air ( $\text{ng}/\text{m}^3$ ). This proposed AAC is unacceptable due to the proximity of the residential towers. The Department requires a conference call to further discuss these issues.

Response: Based on the results of discussions with the Department, the site-specific acceptable air concentration (AAC) for hexavalent chromium in air will be 487  $\text{ng}/\text{m}^3$  based on a non-carcinogenic endpoint within a 225 work-day duration of intrusive remediation activities. Compliance with the AAC during the duration of remediation activities will be based on the results of daily 8-hour TWA analysis for hexavalent chromium in air using a project duration (225 work days) average. The average will be periodically evaluated and communicated to the Department to assess compliance on a 30/60/90-day and project-to-date rolling average. Should the project duration exceed 225 work days due to schedule delays or other unforeseen conditions, the AAC will be recalculated using a carcinogenic endpoint.

***Adequacy of Response: The response is incomplete as stated. When approximately 9-10 months of project time have elapsed, the Department will evaluate whether the proposed project schedule is on track, or if additional project time will be required due to schedule delays or other unforeseen conditions. A new project schedule will be developed at this time, based upon production rates of activities to date. If this new***

*project schedule extends beyond 225 intrusive activity days, PPG must calculate and measure against a carcinogenic endpoint AAC based upon the revised duration of intrusive activity. PPG will then be required to comply with one of the following:*

- 1. If project-to-date average AAC concentrations are below the calculated carcinogenic exposure AAC, and it appears that PPG can continue to operate within the average limit of the carcinogenic exposure AAC, PPG can continue to perform remediation activities without a change in operations.*
- 2. If project-to-date average AAC concentrations exceed the calculated carcinogenic exposure AAC, or it appears that continued operations might cause the carcinogenic exposure AAC to be exceeded prior to the completion of the remediation, PPG must implement additional engineering controls, including the installation of a negative-pressure enclosure around all remaining intrusive activities, to eliminate potential dust exposure to the residential population at the site.*

Section-Specific Comment 89 - PERIMETER AIR MONITORING PLAN, Section 2.5: The proposed PAMP does not indicate the use of exclusion zone perimeter monitoring or any other means of an “early warning” indicator. This is unacceptable. An exclusion zone monitoring system, best management work practices, or other engineering controls shall be included in the PAMP. The reliance upon a hand-held portable monitor (as indicated in the last paragraph of Section 2.4) as the sole exclusion zone monitoring system is unacceptable. Exclusion zone monitoring shall be employed for each work area, and supplemented with hand-held monitoring devices.

Response: Due to the close proximity of the excavation zones with the construction area barriers and the proximity of the residents at the site, there is little or no buffer zone. A revised air monitoring program has been developed that includes consideration of both ground level and elevated sampling at the perimeter of the construction area. The revised air monitoring program will also include continuous real-time PM10 monitoring using hand-held instruments near the excavations to allow proactive dust control to be implemented and to verify that dust control measures are being successful in controlling dust levels to be below the allowable limits at and above the construction area.

**Adequacy of Response:** *This will be evaluated upon submission of revised monitoring location figures (refer to Comment 102). Also see evaluation of adequacy of response to General Comment 4.*

Section-Specific Comment 96 - PERIMETER AIR MONITORING PLAN, Section 3.2: The PAMP indicates that integrated samples will be collected over a 24-hour period. However, this is not adequately representative of actual site conditions during the period of highest potential for exposure (the actual work day). Integrated sample collection shall be performed only during the work day at the perimeter monitoring locations. Consistent with the air monitoring/sampling practices implemented at Garfield Avenue, PPG shall deploy a minimum of one to two separate air monitoring stations specifically to collect 24-hour samples. Additionally, a turn-around-time (TAT) of 14 days for hexavalent chromium samples is unacceptable; a shorter TAT is required.

Response: Integrated samples for Cr+6 will be obtained daily from each sampling location during the planned eight-hour workday. Twenty-four (24-hour) integrated sampling for Cr+6 is not being proposed at this site. A 7-day turnaround time (TAT) will be utilized for all Cr+6 air data.

***Adequacy of Response: The sampling frequency, including 24-hour sampling, must be consistent with what is being performed at the Garfield Avenue Group of sites. However, due to the proximity of residents to the planned excavation area, a TAT of 7 days is being required for this site. Note that the PAMP QAPP must be updated to incorporate these changes, including addressing the inconsistent references to PAH analysis.***

Section-Specific Comment 97 - PERIMETER AIR MONITORING PLAN, Section 4: Section 4.0 provides a text overview of personnel on-site responsible for implementation of the PAMP, but is unclear. An organizational chart shall be provided to better define roles and responsibilities of site personnel responsible for implementation of the PAMP and for dust control and response actions.

Response: The text of this section will be revised to better define roles and responsibilities of personnel responsible for implementation of the PAMP. An organizational chart will be provided for clarification.

***Adequacy of Response: The response is adequate, provided an updated organizational chart (Figure 3 of the PAMP) is provided prior to site mobilization.***

Section-Specific Comment 102 - PERIMETER AIR MONITORING PLAN, Figure 2: The figure provides an overview of proposed perimeter air monitoring station locations. The use of 4 air monitoring stations during work in Layout Area 1 does not adequately provide coverage for residents of Metropolis Towers or the general public beyond the site perimeter along Marin Boulevard (north/northwest of the work area). Similarly, the proposed air monitoring station locations for Layout Areas 2 and 3 do not provide adequate coverage if work is not being performed concurrently. Air monitoring should be provided not just for the perimeter of the property, but also for each individual remedial area (e.g., A, B, C...), as well as near any active residential entrances.

Based upon the number and placement of air monitoring stations as provided in Figure 2, there is no mechanism place to evaluate for potential fugitive dust emissions where excavation extends to the buildings (Remedial Areas A, C South, D and E). Engineering controls or other methods must be utilized to monitor fugitive dusts and prevent particulate matter from impacting the building exteriors accessible to residents (such as windows and balconies in each apartment which may overlook a work area). See General Comment 4. The Department requires a conference call to further discuss these issues.

Response: Figure 2 will be revised to provide additional monitoring stations along the perimeter of each remedial area and building entrances. Air monitoring stations will be moved throughout the excavation and placed around the remedial areas that are being excavated at that time.

Building entrances and balconies will be monitored. Real-time particulate and integrated air monitoring stations will be placed within 20 feet of entrances on the ground level. Elevated air monitoring stations will be anchored to a pulley system on the roof of the building. Air monitors will be mounted at the top of the building, at mid-building height and at the height of the first balconies.

***Adequacy of Response: No air monitoring stations are shown for Area F1. Please provide updated figures which specify air monitoring location placement on separate figures for each layout area.***

If you have any questions regarding this matter, contact me at (609) 984-2905.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tom Cozzi", is centered on the page.

Thomas J. Cozzi, Assistant Director  
Site Remediation DEP

C: Brian McPeak, Project Manager  
Dave Doyle, DEP



**New Jersey Department of Environmental Protection**  
Site Remediation Program

**RECEPTOR EVALUATION (RE) FORM**

Date Stamp  
(For Department use only)

**SECTION A. SITE**

Site Name: \_\_\_\_\_

Program Interest (PI) Number(s): \_\_\_\_\_

Case Tracking Number(s) for this submission: \_\_\_\_\_

**This form must be attached to the Cover/Certification Form  
if not submitted through a Remedial Phase Online Service**

**Indicate the type of submission:**

Initial RE Submission

Updated RE Submission

Indicate the reason for submission of an updated RE form

Submission of an Immediate Environmental Concern (IEC) source control report;

Submission of a Remedial Investigation Report;

Submission of a Remedial Action Report;

Check if included in updated RE

The known concentration or extent of contamination in any medium has increased;

A new AOC has been identified;

A new receptor is identified;

A new exposure pathway has been identified.

**SECTION B. ON SITE AND SURROUNDING PROPERTY USE**

1. Identify any sensitive populations/uses that are currently on-site or surrounding property usage within 200 feet of the site boundary (check all that apply):

	On-site	Off-site
None of the following .....	<input type="checkbox"/>	<input type="checkbox"/>
Residences or residential property .....	<input type="checkbox"/>	<input type="checkbox"/>
Public or Private Schools grades K-12 .....	<input type="checkbox"/>	<input type="checkbox"/>
Child care centers .....	<input type="checkbox"/>	<input type="checkbox"/>
Public parks, playgrounds or other recreation areas .....	<input type="checkbox"/>	<input type="checkbox"/>
Other sensitive population use(s) Explain _____	<input type="checkbox"/>	<input type="checkbox"/>

If any of the above applies, attach a list of addresses, facility names, type of use, and a map depicting each location relative to the site. **See Attachment A-1**

2. Current site uses (check all that apply):

- |   |                                       |   |                                       |
|---|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Industrial           | <input type="checkbox"/> Residential  | <input type="checkbox"/> Commercial               | <input type="checkbox"/> Agricultural |
| <input type="checkbox"/> School or child care | <input type="checkbox"/> Government   | <input type="checkbox"/> Park or recreational use |                                       |
| <input type="checkbox"/> Vacant               | <input type="checkbox"/> Other: _____ |   |                                       |

3. Planned future site uses and off-site use within 200 ft of site boundary (check all that apply):

- |   |                                       |   |                                       |
|---|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Industrial           | <input type="checkbox"/> Residential  | <input type="checkbox"/> Commercial               | <input type="checkbox"/> Agricultural |
| <input type="checkbox"/> School or child care | <input type="checkbox"/> Government   | <input type="checkbox"/> Park or recreational use |                                       |
| <input type="checkbox"/> Vacant               | <input type="checkbox"/> Other: _____ |   |                                       |

Provide a map depicting the location of the proposed changes in land use.

**SECTION C. DESCRIPTION OF CONTAMINATION**

1. Identify if any of the following exist at the site (check all that apply):
- Free product [N.J.A.C. 7:26E-1.8] identified is  LNAPL\* or  DNAPL\*\*. Date identified: \_\_\_\_\_
  - Residual product [N.J.A.C. 7:26E-1.8]
  - Other high concentration source materials not identified above (e.g., buried drums, containers, unsecured friable asbestos)
- Explain: \_\_\_\_\_
- \* LNAPL – measured thickness of .01 feet or more  
\*\*DNAPL – See [US EPA DNAPL Overview](#)
2. Soil Migration Pathway
- Has soil contamination been delineated to the applicable Direct Contact Soil Remediation Standard? .....  Yes  No
- Are all soils either below the applicable Direct Contact Criteria or under an institutional control (i.e. deed notice)? .....  Yes  No
3. If this evaluation is submitted with a technical document that includes contaminant summary information, proceed to Section D. Otherwise attach a brief summary of all currently available data and information to be included in the site investigation or remedial investigation report.

**SECTION D. GROUND WATER USE**

1. Has the requirement for ground water sampling been triggered?.....  Yes  No  Unknown  
If “No,” proceed to Section F. If “Unknown,” explain:  
\_\_\_\_\_
2. Is Ground water contaminated above the Ground Water Remediation Standards [N.J.A.C.7:9C]? .....  Yes  No  Unknown  
Or  Awaiting laboratory data with the expected due date: \_\_\_\_\_  
If “Yes,” provide the date that the laboratory data was available and confirmed contamination above the Ground Water Remediation Standards. Date: \_\_\_\_\_  
If “Unknown,” explain: \_\_\_\_\_  
If “No,” or awaiting laboratory data proceed to Section F.
3. Has ground water contamination been delineated to the applicable Remediation Standard? .....  Yes  No
4. Has a well search been completed? ..... [See Attachment B-1](#) .....  Yes  No  
Date of most recent or updated well search: \_\_\_\_\_  
Identify if any of the following conditions exist based on the well search [N.J.A.C.7:26E-1.14(a)] (check all that apply):
- Potable wells located within 500 feet from the downgradient edge of the currently known extent of contamination.
  - Potable well located 250 feet upgradient or 500 feet side gradient of the currently known extent of contamination.
  - Ground water contamination is located within a Tier 1 wellhead protection area (WHPA).
5. Is a completed Well Search Spreadsheet or historical well search table attached and has an electronic copy of the spreadsheet been submitted to [srpgis\\_wrs@dep.state.nj.us](mailto:srpgis_wrs@dep.state.nj.us). .....  Yes  No  
If “No,” explain: \_\_\_\_\_
6. Are any private potable or irrigation wells located within ½ mile of the currently known extent of contamination? .....  Yes  No  
If “Yes,” was a door to door survey completed? .....  Yes  No  
If survey was not completed explain: \_\_\_\_\_
7. Has sampling been conducted of  potable well(s) and /or  non-potable use well(s)?.....  Yes  No  
If “No,” provide justification then proceed to Section E.  
\_\_\_\_\_

- 8 Has contamination been identified in potable well(s) above Ground Water Remediation Standards that is not suspected to be from the site? (If "Yes," provide justification) .....  Yes  No
- 
- 9 Has contamination been identified in potable well(s) that is above the Ground Water Remediation Standards or Federal Drinking Water Standards? .....  Yes  No
- Provide date laboratory data was received: \_\_\_\_\_
- Or  awaiting laboratory data with the expected due date: \_\_\_\_\_
- If "Yes" for potable well contamination **not attributable to background**, follow the IEC Guidance Document at <http://www.nj.gov/dep/srp/guidance/index.html#iec> for required actions and answer the following:
- Has an engineered system response action been completed on all receptors? .....  Yes  No
- Provide a brief narrative description:
- Date completed: \_\_\_\_\_ NJDEP Case Manager: \_\_\_\_\_
10. Were Non-potable use well(s) sampled and results were above Class II Ground Water Remediation Standards? .....  Yes  No
- Provide date laboratory data was received: \_\_\_\_\_
- Or  awaiting laboratory data with the expected due date: \_\_\_\_\_
11. Has the ground water use evaluation been completed? .....  Yes  No

**SECTION E. VAPOR INTRUSION (VI)**

1. Contaminants present in ground water exceed the Vapor Intrusion Ground Water Screening Levels that trigger a VI evaluation. (see NJDEP Vapor Intrusion Technical Guidance). ...  Yes  No  Unknown
- Or  Awaiting laboratory data and the expected due date: \_\_\_\_\_
- Provide the date that the laboratory data was available and confirmed contamination above the Vapor Intrusion Trigger Levels. Date: \_\_\_\_\_
2. Other existing conditions that trigger a VI evaluation. (see NJDEP Vapor Intrusion Technical Guidance)
- Wet basement or sump containing free product or ground water containing volatile organics
  - Methane generating conditions causing oxygen deficient or explosion concern
  - Other human or safety concern from the VI pathway (i.e. elemental mercury, unsaturated contamination, elevated soil gas or indoor vapor (explain):

If you answered "No," or awaiting laboratory data to Question 1., *and* did not check any boxes in Question 2, proceed to Section F, "Ecological Receptors", otherwise complete the rest of this section.

3. Has ground water contamination been delineated to the applicable Ground Water Vapor Screening Level? .....  Yes  No
4. Was a site specific screening level, modeling or other alternative approach employed for the VI pathway? .....  Yes  No
5. Identify and locate on a scaled map any buildings/sensitive populations that exist within the following distances from ground water contamination with concentrations above the Vapor Intrusion Ground Water Screening Levels or specific threats (check all that apply):
- 30 feet of petroleum free product or dissolved petroleum hydrocarbon contamination in ground water
  - 100 feet of any non-petroleum free product or any non-petroleum dissolved volatile organic ground water contamination
  - No buildings exist within the specified distances
6. The vapor intrusion pathway is a concern at or adjacent to the site (if "No," attach justification) .....  Yes  No



7. Has soil gas sampling of the building(s) been conducted? .....  Yes  No  N/A  
If "No," or "N/A," proceed to #12
8. Has indoor air sampling been conducted at the identified building(s)? .....  Yes  No  
If "No," proceed to #12
9. Has indoor air contamination been identified but not suspected to be from the site?  
(if "Yes," attach justification) .....  Yes  No
10. Indoor air results were above the NJDEP's Rapid Action Levels. ....  Yes  No  
Provide the date that the laboratory data was available. Date: \_\_\_\_\_  
Or  Awaiting laboratory data with the expected due date: \_\_\_\_\_  
**If "Yes" to #10 above, follow the IEC Guidance Document at**  
<http://www.nj.gov/dep/srp/guidance/index.html#iec> **for required actions.**  
The IEC engineering system response for control was implemented for all  
identified structures .....  Yes  No  
Date: \_\_\_\_\_ NJDEP Case Manager: \_\_\_\_\_
11. Indoor air sampling was conducted and results were above the NJDEP's Indoor Air Screening  
Levels but at or below the Rapid Action Levels .....  Yes  No  
Provide the date that the laboratory data was available. Date: \_\_\_\_\_  
Or  Awaiting laboratory data with the expected due date: \_\_\_\_\_  
**If "Yes" to #11 above, answer the following:**  
Has the Vapor Concern (VC) Response Action Form notifying the NJDEP of the exceedances  
been submitted? .....  Yes  No  
Date: \_\_\_\_\_  
Has a plan to mitigate and monitor the exposure been submitted? .....  Yes  No  
Date: \_\_\_\_\_  
Has the Mitigation Response Action Report been submitted? .....  Yes  No  
Date: \_\_\_\_\_
12. Has the vapor intrusion investigation been completed? .....  Yes  No  
If "No", is the vapor intrusion investigation stepping out as part of the site  
investigation or remedial investigation. (If "No," attach justification) .....  Yes  No

**SECTION F. ECOLOGICAL RECEPTORS**

1. Has an Ecological Evaluation (EE) has been conducted? [N.J.A.C. 7:26E-1.16] .....  Yes  No  
Date conducted: \_\_\_\_\_
2. Do the results of an EE trigger a remedial investigation of ecological receptors? [N.J.A.C. 7:26E-4.8] .....  Yes  No
3. Has a remedial investigation of ecological receptors been conducted? .....  Yes  No  
Date conducted: \_\_\_\_\_
4. Provide the following information for any surface water body on or within 200 feet of the site:

Surface Water Body Name	Stream Classification	Antidegradation Designation	Trout Production	Trout Maintenance
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

5. Does the site contain any features regulated by the Land Use Regulation Program (LURP)?  
(e.g. wetlands, flood hazard area, tidelands, etc.) .....  Yes  No  
If "Yes," identify the type(s) of features: \_\_\_\_\_

6. Have any formal LURP jurisdiction letters or approvals been issued for the site? .....  Yes  No  
If "Yes," what is the LURP Program Interest (PI) number(s) for the site? \_\_\_\_\_

7. Have any applications for formal LURP jurisdiction letters or approvals been submitted the NJDEP? .....  Yes  No  
If "Yes," what is the LURP Program Interest (PI) number(s) for the site? \_\_\_\_\_

8. Is free product or residual product located within 100 feet from an ecological receptor? .....  Yes  No

9. Does available data indicate an impact on Ecological receptor(s), Surface water, or Sediment? .....  Yes  No  
If "Yes,"

a) Check all that apply:

Ecological receptor(s)     Surface water     Sediment

b) Submit with this evaluation either a technical document that includes contaminant summary information, or a description of the type of contamination, a schedule, and a description of all actions to be taken to mitigate exposure.

Completed forms should be sent to the municipal clerk, designate health department, and:

Bureau of Case Assignment & Initial Notice  
Site Remediation Program  
NJ Department of Environmental Protection  
401-05H  
PO Box 420  
Trenton, NJ 08625-0420

**Attachment A-1**

**List and Map of Properties Within 200 feet of Site**

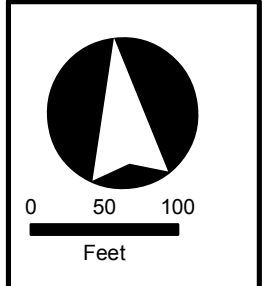
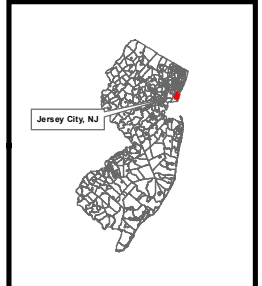
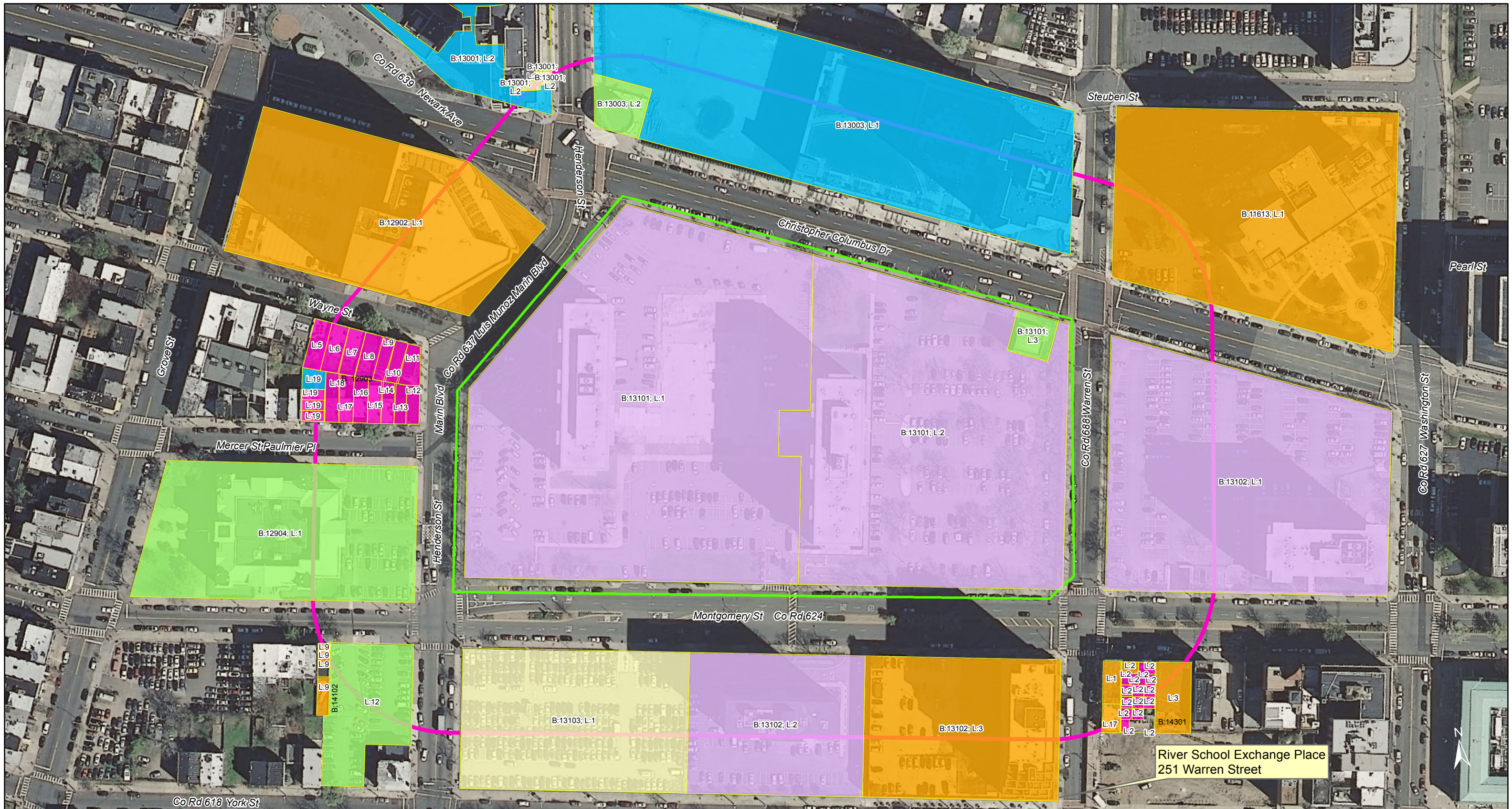
**Table A-1**  
**List of Properties Within 200-feet of Site**

<b>Sensitive Properties within 200 Feet of Site</b>									
<b>MUN</b>	<b>BLOCK</b>	<b>LOT</b>	<b>PROPERTY CLASS</b>	<b>PROPERTY LOCATION</b>	<b>OWNER</b>	<b>STREET</b>	<b>CITY, STATE</b>	<b>ZIP CODE</b>	
906	13001	2	1 Vacant	102 COLUMBUS DR.	VARIOUS OWNERS	102 COLUMBUS DR.	JERSEY CITY, NJ	07302	
906	13103	1	1 Vacant	155 MONTGOMERY ST.	EDISON MONTGOMERY, LLC	100 WASHINGTON ST.	NEWARK, NJ	07102	
906	12903	10	2 Residential	5 WAYNE ST.	JADHAV, ANIRUDHA	5 WAYNE ST.	JERSEY CITY, N.J.	07302	
906	12903	11	2 Residential	3 WAYNE ST.	MEHTA, PUNEET & SONPREET	3 WAYNE ST.	JERSEY CITY, N.J.	07302	
906	12903	12	2 Residential	2 MERCER ST.	MCCORKLE, DEVON J.	2 MERCER STREET	JERSEY CITY, N.J.	07302	
906	12903	13	2 Residential	4 MERCER ST.	CAPRIHOUSE LLC.	4111 QUEENS BLVD	SUNNYSIDE, N.Y.	11104	
906	12903	14	2 Residential	4.5 MERCER STREET	WOODS, TONY & TRAIKOS, STEPHANIE	4.5 MERCER ST.	JERSEY CITY, NJ	07302	
906	12903	15	2 Residential	6 MERCER ST.	COCKRELL, CURTIS & SANDRA	6 MERCER STREET	JERSEY CITY, N.J.	07302	
906	12903	16	2 Residential	8 MERCER ST.	DESTIN, ANNA V.	8 MERCER ST.	JERSEY CITY, N.J.	07302	
906	12903	17	2 Residential	10 MERCER ST.	RAMOS, ANTHONY & NANCY	10 MERCER ST.	JERSEY CITY, N.J.	07302	
906	12903	18	2 Residential	12 MERCER ST.	LEE, JAY & WU, JENNY	640 OVERHILL ROAD	SOUTH ORANGE, NJ	07079	
906	12903	19	2 Residential	14 MERCER ST.	ZHANG, NING & YU, LU	14 MERCER ST. #3	JERSEY CITY, N.J.	07302	
906	12903	19	2 Residential	14 MERCER ST.	SAVOV, PAVLIN & MARGARITA	14 MERCER STREET #2	JERSEY CITY, N.J.	07302	
906	12903	19	2 Residential	14 MERCER ST.	DARSNEY, BENJAMIN & NICOLE	14 MERCER STREET #1	JERSEY CITY, N.J.	07302	
906	12903	5	2 Residential	15 WAYNE ST.	WANG, CASEY & XIE, CHENYUE	227 8TH ST #1	JERSEY CITY, NJ	07302	
906	12903	6	2 Residential	13 WAYNE ST.	MAI, WENDY	13 WAYNE ST.	JERSEY CITY, N.J.	07302	
906	12903	7	2 Residential	11 WAYNE ST.	GHOUSIA, LLC %DATA REALTY,LLC	250 NEWARK AVENUE	JERSEY CITY, N.J.	07302	
906	12903	8	2 Residential	9 WAYNE ST.	FREMANTLE URF LLC %DIXON ADVISORY	1000 PLAZA TWO, 10 FL	JERSEY CITY, NJ	07311	
906	12903	9	2 Residential	7 WAYNE ST.	7 WAYNE ST.,LLC	7 WAYNE ST.	JERSEY CITY, N.J.	07302	
906	14301	2	2 Residential	99 MONTGOMERY ST.	VARIOUS OWNERS		JERSEY CITY, NJ	07302	
906	13101	1	4C Apartment/cooperative	280 GREGORY PARK PLAZA	METROPOLIS TOWERS APT. CORP. MGT.	280 GREGORY PARK PLAZA	JERSEY CITY, NJ	07302	
906	13101	2	4C Apartment/cooperative	270 GREGORY PARK PLAZA	METROPOLIS TOWERS APT. CORP. MGT.	280 GREGORY PARK PLAZA	JERSEY CITY, NJ	07302	
906	13102	1	4C Apartment/cooperative	100 MONTGOMERY ST.	PH RESIDENTIAL OWNER LLC See Note 1	7 THOMAS DRIVE	CUMBERLAND FORESIDE, M.E.	04110	
906	13102	2	4C Apartment/cooperative	95 MONTGOMERY ST.	See Note 2				
<b>Other Properties within 200 Feet of Site</b>									
906	11613	1	4A Commercial	1 EVERTRUST PLAZA	EVERGREEN AMERICA CORPORATION	ONE EVERTRUST PLAZA	JERSEY CITY, N.J.	07302	
906	12902	1	4A Commercial	95 COLUMBUS DR.	WELLS REIT II-INT'L FNCL TW%M. CALI	P.O. BOX 56607	ATLANTA,GA	30343	
906	13102	3	4A Commercial	75 MONTGOMERY ST.	See Note 3				
906	14102	9	4A Commercial	183 MONTGOMERY ST.	VANTAGE PROPERTIES 183,LLC	183 MONTGOMERY ST.	JERSEY CITY, N.J.	07302	
906	14301	1	4A Commercial	103 MONTGOMERY ST.	CP3, INC. % ALAN LAU	270 MARIN BLVD., #10E	JERSEY CITY, NJ	07302	
906	14301	17	4A Commercial	260-262 WARREN ST.	CP3, INC. % ALAN LAU	270 MARIN BLVD., #10E	JERSEY CITY, NJ	07302	
906	14301	2	4A Commercial	99 MONTGOMERY ST.	MONTGOMERY PEDIATRIC & DENTAL, LLC	99 MONTGOMERY ST. COM. 1	JERSEY CITY, NJ	07302	
906	14301	3	4A Commercial	95 MONTGOMERY ST.	95 MONTGOMERY,LLC%POINT CAP.DEV.LLC	PO BOX 4	JERSEY CITY, NJ	07303	
906	12904	1	15C Exempt Public	280 GROVE STREET	CITY OF JERSEY CITY	280 GROVE ST.	JERSEY CITY, NJ	07302	
906	13003	2	15C Exempt Public	90 COLUMBUS DR.	PORT AUTHORITY TRANS-HUDSON CORP.	225 PARK AVE., 15TH FLR	NEW YORK, NJ	10006	
906	13101	3	15C Exempt Public	COLUMBUS DR.	PORT AUTHORITY TRANS-HUDSON CORP	225 PARK AVE., 15TH FLR	NEW YORK, NY	10006	
906	14102	12	15C Exempt Public	179 MONTGOMERY ST.	CITY OF JERSEY CITY	280 GROVE ST.	JERSEY CITY, N.J.	07302	
906	12903	19	15F Exempt Miscellaneous	14 MERCER ST.	14 MERCER ST.CONDOMINIUM ASSOCIATIO	14 MERCER ST.	JERSEY CITY, NJ	07302	
906	13001	2	15F Exempt Miscellaneous	100-102 COLUMBUS DR.	GROVE POINTE COMMUNITY ASSOCIATION	P.O. BOX 6872	BRIDGEWATER, NJ	08807	
906	13003	1	15F Exempt Miscellaneous	50 COLUMBUS DR.	100 COLUMBUS CONDO.OWNER'S ASSOC.,	50 WASHINGTON ST.	HOBOKEN, NJ	07030	
906	14301	2	15F Exempt Miscellaneous	99 MONTGOMERY ST.	99 MONTGOMERY ST.CONDOMINIUM ASSOC.	99 MONTGOMERY ST.	JERSEY CITY, NJ	07302	

1. In <http://tax1.co.monmouth.nj.us>, the property location is 8 HORIZON WAY ST. and the lot is 1.01.

2. In [www.njtaxrecords.net](http://www.njtaxrecords.net), the block is 14301 and the lot is 3 for this property location.

3. In [www.njtaxrecords.net](http://www.njtaxrecords.net), the block is 14301 and the lot is 7 for this property location.



- Site Boundary
- 200 ft Buffer
- Parcels within 200ft of Site Boundary
- 1 Vacant
- 2 Residential
- 4A Commercial
- 4C Apartment/Cooperative
- 15C Exempt Public
- 15F Exempt Miscellaneous

Receptors Evaluation - Land Use			
Hudson County Chromate 156 Metropolis Towers Jersey City, New Jersey			
SCALE:	DATE:	PROJECT NUMBER:	PATH AND FILE NAME:
1:1,565	8/8/2017	60290456	F:\Projects\PPGSITE 156 - METRO TOWERS\7-Deliverables\7.2-Reports-Drafts\2017_08 RAR\Appendices\C Forms\3 RE Form\A Parcels Map.mxd

**AECOM**

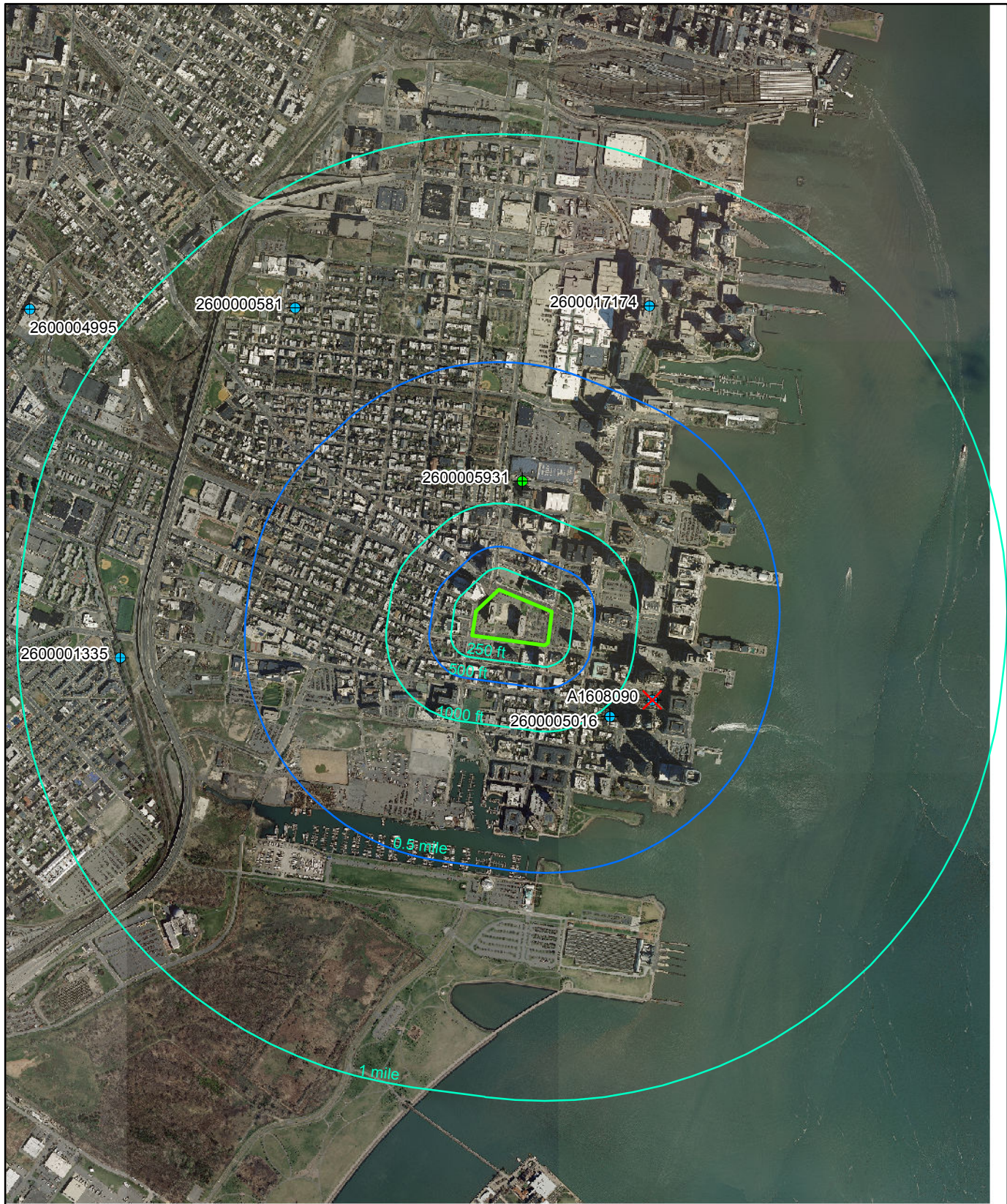
**AECOM Environment**  
 30 KNIGHTSBRIDGE ROAD, SUITE 520  
 PISCATAWAY, NJ 08854  
 PHONE: (732) 564-3200  
 FAX: (732) 369-0122  
 WEB: [HTTP://WWW.AECOM.COM](http://www.aecom.com)

FIGURE NUMBER:  
**A-1**

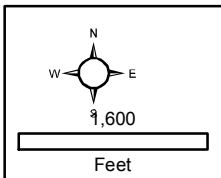
SHEET NUMBER:  
1 of 1

**Attachment B-1**

**Results of Well Search**



Permit numbers are shown.



**Figure B-1**  
**Well Locations**

**Hudson County Chromate 156**  
**Metropolis Towers**  
**Jersey City, New Jersey**

8/8/17

- + Industrial
- + Public Non-Community
- X Decommissioning

<b>SITE NAME</b>	Hudson County Chromate 156	
<b>SITE STREET ADDRESS</b>	270-280 Luis Munoz Marin Blvd	
<b>SITE COUNTY (select)</b>	Hudson	
<b>SITE MUNICIPALITY (select)</b>	Jersey City	
<b>PROGRAM INTEREST (PI) ID # :</b>	G000008770	
<b>SOURCE COORDINATE X</b>		619397
<b>SOURCE COORDINATE Y</b>		686772
<b>GROUNDWATER FLOW DIRECTION USED (if any)</b>		
<b>WERE APPLICABLE WELL TYPES FOUND? (Yes/No)</b>	Yes	
<b>IS THIS SUBMISSION AN UPDATE? (Yes/No)</b>	Yes	
<b>AUTHOR (name of company)</b>	AECOM	
<b>AUTHOR STREET ADDRESS (include town and zip code)</b>	30 Knightsbridge Road, Suite 520	
<b>LSRP LICENSE NUMBER OVERSEEING WORK</b>	Piscataway, NJ 08854	
<b>LSRP NAME OVERSEEING WORK</b>	Not Available - Direct Oversight	
<b>PROFESSIONAL WHO PREPARED SUBMISSION</b>	Claire Hunt	
<b>EMAIL CONTACT</b>	<a href="mailto:claire.hunt@aecom.com">claire.hunt@aecom.com</a>	
<b>PHONE CONTACT</b>	845-425-4980	



Download_ Document	Permit_Number	Well_Use	Potentially _Potable	Document	Date (permitted/drilled	Physical_Address	County	Municipality	Block	Lot	Location_Method
	A1608090	Industrial	Yes	Decommissioning	9/16/2016	99 Hudson St	Hudson	Jersey City	14507	1	GPS
	2600001335	Industrial	Yes	Record	4/18/1956	GRAND STREET	Hudson	Jersey City			Prop Loc - Dig Image
	2600000581	Industrial	Yes	Permit	11/5/1952		Hudson	Jersey City			Prop Loc - Hard Copy
	2600000581	Industrial	Yes	Record	12/9/1952	9TH STREET	Hudson	Jersey City			Prop Loc - Dig Image
	2600005016	Industrial	Yes	Permit	3/5/1981		Hudson	Jersey City	36	1A	Prop Loc - Hard Copy
	2600004995	Industrial	Yes	Record	3/31/1981	BALDWIN AVENUE	Hudson	Jersey City	1880	12B	Prop Loc - Dig Image
	2600005931	Public Non-Community	Yes	Permit	12/7/1982		Hudson	Jersey City	2L15	1507	Prop Loc - Hard Copy
	2600017174	Industrial	Yes	Permit	8/25/1989		Hudson	Jersey City	20	2.1	Prop Loc - Hard Copy
	2600017174	Industrial	Yes	Record	1/18/1990	111 PAUONIA AVENUE	Hudson	Jersey City	20	2.1	Prop Loc - Dig Image

Search Date: 6/10/2018

Download_	Permit_Number	Easting_X	Northing_Y	Distance _(feet)	Depth (feet)	Capacity (gal/min)	COORD_ METHOD	TOP_OPEN _INT	BOT_OPE N_INT	STATIC _LEVEL	STATUS	WELL_SAMPLED?
	A1608090	621091	685833	1936.84								
	2600001335	614920	686324	4499.63	335	0						
	2600000581	617488	690992		100	125						
	2600000581	616952	690382	4359.86	99	0						
	2600005016	620596	685645		200	65						
	2600004995	613873	690366	6590.55	1000	0						
	2600005931	619580	688372		200	8						
	2600017174	621568	691013		1000	150						
	2600017174	621058	690403	3993.26	1000	0						

Search Date: 6/10/2018



**New Jersey Department of Environmental Protection**  
**Site Remediation Program**

**FULL LABORATORY DATA DELIVERABLES FORM**

LSRP     Subsurface Evaluator    **Direct Oversight**

Date Stamp  
 (For Department use only)

**SECTION A. SITE NAME AND LOCATION**

Site Name: Hudson County Chromate Site 156  
 List all AKAs: HCC Site 156; Metropolis Towers; Gregory Park Apartments; 270 Henderson St.; 280 Gregory Park Plaza  
 Street Address: 270-280 Luis Munoz Marin Blvd (aka 270-280 Henderson Street)  
 Municipality: Jersey City (Township, Boro or City)  
 County: Hudson Zip Code: 07302  
 Program Interest (PI) Number(s): G000008770 Case Tracking Number(s): 104063

**SECTION B. NJDEP CASE MANAGER**

Do you have an assigned Case Manager?.....  Yes     No  
 If "Yes," please list the Case Manager: David Doyle

**SECTION C. REMEDIAL PHASE**

Immediate Environmental Concern     Preliminary Assessment Report  
 Site Investigation Report     Remedial Investigation/Remedial Action Work Plan  
 Remedial Action Report     Response Action Outcome

**SECTION D. Matrix Type/Analysis and Number of Samples**

Potable Well Water .....# of samples: \_\_\_\_\_ Sampling Date: \_\_\_\_\_  
 Analytical Method(s) \_\_\_\_\_  
 Indoor Air.....# of samples: \_\_\_\_\_ Sampling Date: \_\_\_\_\_  
 Analytical Method \_\_\_\_\_  
 Polychlorinated dibenzo-p-dioxins/polychlorinated dibenzofurans # of samples: \_\_\_\_\_ Sampling Date: \_\_\_\_\_  
 Analytical Method \_\_\_\_\_ 10/27/1992-10/17/2017  
 Hexavalent chromium soil sample .....# of samples: 1994 Sampling Date: \_\_\_\_\_  
 Analytical Method SW 846 Methods 3060/7196A  
 Other \_\_\_\_\_ # of samples: \_\_\_\_\_ Sampling Date: \_\_\_\_\_  
 Analytical Method \_\_\_\_\_  
 Other \_\_\_\_\_ # of samples: \_\_\_\_\_ Sampling Date: \_\_\_\_\_  
 Analytical Method \_\_\_\_\_  
 Other \_\_\_\_\_ # of samples: \_\_\_\_\_ Sampling Date: \_\_\_\_\_  
 Analytical Method \_\_\_\_\_

**SECTION E. GENERAL**

1. Was a full laboratory data deliverables package provided?.....  Yes     No \*  
 2. Was a certified laboratory(s) used for the analyses? .....  Yes     No  
 Provide name of laboratory(s): Accutest, ChemTech, Hampton Clarke Veritech, Columbia Analytical Services  
 3. Were data summaries provided for all samples? .....  Yes     No \*  
 4. Were electronic deliverables submitted?.....  Yes     No  
 5. For air sample data, were the TO-15 Conversion Tables (hit-lists) provided on disc in the N/A  
 appropriate Excel format pursuant to the VIG? .....  Yes     No

**Section F. Data Quality Assurance/Quality Control**

1. Were the appropriate sample preservation requirements met? .....  Yes  No  
2. Were appropriate sample holding times (for both extraction/sample preparation and analysis) met? .....  Yes  No  
If "No," provide a brief explanation.

See Remedial Action Report Section 6.6 and Appendix L.

3. Were the samples diluted? .....  Yes  No  
Indicate the identity of the samples and why.

The samples included in the remedial action report (RAR) include all remedial investigation samples. Some soil samples were diluted because of elevated hexavalent chromium concentrations.

4. If applicable, did sample dilutions result in elevated reporting limits that exceed applicable standards?..  Yes  No  
If "Yes," list the affected samples.

5. Were any applicable standards exceeded for any samples? .....  Yes  No  
If "Yes," include the number of samples and laboratory sample identification numbers.

156-B74G\_13.5-14.0, 766434  
WC-PS3-1E-S01-17.0-17.5, JC40543-2R  
WC-LB3D-8.0-13.0, JC42024-5

6. Were the laboratory reporting limits below the applicable remediation standards/criteria required for the site? .....  Yes  No  
If "No," provide a brief explanation of action taken.

7. Were qualifications noted in the non-conformance summary? .....  Yes  No  
Provide a brief explanation.

See the data validation reports in Remedial Action Report Appendix M.

8. Were qualified data used? .....  Yes  No  
9. Were rejections noted in the non-conformance summary? .....  Yes  No  
Provide a brief explanation.

See Remedial Action Report Section 6.6 and Appendix M.

10. Were rejected data used? .....  Yes  No

If "Yes," please indicate reasons rejected data were used:

- For Hex Chrome, data were rejected because spike recovery was less than 50%.
- Data were rejected due to missing deliverables.
- Data were rejected but an applicable standard exceedance exists.
- Data were rejected in an early phase of a remediation; however, additional sampling and analysis are scheduled to be performed.
- Other reasons not noted directly above. Explain:

11. Were the quality control criteria associated with the compounds of concern at the site met? .....  Yes  No

12. Were the QC Summary Forms reviewed? .....  Yes  No

13. Surrogate recoveries acceptable ~~Not Applicable to hexavalent chromium (Cr<sup>+6</sup>)~~ .....  Yes  No

14. Internal Standards acceptable ~~Not Applicable to hexavalent chromium (Cr<sup>+6</sup>)~~ .....  Yes  No

15. MS/MSDs acceptable .....  Yes  No

16. Tune summaries acceptable ~~Not Applicable to hexavalent chromium (Cr<sup>+6</sup>)~~ .....  Yes  No

17. Calibration summaries acceptable .....  Yes  No

18. Serial dilutions acceptable ~~Not Applicable to hexavalent chromium (Cr<sup>+6</sup>)~~ .....  Yes  No

19. Inorganic duplicates acceptable .....  Yes  No

20. LCS recovery acceptable .....  Yes  No

21. Other QC acceptable? .....  Yes  No

Provide a brief explanation if applicable:

Exceptions are noted the Appendix M data validation reports and in Section 6.6.2 for unvalidated data packages.

**SECTION G. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION**

Full Legal Name of the Person Responsible for Conducting the Remediation: PPG

Representative First Name: Mark Representative Last Name: Terril

Title: Corporate Director, Environmental Affairs

Phone Number: (412) 434-2708 Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

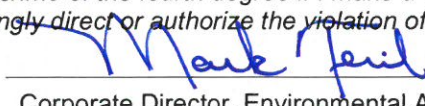
Mailing Address: 440 College Park Drive

City/Town: Monroeville State: PA Zip Code: 15146

Email Address: terril@ppg.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

*I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.*

Signature:  Date: July 13, 2018

Name/Title: Corporate Director, Environmental Affairs

**SECTION H. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT**

LSRP ID Number: \_\_\_\_\_  
First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Email Address: \_\_\_\_\_

This statement shall be signed by the LSRP who is submitting this notification in accordance with N.J.S.A. 58:10C-14, and N.J.S.A. 58:10B-1.3b(1) and (2).

*I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:*

**[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:**

- directly oversaw and supervised all of the referenced remediation, and/or*
- personally reviewed and accepted all of the referenced remediation presented herein.*

*I believe that the information contained herein, and including all attached documents, is true, accurate and complete.*

*It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.*

*My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.*

*I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.*

LSRP Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
LSRP Name/Title: \_\_\_\_\_  
Company Name: \_\_\_\_\_

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice  
Site Remediation Program  
NJ Department of Environmental Protection  
401-05H  
PO Box 420  
Trenton, NJ 08625-0420

**SECTION I. SUBSURFACE EVALUATOR UST REPORT CERTIFICATION FORM**

**Certification by the Subsurface Evaluator:**

*I certify under penalty of law that the work was performed under my oversight and I have reviewed the report and all attached documents, and the submitted information is true, accurate and complete in accordance with the requirements of N.J.A.C. 7:14B and N.J.A.C. 7:26E. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information including fines and/or imprisonment.*

Name: \_\_\_\_\_ UST Cert. No.: \_\_\_\_\_

Firm: \_\_\_\_\_ Firm's UST Cert. Number: \_\_\_\_\_

Firm Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Ext: \_\_\_\_\_ Fax: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice  
Site Remediation Program  
NJ Department of Environmental Protection  
401-05H  
PO Box 420  
Trenton, NJ 08625-0420