RONALD J. RICCIO SITE ADMINISTRATOR

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January 24, 2019

VIA FEDERAL EXPRESS AND EMAIL

The Honorable Jeffrey R. Jablonski, P.J. Ch. Superior Court of New Jersey Brennan Courthouse 583 Newark Avenue Jersey City, New Jersey 07306

Re: PROGRESS REPORT (August 1, 2018 through the date of this Report): New Jersey Department of Environmental Protection, et al. v. Honeywell International, Inc., et al. v. City of Jersey City, et al., Superior Court of New Jersey, Chancery Division, Hudson County, Civil Action No. HUD-C-77-05; Partial Consent Judgment Concerning the PPG Sites (the "JCO")

Dear Judge Jablonski:

I respectfully submit this Progress Report pursuant to my responsibilities as independent Site Administrator operating under the JCO. This Report covers the period August 1, 2018 through the date of this Report.

I submit this Progress Report pursuant to paragraph 1(b)(i)1 of the "Order Administratively Dismissing This Matter Without Prejudice and Retaining Jurisdiction" entered by Judge Sarkisian on May 4, 2016. That Order requires that I provide Progress Reports to the Court twice per year. This is my sixth Progress Report. The prior Progress Reports are dated July 29, 2016, January 27, 2017, July 28, 2017, January 30, 2018, and July 31, 2018.

In addition to serving as Site Administrator, I am also a Court-appointed Mediator pursuant to the February 22, 2016 "Order Referring Third-Party Complaint and Referring Certain Matters to Mediation and Entering Stay" (the "<u>Mediation Order</u>"). A summary of the progress of the Mediation is included in this Progress Report.

I. <u>New Master Schedule</u>: With the help and cooperation of all the JCO Parties¹ with me and my team, the Master Schedule dated July 31, 2018 was revised. A copy of the revised Master Schedule dated January 24, 2019 is enclosed.

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¹ For the purpose of this Report, the "JCO Parties" include PPG, the New Jersey Department of Environmental Protection ("NJDEP") and the City of Jersey City.

II. <u>IRM Inspection Program</u>: Inspections of all of the Interim Remedial Measures ("<u>IRMs</u>")² in place at the PPG Sites are performed at varying frequencies depending upon numerous factors, such as the levels of contamination, the potential for exposures, and the type of IRMs being utilized. The IRM inspections for the period covered by this Report confirmed that all of the IRMs remain effective.

III. Remediation Progress

Attached to the revised Master Schedule are <u>Figure 1</u> and <u>Figure 2</u>. These figures depict the "Garfield Avenue Group" of sites (the "<u>GAG Sites</u>"), the Garfield Avenue Group Phase 4 Roadways (the "<u>GAG Roadways</u>") and the Garfield Avenue Group Phase 5 – Off-Site Properties (the "<u>GAG Off-Site Properties</u>"). This section of the Progress Report is broken down into a discussion of the remediation progress at the GAG Sites, the GAG Roadways and the GAG Off-Site Properties. The last section of this Remediation Progress summary also addresses the "Non-GAG Sites," which include all PPG sites that are not GAG Sites, GAG Roadways or GAG Off-Site Properties.

The GAG Sites include the following parcels, broken down as "Phases," shown on <u>Figure 1</u> and <u>Figure 2</u>:

- Interim Remedial Measure (IRM) #1, located within Site 114;
- Phases 1A and 1B, considered the Southwest (SW) Area within Site 114;
- Phase 1C, located within Site 114;
- Phase 2A, located within Site 114, addressed under Public Service Electric and Gas Company's remedial action;
- Phase 2B, which includes Phases 2B-1 through 2B-4, located within Site 114;
- Phase 3A, which includes Site 132 and most of Site 143;
- Phase 3B North, which includes a portion of Site 132 and a portion of Site 137:
- Phase 3B South, which includes Site 133 West, a portion of Site 137, the former Fishbein property, the Ten West Apparel property, and a small portion of Halladay Street South; and
- Phase 3C, which includes Site 133 East, the remainder of Halladay Street South, and Site 135 North.

The GAG Roadways are CCPW³-impacted roadways surrounding the GAG Sites, including Halladay Street North, Forrest Street, Carteret Avenue, and Garfield Avenue (from Carteret Avenue to the Light Rail).

² An Interim Remedial Action is an action taken at a contaminated site in order to reduce the chances of human or environmental exposure to site contaminants. It is an action taken to protect public health or remove an obvious source of contamination before a remedial investigation is complete. The need for and type of IRM is determined on a case-by-case basis. Examples of IRMs in use at some of the PPG sites include epoxy, plastic sheeting, plywood, duct tape, cones, caution tape, folding caution signs, stone/gravel, or other barriers.

³ "CCPW" refers to chromate chemical production waste and is more particularly defined in the JCO.

The GAG Off-Site Properties include CCPW-impacted properties adjacent to the GAG Sites, including the former Halsted Corporation, Forrest Street Properties, Ten West Apparel, 816 Garfield Avenue (Fishbein Parcel) and Al Smith Moving.

A. Remediation of the GAG Sites

Excavation, backfilling and restoration of impacted soils at the GAG sites is substantially complete, though some work still remains to be done. The primary focus at this time is the groundwater delineation and cleanup. Restoration of the IRM #1 Area of Site 114 is on hold pending groundwater remediation that is taking place in this area. Soil treatment activities are on-going in a small portion of Site 114 adjacent to Garfield Avenue (referred to as the Western Sliver).

In December 2017, PPG commenced the first phase of a groundwater treatment program at the GAG Sites. This treatment program targets chromium contamination in the water table through the use of, among other things, injection of a food source (sugars) to stimulate biological activity that will reduce the chromium contamination without harm to the environment. PPG circulated to the JCO Parties three quarterly groundwater treatment progress reports in calendar year 2018. The fourth quarterly report is expected in late February 2019 and a meeting to address the overall progress of the groundwater treatment program is scheduled for February 6, 2019.

Ten West Apparel Property (800 Garfield Avenue): The access litigation between PPG and Ten West Apparel was settled in April 2017. Pursuant to the terms of settlement, Mid-Newark, L.P., the former owner of the 800 Garfield Avenue property, transferred title to the property to PPG on March 2, 2018. Ten West Apparel is required to vacate the property on or prior to the 24th month following the property transfer, i.e., by March 2020. Demolition of the building and excavation of chromium impacted soils under the building located at this site will not commence until Ten West Apparel has vacated the building. A conference with Your Honor is scheduled for January 28, 2019 to address Ten West's progress in vacating the building pursuant to the terms of the settlement agreement.

Properties Adjacent to Ten West: PPG attempted in the third quarter 2018 to perform excavation at Sites 137B and Site 133 West, which are situated to the east of the Ten West property. Those excavation activities were interrupted by, among other things, excessive rainfall and the discovery of a source of volatile organic compounds ("VOCs") in the soils. While excavating in this area, PPG experienced some exceedances of the action levels established for Total VOCs in air monitoring devices located in close proximity to the excavation. However, air monitoring at the perimeter of the site indicated no Total VOC concentrations greater than the Total VOC action level, which such levels are designed to be protective of human health and the environment. Appropriate measures were ultimately employed by PPG's contractors at the site to control the VOC emission issue. An Event Documentation Report ("EDR") was prepared by PPG's consultants related to this incident. The EDR was submitted to and approved by NJDEP and the Independent Technical Consultant (Weston). The EDR was posted to the Chromium Cleanup Partnership web site

this month. Excavation at Sites 137B and Site 133 West will resume in concert with the excavation of the Ten West property.

B. Remediation of the GAG Roadways:

<u>Halladay Street North</u>: PPG and the Jersey City Municipal Utilities Authorities ("<u>JCMUA</u>") have agreed upon a remedial approach in this roadway that calls for the JCMUA's abandonment of a sewer line located in a portion of this roadway and the re-routing of the flow from this sewer line. That will allow PPG to have unfettered access to excavate the chromium impacted portions of Halladay Street North, as well as remaining impacts along the western boundary of the former Halsted Corporation (see discussion of that site below).

Forrest Street: PPG excavated chromium contaminated soils in this roadway that could feasibly be removed without impacting utilities located in the roadway and buildings located on the adjacent Forrest Street Properties (see discussion of that site below). In order to protect the utilities and building structures, the JCO Parties agreed upon the implementation of a restricted use remedy⁴ for this roadway that involves leaving some chromium impacted soils in place with a combination of plastic liners and the use of the asphalt roadway to cap the remaining soils contamination in the roadway. It is understood that excavation of chromium impacted soils could become necessary upon future road construction and/or development of the Forrest Street Properties. The JCO Parties are working toward finalizing a Remedial Action Report⁵ for the soil remedial work at this site and a final approval letter from NJDEP.

<u>Garfield Avenue</u>: Garfield Avenue has numerous utilities and a main sewer line beneath it, and is a heavily-travelled roadway. This has made excavation of all chromium-impacted soils in Garfield Avenue difficult. Therefore, the JCO parties have agreed upon a restricted use remedy for this roadway that calls for leaving some contaminated soils in place with the asphalt roadway serving to cap the impacted soils.⁶ Like the remedy for Forrest Street, excavation of chromium impacted soils could become necessary upon future road construction and/or development of the Garfield Avenue right of way. The JCO Parties are working toward finalizing a Remedial Action Work Plan for the soil remedial work at this site.

<u>Carteret Avenue</u>: The remediation plan for the Carteret Avenue section of the GAG Roadways is significantly complicated by the presence of a 96-inch steel combined sewer

⁴ A restricted use remedy or restricted use remedial action means any remedial action that requires the continued use of engineering or institutional controls to meet the established health risk or environmental standards and protect the public. In the case of Forrest Street, the plastic liners and asphalt roadway serve as "caps" or engineering controls that prevent direct contact with any contaminants that are left in place subgrade. The Forrest Street remedy will also include the filing of a notice in lieu of deed notice that will function as the institutional control for the site and that will put utility workers and others on notice that contaminants exist subgrade.

⁵ A Remedial Action Report is a comprehensive report that documents the actions that were taken to remediate a given site to the applicable NJDEP standards. The specific requirements for a Remedial Action Report are set forth in the Department's Technical Requirements for Site Remediation, N.J.A.C. 7:26E-5.7.

⁶ The restricted use remedy for Garfield Avenue will be similar to that being used for Forrest Street in that the remedy will involve the use of engineering and institutional controls designed to protect the public. See footnote 4 above.

pipe that extends from the intersection of Carteret Avenue and Garfield Avenue to beyond the intersection of Carteret Avenue and Pacific Avenue. The investigation of this roadway demonstrates that soils contaminated by CCPW are in close proximity to large portions of the sewer pipe. Any remediation of the contaminated soils/materials that surround the pipe must be designed to avoid damaging the 100-year old pipe. Further complicating this project is the presence of a siphon in the sewer pipe that dips below the former Morris Canal. PPG submitted a Remedial Action Work Plan Addendum ("RAWPA") for this roadway in November 2018, which is under review by the JCO Parties. It is hoped that the JCO Parties will be able to finalize the RAWPA for this roadway in the first quarter of 2019. A positive development is that, after many meetings on the subject, PPG, the City and JCMUA have entered into a Memorandum of Understanding and other written agreements to address, among other things, the cooperation among the parties relative to the PPG remediation work and the improvements that JCMUA intends to undertake to the 96" sewer line. In my last Progress Report, I had reported that PPG had planned to commence excavation of chromium impacted soils in this roadway in December 2018. Unfortunately, because of delays resulting from the negotiation of the Memorandum of Understanding and because of problems with the water treatment plant located at the site, the timeline for commencement of excavation in this roadway has been extended to May 2019. I am working with the parties to facilitate expediting that schedule as much as possible.

<u>Pacific Avenue/Caven Point Avenue</u>: CCPW impacts were discovered in portions of these roadways. The JCO Parties are working on establishing milestones to address these impacts.

C. Remediation of the GAG Offsite Properties

treatment plant.

Al Smith Moving Property (33 Pacific Avenue). PPG has completed excavation, backfilling and restoration of chromium impacted soils at the Al Smith Moving property. The JCO Parties are working toward finalizing a Remedial Action Report for the soil remedial work at this site and a final approval letter from NJDEP.

<u>Former Halsted Corporation Property (78 Halladay Street)</u>: Excavation and backfilling of this site have been completed with the exception of:

- (i) residual impacted soils along the eastern boundary of the site, which will remain in place in order to protect building structures located on adjacent properties. Remedial excavation of this eastern area will be deferred pending redevelopment of the adjacent properties, and
- (ii) residual impacted soils along the western boundary of the site, which will remain in place until the Halladay Street North sewer pipe abandonment is completed and the remediation of that roadway commences (see discussion of Halladay Street North above).

7 This water treatment plant is designed to treat water that is removed from open excavations at the GAG Sites to facilitate the excavation work. Treated water is discharged to the public sewer lines pursuant to a permit issued by NJDEP. PPG submitted to the JCO Parties in January 2019 a memo outlining the efforts it is undertaking to address the technical problems with the water

Upon completion of the excavation and backfilling of the impacted soils that remain on the western boundary, a Remedial Action Report will be submitted by PPG for the Halsted site. Chromium impacts that cannot be removed along the eastern boundary of the site will be addressed via a restricted use remedy.

Forrest Street Properties: PPG and the property owner reached a conceptual understanding regarding a remedial approach. This understanding called for the excavation and backfilling of impacted soils in and around the exterior of building structures, subject to a restricted area around the perimeter of the buildings where excavation was prohibited to avoid structural damage to the buildings. Excavation, backfilling and restoration of the agreed upon areas outside of the buildings was completed in 2018. In light of the building structural restrictions, some chromium impacted soils will remain under and in the proximity of the buildings located at this site that will be addressed at some future date when the property is redeveloped or upon agreement between PPG and the property owner.⁸ In March 2018, PPG submitted a draft Remedial Action Work Plan to memorialize the proposed restricted use remedy for these properties. NJDEP, PPG and the property owner have been in discussions for quite some time regarding the Remedial Action Work Plan for the site. PPG will propose schedule milestones for implementation of the Remedial Action Work Plan within three months of approval of the Remedial Action Work Plan by the property owner and the JCO Parties. I am continuing my efforts to expedite agreements between and among all parties involved with this site.

D. <u>Remediation of the Non-GAG Sites</u>

Site 156, Metropolis Towers: All excavation and backfilling of soils and restoration of this site have been completed and, on October 12, 2018, NJDEP issued an approval of a Soils Remedial Action Report for this site. On July 19, 2018, NJDEP issued an approval of a Groundwater Remedial Investigation Report for this site, which demonstrated that the groundwater at this site complied with NJDEP groundwater quality standards for chromium and CCPW-related metals for which PPG is responsible. The only remaining area of environmental concern at this site is the boiler room located in one of the towers. In 2017, PPG sealed a portion of the floor of the boiler room located at one of the buildings at this site as an engineering control to prevent chromium blooming. During routine inspections, minor issues were identified with respect to the floor sealant that was applied in the boiler room. PPG is coordinating efforts with the property owner to repair any damaged areas of the floor sealant. Furthermore, electrical work currently being negotiated between the property owner and PSE&G, and out of PPG's control, is impeding the completion of the remedy installation in the boiler room.

Site 16, Linden Avenue East: PPG completed excavation, backfilling and restoration of chromium impacted soils in areas exterior to the buildings located at this property in June 2015. The remedy for chromium impacts under the building structures, however, is currently being negotiated between PPG and the property owner. My involvement and that of NJDEP has been required to assist in the PPG-property owner negotiations before a

⁸ Engineering controls and institutional controls will be required in order to protect the public with respect to any contaminants that are left in place at this site. See footnote 4 above.

remedy for the impacts under the building structures can be selected and milestones established. In the meantime, PPG continues to investigate groundwater impacts at the site and to develop a Remedial Action Work Plan for the groundwater.

<u>Site 63, Baldwin Oil (1 Burma Road)</u>: Excavation and backfilling of impacted soils and restoration of this site have been completed. In January 2018, NJDEP issued a final approval (Consent Judgment Compliance Letter) for the on-site soils Area of Concern at this site confirming that the soils remediation had been performed in compliance with the requirements of applicable NJDEP regulations and guidance. The investigation/delineation of impacted groundwater at this site (and Site 65) has commenced and is anticipated to be completed in August 2019.

Site 65, Portions of Burma Road/Morris Pesin Drive: PPG, the City, JCMUA and NJDEP entered into a settlement agreement dated January 9, 2018 that resolved a dispute among the parties as to the extent of PPG's responsibility for chromium impacts in this roadway. Pursuant to the settlement agreement, the remedy for this site consists of institutional and engineering controls until such time as JCMUA undertakes work on a water utility line located within this roadway. In 2018, PPG submitted a Remedial Action Report for soil embodying the terms of the settlement agreement to the JCO Parties. This is currently under review by the JCO Parties.

Sites 107/108, Fashionland/Albanil: In June 2018, demolition of the building located on Site 107 was completed and excavation of chromium impacted soils commenced. Since the commencement of the excavation activities, CCPW impacts were observed to extend beyond the originally anticipated excavation limits. As a result, excavation, backfilling and restoration are expected to be completed by August 2019, as opposed to the prior schedule, which called for completion in March 2019. Site 108 is located adjacent to Site 107. A portion of Site 108, along the boundary of Site 107, is impacted by chromium also beyond originally anticipated limits. Remediation of that area is occurring concurrently with the remediation of Site 107.

Site 174, Dennis Collins Park (Bayonne): In my last Progress Report, I reported that PPG and the City of Bayonne were negotiating the terms of a Memorandum of Understanding (MOU) that will address the coordination of the City's redevelopment of the Park with the installation by PPG of a 2 ft. clean soil cap and other required engineering controls for the remediation of soils. A complicating factor is the need for an NJDEP-issued waterfront development permit with respect to the installation of a revetment (engineering control) along the shoreline of the Kill Van Kull, which will act as a barrier from the CCPW identified within the banks of the waterway. This engineering control is part of the soils remedy for the Park. A conference is scheduled with Your Honor for January 28, 2019 to address the status of activities at this site.

457 Communipaw Avenue: CCPW identified in a City of Jersey City right-of-way located adjacent to this property was fully remediated by PPG. PPG is currently performing investigations at 457 Communipaw Avenue to determine the full extent of CCPW

contamination. A more complete investigation of this site, called a remedial investigation, is expected to commence in March 2019, pending resolution of access issues.

VI. Mediation Proceedings

Pursuant to the Mediation Order, I was appointed as Mediator with respect to the following principal issues: (i) to attempt to obtain agreement among PPG, JCRA and Hampshire with respect to reimbursement of "incremental costs" that Hampshire and JCRA allege will be incurred during the redevelopment of Site 114 (the "Hampshire-PPG Dispute"), and (ii) to attempt to obtain agreement among PPG, JCRA, and the City of Jersey City with respect to reimbursement of the City and JCRA for costs related to the replacement of City improvements/infrastructure that were damaged or removed during the remediation activities (the "City-PPG Dispute").

I am happy to report progress with respect to both disputes. As to the Hampshire-PPG dispute, I was able to facilitate a face-to-face meeting between PPG and Hampshire representatives at PPG headquarters in Pittsburgh last December. As a result of that meeting they have scheduled monthly conference calls to discuss remediation/redevelopment issues and are presently negotiating a cooperation agreement.

In the City-PPG Dispute, the parties have agreed in principle to an Infrastructure Reimbursement Agreement that awaits approval by the Jersey City Redevelopment Agency board and the City of Jersey City Council.

I am hopeful that the parties to these disputes will be able to resolve their differences and finalize any written agreements soon.

X. Current and Future Activities

Web Site: My office, with the help of the JCO Parties, maintains a web site at www.chromiumcleanup.com. The web site contains information about, among other things, the status of remediation at the PPG chromium sites. We are currently (and continually) updating the web site to include the most recent information about the PPG chromium sites. This Progress Report with all attachments/enclosures will be posted to the web site. All prior Progress Reports are also posted on the web site.

<u>Newsletter</u>: A newsletter is published at least annually that summarizes the status of activities at the PPG chromium sites. Attached is the most current newsletter dated January 2019.

<u>Sharing Information with the Public</u>: I hold a public forum at least once annually. The next such forum will be held on April 16, 2019 at a meeting of the Environmental Commission of Jersey City.

<u>PPG Employment Report</u>: Attached is PPG's 3Q 2018 Employment Report in which PPG reports that it has satisfied the JCO goals for the reporting period.

I trust that Your Honor will find this Progress Report helpful. I am available at your convenience to answer any questions you may have.

Ponald J. Riccio

Ronald J. Riccio Site Administrator

Attachments:

- Master Schedule dated January 24, 2019 with figures/maps
- Newsletter dated January 2019
- PPG 3Q 2018 Employment Report

cc: Via email: PPG, NJDEP and the City of Jersey City

Revision Date: January 24, 2019

SOILS - GARFIELD AVENUE SITES

Group/Phase or Site (See Figure 1 attached)	Property Description (Owner) (See Figure 2 attached)	Access/Road Closure Plan	Excavation Start Actual OR Required	Excavation Complete Actual OR Required	Backfill Complete Actual OR Required	Restoration Complete Actual OR Required	RAR Determination	Comments		
GA Group IRM #1 and Phases 1A, 1B, 1C, 2A, 2B-1, 2B-2, 2B-3, and 2B-	Site 114 (JCRA/ Hampshire)	See Comments	12/31/2013	11/24/2014	1/21/2015	1/31/2018 (see Comments)	July 2019	Site 114 is the subject of pending litigation between PPG, Hampshire, JCRA and the City, but the Court issued an Order granting PPG access to conduct remediation work at this site. Any remaining issues are the subject of mediation between the mediating parties. If the mediation is unsuccessful, the litigation may again become active. PPG is addressing remaining soil impacts in a portion of the "Western Sliver" via injection of emulsified vegetable oil into shallow groundwater in this area to treat the soil impacts. The Remedial Action Report (RAR) Determination for this area may not be included in the July 2019 RAR Determination for Site 114. Restoration was deemed complete for all of Site 114, except for the soil IRM #1 area where active groundwater remediation is being performed. Restoration of the soil IRM #1 area is on hold pending the referenced groundwater remediation activities.		
GA Group Phase 3A	Site 132 (824 Garfield) (JCRA) Site 143 (846 Garfield) (PPG)	See Comments PPG Owned	- 3/4/2014	9/5/2014	5/15/2015	1/31/2018	June 2019	Site 132 is the subject of pending litigation between PPG, Hampshire, JCRA and the City, but the Court issued an Order granting PPG access to conduct remediation work at this site. Any remaining issues are the subject of mediation between the mediating parties. If the mediation is unsuccessful, the litigation may again become active.		
GA Group Phase 3B North (45 Halladay and a portion of 25 Halladay)	Site 137 North (PPG)	PPG Owned	7/9/2014	5/15/2015	8/3/2015	1/31/2018	June 2019	During the remediation of Phase 3B North, the southern portion of Site 137 (i.e., Site 137 South) was not able to be remediated because of its proximity to the Ten West Apparel Building, and is now considered part of Phase 3B South under this Master Schedule (see below).		
GA Group Phase 3B South (15 Halladay, the remainder of	Site 133 West (PPG) and Site 137 South (PPG)	PPG Owned	8/29/2018	April 2021	June 2021	July 2021	September 2022	PPG initiated excavation in this area in August 2018, but could not complete the excavation work because of various technical issues related to a volatile organic compound (VOC) source in this area and PPG's water treatment plant. Excavation dewatering resumed on January 9, 2019. Once the open area is dewatered, PPG will continue excavation in non-VOC source areas to reach final depths in the portions of these sites where excavation was partially completed. The remaining portions of the planned excavation will be deferred until Ten West Apparel vacates 800 Garfield Avenue and will be included with the Ten West Apparel and Fishbein excavation. The sites included within GA Group Phase 3B South were not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at these sites.		
25 Halladay with 800 and 816 Garfield Avenue added)	Fishbein (816 Garfield Avenue) (PPG) Ten West Apparel (800 Garfield Avenue) (PPG)	PPG Owned PPG Owned	November 2020	April 2021	June 2021	July 2021	September 2022	The access litigation between PPG and Ten West Apparel was settled in April 2017. Pursuant to the terms of settlement, Mid-Newark, L.P., the former owner of the 800 Garfield Avenue property, transferred title to the property to PPG on March 2, 2018. Ten West Apparel is required to vacate the property on or prior to the 24 th month following the property transfer, i.e., by March 2020. The sites included within GA Group Phase 3B South were not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at these sites.		
GA Group Phase 3C	Site 133 East (22-68 Halladay) (PPG) Halladay Street South (Jersey City)	PPG Owned Road Closure In Place	4/21/2015	10/22/2015 (See Comments)	7/29/2016 (See Comments)	1/31/2018 (see comments)	April 2019 for Halladay St. South/ June 2019 for Site 133 East & Site 135 North	PPG completed excavation, backfilling and restoration in these areas with the exception of grids in Site 133 East and Hallada South adjacent to Ten West Apparel; those grids will be excavated, backfilled, and restored in connection with the Ten West remediation activities consistent with the Ten West Apparel Master Schedule milestones. The Halladay Street South RAR Determination milestone assumes that the City of Jersey City provides comments on the Halladay Street South Notice of Lieu of Deed Notice by January 2019.		

Revision Date: January 24, 2019

SOILS - GARFIELD AVENUE SITES

Group/Phase or Site (See Figure 1 attached)	Property Description (Owner) (See Figure 2 attached)	Access/Road Closure Plan	Excavation Start Actual OR Required	Excavation Complete Actual OR Required	Backfill Complete Actual OR Required	Restoration Complete Actual OR Required	RAR Determination	Comments
	Site 135 North (Portion of 51-99 Pacific) (PPG)	PPG Owned	2/23/2016	5/25/2016	7/29/2016			
GA Group Site 135 South	Site 135 South (Remainder of 51-99 Pacific) (PPG)	PPG Owned	3/16/2016	8/23/2016 (See Comments)	12/29/2016 (See Comments)	1/31/2018	June 2019	
	Halsted Corporation (78 Halladay St) (PPG)	PPG Owned	5/7/2018	8/10/2018 (See Comments)	8/24/2018 (See Comments)	10/4/2018 (See Comments)	December 2021 (See Comments)	Excavation, backfilling, and restoration of this site have been completed with the exception of: (i) Residual impacted soils along the eastern boundary of the site, which will remain in order to protect building structures located on adjacent properties; remedial excavation of this eastern area will be deferred pending redevelopment of the adjacent properties, and (ii) Residual impacted soils along the western boundary of the site which will be addressed concurrently with the Halladay Street North remediation. The RAR for the Halsted site will be finalized upon completion of the excavation and backfilling of the impacted soils that remain on the western boundary. Chromium impacts that cannot be removed along the eastern boundary of the site will be addressed via a restricted use remedy. This property was not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department as to the need for a capillary break at this Site.
GA Group Phase 5 Off Site Properties	Forrest Street Properties 84, 86-90, 98- 100, and 108 Forrest St (Caragliano)	Access complete	3/27/2017	7/19/2017	8/9/2017	5/2/2018 (See Comments)	July 2019 (See Comments)	Milestone dates are for initial excavation activities in accordance with the Forrest Street and Forrest Street Properties Technical Execution Plan dated March 2017. PPG and the property owner reached a conceptual understanding regarding a remedial approach that called for the excavation and backfilling of impacted soils in phases, but subject to a restricted area around the perimeter of and within the footprint of the buildings where excavation was prohibited so as to avoid structural damage to the buildings. Excavation and backfilling of the agreed upon areas outside of the buildings was completed. In light of the building structural restrictions, some impacted soils will remain under and in the proximity of the buildings located on these properties that will be addressed via a restricted use remedy until some future date when the property is redeveloped or upon agreement between PPG and the property owner. The Department, PPG and the property owner are in discussions regarding the proposed restricted use remedy for these portions of the properties. In March 2018, PPG submitted a RAWP to memorialize the restricted use remedy for these properties. PPG will propose schedule milestones for implementation of the RAWP within three months of NJDEP approval of and property owner consent to the RAWP; this new schedule may be included in the next update to the Master Schedule, as a separate line with separate milestones. This property was not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department as to the need for a capillary break at this Site.
	Al Smith Moving (33 Pacific Avenue) (NJEDA c/o Al Smith Moving)	Access Complete	8/16/2017	1/8/2018	1/26/2018	2/15/2018	June 2019	

Revision Date: January 24, 2019

SOILS - GARFIELD AVENUE SITES

Group/Phase or Site (See Figure 1 attached)	Property Description (Owner) (See Figure 2 attached)	Access/Road Closure Plan	Excavation Start Actual OR Required	Excavation Complete Actual OR Required	Backfill Complete Actual OR Required	Restoration Complete Actual OR Required	RAR Determination	Comments
								Carteret Avenue area/phase includes Carteret Avenue from the intersection with Garfield Avenue through the intersection with Pacific Avenue. The portion of Carteret Avenue from the intersection with Garfield Avenue to approximately 100 feet beyond the intersection with Halladay Street is closed and will remain closed pending remediation of this roadway.
GA Group Phase 4 Roadways	Carteret Avenue (Jersey City)	See Comments	May 2019	March 2020	April 2020	May 2020	July 2021	PPG, the City and JCMUA have executed a Memorandum of Understanding in January 2019 with respect to the planning for the remediation of this roadway by PPG.
Koauways	(Jersey Orty)		,					This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at this Site.
	Halladay Street North (Jersey City)	See Comments	March 2020	July 2020	September 2020	October 2020	December 2021	The remediation of this roadway was originally intended to be completed in conjunction with the remediation of the Halsted Building. PPG and JCMUA agreed, however, to permanently reroute the sewer flow in a 30" sewer line that exists in this roadway and abandon a portion of that sewer line, which will enable PPG to have unfettered access to conduct the excavation work in this roadway. When remedial action is implemented in Halladay Street North, residual contamination on the western boundary of the Halsted Corporation site will be addressed. The JCMUA is anticipating completion of the sewer rerouting by June 2019. This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at this Site.
GA Group Phase 4 Roadways (continued)	Forrest Street (Jersey City)	See Comments	3/27/2017	8/4/2017	9/1/2017	6/27/18	August 2019	The Principals agreed that Forrest Street and Forrest Street Properties shall be considered one combined site for the purpose of the Excavation Start milestone set forth herein. PPG and the adjacent Forrest Street property owner reached a conceptual understanding regarding a remedial approach that called for a phased approach to the excavation and backfilling of impacted soils located on the Forrest Street Properties and in Forrest Street, but subject to a restricted area around the perimeter of and within the footprint of the buildings located on the Forrest Street Properties where excavation was prohibited so as to avoid structural damage to the buildings. In light of these restrictions, some impacted soils will remain in Forrest Street that will be addressed via a restricted use remedy until some future date when the Forrest Street Properties are redeveloped or upon agreement between PPG and the property owner, or whenever utility work beneath the Forrest Street roadway is necessary. A portion of this roadway was not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department as to the need
	Garfield Avenue (Jersey City)	See Comments	See Comments	See Comments	See Comments	See Comments	June 2020	In consideration of the numerous utilities located in this roadway and traffic issues, the City, PPG and NJDEP agreed upon a restricted use remedy for this roadway that was incorporated into a Remedial Action Work Plan (RAWP). The RAWP calls for, among other things, deferring excavation of shallow impacts until the street is closed/partially closed for street widening work by the City. The RAWP is currently under review by the Parties. This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department as to the need for a capillary break at this Site.
	Pacific Avenue/ Caven Point Avenue	See Comments						Hexavalent chromium impacts were discovered in portions of these roadways. The parties are working on establishing milestones to address these impacts.

Revision Date: January 24, 2019

SOILS - NON-GARFIELD AVENUE GROUP SITES

Group/Phase or Site	Property Description (Owner)	Access/Road Closure Plan	Excavation Start Actual OR Required	Excavation Complete Actual OR Required	Backfill Complete Actual OR Required	Restoration Complete Actual OR Required	RAR Determination	Comments
Site 16	45 Linden Ave. East (Etzion)	Access agreement in place	6/16/2014 (See Comments)	November 2020	January 2021	September 2021	December 2022	PPG completed excavation and backfilling of the exterior area of this property in June 2015. Negotiation between PPG and the property owner, as well as mediation with the Site Administrator, may be required before a remedy for the impacts under the building structure can be selected and milestones confirmed or modified as required. Some remediation will be required in the street. That remediation will be performed concurrent with the remediation of the building. PPG will
								notify the City at least 90 days prior to the date that the street needs to be closed.
Site 63	Baldwin Oil (Nisan 12)	Access agreement in place	4/28/2014	5/19/2015	5/19/2015	6/13/2015	4/27/2017	All CCPW has been excavated and the Site has been restored. A final Consent Judgment Compliance Letter (NFA equivalent) with respect to soils was issued by NJDEP on January 30, 2018.
Site 65	Burma Road/Morris Pesin Drive (Jersey City)	See Comments	4/28/2014	Not Applicable (See Comments)	Not Applicable (See Comments)	Not Applicable (See Comments)	May 2019	PPG, the City, JCMUA and NJDEP entered into a Settlement Agreement dated January 9, 2018 with respect to this site. Pursuant to the Settlement Agreement, the remedy for this site will consist of institutional and engineering controls until JCMUA undertakes Water Line Work (as defined by the Settlement Agreement), at which time the Water Line Work will be managed following the Linear Construction Guidance. On October 19, 2018, PPG submitted a second revision of the RAR incorporating the remedial action concepts from the Settlement Agreement. The RAR is under review by the Parties.
Site 107/Site	Fashionland (Site 107 – Ancam, LLC, aka EMI)	107 - Access agreement in place	6/13/2018 (See					The approved Remedial Investigation Report for Site 108 indicated that the "hotspot" contaminated area on Site 108 was presumed to have emanated from Site 107, and required that remedial action at Site 108 would be performed as part of the Site 107 remedial action. Therefore, Site 108 soils will be remediated concurrent with the Site 107 remedial action.
108			Comments)	July 2019	August 2019	August 2019	October 2020	Milestones have been extended beyond those identified in the last version of this Master Schedule (July 31, 2018) due to the remedial excavation extending beyond the previously-anticipated limits. A deferred remedy may be required on the adjacent Conrail property based on the recent discovery of CCPW along the limit of excavation established to protect the rail infrastructure. The timing to achieve Conrail agreement to the remedy may impact the RAR Determination date.
Site 156	Metro Towers (ALMA)	Access agreement in place	3/18/2013	5/23/2014	5/30/2014	6/30/2014	Boiler Room: See Comments Soils Area of Concern: 10/12/2018	The Boiler Room (Area of Concern #3) remedial action has been postponed, at the property owner's request, while the property owner completes electrical work in the Boiler Room. The remedial action will resume upon authorization to proceed from the property owner. An RAR Determination Date for the Boiler Room will be established at that time.
							10/12/2010	
Site 174	Dennis Collins Park (City of Bayonne)	Access agreement (See Comments)	4/8/2013	9/30/2016	9/30/2016	9/30/2016 (See Comments)	August 2020	PPG and City of Bayonne entered into an access agreement that extends through June 17, 2019. PPG completed focused excavation, backfilling, and restoration of a portion of the Park in September 2016. PPG and the City of Bayonne are negotiating a Memorandum of Understanding (MOU) setting forth the parties' understandings concerning the coordination of the installation of a 2 ft. clean soil cap and other required engineering controls for the remediation of soils with the City's redevelopment of the Park. The RAR Determination milestone assumes capping installation starts on or before September 2019. Commencement of the capping work at the Park must await approval by NJDEP of a waterfront development permit for installation of an engineering control along the shoreline of the Kill Van Kull. That shoreline work must be completed in conjunction with the capping of the Park.
Site 186	Garfield Avenue #1	Access no longer required; Remediation Complete	8/19/2013	11/1/2013	11/1/2013	11/20/2013	4/16/2014	All CCPW has been excavated and the Site restored. A final Consent Judgment Compliance Letter (NFA equivalent) was issued July 15, 2015.
457 Communipaw	457 Communipaw Right-of-Way (285 Lincoln Avenue, LLC)	Investigation access only at this time	TBD	TBD	TBD	TBD	TBD	The portion of this area in the right-of-way has been fully remediated by PPG. It was determined, however, that CCPW impacts extend onto 457 Communipaw Avenue (privately owned) and several parcels owned by JCRA. A site investigation was performed in 2017 at 457 Communipaw Avenue. PPG submitted a PA/SI/RIWP for this property in February 2018. The RI work at this site is expected to commence in March 2019, pending access.

Revision Date: January 24, 2019

GROUNDWATER

GA GROUP GRO	DUNDWATER MIL	ESTONES					
Group/Phase or Site	Property Description (Owner)	IRM Start	IRM Performance Monitoring Complete	Remedial Investigation Report Submitted	vestigation Action Work Remedial Report Plan Remedial Action Report		Comments
GW IRM Phase I	Site 114 (JCRA/Hamp- shire)	12/29/2017	December 2020	N/A	N/A	N/A	The IRM was designed to extract ground water from the areas of highest Cr concentration in the northern portion of Site 114 and make use of the treated water to support bio-precipitation in the southern portion of Site 114. For more detail, see "Groundwater Interim Remedial Measure: Phase I Design and Permit-by-Rule Authorization Request" dated June 2017 (the "PBR"). The IRM Phase I activities also include active remediation within the shallow zone groundwater to address localized exceedances of the groundwater quality standards. Phase I of the IRM calls for approximately one year of active treatment and up to two years of performance monitoring with ongoing dialogue and collaboration around IRM performance that may result in a revisiting of these timeframes. Quarterly reporting on the progress of the IRM has been provided by the PPG team.
GW IRM Phase II	Site 114 (JCRA/Hamp- shire)	June 2019	June 2022	N/A	N/A	N/A	Conceptually, Phase II of the IRM will implement bio-precipitation in the portions of Site 114 not addressed in Phase I, with the same considerations as noted above for Phase I.
GW IRM Phase III	South of Carteret (PPG & JCRA)	December 2020	December 2023	N/A	N/A	N/A	This phase is contingent on PPG Management approval. Conceptually, Phase III of the IRM will address the area south of Carteret Avenue, with the same considerations as noted above for Phase I.
IRM Phase IV or RAWP	Other Adjacent Properties	TBD	TBD	N/A	N/A	N/A	This phase (if warranted) is contingent on PPG Management approval. Adjacent properties may include but are not limited to roadways adjacent to the GAG Sites (i.e., Forrest Street, Halladay Street, Carteret Avenue and Garfield Avenue), the Forrest Street Properties, the former Halsted Corporation property and the Ten West Apparel property. Other properties/roadways may be identified by the ongoing groundwater remedial investigation. Milestone dates will need to be established at an appropriate point in the future based on information generated by the remedial investigation.
Remedial Investigation	Entire Site Group	N/A	N/A	January 2020	N/A	N/A	RIR must address shallow, intermediate, deep and bedrock groundwater zones. The draft GW RIR was submitted to NJDEP in October 2018. The path forward discussions are on-going. Access has been obtained for many of the properties included in the scope of the remedial investigation. However, as full delineation is required, access may be required to other properties. Access to these other properties will need to be obtained at a future date as needed and could impact the dates listed.
Remedial Action Work Plan	Entire Site Group	N/A	N/A	N/A	May 2021	N/A	PPG may submit the RAWP in advance of the date presented herein if sufficient information is obtained during IRM Phases I and/or II. Areas with soil remediated after submittal of groundwater RAWP can be addressed through addenda to the groundwater RAWP as an alternate approach.
Remedial Action Report	Entire Site Group	N/A	N/A	N/A	N/A	November 2023	Areas with groundwater remediated after submittal of the groundwater RAR can be addressed through addenda to the groundwater RAR.
NON-GA GROU	P GROUNDWATE	R MILESTONES		•			
Site 16	(see non-GAG Soils table)	N/A	N/A	RIR/RAWP Novemb		TBD	
Site 63	(see non-GAG Soils table)	N/A	N/A	RIR/RAWP April : (See Con	2019	TBD	Milestone assumes access is received by January 2019 and two additional rounds of groundwater sampling approximately 30 days apart to demonstrate compliance with Groundwater Quality Standards and no additional groundwater monitoring well installation. If additional investigation work is needed, the milestone will need to be revised.
Site 65	(see non-GAG Soils table)	N/A	N/A	See Con	nments	TBD	Pursuant to the settlement agreement entered by PPG, the City, JCMUA and NJDEP, any impacted groundwater at Site 65 will be deemed to have emanated from Site 63. Therefore, no action vis-à-vis groundwater is required for Site 65.
Site 107 & 108	(see non-GAG Soils table)	N/A	N/A	RIR/RAWP Augus		TBD	Milestone assumes excavation complete is achieved in July 2019.
Site 156	(see non-GAG Soils table)	N/A	N/A	RIR Submittal: 4/16/2018	N/A	See Comments	The GW RIR demonstrated compliance with the GWQS. NJDEP expects to issue a final compliance letter for groundwater (Area of Concern #2) in February 2019.
Site 174	(see non-GAG Soils table)	N/A	N/A	RIR/RAWP June 2		TBD	Milestone assumes sampling will be complete by April 2019 to demonstrate compliance with Groundwater Quality Standards, and the tidal study demonstrates RI complete. If additional investigation work is needed, the milestone will need to be revised.
Site 186	(see non-GAG Soils table)	N/A	N/A	Site 186 Ground Investigation inc GA Gro	corporated into	TBD	Site 186 groundwater investigation/remedial action is considered part of the Garfield Avenue Group groundwater program.

Revision Date: July 31, 2018

NOTES

GENERAL NOTES:

Redevelopment cannot occur until a capillary break determination has been made and capillary break installation (where required) has been completed.

SOILS NOTES:

- 1) Green shading indicates that milestones have been attained.
- 2) "Excavation Start" means access has been gained, building demolition and shoring installation, if required, have been completed, there are no known impediments to proceeding with excavation and excavation has actually commenced.
- 3) For Garfield Avenue Group Sites, PPG is currently addressing groundwater treatment plant capacity issues and permitting limitations.
- 4) For Garfield Avenue Group Sites, "Backfill Complete" means backfill is brought to elevations approved by NJDEP.
- 5) For the purpose of this Master Schedule, "restoration" is defined as final remediation grading in accordance with an NJDEP-approved document identifying restoration requirements. In-kind replacement of existing infrastructure (i.e., pavement and utilities) is covered under the PPG/Jersey City Infrastructure Settlement Agreement, which has been agreed to in principle by all Parties.
- 6) Restoration within specific areas under/around infrastructure necessary to support on-going remediation may be delayed if such a delay is acceptable to the Department and property owners.
- 7) For the purpose of this Master Schedule, "RAR Determination" means that the Department will determine whether the Remedial Action Report (RAR) meets the requirements of applicable Department regulations and guidance. The Department will determine whether the milestone identified in the Exhibit is achieved assuming: (i) the RAR Figures/Tables have been submitted by PPG and reviewed/approved by the Department prior to complete RAR submittal, and (ii) the initial submittal of the complete RAR (i.e., text plus figures, tables and other Department-required information) is received 26 weeks prior to the RAR Determination milestone. (The referenced 26 week time period assumes 12 weeks for the Department/Weston and the City of Jersey City to provide comments to the initial complete RAR submittal, 7 weeks thereafter for PPG to review and incorporate such comments and submit the final version of the full RAR, and 7 weeks thereafter for the Department to make the RAR Determination).
- 8) This version of the Master Schedule has combined "Exhibit 2" and "Exhibit 3" from the version of the Master Schedule dated October 13, 2015. The term Exhibits 2/3 is used here because prior orders entered by the court in NJDEP, et al. v. Honeywell International, Inc., et al. reference those exhibits as exhibits to the Master Schedule, which Master Schedule remains in effect as modified by these changes to Exhibits 2 and 3.
- 9) NJ Transit Right-of-Way (ROW): CCPW located beneath this ROW will be addressed concurrent with Site 199, as part of remediation requirements specified in the 2011 Consent Order (Orphan Sites Agreement).

GROUNDWATER NOTES:

- 1) For purposes of this schedule, the Garfield Avenue Group Access date is assumed to be March 2017 and would continue without interruption although litigation between JCRA and PPG is ongoing for JCRA owned properties.
- 2) "N/A" means not applicable

FIGURES 1 and 2 ATTACHED

DATE: 01/24/2019 DRWN: DCB

FIGURE 1

Piscataway on uspsw2vfp001\Data_uspsw2vfp001\Environment\(J) User: Amy,Krayer Plotted: Jan 24, 2019 - 9:53am File: P:\Jobs\Rem_Eng\Project Files\PPG Industries\Garfield Avenu

Piscataway on uspsw2vfp001\Data_uspsw2vfp001\Environment\(J) User: Amy,Krayer Plotted: Jan 24, 2019 - 9:54am File: P:\Jobs\Rem_Eng\Project Files\PPG Industries\Garfield Avenu

Chromium Cleanup

Partnership

N.J. DEPARTMENT OF ENVIRONMENTAL PROTECTION
CITY OF JERSEY CITY
PPG
COURT-APPOINTED SITE ADMINISTRATOR



Technician Chris French of Arcadis explains how one of the 68 wells at the Garfield Avenue Site extracts chromium-impacted groundwater.

PPG is in the second year of a focused pumping-and-treating process designed to clean up groundwater in a portion of the 900 Garfield Avenue Site immediately adjacent to the former chromate processing plant.

Since December 2017, PPG has extracted more than 13 million gallons of groundwater from depths ranging from 20 to 65 feet below ground surface. The water is then conveyed to a treatment plant south of Carteret Avenue.

Once chromium and other contaminants are removed at the plant, the water, with the addition of molasses, is then injected below grade via a set of up to 68 wells.

The molasses continues the treatment of impacted groundwater through the

stimulation of biological activity that converts hexavalent chromium to its much less toxic trivalent form.

More than 3 million gallons of molassesamended water has been injected into groundwater since the pumping and treating began. This is in addition to the more than 100 million gallons of impacted groundwater removed and treated during the soil cleanup. continued on page 3

Letter from Site Administrator

Comments from the Site Administrator for PPG chromium cleanups



By Ronald J. Riccio

Periodically I have found it to be helpful to remind everyone of my responsibilities as the court-appointed Site Administrator for the

PPG chromium contamination sites.

The PPG cleanup activities are governed by a judicial consent order entered in 2009 by the Superior Court of New Jersey, Chancery Division, Hudson County (the "JCO"). PPG, the New Jersey Department of Environmental Protection ("NJDEP") and the City of Jersey City are parties to the JCO. The Honorable Jeffrey Jablonski

currently has responsibility to administer the JCO. Judge Jablonski was appointed to the Chancery Division, Hudson County, in July 2018, upon the retirement of the Honorable Barry Sarkisian.

The JCO is a public document. A copy, along with the various amendments to the JCO, can be found on the Chromium Cleanup Partnership website at http://www.chromiumcleanup.com/. The JCO called for the appointment of a Site Administrator whose responsibilities and powers include, among others: (1) establishing a "Master Schedule" for the filing and review of PPG submittals, (2) holding regular meetings with PPG, the City of Jersey City,

NJDEP and the developer of the Garfield Avenue Sites to ensure that good faith efforts are being made to meet the goals established in the Master Schedule, (3) hiring experts and/or consultants to assist the Site Administrator in reviewing PPG submittals and in resolving any issues raised to the Site Administrator by the parties, (4) hiring a Technical Consultant to, among other things, advise the Site Administrator on technical issues relating to the PPG submittals, and (5) attending and participating in community or public meetings to discuss proposed remedial measures at the PPG Sites. All of these responsibilities are carried out by me and continued on page 2

Site Administrator

continued from page 1

my support team on literally a daily basis.

I would like to address specifically what I have been doing to comply with item (5) listed above. Since my appointment as Site Administrator, effective Jan. 4, 2016, I have taken very seriously my responsibility to communicate with the public regarding the status of the PPG cleanup efforts. This newsletter, which is published annually in January, is just one vehicle to do so. You will see that, in this newsletter, in addition to those published since I was appointed Site Administrator, we have attempted to summarize the remediation status of nearly all of the PPG Sites. It is impossible, however, in a newsletter format to address all of the sites and all of the technical and other issues at the sites. Therefore, in addition to providing newsletters, the following are used as a means to communicate with both the Court and the public as to the status of the PPG remediation activities:

Progress Reports to the Court: Progress
Reports are submitted to the Court
twice per year to advise the Court
(currently, Judge Jablonski) of the status
of the remediation activities and any
problems or difficulties that might be
experienced. The Progress Reports are
public documents and are posted to the
Chromium Cleanup Partnership website.

PUBLIC MEETING

Site Administrator Ron Riccio will brief the public on PPG's chromium cleanups and field questions as part of the Jersey City Environmental Commission's April meeting. No preregistration is required.

DATE: Tuesday, April 16 TIME: 6:30 p.m. PLACE:Council Chambers City Hall 280 Grove St. Jersey City, N.J. 07302

- Public Meetings/Presentations: At least annually, I hold some form of meeting or presentation to inform the public as to the status of the remediation activities. Last year, in January, we held a meeting at the Mary McLeod Bethune Life Center. This year, on April 16, 2019, I will be appearing before the Environmental Commission of Jersey City.
- Chromium Cleanup Partnership Website:
 The Chromium Cleanup Partnership
 website (http://www.chromiumcleanup.
 com/) was recently updated. It contains
 an extensive amount of information about
 the PPG chromium sites, including the
 history of the sites, copies of the JCO
 and all amendments, maps showing
 the location of all of the sites, copies
 of key PPG submittals related to the
 investigation and remediation of the
 sites, copies of the Progress Reports to
 the Court, copies of the Master Schedule,
 information about the health and safety
 measures used at the sites and more.
- Field Inspections: I regularly visit the sites where active work is taking place. Those

field inspections may also be attended by other interested parties who, directly or indirectly, represent the interests of the public, including NJDEP, the City of Jersey City, the Jersey City Municipal Utilities Authority, the Jersey City Redevelopment Agency and property owners. In October 2018, Judge Jablonski attended a field inspection of all the sites.

• Phone/Email Inquiries: The Chromium Cleanup Partnership website contains a "Contacts" tab that includes contact information for people with knowledge of the status of the PPG sites, including my contact information. The public is encouraged to use the following email address and phone number to reach me with questions about the PPG sites: Email: Info@chromecleanup.com; Phone: 201-777-2099.

I hope that you find this newsletter and the information I have provided helpful. I will continue to do my best to make sure that the remediation and restoration of the PPG Sites is done efficiently, effectively, expeditiously, transparently, and above all, safely. Having been born and raised in Jersey City, and being personally familiar with some of the neighborhoods adjacent to the PPG Sites, I have added reason to make certain that the cleanup is done right.

Ronald J. Riccio Site Administrator, PPG Chromium Cleanup Sites

Excavation at Site 107, adjacent locations scheduled to end this year

PPG is approximately 50 percent complete with its excavation of chromium-impacted soil and debris at a cleanup location between Linden Avenue East and Chapel Avenue in Jersey City.

Officials say they expect to remove approximately 100,00 tons of material when the cleanup is complete later this year.

Last year PPG demolished the building at the site, which is officially known as Fashionland, or Site 107, according to the New Jersey Department of Environmental Protection. The digging up and hauling away of material began last June.

Chromate chemical production waste, or CCPW, a byproduct from the chromium manufacturing process, was deposited as fill at the property.

CCPW associated with Site 107 extends to the northwest corner of a property immediately to the south, also known as Site No. 108, and the adjacent Conrail property to the west. Impacts on the Conrail property are isolated to the western property boundary of Site 107 and Site 108. CCPW-impacted materials at both off-site locations are being excavated during the cleanup at Site 107.

To protect human health, approximately 800 cubic yards of chromium-impacted soil and masonry debris were removed from



Workers excavate chromium-impacted soil and debris at Site 107.

under a portion of the concrete slab of the building interior at Site 107 between 1999 and 2003. In addition, building walls and floors impacted by the removal were replaced.

The owner of Site 107 will take possession of its property when PPG completes restoration. An investigation will follow to determine whether a groundwater cleanup is required.



Pumps inject molasses-amended water into groundwater at Garfield Avenue Site.

Pumping and treating groundwater

continued from page 1

When the pumping and treating is complete, technicians will collect samples quarterly for two years to monitor groundwater concentrations as they decrease to meet New Jersey's groundwater quality standard for chromium.

Lessons learned during the pumping-andtreating process will be used to address groundwater conditions elsewhere at the Garfield Avenue Site and sites south of Carteret Avenue. Digging up and hauling away nearly 600,000 tons of chromium-impacted soil and debris at the site – and approximately 400,000 tons at neighboring locations – has had a positive impact on groundwater at shallow depths.

As a result, groundwater approximately 20 feet below ground surface at the Garfield Avenue Site has shown dramatic improvement.

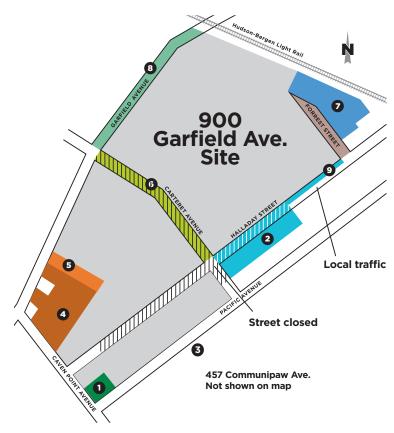
No groundwater in Jersey City is used for drinking purposes.

PPG continues to make progress at locations adjacent to Garfield Avenue sites listed in 2009 agreement

PPG's environmental responsibilities in the Garfield Avenue area extend beyond the NJDEP designated Hudson County Chromate sites identified in the 2009 judicial consent order with the New Jersey Department of Environmental Protection and the City of Jersey City.

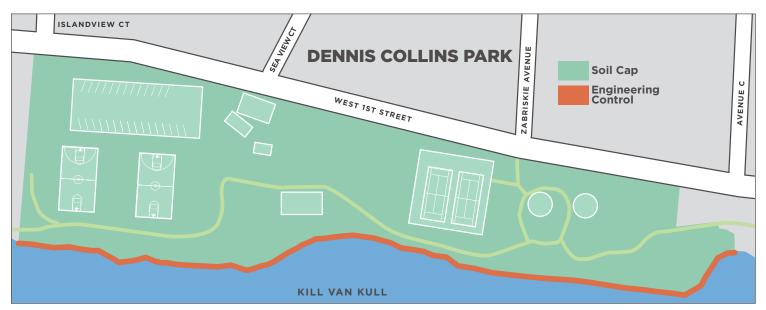
Properties adjacent to those sites listed in the judicial consent order also require or required investigation and remediation by PPG if contamination had extended to them. Here is the status of the affected adjacent properties:

- **1 33 Pacific Ave.** (*Also known as Al Smith Moving.*) Excavation of chromium-impacted soil and debris as well as the restoration of the property was completed last year. A report documenting the cleanup is under review by NJDEP and the city.
- **2 78 Halladay St.** (*Formerly Halsted Corporation.*) Demolition of the building and the excavation of currently accessible chromium-impacted soil were completed last year. Remaining impacted soil will be removed when adjacent properties are remediated, which will complete the cleanup of this property.
- **3 457 Communipaw Ave.** PPG will investigate neighboring properties to confirm chromium-impacted material is limited to this property.
- **4 800 Garfield Ave.** (*Also known as Ten West Apparel.*) PPG purchased this property last spring and plans to demolish the building on it next year. This will enable PPG to excavate the chromium-impacted soil that was placed in the former Morris Canal beneath the building before it was constructed. Excavation of impacted material adjacent to this property will be conducted at the same time.
- **5** 816 Garfield Ave. Chromium-impacted material on this property will be dug up and hauled away in conjunction with PPG's excavation at 800 Garfield Ave.
- **6** Carteret Avenue Excavation of chromium-impacted material surrounding the 96-inch sewer line beneath this street between Garfield Avenue and Pacific Avenue is expected to begin by midyear.
- **Forrest Street** A section of Forrest Street and exterior portions of privately owned buildings on the north side of the roadway have been fully restored following PPG's excavation of chromium-impacted soil. Chromium-impacted soil and debris



under and in the proximity of the buildings will be addressed when the property is redeveloped.

- 8 Garfield Avenue A work plan to address the chromium-impacted soil beneath the street from the light rail bridge to Carteret Avenue is under review by NJDEP and the city. Remediation activities will not commence until the street is widened or opened to repair or replace the utilities beneath it.
- **9** Halladay Street North PPG will dig up and haul away chromium-impacted soil and debris under portions of the street after the Jersey City Municipal Utilities Authority reroutes the sewer line serving properties on this stretch of Halladay Street. JCMUA officials say they expect to complete their work by early summer.



PPG wants to install a 2-foot layer of soil on roughly 9 acres of the park and a new revetment on the adjacent shoreline.

Planning under way for last phase of soil cleanup at Dennis Collins Park

PPG is developing plans for the final phase of its cleanup of chromium in the soil at Dennis Collins Park.

Under a plan pending approval by the New Jersey Department of Environmental Protection, PPG will place a 2-foot cap of soil on approximately 9 acres in the Bayonne park between Islandview Court and Avenue C. This will act as a protective barrier from scattered, low concentrations of CCPW, otherwise known as chromate chemical production waste, in the soil.

Additionally, PPG is developing a proposal to install a liner and other materials on the shoreline of the Kill Van Kull. This will constitute a more robust engineering control, preventing human exposure to the CCPW identified within the banks of the waterway.

PPG expects to complete the remediation this year. The work is expected to last about five months.

A limited soil cleanup was conducted in April 2013 in accordance with a plan approved by NJDEP. During the remediation, however, additional visible CCPW was observed outside the proposed limits of excavation at approximately 2 feet below ground surface. As a result, an additional investigation to determine the limits of impacted soil was conducted, and an additional limited soil cleanup was completed in 2016.

A series of interim remedial measures was then installed to prevent direct contact exposure with CCPW in several locations. These measures are being inspected on a weekly basis by PPG's consultants and representatives for Weston Solutions, the court-appointed, independent technical consultant.

An investigation into chromium impacts on groundwater in the park remains under way. No groundwater in Bayonne is used for drinking purposes.

PPG is in discussions with the city on how the company's work can be coordinated with planned renovations and upgrades for the park.

CCPW, a byproduct from the chromium manufacturing process, was deposited as one component of the fill used to raise the park site out of the Kill Van Kull.

Soil, groundwater at Metropolis Towers meet NJDEP safety requirements

The New Jersey Department of Environmental Protection has approved PPG's report on its soil cleanup at Metropolis Towers, meaning the company has met the agency's safety requirements for human health and the environment.

From March 2013 to June 2014, and for a three-month period in 2017, PPG dug up and hauled away more than 65,000 tons of chromium-impacted soil and debris from the apartment complex in downtown Jersey City.

Details documenting the excavation are contained in PPG's remedial action report, which parties responsible for contamination are required to submit to NJDEP at the completion of their cleanup work.

An investigation conducted after the soil cleanup was complete determined chromium has had no impact on the groundwater at Metropolis Towers. As a result, no groundwater cleanup is required, and PPG will remove the monitoring wells on the property.

The only remaining area of concern at Metropolis Towers is the boiler room in the basement of Building No. 2, or 270 Marin Blvd. A coating has been applied to areas of the floor to provide a durable barrier to chromium in and under the concrete.

Regular inspections of the coating are being conducted by PPG and representatives for NJDEP to confirm it prevents human and environmental exposure.

Chromium waste was used as construction fill at sites throughout Hudson County in the 1960s, including Metropolis Towers.

Chromium Cleanup

Partnership

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Jody Overmyer Remediation Project Engineer

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December 18, 2018

Ronald Riccio (Via Email rriccio @mdmc-law.com)
McElroy, Deutsch, Mulvaney & Carpenter, LLP
One Hovchild Plaza
4000 Route 66
Tinton Falls, New Jersey 07753

Re: PPG New Jersey Chrome 3Q18 Employment Report

Dear Mr. Riccio:

This report describes PPG's progress on the contracting and employment goals described in the Partial Consent Judgment filed on June 26, 2009 in compliance with the requirements of Paragraph 60 of the Order.

During the third quarter of 2018, 11 firms provided services, including environmental consultants, for onsite activities directly related to investigation and remediation of PPG's chromium sites. Two of these firms (ENTACT and Securitas) maintain a business presence in Jersey City. Note that ENTACT opened a Jersey City office January 2, 2018; ENTACT hours prior to this date do not count in the firms with operations in Jersey City total.

To date, firms with operations in Jersey City have provided 25% of the manpower employed on the project. Jersey City residents accounted for a total of 6,730 manhours or 26.2% of the manpower used on the project during the third quarter, and 255,136 manhours or 30.4% of the manpower used for the project to date. The calculation of progress toward the local hiring goal includes all on-site labor except consulting services and over-the-road truck drivers, as was previously agreed to by the Local Employment Goals Work Group.

Sincerely,

Ecc:

P. Amin P. Baker H. Bartges

Jody Overmyer

N. Colson B. Delisle

D. Doyle

R. Engel

S. Faeth R. Feinberg

W. Howitz
J. Lagrotteria

D. Lagrotteria

J. Ray

D. Spader

N. Strasser

M. Terril

J. Worden

PPG New Jersey Chrome Project

Garfield Avenue Group Sites Q3 2018 Local Employment Report December 18, 2018

	1st Precinct Security	Borbas Surveying	Century Electric	ENTACT	GWTT	Master Locators	ProAct	Securitas	SGS Envir. Services	Summit	Taylor, Wiseman, and Taylor Inc.	TPI Environmental	Totals
January		0	0	1,472	108	0	103	244		0			1,927
January		16	5	4,798	1,166	27	329	840		247			7,427
February	2		0	1,280	116			180	0		0	0	1,578
rebruary	4		8	3,286	1,121			672	96		41	16	5,243
March				1,408	136			215	0		0		1,759
IVIAICII				1,983	1,000			671	66		4		3,724
April				1,344			114	208	0			0	1,666
Артп				2,199			545	672	158			16	3,590
May				1,472			232	323	0				2,027
iviay				3,677			409	840	48				4,974
June	1	0		1,177			209	200	0				1,586
Julic	1	16		4,020			760	672	33				5,502
July		0		1,048			236	126	0			0	1,409
July		105		3,458			705	672	48			32	5,020
August		0		1,112			200	165	0				1,477
August		16		2,641			782	840	64				4,343
September				1,072			95	136					1,302
September				2,028			568	665					3,260
October													0
Octobel													0
November													0
NOVEITIBEI													0
December													0
													0
Totals:	3	0	0	11,385	360	0	1,187	1,794	0	0	0	0	14,729
	5	153	13	28,090	3,286	27	4,097	6,543	513	247	45	64	43,081

Note: Jersey City Contractors in Red

Project to Date (All Sites)	Jersey City MH's	Total MH's	% Jersey City Residents
2009:	1,875	5,581	33.6%
2010:	11,808	30,181	39.1%
2011:	19,449	58,741	33.1%
2012:	18,685	73,753	25.3%
2013:	39,546	165,638	23.9%
2014:	62,951	204,031	30.9%
2015:	35,784	103,123	34.7%
2016:	25,046	64,783	38.7%
2017:	21,448	70,307	30.5%
2018:	18,544	62,508	29.7%
Project Totals:	255,136	838,646	30.4%

PPG New Jersey Chrome Project

Non-Garfield Avenue Group Sites Q3 2018 Local Employment Report December 18, 2018

		Site	107		
	Cambridge Security	ENTACT	Master Locators	SGS North America	Totals
lanuary		0	0	0	0
January		70	36	134	240
February		0			0
rebluary		140			140
March		0			0
March		160			160
April	127	0			127
Аргіі	186	160			346
May	394	280			674
May	744	1,688			2,432
June	309	162			471
Julie	720	2,341			3,061
July	391	352			743
July	744	3,696			4,440
August	414	504			918
August	744	3,864			4,608
September	490	392			882
September	720	3,280			4,000
October					0
Octobel					0
November					0
NOVEITIBEI					0
December					0
December					0
Totals:	2,125	1,690	0	0	3,815
i otais.	3,858	15,399	36	134	19,427

Note: Jersey City Contractors in Red