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SITE ADMINISTRATOR

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July 31, 2018

**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 (January 30, 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 January 30, 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 fifth Progress Report. The prior Progress Reports are dated July 29, 2016, January 27, 2017, July 28, 2017 and January 30, 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 “**Mediation Order**”). A summary of the progress of the Mediation is included in this Progress Report.

**I. New Master Schedule:** With the help and cooperation of all the JCO Parties<sup>1</sup>, the Master Schedule dated January 9, 2018 was revised. A copy of the revised Master Schedule dated July 31, 2018 is enclosed.

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<sup>1</sup> 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. Update to McCabe Health Study.** The JCO charged the Site Administrator with a number of duties, including the following:

*Review previous and ongoing health studies concerning the health impacts of chromium in Hudson County and consult with experts in the field and, if necessary, to recommend a protocol for a future medical study (health exposure study), that would monitor the people living within the vicinity of the Garfield Avenue Site to ascertain chromium exposure risks.*

As required, former Site Administrator, W. Michael McCabe, reviewed more than 50 relevant health studies and consulted with top health and science experts in the field. In May 2010, Site Administrator McCabe issued his “Health Exposure Study Recommendation” (the “**McCabe Report**”).

The McCabe Report recommended the initiation of a comprehensive Community Health Exposure Prevention and Testing Program consisting of the following: (1) a comprehensive Air Monitoring Program to ensure the protection of the surrounding community during the remediation of the Garfield Avenue Sites, (2) an accompanying health exposure program to determine whether the community is being exposed to hexavalent chromium related to the cleanup of the Garfield Avenue Sites, and (3) a mapping project using results from the Residential Inspection Program established by the JCO to outline areas of soil contamination, if detected.

On June 1, 2018, I issued an “Update to the May 2010 Health Exposure Study Recommendation” (the “**Riccio Report**”)(copy enclosed). The Riccio Report chronicles the work that has been done by PPG and the other JCO Parties to implement the recommendations made in the McCabe Report. The Riccio Report concludes that the McCabe Report recommendations have been successfully implemented.

In addition, the Riccio Report makes the following recommendations:

*Air Monitoring Program: This Program shall continue at the PPG Sites during remedial activities. All data generated from the Program shall continue to be uploaded to the Chromium Cleanup Partnership web site. In addition, all such data and any future modifications to the Air Monitoring Plan that are required due to changing conditions at the PPG Sites will be reviewed by the Independent Technical Consultant<sup>2</sup> and approved by NJDEP.*

*Health Exposure Testing: No further health testing activities are planned at this time.*

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<sup>2</sup> The JCO requires the Site Administrator to retain an Independent Technical Consultant. Weston Solutions, Inc. has served as the Independent Technical Consultant since being selected to serve in that capacity in October 2009. The Independent Technical Consultant provides technical support to NJDEP, provides NJDEP with written comments on technical submittals, answers questions from, and meets and confers with the JCO Parties regarding submittals, and attends and participates in community or public meetings to discuss proposed remedial measures at the PPG Sites.

*Residential Inspection Program: It is recommended that this Program be discontinued, unless good cause exists to reopen the Program on a case-by-case basis with respect to residents located in the Program Area.*

**III. Residential Inspection Program:** When I started as Site Administrator in January 2016 there were 47 properties remaining in the Residential Inspection Program that potentially required inspection, sampling and/or remediation. As of the date of this Progress Report, all of the properties in the Program have been evaluated and, if requested, inspected and sampled and, where required, remediated or otherwise closed out of the Program. In the Riccio Report (see Section II above), it was recommended that this Program be discontinued, unless good cause exists to re-open the Program on a case-by-case basis for residents located in the Program Area (as defined in the Riccio Report).

**IV. IRM Inspection Program:** Inspections of all of the Interim Remedial Measures (“**IRMs**”)<sup>3</sup> 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.

**V. Remediation Progress**

Attached to the Master Schedule are **Figure 1** and **Figure 2**. These figures depict the “Garfield Avenue Group” of sites (the “**GAG Sites**”), the Garfield Avenue Group Phase 4 Roadways (the “**GAG Roadways**”) and the Garfield Avenue Group Phase 5 – Off-Site Properties (the “**GAG Off-Site Properties**”). 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 **Figure 1** and **Figure 2**:

- 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;

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<sup>3</sup> 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.

- 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 CCPW<sup>4</sup>-impacted roadways surrounding the GAG Sites, including Halladay Street North, Forrest Street, Carteret Avenue, and Garfield Avenue (from Carteret Avenue to the Light Rail).

The GAG Off-Site Properties include CCPW-impacted properties adjacent to the GAG Sites, including the former Halsted Bag Company, Forrest Street Properties, and Al Smith Moving.

#### A. Remediation of the GAG Sites

Significant progress has been made at the GAG Sites since my last Progress Report. With the exception of the Ten West Apparel Property (see below), properties located adjacent to the Ten West Apparel Property (see below) and small portions of Site 114, excavation, backfilling and restoration of impacted soils at the GAG Sites are largely complete. The work at these sites has begun to focus on groundwater 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 is intended to target chromium contamination in the water table through the use of, among other things, “biological” treatment agents that will reduce the chromium contamination without harm to the environment. The JCO Parties agreed to milestones for the groundwater remedial investigation and the groundwater remediation program. The milestones are included in the new Master Schedule. PPG expects the groundwater remediation program to achieve meaningful reductions in the total chromium concentrations in groundwater at the GAG Sites. PPG intends to circulate to the JCO Parties, by the end of August 2018, the second quarterly groundwater treatment progress report.

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. Excavation of chromium impacted soils under the building located at 800 Garfield Avenue will not

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<sup>4</sup> “CCPW” refers to chromate chemical production waste and is more particularly defined in the JCO.

commence until Ten West Apparel has vacated the building. I have been informed that Ten West is not likely to vacate the building until March 2020.

Properties Adjacent to Ten West: Remediation of soils at certain properties adjacent to 800 Garfield Avenue was put on hold pending resolution of the access litigation between PPG and Ten West Apparel/Mid-Newark, L.P. Now that the access litigation has been resolved, PPG intends to commence soils remediation in 2018 at portions of Site 137B and Site 133 West.

B. Remediation of the GAG Roadways:

Halladay Street North: The remediation of chromium impacted soils in this roadway was originally planned to commence in conjunction with the remediation of the former Halsted Bag Company property (78 Halladay Street) (see discussion of that site below). The remediation activities have, however, been postponed because PPG and the Jersey City Municipal Utilities Authorities (“JCMUA”) have not to date agreed upon the remedial approach in this roadway given the presence of a sewer line that exists in this roadway.

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 remedy<sup>5</sup> 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.

Garfield Avenue: PPG has substantially completed the investigation and delineation of chromium impacts in Garfield Avenue between Carteret Avenue and the Hudson Bergen Light Rail overpass. 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.<sup>6</sup> 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.

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<sup>5</sup> A restricted use remedy or restricted use remedial action means any remedial action that requires the continued use of engineering and 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.

<sup>6</sup> 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.

Carteret Avenue: 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 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. Since my last Progress Report, PPG and the JCMUA have coordinated activities to install test pits on Carteret Avenue to verify the location of the sewer pipe and to assist in the design of JCMUA efforts to upgrade the sewer line. JCMUA also commenced testing of sewage flows in the pipe. Numerous meetings have been held and are planned to coordinate the construction/remediation activities and cost sharing issues between PPG and the City entities. PPG submitted a Remedial Action Work Plan for this roadway in June 2018, which is under review by the JCO Parties. PPG currently plans to commence excavation of chromium impacted soils in this roadway in December 2018.

C. Remediation of the GAG Offsite Properties

Al Smith Moving Property (33 Pacific Avenue). PPG has completed excavation, backfilling and restoration of the Al Smith Moving property.

Former Halsted Bag Company Property (78 Halladay Street): In May 2018, PPG demolished all building structures at this site and commenced excavation and backfilling of chromium impacted soils. Excavation and backfilling are expected to be completed in August 2018. Some chromium impacted soils will remain in place to avoid damage to off-site building structures located on the east side of this property.<sup>7</sup> In addition, impacted soils located on the west side of this property adjacent to Halladay Street will be left in place until PPG and JCMUA have agreed upon the coordination of the remediation in proximity to the sewer pipe located in Halladay Street North.

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 existing 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 during the reporting period. 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.<sup>8</sup> 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

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<sup>7</sup> 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.

<sup>8</sup> 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.

are in discussions 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.

D. Remediation of the Non-GAG Sites

Site 156, Metropolis Towers: All excavation, backfilling and restoration activities have been completed at this site. All NJDEP approvals related to the soils remediation of this site (except for impacted soils underlying the boiler room, as discussed herein) are expected to be issued in 2018. 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. PPG has completed its investigation of groundwater at this site and on July 19, 2018 NJDEP issued its final approval of the groundwater investigation. The groundwater investigation demonstrated compliance with NJDEP's groundwater quality standards for chromium and CCPW-related metals for which PPG is responsible. Consequently, no further action is required by PPG with respect to the groundwater at this site.

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 milestones for contaminated soils located under the buildings at this site were originally based on the assumption that the remedy for those areas included demolition of all buildings enabling full removal/excavation of contaminated material within the footprint of the building. Those milestones are now in question because PPG and the property owner have not agreed upon whether demolition of the buildings is required to support the remedial alternatives analysis. My involvement and that of NJDEP may be required to assist in the PPG-property owner negotiations. In the meantime, PPG continues to investigate groundwater impacts at the site and to develop a Remedial Action Work Plan for the groundwater.

Site 63, Baldwin Oil (1 Burma Road): Excavation, backfilling 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 scheduled for completion in 2018.

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 will consist of institutional and engineering controls until such time as JCMUA undertakes work on a water utility line

located within this roadway. PPG submitted a Soils Remedial Action Report<sup>9</sup> embodying the terms of the settlement agreement to the JCO Parties in April 2018. 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. Excavation, backfilling and restoration are expected to be completed this year. Site 108 is located adjacent to Site 107. A portion of Site 108, along the boundary of Site 107, is impacted by chromium. Remediation of that area is expected to occur concurrently with the remediation of Site 107.

Site 174, Dennis Collins Park (Bayonne): The parties continue to await a response from the City of Bayonne with respect to a proposed Memorandum of Understanding (MOU) between PPG and the City. This MOU will set forth the parties' understandings concerning the coordination of the City's redevelopment of the Park with the installation of a 2 ft. clean soil cap and other required engineering controls for the remediation of soils.

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 by the end of 2018.

## **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 held numerous mediation sessions in 2017 with PPG, JCRA, the City and Hampshire and in 2018 conference calls have been held among the parties to address open issues. As a result, many issues relating to both disputes have been either significantly clarified or are no longer in dispute.

As to the Hampshire-PPG dispute, some issues were clarified through mediation, although the Hampshire-PPG Dispute is not resolved. Based upon a recent request by Hampshire, I

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<sup>9</sup> 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

am attempting to schedule a meeting in August 2018 to discuss PPG's remediation plans for Site 114.

In the City-PPG Dispute, I held a meeting between PPG and the City on May 7, 2018 to discuss open issues between these parties. More recently, PPG and the City have exchanged drafts of a settlement agreement. The City and PPG are currently privately negotiating the terms of that agreement. I remain available to them if they cannot resolve their differences and further mediation is necessary. I anticipate that we will know in the coming months whether the parties can resolve their differences.

I leave it to Your Honor's sound discretion as to whether you want to conduct a case management conference involving any of the issues that I have been mediating.

#### **X. Current and Future Activities**

Web Site: My office, with the help of the JCO Parties, maintains a web site at [www.chromiumcleanup.com](http://www.chromiumcleanup.com). The web site contains information about, among other things, the status of remediation at the PPG chromium sites. We are currently 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.

Newsletter: A newsletter is published at least annually that summarizes the status of activities at the PPG chromium sites. The next newsletter is scheduled for distribution in January 2019.

Public Information Session: I hold a public open house/information session at least once annually. The next such session will be held in January 2019. My office and certain of the JCO Parties will participate in the open house and respond to questions from the public about the status of the cleanup of the PPG chromium sites.

PPG Employment Report: Attached is PPG's 1Q 2018 Employment Report in which PPG reports that it has satisfied the JCO goals for the reporting period.<sup>10</sup>

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

Respectfully submitted,



Ronald J. Riccio  
Site Administrator

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<sup>10</sup> Paragraph 60 of the JCO requires that PPG submit a quarterly report to the Site Administrator detailing the efforts PPG has taken to meet the employment goals set forth in the JCO.

Attachments:

- Master Schedule dated July 31, 2018 with figures/maps
- Update to the May 2010 Health Exposure Study Recommendation dated June 1, 2018
- PPG Q1 2018 Employment Report

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

**Master Schedule for the NJ PPG Chrome Remediation Sites**

**(Exhibit 2/3)**

**Revision Date: July 31, 2018**

**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-4	Site 114 (JCRA/Hampshire)	See Comments	12/31/2013	11/24/2014	1/21/2015	1/31/2018 (see Comments)	June 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.  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.  PPG is to addressing remaining soil impacts in a small portion of the soil IRM #1 area adjacent to Garfield Avenue (referred to as the "Western Sliver") via injection of emulsified vegetable oil into shallow groundwater in this area to treat the soil impacts.
GA Group Phase 3A	Site 132 (824 Garfield) (JCRA)	See Comments	3/4/2014	9/5/2014	5/15/2015	1/31/2018	May 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.
	Site 143 (846 Garfield) (PPG)	PPG Owned						
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	May 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 25 Halladay with 800 and 816 Garfield Avenue added)	Site 133 West (PPG) and Site 137 South (PPG)	PPG Owned	August 2018	February 2019	April 2019	June 2019	August 2020	Milestone dates apply to the portions of Site 133 West and Site 137 South that are accessible prior to demolition of the Ten West Apparel building. The portions that are inaccessible due to proximity to the Ten West Apparel Building will be excavated and backfilled with the Ten West Apparel remediation activities consistent with the Ten West Apparel Master Schedule milestones.
	Fishbein (816 Garfield Avenue) (PPG)	PPG Owned	7 Months After Ten West Vacates 800 Garfield	7 Months After Excavation Start	2 Months After Excavation Complete	3 Months After Backfill Complete	14 Months After Restoration Complete	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 <sup>th</sup> 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. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at the sites/partial sites located within this Phase.
	Ten West Apparel (800 Garfield Avenue) (PPG)	PPG Owned						
GA Group Phase 3C	Site 133 East (22-68 Halladay) (PPG)	PPG Owned	4/21/2015	10/22/2015 (See Comments)	7/29/2016 (See Comments)	1/31/2018 (see comments)	January 2019 for HSS	PPG achieved the restoration complete for these areas with the exception of grids in Site 133 East and Halladay Street South adjacent to Ten West Apparel; those grids will be excavated and backfilled with the Ten West Apparel remediation activities consistent with the Ten West Apparel Master Schedule milestones.  Utility reinstatement in Halladay Street South is on hold pending mediation between the City and PPG of issues related to reimbursement to the City for replacement of utilities and other improvements/infrastructure located within this portion of the roadway.
	Halladay Street South (Jersey City)	Road Closure In Place					May 2019 for Site 133 East & Site 135 North	
	Site 135 North (Portion of 51-99 Pacific) (PPG)	PPG Owned	2/23/2016	5/25/2016	7/29/2016			

**Master Schedule for the NJ PPG Chrome Remediation Sites**

**(Exhibit 2/3)**

**Revision Date: July 31, 2018**

**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 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	May 2019	
GA Group Phase 5 Off Site Properties	Halsted Corporation (78 Halladay St) (PPG)	PPG Owned	5/7/2018	June 2019 (See Comments)	August 2019 (See Comments)	February 2020 (See Comments)	July 2020 (See Comments)	As of this time, residual impacted soils will remain along the eastern boundary of the Halsted site, adjacent to the adjoining properties, in order to protect those structures. Remedial excavation of this eastern area will be deferred pending redevelopment. Additionally, residual impacted soils may remain along the western boundary of the Halsted site, pending remediation of Halladay Street North, in order to protect utilities within the Street. The RAR Determination milestone is based upon the assumption that the RAR will include a restricted use component with respect to chromium impacts that cannot be removed within the boundaries of the former Halsted site. A separate RAWP will be required to address remediation of the remaining impacts along the eastern boundary of this site, and beyond the site boundary if needed.  This property was not part of NJDEP's March 30, 2017 capillary break determination letter. 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.
	Forrest Street Properties 84, 86 and, 90-98 Forrest St and Block 21501, Lot 15 (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 at 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.
	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	May 2019	
GA Group Phase 4 Roadways	Carteret Avenue (Jersey City)	See Comments	TBD (See Comments)	TBD (See Comments)	TBD (See Comments)	TBD (See Comments)	TBD (See 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.  PPG, the City, JCMUA and JCRA are working cooperatively with respect to the planning for the remediation of this roadway and the possible lining, removal and/or replacement of all or portions of an existing 96" steel combined sewer line within Carteret Avenue. PPG intends to commence remediation in this roadway by December 2018. The parties await finalization of the JCMUA's plans with respect to the steel sewer line. PPG and JCMUA are also currently in discussion regarding the 48" concrete combined sewer that comes from Halladay Street continuing past Pacific Avenue.  PPG submitted a RAWP for the Carteret Avenue roadway on June 29, 2018 that is currently under review by the Parties.  This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter. 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.

**Master Schedule for the NJ PPG Chrome Remediation Sites**

**(Exhibit 2/3)**

**Revision Date: July 31, 2018**

**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 Phase 4 Roadways (continued)	Halladay Street North (Jersey City)	See Comments	November 2018	December 2019	February 2020	August 2020	October 2021	The remediation of this roadway was originally intended to be completed in conjunction with the remediation of the Halsted Building, however, PPG and JCMUA are currently in discussion regarding the 30" sewer line that exists in this roadway. When remedial action is implemented in Halladay Street North, residual contamination on the western edge of the Halsted Corporation site will be addressed.  This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter. 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.
	Forrest Street (Jersey City)	See Comments	3/27/2017	8/4/2017	9/1/2017	6/27/18	July 2019	The Principals agreed that Forrest Street and Forrest Street Properties shall be considered one combined site for the purpose of the milestones 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 at 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.
	Garfield Avenue (Jersey City)	See Comments	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 Remediation Plan Summary. The Remediation Plan Summary calls for, among other things, deferring excavation of shallow impacts until the street is closed/partially closed for street widening work by the City. PPG submitted a RAWP for the Garfield Avenue roadway on June 29, 2018 that is currently under review by the Parties.  This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department as to the need for a capillary break at this Site.

**Master Schedule for the NJ PPG Chrome Remediation Sites**

**(Exhibit 2/3)**

**Revision Date: July 31, 2018**

**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. PPG intended to conclude its analysis of remedial alternatives for the warehouse building, secure the property owner's consent and propose a remedy to NJDEP by September 2018 for the areas under the building and outside the building along Linden Avenue East. That milestone is in jeopardy because the property owner and PPG are currently discussing required methods for building structural analysis to support the remedial alternatives analysis.  The milestones for this Site do not assume that the remedy for the building includes demolition.  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	See Comments	See Comments	See Comments	October 2018	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 April 9, 2018, PPG submitted a Remedial Action Report ("RAR") incorporating the remedial action concepts from the Settlement Agreement. The RAR is under review by the Parties.
Site 107/Site 108	Fashionland (Site 107 - Greenberg) / Albanil Dyestuff (Site 108 - American Self Storage Liberte, LLC)	107 - Access agreement in place  108 - Access agreement in place with new owner	6/13/2018 (See Comments)	December 2018	January 2019	March 2019	May 2020	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.
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  Parking Lot: September 2018	The Boiler Room 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.
Site 174	Dennis Collins Park (City of Bayonne)	Access agreement (See Comments)	4/8/2013	9/30/2016	9/30/2016	9/30/2016	March 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 May 2019.
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						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, an adjacent private property. 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 by the end of 2018.

**Master Schedule for the NJ PPG Chrome Remediation Sites**

**(Exhibit 2/3)**

**Revision Date: July 31, 2018**

**GROUNDWATER**

GA GROUP GROUNDWATER MILESTONES							
Group/Phase or Site	Property Description (Owner)	IRM Start	IRM Performance Monitoring Complete	Remedial Investigation Report Submitted	Remedial Action Work Plan Submitted	Remedial Action Report Submitted	Comments
GW IRM Phase I	Site 114 (JCRA/Hampshire)	12/29/2017	December 2020				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 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 IRM progress will be provided by the PPG team.
GW IRM Phase II	Site 114 (JCRA/Hampshire)	June 2019	June 2022				This phase is contingent on PPG Management approval. 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				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				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			January 2020			RIR must address shallow, intermediate, deep and bedrock groundwater zones. 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				May 2021		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					November 2023	Areas with groundwater remediated after submittal of the groundwater RAR can be addressed through addenda to the groundwater RAR.
NON-GA GROUP GROUNDWATER MILESTONES							
Site 16	(see non-GAG Soils table)			RIR/RAWP Submittal: November 2021		TBD	
Site 63	(see non-GAG Soils table)			RIR/RAWP Submittal: September 2018		TBD	Milestone assumes 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)			See Comments		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)			RIR/RAWP Submittal: September 2019		TBD	
Site 156	(see non-GAG Soils table)			RIR Submittal: 4/16/2018		See Comments	The GW RIR demonstrated compliance with the GWQS. It is anticipated that NJDEP could issue a final compliance letter for groundwater in the third quarter of 2018.
Site 174	(see non-GAG Soils table)			RIR/RAWP Submittal: December 2018		TBD	Milestone assumes one round of groundwater monitoring well installation and two rounds of groundwater sampling approximately 30 days apart to demonstrate compliance with Groundwater Quality Standards. If additional investigation work is needed, the milestone will need to be revised.
Site 186	(see non-GAG Soils table)			Site 186 Groundwater Remedial Investigation incorporated into GA Group RI		TBD	Site 186 groundwater investigation/remedial action is considered part of the Garfield Avenue Group groundwater program.

**Master Schedule for the NJ PPG Chrome Remediation Sites**

**(Exhibit 2/3)**

**Revision Date: July 31, 2018**

**NOTES**

**SOILS NOTES:**

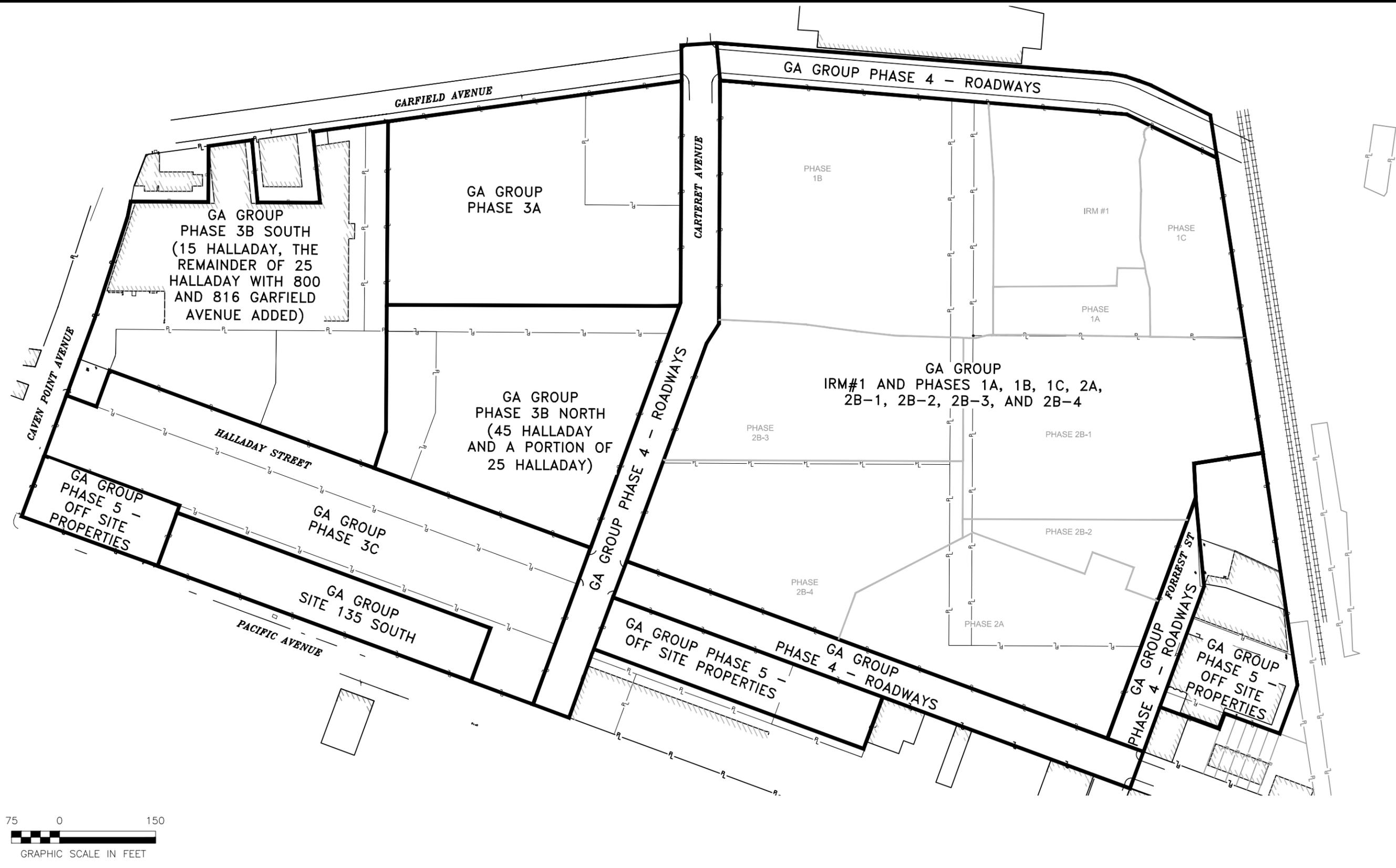
- 1) "Excavation Start" means access has been gained, building demolition and shoring installation, if required, have been completed, there are no known impediments to proceeding with excavation and excavation has actually commenced.
- 2) Green shading indicates that milestones have been attained.
- 3) For Garfield Avenue Group Sites, "Backfill Complete" means backfill is brought to elevations approved by NJDEP.
- 4) For the purpose of this Master Schedule, "restoration" is defined as capillary break installation (where required) and final remediation grading in accordance with an NJDEP-approved Restoration Technical Execution Plan. In its review of the Restoration TEP, the Department will consider the grades established in the Canal Crossing Redevelopment Plan for the Garfield Avenue Sites. In-kind replacement of existing infrastructure and/or improvements removed to implement the remedy, as well as final redevelopment grading, for the GAG Sites is the subject of pending mediation between the City and PPG.
- 5) 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.
- 6) 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). A Draft Consent Judgment Compliance Letter will typically be issued by the Department within 30 business days of the issuance of the RAR Determination.
- 7) 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.
- 8) 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.

**FIGURES 1 and 2 ATTACHED**

Piscataway on uspsw2vfp001\Data\_uspsw2vfp001\Environment(J)  
 User: amy.krayer Plotted: Jul 26, 2018 - 12:42pm  
 File: P:\Jobs\Rem\_Eng\Project Files\PPG Industries\Garfield Avenue\30% Design\CADD\MEETING FIGURES\2016-07-28 GAG Vicinity Ref Figure.dwg Layout: FIGURE 1



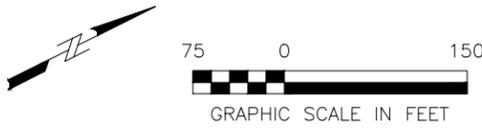
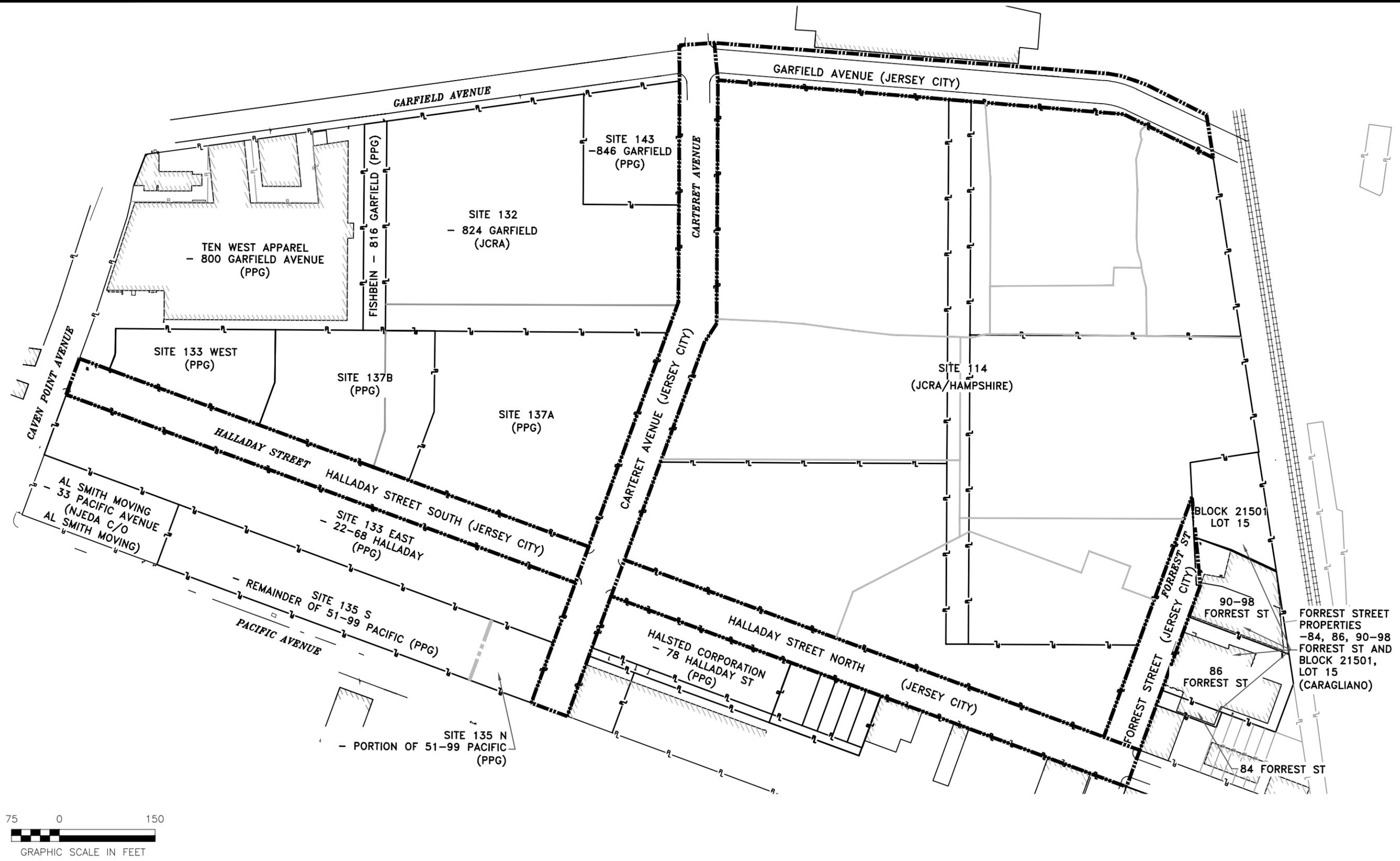
NOTES:

1. FOR OFF SITE PROPERTIES AND ROADWAYS, PROPERTY LINES ARE ESTIMATED BASED ON TAX MAPS. LIMITS ARE INTENDED TO EXTEND TO ACTUAL PROPERTY LINES, TO BE CONFIRMED BY PROFESSIONAL SURVEY PRIOR TO START OF WORK.



PPG GARFIELD AVENUE GROUP JERSEY CITY, NEW JERSEY		GROUP/PHASE OR SITE PLAN
DATE: 07/19/2016	DRWN: DCB	FIGURE 1

Piscataway on uspsw2\fp001\Data\_uspsw2\fp001\Environment(J)  
 User: amy.krayer Plotted: Jul 26, 2018 - 12:48pm  
 File: P:\Jobs\Rem\_Eng\Project Files\PPG Industries\Garfield Avenue\30% Design\CADD\MEETING FIGURES\2016-07-28 GAG Vicinity Ref Figure 2.dwg Layout: FIGURE 2



**LEGEND**  
 SITE DESCRIPTION  
 - ADDRESS  
 (OWNER)

**NOTES:**  
 1. FOR OFF SITE PROPERTIES AND ROADWAYS, PROPERTY LINES ARE ESTIMATED BASED ON TAX MAPS. LIMITS ARE INTENDED TO EXTEND TO ACTUAL PROPERTY LINES, TO BE CONFIRMED BY PROFESSIONAL SURVEY PRIOR TO START OF WORK.



PPG GARFIELD AVENUE GROUP JERSEY CITY, NEW JERSEY		<b>PROPERTY DESCRIPTION (OWNER)          PLAN</b>
DATE: 07/19/2016	DRWN: DCB	<b>FIGURE 2</b>

# **Update to the May 2010 Health Exposure Study Recommendation**

By: Ronald J. Riccio, Site Administrator, and James D. Ray, Esq.<sup>1</sup>

June 1, 2018

## **Purpose of this Report**

The former court-appointed Site Administrator for the cleanup of designated PPG chromium waste sites in Hudson County, New Jersey, W. Michael McCabe, prepared and submitted to the Superior Court of New Jersey, Hudson County, a Health Exposure Study Recommendation dated May 2010 (the “*McCabe Report*”). The McCabe Report recommended the initiation of a comprehensive “Community Health Exposure Prevention and Testing Program” consisting of various components.

The purpose of this Report is to communicate to the public the status of the implementation of the recommendations of the McCabe Report. This Report will also make recommendations for future activities at the PPG chromium cleanup sites designed to continue to help protect the health and safety of residents living in close proximity to these sites.

## **Background**

On June 26, 2009, a Partial Consent Judgment (the “*Consent Judgment*”) was entered with the Superior Court of New Jersey. The Consent Judgment bound the New Jersey Department of Environmental Protection (“*NJDEP*”), PPG Industries, Inc. (“*PPG*”), and the City of Jersey City to work together to remediate the remaining 20 chromium sites in Hudson County for which PPG is responsible. The settlement incorporated into the Consent Judgment was designed to remediate the soils, groundwater and sources of contamination at the PPG Sites as “expeditiously as possible.”<sup>2</sup>

To help meet this objective, the Consent Judgment required the establishment of the position of an independent Site Administrator with oversight responsibilities. The responsibilities vested in the Site Administrator include developing a judicially enforceable master schedule, facilitating parties’ progress in meeting master schedule milestones, hiring an independent technical consultant, maintaining regular communications with community representatives and communicating community concerns to the parties to the Consent Judgment.

W. Michael McCabe was appointed Site Administrator by court order in July 2009. Mr. McCabe served as Site Administrator until January 2016 when Ronald J. Riccio assumed the position. Mr. Riccio was appointed Site Administrator on December 12, 2015 by the Superior Court of New Jersey, Chancery Division, Hudson County. Mr. Riccio was reappointed to the position of Site Administrator by Consent Order entered by the Court on December 26, 2017 for

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<sup>1</sup> Mr. Riccio is Counsel and Mr. Ray is a Partner with the law firm of McElroy, Deusch, Mulvaney & Carpenter, LLP. Their biographies can be viewed on the Chromium Cleanup Partnership web site at [www.chromiumcleanup.com](http://www.chromiumcleanup.com).

<sup>2</sup> Partial Consent Judgment Concerning the PPG Sites (Civil Action No.: HUD-C-77-05), June 26, 2009 (the “Consent Judgment”), Section V, Paragraph 8.

a two-year term commencing on January 4, 2018.

As part of the duties and responsibilities of the Site Administrator, a provision was included in the Consent Judgment requiring the Site Administrator to:

Review previous and ongoing health studies concerning the health impacts of chromium in Hudson County and consult with experts in the field and, if necessary, to recommend a protocol for a future medical study (health exposure study), that would monitor the people living within the vicinity of the Garfield Avenue Site to ascertain chromium exposure risks....<sup>3</sup>

It was on this basis that Site Administrator McCabe prepared the McCabe Report and submitted it to the Court by letter dated June 28, 2010. The McCabe Report included an extensive review of existing health study literature and research which formed the foundation for the recommendations in the McCabe Report, centered upon potential exposures to hexavalent chromium and, in particular, the use of chromate chemical production waste (“CCPW”) as construction fill material.

### **CCPW**

The reader of this Report is referred to the McCabe Report, which contains an extensive description of CCPW and its potential health exposure threats. In summary, CCPW is a by-product generated from the production of sodium dichromate. CCPW contains hexavalent chromium. CCPW has been found at residential, commercial and industrial locations throughout Hudson County. Chromate waste from the sodium dichromate production facilities in Hudson County was used as fill in preparation for building foundations, roadway construction, filling of wetlands, sewer construction and other construction and development projects. Chromate contamination has been found in a variety of places, including the walls and floors of buildings, interior and exterior building surfaces, surfaces of driveways and parking lots and in the surface and subsurface of unpaved areas.

### **Recommendations of the McCabe Report**

As required by the terms of the Consent Judgment, before deciding whether to recommend “a health exposure study for the residents living in the vicinity of Garfield Avenue,” Site Administrator McCabe reviewed relevant health study data and considered the opinions of health and science experts.<sup>4</sup> McCabe evaluated this information “in the context of protecting the public’s health from potential exposures related to the remediation of the Garfield Avenue Site.”<sup>5</sup>

After conducting a thorough review of scientific studies, expert opinions and other available data and information, Site Administrator McCabe recommended a Community Health Exposure Prevention and Testing Program that “would protect the health and ensure the safety of

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<sup>3</sup> Consent Judgment, Section XVI, Paragraph 49 (g).

<sup>4</sup> McCabe Report, Article IV.

<sup>5</sup> Id.

residents living near the Garfield Avenue Site.”<sup>6</sup> Site Administrator McCabe’s recommended program consisted of the following three components: (1) a comprehensive Air Monitoring Program to ensure the protection of the surrounding community during the remediation of the Garfield Avenue Site, (2) an accompanying health exposure program to determine whether the community is being exposed to hexavalent chromium related to the site cleanup, and (3) a mapping project using results from the Residential Inspection Program established by the Consent Judgment to outline areas of soil contamination, if detected.<sup>7</sup>

The details of the Community Health Exposure Prevention and Testing Program recommended by Site Administrator McCabe and the actions taken to date to implement those recommendations are outlined below.

## A. AIR MONITORING PROGRAM

### 1. The McCabe Report Recommendations for an Air Monitoring Program.

The McCabe Report recognized that the activities associated with the excavation and removal or treatment of CCPW and CCPW-impacted materials from the Garfield Avenue Site<sup>8</sup> resulted in the generation of work site dust. In order to ensure that the health and safety of off-site residents was being protected during these activities, the McCabe Report called for continuous on-site and perimeter monitoring of ambient air. The McCabe Report also recommended that “the data generated will be independently reviewed and made available in an open and transparent manner.”<sup>9</sup>

The Air Monitoring Program described in the McCabe Report was required to include the following:<sup>10</sup>

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<sup>6</sup> Id.

<sup>7</sup> Site Administrator McCabe also recommended that the parties to the Consent Judgment undertake promotion activities to encourage community participation in the second phase of a household dust study being funded mainly by NJDEP through its Division of Science and Research (the “Phase II Dust Study”). The Phase II Dust Study was conducted by the Department of Environmental and Occupational Medicine, Center for Environmental Exposure and Disease, Rutgers Robert Wood Johnson Medical School, Environmental and Occupational Health Sciences Institute (“EOHSI”) and other participants. The Phase II Dust Study was completed and the study results were compiled in a paper published in the Journal of Exposure Science and Environmental Epidemiology (2015), 1–7, entitled, “A post-remediation assessment in Jersey City of the association of hexavalent chromium in house dust and urinary chromium in children.” This paper concluded, in part, as follows:

In contrast to our findings in pre-remediation studies of Cr exposure in Jersey City, there no longer appears to be an association between Cr+6 in house dust and Cr in the urine of children in the same homes. The urine chromium levels are lower than in the pre-remediation period. Consistent with our more recent findings, this appears to be associated with the remediation of chromium waste sites in Jersey City and to reflect the reduction of Cr+6 exposure in Jersey City to New Jersey urban background levels. In the larger context, this study serves to cap the series of studies of exposure to chromium waste in Jersey City....

<sup>8</sup> The “Garfield Avenue Site” is described in the Consent Judgment as “a chrome production facility [that] was operated at and/or near 880 Garfield Avenue, Jersey City, Hudson County, New Jersey.”

<sup>9</sup> McCabe Report, Article IV, Section A.

<sup>10</sup> These components and other requirements were set forth in an “Air Monitoring Plan” that had been reviewed and approved by NJDEP.

- Measures to control CCPW-containing dust and potential hexavalent chromium exposure to off-site residents;
- Establish an Action Level for total particulates and a risk-based concentration goal for hexavalent chromium for monitoring in the exclusion (work) zone and at the site perimeter;
- Continuously monitor and document airborne particulate and hexavalent chromium levels at on-site locations and at the fenceline (perimeter);
- Establish baseline conditions prior to remedial activities;
- Generate data to confirm successful dust control, as well as evaluate the need to initiate actions to mitigate dust generation in real-time as the excavation proceeds;
- Require program activity and data review by an independent Technical Consultant;<sup>11</sup>
- Post air monitoring data on the [www.chromiumcleanup.com](http://www.chromiumcleanup.com) website.

The McCabe Report considered a key component of the Air Monitoring Program to be the development of a risk-based concentration limit for hexavalent chromium in order to protect residents from exposure to hexavalent chromium during remedial activities. The McCabe Report recommended that the risk-based hexavalent chromium concentration limit in ambient air be calculated using a cancer risk methodology (representing the cumulative average risk over the 5-year duration of the remediation project). Because hexavalent chromium cannot be measured in real-time, a surrogate real-time Action Level for total particulates (PM10) was also recommended to be calculated. The real-time total particulate concentrations in the Exclusion (Work) Zone was to be averaged every five minutes in order to provide site personnel ample time to evaluate dust sources, employ dust control procedures or, when necessary, cease operations in order to prevent off-site exposures to elevated levels of contaminants.

## 2. Implementation of the Air Monitoring Program since Publication of the McCabe Report.

As recommended in the McCabe Report and required by NJDEP regulations, a comprehensive Air Monitoring Program was implemented during the remediation work at the PPG Sites to ensure that off-site residents were protected from potential hexavalent chromium exposure. A key element of the Air Monitoring Program was the development of an *Air Monitoring Workplan for Ground Intrusion Activities at the Garfield Avenue Site in Jersey City, New Jersey* (the “**Air Monitoring Plan**”),<sup>12</sup> which set forth the requirements for performing and documenting continuous air monitoring of airborne particulates and hexavalent chromium levels at on-site locations and at the site perimeter fenceline. The Air Monitoring Plan was reviewed by the Independent Technical Consultant and approved by NJDEP. Any subsequent modifications to the Air Monitoring Plan that were required due to changing conditions as the remediation

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<sup>11</sup> The Consent Judgment requires the Site Administrator to retain an Independent Technical Consultant. Weston Solutions, Inc. has served as the Independent Technical Consultant since being selected to serve in that capacity in October 2009. The Independent Technical Consultant provides technical support to NJDEP, provides NJDEP with written comments on technical submittals, answers questions from, and meets and confers with, PPG, DEP, and the Site Administrator regarding submittals, and attends and participates in community or public meetings to discuss proposed remedial measures at the PPG Sites.

<sup>12</sup> The referenced Workplan was originally approved by the Independent Technical Consultant and NJDEP in 2010 and later modified in April 2012.

work progressed were documented in individual Air Monitoring Plan Amendments. All Air Monitoring Plan Amendments were also reviewed by the Independent Technical Consultant and approved by NJDEP prior to their implementation.

To ensure the protection of off-site residents from exposure to airborne hexavalent chromium during the remediation activities, a site-specific Acceptable Air Concentration (“AAC”) limit for hexavalent chromium was developed in coordination with the NJDEP. The AAC for hexavalent chromium in air was calculated as a time-weighted average over the duration of the remediation project. For the Garfield Avenue Site, the AAC was established as 49 nanograms per cubic meter of air over the project duration at the site perimeter fenceline, which is considered to be protective of human health based on NJDEP criteria. In addition to establishing the site-specific AAC and because hexavalent chromium concentrations in air cannot be measured in real-time, a surrogate real-time Action Level of 333 micrograms per cubic meter for total particulates less than 10 micrometers in size (“*PM10*”) was calculated based on actual hexavalent chromium concentrations in site soils. The Air Monitoring Plan established the hexavalent chromium AAC and the *PM10* Action Level and presented the basis for their calculation.

Prior to the initiation of remediation activities, a robust perimeter air monitoring system consisting of multiple fixed and portable air monitoring stations was installed at the Garfield Avenue Site to confirm that safe conditions were maintained during intrusive site activities. The air monitoring system consisted of two tiers of protective monitoring. The first tier, which served as an early warning indicator to prevent dust from reaching the site perimeter, consisted of the performance of air monitoring at on-site exclusion zone areas with portable monitors encircling the areas of work. The second tier consisted of air monitoring at multiple fixed and portable stations located at the perimeter fenceline of the site. The air monitoring stations facilitated the collection of real-time air samples for *PM10* and also integrated air samples (over a period of 8 hours, 24 hours or 72 hours) for the laboratory analysis of *PM10* and hexavalent chromium in air. Baseline air monitoring of the site was performed for a period of 5 consecutive days preceding the startup of excavation/construction activities to quantify the pre-existing levels of *PM10* and hexavalent chromium at the site.

As the remediation work progressed, all real-time *PM10* data from the exclusion zone and perimeter stations were continuously telemetered to a central air monitoring station located at the site and evaluated by site air technicians against the particulate Action Level to confirm levels were within safe limits. Furthermore, the *PM10* Action Level was compared to real-time particulate measurements as an early warning sign to step-up dust suppression measures in the immediate work area or cease operations, if necessary, to evaluate and implement immediate corrective actions. Rolling averages of the hexavalent chromium concentration results from the analytical laboratory were compared to the established AAC, and trend analyses performed, to evaluate the on-going effectiveness of the Air Monitoring Program and dust control measures implemented during the construction activities. Weekly and monthly reports summarizing the program-to-date air results were submitted by PPG for review by the Independent Technical Consultant to confirm that: (i) the objectives set forth in the Air Monitoring Program were being met, and (ii) the site dust control measures were successful in maintaining *PM10* and hexavalent chromium levels below the Action Level and AAC, respectively. These air results were also

uploaded on a regular basis to the Chromium Cleanup Partnership web site ([www.chromiumcleanup.com](http://www.chromiumcleanup.com)) for public viewing.

Overall, the PM10 results obtained to date indicate that the dust control measures instituted during the intrusive activities at the PPG Sites have been so effective that the average PM10 concentrations measured during the intrusive work are very close to the concentrations measured during the baseline monitoring period. As further indication of the Air Monitoring Program's effectiveness, the integrated hexavalent chromium sampling and analysis performed during the remediation activities show that the program-to-date average airborne hexavalent chromium concentrations are significantly less than the AAC. These results confirm continuing compliance with the AAC established in the Air Monitoring Plan and the protectiveness of the dust control measures implemented at the site to protect public safety.

It is recommended that the Air Monitoring Program continue at the PPG Sites during remedial activities and that the data generated from the Program continue to be uploaded to the Chromium Cleanup Partnership web site. In addition, all data generated from the Program and any future modifications to the Air Monitoring Plan that are required due to changing conditions as the remediation work progresses will be reviewed by the Independent Technical Consultant and approved by NJDEP.

## **B. COMMUNITY HEALTH EXPOSURE TESTING PROGRAM**

### **1. McCabe Report Recommendations for a Health Exposure Testing Program.**

In addition to the Air Monitoring Program, the McCabe Report recommended health exposure testing for residents in order to evaluate whether the community was being exposed to hexavalent chromium related to the remedial activities. The McCabe Report noted that blood testing was being offered to respond to community concerns about potential exposures during remediation rather than being prescribed because of concerns about past exposures. The McCabe Report called for sampling of area residents' blood before, during and after cleanup activities to evaluate whether increases of hexavalent chromium above levels of concern were observed. The voluntary program was made open to all residents living in the area from the Garfield Avenue Site west to Ocean Avenue, south to Bayview Avenue and north to Bramhall Avenue (the "*Study Area*").

The McCabe Report recommended that the program consist of:

- An initial screening for chromium level in red blood cells (blood screening) to be completed before any remedial excavation activities are initiated at the Garfield Avenue Site in order to establish a baseline for comparison purposes;
- Semi-annual blood screenings throughout the period of land-disturbing remedial activities;
- Physical examinations for evidence of medical conditions that indicate a recent exposure to hexavalent chromium, if red blood cell sampling results are elevated above a level of concern;
- Data management and integration of participant blood data with environmental exposure studies data; and

- Protections for participant privacy.

## 2. Implementation of the Health Exposure Testing Program since Publication of the McCabe Report.

In June 2010, Site Administrator McCabe contracted with the Environmental and Occupational Health Sciences Institute (“*EOHSI*”) at the Rutgers School of Public Health to perform the health exposure study. A new contract was entered between Site Administrator Riccio and EOHSI in January 2016 to complete the study.

The results of the study were summarized in a report by EOHSI dated December 6, 2016, entitled “Results of the Blood Monitoring Program at the Garfield Avenue Chromium (VI) Remediation Sites” (the “*EOHSI Report*”).<sup>13</sup> The EOHSI Report noted that the blood monitoring program was implemented as planned in the McCabe Report, but with one modification after consultation between Site Administrator McCabe and environmental health scientists at EOHSI, who conducted the blood monitoring program, i.e., that blood sampling would be performed annually, instead of semi-annually. Sampling periods were selected to coincide with active remediation (soil removal).

The EOHSI Report confirmed that the multiple and overlapping measures to prevent human exposure to chromium during PPG’s soil cleanup activities at the Garfield Avenue sites had been effective. Blood samples collected from 28 residents living in the Study Area in June and July 2016 showed no detectable levels of chromium. Furthermore, results from the six previous rounds, including the initial testing in 2010, did not find any evidence of an increase in the blood chromium levels of the Study Area participants, despite digging up and hauling away approximately 1 million tons of chromium contaminated soil and debris.

The protective measures implemented at the cleanup sites include best management practices such as:

- Setting stringent limits on airborne dust and chromium;
- Monitoring air quality 24/7;
- Water misting work areas to suppress dust;
- Spraying surfaces with dust suppression materials;
- Pressure-washing trucks in a protected area before exiting site; and
- Covering open excavations and stockpiles when not being worked.

To determine baseline blood chromium concentrations, blood samples were collected by EOHSI from community volunteers living in the Study Area established under the blood monitoring program before the excavation began in July 2010. As planned in the blood monitoring program, samples were then collected annually, including 2016, the final year of the study. Under program guidelines, samples were collected and analyzed by an independent laboratory.

Dr. Robert J. Laumbach, the author of the EOHSI Report, said in the report that the

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<sup>13</sup> The EOHSI Report can be found on the Chromium Cleanup Partnership web site at [www.chromiumcleanup.com](http://www.chromiumcleanup.com).

results from the six-year study “support the conclusion that the work practices, dust suppression activities and the air monitoring program for controlling potential exposures to Chromium(VI) during the site remediation activities provided effective protection for residents in the Study Area.”

Based upon the conclusions drawn in the EOHSI Report, the recommendation of Site Administrator McCabe for a health testing program in the Study Area has been satisfactorily implemented. No further health testing activities are planned at this time.

## C. RESIDENTIAL INSPECTION PROGRAM

### 1. McCabe Report Recommendations for a Residential Inspection Program.

The McCabe Report recommended a project to map the results from the Residential Inspection Program established pursuant to the Consent Judgment<sup>14</sup> to outline areas of CCPW contamination, if detected. The Report noted that: “The information collected through site sampling is of great value in determining the extent of CCPW contamination within the Garfield Avenue Site community.”<sup>15</sup> The McCabe Report recommended that a “Residential Inspection Program Results Mapping Project” be developed to “share sampling results through location maps and public reports in order to provide the broader community with an accurate picture of residential contamination conditions.”<sup>16</sup> Finally, the McCabe Report recommended that information gathered in the Program be shared with the public through website postings and newsletters, as appropriate.<sup>17</sup>

As required by the Consent Judgment, the McCabe Report noted that residents living within the following prescribed areas were eligible to request an inspection under the Program: (i) 400 feet of the property lines or the edge of CCPW remediation (whichever is greater in distance) of a PPG Site, or (ii) in the area from the Garfield Avenue Site west to Ocean Avenue, south to Bayview Avenue and north to Bramhall Avenue ((i) and (ii) are collectively referred to herein as the “**Program Area**”). Daycare centers, schools and playgrounds within the Program Area were also considered eligible. The Site Administrator was required pursuant to the Consent Judgment to establish a hot-line call number that residents living in the Program Area could call if the resident suspected the presence of CCPW in or on their property.<sup>18</sup> The stated intention of the Residential Inspection Program as described by Site Administrator McCabe was that “both CCPW on the Garfield Avenue Site and residual CCPW on surrounding residential properties will be removed, thereby helping protect the community’s health.”<sup>19</sup>

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<sup>14</sup> The Consent Judgment required that the inspection, testing and, if required, remediation of residential properties within the specified study area be given the “highest priority” of the Site Administrator in scheduling of the site remediation work. The Consent Judgment also required the Site Administrator to “direct that an inspection and, if needed, any testing, at the real property be undertaken by qualified professionals retained by PPG, and PPG shall undertake the appropriate remedial measures, in the event there exists elevated levels of CCPW on the real property.” Consent Judgment, Section XX, Paragraph 61.

<sup>15</sup> McCabe Report, Section VII, C. 1.

<sup>16</sup> Id. at Section VII, C. 2.

<sup>17</sup> In light of concerns expressed by property owners participating in the Residential Inspection Program over public dissemination of specific information about their properties, the parties to the Consent Judgment have exercised discretion in the level of detail included in web site postings and newsletters that address the Program.

<sup>18</sup> Consent Judgment, Section XX, Paragraph 61.

<sup>19</sup> McCabe Report, Section VII, C. 1.

2. Implementation of the Residential Inspection Program since Publication of the McCabe Report.

At the request of the Site Administrator, and with the input of NJDEP, the City of Jersey City and the Independent Technical Consultant, PPG compiled a Residential Site Inspection Work Plan dated February 2010 (the “*RSIWP*”). The RSIWP governs the inspection, sampling and, if required, remediation of eligible residential sites.<sup>20</sup> The inspection process at each residence was designed to consist of a historical records review to determine if there was any record of the placement of CCPW on the property and an on-site physical inspection to look for visible signs of CCPW. The RSIWP procedures also called for the collection of soil samples which were analyzed for hexavalent chromium under two scenarios: (i) if visible signs of CCPW were observed, or (ii) visible signs of CCPW were not observed, but collection of samples were requested by the property owner. On-site inspections and soil sample collection were performed by AECOM (PPG’s consultant). One or more representatives of the Independent Technical Consultant retained by the Site Administrator participated in the site inspections and observed the collection of the soil samples and remediation activities, where required. The flow diagram below summarizes the critical steps of the Program.



Beginning in early 2010, property owners in the Program Area were advised of the Residential Inspection Program by notifications in the Site Administrator’s newsletters which were mailed to local residents, including property owners in the Program Area, by announcements at a number of public meetings chaired by the Site Administrator and by postings to the Chromium Cleanup Partnership web site. Throughout the Program, communications were also made with certain residents by letters mailed via certified and regular mail to their residences (including, in some instances, multiple mailings).

<sup>20</sup> Eligibility is based upon the residential site being located in the Program Area, as defined in this Report.

Seventy-six (76) residents who were eligible to participate in the Program used the hot-line or otherwise communicated with the Site Administrator or the parties to the Consent Judgment expressing interest in the Program. As of the date of this Report, soil sampling was completed on 29 residential properties who requested participation in the Program.

All inspection, sampling and remediation activities were undertaken by PPG and its consultants, but with the oversight of the Independent Technical Consultant. Twenty-two (22) of the 29 sites that were sampled were determined not to have hexavalent chromium present above applicable cleanup criteria, i.e., the New Jersey Direct Contact Soil Clean-up Criterion of 20 milligrams per kilograms (mg/kg). All sample results were reviewed by the Independent Technical Consultant before a determination was made that remediation of those 22 sites was not required.

Of the 29 properties that were sampled, individual samples from seven (7) properties exceeded the 20 mg/kg criterion. Soil removal actions are either in process or were completed by PPG<sup>21</sup> at these 7 properties where samples exceeded this criterion. These remedial activities are (or will be) documented in final written reports that were (or will be) reviewed by the Independent Technical Consultant.

Of the original 76 eligible residents who expressed interest in the Program, forty-seven (47) of those residents either did not respond to efforts to complete the various steps in the Program or they indicated that they did not desire to proceed with the Program. Beginning in 2016, after being appointed Site Administrator, Site Administrator Riccio made numerous attempts (in addition to prior efforts) to communicate with these 47 residents, including multiple mailings by both certified mail and regular mail. No further communications with these residents is contemplated at this time.

It is important to note that no historical records were found indicating that CCPW was disposed of on any of the residential properties that were inspected. In addition, based on the site inspections conducted by PPG's consultants and the Independent Technical Consultant, no evidence of the presence of CCPW was observed at the inspected properties. The absence of CCPW at each of the residential properties is documented in written reports reviewed by the Independent Technical Consultant. Those reports also include photographs documenting observations made during the site inspections. Where sampling was performed, the written reports contain detailed boring logs of the soils retrieved during sampling, including notations related to the presence or absence of CCPW as well as photo-documentation of the soils retrieved during sampling.

As noted above, the McCabe Report recommended that a "Residential Inspection Program Results Mapping Project" be developed to "share sampling results through location maps and public reports in order to provide the broader community with an accurate picture of residential contamination conditions." As noted in this Report, CCPW was not identified at any

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<sup>21</sup> Pursuant to the terms of the Consent Judgment, PPG is required to investigate and remediate CCPW at the residential sites and not hexavalent chromium that does not result from the presence of CCPW. (Consent Judgment, Section XX, Paragraph 61). Therefore, PPG's remediation activities at the referenced residential sites was done on a voluntary basis.

of the 29 sites that were inspected, including during the soil sampling activities at those 29 sites. Therefore, CCPW cannot be mapped for the sites that were studied. As also noted in this Report, hexavalent chromium was identified at several sites at levels that exceeded the applicable cleanup criteria. The Independent Technical Consultant prepared a map that shows those locations. The map illustrates that the hexavalent chromium exceedances are sporadic in terms of their locations. No firm conclusions can be drawn from these findings.

Over the past eight years, the existence of and eligibility for entry into the Residential Inspection Program has been widely communicated to residents in the Program Area through the various means mentioned in this Report. All eligible residents who requested entry into the Program had a historical records review performed for the property. If requested by the resident, their properties were inspected, sampled and, where sample results exceeded applicable NJDEP criteria for hexavalent chromium, remediated. It is recommended that the Residential Inspection Program be discontinued, unless good cause exists to reopen the Program on a case-by-case basis with respect to residents located in the Program Area.

## **CONCLUSIONS AND RECOMMENDATIONS**

The recommendations of the McCabe Report that called for a comprehensive Air Monitoring Program, a health exposure study and a mapping project using results from the Residential Inspection Program have been successfully implemented. This Report recommends the following:

Air Monitoring Program: This Program shall continue at the PPG Sites during remedial activities. All data generated from the Program shall continue to be uploaded to the Chromium Cleanup Partnership web site. In addition, all such data and any future modifications to the Air Monitoring Plan that are required due to changing conditions at the PPG Sites will be reviewed by the Independent Technical Consultant and approved by NJDEP.

Health Exposure Testing: No further health testing activities are planned at this time.

Residential Inspection Program: It is recommended that this Program be discontinued, unless good cause exists to reopen the Program on a case-by-case basis with respect to residents located in the Program Area.

This Report will be posted on the Chromium Cleanup Partnership web site, will be supplied to the Court with the Site Administrator's next Progress Report and will be summarized in the next Newsletter circulated to the public.



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**Jody Overmyer**  
Remediation Project Engineer

July 9, 2018

Ronald Riccio (Via Email [rriccio@mdmc-law.com](mailto: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  
1Q18 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 first quarter of 2018, services were provided by 17 firms, including environmental consultants, for on-site activities directly related to investigation and remediation of PPG's chromium sites. Three of these firms (1<sup>st</sup> Precinct Security, 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 21.8% of the manpower employed on the project. Jersey City residents accounted for a total of 5,264 manhours or 31.1% of the manpower used on the project during the first quarter, and 241,855 manhours or 30.5% 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,

A handwritten signature in black ink that reads 'Jody Overmyer' followed by a small 'es' at the end.

Jody Overmyer

ecc:

R. Adams  
P. Amin  
N. Colson  
B. Delisle  
B. Doshi  
D. Doyle  
R. Engel

S. Faeth  
R. Feinberg  
W. Howitz  
J. Lagrotteria  
D. Laguzza  
J. Ray  
D. Spader

M. Terril  
J. Worden

**PPG**  
**New Jersey Chrome Project**  
Garfield Avenue Group Sites  
Q1 2018 Local Employment Report  
July 9, 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
		16	5	4,798	1,166	27	329	840		247			7,427
February	2		0	1,280	116			180	0		0	0	1,578
	4		8	3,286	1,121			672	96		41	16	5,243
March				1,408	136			215	0		0		1,759
				1,983	1,000			671	66		4		3,724
April													0
													0
May													0
													0
June													0
													0
July													0
													0
August													0
													0
September													0
													0
October													0
													0
November													0
													0
December													0
													0
<b>Totals:</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4,160</b>	<b>360</b>	<b>0</b>	<b>103</b>	<b>639</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5,264</b>
	4	16	13	10,067	3,286	27	329	2,183	162	247	45	16	16,394

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:	5,264	16,933	31.1%
<b>Project Totals:</b>	<b>241,855</b>	<b>793,071</b>	<b>30.5%</b>

**PPG**

**New Jersey Chrome Project**

Non-Garfield Avenue Group Sites

Q1 2018 Local Employment Report

July 9, 2018

	Site 107			Totals
	ENTACT	Master Locators	SGS North America	
January	0	0	0	0
	70	36	134	240
February	0			0
	140			140
March	0			0
	160			160
April				0
				0
May				0
				0
June				0
				0
July				0
				0
August				0
				0
September				0
				0
October				0
				0
November				0
				0
December				0
				0
<b>Totals:</b>	0	0	0	0
	370	36	134	540

**Note: Jersey City Contractors in Red**