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January 31, 2022

**VIA FEDERAL EXPRESS AND EMAIL**

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

Re: **Progress Report (July 31, 2021 through the date of this Report)** pursuant to 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 filed June 26, 2009 (the “JCO”)

Dear Judge Jablonski:

I respectfully submit this Progress Report pursuant to my responsibilities as independent Site Administrator operating under the JCO (defined above). This Report covers the period July 31, 2021 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 twelfth Progress Report since being appointed Site Administrator. The prior Progress Reports are dated July 29, 2016, January 27, 2017, July 28, 2017, January 30, 2018, July 31, 2018, January 24, 2019, July 31, 2019, March 5, 2020, July 31, 2020, January 29, 2021 and July 30, 2021. All of those Progress Reports have been posted to the Chromium Cleanup Partnership web site ([www.chromiumcleanup.com](http://www.chromiumcleanup.com)) so that the public is kept apprised of the remediation activities at the PPG chromium sites.

In addition to serving as Site Administrator, I sometimes function as a mediator pursuant to the February 22, 2016 “Order Referring Third-Party Complaint and Referring Certain Matters to Mediation and Entering Stay” or as requested by interested parties

relative to the PPG chromium sites. Section VI. of this Report addresses the status of mediation proceedings I am handling.

### **I. COVID-19 Pandemic Impact on Master Schedule Milestones**

The JCO Parties and I continue to monitor COVID-19 indicators to determine any future potential COVID impact on the PPG remediation activities.

### **II. Master Schedule Revisions**

A revised Master Schedule dated January 31, 2022 is set forth as **Attachment 2** to this Progress Report. The new Master Schedule sets forth the most up to date activity milestones.

### **III. Release of Sites from JCO and Transition of Some Sites to the LSRP Program.**

PPG, NJDEP and the City of Jersey City entered into a Memorandum of Understanding dated September 22, 2020 (the “MOU”) that sets forth the procedure for the release of a site or portions of sites from the JCO. In summary, the parties to the MOU agreed that once NJDEP issues a “Consent Judgment Compliance Letter”<sup>1</sup> stating that PPG has satisfied its obligations for the remediation of a site or a portion of a site, then the site or portion of a site covered by the Consent Judgment Compliance Letter is released from my jurisdiction under the JCO. In some cases, where a remedial action permit (“RAP”) is required because there are future obligations to monitor the remedy, the site or portions of sites are transitioned to the Licensed Site Remediation Professional (“LSRP”) program for administration of the permit requirements.

PPG has made significant progress in obtaining Consent Judgment Compliance Letters for the remediation it has performed at the JCO sites or portions of sites. Attachment 1 to the new Master Schedule contains a list of all such approvals. The sites or portions of sites on that list have been released from my jurisdiction under the JCO.

It has come to my attention, however, that the NJDEP Bureau of Remedial Action Permitting (“BRAP”) that issues the RAPs is experiencing review delays. These delays have impacted PPG’s ability to obtain Consent Judgment Compliance Letters for those sites that require RAPs. For example, BRAP has not issued RAPs for permit applications that PPG submitted in March 2021 and July 2021.

### **IV. Approval of Groundwater Submittals for the GAG Sites.**

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<sup>1</sup> A “Consent Judgment Compliance Letter” is a letter issued by NJDEP pursuant to Section 23.G(b) of the September 7, 2011 Consent Judgment entered among PPG, NJDEP and the City of Jersey documenting completion by PPG of its remediation obligations.

Two major submittals by PPG relating to the groundwater contamination at Site 114 and the other surrounding Garfield Avenue Group of sites (the “GAG Sites”)<sup>2</sup> were approved this month by NJDEP.

A. Approval of the Remedial Investigation Report for Groundwater at the GAG Sites. After many detailed exchanges of technical issues among the groundwater experts, the Remedial Investigation Report for Groundwater at the GAG Sites (the “GW-RIR”) was approved by NJDEP on January 7, 2022. The GW-RIR documents the horizontal and vertical delineation of chromium and other contaminants of concern in the groundwater.<sup>3</sup> Approval of the GW-RIR is a major achievement given the many complexities associated with the groundwater conditions at the GAG Sites and because the GW-RIR forms the basis for the design of the groundwater remedy (See B. below).

B. Approval of the Remedial Action Work Plan for Groundwater at the GAG Sites. Another significant development since my last Progress Report is that the Remedial Action Work Plan for Groundwater at the GAG Sites (the “GW-RAWP”) was approved by NJDEP today (January 31, 2022). The findings from the GW-RIR were used to develop a comprehensive remediation strategy described in the GW-RAWP that is intended to address groundwater in the project area<sup>4</sup> that is impacted by chromium and other contaminants of concern.

The groundwater remediation goal of the GW-RAWP is to protect human health and the environment through attainment of applicable Groundwater Quality Standards (“GWQS”) established by NJDEP. The remediation strategy includes a combination of active remedial actions, long term monitoring and maintaining existing engineering controls and institutional controls. Excavation of the contaminant source material across the project area, followed by backfilling with clean backfill has considerably improved groundwater quality within the shallow water-bearing zone.<sup>5</sup>

In December 2017, PPG commenced operation of the first of three phases (Phase I, Phase II and Phase III) of interim remedial measures (“IRMs”) throughout the project area to address groundwater impacts. The IRMs utilize a combination of technologies, including extraction and ex-situ treatment of contaminated groundwater and injection of treatment reagents to achieve contaminant concentration reductions in-situ. Each IRM phase was implemented within specific areas and depth intervals of the project area. The Phase I IRM injection and extraction operations were completed in April 2020. The Phase II IRM, which also includes a combination of extraction and injections, is anticipated to operate through the first quarter of 2022. The Phase III IRM includes reagent injections similar to Phases I and II, and also includes subsurface emplacement of in situ reactive zones to address deeper, untreated areas. Phase III injections are

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<sup>2</sup> **Attachment 1** to this Progress Report defines “GAG Sites” and certain other terminology used in this Report.

<sup>3</sup> The parties have agreed that additional investigations of the bedrock zone of groundwater are required. The field activities relative to the bedrock investigations commenced in September 2021 and are ongoing. PPG anticipates submitting an Addendum to the GW-RIR in the third quarter of 2022 that will address the delineation of contaminant impacts to the bedrock.

<sup>4</sup> The “project area” is impacted groundwater at Site 114 and other portions of the Garfield Avenue Group of Sites.

<sup>5</sup> The shallow water bearing zone includes groundwater present in the fill from the water table to the top of an organic meadow mat layer that varies in depth across the project area from approximately 10 to 25 feet below ground surface.

expected to continue at least through the fourth quarter of 2022, while the in situ reactive zones have already been installed within Site 114. Emplacement of in situ reactive zones contemplated east of Pacific Avenue may be subject to delay resulting from access issues with a property owner. A period of post-treatment monitoring has and will follow each IRM phase.

Following implementation of the Phase I, II and III IRMs, the injected reagents will maintain a geochemically reducing environment for an extended period that is referred to in the GW-RAWP as the “enhanced attenuation” period. The enhanced attenuation period, which is considered active treatment, is projected to be 8 to 10 years. The injected reagents should further attenuate contaminant concentrations, prior to a transition to a “long-term groundwater monitoring” phase. The long-term groundwater monitoring plan will consist of an extensive network of wells that will be used to monitor treatment performance and other parameters to evaluate the effectiveness of the remedy. The long-term groundwater monitoring phase is projected to be as long as 30 years. During the long-term groundwater monitoring phase, if treatment performance is proven to be successful and a stable or immobilized plume is demonstrated, then the groundwater remedy may qualify to be transitioned to monitored natural attenuation (“MNA”).<sup>6</sup>

The GW-RAWP obligates PPG to submit periodic progress reports to document the effectiveness of the remediation strategy, including whether the lines of evidence indicate that the GWQS for the contaminants of concern will be achieved. In addition, if post-treatment monitoring indicates that the remediation goals cannot be achieved, the GW-RAWP obligates PPG to implement contingency remedies.

NJDEP, the City of Jersey City and I will be monitoring PPG’s activities pursuant to the GW-RAWP to ensure the continued protection of human health and the environment and to evaluate potential conflicts between future redevelopment activities and the PPG groundwater work. It is noted that groundwater in the project area is not used for potable, industrial, commercial, or private use.

## **V. Status of Sites Currently Being Investigated/Remediated**

### **A. Remediation of the GAG Sites, GAG Roadways and GAG Off-Site Properties<sup>7</sup>**

Halladay Street North (between Carteret Avenue and Forrest Street): The Remedial Action Report (“RAR”) documenting the remediation of soils in this roadway was approved by NJDEP on December 29, 2021. NJDEP expects to issue a Consent Judgment Compliance Letter releasing this roadway from the JCO in February 2022.

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<sup>6</sup> NJDEP has published a guidance document called the “Monitored Natural Attenuation Technical Guidance” (NJDEP, 2012a) that must be followed by PPG before it can transition the groundwater remedy to MNA. In accordance with the NJDEP’s guidance on MNA, the evaluation of MNA as a component of the groundwater remediation strategy for a site shall demonstrate the following: (i) whether the contaminants of concern are likely to be effectively addressed by natural attenuation processes; (ii) the potential for the contaminant plume to migrate; and (iii) the potential for unacceptable risks to human health and the environment.

<sup>7</sup> **Attachment 1** to this Progress Report sets forth definitions/descriptions of the “GAG Sites,” the “GAG Roadways,” the “GAG Off-Site Properties” and the “Non-GAG Sites.”

Forrest Street Roadway (west of Halladay Street to the terminus of the public roadway): PPG completed all remediation field activities in this roadway. It is currently awaiting NJDEP approval of a soil remedial action permit. Upon receipt of the permit, a Consent Judgment Compliance Letter will be issued by NJDEP releasing this roadway from the JCO and transitioning it to the LSRP program.

Garfield Avenue (between Carteret Avenue and the NJ Transit Line): The JCO Parties have agreed to a restricted use remedy for this roadway consisting of engineering controls (existing asphalt cap) and institutional controls (notice in lieu of deed notice). The remedy also calls for excavation of shallow chromium impacts in the roadway in the event of the widening of the roadway by the City that exposes soils underlying the road surface. Final documentation of the remedy has been postponed pending evaluation of the City's schedule for undertaking planned activities to widen this roadway.

Carteret Avenue (between Garfield Avenue and Pacific Avenue): The RAR documenting the remediation of soils in this roadway was approved by NJDEP on September 29, 2021. PPG anticipates submitting an application to NJDEP for a soil remedial action permit in the first quarter 2022. Upon receipt of the permit, NJDEP will issue a Consent Judgment Compliance Letter releasing this roadway from the JCO and transitioning the site to the LSRP program.

Pacific Avenue/Caven Point Avenue: The RAR documenting the remediation of soils in this roadway was submitted by PPG for review on October 7, 2021. Approval of the RAR is anticipated to occur in the first quarter 2022, following which PPG will submit an application to NJDEP for a soil remedial action permit. Upon receipt of the permit, NJDEP will issue a Consent Judgment Compliance Letter releasing this roadway from the JCO and transitioning the site to the LSRP program.

Former Halsted Corporation Property (78 Halladay Street): Excavation and backfilling of this site have been completed with the exception of residual chromium-impacted soils along the eastern boundary of the site that were left due to structural concerns of adjacent buildings. PPG is currently considering options for regulatory closure of those impacts. Therefore, final approval of the soil remediation activities at this site are on hold.

Forrest Street Properties (84, 86-90, 98-100 and 108 Forrest Street): The soil contamination at this property is being remediated under two separate approaches, one for the exterior portions of the buildings and one for the chromium impacts that remain in place under and adjacent to building structures located at this property.

Work Exterior to the Buildings: NJDEP approved the RAR for the soil remediation work exterior to the buildings on December 3, 2021. PPG submitted an application to NJDEP for a soil remedial action permit on January 27, 2022. Upon receipt of the permit, NJDEP will issue a Consent Judgment Compliance Letter releasing the exterior soils from the JCO and transitioning that portion of the site to the LSRP program.

Impacts under the Buildings: Implementation of an owner-approved Remedial Action Work Plan (“RAWP”) for chromium impacts under the buildings is underway, including installation of engineering controls in a basement area, alleyway and loading dock. The work in the alleyway was completed in December 2021. Installation of the engineering controls in the basement and the loading dock has been delayed as a result of building conditions and issues related to tenant movements in and out of the buildings. I am monitoring communications between PPG and the property owner in the hope of a resolution of the delays.

Ten West Apparel Property (800 Garfield Avenue, Jersey City) and Adjacent Parcels: All field work related to excavation, backfilling and restoration of the chromium impacts on the Ten West property and adjacent parcels was completed in 2021. PPG anticipates submitting the RAR for these areas in the fourth quarter 2022.

#### B. Remediation of the Non-GAG Sites

Site 156, Metropolis Towers: The only remaining area of environmental concern at this Site is the boiler room floor located in one of the towers. NJDEP approved the RAR for the boiler room in October 2020 and PPG submitted the remedial action permit application to NJDEP in July 2021. Upon receipt of the permit, NJDEP will issue a Consent Judgment Compliance Letter releasing the boiler room from the JCO and transitioning the area to the LSRP program.

Site 16, Linden Avenue East: Negotiations between PPG and the property owner with respect to a scope of work for future remediation of chromium impacted soils under the building structures located at this Site are ongoing. Soils exterior to the building have been remediated and final approvals were issued by NJDEP in March 2021. PPG submitted a Groundwater RIR Addendum in June 2020, which was approved by NJDEP in August 2020. Submittal of a RAWP for groundwater cannot occur until there is a resolution with the property owner of soil impacts under the building structures.

Site 63, Baldwin Oil (1 Burma Road): NJDEP approved PPG’s remediation of the soils at this Site in 2018. PPG’s efforts are now focused on groundwater at this Site, including Site 65.<sup>8</sup> PPG submitted a groundwater RIR Addendum/RAWP for this Site in December 2021, which is currently under review by NJDEP.

Sites 107, Site 108 and the Conrail Property: These three sites are contiguous and are being grouped in this Progress Report for the purpose of discussion.

Site 107: All excavation, backfilling and restoration of soils at this site were completed in 2021. For reporting purposes, this Site was split up into a “Majority

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<sup>8</sup> The JCO Parties have agreed that any impacted groundwater at Site 65 (which includes portions of Burma Road and Morris Pesin Drive and is situated adjacent to Site 63) will be deemed to have emanated from Site 63 and will be addressed in connection with the Site 63 groundwater investigation.

Site Area” and an “MSA Area.” The RARs for the soils in each area were approved in 2021.

Site 108: PPG submitted a draft RAWP/RAR in May 2021, which calls for a restricted use remedy for soils at this Site involving institutional controls and engineering controls. This remedy is subject to the consent of the property owner. Negotiations with the property owner are on-going.

Conrail Property: PPG has proposed a restricted use remedy for soils at this Site involving institutional controls and engineering controls. This remedy is subject to the consent of the property owner. Negotiations with the property owner are ongoing.

PPG is currently conducting groundwater remedial investigation activities at these sites. It anticipates submitting a groundwater RIR/RAWP for these sites in the second quarter 2022.

Site 174 – Portion of Dennis Collins Park (Bayonne): All excavation, backfilling and restoration of the soils at this Site were completed in 2021. PPG submitted a soils RAR on January 21, 2022, which is currently under review by NJDEP and the City of Bayonne. The groundwater investigation of this Site is in progress. PPG anticipates submitting an RIRA/RAWP for groundwater in the first quarter 2022.

457 Communipaw Avenue: During the investigation of this site, it was determined that CCPW impacts exist on the property located at 457 Communipaw Avenue (privately owned), but also on a parcel owned by the Jersey City Redevelopment Authority (“JCRA”), which is adjacent to the 457 Communipaw Avenue property. The JCRA parcel has been fully remediated. PPG has conducted remedial investigation activities at the 457 Communipaw Avenue property and anticipates submitting an RIR/RAWP in the first quarter 2022. The RAWP portion of that report will call for a restricted use remedy consisting of engineering controls (existing building and asphalt parking lot to serve as a cap) and institutional controls (deed notice). The RAWP will be subject to approval by the property owner.

In April 2021, chromium blooming was discovered in the basement of the building located at 465 Communipaw Avenue. PPG installed an IRM in the basement of the 465 Communipaw building in April 2021 and conducted monthly inspections of the IRM through November 2021 until structural issues were identified in the 465 Communipaw Avenue building. Inspections of the IRM are on hold pending resolution of the building structural issues by the property owner. PPG, NJDEP and I informed City representatives of the building structural issues. The City building department is monitoring the situation.

An inspection of the basement of 467 Communipaw was conducted; no chromium impacts were identified.

PPG also plans to initiate groundwater remedial investigation activities in March 2022.

## **VI. Mediation Proceedings**

A. Mediation Order. I function as a Court-appointed Mediator pursuant to the February 22, 2016 “Order Referring Third-Party Complaint and Referring Certain Matters to Mediation and Entering Stay.” Pursuant to that Order, I was appointed to mediate claims by JCRA, Hampshire Urban Renewal Redevelopment, L.L.C. and 900 Garfield Avenue, L.L.C. against PPG concerning the remediation and restoration of Site 114 (owned by Hampshire) and Site 132 (owned by JCRA), terms of a deed notice(s) for those sites and reimbursement of JCRA and Hampshire for incremental costs with respect to those sites. I have held numerous mediation proceedings on this matter. The parties have resolved the claims related to the deed notices. Hampshire and JCRA have executed deed notices for Site 114. The claims related to incremental costs remain unresolved.

The parties requested that I not declare the mediation to be at an impasse, although it was my intention to do so. Instead, the mediation proceedings have been suspended. I intend to monitor the situation to determine whether I should resume my mediation efforts and, if so, when.

B. Site 107 Mediation: Approximately one year ago, the owner of the property advised me and the JCO Parties of a potential claim for monetary damages resulting from the alleged delays by PPG in conducting the soil remediation work at this Site and the owner’s inability to derive income from the property. The property owner also raised certain issues relating to the backfilling and grading of the property by PPG. I was asked by the property owner and PPG to mediate the disputes between these parties. Several mediation sessions were held in 2021, but there was no activity since November 2021. On January 19, 2022, I informed the parties that I considered the mediation to have been concluded.

## **VII. Communications with the Site 114 Property Owner/Redeveloper**

Pursuant to the Court’s direction during an August 27, 2020 conference call with the Redeveloper, PPG, NJDEP and the City of Jersey City, I have filed the following reports with the Court regarding the progress of PPG’s remediation activities at Site 114 and any potential impacts on redevelopment: November 30, 2020, February 26, 2021, June 2, 2021, September 10, 2021 and November 10, 2021. I anticipate filing my next report in February 2022. Since the filing of my last report on November 10, 2021, I do not presently see any conflicts between PPG’s planned remediation activities and the proposed redevelopment schedule. As of the date of this Report it appears that the timeline for commencement of construction activities related to the proposed redevelopment is still in flux.

## **VIII. Current and Future Activities**

Web Site: My office, with the help of the JCO Parties, maintains a web site referred to as the Chromium Cleanup Partnership, which can be found at

[www.chromiumcleanup.com](http://www.chromiumcleanup.com). The web site contains extensive information including, among other things, the status of remediation at the PPG chromium sites. Critical remediation reports and other important documents are posted to the web site. We are continually updating the web site to include the most recent information about the PPG chromium sites. This Progress Report with all attachments/enclosures, including the new Master Schedule, will be posted to the web site. All prior Progress Reports have also been posted to the web site.

Newsletter: A newsletter summarizing the status of activities at the PPG chromium sites was published in December 2021. A copy is enclosed as **Attachment 2** to this Progress Report. The newsletter is widely distributed throughout the community and, historically, has been published at least once per calendar year. The newsletters, including the December 2021 publication, have been posted to the Chromium Cleanup Partnership web site.

Public Meetings: Typically, I hold a public meeting at least once per year. Given the COVID-19 pandemic, however, I did not hold such a meeting in 2020 or 2021. As the COVID situation evolves I am contemplating holding a public meeting late this year. Our postings to the Chromium Cleanup Partnership web site and the newsletters that are distributed to the public will hopefully be sufficient to advise the public of the status of the remediation work. I also remain available to address public inquiries via phone and email and I have done so on many occasions.

PPG Employment Report: **Attachment 3** includes PPG's most recent Employment Reports (Q3 and Q4 2021) in which PPG reports that it has satisfied the JCO goals for the reporting period.

I am available at Your Honor's convenience to answer any questions you may have.

Respectfully submitted,

*/s/ Ronald J. Riccio*

Ronald J. Riccio  
Site Administrator

Attachments:

- **Attachment 1**: Definitions/Descriptions
- **Attachment 2**: Master Schedule with figures/maps
- **Attachment 3**: December 2021 Newsletter
- **Attachment 4**: PPG Employment Reports (Q3 and Q4 2021)

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

## **ATTACHMENT 1**

### **DEFINITIONS/DESCRIPTIONS**

Attached to the revised Master Schedule (Attachment 2 to this Progress Report) 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”). The “Non-GAG Sites” 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:

- IRM #1, located within Site 114;
- Phases 1A and 1B, considered the Southwest Area within Site 114;
- Phase 1C, located within Site 114;
- Phase 2A, located within Site 114;
- Phase 2B, which includes Phases 2B-1 through 2B-4, located within Site 114;
- Phase 3A, which includes Site 132 and most of Site 143;
- Phase 3B North, which includes a portion of Site 132 and a portion of Site 137;
- Phase 3B South, which includes Site 133 West, a portion of Site 137, the former Fishbein property, the Ten West Apparel property, and a small portion of Halladay Street South; and
- Phase 3C, which includes Site 133 East, the remainder of Halladay Street South, and Site 135 North.

The “GAG Roadways” are chromium-impacted roadways surrounding the GAG Sites, including Halladay Street, Forrest Street, Carteret Avenue, Garfield Avenue (from Carteret Avenue to the Light Rail) and in portions of Pacific Avenue and Caven Point Avenue.

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

**ATTACHMENT 2**  
**MASTER SCHEDULE**  
**(ATTACHED)**

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

**(Exhibit 2/3)**

**Revision Date: January 31, 2022**

**SOILS - GARFIELD AVENUE SITES**

Group/Phase or Site (See Fig. 1 attached)	Property Description (Owner) (See Fig. 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 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	8/29/2018 (See Comments)	11/11/2021	11/23/2021	February 2022	April 2023	The sites included within GA Group Phase 3B South were not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at these sites.
	Fishbein (816 Garfield Avenue) (PPG)	PPG Owned	April 2021	11/11/2021	11/23/2021	February 2022	April 2023	The sites included within GA Group Phase 3B South were not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at these sites.
	Ten West Apparel (800 Garfield Avenue) (PPG)	PPG Owned						
GA Group Phase 3C	Halladay Street South (AOC HSS-1B) (Jersey City)	Road Closure in Place	April 2021	11/11/2021	11/23/2021	February 2022	April 2023	This area was not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break in this area.
	Site 133 East (22-68 Halladay) (AOC 133E-1B) (PPG)	PPG Owned	April 2021	11/11/2021	11/23/2021	February 2022	April 2023	A determination must be made by the Department prior to Restoration Complete as to the need for a capillary break in this area.
GA Group Phase 4 Roadways	Carteret Avenue (Jersey City)	Road Closure in Place	6/3/2019	1/15/2020	2/7/2020	12/16/2020	9/28/2021	See Soil Note 8 regarding MGP contamination. The Restoration Complete milestone was administratively completed on December 16, 2020 when NJDEP accepted the capillary break determination for Carteret Avenue as presented in the Capillary Break Design Report Addendum. PPG anticipates applying for a Soil Remedial Action Permit in February 2022, which application will include a Notice in Lieu of Deed Notice executed by the City of Jersey City.
	Halladay Street North (Jersey City)	Road Closure in Place	1/16/2020	4/2/2020	4/10/2020	2/18/2021	12/29/2021	See Soil Note 8 regarding MGP contamination. A Consent Judgment Compliance Letter is anticipated to be issued in February 2022.
	Forrest Street (Jersey City)	See Comments	3/27/2017	8/4/2017	9/1/2017	6/27/2018	10/29/2019 (See Comments)	An RAR Determination letter for AOCs FS-1A, FS-1B, and FS-1C was issued on October 29, 2019 and on November 12, 2020 NJDEP issued an RAR Approval letter for the restricted use remedy proposed for this Site. PPG applied to NJDEP for a Soil Remedial Action Permit on March 26, 2021, which application included a Notice in Lieu of Deed Notice executed by the City of Jersey City. PPG will conduct remedial excavation of CCPW impacts that remain in the roadway in the event the Forrest Street Properties buildings are demolished and the remaining impacted materials become accessible, consistent with the RAWP approved by NJDEP on February 19, 2020. The timing of building demolition on the Forrest Street Properties is unknown and outside of the scope of this Master Schedule. See Soil Note 8 regarding MGP contamination.

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

**(Exhibit 2/3)**

**Revision Date: January 31, 2022**

**SOILS - GARFIELD AVENUE SITES**

Group/Phase or Site (See Fig. 1 attached)	Property Description (Owner) (See Fig. 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
	Garfield Avenue (Jersey City)	See Comments	See Comments	See Comments	See Comments	See Comments	See Comments	<p>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 RAWP, which calls for, among other things, deferring excavation of shallow impacts until such time as any street widening work or other work by the City that would disrupt the asphalt surface of the roadway. The RAWP was approved by NJDEP on December 18, 2019.</p> <p>The City of Jersey City Planning Board approved the subdivision of a narrow strip of the western boundary of Site 114 (parallel to the eastern boundary of Garfield Avenue), including the "Western Sliver" area (AOC 114-1B, where limited CCPW-impacts currently remain). This strip of land was transferred to the City in November 2020 thereby making it a part of the Garfield Avenue roadway. The Remedial Action Report for Garfield Avenue will include AOC 114-1B. Submittal of the RAR is on hold pending evaluation of the City's schedule for undertaking planned activities to widen this roadway.</p> <p>This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter or the NJDEP-approved December 2017 Capillary Break Design Report. A capillary break evaluation was, however, included in the RAWP for the current use scenario; the RAWP calls for a capillary break reassessment as part of any roadway modifications in connection with the Canal Crossing Redevelopment.</p>
	Pacific Avenue/Caven Point Avenue	See Comments	See Comments	See Comments	See Comments	See Comments	March 2022	CCPW-related impacts were discovered in portions of these roadways. PPG submitted an RAR for these roadways in September 2021, which documented attainment of compliance through compliance averaging. A Notice in Lieu of Deed Notice is required by NJDEP to restrict the roadway to non-residential use.
GA Group Phase 5 Off Site Properties	Halsted Corporation (78 Halladay St) (PPG)	PPG Owned	5/7/2018	8/10/2018 (See Comments)	8/24/2018 (See Comments)	2/18/2021	December 2022	Excavation and backfilling of this site have been completed with the exception of residual chromium-impacted soils along the eastern boundary of the site. PPG is currently considering options for regulatory closure of those impacts.
	Forrest Street Properties 108 Forrest St (Caragliano)	Access Agreement in Place	3/27/2017	7/19/2017	8/9/2017	5/2/2018	10/29/2019	<p>The deed notice required for the affected parcels was recorded on December 30, 2021. PPG submitted an application for a Soil Remedial Action Permit on January 27, 2022.</p> <p>PPG will conduct remedial excavation of the impacts that remain adjacent to the 100 Forrest Street building in the event the building is demolished and the remaining impacted materials become accessible. The timing of building demolition is unknown and outside of the scope of this Master Schedule.</p> <p>See Soil Note 8 regarding MGP contamination.</p>
	Forrest Street Properties 84, 86-90, and 98-100 Forrest St (Caragliano)	Access Agreement in Place	See Comments	See Comments	See Comments	See Comments	July 2023	<p>On February 11, 2020, the property owner approved a Remedial Action Work Plan ("RAWP") to memorialize a restricted use remedy for these properties taking into account the properties' current non-residential use and impacts that remain under and adjacent to the buildings. NJDEP approved the RAWP by letter dated February 19, 2020.</p> <p>Current-use remedial action implementation, including installation of engineering controls in the alleyway was completed in December 2021. Installation of engineering controls in the boiler room basement and loading dock is expected to be completed in February 2022 and October 2022, respectively. Access to the loading dock is anticipated to be granted in September 2022, following the end of the current tenant's lease. Due to conditions in both the boiler room basement and the loading dock, PPG may be requesting variations to the proposed engineering controls.</p> <p>PPG will conduct remedial excavation of the impacts that remain under and adjacent to the buildings in the event the buildings are demolished and the remaining impacted materials become accessible. The timing of building demolition is unknown and outside of the scope of this Master Schedule.</p> <p>See Soil Note 8 regarding MGP contamination.</p>

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

**(Exhibit 2/3)**

**Revision Date: January 31, 2022**

**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)	See Comments	See Comments	See Comments	See Comments	PPG completed excavation and backfilling of this property exterior to the buildings in June 2015. On March 3, 2021, NJDEP issued a Consent Judgement Compliance letter memorializing approvals for the remediation of the exterior soils (AOC-1). PPG and the property owner are in negotiations regarding the remedy for Cr impacts under the building structure. Therefore, milestones for remediation of such impacts are on hold.  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 107	Fashionland (Ancam, LLC, aka EMI)	Access Agreement in Place	6/13/2018	2/18/2021	3/11/2021 (See Comments)	3/11/2021 (See Comments)	10/28/2021 (Majority Site RAR); 12/29/2021 (MSA RAR)	A Consent Judgment Compliance Letter was issued by NJDEP for the Majority Site on January 10, 2022. It is anticipated that a Consent Judgment Compliance Letter will be issued by NJDEP for the MSA Site in February 2022.
Conrail Right-of-Way (AOC Adjacent to Site 107 and Site 108)	Conrail Right-of-Way	Access Agreement in Place	6/13/2018 (See Comments)	See Comments	See Comments	See Comments	December 2022	PPG completed some excavation of Cr impacts in the Conrail right of way and proposed to Conrail a restricted use remedy that called for institutional and engineering controls with respect to the remaining CCPW-related impacts in the right of way. Coordination with Conrail owner is on-going. PPG is planning to conduct additional investigation work at the request of Conrail.
Site 108	Albanil Dyestuff (Jersey City Logistics, LLC)	Access Agreement in Place	6/13/2018	See Comments	See Comments	See Comments	December 2022	PPG submitted a draft RAWP/RAR to NJDEP in May 2021. Coordination with the property owner is on-going.
Site 156 (Boiler Room)	Metro Towers (ALMA)	Access Agreement in Place	See Comments	See Comments	See Comments	See Comments	10/30/2020	The proposed remedy for the boiler room calls for continued regular inspections by PPG under a Remedial Action Permit, coupled with a deed restriction. PPG submitted the Remedial Action Permit application to NJDEP in July 2021. Approval by NJDEP/BRAP is pending.
Site 174	Dennis Collins Park (City of Bayonne)	Access Agreement in Place (See Comments)	4/8/2013	9/30/2016	9/30/2016	9/30/2021	July 2022	PPG completed installation of engineering controls on this site in September 2021. A Remedial Action Report for soil was submitted on January 21, 2022 and is under review by NJDEP and the City of Bayonne.
457 Communipaw	457 Communipaw Right-of-Way (285 Lincoln Avenue, LLC)	Access Agreement in Place	January 2016	See Comments	See Comments	See Comments	September 2022	During the investigation of this site, it was determined that CCPW impacts exist on 457 Communipaw Avenue (privately owned), but also on one parcel owned by the Jersey City Redevelopment Authority ("JCRA"). A portion of the entrance to Berry Lane Park from Communipaw Avenue, which is adjacent to the 457 Communipaw Avenue property, was fully remediated in 2016. In April 2021, Cr blooming was discovered in the basement of the building located at 465 Communipaw Avenue; PPG installed an IRM in the basement of the 465 Communipaw building. Inspections of that IRM are on hold pending resolution of building structural issues by the property owner. An inspection of the basement of 467 Communipaw was conducted; no Cr impacts were identified.  PPG submitted an RIR/RAWP-Current Use for the 457 Communipaw Avenue property in August 2021. That submittal is being revised by PPG as an RIR/RAWP/RAR to propose an existing cap remedy.

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

**(Exhibit 2/3)**

**Revision Date: January 31, 2022**

**GROUNDWATER**

<b>GA GROUP GROUNDWATER MILESTONES</b>					
<b>Group/Phase or Site</b>	<b>Property Description (Owner)</b>	<b>RIR Submittal /Anticipated Review-Approval</b>	<b>RAWP Submittal /Anticipated Review-Approval</b>	<b>RAR Submittal /Anticipated Review-Approval</b>	<b>Comments</b>
GW IRM Phase III	See Comments	N/A	N/A	NA	The Phase III of the IRM Permit-by-Rule application was submitted in March 2021 and the authorization was received in July 2021. The IRM Phase III will address a portion of Site 114 and areas north, south and east of Site 114. Portions of the injection system of the Phase III IRM became operational in September 2021. Completion of construction for the remaining portions of the injection system is expected in April 2022. Portions of the system are expected to operate at least until the fourth quarter of 2022. The groundwater IRMs are a component of the remedial action described in the RAWP.
Remedial Investigation (Overburden)	Entire Site Group	3/24/2021	N/A	N/A	
		1/7/2022			
Remedial Investigation (Bedrock)	Entire Site Group	August 2022	N/A	N/A	An RIR specific to bedrock will be provided as an RIR addendum. Assuming submittal of an RIR (Bedrock) in approvable form (i.e., sufficient to document completion of delineation) in August 2022, review and approval by NJDEP would be anticipated by December 2022. Additional investigation in the bedrock water bearing zone will be conducted in spring/summer 2022.
		December 2022			
Remedial Action Work Plan	Entire Site Group	N/A	3/31/2021	N/A	The draft GW RAWP was submitted by PPG on March 31, 2021. Following comments and responses between PPG and NJDEP, PPG submitted the final RAWP on October 29, 2021. Additional comments were subsequently exchanged. Resolution of these additional comments occurred in January 2022 and an approval letter was issued by NJDEP on January 31, 2022.
			1/31/2022		
Remedial Action Report	Entire Site Group	N/A	N/A	November 2023	Assuming submittal of an RAR in approvable form (i.e., sufficient data to document compliance with the approved RAWP and the requirements of N.J.A.C. 7:26E-5.7) in November 2023, review/approval by NJDEP would be anticipated by June 2024.
				June 2024	

<b>NON-GA GROUP GROUNDWATER MILESTONES</b>					
Site 16	(see non-GAG Soils table)	10/28/2019	TBD	TBD	PPG rescinded a previously submitted groundwater RIR/RAWP and issued an RIR Addendum on 10/28/19. The most recent revision to the RIR Addendum was submitted by PPG on June 9, 2020. The RIR Addendum was approved by letter from NJDEP dated August 13, 2020. Submittal of a RAWP for Groundwater cannot occur until there is a resolution with the property owner of soil impacts under the building structure.
Site 63	(see non-GAG Soils table)	RIRA/RAWP Submittal: 12/6/2021		TBD	PPG submitted an RIRA/RAWP in December 2021. The RAR Submittal date will be determined once NJDEP approves the RIRA/RAWP.
Site 107, Site 108 and Conrail Right-of-Way	(see non-GAG Soils table)	RIR/RAWP Submittal: May 2022		TBD	
Site 174	(see non-GAG Soils table)	RIRA/RAWP Submittal: February 2022		TBD	A draft RIRA/RAWP for Groundwater will be submitted to document groundwater investigations at the site for NJDEP approval in 2022.
457 Communipaw	(see non-GAG Soils table)	RIR/RAWP Submittal: August 2022		TBD	PPG included a groundwater investigation plan in the August 2021 Soil RIR/RAWP. This schedule assumes one round of well installation with two sampling events (one month apart).
Site 186	(see non-GAG Soils table)	See Comments		N/A (See Comments)	Site 186 groundwater is considered part of the Garfield Avenue Group groundwater program. Consistent with the approved GAG GW RIR, no further action is required for Site 186 groundwater. Therefore, this site will be removed from the next iteration of the groundwater Master Schedule.

## Master Schedule for the NJ PPG Chrome Remediation Sites

(Exhibit 2/3)

Revision Date: January 31, 2022

### NOTES

#### GENERAL NOTES:

- 1) Redevelopment cannot occur until a capillary break determination has been made and capillary break installation (where required) has been completed.
- 2) Commencing on or about April 10, 2020, all field work was suspended at the PPG Chrome Remediation Sites as a result of the COVID-19 pandemic. Limited field activities restarted on June 15, 2020. As of the date of this Master Schedule, the Principals continue to monitor COVID-19 incident rates and other criteria. The milestones set forth in this Master Schedule may be affected by safety and health considerations relative to the COVID-19 pandemic.
- 3) Defined Terms:

“JCO” means the Partial Consent Judgment Concerning the PPG Sites entered in the matter captioned 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.

“JCO Stakeholders,” for the purpose of this Master Schedule, means PPG, the City of Jersey City, NJDEP and the Site Administrator (Ronald J. Riccio).

“Consent Judgment Compliance Letter” means a letter issued by the Department pursuant to the 2011 Consent Judgment. The Consent Judgment Compliance Letter is the Department’s equivalent of a No Further Action letter that is issued after all appropriate remediation documents have been finalized, an RAR Determination has been made, and after the issuance by the Department of any required remedial action permits with respect to the applicable media and areas of concern.

“2011 Consent Judgment” means the Consent Judgment in the matter captioned New Jersey Department of Environmental Protection, et al. v. Honeywell International Inc., et al., Docket No C-77-05, Superior Court of New Jersey, Chancery Division, Hudson County (filed September 7, 2011).

“LSRP” means Licensed Site Remediation Professional.

“Principals” means, collectively, PPG, NJDEP, the City of Jersey City and the Site Administrator.
- 4) PPG, NJDEP and the City of Jersey City entered into (and the Site Administrator acknowledged and accepted) that certain Memorandum of Understanding dated as of September 22, 2020 establishing detailed procedures for the removal of PPG sites, portions of sites or media from jurisdiction pursuant to the JCO and the 2011 Consent Judgment and, in certain instances, transitioning same to the LSRP Program (the “MOU”). On October 22, 2020, the Superior Court of New Jersey entered the First Consent Order Transitioning Certain PPG Sites, Portions of Sites or Media to the LSRP Program (the “First Consent Order”). The First Consent Order included an Exhibit A that identified the sites, portions of sites or media that were being removed from jurisdiction pursuant to the JCO and the 2011 Consent Judgment and, in certain instances, transitioned to the LSRP Program.

#### SOILS NOTES:

- 1) Green shading indicates that milestones have been attained.
- 2) “Excavation Start” means access has been gained, building demolition and shoring installation, if required, have been completed, there are no known impediments to proceeding with excavation and excavation has actually commenced.
- 3) For Garfield Avenue Group Sites, “Backfill Complete” means backfill is brought to elevations approved by NJDEP.
- 4) For the purpose of this Master Schedule, “restoration” is defined as final remediation grading in accordance with an NJDEP-approved Restoration Technical Execution Plan or other NJDEP-approved document identifying restoration requirements, and a capillary break has been installed if required. In-kind replacement of existing infrastructure (i.e., pavement and utilities) is covered under the PPG/Jersey City Infrastructure Settlement Agreement, which has been agreed to by all Parties.
- 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 has determined whether the Remedial Action Report (“RAR”) meets the requirements of applicable Department regulations and guidance. The Department will make this determination 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).
- 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) PSE&G will take the lead on MGP AOCs located within and emanating from Site 114 under the LSRP program. See letter from PPG and PSE&G to Wayne Howitz, NJDEP, dated July 9, 2019 confirming same.

#### GROUNDWATER NOTES:

- 1) For purposes of this schedule, the Garfield Avenue Group Access date is assumed to be March 2017.
- 2) “N/A” means not applicable.

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

**(Exhibit 2/3)**

**Revision Date: January 31, 2022**

**Attachment 1 to Master Schedule for the NJ PPG Chrome Remediation Sites**

**Revision Date: January 31, 2022**

**List of Sites Released from JCO/Transitioned to LSRP Program<sup>1</sup>**

<b>Group/Phase or Site</b>	<b>Property Description (Owner)</b>	<b>Date of Issuance of Consent Judgment Compliance Letter</b>	<b>Comments</b>
GA Group IRM #1 and Phases 1A, 1B, 1C, 2A, 2B-1, 2B-2, 2B-3, and 2B-4	Site 114 (JCRA/ Hampshire)	6/1/2020	An RAR Approval Letter was issued by the New Jersey Department of Environmental Protection ("NJDEP") on December 5, 2019 and a Consent Judgment Compliance Letter (as defined in the General Notes attached to this Master Schedule) (Restricted Use - Soil) was issued on June 1, 2020 for chromate chemical production waste ("CCPW"), CCPW-related metals, historic fill, former underground storage tanks, and other historic operations Areas of Concern ("AOCs") (114-1A, 114-3, 114-4A, 114-4B, and 114-5) at Site 114. As part of the approved remedy for Site 114 soils, deed notices were recorded in December 2019 with respect to all parcels constituting Site 114 and soil remedial action permits were issued on February 7, 2020. All of the referenced approvals exclude: (i) Soil AOC 114-1B (CCPW-impacted soils in portions of Grids A5B, A6B, A7B, and B7B within the Western Sliver), and (ii) manufactured gas plant ("MGP") related contaminants, which are being managed by PSE&G under NJDEP's Licensed Site Remediation Professional program. See Soil Note 8 attached to this Master Schedule regarding MGP contamination. Restoration was deemed complete for all of Site 114, except for the soil IRM #1 area where active groundwater remediation is being performed. Restoration of the soil IRM #1 area is on hold pending the referenced groundwater remediation activities.
GA Group Phase 3A	Site 132 (824 Garfield) (JCRA)	11/1/2019	An RAR Approval Letter was issued by NJDEP on June 27, 2019 and a Consent Judgment Compliance Letter (Unrestricted Use - Soil - for CCPW and CCPW-related metals) was issued on November 1, 2019 for AOC 132-1.
	Site 143 (846 Garfield) (PPG)	6/26/2020	An RAR Approval Letter was issued by NJDEP on September 30, 2019 and a Consent Judgment Compliance Letter (Unrestricted Use – Soil - for CCPW and CCPW-related metals) was issued on June 26, 2020 for AOC 143-1.
GA Group Phase 3B North (45 Halladay and a portion of 25 Halladay)	Site 137 North (PPG)	6/26/2020	An RAR Approval Letter was issued by NJDEP on September 30, 2019 and a Consent Judgment Compliance Letter (Unrestricted Use – Soil - for CCPW and CCPW-related metals) was issued on June 26, 2020 for AOC 137-1A. See Soil Note 8 regarding MGP contamination. The referenced approvals exclude MGP-related AOCs (AOC 137-2A).
GA Group Phase 3C	Halladay Street South (AOC HSS-1A) (Jersey City)	6/30/2020	An RAR Approval letter was issued by NJDEP on November 15, 2019 and a Consent Judgment Compliance Letter (Unrestricted Use – Soil - for CCPW and CCPW-related metals) was issued on June 30, 2020 for AOC HSS-1A. See Soil Note 8 regarding MGP contamination. The referenced approvals exclude MGP-related AOCs.
	Site 133 East (22-68 Halladay) (AOC 133E- 1A) (PPG)	3/24/2020	An RAR Approval letter for Site 133 East AOC 133E-1A was issued by NJDEP on October 11, 2019 and a Consent Judgment Compliance Letter (Unrestricted Use – Soil - for CCPW and CCPW-related metals) was issued on March 24, 2020 for AOC 133E-1A. See Soil Note 8 regarding MGP contamination. The referenced approvals exclude MGP-related AOCs (AOC 133E-2A).
	Site 135 North (Portion of 51-99 Pacific) (PPG)	1/15/2021	An RAR Approval Letter was issued by NJDEP for Site 135 AOC 135-1 on October 11, 2019. Antimony (a CCPW-related metal) associated with re-used fill materials remains at concentrations greater than the Residential Direct Contact Soil Remediation Standards and will be addressed by an engineering control (Clean Fill Soil Cap) and institutional control (deed notice). As part of the approved remedy for soils at this Site, a deed notice was recorded in June 2020 and a soil remedial action permit was issued on November 13, 2020. A Consent Judgment Compliance Letter (Restricted Use - Soil) was issued on January 15, 2021 for CCPW and CCPW-related metals for AOC-1 covering Site 135 North and Site 135 South.
GA Group Site 135 South	Site 135 South (Remainder of 51-99 Pacific) (PPG)	1/15/2021	An RAR Approval Letter was issued by NJDEP for Site 135 AOC 135-1 on October 11, 2019. Antimony (a CCPW-related metal) associated with re-used fill materials remains at concentrations greater than the Residential Direct Contact Soil Remediation Standards and will be addressed by an engineering control (Clean Fill Soil Cap) and institutional control (deed notice). As part of the approved remedy for soils at this Site, a deed notice was recorded in June 2020 and a soil remedial action permit was issued on November 13, 2020. A Consent Judgment Compliance Letter (Restricted Use - Soil) was issued on January 15, 2021 for CCPW and CCPW-related metals for AOC-1 covering Site 135 North and Site 135 South.
GA Group Phase 5 Off Site Properties	Al Smith Moving (33 Pacific Avenue) (NJEDA c/o Al Smith Moving)	10/11/2019	An RAR Approval letter was issued by NJDEP on May 28, 2019 and a Consent Judgment Compliance Letter (Unrestricted Use – Soil - for CCPW and CCPW-related metals) was issued on October 11, 2019 for AOC ASM-1.

<sup>1</sup> Pursuant to the MOU described in General Note 4 to this Master Schedule, the media, contaminants and AOCs referenced in the Consent Judgment Compliance Letters listed in this Attachment 1 were removed from jurisdiction pursuant to the JCO and the 2011 Consent Judgment and, in those situations involving Remedial Action Permits, were transitioned to the LSRP Program to implement the requirements of the Remedial Action Permits.

**Master Schedule for the NJ PPG Chrome Remediation Sites**  
**(Exhibit 2/3)**  
**Revision Date: January 31, 2022**

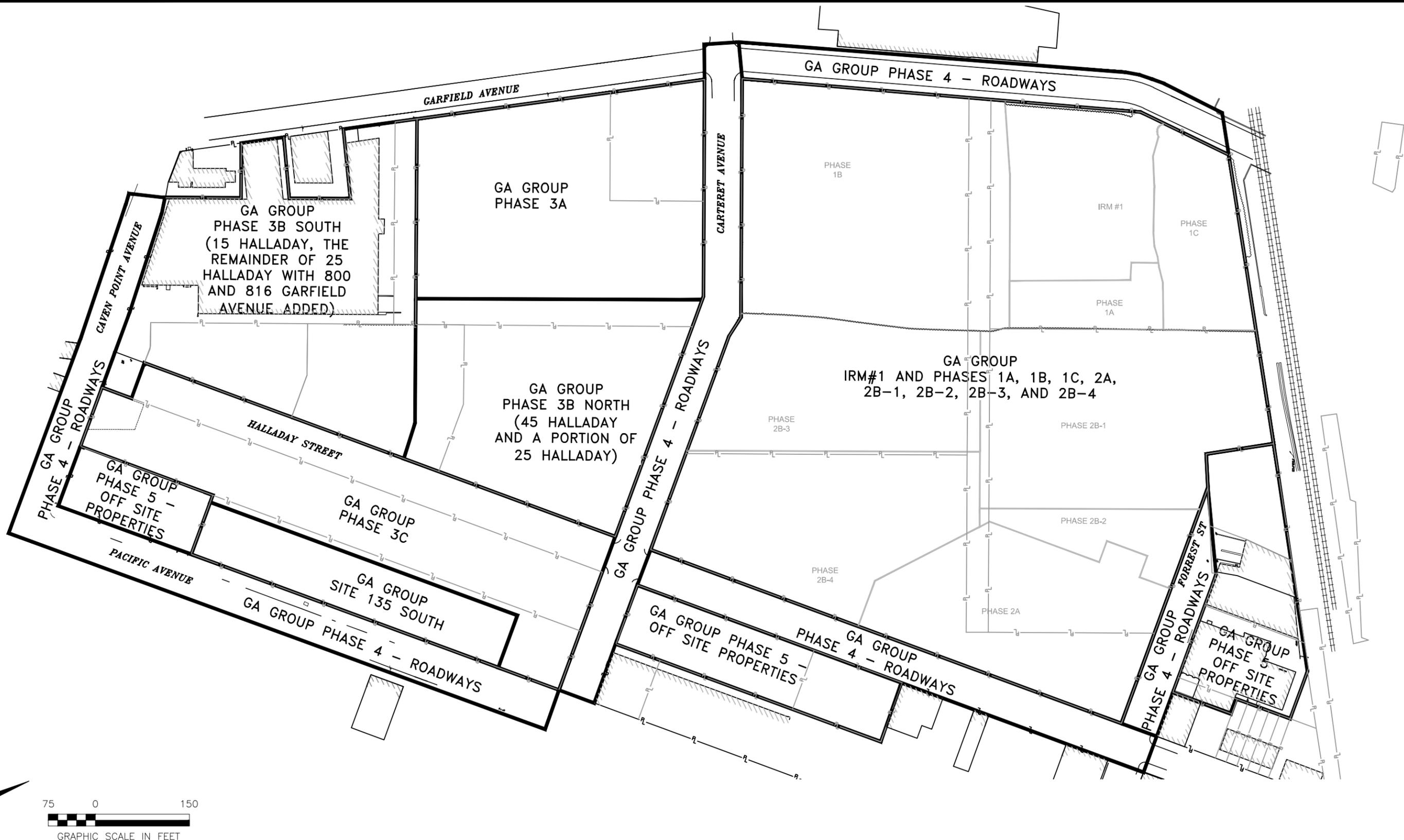
**Attachment 1 to Master Schedule for the NJ PPG Chrome Remediation Sites**  
**Revision Date: January 31, 2022**  
**List of Sites Released from JCO/Transitioned to LSRP Program<sup>1</sup>**

<b>Group/Phase or Site</b>	<b>Property Description (Owner)</b>	<b>Date of Issuance of Consent Judgment Compliance Letter</b>	<b>Comments</b>
Site 63	Baldwin Oil (Nisan 12)	1/30/2018	An RAR Approval/Consent Judgment Compliance Letter (Unrestricted Use – Soil – for CCPW and CCPW-related metals) was issued by NJDEP on January 30, 2018.
Site 65	Burma Road/Morris Pesin Drive (Jersey City)	4/6/2020	PPG, the City of Jersey 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 consists of institutional and engineering controls. An RAR Approval Letter was issued by NJDEP on May 31, 2019, a Soil Remedial Action Permit was issued on March 9, 2020 and a Consent Judgment Compliance Letter (Restricted Use for CCPW and CCPW-related metals in soil) was issued on April 6, 2020. Pursuant to the Settlement Agreement, impacted groundwater at Site 65 was deemed to have emanated from Site 63; no action vis-à-vis groundwater was required for Site 65. Therefore, the April 6, 2020 Consent Judgment Compliance Letter approved an Unrestricted Use remedy for CCPW and CCPW-related metals in groundwater.
Site 156	Metro Towers (ALMA)	6/28/2019	An RAR Approval was issued by NJDEP on October 12, 2018 and a Consent Judgment Compliance Letter was issued on June 28, 2019 (Unrestricted Use) for: (1) Area of Concern 1 for CCPW and CCPW Related Metals Only in Soil Beyond AOC 3 Footprint, and (2) Area of Concern 2 for CCPW and CCPW-Related Metals Only in Groundwater.
Site 186	Garfield Avenue #1	7/14/2015	An RAR Approval letter was issued by NJDEP on April 16, 2014 and a Consent Judgment Compliance Letter (Unrestricted Use - Soil; Entire Site) for CCPW and CCPW-related metals in soil was issued July 15, 2015.
Site 16	45 Linden Ave. East (Etzion)	3/3/2021	An RAR Approval letter was issued by NJDEP on August 13, 2020 and a Consent Judgment Compliance Letter (Unrestricted Use) for CCPW and CCPW-related metals in exterior soils only (AOC-1) was issued on March 3, 2021.

**Master Schedule for the NJ PPG Chrome Remediation Sites**  
**(Exhibit 2/3)**  
**Revision Date: January 31, 2022**

**FIGURES 1 AND 2 ATTACHED**

Piscataway on uspsw2\fp001\Data\_uspsw2\fp001\Environment(J)  
 User: Amy.Krayer Plotted: Feb 05, 2020 - 1:33pm  
 File: P:\Jobs\Rem\_Eng\Project Files\PPG Industries\Garfield Avenue\30% Design\CADD\MEETING FIGURES\2020-02-05 GAG Vicinity Ref Figure.dwg Layout: FIGURE 1



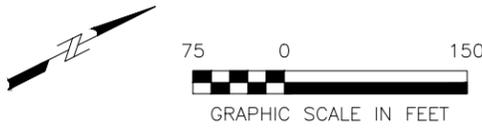
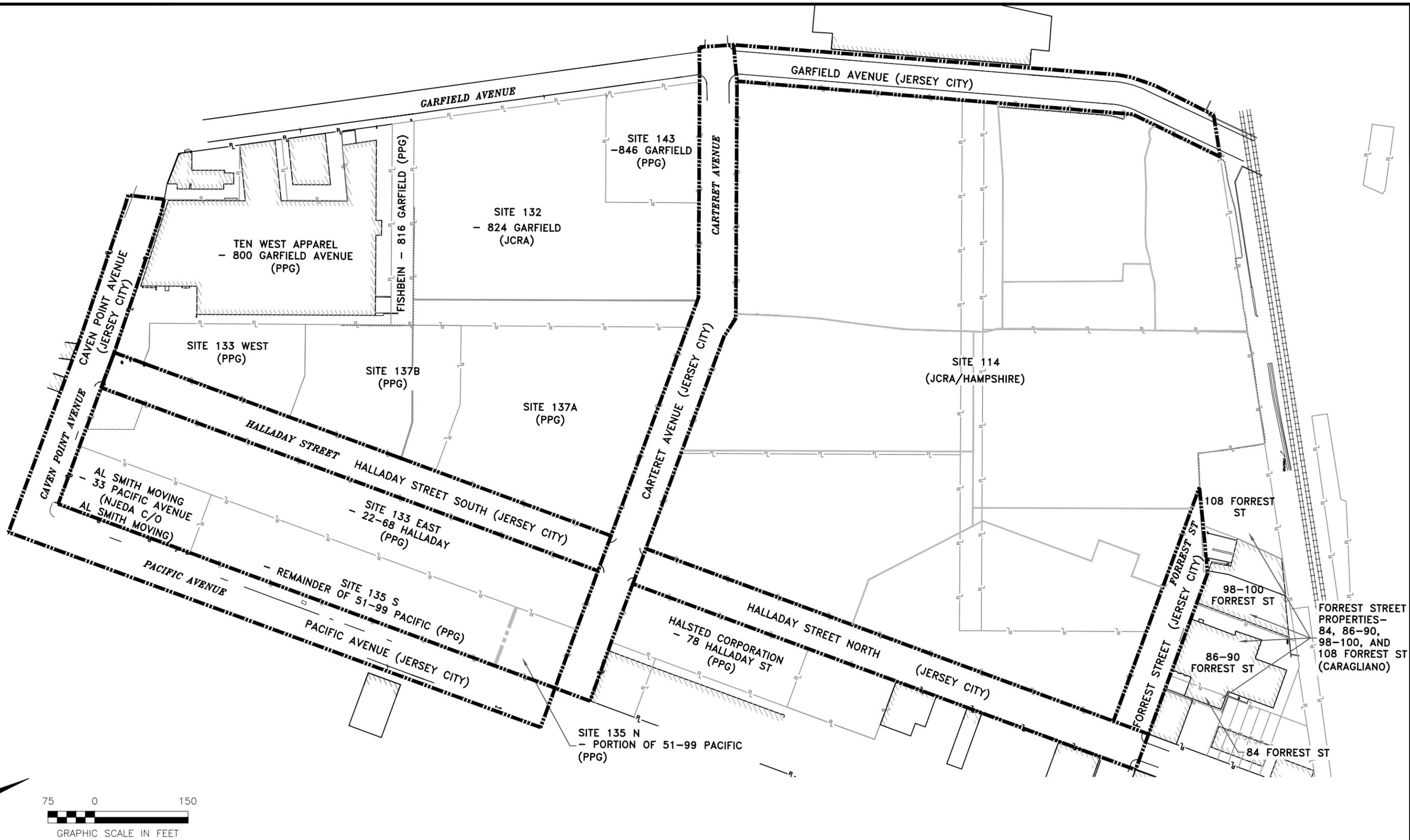
NOTES:

- 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: 02/05/2020	DRWN: DCB	FIGURE 1

Piscataway on uspsw2\fp001\Data\_uspsw2\fp001\Environment(J)  
 User: Amy.Krayer Plotted: Feb 05, 2020 - 2:12pm  
 File: P:\Jobs\Rem\_Eng\Project Files\PPG Industries\Garfield Avenue\30% Design\CADD\MEETING FIGURES\2020-02-05 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: 02/05/2020	DRWN: DCB	<b>FIGURE 2</b>



**ATTACHMENT 3**

**NEWSLETTER**

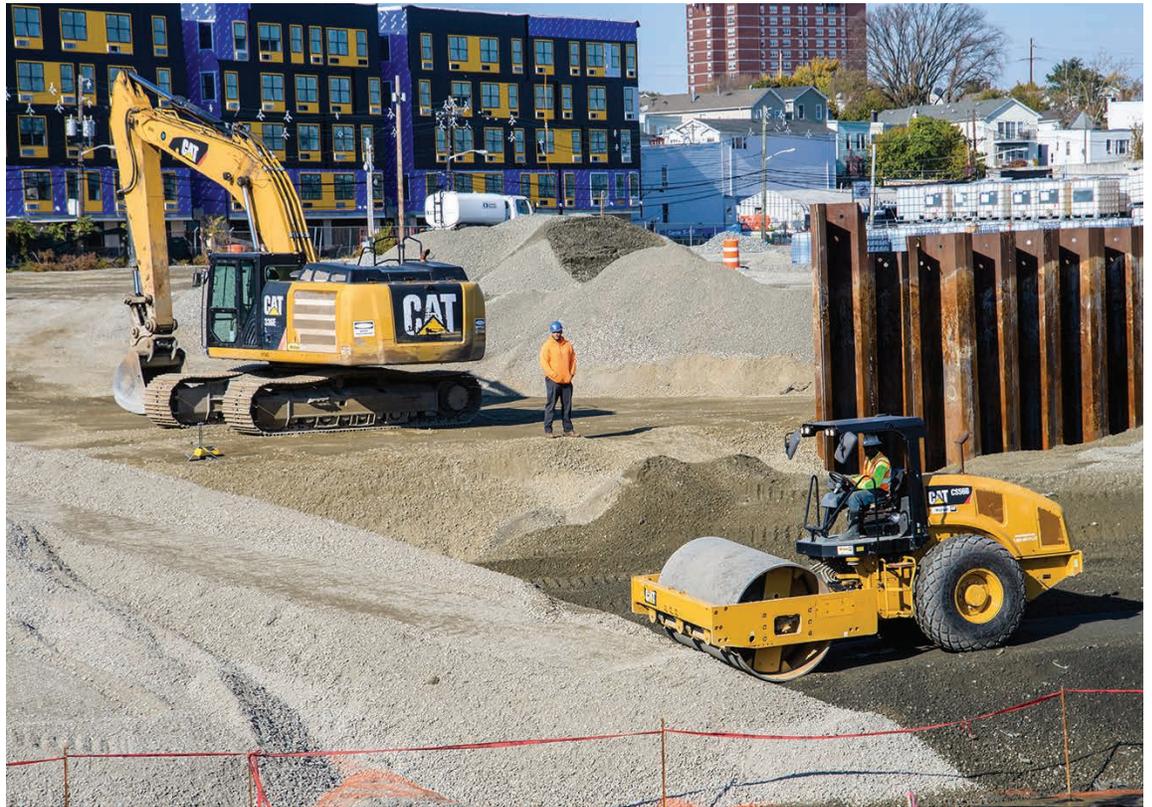
## 99% COMPLETE Soil cleanup on Garfield reaches milestone

PPG's chromium cleanup of the Garfield Avenue Group of Sites reached a milestone last month when excavation at the Ten West site and surrounding properties was completed, meaning 99 percent of the soil requiring removal has been dug up and hauled away.

Workers for a real estate developer, meanwhile, are completing plans and preparations for initial construction under the Canal Crossing Redevelopment Plan, a 111-acre, mixed-use project.

PPG purchased the Ten West property, near the corner of Garfield and Caven Point avenues, in April 2017 and demolished the building in May 2021. Following demolition of the building, nearly 80,000 tons of chromium-impacted soil and debris were dug up and hauled away.

continued on page 3



Workers spread clean fill south of Carteret Avenue during restoration at the Garfield Avenue Group of Sites.

*Letter from Site Administrator*

## Soil remediation and restoration field work complete at 18 of 23 sites



*By Ronald J. Riccio*

I have served as the court-appointed Site Administrator for nearly six years. I accepted the appointment, in part, because, growing up in Jersey City, I became very

familiar with the locations and residents near some of the PPG cleanup sites. This gave me an added motivation to make sure the contaminated sites are remediated and restored safely, effectively, and efficiently.

Since my appointment in January 2016, a total of 23 PPG sites have required investigation, remediation and restoration. I am pleased to report that at 18 of the 23

sites the soil remediation and restoration field work has been completed. At all of the sites, groundwater investigation and/or remediation is either complete or in progress.

At the sites where the soil remediation has not been completed, any exposure to occupants of the properties and the public is controlled by interim remedial measures, where required. These measures range from liners and concrete foundations to asphalt roadways and other controls to prevent direct contact with chromium impacts that remain in the soil under buildings or other structures or surfaces.

### Source of the Chromium Contamination

The source of the chromium contamination at the PPG sites dates back to a chromium manufacturing plant operated by a PPG

predecessor company from 1911 to 1963. The plant was located in Ward F of Jersey City, east of Garfield Avenue and south of Berry Lane Park and the Hudson-Bergen Light Rail line, on the banks of the former Morris Canal.

The chromium processing operations at the PPG plant generated a residue known as chromate chemical production waste or CCPW. The CCPW was used as fill in construction projects in Hudson County, primarily Jersey City and Bayonne. It was also used in roadway construction and to fill portions of the former Morris Canal. CCPW contains hexavalent chromium, which, according to scientific reports, can cause lung cancer in humans. It has also been linked to other health effects,

continued on page 4



The remediation of a 5.2-acre portion of Dennis Collins Park includes a bigger and heavier rock revetment on the shores of the Kill Van Kull.

## PPG completes cleanup at Dennis Collins Park

Many decades ago, fill material was deposited on the banks of the Kill Van Kull in Bayonne to create Dennis Collins Park. One component of that material was chromate chemical production waste (CCPW), a byproduct of the chromium manufacturing process PPG is required to address.

For several years PPG tried to pinpoint the location of the CCPW. In the end, it was determined the byproduct was scattered throughout the area of the park that constitutes the cleanup site. In 2016, PPG conducted a limited removal of roughly 7,300 tons of CCPW-impacted soil and debris from the cleanup site, which is east of Gorman Field and west of the Korean War Memorial.

Then, in 2019, the New Jersey Department of Environmental Protection (“NJDEP”) approved installation of a soil cap and a rock revetment to prevent contact with the scattered and low concentrations of CCPW in the subsurface soil.

This work on a 5.2-acre portion of the park

began in January 2020 and was substantially complete in April 2021. Additional cleanup work along the shoreline revetment was completed in September 2021.

In all, PPG dug up and hauled away more than 20,000 tons of chromium-impacted material, which was transported for disposal at a licensed facility. PPG, meanwhile, placed 39,000 tons of clean fill at the site to create a two-foot cap over the project limits.

The soil cap raised this part of the Park’s elevation 18 inches or more, which is supported with retaining walls. ADA-compliant ramps provide access. As part of the plan, PPG expanded the parking lot to 47 from 30 spaces and installed new stormwater management features, asphalt ramps and sidewalk along West First Street.

More than 2,000 tons of rock from the former revetment on the Kill Van Kull were removed and transported to Veterans Park for use on the banks of Newark Bay and to the former Military Ocean Terminal for use at other locations in Bayonne. In its place,

workers installed liners and a bigger and heavier rock revetment on the shoreline of the Kill Van Kull. This acts as a barrier to chromium-impacted material on the banks of this waterway. The new revetment is designed to better withstand major weather events, according to a plan preapproved by the U.S. Army Corps of Engineers.

A report documenting no further remedial action is required is being prepared for submission to NJDEP for its approval. The report will recommend annual inspections of the soil cap and revetment be conducted under a permit issued by NJDEP and pursuant to its Licensed Site Remediation Professional program to assure they remain protective of human health and the environment.

According to Bayonne officials, the city plans to install at the former cleanup site new facilities for a variety of sports and age groups; equipment and walkways that comply with ADA requirements; a dog park; an amphitheater; and new varieties of trees.

### Excavation complete at cleanup Site 107

PPG has completed the digging up and hauling away of chromium-impacted soil and debris at Site 107, which is located between Linden Avenue East and Chapel Avenue in Jersey City.

Work began in May 2018 with the demolition of a 64,000-square foot warehouse. During 2018 and 2019, PPG excavated more than 112,000 tons of chromium-impacted material from the site as well as the adjacent Site 108 and the

Conrail right-of-way to the northwest. This work was conducted in accordance with a cleanup plan approved by the New Jersey Department of Environmental Protection.

Restoration of all three properties was completed in October 2019, but the sporadic presence of small, rounded lumps of chromium remaining in the northwest corner of Site 107 prompted the need for an additional investigation of an approximate 27,000-square-foot area. Excavation and off-site disposal of an additional 250 tons of soil and debris as well as the restoration of the northwest corner was

completed in March 2021.

A report documenting the successful cleanup at Site 107 beginning in 2018 has been approved by NJDEP and a similar report on the 2021 excavation is under review. Meanwhile, an investigation is under way to determine if a groundwater cleanup is required.

Some chromium-impacted soil, meanwhile, remains on Site 108 and the Conrail property. PPG is in discussions with the property owners as well as NJDEP and city officials regarding management of this material.

# Groundwater cleanup continues at Garfield Avenue

PPG has started the third phase of its groundwater cleanup at the Garfield Avenue Group of Sites.

Contractors for PPG are injecting reagents deep below ground surface via a network of wells to clean up groundwater impacted with hexavalent chromium, which is a component of the waste material generated at the manufacturing plant that operated at 900 Garfield Ave., for more than 50 years.

Groundwater is underground in the cracks and spaces in soil, sand and rock.

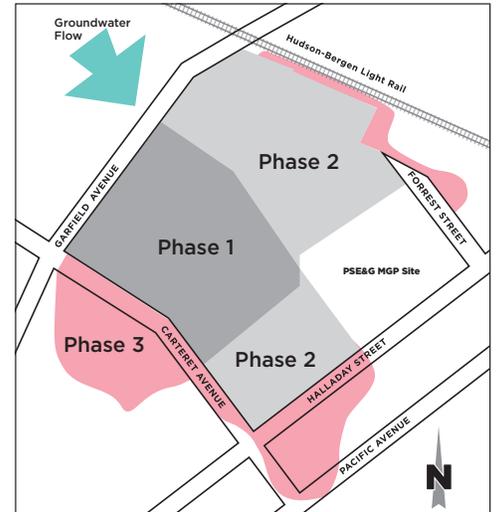
Reagents are substances that cause chemical or biological reactions. In this case, the reagents are converting hexavalent chromium into trivalent chromium, which is a more benign form of the metal that

occurs naturally in the environment and is an essential dietary element.

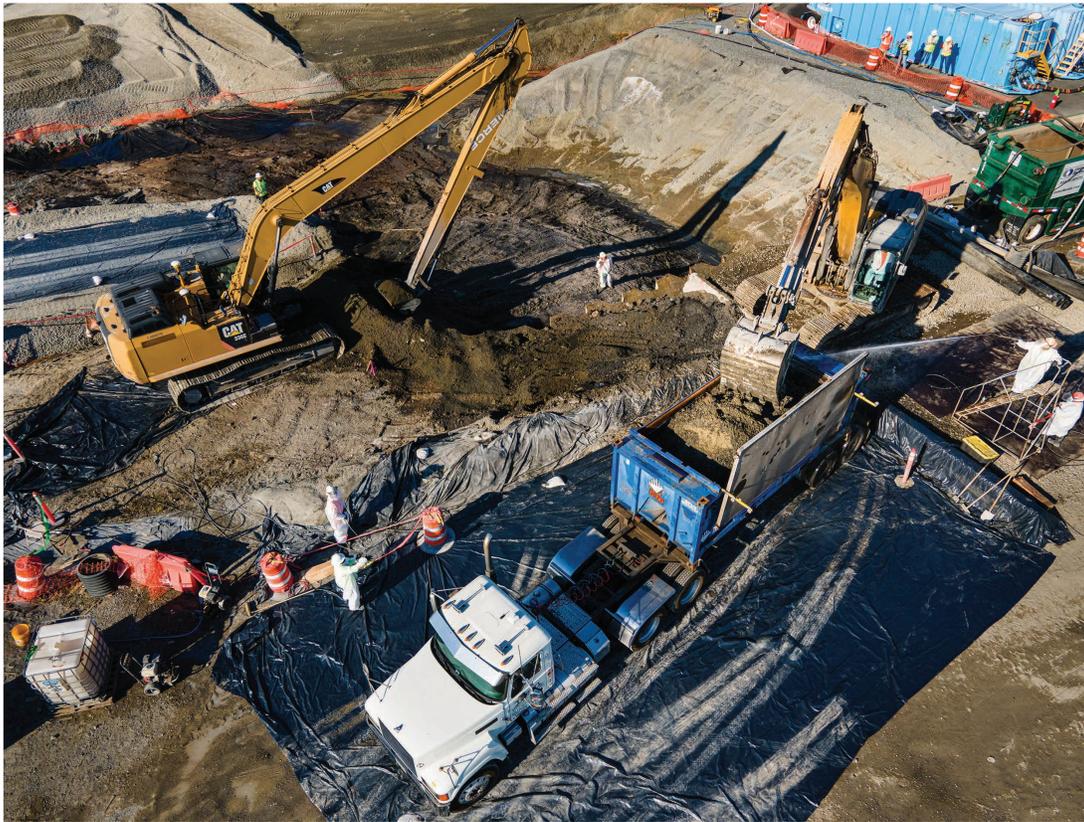
PPG will continue to monitor and/or remediate groundwater until compliance with New Jersey Department of Environmental Protection cleanup standards are achieved, which could take 30 or more years.

Reservoirs in Boonton supply Jersey City with its drinking water. No groundwater in Jersey City is used for drinking purposes.

Furthermore, NJDEP has approved a Classification Exception Area (“CEA”) for the chromium impacted groundwater at the Garfield Avenue Group of Sites. A CEA forbids the installation or use of groundwater wells at impacted properties.



Groundwater flows southeast of former plant site.



Excavator at right loads final bucket of chromium-impacted soil from sites south of Carteret Avenue.

## Soil cleanup 99% complete

continued from page 1

Since midyear 2010, PPG has excavated approximately 1.1 million tons of chromium-impacted soil and debris from the Garfield Avenue Group of Sites, defined as the six New Jersey Department of Environmental Protection (“NJDEP”) designated chromium sites on Garfield Avenue as well as adjacent

properties and roadways. This comprises approximately 40 acres where the average excavation depth was 15 to 20 feet. All excavated material was transported for disposal at licensed, offsite locations in accordance with applicable regulations.

During the 11-plus years of excavation on Garfield Avenue, air monitoring results remained well within the strict safety limits established by NJDEP.

Clean fill for much of the sites was amended with a reagent designed to prevent the soil from being contaminated by chromium-impacted groundwater and to

PPG has excavated approximately 1.1 million tons of chromium-impacted soil and debris from the Garfield Avenue Group of Sites.

support groundwater remediation. (See related article above.)

Several small areas under and/or near streets or buildings in the Garfield Avenue Group of Sites that still contain chromium-impacted material will be addressed when access is made available to PPG.

In the early 1900s, the Natural Products Refining Company opened a chromium manufacturing plant at 880-900 Garfield Ave. PPG purchased the plant in 1954 and ceased operations in 1963, selling the facility and property in 1964.

The manufacturing process used at the facility produced a waste byproduct known as chromate chemical production waste, or CCPW, which contains hexavalent chromium in concentrations that exceed NJDEP soil cleanup criteria.

## Site Administrator

continued from page 1

such as respiratory and skin conditions.

### The “JCO”

On June 26, 2009, a Partial Consent Judgment Concerning the PPG Sites (the “JCO”) was entered with the Superior Court of New Jersey. The JCO binds PPG, the New Jersey Department of Environmental Protection (“NJDEP”), and the City of Jersey City to work together on a process that enables PPG to remediate and restore chromium sites in Hudson County.

The terms of the JCO require the appointment of an independent Site Administrator to oversee the remediation and restoration of the sites. This responsibility also includes developing a judicially enforceable master schedule, facilitating the parties’ progress in meeting master schedule milestones, hiring an independent technical consultant, maintaining regular communications with community representatives, overseeing remediation in a manner that permits redevelopment and communicating the public’s concerns to the parties.

Once a site is remediated in accordance with NJDEP standards, the site is removed from the JCO. In some cases, the final remedy for a site requires engineering and institutional controls. These are physical barriers or legal restrictions designed to prevent human exposure to any remaining chromium. In these cases, the site is transitioned to the Licensed Site Remediation Professional (“LSRP”) program. This program requires an LSRP to oversee proper maintenance of the engineering and institutional controls under permits issued by NJDEP.

My communications with the community have been accomplished through various means, including periodic public meetings and publication of annual newsletters. PPG, NJDEP, the City of Jersey and I also collaborate on maintaining the Chromium Cleanup Partnership website. Posted to the website are copies of cleanup reports, progress reports that I have filed with the court, the master schedules, newsletters and other pertinent information.

### How the Remediation of CCPW is Accomplished

Remediation of chromium impacts in soil and groundwater at the Garfield Avenue Group of Sites involves different methodologies. Where CCPW was found in soils under buildings, parking areas and roadways, the remediation is accomplished, to the extent feasible, almost exclusively by excavation

of the impacted materials. This requires removing the impacted material using earthmoving equipment, placing it into trucks and transporting it by truck or rail off-site to licensed disposal facilities.

Based upon investigations performed to date, the only PPG site that has required active groundwater remediation is Site 114 and surrounding parcels. This is the location of the former PPG chromium manufacturing plant.

Groundwater at Site 114 has been impacted by the leaching of chromium in soils under buildings and other areas, including in the former Morris Canal, which ran through the site. All of the chromium impacted soils at Site 114 that require removal have been dug up, hauled away and given final approval by NJDEP. Chromium-impacted groundwater at Site 114 and surrounding parcels, however, is still in the process of being remediated.

Remediation of groundwater has proven to be complex and quite challenging. While the groundwater at Site 114 (or elsewhere in Jersey City) is not used for drinking water, NJDEP is charged with ensuring that the ultimate remedy for Site 114 groundwater is protective of human health and the environment.

After performing numerous pilot studies, it was determined that active remediation of groundwater at Site 114 and surrounding parcels would be accomplished via a combination of technologies, including extraction of the chromium-contaminated groundwater and/or injection of reagents into the groundwater that cause chemical or biological reactions. Extraction involves pumping the impacted groundwater from the site, treating it at a treatment plant on the Garfield Avenue Group of Sites to remove the chromium and then discharging the treated water to the Passaic Valley Sewerage Commission under the terms of a permit issued by PVSC.

Injection involves adding biological reagents (such as molasses) or chemical reagents (calcium polysulfide) into the groundwater to reduce hexavalent chromium to a more benign form. PPG has also proposed the use of reactive zones consisting of long-lasting reagents and an extensive well system to monitor the groundwater plume. See the article on page 3 that provides more detail on the proposed groundwater remedy for Site 114 and the surrounding parcels.

### Project Delays/Field Work Issues

Environmental remediation is similar to a construction project. As such, it is subject to many unforeseen problems that can affect the schedule. Some obstacles in

meeting milestones for completion of the PPG work include: weather, unanticipated below-ground conditions (e.g., buried debris, underground storage tanks), discovery of more contamination than expected, utility clearances and, of course, the COVID pandemic.

Disputes with property owners can also cause delays. The disputes can result from disruption of the business operations of the property owner and disagreements over access as well as the scope of remediation. Disagreements over the type or extent of restoration following remediation can also arise. I have been asked on numerous occasions to facilitate resolution of these disputes. In some cases, cleanup sites are left in a better condition than they were before remediation.

### Potential Conflicts Between Development of a Site and the Remediation Activities

The complexities and unforeseen conditions at a remediation site can interfere with a property owner’s intention to develop the remediation site or put it to its highest and best use. Site 114 is a prime example.

Site 114 is part of the Canal Crossing Redevelopment Area. This area is approximately 111 acres in the southeastern section of Jersey City. The City has designated a redeveloper for Site 114 and other portions of Canal Crossing. The redeveloper is hoping to receive site plan approval from the City and to commence redevelopment work at Site 114 in 2022.

### Conclusion

I hope this summary provides some insight into my function as Site Administrator for the past nearly six years. I encourage all interested parties to read the remaining articles in this newsletter for more information about the status of the remediation work at the PPG sites.

The public is encouraged to use the following email address and phone number to reach me with any questions about the PPG sites:  
Email: [Info@chromecleanup.com](mailto:Info@chromecleanup.com);  
Phone: 201-777-2099.

Ronald J. Riccio  
Site Administrator  
PPG Chromium Cleanup Sites

## Chromium Cleanup Partnership

This newsletter is an information resource for PPG’s chromium cleanups in Jersey City and Bayonne, New Jersey.

One Hovchild Plaza  
4000 Route 66  
4th Floor (MDMC)  
Tinton Falls, N.J. 07753

## Administrador de Obras

continuación de la página 8

respiratorias y cutáneas.

### El “JCO”

El 26 de junio de 2009, el Tribunal Superior de Nueva Jersey dictó una sentencia de consentimiento parcial relativa a los lugares de PPG (la “JCO”). La JCO obliga a PPG, al Departamento de Protección Ambiental de Nueva Jersey (New Jersey Department of Environmental Protection, NJDEP) y a la ciudad de Jersey City a trabajar juntos en un proceso que permita a PPG recuperar y restaurar los lugares de cromo en el condado de Hudson.

Los términos de la JCO exigen el nombramiento de un administrador independiente para supervisar la recuperación y restauración de los lugares. Esta responsabilidad también incluye el desarrollo de un cronograma principal ejecutable judicialmente, la facilitación del progreso de las partes en el cumplimiento de los hitos del cronograma principal, la contratación de un consultor técnico independiente, comunicaciones regulares con los representantes de la comunidad, la supervisión de la recuperación de una manera que permita la reurbanización y la comunicación de las preocupaciones del público a las partes.

Una vez que se haya recuperado un lugar de acuerdo con las normas del NJDEP, el lugar se retira de la JCO. En algunos casos, la solución final para un lugar requiere controles institucionales y de ingeniería. Estas son barreras físicas o restricciones legales diseñadas para prevenir la exposición humana a cualquier residuo de cromo. En estos casos, el lugar pasa a formar parte del programa profesionales autorizados para la recuperación de lugares (Licensed Site Remediation Professional, “LSRP”). Este programa requiere que un LRSP supervise el mantenimiento adecuado de los controles institucionales y de ingeniería según los permisos emitidos por el NJDEP.

Mis comunicaciones con la comunidad se han realizado a través de diversos medios, como las reuniones públicas periódicas y la publicación de boletines anuales. PPG, el NJDEP, la ciudad de Jersey y yo colaboramos también en el mantenimiento del sitio web de la Chromium Cleanup Partnership. En el sitio web se publican copias de los informes de limpieza, los informes de progreso que he presentado al tribunal, los cronogramas principales, los boletines informativos y otra información pertinente.

### Cómo se logra la recuperación del suelo con CCPW

La recuperación del impacto de cromo en el suelo y las aguas subterráneas implica diferentes metodologías. En los casos en los que los CCPW se depositaron en los suelos bajo los edificios, las zonas de estacionamiento y las carreteras, la recuperación se realiza, en la medida de lo posible, casi exclusivamente mediante la excavación de los materiales afectados. Para eso, es necesario retirar el material afectado con equipos de movimiento de tierras, colocarlo en camiones y transportarlo por camión o ferrocarril fuera del lugar a instalaciones de

eliminación autorizadas.

Sobre la base de las investigaciones realizadas hasta la fecha, el único lugar de PPG que ha requerido una recuperación activa de las aguas subterráneas es el lugar 114 y las parcelas circundantes. Esta es la ubicación de la antigua planta de procesamiento de cromo de PPG.

Las aguas subterráneas del lugar 114 se han visto afectadas por la lixiviación del cromo depositado en los suelos bajo los edificios y otras zonas, incluido el antiguo canal Morris, que atravesaba el lugar. Todos los suelos afectados por el cromo en el lugar 114 que debían extraerse se han desenterrado, transportado y han recibido la aprobación final del NJDEP. Sin embargo, las aguas subterráneas afectadas por el cromo en el lugar 114 y en las parcelas circundantes todavía están en proceso de recuperación.

La recuperación de las aguas subterráneas ha resultado ser compleja y bastante difícil. Aunque las aguas subterráneas del lugar 114 (o de cualquier otro lugar de Jersey City) no se utilizan como agua potable, el NJDEP se encarga de garantizar que la solución definitiva para las aguas subterráneas del lugar 114 proteja la salud humana y el medio ambiente.

Después de realizar numerosos estudios piloto, se determinó que la recuperación activa de las aguas subterráneas del lugar 114 y de las parcelas circundantes se llevaría a cabo mediante una combinación de tecnologías, incluida la extracción de las aguas subterráneas contaminadas con cromo o la inyección de reactivos en las aguas subterráneas que provocan reacciones químicas o biológicas. La extracción implica el bombeo de las aguas subterráneas afectadas del lugar, su tratamiento en una planta de tratamiento cercana al lugar para eliminar el cromo y, a continuación, la descarga de las aguas tratadas a la Comisión de Alcantarillado del Valle de Passaic según los términos de un permiso emitido por la misma (Passaic Valley Sewerage Commission, PVSC).

La inyección implica la adición de reactivos biológicos (como la melaza) o reactivos químicos (polisulfuro de calcio) a las aguas subterráneas para reducir el cromo hexavalente a una forma más benigna. PPG también ha propuesto el uso de zonas reactivas que consisten en reactivos de larga duración y un amplio sistema de pozos para controlar la pluma de contaminación de las aguas subterráneas. Consulte el artículo de la página 3 que ofrece más detalles sobre la solución propuesta para las aguas subterráneas del lugar 114 y las parcelas circundantes.

### Retrasos en el proyecto/Problemas con los trabajos de campo

La recuperación del medio ambiente es similar a un proyecto de construcción. Como tal, está sujeto a muchos problemas imprevistos que pueden afectar el cronograma del proyecto. Algunos de los obstáculos que dificultan el cumplimiento de los hitos para la finalización de los trabajos de recuperación y restauración de PPG son: el clima, las condiciones imprevistas del subsuelo (por ejemplo, escombros enterrados, tanques de almacenamiento

subterráneos), el descubrimiento de más contaminación de la esperada, las autorizaciones de los servicios públicos y, por supuesto, la pandemia de COVID.

Las disputas con los propietarios también pueden causar retrasos. Las disputas pueden derivarse de la interrupción de las operaciones comerciales del propietario y de los desacuerdos sobre el acceso y el alcance de la recuperación. También pueden surgir desacuerdos sobre el tipo o el alcance de la restauración tras la recuperación. Se me ha pedido en numerosas ocasiones que facilite la resolución de estos conflictos. En algunos casos, el lugar recuperado queda en mejores condiciones que antes de los trabajos de recuperación.

### Posibles conflictos entre el desarrollo de un lugar y las actividades de recuperación

Las complejidades y las condiciones imprevistas de un lugar en recuperación pueden interferir con la intención del dueño de la propiedad de desarrollar el lugar de recuperación o darle su mejor uso. El lugar 114 es un buen ejemplo.

El lugar 114 forma parte del área de reurbanización del Canal Crossing. Esta área tiene aproximadamente 111 acres en la sección sureste de Jersey City. La ciudad ha designado un agente para la reurbanización del lugar 114 y otras partes del Canal Crossing. El agente para la reurbanización espera recibir la aprobación del plan del lugar por parte de la ciudad y comenzar las obras de reurbanización en el lugar 114 en 2022.

### Conclusión

Espero que este resumen ofrezca una visión de mi función como administrador del lugar durante los últimos casi seis años. Animo a todas las partes interesadas a leer el resto de los artículos de este boletín para obtener más información sobre el estado de las obras de recuperación de los lugares de PPG.

Se anima al público a utilizar la siguiente dirección de correo electrónico y el siguiente número de teléfono para ponerse en contacto conmigo si tienen alguna pregunta sobre los lugares de PPG:

Correo electrónico: [Info@chromecleanup.com](mailto:Info@chromecleanup.com);

Teléfono: 201-777-2099.

Ronald J. Riccio

Administrador de Obras

Sitios de limpieza de cromo de PPG

## Chromium Cleanup Partnership

Este boletín es una fuente de información de las limpiezas de cromo de PPG en Jersey City y Bayonne, Nueva Jersey.

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# La limpieza del agua subterránea continúa en la Avenida Garfield

PPG ha iniciado la tercera fase de limpieza de las aguas subterráneas en la zona de Garfield Avenue.

Los contratistas de PPG están introduciendo reactivos a gran profundidad bajo la superficie del suelo a través de una red de pozos para limpiar las aguas subterráneas contaminadas con cromo hexavalente, que es un componente del material de desecho generado en la planta de fabricación que funcionó en el número 900 de la avenida Garfield durante más de 50 años.

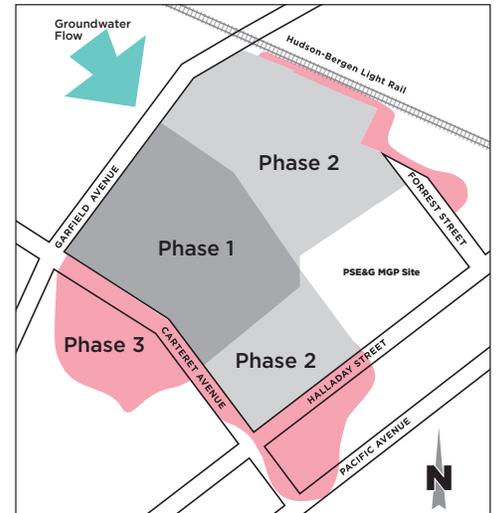
Las aguas subterráneas se encuentran en las grietas y espacios del suelo, arena y roca.

Los reactivos son sustancias que provocan reacciones químicas o biológicas. En este caso, los reactivos están convirtiendo el cromo hexavalente en cromo trivalente, que es una forma más benigna del metal que

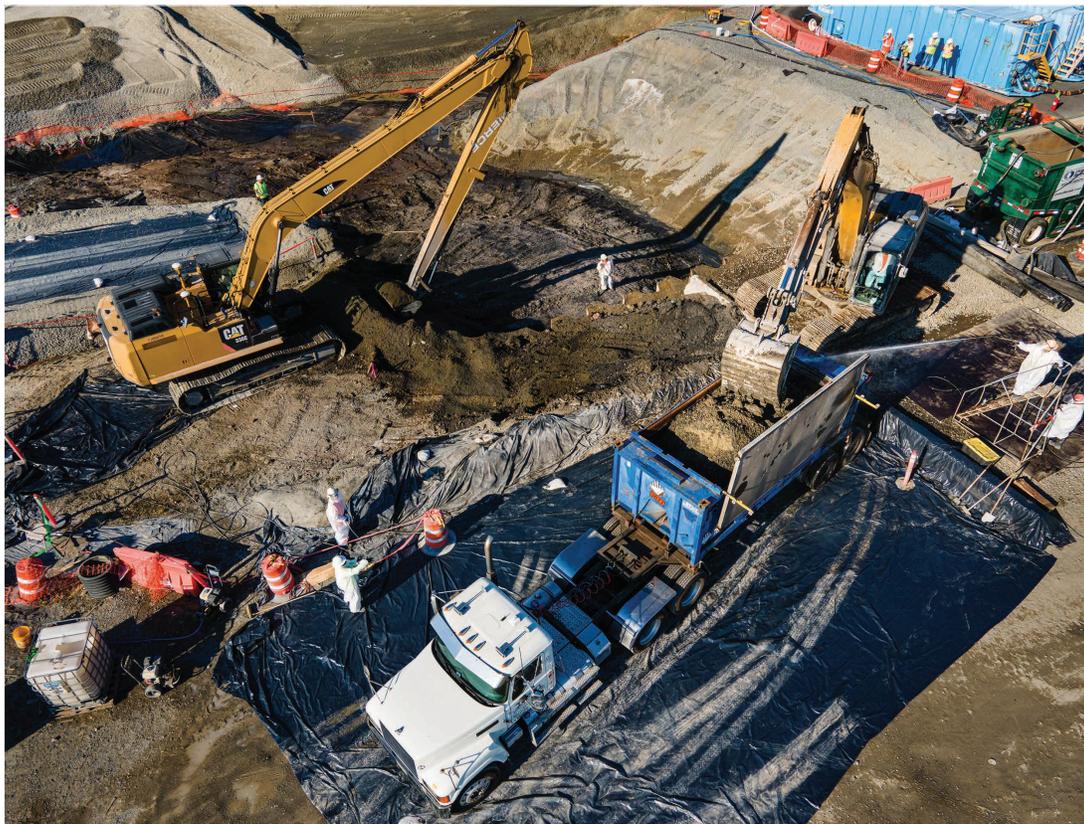
se encuentra de forma natural en el medio ambiente y es un elemento dietético esencial. PPG continuará controlando o recuperando las aguas subterráneas hasta que se cumplan las normas de limpieza del Departamento de Protección Ambiental de Nueva Jersey, lo que podría llevar 30 años o más.

Los embalses de Boonton abastecen de agua potable a Jersey City. En Jersey City no se utilizan las aguas subterráneas como agua potable.

Además, el NJDEP aprobó un área exenta de clasificación (Classification Exception Area, CEA) para las aguas subterráneas afectadas por el cromo en la zona de Garfield Avenue. Una CEA prohíbe la instalación o el uso de pozos de agua subterránea en las propiedades afectadas.



Las aguas subterráneas fluyen hacia el sureste del lugar de la antigua planta.



La excavadora a la derecha carga el último cubo de tierra afectada por cromo de los terrenos ubicados al sur de la avenida Carteret.

## La limpieza del suelo se ha completado en un 99 %.

continuación de la página 8

En 2010, PPG excavó aproximadamente 1.1 millones de toneladas de tierra y escombros afectados por el cromo en la zona de Garfield Avenue, definida como parte de los seis lugares de cromo designados por el Departamento de Protección Ambiental de Nueva Jersey (New Jersey Department of Environmental Protection, NJDEP) en

Garfield Avenue, así como en las propiedades y carreteras adyacentes. Esto comprende aproximadamente 40 acres en los que la profundidad media de la excavación era de 15 a 20 pies. Todo el material excavado se transportó para su eliminación en lugares autorizados fuera del sitio, de acuerdo con la reglamentación aplicable.

Durante los más de 11 años de excavación en la avenida Garfield, los resultados de control del aire se mantuvieron dentro de los estrictos límites de seguridad establecidos por el NJDEP.

El relleno limpio de gran parte de los lugares se reformó con un reactivo diseñado para evitar que el suelo se contaminara con aguas subterráneas afectadas por el cromo y para apoyar la recuperación de las aguas subterráneas. (Consulte el artículo anterior).

PPG excavó aproximadamente 1.1 millones de toneladas de tierra y escombros afectados por el cromo en la zona de Garfield Avenue.

Se abordarán muchas otras áreas pequeñas debajo de calles o edificios y/o próximos a estos en el grupo de sitios de la avenida Garfield Avenue que aún contienen material con cromo cuando PPG tenga acceso. A principios del siglo XX, la Natural Products Refining Company abrió una planta de fabricación de cromo

en el 880-900 de la avenida Garfield. PPG compró la planta en 1954 y dejó de operar en 1963, vendiendo las instalaciones y la propiedad en 1964.

El proceso de fabricación utilizado en la instalación produjo un subproducto de residuos conocido como residuos de producción química de cromato (Chromate Chemical Production Waste, CCPW) que contiene cromo hexavalente en concentraciones que superan los criterios de limpieza del suelo del NJDEP.



La recuperación de una porción de 5.2 acres del parque Dennis Collins incluye un revestimiento de roca más grande y pesado en las orillas del Kill Van Kull.

## PPG completa la limpieza del parque Dennis Collins

Hace muchas décadas, se depositó material de relleno en las orillas del Kill Van Kull en Bayonne para crear el parque Dennis Collins. Un componente de ese material era el desecho de producción química de cromato (CCPW), un subproducto del proceso de fabricación de cromo que PPG debe abordar.

Durante varios años, PPG trató de identificar la ubicación del CCPW. Al final, se determinó que el subproducto se encontraba disperso por toda el área del parque que forma parte del sitio de limpieza. En 2016, PPG eliminó de forma limitada aproximadamente 7,300 toneladas de suelo y restos con CCPW del sitio de limpieza, que se encuentra al oeste de Gorman Field y al occidente del Memorial de la Guerra de Corea. Luego, en 2019, el Departamento de Protección Ambiental de Nueva Jersey (New Jersey Department of Environmental Protection, NJDEP) aprobó la instalación de una cubierta de suelo y un revestimiento de roca para evitar el contacto con las concentraciones dispersas y bajas de CCPW y el relleno antiguo en el suelo subsuperficial.

Este trabajo en una porción de 5.2 acres del Parque comenzó en enero de 2020 y se completó sustancialmente en abril de 2021. En septiembre de 2021 se completaron

trabajos adicionales de limpieza a lo largo del revestimiento de la costa de Kill Van Kull.

En total, PPG desenterró y retiró más de 20,000 toneladas de material afectado por el cromo, que se transportó para su eliminación en una instalación autorizada. PPG, por su parte, colocó 39,000 toneladas de relleno limpio en el lugar para crear una cubierta de dos pies sobre los límites del proyecto.

La cubierta de suelo aumentó en 18 pulgadas o más la elevación de esta parte del parque, que se sostiene con muros de contención. Las rampas en cumplimiento con la Ley para Estadounidenses con Discapacidades (Americans with Disabilities Act, ADA) facilitan el acceso. Como parte del plan, PPG amplió el estacionamiento de 30 plazas a 47 e instaló nuevos elementos de gestión de aguas pluviales, rampas de asfalto y aceras a lo largo de West First Street.

Se retiraron más de 2,000 toneladas de roca del antiguo revestimiento del Kill Van Kull y se transportaron al Parque de los Veteranos para su uso en las orillas de la bahía de Newark y a la antigua Terminal Marítima Militar para que pueda utilizarse en otros lugares de Bayonne. En su lugar, los trabajadores instalaron revestimientos, y un revestimiento

de roca más grande y pesado en la costa del Kill Van Kull. Este actúa como barrera para el material afectado por el cromo y el relleno antiguo en las orillas de esta vía fluvial. El nuevo revestimiento está diseñado para resistir con mayor eficacia los grandes fenómenos meteorológicos, según un plan preaprobado por el Cuerpo de Ingenieros del Ejército de los EE. UU.

Se está preparando un informe al NJDEP para su revisión y aprobación, en el que se documenta que no se requieren más medidas correctivas. El informe recomendará que se lleven a cabo inspecciones anuales de la cubierta de suelo y del revestimiento con un permiso emitido por el NJDEP y de conformidad con su Programa de Profesionales con Licencia para la Recuperación de Sitios, a fin de garantizar que sigan protegiendo la salud humana y el medio ambiente.

De acuerdo con los funcionarios de Bayonne, la ciudad planea establecer en el antiguo sitio de limpieza nuevas instalaciones para una variedad de deportes y grupos de edad; equipos y caminos que cumplan con los requisitos de la ADA; un parque para perros; un anfiteatro; y nuevas variedades de árboles.

### Se ha completado la excavación en el lugar de limpieza 107

PPG ha completado la excavación y extracción de la tierra y los escombros afectados por el cromo en el lugar 107, situado entre Linden Avenue East y Chapel Avenue en Jersey City.

Las obras comenzaron en mayo de 2018 con la demolición de un almacén de 64,000 pies cuadrados. Durante 2018 y 2019, PPG excavó más de 112,000 toneladas de material afectado por el cromo en el lugar, así como en el lugar 108 adyacente y en el derecho de paso de

Conrail al noroeste. Este trabajo se realizó de acuerdo con un plan de limpieza aprobado por el Departamento de Protección Ambiental de Nueva Jersey.

La restauración de las tres propiedades se completó en octubre de 2019, pero la presencia esporádica de nódulos restantes en la esquina noroeste del lugar 107 provocó la necesidad de una investigación adicional de un área de aproximadamente 27,000 pies cuadrados. La excavación y la eliminación fuera del lugar de otras 250 toneladas de tierra y escombros, así como la restauración de la esquina noroeste, se completaron en marzo de 2021.

El Departamento de Protección Ambiental de Nueva Jersey (New Jersey Department of Environmental Protection, NJDEP) está revisando los informes que documentan el éxito de la limpieza del lugar 107. Además, se está llevando a cabo una investigación para determinar si es necesaria una limpieza de las aguas subterráneas.

Por otro lado, en el lugar 108 y en la propiedad de Conrail permanece parte del suelo afectado por el cromo. PPG está en conversaciones con los propietarios, así como con el NJDEP y los funcionarios de la ciudad de Jersey City, sobre la gestión de este material.

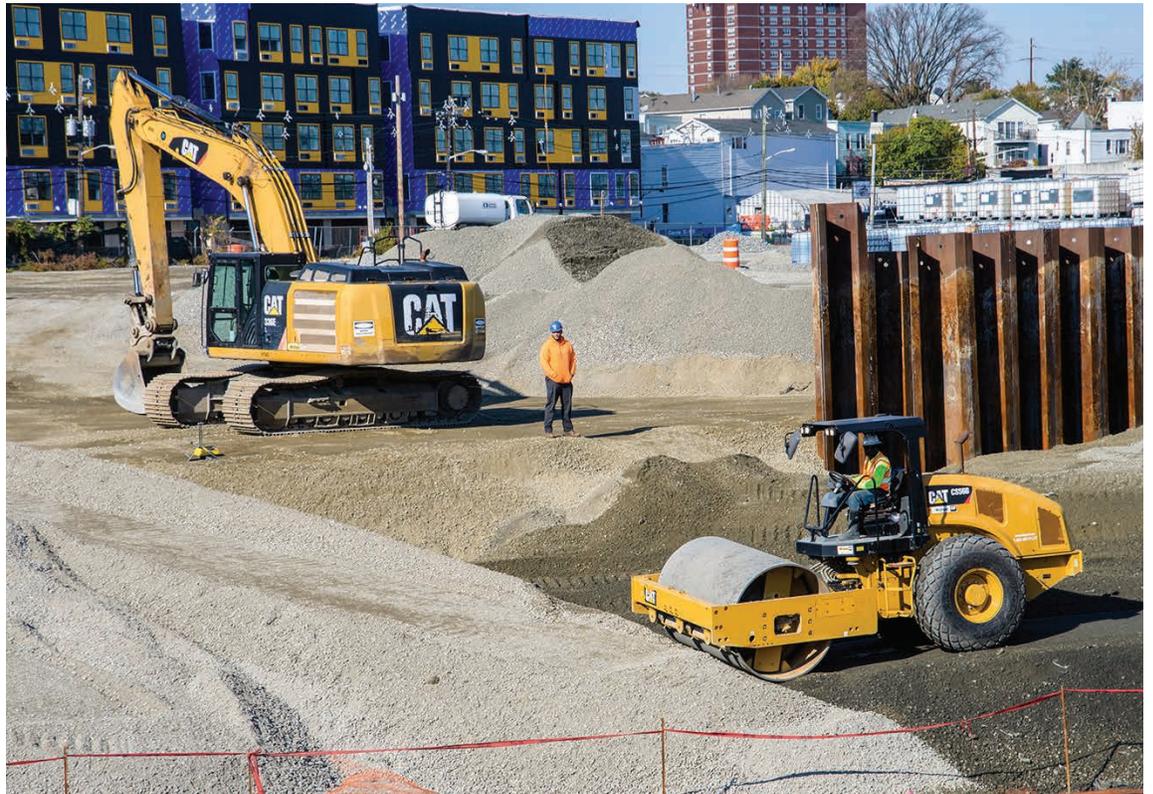
## COMPLETA AL 99 % La limpieza del suelo en Garfield alcanza un hito

La limpieza de cromo de PPG en la zona de Garfield Avenue alcanzó un hito el mes pasado cuando se completó la excavación en la zona de Ten West y las propiedades circundantes, lo que significa que el 99 % de la tierra que había que extraer se ha desenterrado y transportado.

Mientras tanto, los trabajadores de un promotor inmobiliario están terminando los planes y los preparativos para la construcción inicial del Plan de Reurbanización del Canal Crossing, un proyecto de 111 acres de uso mixto.

PPG compró la propiedad de Ten West, cerca de la esquina de las avenidas Garfield y Caven Point, en abril de 2017 y demolió el edificio en mayo de 2021. Tras la demolición del edificio, se retiraron casi 80,000 toneladas de tierra y escombros afectados por el cromo. Desde mediados de año

continúa en la página 6



Los trabajadores esparcen relleno limpio al sur de la Avenida Carteret durante la restauración en la zona de la Avenida Garfield.

*Carta del Administrador de Obras*

### Se ha completado el trabajo de recuperación y restauración del suelo en 18 de los 23 lugares



*Por Ronald J. Riccio*

Llevo casi seis años ejerciendo como administrador de obras designado por el tribunal. Acepté el nombramiento, en parte, porque, al haber crecido en Jersey City, me familiaricé con los lugares y los residentes cercanos a

algunos de los lugares de limpieza de PPG. Esto me dio una motivación adicional para asegurarme de que los lugares contaminados se recuperan y restauran de forma segura, eficaz y eficiente.

Desde mi nombramiento en enero de 2016, un total de 23 lugares de PPG fueron objeto de investigación, recuperación y restauración. Me complace informar que en 18 de los 23 lugares se ha completado el trabajo de campo de recuperación y restauración del suelo. En todos

los lugares, la investigación o recuperación de las aguas subterráneas se ha completado o está en curso.

En los lugares en los que no se ha completado la recuperación del suelo, cualquier exposición de los ocupantes de las propiedades y de público se controla con medidas de recuperación provisionales, cuando sea necesario. Estas medidas van desde revestimientos y cimentaciones de hormigón hasta carreteras de asfalto y otros controles para evitar el contacto directo con el cromo que permanece en el suelo bajo los edificios u otras estructuras o superficies.

#### **Origen de la contaminación por cromo**

El origen de la contaminación por cromo en los lugares de PPG se remonta a una planta de procesamiento de mineral de cromita operada por una compañía predecesora de PPG desde

1911 hasta 1963. La planta estaba ubicada en el distrito F de Jersey City, al este de la avenida Garfield y al sur del parque Berry Lane y de la línea del tren ligero Hudson-Bergen, a orillas del antiguo canal Morris.

Las operaciones de procesamiento de cromo en la planta de PPG generaban un residuo conocido como desecho de la producción química de cromato o Chromate Chemical Production Waste, CCPW. El CCPW se utilizó como relleno en proyectos de construcción en el condado de Hudson, principalmente en Jersey City y Bayonne. También se utilizó en la construcción de carreteras y para llenar partes del antiguo canal Morris. El CCPW contiene cromo hexavalente, que, según los informes científicos, puede provocar cáncer de pulmón en los seres humanos. También se ha relacionado con otros efectos sobre la salud, como afecciones

continúa en la página 5

**ATTACHMENT 4**  
**PPG EMPLOYMENT REPORTS**  
**(ATTACHED)**



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**Jody Overmyer**  
Senior Remediation Project Manager

January 27, 2022

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  
3Q21 Employment Report

Dear Mr. Riccio:

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

During the third quarter of 2021, 19 firms provided services, including environmental consultants, for on-site activities directly related to investigation and remediation of PPG's chromium sites. One of these firms (ENTACT) maintains 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 33.1% of the labor employed on the project. Jersey City residents accounted for a total of 891 hours or 4.1% of the labor used on the project during the third quarter, and 310,170 hours or 28.8% of the labor used for the project to date. Note that for the third quarter, hours from PPG's security firm were not included but will be added when available. 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:

P. Amin  
P. Baker  
M. Clemente  
N. Colson  
D. Doyle  
R. Engel

S. Faeth  
R. Feinberg  
C. Fiore  
W. Howitz  
J. Lagrotteria  
D. Laguzza

J. Ray  
D. Spader  
M. Terril  
J. Worden

**PPG**  
**New Jersey Chrome Project**  
 Garfield Avenue Group Sites  
 Q3 2021 Local Employment Report  
 January 27, 2022

	Aquifer Drilling	AST Environmental	AWT Environmental	Borbas Surveying	Code	Creamer	ENTACT	Evoqua	Forrest Electric	G4S/Allied	Geo-Instruments	GWTT	Hager-Richter	Municipal Main	TPI	Totals
January				0			160	0		656			0	0	0	816
				22			320	582		840			33	30	4	1,831
February				0			160	0		509						669
				12			320	518		672						1,522
March							288	0		519						807
							736	833		671						2,240
April				0			428	0		528						956
				110			3,168	863		672						4,812
May	0			0			463	0		640					0	1,103
	833			275			3,402	743		840					14	6,107
June	0			0	24	0	396	0		520			0	0	0	940
	2,011			210	86	80	3,564	647		672			28	90	12	7,399
July			0	0	180		198	0	0					0	0	378
			22	237	1,194		3,564	1,092	8					10	4	6,131
August	0		0	0	144		189	0				0				333
	331		1,076	197	854		3,402	1,072				38				6,969
September	0	0	0	0	0		180	0			0	0			0	180
	314	275	1,246	143	108		3,345	1,253			23	37			6	6,749
October																0
November																0
December																0
Totals:	0	0	0	0	348	0	2,462	0	0	3,371	0	0	0	0	0	6,181
	3,489	275	2,344	1,205	2,242	80	21,821	7,603	8	4,367	23	75	61	130	39	43,760

Note: Jersey City Contractors in Red

JC Resident Hours	
Total Hours	

Project to Date (All Sites)	Jersey City Hours	Total Hours	% 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:	25,378	86,644	29.3%
2019:	22,359	94,528	23.7%
2020	16,705	62,233	26.8%
2021	9,137	56,025	16.3%
Project Totals:	310,170	1,075,568	28.8%

**PPG**  
**New Jersey Chrome Project**  
 Non-Garfield Avenue Group Sites  
 Q3 2021 Local Employment Report  
 January 27, 2022

	Site 63	Site 107 Fashionland				Site 174 Dennis Collins Park						457 Communipaw		Totals
	EPI	Borbas	Emilcott	ENTACT	SGS	Emilcott	ENTACT	G4S	Ocean Surveys	Posilico	Sklar Survey	Borbas	TPI	
January			0			0	220	408			0			628
			3			182	2,148	840			20			3,192
February			0	80		0	40	337	0			0	0	457
			42	350		61	360	672	25			6	8	1,524
March						4	192	351						547
						160	1,674	671						2,505
April						0	76	454			0			530
						17	658	672			24			1,370
May	0							441						441
	16							840						856
June					0			352						352
					182			672						854
July						0								0
						3								3
August						0				0				0
						117				831				948
September		0				0				0				0
		10				157				846				1,013
October														0
														0
November														0
														0
December														0
														0
<b>Totals:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>4</b>	<b>528</b>	<b>2,343</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,955</b>
	16	10	45	350	182	696	4,840	4,367	25	1,677	44	6	8	12,265

Note: Jersey City Contractors in Red



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**Jody Overmyer**  
Senior Remediation Project Manager

January 27, 2022

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  
4Q21 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 fourth quarter of 2021, 18 firms provided services, including environmental consultants, for on-site activities directly related to investigation and remediation of PPG's chromium sites. One of these firms (ENTACT) maintains 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 33.1% of the labor employed on the project. Jersey City residents accounted for a total of 1,037 hours or 5.6% of the labor used on the project during the fourth quarter, and 311,207 hours or 28.4% of the labor used for the project to date. Note that for the fourth quarter, hours from PPG's security firm were not included but will be added when available. 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 the letters 'es'.

Jody Overmyer

Ecc:

P. Amin  
P. Baker  
M. Clemente  
N. Colson  
D. Doyle  
R. Engel

S. Faeth  
R. Feinberg  
C. Fiore  
W. Howitz  
J. Lagrotteria  
D. Laguzza

J. Ray  
D. Spader  
M. Terril  
J. Worden

**PPG**  
**New Jersey Chrome Project**  
Garfield Avenue Group Sites  
Q4 2021 Local Employment Report  
January 27, 2022

	Aquifer Drilling	AST Environmental	AWT Environmental	Borbas Surveying	Code	Control Services	Creamer	ENTACT	Evoqua	Forrest Electric	G4S/Allied	Geo-Instruments	GWTT	Hager-Richter	Municipal Main	SGS	TPI	Totals
January				0				160	0		656			0	0		0	816
				22				320	582		840			33	30		4	1,831
February				0				160	0		509							669
				12				320	518		672							1,522
March								288	0		519							807
								736	833		671							2,240
April				0				428	0		528							956
				110				3,168	863		672							4,812
May	0			0				463	0		640						0	1,103
	833			275				3,402	743		840						14	6,107
June	0			0	24		0	396	0		520			0	0		0	940
	2,011			210	86		80	3,564	647		672			28	90		12	7,399
July			0	0	180			198	0	0					0		0	378
			22	237	1,194			3,564	1,092	8					10		4	6,131
August	0		0	0	144			189	0				0					333
	331		1,076	197	854			3,402	1,072				38					6,969
September	0	0	0	0	0			180	0			0	0				0	180
	314	275	1,246	143	108			3,345	1,253			23	37				6	6,749
October	0	0	0	0	0	200		180	0			0	0			0	0	380
	1,029	1,168	1,199	157	45	400		3,060	1,230			8	16			50	4	8,365
November	0		0	0	0	272		153	0			0		53			0	478
	1,124		947	158	10	288		2,754	567			5		172			3	6,028
December	0		0	0	88	89		0	0				0	3				180
	422		1,222	67	424	257		1,089	439				9	6				3,934
<b>Totals:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>436</b>	<b>561</b>	<b>0</b>	<b>2,795</b>	<b>0</b>	<b>0</b>	<b>3,371</b>	<b>0</b>	<b>0</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,218</b>
	6,064	1,443	5,712	1,587	2,721	945	80	28,724	9,839	8	4,367	35	100	238	130	50	46	62,086

Note: Jersey City Contractors in Red

JC Resident Hours	
Total Hours	

Project to Date (All Sites)	Jersey City Hours	Total Hours	% 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%
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2015:	35,784	103,123	34.7%
2016:	25,046	64,783	38.7%
2017:	21,448	70,307	30.5%
2018:	25,378	86,644	29.3%
2019:	22,359	94,528	23.7%
2020:	16,705	62,233	26.8%
2021:	10,174	74,666	13.6%
<b>Project Totals:</b>	<b>311,207</b>	<b>1,094,209</b>	<b>28.4%</b>

**PPG**  
**New Jersey Chrome Project**  
 Non-Garfield Avenue Group Sites  
 Q4 2021 Local Employment Report  
 January 27, 2022

	Site 63	Site 107 Fashionland				Site 174 Dennis Collins Park						457 Communipaw		Totals
	EPI	Borbas	Emilcott	ENTACT	SGS	Emilcott	ENTACT	G4S	Ocean Surveys	Posilico	Sklar Survey	Borbas	TPI	
January			0			0	220	408			0			628
			3			182	2,148	840			20			3,192
February			0	80		0	40	337	0			0	0	457
			42	350		61	360	672	25			6	8	1,524
March						4	192	351						547
						160	1,674	671						2,505
April						0	76	454			0			530
						17	658	672			24			1,370
May	0							441						441
	16							840						856
June					0			352						352
					182			672						854
July						0								0
						3								3
August						0				0				0
						117				831				948
September		0				0				0				0
		10				157				846				1,013
October										0				0
										259				259
November														0
														0
December										0				0
										56				56
<b>Totals:</b>	0	0	0	80	0	4	528	2,343	0	0	0	0	0	2,955
	16	10	45	350	182	696	4,840	4,367	25	1,992	44	6	8	12,580

Note: Jersey City Contractors in Red