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July 28, 2017

VIA REGULAR MAIL AND EMAIL

The Honorable Barry P. Sarkisian, P.J. Ch.
Superior Court of New Jersey
Brennan Courthouse
583 Newark Avenue
Jersey City, New Jersey 07306

Re: **PROGRESS REPORT (January 1, 2017 through the date of this Report):**
New Jersey Department of Environmental Protection, et al. v. Honeywell
International, Inc. et al. v. City of Jersey City et al., Superior Court of New Jersey,
Chancery Division, Hudson County, Civil Action No. HUD-C-77-05; Partial
Consent Judgment Concerning the PPG Sites (the “**JCO**”)

Dear Judge Sarkisian:

I respectfully submit this Progress Report pursuant to my responsibilities as independent Site Administrator operating under the JCO. This Report covers the period January 1, 2017 through the date of this Report.

This is my third Progress Report submitted to Your Honor. The prior Progress Reports were dated July 29, 2016 and January 27, 2017. Capitalized terms used in this Progress Report that are not defined shall have the meanings in the prior Progress Reports.

I am submitting this Progress Report pursuant to paragraph 1(b)(i)1 of the “Order Administratively Dismissing This Matter Without Prejudice and Retaining Jurisdiction” entered by Your Honor on May 4, 2016 (the “**May 2016 Order**”). That Order requires that I submit Progress Reports to the Court twice per year.

In addition to serving as Site Administrator, I am also serving 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” (the “**Mediation Order**”). A summary of the progress of the Mediation is included in this Progress Report.

I. New Master Schedule: With the help and cooperation of all of the JCO Parties, a new/revised Master Schedule was successfully completed. A copy of the new Master Schedule dated as of July 28, 2017 is enclosed.

II. Residential Inspection Program: The Residential Inspection Program offers owners/occupants of residential properties who live within defined areas of the PPG cleanup sites the opportunity to request an inspection of the exterior of their homes if they suspect chromium waste is in, or on, their property. When I started my tenure in January 2016 there were 47 such properties remaining in the Program that potentially required inspection, sampling and/or remediation. As of the date of this Progress Report, only 4 of those properties require further action. It is anticipated that these remaining 4 properties will be investigated and, where necessary, remediated this year.

III. IRM Inspection Program: Inspections of the Interim Remedial Measures (“**IRMs**”) in place at the PPG Sites are performed at varying frequencies depending upon numerous factors, such as the levels of contamination, the potential for exposures and the type of IRM being utilized. The IRM inspection reports for the period covered by this Report did not reveal problems of any significance.

IV. Access Settlements: As Your Honor is aware, settlements were reached between PPG and the property owners for both the Ten West Apparel property (800 Garfield Avenue) and Site 107 (18 Chapel Avenue; Greenberg Property). See further discussion of each below.

V. Remediation Progress – Garfield Avenue Group (“GAG”) Sites¹:

Soil Remediation: Excavation and backfilling of chromium impacted soils at the GAG Sites have been completed, with the exception of the parcels encompassing Phase 3B South² and a small area adjacent to the Al Smith Moving building and Building 51.

Selection of Capillary Break: The Capillary Rise Study discussed in my prior Progress Reports was completed. A final Capillary Rise Study Report was submitted by PPG to NJDEP resulting in the issuance by NJDEP of a Capillary Break Determination letter dated March 30, 2017 (copy attached). That letter addressed, among other things, where a capillary break³ will have to be installed at the GAG Sites and the acceptable materials that can be utilized for the capillary break. (Note that the NJDEP’s Capillary Break Determination was limited to those portions of the

¹ For the purpose of this Progress Report, the “GAG Sites” do not include the “GAG Roadways” and the “GAG Offsite Properties.” My July 29 , 2016 Progress Report explains the differences between the “GAG Sites,” the “GAG Roadways” and the “GAG Offsite Properties,” including figures showing the locations of these properties/roadways.

² Phase 3B South consists of Site 133 West, a portion of Site 137B, the Fishbein property (816 Garfield Avenue) and the Ten West Apparel property (800 Garfield Avenue).

³ Capillary action causes water to rise to elevations above the groundwater table. In order to prevent potentially-impacted groundwater from reaching the ground surface via capillary action and forming “chromium blooms,” a “capillary break” can be installed. The capillary break materials to be used at the PPG Sites (where required) will be designed to prevent the formation of “chromium blooms” that may result from capillary action

GAG Sites where soil remediation had been completed as of March 30, 2017. Further evaluation will be required to determine the need for a capillary break at the portions of the GAG Sites that have not as yet been remediated, as well as the GAG Roadways and the GAG Offsite Properties).

In May 2017, PPG submitted to NJDEP and the other JCO Parties the first draft of a Capillary Break Design Report setting forth the detailed design parameters for the selected capillary break materials and the location of the break materials. A revised Capillary Break Design Report is under development.

Site Restoration: “Restoration” of the PPG sites is defined to mean installation of a capillary break (where required) and final remediation grading in accordance with an NJDEP-approved Restoration Technical Execution Plan. Restoration Complete is expected to occur in compliance with the October 2017 milestone established in the new Master Schedule for all portions of the GAG Sites, except those portions of the GAG Sites not considered remediated or requiring further study as set forth in the NJDEP Capillary Break Determination letter dated March 30, 2017.

Groundwater: In June 2017, PPG began implementation of supplemental groundwater remedial investigation activities in an attempt to fully delineate the extent of chromium groundwater impacts at the GAG Sites. In addition, PPG voluntarily agreed to undertake the first phase⁴ of groundwater interim remedial measures (“IRMs”) at Site 114, which will commence in December 2017.

The IRM activities will be performed in the Site 114 area of the GAG Sites where the most heavily chromium-contaminated groundwater is located. It will involve extraction and treatment of impacted groundwater and reinjection of the treated groundwater with organic carbon compounds to achieve bioremediation of areas downgradient of the extraction area. It is hoped that the groundwater IRM activities will achieve meaningful reductions in the total chromium concentrations in groundwater. The JCO Parties agreed to milestones for the groundwater remedial investigation and the groundwater IRMs. The milestones are included in the new Master Schedule. Note that PPG has approval to initiate only one phase of the IRMs at this point; approval of subsequent IRMs is contingent on PPG management approval.

VI. Remediation Progress – GAG Roadways:

The GAG Roadways include the portions of Halladay Street North, Forrest Street, Carteret Avenue and Garfield Avenue.⁵ A summary of the status of each is set forth below.

Halladay Street North: CCPW has been discovered under this roadway between Carteret Avenue and Forrest Street. PPG plans to excavate this material at the same time it conducts

⁴ The need for additional phases of groundwater IRM activities will be evaluated during implementation of the groundwater IRM work.

⁵ See Figures 1 and 2 attached to the new Master Schedule.

its cleanup at 78 Halladay Street (the former Halsted Bag Company property). The excavation is scheduled to commence in June 2018.

Forrest Street: CCPW was identified in the soil under this roadway. PPG began excavation in March 2017 on both the Forrest Street roadway, as well as the Forrest Street Properties located adjacent to the roadway (see discussion of Forrest Street Properties below). Excavation of all chromium contaminated soils in Forrest Street is not possible at this time due to structural constraints, including but not limited to the presence of utilities and the proximity of buildings located on the Forrest Street Properties, as well as the impact to the businesses located in the buildings resulting from utility re-routing. Therefore, the JCO Parties are considering other alternatives, including implementation of a restricted use remedy for chromium contaminated soils in Forrest Street. If selected, this remedy would involve leaving some chromium impacted soils in place with a combination of plastic liners and the use of the asphalt roadway to cap the remaining soils contamination in the roadway with the understanding that excavation of chromium impacted soils would become necessary upon future road construction and/or development of the Forrest Street Properties.

Garfield Avenue: PPG has substantially completed the investigation and delineation of chromium impacts in Garfield Avenue between Carteret Avenue and the Hudson Bergen Light Rail overpass. Garfield Avenue has numerous sewer lines and other utilities beneath it, which will make excavation of all chromium-impacted soils in Garfield Avenue difficult. As a result, the JCO parties are currently in discussions with respect to the remedy for this roadway.

Carteret Avenue: As previously reported, the remediation plan for the Carteret Avenue section of the GAG Roadways is complicated by the presence of a 96 inch steel combined sewer pipe that extends from the intersection of Carteret Avenue and Garfield Avenue to beyond the intersection of Carteret Avenue and Pacific Avenue. The investigation and delineation shows that soils contaminated by CCPW are in close proximity to large portions of the sewer pipe. The contaminated soils/materials that surround the pipe cannot be remediated with the sewer pipe in place for fear of damaging the 100-year old pipe. Since my last Progress Report to Your Honor, significant progress has been made amongst the JCO Parties to move this very complicated project forward.

First, in March 2017, PPG, the City of Jersey City, the Jersey City Municipal Utilities Authority (“JCMUA”) and the Jersey City Redevelopment Agency (“JCRA”) entered into a Memorandum of Understanding (“MOU”) with respect to the Carteret Avenue project. (Copy attached). The MOU is designed to coordinate the installation of a temporary bypass pipe, removal of the existing pipe and excavation of contaminated material impacted with CCPW, and installation of a new pipe

Second, in accordance with the Implementation Schedule, JCMUA retained a design engineer and, in March 2017, submitted to the New Jersey Environmental Infrastructure Trust (“EIT”) a Planning Document for the Carteret Avenue Sewer Replacement Project memorializing JCMUA’s intention to apply to EIT for financial assistance with respect to the project.

Third, by letter dated June 16, 2017, JCMUA's design engineer, CME Associates, made its recommendation to JCMUA of the preferred approach for the sewer replacement/remediation project. The preferred approach involves the installation of a temporary sewer pipe south of Carteret Avenue that would direct the flow around the portion of the Carteret Avenue roadway that requires remediation. Once the remediation is completed in the Carteret Avenue roadway, a permanent sewer pipe would be constructed in Carteret Avenue and the temporary bypass pipe would be removed. The JCO Parties have conceptually agreed to this approach, but it requires formal approval by the JCMUA Board of Commissioners and EIT will have to approve the formal application for financial assistance, the design drawings and other matters before the EIT monies can be made available for the project.

Numerous meetings of the JCO Parties have taken place to achieve the above results and more meetings are scheduled to, among other things, revise the Implementation Schedule that was attached to the March 2017 MOU. It is hoped that, assuming all required approvals are obtained and the EIT monies are made available by the end of 2017, then construction of the temporary pipe can commence by Q2 of 2018.

VII. Remediation Progress - GAG Offsite Properties

For the purpose of this Report, the GAG Offsite Properties include Site 135 North (portion of 51-99 Pacific Avenue), Site 135 South (remainder of 51-99 Pacific Avenue), the Al Smith Moving property located at 33 Pacific Avenue, the former Halsted Bag Company property located at 78-104 Halladay Street (now owned by PPG) and the Forrest Street Properties located at 90 to 98 Forrest Street.

Site 135 North: PPG acquired this parcel in 2015. Demolition of the buildings and excavation and backfilling of CCPW-contaminated soils was completed in July 2016.

Site 135 South: PPG acquired this parcel in 2015. PPG has demolished all of the buildings on this site. Excavation of the CCPW-impacted soils/materials located at Site 135 South was completed in 2016, with the exception of impacted materials located under and in close proximity to Building 51. These remaining materials will be excavated concurrently with the remediation of the Al Smith Moving property (see below).

Al Smith Moving Property: Demolition of the building situated at the Al Smith Moving property commenced in July 2017 and PPG anticipates that excavation of chromium-impacted soils under the building will be completed by the September 2017 Master Schedule milestone.

Former Halsted Bag Company Property: This property was acquired by PPG in February 2016. The prior owners (the Halsted Bag Company) vacated the building. The building is currently occupied by Al Smith Moving, which moved its operations into the Halsted Building in order to allow demolition/remediation of the Al Smith Moving building/property. Al Smith Moving must vacate the Halsted building on or before October

31, 2017 in order to allow PPG time to demolish the Halsted building and complete the remediation of chromium-impacted soil and debris underlying the building. Excavation is scheduled to start in May 2018.

Forrest Street Properties: This site consists of various multi-tenanted buildings, as well as a vacant parcel adjacent to the NJ Transit Light Rail tracks. PPG and the property owner have reached a conceptual understanding regarding a remedial approach that calls for the excavation and backfilling of impacted soils in phases, but subject to a restricted area around the perimeter of and beneath the buildings where excavation is currently prohibited so as to avoid structural damage to the buildings. In light of these restrictions, some impacted soils will remain under and in close proximity of the buildings located on these properties that will be addressed at some future date when the property is redeveloped or upon agreement between PPG and the property owner. NJDEP, PPG and the property owner are in discussions regarding this proposed restricted use remedy for these unremediated portions of the properties.

VIII. Remediation Progress – The Non-GAG Sites

Site 156, Metropolis Towers:

Parking Lot: This is the large apartment complex across from City Hall, known as Metropolis Towers. Soil remediation and restoration activities at this site, mainly in the parking lot area, have been substantially completed. As a result of additional, unexpected soil contamination identified at this Site, the milestone for Remedial Action Report (“**RAR**”) Determination set forth in the new Master Schedule was extended until February 2018.

Boiler Room: PPG is in the process of installing an engineering control for this area. Upon completion, a deed notice will be recorded and final NJDEP approval can be granted.

Site 16, Linden Avenue East: PPG completed excavation and backfilling of the exterior area of this property in June 2015. PPG is to conclude its analysis of remedial alternatives for the warehouse building, secure the property owner’s consent and propose a remedy to NJDEP by September 2018 for the areas under the building and outside the building along Linden Avenue East. The milestones for this site are based on the assumption that the remedy for the building includes demolition enabling full removal/excavation of contaminated material within the footprint of the building. (The milestones may change if it is determined that the building does not need to be demolished). PPG is also currently considering a groundwater remedial investigation plan for the site.

Site 63, Baldwin Oil: This site is located at the juncture of Burma Road and Morris Pesin Drive in Jersey City. The soil remediation work for Block 21503, Lot 11, and portions of New Jersey Turnpike Authority (NJTA) Parcels R28DD and 28N has been completed. By letter dated April 27, 2017, NJDEP issued an RAR Determination for the on-site soils Area

of Concern at this site. The investigation of groundwater at this site has commenced and is scheduled for completion in 2018.

Site 65, Burma Road/Morris Pesin Drive: By letter dated July 27, 2017 Your Honor's assistance was requested with respect to an ongoing dispute between PPG, the City and NJDEP concerning responsibility for the remediation of this Site.

Sites 107/108, Fashionland/Albanil: The access litigation between PPG and the owner of Site 107 was settled in April 2017. The principal tenant in the building located at Site 107 (Eastern Millwork, Inc.) requested that the JCO Parties extend the Master Schedule milestones because of construction delays in the new building to which this tenant planned to relocate. The JCO Parties agreed to the extension and, in the new Master Schedule, have further agreed that, assuming all tenants vacate the Site 107 building by the end of November 2017, PPG will demolish the building and commence excavation of contaminated soils by June 2018.

PPG successfully negotiated an access agreement with the new owner of Site 108. Site 108 is adjacent to Site 107. A portion of Site 108, along the boundary of Site 107, is impacted by chromium. Remediation of that area will occur concurrently with the remediation of Site 107.

Site 174, Dennis Collins Park (Bayonne): Focused excavation, backfilling, and restoration of a portion of the Park were completed in September 2016. PPG and the City of Bayonne are negotiating a Memorandum of Understanding (MOU) setting forth the parties' understandings concerning the coordination of the installation of a 2 ft. clean soil cap and other required engineering controls for the remediation of soils with the City's redevelopment of the Park. PPG is currently developing work plans for the soil capping remedy and the investigation of groundwater at this site.

457 Communipaw Avenue: This area is located at the intersection of Berry Lane and Communipaw Avenue. In December 2015, a JCRA contractor discovered an area potentially impacted with CCPW. It was ultimately confirmed that CCPW-related contaminants were present in the soils in excess of applicable NJDEP remediation standards. The portion of this impacted area that was accessible to PPG has been fully remediated. Because it was determined that the CCPW impacts likely extend onto 457 Communipaw Avenue, an adjacent property, PPG is currently seeking to obtain access to that property to conduct an investigation and determine the extent of remediation required.

Site 147, Weehawken: This site is located at 99 Baldwin Avenue, Weehawken. It is not a JCO site, but my assistance was requested to help finalize the paperwork requirements necessary to achieve regulatory closure of this site. The remediation field work for this site was completed in 2001 in accordance with an NJDEP-approved Remedial Action Work Plan. After much delay, it was reported to me prior to submittal of this Progress Report that the required paperwork is in the process of being executed by the relevant parties. Once this occurs, NJDEP will be able to issue its final approval.

IX. Mediation Proceedings

Pursuant to the Mediation Order, I was appointed as Mediator with respect to the following principal issues: (i) to attempt to obtain agreement among PPG, JCRA, and the City of Jersey City with respect to costs related to the restoration of roadways and other City improvements/infrastructure once the remediation of soils is completed for the GAG Sites, and (ii) to attempt to obtain agreement among PPG, JCRA and Hampshire with respect to reimbursement of “incremental costs” that Hampshire and JCRA allege will be incurred during the redevelopment of the GAG Site properties.

I have held numerous mediation sessions to address these issues. I am happy to report significant progress, although not a final resolution to these issues.

As a result of the mediation sessions, as well as the submittal by PPG of new information concerning the remediation scenarios for the GAG Sites, it has been determined that the area of the GAG Sites that will require a capillary break is much smaller than had previously been anticipated. Also, as a result of the NJDEP’s March 30, 2017 Capillary Break Determination, the types of break materials that will be required and where they will be installed are now known. This new information may help to resolve the issue of incremental costs.

An additional significant development is PPG’s proposed Groundwater IRM work. This work is expected to achieve significant chromium mass reductions in the affected groundwater at the GAG Sites. In addition, PPG has worked with all of the JCO Parties to coordinate the phasing strategy for the Groundwater IRM work to minimize the impacts on the redevelopment phasing that has been proposed by Hampshire.

Finally, PPG and Hampshire are working diligently on a possible joint venture or other structure that would allow them to work collaboratively on future remediation and redevelopment issues. It is hoped that these collaborative efforts will also address the City’s concerns about ensuring that the remediation and redevelopment of the GAG Sites will take into account restoration of roadways and other City improvements/infrastructure.

Another mediation session is anticipated to be scheduled in August 2017. I am hopeful that further progress will be achieved on these issues.

X. Current and Future Activities

Newsletter: The Chromium Cleanup Partnership published a newsletter in January 2017 that summarized the status of activities at the PPG chromium sites. A copy was supplied to Your Honor with my last Progress Report. Another newsletter will be published by the end of 2017. The newsletter will be distributed to a lengthy mailing list consisting of residents, business owners, public officials and other interested parties.

Public Open House/Information Session: A public open house/information session was held on January 31, 2017 at the Mary McLeod Bethune Life Center, 140 Dr. Martin Luther

King Jr. Drive. My office, NJDEP, PPG and its consultants, Weston, the City of Jersey City, JCRA and others participated in the open house and responded to questions from the public about the status of the cleanup of the PPG chromium sites. Another such gathering will be held in Q3 or Q4 of this year.

PPG Employment Report: Attached is PPGs 1Q 2017 Employment Report in which PPG reports that it has satisfied the JCO goals for the reporting period.

XI. Conclusion

As noted in this Report, significant progress was made in the reporting period, as well as since the commencement of my appointment. I anticipate further progress for the balance of 2017.

In my last Progress Report I stated that my primary goal going forward was to “find a pathway that will allow for remediation efforts to blend seamlessly with restoration of all of the cleanup sites as well as redevelopment of the GAG sites.” I truly believe we are coming closer to achieving that goal.

I thank the Court for considering this Progress Report. I am available at your convenience to answer any questions you may have.

Respectfully submitted,



Ronald J. Riccio
Site Administrator

Attachments:

- Master Schedule dated July 28, 2017
- NJDEP Capillary Break Determination Letter dated March 30, 2017
- Carteret Avenue Memorandum of Understanding
- PPG Q1 2017 Employment Report

cc: Via email:
PPG Industries
NJDEP
City of Jersey City

Master Schedule for the NJ PPG Chrome Remediation Sites

(Exhibit 2/3)

Revision Date: July 28, 2017

SOILS - GARFIELD AVENUE SITES

| Group/Phase or Site (See Figure 1 attached) | Property Description (Owner) (See Figure 2 attached) | Access/Road Closure Plan | Excavation Start Actual OR Required | Excavation Complete Actual OR Required | Backfill Complete Actual OR Required | Restoration Complete Actual OR Required | RAR Determination | Comments |
|--|---|--------------------------------|--|--|--------------------------------------|---|--------------------------------------|---|
| GA Group IRM#1 and Phases 1A, 1B, 1C, 2A, 2B-1, 2B-2, 2B-3, and 2B-4 | Site 114 (JCRA /Hampshire) | See Comments | 12/31/2013 | 11/24/2014 | 1/21/2015 | October 2017 | December 2018 | Site 114 is the subject of pending litigation between PPG, Hampshire, JCRA and the City, but the Court issued an Order granting PPG access to conduct remediation work at this site. Any remaining issues are the subject of mediation between the mediating parties. If the mediation is unsuccessful, the litigation may again become active. A capillary break is required to be installed on certain portions of this Site in order to achieve restoration complete for this site by the milestone specified herein. |
| GA Group Phase 3A | Site 132 (824 Garfield) (JCRA) | See Comments | 3/4/2014 | 9/5/2014 | 5/15/2015 | October 2017 | December 2018 | Site 132 is the subject of pending litigation between PPG, Hampshire, JCRA and the City, but the Court issued an Order granting PPG access to conduct remediation work at this site. Any remaining issues are the subject of mediation between the mediating parties. If the mediation is unsuccessful, the litigation may again become active. PPG is evaluating the need for a capillary break in this Phase in accordance with the criteria established in NJDEP's March 30, 2017 capillary break determination letter. |
| | Site 143 (846 Garfield) (PPG) | PPG Owned | | | | | | |
| GA Group Phase 3B-N (45 Halladay and a portion of 25 Halladay) | A portion of Site 137 (PPG) | PPG Owned | 7/9/2014 | 5/15/2015 | 8/3/2015 | October 2017 | December 2018 | A portion of Site 137 was not able to be remediated because of its proximity to the Ten West Apparel Building, and is now considered part of Phase 3B-S under this Master Schedule. PPG is evaluating the need for a capillary break in this Phase in accordance with the criteria established in NJDEP's March 30, 2017 capillary break determination letter. |
| GA Group Phase 3B-S (15 Halladay, the remainder of 25 Halladay with 800 and 816 Garfield Avenue added) | Site 133 West (PPG) and the remainder of Site 137 (PPG) | PPG Owned | 7 Months After Ten West Vacates 800 Garfield | 7 Months After Excavation Start | 2 Months After Excavation Complete | 3 Months After Backfill Complete | 14 Months After Restoration Complete | The access litigation between PPG and Ten West Apparel was settled in April 2017. Pursuant to the terms of settlement, Mid-Newark, L.P., the owner of the 800 Garfield Avenue property, is required to transfer title to the property to PPG and Ten West Apparel is required to vacate the property on or prior to the 24 th month following the date upon which title to the property is transferred to PPG. This Group/Phase also includes remediation of portions of Halladay Street and Site 133 East (adjacent to Caven Point Avenue) used for access to the Ten West Apparel warehouse. The sites included within GA Group Phase 3-B-S were not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at the sites/partial sites located within this Phase. |
| | Fishbein (816 Garfield Avenue) (PPG) | PPG Owned | | | | | | |
| | Ten West Apparel (800 Garfield Avenue) (Gadeh) | To be PPG Owned (See Comments) | | | | | | |
| GA Group Phase 3C | Site 133 East (22-68 Halladay) (PPG) | PPG Owned | 4/21/2015 | 10/22/2015 (See Comments) | 7/29/2016 (See Comments) | October 2017 | December 2018 | PPG achieved the excavation complete and backfill complete milestones for Phase 3C (Site 133 East, Halladay Street South and Site 135 North) on the dates indicated to Elevation 11 Feet NAVD 88 with the exception of grids adjacent to the Al Smith Moving building and grids in Halladay Street South adjacent to Ten West Apparel. The grids adjacent to the Al Smith building and Building 51 along the eastern boundary of Site 133 East will be excavated and backfilled as part of the remediation activities at the Al Smith Moving property consistent with the Al Smith Moving Master Schedule milestones. The grids in Halladay Street South adjacent to Ten West Apparel will be excavated and backfilled with the Phase 3B South remediation activities consistent with the Phase 3B South Master Schedule milestones. Utility reinstallation in Halladay Street South is on hold pending mediation between the City and PPG of issues related to in-kind replacement of utilities and other improvements/infrastructure. A portion of this Phase was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break in those areas located within these Sites. |
| | Halladay Street South (Jersey City) | Road Closure In Place | | | | | | |
| | Site 135 North (Portion of 51-99 Pacific) (PPG) | PPG Owned | 2/23/2016 | 5/25/2016 | 7/29/2016 | | | |

Master Schedule for the NJ PPG Chrome Remediation Sites

(Exhibit 2/3)

Revision Date: July 28, 2017

SOILS - GARFIELD AVENUE SITES

| Group/Phase or Site (See Figure 1 attached) | Property Description (Owner) (See Figure 2 attached) | Access/Road Closure Plan | Excavation Start Actual OR Required | Excavation Complete Actual OR Required | Backfill Complete Actual OR Required | Restoration Complete Actual OR Required | RAR Determination | Comments |
|---|---|--------------------------|-------------------------------------|--|--------------------------------------|---|--------------------|---|
| GA Group Site 135 South | Site 135 South (Remainder of 51-99 Pacific) (PPG) | PPG Owned | 3/16/2016 | 8/23/2016 (See Comments) | 12/29/2016 (See Comments) | October 2017 | December 2018 | PPG achieved the excavation complete and backfill complete milestones for Site 135 South on the dates indicated, with the exception of grids adjacent to the Al Smith Moving building and Building 51, which will be excavated and backfilled as part of the remediation activities at the Al Smith Moving property consistent with the Al Smith Moving Property Master Schedule milestones. A portion of this Phase was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break in those areas located within these Sites. |
| GA Group Phase 5 Off Site Properties | Halsted Corporation (78 Halladay St) (PPG) | PPG Owned | May 2018 | June 2019 | August 2019 | February 2020 | April 2021 | By agreement of all parties, Al Smith Moving Company vacated the Al Smith Moving Company Building (33 Pacific Avenue) and relocated its operations to the Halsted Building (78 Halladay Street) in February 2017 to allow for remediation activities at the Al Smith Moving property (33 Pacific Avenue). Based upon PPG's investigations, it was determined that the Al Smith Moving Building requires demolition. PPG and Al Smith Moving Company have entered into a legally binding agreement that requires that Al Smith Moving Company vacate the Halsted Building on or before the last day of October 2017. At such time, remediation activities at the Halsted Building shall commence. When Al Smith Moving Company vacates the Halsted Building it must move to a location other than the Al Smith property. The Halladay Street North remediation activities are to be completed in conjunction with the remediation of the Halsted Building. The milestones for the Halsted Building are based on the assumption that the remedy for the site includes building demolition. This Site was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at this Site. |
| | Forrest Street Properties 84, 86 and, 90-98 Forrest St and Block 21501, Lot 15 (Caragliano) | Access complete | 3/27/2017 | July 2017 | September 2017 | February 2018 | April 2019 | Milestone dates are for initial excavation activities in accordance with the Forrest Street and Forrest Street Properties Technical Execution Plan dated March 2017. PPG and the property owner have reached a conceptual understanding regarding a remedial approach that calls for the excavation and backfilling of impacted soils in phases, but subject to a restricted area around the perimeter of and beneath the buildings where excavation is currently prohibited so as to avoid structural damage to the buildings. In light of these restrictions, some impacted soils will remain under and in the proximity of the buildings located on these properties that will be addressed at some future date when the property is redeveloped or upon agreement between PPG and the property owner. The Department, PPG and the property owner are in discussions regarding this proposed restricted use remedy for these portions of the properties. PPG will issue a Remedial Action Work Plan to address these areas by July 2017. PPG will propose schedule milestones within three months of NJDEP and property owner approval of the RAWP; this new schedule may be included in the next update to the Master Schedule, as a separate line with separate milestones. This Site was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at this Site. |
| | Al Smith Moving (33 Pacific Avenue) (NJEDA c/o Al Smith Moving) | Access Complete | August 2017 | September 2017 | December 2017 | February 2018 | April 2019 | Al Smith Moving permanently vacated the property in February 2017. PPG has secured unfettered access to the Al Smith Moving property. (See discussion of Halsted Corporation property above). This Site was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at this Site. |
| GA Group Phase 4 Roadways | Carteret Avenue (Jersey City) | See Comments | TBD (See Comments) | TBD (See Comments) | TBD (See Comments) | TBD (See Comments) | TBD (See Comments) | Carteret Avenue area/phase includes Carteret Avenue from the intersection with Garfield Avenue through the intersection with Pacific Avenue. The portion of Carteret Avenue from the intersection with Garfield Avenue through the intersection with Halladay Street is closed and will remain closed pending remediation of this roadway. In March 2017, PPG, the City, JCMUA and JCRA entered into a Memorandum of Understanding (the "MOU"), which was acknowledged by NJDEP and the Site Administrator. The MOU set forth the parties' understandings concerning certain activities and commitments in connection with the removal and replacement of an existing 96" steel combined sewer line within Carteret Avenue and remediation in and around said sewer line. Attached to the MOU is an Implementation Schedule that calls for certain activities to be taken by the parties. That Implementation Schedule is currently under review by the parties to the JCO. By the end of October 2017, the parties are to finalize definitive milestones for this project, unless an alternate date is mutually agreed upon by the parties to the JCO. This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at this Site. |

Master Schedule for the NJ PPG Chrome Remediation Sites

(Exhibit 2/3)

Revision Date: July 28, 2017

SOILS - GARFIELD AVENUE SITES

| Group/Phase or Site (See Figure 1 attached) | Property Description (Owner) (See Figure 2 attached) | Access/Road Closure Plan | Excavation Start Actual OR Required | Excavation Complete Actual OR Required | Backfill Complete Actual OR Required | Restoration Complete Actual OR Required | RAR Determination | Comments |
|--|---|--------------------------|--|---|---|--|-------------------|---|
| GA Group Phase 4 Roadways (continued) | Halladay Street North (Jersey City) | See Comments | May 2018 | June 2019 | August 2019 | February 2020 | April 2021 | <p>If this roadway needs to be closed for additional investigation or remediation activities, PPG will notify the City at least 90 days prior to the date that the roadway needs to be closed. Halladay Street North is to be completed in conjunction with remediation of the Halsted Building.</p> <p>This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at this Site.</p> |
| | Forrest Street (Jersey City) | See Comments | March 2017 | October 2017 (See Comments) | December 2017 (See Comments) | December 2018 | February 2020 | <p>Milestone dates are for initial excavation activities in accordance with the <i>Forrest Street and Forrest Street Properties Technical Execution Plan</i>, dated March 2017.</p> <p>If this roadway needs to be closed for additional investigation or remediation activities, PPG will notify the City at least 90 days prior to the date that the roadway needs to be closed.</p> <p>The Principals have agreed that Forrest Street and Forrest Street Properties shall be considered one combined site for the purpose of the milestones set forth herein. Therefore, commencement of excavation on the Forrest Street Properties in March 2017, is deemed to satisfy the March 2017 excavation start date for Forrest Street. PPG and the adjacent Forrest Street property owner have reached a conceptual understanding regarding a remedial approach that calls for the excavation and backfilling of impacted soils in phases, but subject to a restricted area around the perimeter of and beneath the buildings where excavation is currently prohibited so as to avoid structural damage to the buildings. In light of these restrictions, some impacted soils will remain under and in the proximity of the Forrest Street buildings, including within Forrest Street, that will be addressed at some future date when the property is redeveloped or upon agreement between PPG and the property owner, or whenever utility work beneath the roadway is necessary. Until that time, PPG shall utilize the Standard Operating Procedures for Coordinating Utility Work Within Chromium Soil Areas and the Worker Training Manual for Managing Contaminated Soils and Groundwater, in substantially the forms prepared by AMEC Environment & Infrastructure, Inc. for Honeywell.</p> <p>The Department, PPG and the owner of the Forrest Street Properties are in discussions regarding the anticipated remedy for the portions of the properties where Cr impacts will remain in place. PPG will issue a Remedial Action Work Plan to address these areas by July 2017. PPG will propose schedule milestones within three months of NJDEP and property owner approval of the RAWP; this new schedule may be included in the next update to the Master Schedule, as a separate line with separate milestones.</p> <p>This roadway was not part of NJDEP's March 30, 2017 capillary break determination letter. Therefore, a separate determination must be made by the Department prior to Restoration Complete as to the need for a capillary break at this Site.</p> |
| | Garfield Avenue (Jersey City) | See Comments | See Comments | See Comments | See Comments | See Comments | See Comments | June 2020 |

Master Schedule for the NJ PPG Chrome Remediation Sites

(Exhibit 2/3)

Revision Date: July 28, 2017

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 | November 2020 | January 2021 | September 2021 | November 2022 | PPG completed excavation and backfilling of the exterior area of this property in June 2015. PPG is to conclude its analysis of remedial alternatives for the warehouse building, secure the property owner's consent and propose a remedy to NJDEP by September 2018 for the areas under the building and outside the building along Linden Avenue East. The milestones for this Site are based on the assumption that the remedy for the building includes demolition enabling full removal/excavation of contaminated material within the footprint of the building. Some remediation will be required in the street. That remediation will be performed concurrent with the remediation of the building. PPG will notify the City at least 90 days prior to the date that the street needs to be closed. |
| Site 63 | Baldwin Oil (Nisan 12) | Access agreement in place | 4/28/2014 | 5/19/2015 | 5/19/2015 | 6/13/2015 | April 27, 2017 | All CCPW has been excavated and the Site has been restored. A final Consent Order Compliance Letter (NFA equivalent) is expected to be issued 3Q 2017. |
| Site 65 | Burma Road/Morris Pesin Drive (Jersey City) | See Comments | 4/28/2014 | See Comments | See Comments | See Comments | See Comments | The dispute concerning responsibility for this Site was submitted to the Court by letter from the Site Administrator to Judge Sarkisian dated July 27, 2017 |
| Site 107/Site 108 | Fashionland (Site 107 - Greenberg) / Albanil Dyestuff (Site 108 - American Self Storage Liberte, LLC) | 107 - Access agreement in place 108 - Access agreement in place with new owner | June 2018 | December 2018 | January 2019 | March 2019 | May 2020 | The access litigation between PPG and the owner of Site 107 was settled in April 2017. The milestones assume that all tenants will vacate the building prior to December 1, 2017. If all tenants have not vacated by this date, then these milestones will need to be reevaluated. PPG has commenced access negotiations with Conrail. The approved Remedial Investigation Report for Site 108 indicated that the "hotspot" contaminated area on Site 108 was presumed to have emanated from Site 107, and required that remedial action at Site 108 would be performed as part of the Site 107 remedial action. Therefore, Site 108 is to be remediated concurrent with the Site 107 remedial action. In April 2017, PPG entered into an access agreement with the new owner of Site 108. |
| Site 156 | Metro Towers (ALMA) | Access agreement in place | 3/18/2013 | 5/23/2014 | 5/30/2014 | 6/30/2014 | Boiler Room: March 2018 Parking Lot: March 2018 | This site is being handled on two different timelines, one for the Boiler Room and one for the Parking Lot Area: <u>Boiler Room:</u> A Remedial Action Work Plan for the Boiler Room remedy was deemed conditionally approved in February 2016, subject to property owner consent to engineering controls and a deed notice. The initial engineering control proposed by PPG was deemed unacceptable by the boiler manufacturer. A revised engineering control has been proposed by PPG. The NJ Bureau of Boiler and Pressure Vessel Commission ("BPVC"), the boiler manufacturer and the property owner approved the revised remedy in March 2017. An updated Deed Notice will be submitted for the property owner's signature and, once secured, NJDEP can grant final approval of the remedy. <u>Parking Lot Area:</u> Supplemental investigations and excavation are being performed in 2017. |
| Site 174 | Dennis Collins Park (City of Bayonne) | Access agreement (See Comments) | 4/8/2013 | 9/30/2016 | 9/30/2016 | 9/30/2016 | January 2019 | PPG is currently negotiating an extension of the PPG-City of Bayonne access agreement, which expired in June 2017. Focused excavation, backfill, and restoration of a portion of the Park was completed in September 2016. PPG and the City of Bayonne are negotiating a Memorandum of Understanding (MOU) setting forth the parties' understandings concerning the coordination of the installation of a 2 ft. clean soil cap and other required engineering controls for the remediation of soils with the City's redevelopment of the Park. The RAR Determination milestone assumes capping installation starts on or before January 2018. |
| Site 186 | Garfield Avenue #1 | Access no longer required; Remediation Complete | 8/19/2013 | 11/1/2013 | 11/1/2013 | 11/20/2013 | 4/16/2014 | All CCPW has been excavated and the Site restored. A final Consent Order Compliance Letter (NFA equivalent) was issued July 15, 2015. |
| 457 Communipaw | 457 Communipaw Right-of-Way (285 Lincoln Avenue, LLC) | Investigation access only at this time | | | | | | The portion of this area in the right-of-way has been fully remediated by PPG. It was determined, however, that CCPW impacts extend onto 457 Communipaw Avenue, an adjacent private property. PPG entered into an access agreement with the owner of the property, but the tenant has not cooperated with PPG with respect to PPG's sampling efforts. PPG is considering legal action to secure the tenant's cooperation. |

Master Schedule for the NJ PPG Chrome Remediation Sites

(Exhibit 2/3)

Revision Date: July 28, 2017

GROUNDWATER

| GA GROUP GROUNDWATER MILESTONES | | | | | | | |
|--|-------------------------------------|------------------|--|---|--|---|--|
| Group/Phase or Site | Property Description (Owner) | IRM Start | IRM Performance Monitoring Complete | Remedial Investigation Report Submitted | Remedial Action Work Plan Submitted | Remedial Action Report Submitted | Comments |
| GW IRM Phase I | Site 114 (JCRA/Hampshire) | December 2017 | December 2020 | | | | Phase I of the IRM will start on Site 114. In summary, the IRM will be designed to extract ground water from the areas of highest Cr concentration in the northern portion of Site 114 and make use of the treated water to support bio-precipitation in the southern portion of Site 114. For more detail, see "Groundwater Interim Remedial Measure: Phase I Design and Permit-by-Rule Authorization Request" dated June 2017 (the "PBR"). The IRM Phase I activities may also include active remediation within the shallow zone groundwater to address localized exceedances of the groundwater quality standards. The operational logic and performance considerations for the IRM will be established in the design, including consideration of non-Cr contaminants. Phase I of the IRM calls for approximately one year of active treatment and two years of performance monitoring with ongoing dialogue and collaboration around IRM performance that may result in a revisiting of these timeframes. Quarterly reporting on IRM progress will be provided by the PPG team. |
| GW IRM Phase II | Site 114 (JCRA/Hampshire) | June 2019 | June 2022 | | | | This phase is contingent on PPG Management approval. Conceptually, Phase II of the IRM will implement bio-precipitation in the portions of Site 114 not addressed in Phase I, with the same considerations as noted above for Phase I. |
| GW IRM Phase III | South of Carteret (PPG & JCRA) | December 2020 | December 2023 | | | | This phase is contingent on PPG Management approval. Conceptually, Phase III of the IRM will address the area south of Carteret Avenue, with the same considerations as noted above for Phase I. |
| IRM Phase IV or RAWP | Other Adjacent Properties | TBD | TBD | | | | This phase (if warranted) is contingent on PPG Management approval. Adjacent properties may include but are not limited to roadways adjacent to the GAG Sites (i.e., Forrest Street, Halladay Street, Carteret Avenue and Garfield Avenue), the Forrest Street Properties, the former Halsted Corporation property and the Ten West Apparel property. Other properties/roadways may be identified by the ongoing groundwater remedial investigation. Milestone dates will need to be established at an appropriate point in the future based on information generated by the remedial investigation. |
| Remedial Investigation | Entire Site Group | | | January 2020 | | | RIR must address shallow, intermediate, deep and bedrock groundwater zones. Access has been obtained for many of the properties included in the scope of the remedial investigation. However, as full delineation is required, access may be required to other properties. Access to these other properties will need to be obtained at a future date as needed and could impact the dates listed. |
| Remedial Action Work Plan | Entire Site Group | | | | May 2021 | | PPG may submit the RAWP in advance of the date presented herein if sufficient information is obtained during IRM Phases I and/or II. Areas with soil remediated after submittal of groundwater RAWP can be addressed through addenda to the groundwater RAWP as an alternate approach. |
| Remedial Action Report | Entire Site Group | | | | | November 2023 | Areas with groundwater remediated after submittal of the groundwater RAR can be addressed through addenda to the groundwater RAR. |
| NON-GA GROUP GROUNDWATER MILESTONES | | | | | | | |
| Site 16 | (see non-GAG Soils table) | | | RIR/RAWP Submittal: November 2021 | | TBD | |
| Site 63 | (see non-GAG Soils table) | | | RIR/RAWP Submittal: February 2018 | | TBD | Milestone assumes one round of groundwater monitoring well installation and two rounds of groundwater sampling approximately 30 days apart to demonstrate compliance with Groundwater Quality Standards. If additional investigation work is needed, the milestone will need to be revised. |
| Site 65 | (see non-GAG Soils table) | | | See Comments | | TBD | Dispute submitted to Court. See non-GAG Soils table. |
| Site 107 & 108 | (see non-GAG Soils table) | | | RIR/RAWP Submittal: September 2019 | | TBD | |
| Site 156 | (see non-GAG Soils table) | | | RIR/RAWP Submittal: November 2017 | | TBD | |
| Site 174 | (see non-GAG Soils table) | | | RIR/RAWP Submittal: March 2018 | | TBD | Milestone assumes one round of groundwater monitoring well installation and two rounds of groundwater sampling approximately 30 days apart to demonstrate compliance with Groundwater Quality Standards. If additional investigation work is needed, the milestone will need to be revised. |
| Site 186 | (see non-GAG Soils table) | | | Site 186 Groundwater Remedial Investigation incorporated into GA Group RI | | TBD | Site 186 groundwater investigation/remedial action is considered part of the Garfield Avenue Group groundwater program. |

Master Schedule for the NJ PPG Chrome Remediation Sites

(Exhibit 2/3)

Revision Date: July 28, 2017

NOTES

SOILS NOTES:

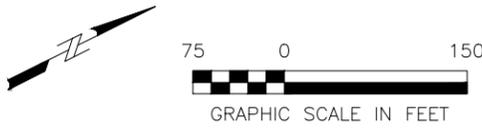
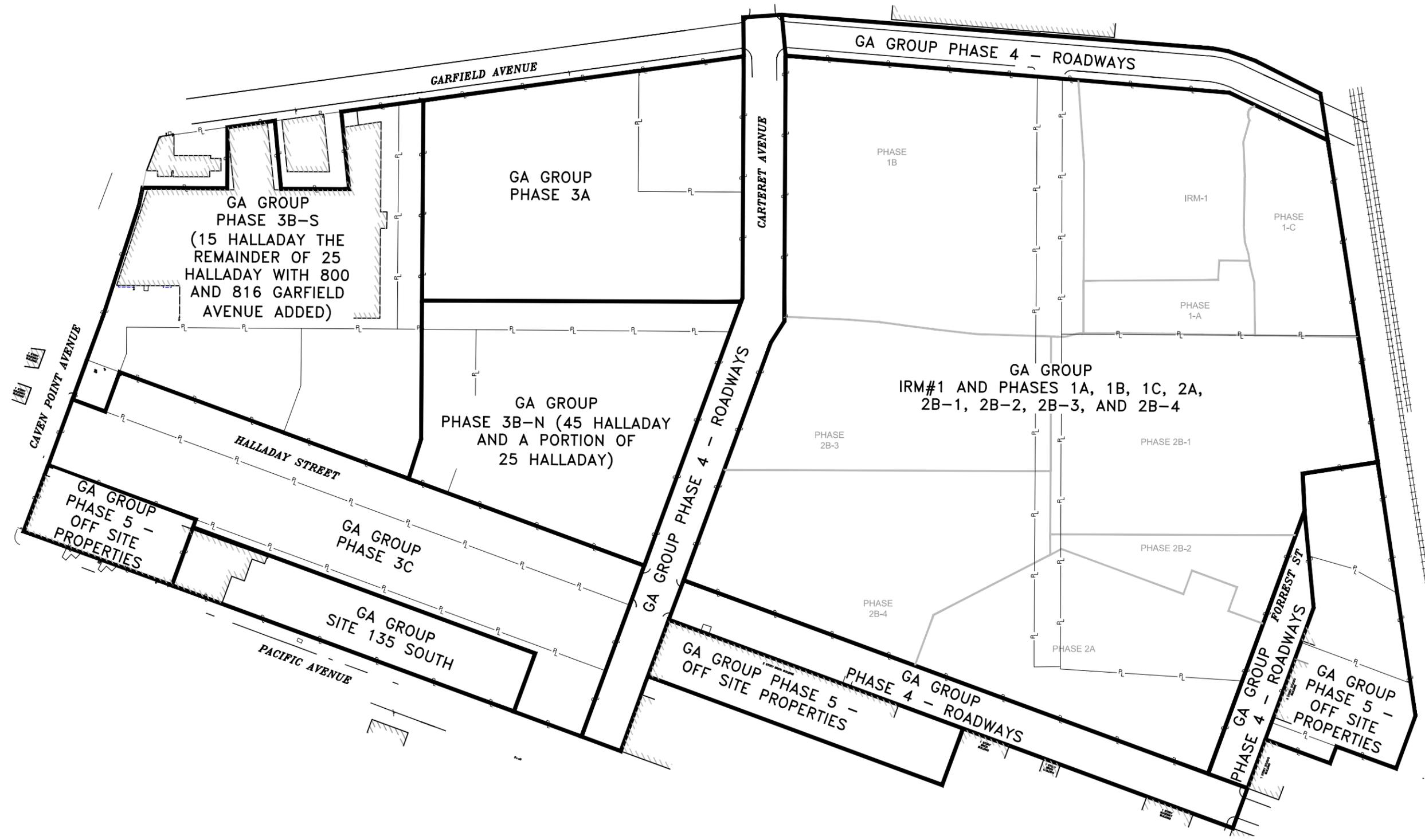
- 1) "Excavation Start" means access has been gained, building demolition and shoring installation, if required, have been completed, there are no known impediments to proceeding with excavation and excavation has actually commenced.
- 2) "Legal remedies will commence" means the initiation of court proceedings.
- 3) Green shading indicates that milestones have been attained.
- 4) For Garfield Avenue Group Sites, "Backfill Complete" means backfill is brought to elevations approved by NJDEP.
- 5) For the purpose of this Master Schedule, "restoration" is defined as capillary break installation (where required) and final remediation grading in accordance with an NJDEP-approved Restoration Technical Execution Plan. In its review of the Restoration TEP, the Department will consider the grades established in the Canal Crossing Redevelopment Plan for the Garfield Avenue Sites. In-kind replacement of existing infrastructure and/or improvements removed to implement the remedy, as well as final redevelopment grading, for the GAG Sites is the subject of pending mediation between the City and PPG.
- 6) Restoration within specific areas under/around infrastructure necessary to support on-going remediation may be delayed if such a delay is acceptable to the Department and property owners.
- 7) For the purpose of this Master Schedule, "RAR Determination" means that the Department will determine whether the Remedial Action Report (RAR) meets the requirements of applicable Department regulations and guidance. The Department will determine whether the milestone identified in the Exhibit is achieved assuming: (i) the RAR Figures/Tables have been submitted by PPG and reviewed/approved by the Department prior to complete RAR submittal, and (ii) the initial submittal of the complete RAR (i.e., text plus figures, tables and other Department-required information) is received 26 weeks prior to the RAR Determination milestone. (The referenced 26 week time period assumes 12 weeks for the Department/Weston and the City of Jersey City to provide comments to the initial complete RAR submittal, 7 weeks thereafter for PPG to review and incorporate such comments and submit the final version of the full RAR and 7 weeks thereafter for the Department to make the RAR Determination). A Draft Consent Judgment Compliance Letter will typically be issued by the Department within 30 business days of the issuance of the RAR Determination.
- 8) This version of the Master Schedule has combined "Exhibit 2" and "Exhibit 3" from the version of the Master Schedule dated October 13, 2015. The term Exhibits 2/3 is used here because prior orders entered by the court in NJDEP, et al. v. Honeywell International, Inc., et al. reference those exhibits as exhibits to the Master Schedule, which Master Schedule remains in effect as modified by these changes to Exhibits 2 and 3.
- 9) NJ Transit Right-of-Way (ROW): CCPW located beneath this ROW will be addressed concurrent with Site 199, as part of remediation requirements specified in the 2011 Consent Order (Orphan Sites Agreement).

GROUNDWATER NOTES:

- 1) For purposes of this schedule, the Garfield Avenue Group Access date is assumed to be March 2017 and would continue without interruption although litigation between JCRA and PPG is ongoing for JCRA owned properties.
- 2) Figure 3, attached, depicts the conceptual overlap of groundwater treatment and redevelopment at the Garfield Avenue Group, including timeframe considerations as currently envisioned. This figure does not represent a commitment by PPG to complete all IRM phases.

FIGURES 1, 2 AND 3 ATTACHED

Piscataway on uspsw2\fp001\Data_uspsw2\fp001\Environment(J)
 User: bossalimid Plotted: Jul 28, 2016 - 3:35pm
 File: P:\Jobs\Rem_Eng\Project Files\PPG Industries\Garfield Avenue\30% Design\CADD\MEETING FIGURES\2016-07-28 GAG Vicinity Ref Figure.dwg Layout: FIGURE 1

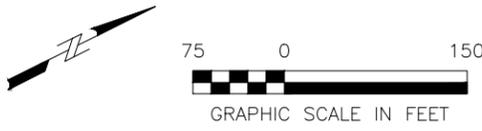
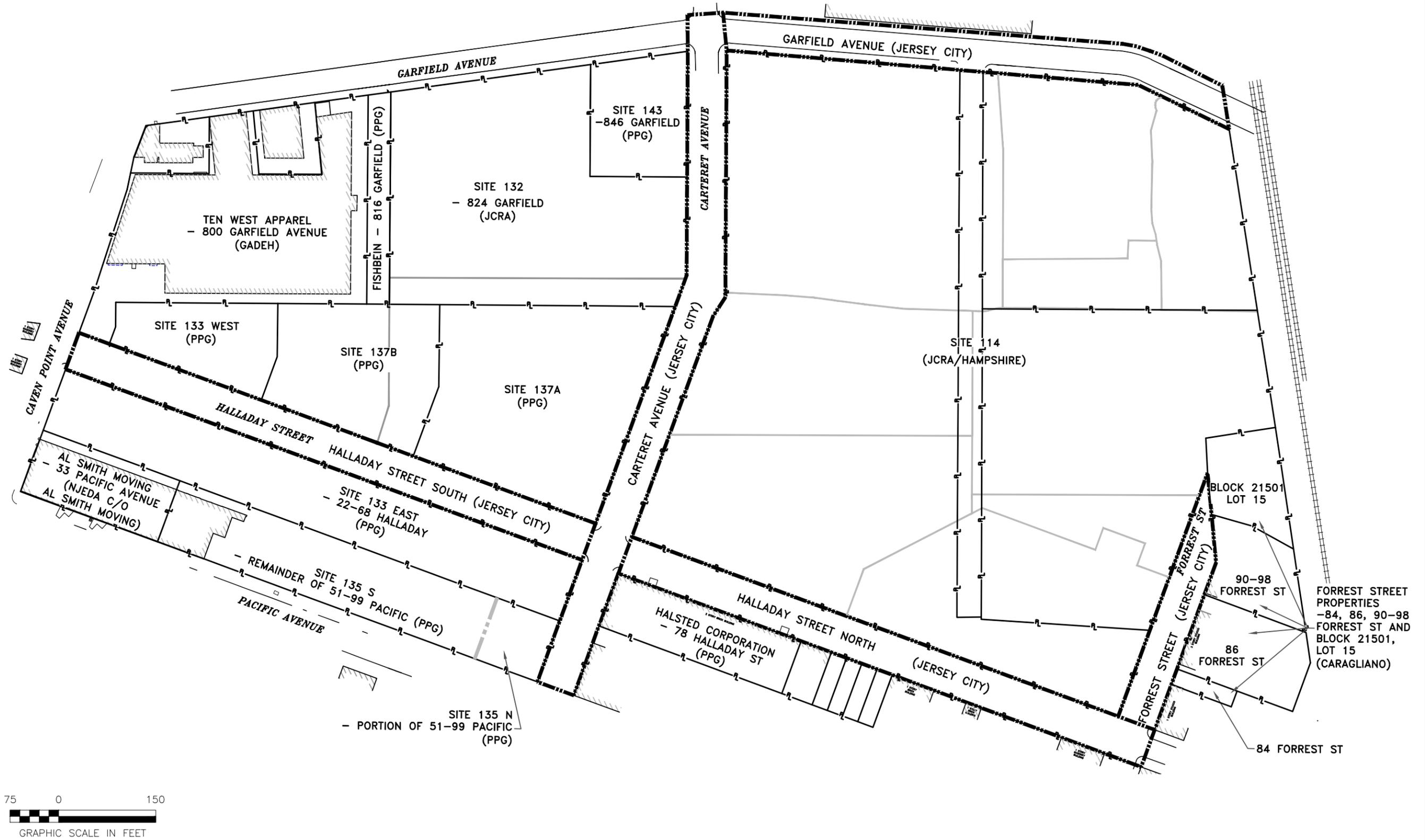


NOTES:
 1. FOR OFF SITE PROPERTIES AND ROADWAYS, PROPERTY LINES ARE ESTIMATED BASED ON TAX MAPS. LIMITS ARE INTENDED TO EXTEND TO ACTUAL PROPERTY LINES, TO BE CONFIRMED BY PROFESSIONAL SURVEY PRIOR TO START OF WORK.



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

Piscataway on uspsw2\fp001\Data_uspsw2\fp001\Environment(J)
 User: bossalimid Plotted: Jul 28, 2016 - 3:33pm
 File: P:\Jobs\Rem_Eng\Project Files\PPG Industries\Garfield Avenue\30% Design\CADD\MEETING FIGURES\2016-07-28 GAG Vicinity Ref Figure 2.dwg Layout: FIGURE 2



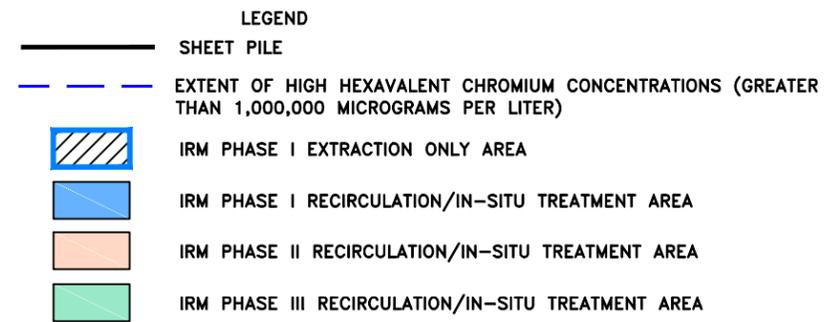
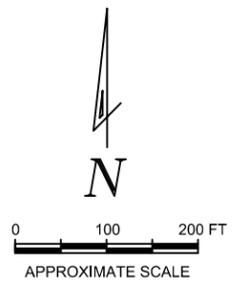
LEGEND
 SITE DESCRIPTION
 - ADDRESS
 (OWNER)

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



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

CITY(COLUMBUS, OHIO) DIV(GROUP, (INDV)) DR (R, SMITH) LD (OH) PIC (OH) PM (P, JN) TM (OH) LVL (OH)N (L, OFF) REF: G:\EN\CAD\Columbus-CHACT\MP000723-PPG JERSEY CITY\00100001\NP000684-010-2017-01.dwg LAYOUT: FIG 1- V3 .SAVED: 5/22/2017 1:57 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ACAD.CTB PLOTTED: 5/22/2017 2:08 PM BY: SMITH, BOB



- Notes:**
- This figure graphically shows the conceptual overlap of the interim remedial measure (IRM) treatment and site redevelopment, including timeframe considerations as currently envisioned (see table below). Adjustment of the proposed redevelopment schedules will be needed to align with the IRM schedules.
 - This figure does not represent a commitment by PPG to complete all IRM phases.
 - The IRM does not represent a final remedy, and thus the number, orientation, and schedule of phases may be modified over time, with the operational logic and performance considerations established in the design and the Permit-By-Rule (PBR). The schedule is contingent on New Jersey Department of Environmental Protection (NJDEP) approval of the PBR application, with acknowledgement that there will be ongoing dialogue and collaboration around IRM performance, which may result in modifications.
 - Development plan taken from concept site plan prepared by Minno Wasko Architects and Planners, dated May 11, 2017.

| Redevelopment Phase | Proposed Redevelopment Schedule ¹ | | IRM Phase Schedule ² | |
|---------------------------|--|--------|---------------------------------|---------------|
| | Start | Finish | Start | Finish |
| Phase 1 | | | Phase I | |
| Retail | -- | -- | December 2017 | December 2020 |
| Residential (Building 16) | -- | -- | December 2017 | December 2020 |
| Phase 2 | | | Phase II | |
| Retail | -- | -- | June 2019 | June 2022 |
| Phase 3 | | | Phase II | |
| Residential (Building 17) | -- | -- | June 2019 | June 2022 |
| Phase 4 | | | Phase III | |
| Retail | -- | -- | N/A | N/A |
| Residential (Building 18) | -- | -- | December 2020 | December 2023 |
| Residential (Building 19) | -- | -- | N/A | N/A |
| Phase 5 | | | Phase II | |
| Residential (Building 14) | -- | -- | June 2019 | June 2022 |
| Residential (Building 15) | -- | -- | N/A | N/A |

1 - Proposed redevelopment schedule is to be provided by the developer.
 2 - IRM schedule represents initiation of active operations through end of performance monitoring.
 N/A - Not Applicable

PPG
 GARFIELD AVENUE GROUP OF SITES
 JERSEY CITY, NEW JERSEY
 NP000684.0010

**GROUNDWATER INTERIM REMEDIAL MEASURE
 CONCEPTUAL PHASES AND TIMELINE**

Design & Consultancy
for natural and
built assets

FIGURE
3



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Site Remediation Program
401 E. State Street, 6th Floor
P. O. Box 028
Trenton, New Jersey 08625-0028
Tel. #(609) 292-1250
Fax. #(609) 777-1914

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

Ronald J. Riccio, Esq.
Site Administrator
Jersey City PPG Chromium Sites

3/30/17

Re: Capillary Break Determination for Portions of the Garfield Avenue Group Sites
SRP PI Numbers: G000008791, G000008749, 025695, 246332, G000008753, and
G000008759

Dear Mr. Riccio:

The New Jersey Department of Environmental Protection (Department) is providing herein its site-specific determination on the placement of a capillary break at the Garfield Avenue Group (GAG) sites within the areas bound by the solid black lines on Figure 1, attached. This determination is consistent with the February 8, 2007 Department Chromium Moratorium memorandum (Chrome Policy) and appropriate Department rules and guidance. This determination is also consistent with the restoration definition in Note 5 on Exhibit 2/3 of the July 29, 2016 revision to the Master Schedule. Furthermore, the Department's determination was based on its evaluation of various key technical submittals made by PPG under the Judicial Consent Order (JCO) as supported by presentations and discussions among the JCO stakeholders. The JCO submittals that support this determination include but are not limited to the following:

- *Final Remedial Action Work Plan (Soil)* (AECOM, April 2012).
- *Garfield Avenue Group (GAG) Sites Restoration Technical Execution Plan* (AECOM, October 2014).
- *Garfield Avenue Capillary Break Re-evaluation* memorandum (AECOM, March 2015).
- *Capillary Rise Technical Execution Plan* (AECOM, February 2016).
- *Capillary Rise Final Report* (AECOM, March 2017).
- *Site-Wide Groundwater Summary Report, April 2015 through March 2016* (AECOM, June 2016).
- *Progress Report for Groundwater Pilot Study and FerroBlack-H Amended Backfill Permits-By-Rule – 2016 Second Quarter (April to June)* (AECOM, July 2016).
- *Progress Report for Groundwater Pilot Study and FerroBlack-H Amended Backfill Permits-By-Rule – 2016 Third Quarter (July to September)* (AECOM, November 2016).
- *Progress Report for Groundwater Pilot Study and FerroBlack-H Amended Backfill Permits-By-Rule – 2016 Fourth Quarter (October to December)* (AECOM, February 2017).

The GAG *Final Remedial Action Work Plan (Soil)* dated April 2012 (RAWP), which was conditionally approved by the Department, requires the installation of a capillary break at the GAG sites. Within the GAG sites *Restoration Technical Execution Plan* dated October 2014, PPG further specified that an impermeable plastic liner would be installed at the GAG sites to serve as the capillary break. However, the Jersey City Redevelopment Agency (JCRA) and Hampshire subsequently expressed concerns that the use of a plastic liner would not be compatible with the plans for future redevelopment of the GAG sites. In response to these stakeholder concerns, PPG prepared the *Garfield Avenue Capillary Break Re-evaluation* memorandum dated March 2015. Based on its evaluation of the *Garfield Avenue Capillary Break Re-evaluation* memorandum, the Department determined that the site-specific alternative(s) to a plastic liner capillary break could be considered contingent upon the completion of further studies.

To formulate the basis and technical approach for this site-specific study to evaluate the protectiveness of capillary break alternatives, a capillary break technical work group was formed with representatives of the JCO parties. The capillary break technical work group collaboratively agreed on a technical scope of work for a study to evaluate various capillary break alternatives, which included an evaluation of the capillary rise within these alternative capillary break materials. The scope of work for the study was then memorialized by PPG in the final *Capillary Rise Technical Execution Plan* dated February 2016. The study was completed in October 2016 and the "*Capillary Rise Final Report*" was submitted by PPG on March 3, 2017 to summarize the study results and conclusions.

Subsequent to its assessment of the aforementioned submittals and related discussions with the JCO stakeholders, the Department has agreed in concept to the location and type of capillary break to be installed by PPG at the GAG sites. The agreed-to conceptual capillary break extents are depicted in Figure 1 within this letter which was originally developed and presented by PPG to the JCO stakeholders on February 16, 2017. The extent of the Department's determination herein applies only to those areas where soil remediation is complete at this time (i.e., areas bound by the solid black lines on Figure 1). The Department cannot make a capillary break determination beyond these designated areas because additional remedial investigation and soil remediation are pending. Based on the information provided by PPG to date and in consideration of the March 8, 2017 correspondence referenced below, the Department has determined that the following would be required for the design of a capillary break within the areas defined in Figure 1:

- The use of 6-inches of certified clean open grade stone (OGS); and
- The bottom of the clean stone must be placed at or above an elevation of 13.2 ft. NAVD88.

PPG may opt to further refine the proposed capillary break extents through the installation and sampling of additional monitoring wells to better understand the extent to which groundwater exceeds the total chromium Department Ground Water Quality Standard (GWQS). In portions of this site where competent meadow mat exists and the total chromium exceeds the GWQS, the meadow mat must be maintained as an engineering control as part of a remedial action permit for groundwater at this site. Similarly, where meadow mat is absent at this site but the backfill has

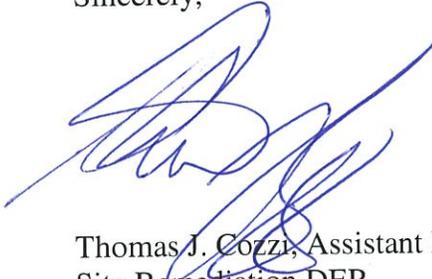
been amended with FerroBlack[®]-H and is present at the depth meadow mat would have been expected to be present, PPG must demonstrate the Ferro-Black[®]-H can act in the same manner as the meadow mat, and the amended backfill must be maintained as an engineering control as part of the remedial action permit for groundwater at this site. The remedial action permit for groundwater should also include an evaluation of the need for continued existence of the capillary break as the groundwater remedy progresses. Furthermore, as part of the future capillary break design effort, PPG must consider the unremediated source areas remaining beneath roadways (e.g., Garfield Avenue, Carteret Avenue) and the NJ Transit Hudson-Bergen Light Rail (i.e., Site 199) and their potential to impact the adjacent remediated areas. In portions of the capillary break areas where an impermeable plastic liner is already in place, PPG must evaluate the present condition and determine the future effectiveness of the liner in its current configuration. If the existing impermeable plastic liner is to remain as the final capillary break, the design must specify how the existing liner will be tied in with an OGS capillary break.

On March 8, 2017, the JCRA, the City of Jersey City and Hampshire collectively submitted the "*Restoration Capillary Break/Grading/Stormwater Management Basin Plan Basis of Design*" which provided comments and guidelines for the restoration of the GAG sites. PPG should consider these comments and guidelines in the final capillary break design provided that the final capillary break design remains consistent with the Department's determination herein and protective of human health and the environment. In addition, PPG is to ensure that the final capillary break design complies with all federal, state, and local requirements.

Any refinement of the capillary break areas, supporting design work, capillary break installation, and site restoration must be performed by PPG to meet the October 2017 Restoration Complete milestone per the Master Schedule. The final remediation site grade must be consistent with pre-remedial action conditions unless the capillary break design requires a higher elevation.

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'Thomas J. Cozzi', is written over a faint, illegible typed name.

Thomas J. Cozzi, Assistant Director
Site Remediation DEP

C: James D. Ray, Esq.
David Doyle, DEP

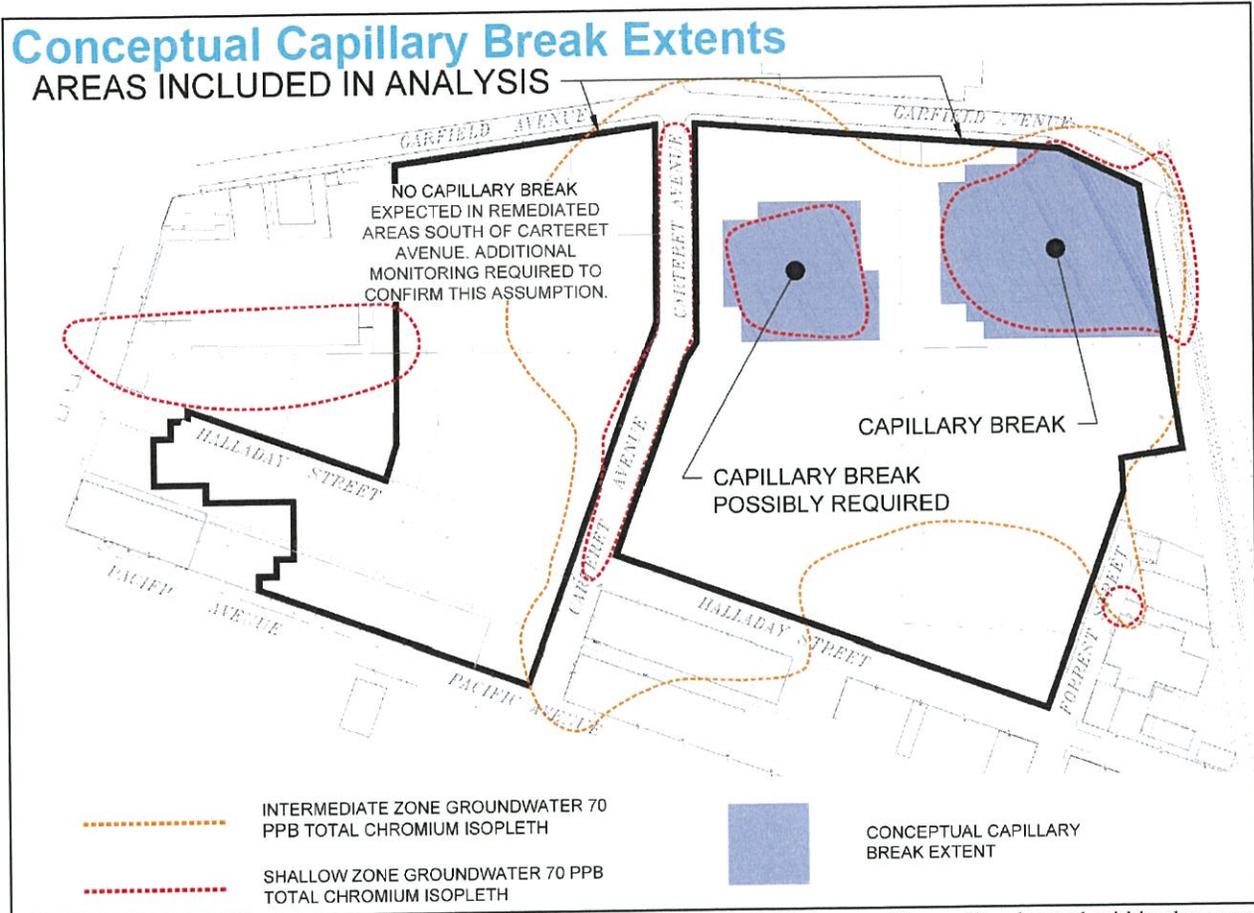


Figure 1: Conceptual capillary break extents for the portions of the Garfield Avenue Group Sites located within the areas outlined by the black solid lines. A determination for areas outside of the areas outlined by the black solid lines is not made at this time because additional remedial investigation and remediation are pending. (Source: AECOM, February 16, 2017 "Capillary Break Design for Remediated Areas" presentation to stakeholders).

Memorandum of Understanding

This Memorandum of Understanding (“MOU”) is made by and among the City of Jersey City 280 Grove Street, Jersey City, NJ 07302 (the “City”), the Jersey City Municipal Utilities Authority, 555 Route 440, Jersey City, NJ 07305 (the “JCMUA”), and PPG (“PPG”), and the Jersey City Redevelopment Agency, 66 York Street, Jersey City, NJ 07302 (the “JCRA”), each a “Party”, and together the “Parties”.

WHEREAS, PPG is a responsible party for the environmental remediation of chromate chemical production waste (“CCPW”) at certain locations within the City, as more particularly set forth in the Partial Consent Judgment entered on June 26, 2009, as amended (the “JCO”), and the judicially enforceable Master Schedule established pursuant to Paragraph 49(a) of the JCO, as amended (the “Master Schedule”), each of which are incorporated herein by reference;

WHEREAS, the Parties agree that CCPW environmental remediation should move forward at that certain site known on the Master Schedule as Carteret Ave, Jersey City, GA Group, Phase 4, Roadways (“Carteret”);

WHEREAS, the CCPW environmental remediation of Carteret (“Carteret Remediation”) is complicated by the presence of a 96-inch steel combined sewer pipe (the “Pipe”) that extends from the Garfield Avenue intersection to beyond the intersection of Carteret Avenue and Pacific Avenue;

WHEREAS, investigation in the section of Carteret Avenue between Garfield Avenue and Pacific Avenue shows that soils contaminated by CCPW surround portions of the Pipe;

WHEREAS, the CCPW-impacted soils/materials that surround the pipe cannot be fully remediated with the Pipe in place due to risk of damage being done to the Pipe;

WHEREAS, the Parties are working on an approach to coordinate the remediation work, and removal and replacement of the existing Pipe;

WHEREAS, installation of the new pipe will require the JCMUA to apply for funding through the New Jersey Environmental Infrastructure Trust (“NJEIT”);

WHEREAS, the Parties desire to enter into this MOU to memorialize the agreements and responsibilities with regard to the Carteret Remediation;

WHEREAS, PPG desires to retain its contribution rights against non-parties to this Agreement; and

NOW, THEREFORE BE IT RESOLVED, in consideration for the recitals and the mutual promises set forth herein, the Parties undertake to each other as follows:

AGREEMENT

1. The Parties will pass the necessary resolutions and/or corporate approvals to support the Carteret Remediation.
2. The Parties will in good faith adhere to the goals and milestones as set forth in the Exhibit A, attached, which includes, but is not limited to the milestone that the MUA will apply for NJEIT funding for certain work anticipated under this agreement at Carteret, as further set forth in Paragraph 7, no later than March 2017.
3. The milestones for completion of the Carteret Remediation may be reevaluated based upon the outcome of the discussions between the Parties with respect to planning for removal and replacement of the existing Pipe as well as associated CCPW remediation activities.
4. The Parties agree that, if necessary, PPG shall grant access and utility easement(s) on property owned by PPG, to the benefit of the JCMUA, for nominal consideration, to accommodate the Carteret Remediation and bypass trench and/or replacement pipe. Should a new pipe be the preferred alternative, then the location of the new pipe shall be mutually agreed upon by the JCRA and JCMUA. The Parties agree that other than granting access and utility easements over the property it owns, and its own administrative overhead expenses, the JCRA shall not be responsible for any other costs or liabilities pertaining to the work described in Paragraphs 6 and 7.
5. The Parties agree that, if necessary, JCRA shall grant access and utility easement(s) on property owned by JCRA, to the benefit of the JCMUA, for nominal consideration, to accommodate the Carteret Remediation and bypass trench and/or replacement pipe.
6. The Parties agree that, subject to PPG's potential contributions claims against third parties, PPG is responsible, at its sole cost and expense, for the Carteret Remediation including, but not limited to, the following:
 - a. All activities required for the environmental remedial investigation and remediation, including excavation work, of Carteret Avenue, pursuant to the NJDEP's correspondence of August 13, 2013 providing the *Updated Method to Determine Compliance with the Department's Chromium Policy Garfield Avenue Group – Sites 114, 132, 133, 135, 137 and 143*, including, but not limited to, dewatering, excavation, compliance soil

- testing, soil management (stockpiling, transport, disposal) backfilling, and removal and disposal of the existing 96" sewer pipe.
- b. Installing sheet piling and related excavation where necessary to facilitate CCPW remediation.
 - c. Installing security fencing and/or an appropriate covers where necessary to facilitate CCPW remediation.
 - d. Removal of sheet piling not needed for final remedy.
 - e. Re-installation (or disposal, as per City/JCMUA) of any other pre-existing utilities removed to facilitate CCPW remediation.
 - f. Elimination of siphon beneath former Morris Canal (or abandonment in place, as appropriate).
 - g. Restoration of the Carteret roadway to a reasonable standard mutually agreed to by the Parties.
 - h. De-watering of groundwater and groundwater management during the work contemplated under this agreement, as well as groundwater remediation and long-term monitoring for contaminants associated with CCPW.
 - i. Obtain all necessary approvals and permits to implement PPG's work anticipated in this agreement.

7. The Parties agree that the following are the MUA's cost responsibilities:
 - a. Excavating and replacement of soils for the bypass trench and/or new pipe including but not limited to any shoring required for installation of the bypass trench and/or new pipe.
 - b. Preparation of bedding and compaction of backfill in and around the new pipe.
 - c. Installing the bypass trench and/or new pipe.
 - d. Connecting the trench bypass and/or new pipe to the sewer system
 - e. Maintenance of the bypass and/or new pipe.
 - f. Obtain all necessary approvals and permits to implement MUA's work anticipated in this agreement.
8. The Parties agree that the aforementioned work may be performed by one or more construction contractors so as to promote efficiency and coordination. The Parties agree that if one construction contractor is selected, costs will be documented and allocated as per this MOU, as may be amended or supplemented.
9. This Agreement is subject to revision in writing by mutual agreement of the Parties.
10. The Parties agree to indemnify and hold harmless each other for any claims for property damage or personal injury by third parties related to the other Parties' actions in the performance of this Agreement.

Signatures on following page

Mark Cancilla

PPG

Mark Cancilla
Vice President EHS

City of Jersey City

Jersey City Municipal Utilities Authority

Jersey City Redevelopment Agency

Acknowledged and Accepted By:

Site Administrator

DEP

PPG



ROBERT KAKOLESKI
BUSINESS ADMINISTRATOR
CITY OF JERSEY CITY

Jersey City Municipal Utilities Authority

Jersey City Redevelopment Agency

Acknowledged and Accepted By:

Site Administrator

DEP



PPG
Mark Cancilla
Vice President EHS

City of Jersey City



Jersey City Municipal Utilities Authority
General F Beck
Exec Dir

Jersey City Redevelopment Agency

Acknowledged and Accepted By:

Site Administrator

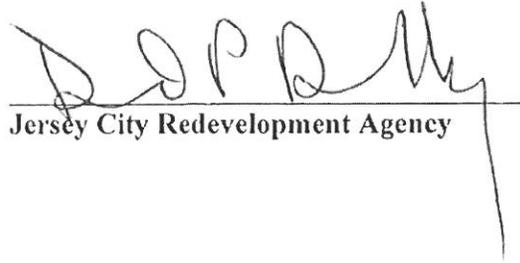
DEP

PPG

City of Jersey City

Jersey City Municipal Utilities Authority

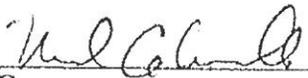
Jersey City Redevelopment Agency

A handwritten signature in black ink, appearing to be 'D. P. D. M.', is written over the line for the Jersey City Redevelopment Agency. The signature is stylized and extends slightly below the line.

Acknowledged and Accepted By:

Site Administrator

DEP



PPG **Mark Cancella** **City of Jersey City**
Vice President EHS

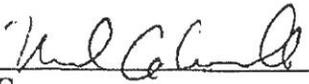
Jersey City Municipal Utilities Authority **Jersey City Redevelopment Agency**

Acknowledged and Accepted By:



Site Administrator

DEP



PPG
Mark Cancilla
Vice President EHS

City of Jersey City

Jersey City Municipal Utilities Authority

Jersey City Redevelopment Agency

Acknowledged and Accepted By:

Site Administrator



DEP

Resolution of the City of Jersey City, N.J.

City Clerk File No. Res. 17-035

Agenda No. 10.E

Approved: JAN 25 2017

TITLE:



RESOLUTION AUTHORIZING A MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF JERSEY CITY, THE JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, THE JERSEY CITY REDEVELOPMENT AGENCY AND PPG INDUSTRIES, INC. REGARDING THE CARTERET AVE. ENVIRONMENTAL REMEDIATION

COUNCIL
resolution:

offered and moved adoption of the following

WHEREAS, PPG Industries Inc. ("PPG") is a responsible party for the environmental remediation of chromate chemical production waste ("CCPW") at certain locations within the City, as more particularly set forth in the Partial Consent Judgment entered on June 26, 2009, as amended (the "JCO"), and the judicially enforceable Master Schedule established pursuant to Paragraph 49(a) of the JCO, as amended (the "Master Schedule"), each of which are incorporated herein by reference; and

WHEREAS, PPG, the City of Jersey City ("City"), the Jersey City Municipal Utilities Authority ("MUA") and the Jersey City Redevelopment Agency ("JCRA", and together, the "Parties") agree that CCPW environmental remediation should move forward at that certain site known on the Master Schedule as Carteret Ave, Jersey City, GA Group, Phase 4, Roadways ("Carteret"); and

WHEREAS, the CCPW environmental remediation of Carteret ("Carteret Remediation") is complicated by the presence of a 96-inch steel combined sewer pipe that extends from the Garfield Avenue intersection to beyond the intersection of Carteret Avenue and Pacific Avenue; and

WHEREAS, investigation in the section of Carteret Avenue between Garfield Avenue and Pacific Avenue shows that soils contaminated by CCPW surround portions of the pipe; and

WHEREAS, the CCPW-impacted soils/materials that surround the pipe cannot be fully remediated with the pipe in place due to risk of damage being done to the pipe; and

WHEREAS, the Parties are working on an approach to coordinate the remediation work, and removal and replacement of the existing pipe; and

WHEREAS, installation of the new pipe will require the JCMUA to apply for funding through the New Jersey Environmental Infrastructure Trust ("NJEIT"); and

WHEREAS, the Parties desire to enter into a Memorandum of Understanding ("MOU") to memorialize the agreements and responsibilities with regard to the Carteret Remediation, in substantially the form attached hereto as Exhibit A; and

WHEREAS, the Parties agree to execute the MOU attached hereto to.

NOW, THEREFORE, Be It Resolved by the Municipal Council of the City of Jersey City that:

- 1) The City is authorized to enter into this MOU with the MUA, JCRA and PPG, attached hereto, and any other documents necessary to effectuate the purpose of this Resolution; and

TITLE:

RESOLUTION AUTHORIZING A MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY OF JERSEY CITY, THE JERSEY CITY MUNICIPAL UTILITIES AUTHORITY, THE JERSEY CITY REDEVELOPMENT AGENCY AND PPG INDUSTRIES, INC. REGARDING THE CARTERET AVE. ENVIRONMENTAL REMEDIATION

- 2) Subject to such modifications as may be deemed necessary or appropriate by Corporation Counsel, the Mayor or Business Administrator is authorized to execute the MOU attached hereto; and
- 3) The term of the MOU shall be for twenty four (24) months effective upon execution by City officials.

BD
01/17/17

APPROVED: _____

APPROVED AS TO LEGAL FORM

APPROVED: _____

Business Administrator

Corporation Counsel

Certification Required

Not Required

APPROVED 8-0

| RECORD OF COUNCIL VOTE ON FINAL PASSAGE 1.25.17 | | | | | | | | | | | |
|---|-----|-----|------|---------------|--------|-----|------|---------------|-----|-----|------|
| COUNCILPERSON | AYE | NAY | N.V. | COUNCILPERSON | AYE | NAY | N.V. | COUNCILPERSON | AYE | NAY | N.V. |
| GAJEWSKI | ✓ | | | YUN | ✓ | | | RIVERA | ✓ | | |
| GADSDEN | ✓ | | | OSBORNE | ABSENT | | | WATTERMAN | ✓ | | |
| BOGGIANO | ✓ | | | ROBINSON | ✓ | | | LAVARRO, PRES | ✓ | | |

✓ Indicates Vote

N.V. Not Voting (Abstain)

Adopted at a meeting of the Municipal Council of the City of Jersey City N.J.

 Peter M. Brennan, President of Council

 Robert Byrne, City Clerk

Carteret Ave Remediation and Sewer Replacement

| Implementation Schedule | Completion Date | Notes |
|---|---------------------|---|
| Memorandum of Understanding Between PPG and Jersey City Terms Finalized | January 19, 2017 | Memorializes agreements, commitments, and general responsibilities between Jersey City and PPG for the Carteret Avenue Soil Remediation and Sewer Replacement Project |
| Memorandum of Understanding Executed | By January 31, 2017 | |
| JCMUA Retains Design Engineer for Sewer Replacement Project | February 2017 | |
| Design Engineer to Submit Letter of Intent for EIT Loan Application | March 2017 | |
| Design Engineer to Evaluate Conceptual Approaches for the Sewer Replacement Project and Provide Recommendation for Final Approach | March 2017 | |
| PPG Delivers Remediation TEP | June 2017 | |
| MUA to Complete Design for new Sewer Line | June/July 2017 | |
| PPG Circulates Draft Remediation and Restoration Schedule | August 2017 | |
| PPG Finalizes Schedules and JCO Group Approves Milestones for JCO Master Schedule | October 2017 | |
| EIT Loan Approval | By November 2017 | |

January 19, 2017



440 College Park Drive
Monroeville, PA 15146 USA
T: 724.325.5070
M: 412.235.8881
E: overmyer@ppg.com
ppg.com

Jody Overmyer
Remediation Project Engineer

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

July 14, 2017

Re: PPG New Jersey Chrome
1Q17 Employment Report

Dear Mr. Riccio:

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

During the first quarter of 2017, services were provided by 13 firms, including environmental consultants, for on-site activities directly related to investigation and remediation of PPG's chromium sites. Three of these firms (D'Elia Electric, EAI, and Securitas) maintain a business presence in Jersey City. To date, firms with operations in Jersey City have provided 21.4% of the manpower employed on the project. Jersey City residents accounted for a total of 4,547 manhours or 42% of the manpower used on the project during the first quarter and 219,690 manhours or 30.7% of the manpower used for the project to date. No manhours are being reported for the Non-Garfield Avenue Group sites this quarter. 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,

Jody Overmyer

| | | | |
|------|------------------|----------------|-----------|
| ecc: | R. Adams | R. Engel | J. Ray |
| | P. Amin | S. Faeth | D. Spader |
| | N. Colson | J. Farrell | M. Terril |
| | K. Corbin-Walker | R. Feinberg | J. Watson |
| | T. Cozzi | J. Lagrotteria | J. Worden |
| | B. Delisle | D. Laguzza | |
| | D. Doyle | S. Mikaelian | |

PPG
New Jersey Chrome Project
Garfield Avenue Group Sites
Q1 2017 Local Employment Report
July 14, 2017

| | Securitas | ENTACT | EAI, Inc. | TPI Environmental | SGS Envir. Services | D'Elia Electric | ProAct/Acqua Bella | Borbas Surveying | Aerotek | Totals |
|----------------|-----------|--------|-----------|----------------------|------------------------|-----------------|-----------------------|---------------------|---------|--------|
| January | 399 | 1,232 | 103 | | 0 | 16 | 114 | 0 | 0 | 1,864 |
| | 672 | 3,052 | 103 | | 182 | 80 | 326 | 40 | 142 | 4,596 |
| February | 295 | 952 | 187 | 0 | 0 | 0 | 139 | 0 | 0 | 1,573 |
| | 676 | 2,010 | 187 | 32 | 210 | 8 | 199 | 16 | 136 | 3,475 |
| March | 360 | 736 | | | 0 | | 15 | | 0 | 1,111 |
| | 840 | 1,727 | | | 37 | | 40 | | 126 | 2,770 |
| April | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| May | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| June | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| July | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| August | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| September | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| October | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| November | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| December | | | | | | | | | | 0 |
| | | | | | | | | | | 0 |
| Totals: | 1,053 | 2,920 | 290 | 0 | 0 | 16 | 268 | 0 | 0 | 4,547 |
| | 2,188 | 6,789 | 290 | 32 | 429 | 88 | 565 | 56 | 404 | 10,841 |

Note: Jersey City Contractors in Red

| Project to Date (All Sites) | Jersey City MH's | Total MH's | % Jersey City Residents |
|--------------------------------|------------------|----------------|----------------------------|
| 2009: | 1,875 | 5,581 | 33.6% |
| 2010: | 11,808 | 30,181 | 39.1% |
| 2011: | 19,449 | 58,741 | 33.1% |
| 2012: | 18,685 | 73,753 | 25.3% |
| 2013: | 39,546 | 165,638 | 23.9% |
| 2014: | 62,951 | 204,031 | 30.9% |
| 2015: | 35,784 | 103,123 | 34.7% |
| 2016: | 25,046 | 64,783 | 38.7% |
| 2017: | 4,547 | 10,841 | 41.9% |
| Project Totals: | 219,690 | 716,672 | 30.7% |

| JC Resident Hours |
|-------------------|
| Total Hours |