SETTLEMENT AGREEMENT

(SITE 65 – BURMA ROAD AND MORRIS PESIN DRIVE)

This SETTLEMENT AGREEMENT (the "Agreement") is made this 9th day of January 2018 (the "Effective Date") by and among the NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION ("NJDEP"), PPG INDUSTRIES, INC. ("PPG"), the CITY OF JERSEY CITY, NEW JERSEY ("City") and the JERSEY CITY MUNICIPAL UTILITIES AUTHORITY (the "MUA"). Each of the foregoing may sometimes be referred to herein as a "Party" or collectively as the "Parties".

WHEREAS, NJDEP and PPG entered into that certain Administrative Consent Order entitled "In the Matter of Hudson County Chromate Chemical Production Waste Sites" dated July 19, 1990 (the "1990 ACO");

WHEREAS, NJDEP, PPG and the City are parties to that certain Partial Consent Judgment Concerning the PPG Sites filed June 26, 2009, Superior Court of New Jersey, Chancery Division, Hudson County, Docket No. HUD C-77-05, as amended (the "JCO");

WHEREAS, NJDEP, PPG and the City are parties to that certain Consent Judgment filed September 7, 2011, Superior Court of New Jersey, Chancery Division, Hudson County, Docket No. HUD-C-77-05, as amended (the "2011 JCO");

WHEREAS, pursuant to the JCO, PPG is obligated to remediate chromate chemical production waste, as defined in the JCO ("CCPW"), located at the Hudson County Chrome ("HCC") Sites identified in the JCO or in the 1990 ACO;

WHEREAS, Site 65 is one of the HCC Sites identified in the 1990 ACO and defined in Attachment One thereto as the west side of Burma Road near Caven Point Road, Jersey City, Block 1497 (the "Former Site 65 Boundaries");

WHEREAS, there exist disputes amongst the Parties concerning, among other things, the boundaries of Site 65 and whether or not chromium and other contaminants identified in portions of Burma Road and Morris Pesin Drive are the responsibility of PPG pursuant to the 1990 ACO or the JCO;

WHEREAS, further complicating the aforementioned disputes, is an existing MUA-owned sixteen inch water line located within the Burma Road and Morris Pesin Drive rights of way as further depicted on <u>Figure 1</u> and <u>Figure 2</u> attached hereto (the "Water Line");

WHEREAS, the NJDEP and Weston Solutions, Inc. ("Weston"), the Technical Consultant under the JCO, selected by the Site Administrator and tasked with providing technical support to the NJDEP, provided oversight of PPG's investigation of soils and groundwater within the Former Site 65 Boundaries and in nearby areas;

WHEREAS, the MUA was made a Party to this Agreement in light of, among other reasons, the interests it has in assuring the proper remediation of contaminated materials in proximity to the Water Line and because its cooperation is needed in connection with remediation

activities that may be necessary in proximity to the Water Line during future repairs and/or replacement of the Water Line by the MUA or otherwise;

WHEREAS, the Parties have decided to settle their disputes relating to the matters set forth above and herein and to memorialize that settlement in this Agreement.

NOW THEREFORE, in consideration of the mutual promises set forth herein and other good and valuable consideration, the receipt of which is hereby acknowledged, the Parties agree as follows:

1. New Boundaries of Site 65. The Parties agree that for the purposes of this Agreement the boundaries of Site 65 shall consist of the area depicted on Figure 1 attached hereto and as described in the legal description attached hereto as Exhibit A. The Site 65 boundaries depicted on Figure 1 and as described on Exhibit A shall replace and supplant any prior figures or other descriptions of the Site 65 area, whether as set forth in the 1990 ACO, the JCO, any amendments thereto or otherwise. All references below to "Site 65" shall mean the area depicted on Figure 1 and as described on Exhibit A.

2. Reporting/Permitting Requirements.

- (i) Within ninety (90) days of the Effective Date of this Agreement, PPG shall submit to NJDEP (with copies to the Parties to this Agreement and any other pertinent parties as required pursuant to the JCO) a Remedial Action Report ("RAR"). The RAR will memorialize the soils remedy for Site 65 and will include a Remedial Investigation summary as required per the NJDEP Technical Requirements for Site Remediation (N.J.A.C. 7:26E, et seq.), including all data collected by PPG in Burma Road and Morris Pesin Drive to date. The Parties agree that the soils remedy to be implemented by PPG for Site 65 will be a restricted use remedy consisting, essentially, of the following: (A) the asphalt road surface covering Site 65 shall function as an engineering control to prevent direct contact exposure, (B) a notice in lieu of deed notice will be filed because contaminants will be left in place in Site 65 soils that exceed NJDEP soil remediation criteria and/or standards, (C) at the time the MUA undertakes Water Line Work (as defined below) such work activities will be managed by the MUA as a linear construction project governed by the LC Guidance (as defined below) and pursuant to the terms and conditions of this Agreement, and (D) PPG shall be obligated for the cost to excavate visible CCPW and any other contaminants under the LC Guidance that is identified in the Trench Area (as defined below) pursuant to the terms and conditions of this Agreement.
- (ii) Subject to PPG satisfying applicable NJDEP requirements, a Soils Remedial Action Permit ("SRAP") will be issued by NJDEP as part of the remedy referenced in Section 2(i) above. PPG shall be the permittee and responsible party and the City, as the owner of Site 65, shall be a co-permittee. The Parties agree that PPG shall be responsible, at its sole cost and expense, to comply with the terms of the SRAP, including, without limitation, inspections of the asphalt cap and preparation and filing of biennial certifications, provided, however, the City agrees that the City shall be responsible, at its sole cost and expense, to maintain the asphalt capping surface on Site 65, including any repair or maintenance required as a result of the cap inspections performed by PPG.

(iii) PPG shall be responsible to satisfy NJDEP financial assurance requirements for the engineering control that will be used at Site 65, although all Parties acknowledge and agree that the financial assurance established by PPG pursuant to Section 9 of the 2011 JCO shall apply to Site 65 and shall satisfy PPG's financial assurance obligation as of the issuance of the SRAP.

3. Water Line Work.

- (i) The Parties agree that, in the event the MUA shall undertake to conduct in whole or in part, repairs, alterations and/or replacement to the Water Line within the Site 65 boundaries, excavation of a trench will be required. The scope of the aforementioned trench will be dependent upon the extent of MUA's work on the Water Line located within the Site 65 boundaries, but for purposes of this Agreement, PPG will be responsible for the PPG Trench Reimbursable Expenses (as defined below) within a trench extending three feet laterally from every point along the outside diameter of the Water Line, as measured on the center axis perpendicular to the direction of the Water Line and up to 6 feet deep, regardless of the actual depth required of the trench to conduct the Water Line Work (the "Trench Area").
- (ii) The Parties agree that, with the exception of specific procedures for the identification of CCPW which shall be subject to Section 5 and **Exhibit E** of this Agreement, any and all utility work to be performed under this Agreement shall be performed in accordance with the following three documents:
 - (a) "Procedure for Coordinating Utility Work Within Chromium Soil Areas, Honeywell Sites, Jersey City, New Jersey," prepared by Amec Foster Wheeler Environment and Infrastructure, Inc., and dated December 2014, updated January 2017, attached to this Agreement as **Exhibit B**; and
 - (b) "Worker Training Manual for Managing Contaminated Soils and Groundwater," prepared by Amec Foster Wheeler Environment and Infrastructure, Inc., and dated December 2014, updated January 2017, attached to this Agreement as Exhibit C.
 - (c) NJDEP's Linear Construction Technical Guidance dated January 2012, as amended (the "LC Guidance").
- (iii) Subject to reimbursement by PPG for the PPG Reimbursable Trench Expenses (as defined below), MUA shall be responsible to perform and pay for, at its sole cost and expense, all work related to the repair, alteration and/or replacement of the Water Line, including, without limitation: (A) installation of a bypass water line; (B) repairs/alterations to the Water Line; (C) excavation and dewatering of the Trench Area; (D) stockpiling of soils; (E) removal of the existing Water Line; (F) installation of a new Water Line; (G) backfilling of the Trench Area; (H) placing new asphalt on top of the Trench Area following backfilling; and (I) any other activities or work related to the aforementioned tasks (all such work activities being collectively referred to hereinafter as the "Water Line Work"). The new asphalt placed on top of the Trench Area shall be placed at the surface so as to serve as the engineering control referenced in Section 2 above.
- (iv) The Parties agree that, for the purpose of this Agreement, the Water Line Work referenced in Section 3(iii) above shall be deemed to be a linear construction project and shall be

governed by the LC Guidance and the terms of this Agreement. In the event of any conflict between the LC Guidance and the terms of this Agreement, the terms of this Agreement shall prevail. The LC Guidance shall be used pursuant to the terms of this Agreement to address contamination that is identified during the Water Line Work and to ensure that contamination encountered during the Water Line Work is handled in a manner that is protective of human health, safety and the environment.

- (v) The MUA shall retain a Licensed Site Remediation Professional (the "MUA LSRP") to oversee (A) all aspects of the Water Line Work pursuant to the LC Guidance; (B) removal and disposal of visible CCPW in the Trench Area; and (C) any other work activities described herein.
- (vi) The following reasonable fees and expenses incurred by the MUA in connection with the Water Line Work shall be subject to reimbursement by PPG, including, without limitation, (A) the incremental cost related to retaining OSHA 40-hour trained personnel as compared to hiring non-trained personnel; (B) sampling and laboratory analytical costs and expenses; (C) fees and expenses of the MUA LSRP; (D) removal and transportation of contaminated soils that cannot be re-used for backfill; (E) clean backfill required to replace contaminated soils that cannot be re-used as backfill; (F) the incremental cost increase related to the treatment, transportation and/or disposal of contaminated fluids as compared to handling non-contaminated fluids from dewatering; (G) costs incurred related to the removal and disposal of visible CCPW in the Trench Area; (H) costs incurred related to addressing the contamination in the Trench Area; and (I) all other costs and expenses reasonably related to the implementation of the LC Guidance in the Trench Area ("PPG Trench Reimbursable Expenses"). Within fourteen (14) days prior to commencement of Water Line Work within the Site 65 boundaries, the MUA shall notify PPG of its intent to conduct Water Line Work, and shall reasonably cooperate with PPG with regard to any requests for information pertaining thereto.
- (vii) The MUA LSRP shall develop a materials management plan listing the actions required to manage visible CCPW, contaminated dewatering fluids and contaminated soils resulting from the Water Line Work in the Trench Area. The costs and expenses related to dewatering fluids, soils, and replacement of backfill material shall be allocated between the MUA and PPG as follows:
 - (1) Contaminated Dewatering Fluids. The MUA will arrange to manage all dewatering fluids, provided that PPG shall be responsible to reimburse the MUA for the incremental cost increase related to the treatment, transportation and/or disposal of contaminated fluids as compared to handling non-contaminated fluids from dewatering. If such water is determined to be hazardous waste in accordance with applicable federal, state and local requirements, PPG shall execute a Uniform Hazardous Waste Manifest as required by the Federal Resource Conservation and Recovery Act (40 CFR Subpart B Parts 262.20 to 262.23) and N.J.A.C 7:26G, obtain an EPA Identification Number and otherwise comply, at its sole cost and expense, with all applicable requirements, including recordkeeping requirements, with respect to the transportation and disposal of hazardous waste materials.
 - (2) <u>Contaminated Soils.</u> The MUA LSRP shall determine whether pursuant to the LC Guidance soils removed from the Trench Area can be used as backfill in the Trench

Area or whether such soils must be disposed off-site. For avoidance of doubt, and whether or not permissible under the LC Guidance, the MUA LSRP must ensure, and the Parties acknowledge and agree, that visible CCPW cannot be replaced in the Trench Area and must be disposed off-site. In the event the MUA LSRP determines that soils must be disposed off-site based upon the presence of any contaminant, substance or characteristic and based upon such LSRP's application of the LC Guidance and/or presence of visible CCPW, PPG shall be responsible to pay, at its sole cost and expense, all transportation, disposal, replacement of backfill materials and other costs and expenses in connection with the off-site disposal of such soils. If any such soils are determined to be hazardous waste in accordance with applicable federal, state and local requirements, PPG shall execute a Uniform Hazardous Waste Manifest as required by the Federal Resource Conservation and Recovery Act (40 CFR Subpart B Parts 262.20 to 262.23) and N.J.A.C 7:26G, obtain an EPA Identification Number and otherwise comply, at its sole cost and expense, with all applicable requirements, including recordkeeping requirements, with respect to the transportation and disposal of hazardous waste materials.

- (3) Waiver/Indemnification. PPG agrees to waive any claims against the City and MUA for contribution and/or incremental handling, transportation or disposal costs that may be incurred by PPG resulting from the presence of non-CCPW contaminants in the soils and/or water PPG is required to manage in accordance with this Section 3, including but not limited to, mercury, petroleum, lead and coal ash, that may be commingled with the CCPW. PPG further agrees to indemnify, defend and hold the City and the MUA harmless from and against any and all losses, damages, liabilities, deficiencies, actions, judgments, interest, penalties, fines and any other costs or expenses of any kind in connection with any third party claims for personal injury, death or property damage arising from the actions of PPG or its agents, servants, employees and/or contractors resulting from or relating to the transportation, disposal or other handling of the soils and/or water that PPG is required to manage pursuant to this Section 3.
- (4) <u>Dispute Resolution</u>. To the extent that there is a dispute between the MUA LSRP and the PPG LSRP (as defined in Section 5) as to the determination made by the MUA LSRP that material must be disposed of off-site or as to the incremental costs under this Section 3, PPG and the MUA agree that such dispute will be resolved by a determination by a third LSRP (the "Third LSRP") and the decision of the Third LSRP shall be binding upon PPG and the MUA. Such LSRP shall be selected and approved by PPG and the MUA. PPG shall be solely responsible for the costs and expenses of the Third LSRP.
- (viii) <u>Backfilling.</u> PPG shall be required to reimburse the MUA for the cost of clean backfill materials needed to replace the volume of soils from the Trench Area that were required to be disposed off-site pursuant to Section 3(vii)(2).
- 4. <u>Weston Technical Memorandum.</u> In a Technical Memorandum dated December 22, 2017 (attached hereto as <u>Exhibit D</u>), Weston has provided a rationale for the maximum horizontal remediation distance of 10 ft. from the Water Line for both Burma Road and Morris Pesin Drive. Soil delineation investigations of Burma Road and Morris Pesin Drive were performed by PPG in June and October of 2015. During these investigations, a total of 59 soil borings were advanced to a depth of 10 ft. and 281 soil samples were collected and analyzed. Upon

a review of the soil investigations, Weston finds that it is reasonable to conclude that the extent of visible CCPW or visible CCPW impacts in Burma Road and Morris Pesin Drive is limited to a maximum of 10 ft. from the Water Line.

Remediation of Visible CCPW.

- During the excavation of the Trench Area, and prior to backfilling of the Trench (i) Area, the MUA LSRP and an LSRP designated by PPG (the "PPG LSRP") shall conduct inspections of the Trench Area to determine the presence of visible CCPW within the Trench Area. A procedure for identifying visible CCPW is attached hereto as Exhibit E. If the MUA LSRP and the PPG LSRP agree that no visible CCPW is identified within the Trench Area, the Trench Area can be backfilled pursuant to the procedures set forth in Section 3 of this Agreement. In the event the MUA LSRP and the PPG LSRP agree that visible CCPW is identified in the Trench Area, then the MUA will perform the excavation, transportation, and disposal of all visible CCPW and PPG shall be responsible for the costs of excavation, transportation, and disposal of all such visible CCPW ("PPG CCPW Reimbursable Expenses") identified in both the 7 foot area beyond the Site 65 boundary (hereinafter referred to as the "Supplemental Remediation Area," which such area is depicted on Figure 1 attached hereto and described in Exhibit A attached hereto) and in the area between the Water Line and the Site 63 boundary. PPG shall not be responsible for excavation of visible CCPW in any of the aforementioned areas deeper than 6 feet, which will be treated, as necessary, as groundwater by PPG pursuant to Section 6 of this Agreement. PPG will not be responsible to conduct post-excavation samples in connection with any of the aforementioned excavation activities. Rather, excavation shall be conducted solely for the purpose of removing visible CCPW.
- (ii) In the event there is a dispute between the MUA LSRP and the PPG LSRP as to the presence or absence of visible CCPW, the extent of excavation required to remove same or other related matters, PPG and the MUA agree that such dispute will be resolved by a determination made by the Third LSRP and the decision of the Third LSRP shall be binding upon PPG and the MUA. Such LSRP will be selected and approved by PPG and the MUA. PPG shall be solely responsible for the costs and expenses of the Third LSRP.
- 6. <u>Groundwater</u>. Groundwater that exceeds the NJDEP Groundwater Quality Standards, N.J.A.C. 7:9C, for total chromium within Site 65, the Supplemental Remediation Area, the Released Area (as defined in Section 7 herein) or another location adjacent to Site 63, shall remain PPG's responsibility under the JCO as emanating from Site 63.
- Release by City. The MUA, the City, and all instrumentalities of the City, hereby waive, release, and fully and forever discharge any and all complaints, claims, charges, liabilities, claims for relief, demands, suits, actions or causes of action, whether in law or in equity, whether known or unknown, which it actually asserts or could assert, at common law or under any statute, rule, regulation, order or law, whether federal, state or local, or on any grounds whatsoever against PPG with respect to any contaminants of any kind whatsoever, whether known or unknown, that exist in soils on or under the portions of Burma Road and Morris Pesin Drive that are adjacent to the boundaries of Site 65, as set forth in **Exhibit A** and **Figure 1**, attached hereto (the "Released Area"). This release shall not apply to the boundaries of Site 65 or the Supplemental Remediation Area that are the subject of this Agreement, to portions of Burma Road or Morris Pesin not within the Released Area, or to any other location within the City of Jersey City.

- 8. Reservation of Rights. Each of the Parties agrees that the recitals, statements, covenants and agreements set forth herein and the exhibits attached hereto were arrived at after extensive negotiation and compromise and shall be without prejudice to the Parties' taking different positions with respect to other HCC Sites identified in the JCO, the 1990 ACO, or otherwise. All of the Parties to this Agreement were represented by counsel in connection with the negotiation of the terms and conditions of this Agreement.
- 9. Soils in Areas Outside of Site 65 and the Supplemental Remediation Area. Notwithstanding anything contained herein to the contrary, NJDEP, the MUA and the City acknowledge that PPG has not accepted responsibility for any contaminants of any kind whatsoever, whether known or unknown, that exist in soils on or under any portions of Burma Road and Morris Pesin Drive that are within the Released Area. If CCPW is identified in the Released Area, this CCPW will be addressed as a "Newly Discovered Site" as defined in Article IV, Section 7.C. of the September 7, 2011 Consent Judgment.

10. Miscellaneous.

- (i) <u>Cooperation</u>. Each of the Parties hereby agree to cooperate with each other in taking all steps necessary in complying with the reasonable requests of the other Party to fully effectuate the terms, covenants and conditions of this Agreement.
- (ii) <u>Governing Law/Venue</u>. This Agreement shall be governed by the laws of the State of New Jersey. The parties acknowledge that this Agreement has been executed and delivered in the State of New Jersey and that the Parties hereto submit to the jurisdiction of the Superior Court, Chancery Division, Hudson County, New Jersey in the event of any dispute under this Agreement.
- (iii) <u>Binding Nature/Successors</u>. This Agreement shall be binding on the Parties and their successors and assigns.
- (iv) <u>Authority of Signatories</u>. Each person executing this Agreement on behalf of each Party hereto hereby acknowledges and represents that he or she has full authority to execute this Agreement and bind the Party on whose behalf the person executes this Agreement and that the execution of this Agreement has been approved by appropriate Resolution or other action of the Party on whose behalf the person is executing this Agreement.
- (v) <u>Entire Agreement/Amendments to be in Writing</u>. This Agreement contains the entire agreement among the Parties hereto. This Agreement may only be amended or modified by a writing fully executed by all Parties hereto. This provision cannot be orally waived.
- (vi) <u>Severability</u>. In case any provision in or obligation under this Agreement shall be held to be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations under this Agreement shall not in any way be affected or impaired thereby.
- (vii) <u>Notices</u>. All notices, requests or other communications which may be or are required to be given, served or sent by any Party hereto to the other shall be deemed to have been properly given, if in writing and addressed, in each case, as set forth in this section below, and shall be deemed to have been delivered, (a) three (3) business days after having been deposited in any

post office or mail depository regularly maintained by the United States Postal Office and sent by registered or certified mail, postage paid, return receipt requested, (b) one (1) business day after having been deposited for overnight delivery by a nationally recognized courier service which obtains delivery receipts (e.g., FedEx or UPS), or (c) as otherwise mutually agreed to by the Parties.

To PPG:

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To the City of Jersey City:

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With copies to:

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To the Jersey City Municipal Utilities Authority:

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To NJDEP:

Thomas J. Cozzi **Assistant Director** Office of the Assistant Commissioner NJDEP Mail Code 401-06 PO Box 420 Trenton, NJ 08625-0420 Email: Tom.Cozzi@dep.nj.gov

With copies to:

Richard Engel Deputy Attorney General Office of the Attorney General Richard J. Hughes Justice Complex 25 Market Street P.O. Box 093 Trenton, NJ 08625-0093

Email: Richard.Engel@law.njoag.gov

Counterpart Signatures. This Agreement may be executed in any number of counterparts, and by different Parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Delivery of an executed counterpart to this Agreement by facsimile or e-mail shall be as effective as delivery of a manually executed counterpart of this Agreement, and each Party hereto shall be entitled to rely on a facsimile or e-mail signature of each other Party hereto as if it were an original.

SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION	
BY:	
PPG INDUSTRIES, INC.	
BY:	
CITY OF JERSEY CITY	
BY:	
JERSEY CITY MUNICIPAL UTILITIES AUTHORITY	
BY:	

[FIGURES AND EXHIBITS ON FOLLOWING PAGES]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first written above.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BY:
PPG INDUSTRIES, INC.
BY: Mark E. Jamil
CITY OF JERSEY CITY
BY:
JERSEY CITY MUNICIPAL UTILITIES AUTHORITY
BY:

[FIGURES AND EXHIBITS ON FOLLOWING PAGES]