UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 2

IN THE MATTER OF:)	
Columbia Smelting and Refining Works Site)	Index No. CERCLA-02-2016-2010
Brooklyn, New York)	
City of New York, Respondent)	
Proceeding Under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604,)))	
9606(a), 9607 and 9622)	

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR A REMOVAL ACTION

TABLE OF CONTENTS

I.	JURISDICTION AND GENERAL PROVISIONS	1
II.	PARTIES BOUND	1
III.	DEFINITIONS	2
IV.	FINDINGS OF FACT	
V.	CONCLUSIONS OF LAW AND DETERMINATIONS	7
VI.	SETTLEMENT AGREEMENT AND ORDER	8
VII.	DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-	
	SCENE COORDINATOR	
VIII.	WORK TO BE PERFORMED	9
IX.	PROPERTY REQUIREMENTS	21
X.	ACCESS TO INFORMATION	24
XI.	RECORD RETENTION	
XII.	COMPLIANCE WITH OTHER LAWS	
XIII.	EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES	26
XIV.	PAYMENT OF FUTURE RESPONSE COSTS	26
XV.	DISPUTE RESOLUTION	
XVI.	FORCE MAJEURE	
XVII.	STIPULATED PENALTIES	30
XVIII.	COVENANTS BY EPA	
XIX.	RESERVATIONS OF RIGHTS BY EPA	33
XX.	COVENANTS BY RESPONDENT	35
XXI.	OTHER CLAIMS	
XXII.	EFFECT OF SETTLEMENT/CONTRIBUTION	
XXIII.	INDEMNIFICATION	38
XXIV.	INSURANCE	
XXV.	FINANCIAL ASSURANCE	
XXVI.	MODIFICATION	
XXVII.	NOTICE OF COMPLETION OF WORK	
XXVIII.	INTEGRATION/APPENDICES	40
XXIX.	EFFECTIVE DATE	40

I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the City of New York ("Respondent"). This Settlement Agreement provides for the performance of a removal action by Respondent and the payment of certain response costs incurred by the United States at or in connection with the "Columbia Smelting and Refining Works Site" (the "Site") generally located in the vicinity of Red Hook Recreation Area Ball Field Numbers 5, 6, 7, 8 and 9 in Brooklyn, New York.
- 2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14-A (Determinations of Imminent and Substantial Endangerment, Nov. 1, 2001), 14-14-C (Administrative Actions Through Consent Orders, Apr. 15, 1994) and 14-14-D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, May 11, 1994). These authorities were further redelegated by the Regional Administrator of EPA Region 2 to the Director of the Emergency and Remedial Response Division in Region 2 by Regional Delegation R-1200, dated November 23, 2004.
- 3. EPA has notified the State of New York (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- 4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Section IV (Findings of Fact) and Section V (Conclusions of Law and Determinations) of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agree that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

- 5. This Settlement Agreement is binding upon EPA and upon Respondent. Any change in legal status of Respondent shall not alter Respondent's responsibilities under this Settlement Agreement.
- 6. Respondent shall provide a copy of this Settlement Agreement to each contractor hired to perform the Work required by this Settlement Agreement and to each person representing Respondent with respect to the Site or the Work, and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this

Settlement Agreement. Respondent or its contractors shall provide written notice of this Settlement Agreement to all subcontractors hired to perform any portion of the Work required by this Settlement Agreement. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Settlement Agreement.

III. DEFINITIONS

7. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or its attached appendices, the following definitions shall apply:

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall mean the effective date of this Settlement Agreement as provided in Section XXIX.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

"NYSDEC" shall mean the New York State Department of Environmental Conservation and any successor departments or agencies of the State.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing deliverables submitted pursuant to this Settlement Agreement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section IX (Property Requirements) (including, but not limited to, cost of attorney time and any monies paid to secure or enforce access or land, water, or other resource use restrictions, and/or to secure, implement, monitor, maintain, or enforce ICs), Section XIII (Emergency Response and Notification of Releases), Paragraph 79 (Work Takeover), Section XXV (Financial Assurance), and Paragraph 30 (Community Involvement Plan) (including, but not limited to, the costs of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e). Future Response Costs shall also

include Agency for Toxic Substances and Disease Registry ("ATSDR") costs regarding the Site.

"Institutional Controls" or "ICs" shall mean state or local laws, regulations, ordinances, zoning restrictions, easements or covenants running with the land or other governmental controls or notices that (a) limit land, water, or other resource use to minimize the potential for human exposure to Waste Material at or in connection with the Site; (b) limit land, water, or other resource use to implement, ensure non-interference with, or ensure the integrity of the removal action; (c) provide access rights to ensure the integrity of the removal action; (d) are created pursuant to common law or statutory law by an instrument that is recorded by the owner in the appropriate land records office, and/or (e) provide information intended to modify or guide human behavior at or in connection with the Site.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at http://www.epa.gov/superfund/superfund-interest-rates.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean EPA and Respondent.

"Planting Strips" shall mean the unpaved areas adjacent to the Red Hook Recreation Area Ball Fields 5-8 or Ball Field 9, between the ball fields and the surrounding sidewalks.

"Post-Removal Site Control" shall mean actions necessary to ensure the effectiveness and integrity of the removal action to be performed pursuant to this Settlement Agreement consistent with Sections 300.415(*l*) and 300.5 of the NCP and "Policy on Management of Post-Removal Site Control" (OSWER Directive No. 9360.2-02, Dec. 3, 1990).

"RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

"Respondent" shall mean the City of New York.

"Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

"Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXVIII (Integration/Appendices)). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

"Site" shall mean the Columbia Smelting and Refining Works Site in Brooklyn, New York, encompassing (1) Red Hook Recreation Area Ball Field Numbers 5, 6, 7, and 8 ("Ball Fields 5-8"); (2) the Ball Fields 5-8 Planting Strips; (3) Red Hook Recreation Area Ball Field Number 9 ("Ball Field 9"); (4) the Ball Field 9 Planting Strips; (5) the sidewalks bordering the Ball Fields 5-8 Planting Strips and the Ball Field 9 Planting Strips; and (6) any other areas impacted by the historic operations of the former Columbia Smelting and Refining Works facility that are currently owned and/or operated by Respondent. Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips collectively comprise approximately 4.17 acres and are located on Block 581, Lot 1 of the Tax Map of Kings County, New York, bordered on the north by Lorraine Street, on the east by Henry Street, on the south by Bay Street and on the west by Hicks Street. Ball Field 9 and the Ball Field 9 Planting Strips collectively comprise approximately 3.4 acres, and are bordered on the north by Bay Street, on the east by Soccer Field #2, on the south by Halleck Street, and on the west by the track surrounding Soccer Field #3, located generally in the vicinity of Block 614, Lot 300 and Block 602, Lot 1 of the Tax Map of Kings County, New York.

"Site Special Account" shall mean the special account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

"State" shall mean the State of New York.

"Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

"Work" shall mean those activities and obligations Respondent is required to perform under this Settlement Agreement except the implementation of Institutional Controls and those activities required by Section XI (Record Retention).

IV. FINDINGS OF FACT

- 8. The Site is located within the Red Hook Recreation Area in Brooklyn, New York. It is bordered generally by a public housing complex (the Red Hook East Houses) to the north, a community pool and other fields within the Red Hook Recreation Area to the east and south of Ball Fields 5-8 and Ball Field 9, Red Hook Recreation Area Soccer Field 3 to the west of Ball Field 9, and an historic dye manufacturer and residences to the west of Ball Fields 5-8. The Site is depicted in Appendix 1.
- 9. The Site included a facility that was operated by smelting and refining companies, including Columbia Smelting & Refining Works, from the late 1920s through the late 1930s. It included a building which was built in the mid-1920s and demolished in approximately 1940, which was used as a smelting works and refinery. On-site operations included the manufacture of various metals, including white metals and alloys, brass and bronze ingots and other metals containing lead using a secondary smelting process. It is currently understood that the Site was acquired by Respondent at some point between 1935 and 1947, and it has been operated by Respondent as a public park area, including ball fields and soccer fields, since that time.
- 10. In January 2014, NYSDEC referred the Site to EPA to determine whether a removal action was appropriate. Between January 2014 and February 2015, EPA conducted a removal site evaluation for the Site, including a round of soil sampling at Ball Fields 7 and 8, which are downwind of and in close proximity to the historic secondary smelting facility footprint, in October 2014. Analytical results of the soil samples demonstrate that lead, arsenic, antimony, and iron are present at some locations at the Site at levels exceeding the respective EPA Removal Management Levels ("RMLs"). EPA has determined that the pattern of elevated lead levels within the upper foot of soil as well as correlations between the lead, antimony, and tin detections indicate the elevated contaminant levels at the Site are characteristic of secondary lead smelting emissions, and, therefore are attributable to the historic, secondary lead smelting facility formerly located at the Site.
- determine whether the historic smelting facility impacted the remainder of the block that includes Ball Fields 7 and 8 and additional downwind areas. The EPA RML for lead is 400 parts per million ("ppm"). The results indicated the presence of lead at levels exceeding the EPA RML in Ball Fields 5-8 and the surrounding areas. Lead levels in the upper foot of soil on these ball fields are, on average, as follows: 1,580 ppm in the uppermost inch, 2,240 ppm at the one-to-six inch interval below the ground surface, and 2,590 ppm at the six-to-twelve inch depth interval. Antimony, arsenic, cobalt, iron, and thallium were also found at levels exceeding the respective EPA RMLs in the same geographic areas. EPA has determined that the correlations between lead, antimony, and tin detections in this area indicate that the elevated contaminant levels are attributable to the historic, secondary lead smelting facility that was located at the Site.
- 12. Based on these findings, on April 8, 2015, EPA recommended closure of and restriction of public access to Ball Fields 5-8 and all nearby grassy areas until such time that a removal action could be completed to address contaminants in this area properly. On April 13,

2015, Respondent voluntarily agreed to undertake this action, and Respondent notified park users of the field closures by April 22, 2015. Public access to all grassy areas on Block 581, Lot 1 is currently prohibited, and access is prevented by fencing.

- 13. In April 2015, EPA conducted a third round of soil sampling in additional areas of the Red Hook Recreation Area to further delineate the aerial extent of the elevated contaminant levels that are associated with the historic, secondary lead smelting facility. Results of that sampling indicate the presence of antimony, arsenic, iron, and lead at levels above the respective EPA RMLs in Ball Field 9 and the Ball Field 9 Planting Strips at depths greater than six inches below the ground surface. Based on the correlations between antimony, lead, and tin, EPA has determined that these contaminants are attributable to the historic, secondary lead smelting facility that was located at the Site.
- 14. The chemicals identified above, with the exception of iron, are "hazardous substances" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14). Exposure to lead can cause damage to the nervous system, leading to cognitive deficits and/or disabilities in children or an increase in blood pressure in adults. Exposure to antimony may cause adverse health effects to the lungs, heart, liver and/or kidneys. Exposure to arsenic can cause damage to the throat, lungs, skin, and/or circulatory system. In addition, EPA has determined that lead is a probable human carcinogen and arsenic is a known human carcinogen.
- An exposure pathway for direct contact with the elevated levels of the hazardous 15. substances at the Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips could arise that would present an unacceptable risk to public health. If the grassy areas on and surrounding Ball Fields 5-8 are not properly maintained, it could result in a reduced grass cover and/or areas containing bare soil. Aeration of the soil or removal of weeds during maintenance may pull subsurface contaminated soil to the surface and distribute it over the outfields and other nearby grassy areas or the surrounding sidewalks, where it may become available for direct contact. While this area was actively maintained to prevent exposures and is currently closed off to the public, if it were to remain in use without proper maintenance, an exposure pathway would arise. If trespassing were to occur or the fields or Planting Strips otherwise became accessible to the public, direct contact with contaminated soil may occur. Contaminated soil may be ingested or adhere to footwear, skin or clothing, and may be tracked off the fields or surrounding grassy areas. In addition, during maintenance activities, or because of a lack of maintenance resulting in the presence of bare soil, contaminated soil may become disturbed and become available for inhalation or may migrate into publicly accessible areas via storm water.
- 16. Although sampling results from Ball Field 9 and the Ball Field 9 Planting Strips indicate that elevated contaminant levels are present only at depths greater than six inches below the ground surface in these areas, an exposure pathway to the contaminated subsurface soil is possible. If these areas were to be significantly disturbed, excavated, or were allowed to become worn down over the years through routine heavy usage of the fields, vandalism, large public events, natural disasters or aeration conducted during maintenance, direct contact with the elevated contaminant levels in the subsurface could occur. In the event that these circumstances were not properly addressed, contaminated soil that could potentially be brought up from the

6

subsurface could be ingested or adhere to baseball cleats, other footwear, skin or clothing, and could be tracked or carried off the field. Once at the surface, contaminated soil could be further disturbed through the typical heavy usage of the field or by maintenance activities, and could potentially become airborne and available for inhalation or may migrate onto the adjacent walkways via storm water.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

- 17. Based on the Findings of Fact set forth above, and the administrative record, EPA has determined that:
- a. The Columbia Smelting and Refining Works Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is liable for performance of a response action and for response costs incurred and to be incurred at the Site.
- e. Respondent is the "owner" and/or "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).
- f. The conditions described in Paragraphs 10, 11, and 13 of the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- g. The conditions described in Paragraphs 15 and 16 of the Findings of Fact above may constitute an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from the facility within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- h. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

18. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the administrative record, it is hereby ordered and agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

- 19. Respondent shall retain one or more contractors to perform the Work. Respondent has proposed, and EPA has approved, the use of TRC Engineers, Inc. for the Work to be performed under this Settlement Agreement. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s), including those which may be proposed to replace the contractor approved by EPA in this paragraph. In the case of replacement of TRC Engineers, Inc., Respondent shall make such notification at least 30 days prior to the anticipated date of replacement, and in the case of replacement of subcontractor(s) or other contractors retained to perform the Work, at least ten days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondent, including contractors proposed to replace TRC Engineers, Inc. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 14 days after EPA's disapproval. The contractor proposed by Respondent must be able to demonstrate compliance with ANSI/ASQC E-4-2004, "Quality Systems for Environmental Data and Technology Programs: Requirements with Guidance for Use" (American National Standard), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B0-1/002, March 2001, reissued May 2006), or equivalent documentation as required by EPA.
- 20. Respondent has designated, and EPA has approved, Mary Salig of the New York City Department of Parks and Recreation as Respondents' Project Coordinator for the Work required under this Settlement Agreement. The Project Coordinator shall be responsible for administration of all actions by Respondent required by this Settlement Agreement, and shall be responsible for oversight of Respondent's implementation of this Settlement Agreement. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. The Project Coordinator shall be knowledgeable at all times about all matters relating to the Work being performed under this Settlement Agreement. Respondents shall ensure that all Work requiring certification by a professional engineer licensed in the State of New York shall be reviewed and certified by such. If a different Project Coordinator is proposed at any time during the Work, EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall designate a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within seven days following EPA's disapproval. Notice or

communication relating to this Settlement Agreement from EPA to Respondent's Project Coordinator shall constitute notice or communication to Respondent.

- 21. EPA has designated Margaret Gregor of the Emergency and Remedial Response Division, Region 2, as its On-Scene Coordinator ("OSC"). EPA and Respondent shall have the right, subject to Paragraph 19, to change their respective designated OSC or Project Coordinator. Respondent shall notify EPA seven days before such a change is made.
- 22. The OSC shall be responsible for overseeing Respondent's implementation of this Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

VIII. WORK TO BE PERFORMED

- 23. Respondent shall perform, at a minimum, all actions necessary to implement the Work as set forth and described in this Section. The actions to be implemented generally include, but are not limited to, the following:
- a. Continue to prohibit public access to Ball Fields 5-8 and the surrounding Planting Strips until such time as the removal action described herein is completed, including access restriction with fencing, a physical cover, or other means to eliminate public exposure to the unpaved areas, and maintain these controls until removal action completion to ensure continued protectiveness;
- b. Provide signage, legible from the street and including contact information, regarding the closure of Ball Fields 5-8 at all entrances to Ball Fields 5-8, until such time that the removal action described herein is completed, and maintain signage until removal action completion to ensure continued protectiveness;
- c. Maintain an adequate vegetative cover over all grassy areas of Ball Fields 5-8 and Ball Field 9 and the surrounding Planting Strips until the removal action described herein is completed to reduce the presence of bare soil in these areas and therefore reduce the potential for exposure to contaminants as well as migration of contaminants via air or storm water runoff.
- d. For Ball Fields 5-8, the Ball Fields 5-8 Planting Strips, Ball Field 9 and the Ball Field 9 Planting Strips, place a permeable demarcation layer over the contaminated soil and provide at least a 12-inch cover of clean soil, fill or other material approved by EPA that meets the requirements of 6 NYCRR 375-6.7(d) and the substantive requirements of NYSDEC Technical Guidance for Site Investigation and Remediation (DER-10) 5.4(e). Where it is anticipated that such cover in the Planting Strips will damage the existing trees or adversely affect survival of trees, an alternate methodology to eliminate exposure to soil contaminants

within the upper 12 inches of soil may be proposed by Respondent for approval by EPA within the Interim Design Plans discussed in Paragraphs 26.d and 26.e;

- e. Restore the Site to park usage following completion of the response action pursuant to Paragraph 23.d at the Site; and
- f. Participate with EPA, as requested, in communications with elected officials, park users, community groups, and the general public regarding the planning, implementation, and completion of the above items.
- 24. Respondent further agrees to establish Institutional Control(s) for the Site, as determined by NYSDEC and EPA, and under NYSDEC oversight to prevent future exposure to Site-related hazardous substances that are left in place at the Site, including, but not limited to, a Declaration of Covenants and Restrictions, which cannot be altered without prior NYSDEC approval, for each parcel at the Site. These ICs shall be documented in a NYSDEC-approved Site Management Plan. Respondent agrees to implement the Site Management Plan and ICs at the time of construction completion for each parcel subject to this Settlement Agreement. Respondent shall provide EPA with documentation of all IC commitments.
- 25. For any regulation or guidance referenced in this Settlement Agreement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.

26. Work Plan and Implementation.

- a. Within the time frames specified in this Settlement Agreement, in accordance with Paragraph 27 (Submission of Deliverables), Respondent shall submit to EPA for approval the following documents which, collectively, will constitute a work plan for performing the removal action (the "Removal Action Work Plan") generally described in Paragraph 23 above. The Removal Action Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement Agreement, CERCLA, the NCP, EPA's relevant guidance documents, and other applicable Federal and State laws and regulations.
 - (1) Project Management Plan for Ball Fields 5-8;
 - (2) Project Management Plan for Ball Field 9;
 - (3) Interim Design Plan for Ball Fields 5-8 and the Ball Fields 5-8

Planting Strips;

(4) Interim Design Plan for Ball Field 9 and the Ball Field 9 Planting

Strips;

- (5) Design and Implementation Plan for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips;
- (6) Construction Plan for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips;
- (7) Design and Implementation Plan for Ball Field 9 and the Ball Field 9 Planting Strips; and
- (8) Construction Plan for Ball Field 9 and the Ball Field 9 Planting Strips.
- b. Within 60 days of the Effective Date of this Settlement Agreement, Respondent shall submit a Project Management Plan which sets forth a management structure for all Work at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including, but not limited to, identification of Respondent's key personnel, contractors and overall project teams for the implementation of each component of the Removal Action Work Plan and the associated responsibilities for each person or group. This plan may identify different management structures for different components of the Work required by this Settlement Agreement (e.g., the design work, on-site removal of Site features, installation of the required depth of soil and reinstallation of utilities and park features, and completion of the Final Report). If portions of the Work will involve contractors and subcontractors that are not retained within 30 days of the Effective Date and/or if additional roles are added during performance of the Work, provide updates to the Project Management Plan within seven days of retention of each contractor or assignment of the additional role.
- c. Within 365 days of EPA approval of the Project Management Plan for Ball Fields 5-8 (Paragraph 26.b), Respondent shall submit a Project Management Plan which sets forth a management structure for all Work at Ball Field 9 and the Ball Field 9 Planting Strips, including, but not limited to, identification of Respondent's key personnel, contractors and overall project teams for the implementation of each component of the Removal Action Work Plan and the associated responsibilities for each person or group. This plan may identify different management structures for different components of the Work required by this Settlement Agreement (e.g., the design work, on-site removal of Site features, installation of the required depth of soil and reinstallation of utilities and park features, and completion of the Final Report). If portions of the Work will involve contractors and subcontractors that are not retained within 30 days of the Effective Date and/or if additional roles are added during performance of the Work, provide updates to the Project Management Plan within seven days of retention of each contractor or assignment of the additional role.
- d. Respondent shall submit the Interim Design Plan for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips in accordance with the schedule provided below, which will include, but not be limited to:

- (1) within seven days of the Effective Date, a description of the actions which have been and will continue to be taken to achieve the required work pursuant to Paragraphs 23.a, 23.b and 23.c, inspection and maintenance schedules for these three items, a template for an inspection report with a maintenance checklist for these three items to be submitted to EPA on no less than a monthly basis, and a contingency plan to be enacted following a change in Site conditions or significant disturbance as discussed in Paragraph 52;
- (2) within 90 days of the Effective Date, a general proposal for the methodology to achieve the response action described in Paragraph 23.d associated with Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including preliminary plans, drawings, and sketches of the overall design, designation of staging areas to be utilized during construction, and a discussion of planned provisions for Site security, traffic control, and environmental monitoring; and
- (3) within 90 days of the Effective Date, a general schedule for completion of all activities within the Removal Action Work Plan associated with Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including time frames for the completion of all design work and construction drawings, retention of a construction contractor, Site setup/mobilization of personnel and equipment, all on-site construction work including Site restoration, and finalization of the Site Management Plan in support of the Institutional Controls.
- e. Within 365 days of EPA approval of the Interim Design Plan for Ball Fields 5-8 (Paragraph 26.d), Respondent shall submit the Interim Design Plan for Ball Field 9 and the Ball Field 9 Planting Strips, which shall include, but not be limited to:
- (1) a general proposal for the methodology to achieve the response action described in Paragraph 23.d associated with Ball Field 9 and the Ball Field 9 Planting Strips, including preliminary plans, drawings, and sketches of the overall design, designation of staging areas to be utilized during construction, and a discussion of planned provisions for Site security, traffic control, and environmental monitoring; and
- (2) a general schedule for completion of all activities within the Removal Action Work Plan associated with Ball Field 9 and the Ball Field 9 Planting Strips, including time frames for the completion of all design work and construction drawings, retention of a construction contractor, Site setup/mobilization of personnel and equipment, all on-site construction work including Site restoration, and finalization of the Site Management Plan in support of the Institutional Controls.
- f. Within 240 days of EPA approval of the Interim Design Plan for Ball Fields 5-8 (Paragraph 26.d), Respondent shall submit a Design and Implementation Plan which details the design for the removal action and planned logistics for all on-site work for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including, but not limited to:
- (1) the required specifications for all on-site construction work, and identification of and methodology for complying with applicable regulatory requirements;

- (2) a design, including detailed plans and drawings, for achieving the response action set forth in Paragraph 23.d herein at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips. The design should specify compaction requirements necessary to achieve this response action;
- (3) a design, including detailed plans and drawings, for restoration of all areas subject to or affected by the Work at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips, including detailed storm water management plans;
- (4) a construction quality assurance/quality control ("QA/QC") plan that details the approach to quality assurance during construction activities at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips, including inspection and certification of the construction, measurement, and daily logging;
- (5) a detailed schedule for all construction activities, including time frames for the mobilization of all equipment and personnel, the initiation of field work, and all demolition, construction, and Site restoration activities at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips;
- (6) an equipment and materials staging plan, including a list of all equipment and materials to be staged, a schedule for staging of equipment and materials, detailed plans and drawings, and a discussion of and schedule for any permitting requirements;
- (7) procedures and plans for the decontamination of equipment and the disposal of contaminated materials;
- (8) a plan for providing security of all areas that are subject to or affected by the Work at Ball Fields 5-8 and Ball Fields 5-8 Planting Strips, including, but not limited to, measures to be taken to keep unauthorized personnel from entering restricted work areas for the duration of the Work;
 - (9) a Traffic Control Plan, including any permitting requirements;
- (10) an Environmental Monitoring Plan, to include a discussion of community air monitoring and Site safety monitoring; and
- (11) a Transport and Disposal Plan, which includes the planned frequency and estimated quantity of waste that will be generated during performance of the Work, the valid RCRA transporter and disposal identification numbers for each proposed transporter and disposal facility, the date of the most recent State or EPA regulatory inspection of each proposed disposal facility, and any special provisions or conditions attached to the RCRA disposal permits as a result of the most recent inspection, and documentation of the current permit status of proposed transporters and disposal facilities.
- g. Within 300 days of EPA approval of the Design and Implementation Plan for Ball Fields 5-8 (Paragraph 26.f), Respondent shall submit a Construction Plan for Ball Fields

5-8 and the Ball Fields 5-8 Planting Strips which details the construction plans for the removal action and logistics for all on-site work for Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including, but not limited to, the documents identified in Paragraphs 26.f(4) through 26.f(11).

- h. Within 240 days of EPA approval of the Interim Design Plan for Ball Field 9 (Paragraph 26.e), Respondent shall submit a Design and Implementation Plan for Ball Field 9 and the Ball Field 9 Planting Strips which details the design for the removal action and planned logistics for all on-site work for Ball Field 9 and Ball Field 9 Planting Strips. These documents shall include all of the documents identified in Paragraph 26.f(1) through 26.f(11) herein for the Work at Ball Field 9 and the Ball Field 9 Planting Strips.
- i. Within 390 days of EPA approval of the Design and Implementation Plan for Ball Field 9 (Paragraph 26.h), Respondent shall submit a Construction Plan for Ball Field 9 and the Ball Field 9 Planting Strips which details the construction plans for the removal action and logistics for all on-site work for Ball Field 9 and the Ball Field 9 Planting Strips, including, but not limited to the documents identified in Paragraphs 26.f(4) through 26.f(11) for Ball Field 9 and the Ball Field 9 Planting Strips.
- j. EPA may approve, disapprove, require revisions to, or modify the draft Removal Action Work Plan in whole or in part as set forth in Paragraphs 27.a(2) and 27.a(3). Respondent shall implement the Removal Action Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Removal Action Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.
- k. Upon approval or approval with modifications of the Removal Action Work Plan, Respondent shall commence implementation of the Work in accordance with the schedule included therein. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement.
- 1. Unless otherwise provided in this Settlement Agreement, any additional deliverables that require EPA approval under the Removal Action Work Plan shall be reviewed and approved by EPA in accordance with this Paragraph.

27. Submission of Deliverables.

a. <u>General Requirements for Deliverables.</u>

(1) Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required under this Settlement Agreement to Margaret Gregor, On Scene Coordinator, Emergency Remedial and Response Division, 2890 Woodbridge Avenue, MS-211, Edison, New Jersey, 08837, phone: 732-321-4424, email: Gregor.margaret@epa.gov. Respondent shall submit all deliverables required by this Settlement

Agreement, the Removal Action Work Plan, or any approved work plan to EPA in accordance with the schedule set forth in such plan.

- (2) <u>Initial Submissions</u>. Upon receipt by EPA of any plan, report, or other deliverable that is required to be submitted for approval pursuant to this Settlement Agreement, EPA shall either (i) approve the submission; (ii) approve the submission with specified conditions; (iii) disapprove the submission, or (iv) any combination of the foregoing. EPA may elect to modify an initial submission to cure deficiencies in the submission if EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work or if one or more previous submission(s) have been disapproved because of material defects and the deficiencies in the initial submission in question indicate a bad faith lack of effort to submit an acceptable plan, report, or deliverable.
- (3) Resubmissions. Upon receipt of a notice of disapproval or if required by a notice of approval with specified conditions as described in Paragraph 27.a(2), Respondent shall, within fourteen days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or deliverable for approval. After review of the resubmitted plan, report, or other deliverable, EPA may (a) approve the resubmission; (b) approve the resubmission with specified conditions; (c) disapprove the resubmission requiring Respondent to correct the deficiencies; (c) modify the resubmission; or (e) any combination of the foregoing. If any initially submitted or resubmitted plan, report, or other deliverable contains a material defect, and it is disapproved or requires modification by EPA as a result of the material defect, this may constitute a lack of compliance under this Settlement Agreement. The provisions of Section XVII (Stipulated Penalties) shall govern the accrual and payment of any stipulated penalties regarding Respondent's submissions under this Section.
- (4) <u>Implementation</u>. Upon approval, approval with conditions, or modification by EPA of any plan, report, or other deliverable, or any portion thereof, such plan, report, or other deliverable shall be incorporated into and enforceable under this Settlement Agreement. The implementation of any non-deficient portion of a plan, report, or other deliverable approved by EPA shall not relieve Respondent of any liability for stipulated penalties under Section XVII (Stipulated Penalties) for the deficient portions. EPA shall be the final arbiter in any dispute regarding the sufficiency or acceptability of any document submitted, any approval, approval with conditions, or modification by EPA of any plan, report, or other deliverable, and all activities performed pursuant to this Settlement Agreement with the exception of those items specifically subject to the procedures in Section XV (Dispute Resolution).
- (5) Respondent shall submit all deliverables in electronic form. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", Respondent shall also provide EPA with paper copies of such exhibits.

b. <u>Technical Specifications for Deliverables</u>.

- (1) Sampling and monitoring data should be submitted in a manner that is consistent with the Region 2 Electronic Data Deliverable ("EDD") format (information available at http://www.epa.gov/superfund/region-2-superfund-electronic-data-submission). Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.
- (2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (a) in the Environmental Systems Research Institute ("ESRI") File Geodatabase; and (b) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee ("FGDC") Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor, complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/.
- (3) Each file must include an attribute name for each site unit or subunit submitted. Consult http://www.epa.gov/geospatial/policies.html for any further available guidance on attribute identification and naming.
- (4) Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of the Site.

28. Health and Safety Plan.

- a. Within the time frames specified below, Respondent shall submit for EPA review and comment plans that ensure the protection of the public health and safety during performance of Work under this Settlement Agreement. Provide a Health and Safety Plan for each phase of the Work, including:
- (1) all pre-construction activities at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips, including the interim action pursuant to Paragraphs 23.a through 23.c as well as all design work for these areas within 60 days after the Effective Date;
- (2) all construction activities related to the removal action at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips within 270 days of EPA approval of the Design and Implementation Plan for Ball Fields 5-8 and the Ball Field 5-8 Planting Strips (Paragraph 26.f).; and
- (3) all pre-construction activities at Ball Field 9 and the Ball Field 9 Planting Strips within 365 days of EPA approval of the Health and Safety Plan for pre-

construction activities at Ball Fields 5-8 and the Ball Fields 5-8 Planting Strips (Paragraph 28.a(1));

- (4) all construction activities related to the removal action at Ball Field 9 and the Ball Field 9 Planting Strips within 420 days of EPA approval of the Design and Implementation Plan for Ball Field 9 (Paragraph 26.h).
- b. All Health and Safety Plans shall be prepared in accordance with "OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities," Pub. 9285.0-OlC (Nov. 2002), available on the NSCEP database at http://www.epa.gov/nscep/index.html, and "EPA's Emergency Responder Health and Safety Manual," OSWER Directive 9285.3-12 (July 2005 and updates), available at http://www.epaosc.org/ HealthSafetyManual/manual-index.htm. In addition, the plans shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. The plans shall also include contingency planning in the event of a hurricane or flood, as well as an evacuation plan. Respondent shall incorporate all changes to the plans recommended by EPA and shall implement the plan during the pendency of the removal action.

29. Quality Assurance, Sampling, and Data Analysis.

- a. Respondent shall use QA/QC and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" (EPA/240/B-01/003, March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/240/R-02/009, December 2002), and subsequent amendments to such guidelines upon notification by EPA to Respondent of such amendment. Amended guidelines shall apply only to procedures conducted after such notification.
- Prior to the commencement of any monitoring project under this Settlement Agreement, Respondent shall submit to EPA for approval a Quality Assurance Project Plan ("QAPP") that is consistent with the Removal Action Work Plan, the NCP, the Uniform Federal Policy for Implementing Quality Systems ("UFP-QS"), EPA-505-F-03-001, March 2005; Uniform Federal Policy for Quality Assurance Project Plans ("UFP-QAPP"), Parts 1, 2, and 3, EPA-505-B-04-900A, B, and C, March 2005 and March 2012 or newer, and other guidance documents referenced in the aforementioned guidance documents as well as http://www2.epa.gov/fedfac/assuring-quality-federal-cleanups. Respondent shall ensure that EPA personnel and its authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondent in implementing this Settlement Agreement. In addition, Respondent shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QAPP for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with "EPA QA Field Activities Procedure" (https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures). Respondent shall ensure that the laboratories it utilizes for the analysis of samples taken pursuant to this Settlement

Agreement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions" (http://www.epa.gov/fem/pdfs/fem-labcompetency-policy.pdf) and that the laboratories perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (http://www.epa.gov/superfund/programs/clp/), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (http://www.epa.gov/epawaste/hazard/testmethods/sw846/online/index.htm), "Standard Methods for the Examination of Water and Wastewater" (http://www.standardmethods.org/), 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (http://www.epa.gov/ttnamti1/airtox.html)," and any amendments made thereto during the course of the implementation of this Settlement Agreement. However, upon approval by EPA, Respondent may use other appropriate analytical method(s), as long as (a) QA/QC criteria are contained in the method(s) and the method(s) are included in the QAPP, (b) the analytical method(s) are at least as stringent as the methods listed above, and (c) the method(s) have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc. Respondent shall ensure that all laboratories it uses for analysis of samples taken pursuant to this Settlement Agreement have a documented Quality System that complies with ANSI/ASQC E-4-2004, "Quality Systems for Environmental Data and Technology Programs: Requirements with Guidance for Use" (American National Standard, 2004, and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program, or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs (http://www.epa.gov/fem/accredit.htm) as meeting the Quality System requirements. Respondent shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement Agreement are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

- c. Upon request, Respondent shall provide split or duplicate samples to EPA or its authorized representatives. Respondent shall notify EPA not less than seven days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall provide to Respondent split or duplicate samples of any samples it takes as part of EPA's oversight of Respondent's implementation of the Work.
- d. Respondent shall submit to EPA the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondent with respect to the Site and/or the implementation of this Settlement Agreement.
- e. Respondent waives any objections to any data gathered, generated, or evaluated by EPA or Respondent in the performance or oversight of the Work that has been verified according to the QA/QC procedures required by this Settlement Agreement or any EPA-approved work plans or sampling and analysis plans. If Respondent objects to any other data

relating to the Work, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days after the monthly progress report containing the data.

- 30. Community Involvement Plan. EPA will prepare a Community Involvement Plan, in accordance with EPA guidance and the NCP. If requested by EPA, Respondent shall participate in community involvement activities pursuant to the plan, including participation in (1) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site. Respondent's support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (1) any community advisory groups, (2) any technical assistance grant recipients and their advisors, and (3) other entities to provide them with a reasonable opportunity for review and comment. All community involvement activities conducted by Respondent at EPA's request are subject to EPA's oversight. At EPA's discretion, Respondent shall establish a community information repository at or near the Site to house one copy of the administrative record.
- 31. Post-Removal Site Control. In accordance with the Removal Action Work Plan schedule, or as otherwise directed by EPA, Respondent shall submit a proposal for Post-Removal Site Control which shall include, but not be limited to, a NYSDEC-approved Site Management Plan as discussed in Paragraph 24, to be implemented at the time of construction completion, to prevent exposure to all hazardous substances which are left in place at the Site. This includes scheduled monitoring and maintenance of the removal action at the Site and periodic certification of the effectiveness of all engineering and Institutional Controls which have been, are being, or are planned to be, employed at the Site. Upon EPA approval, Respondent shall conduct Post-Removal Site Control activities until such time as the ICs for the Site are implemented or EPA determines that no further Post-Removal Site Control is necessary. Respondent shall provide EPA with documentation of all Post-Removal Site Control commitments.
- 32. Progress Reports. Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Settlement Agreement on a monthly basis, or as otherwise requested by EPA, from the date of receipt of EPA's approval of the first submittal of the Removal Action Work Plan until issuance of Notice of Completion of Work pursuant to Section XXVII, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and the dates on which they were performed, any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.
- 33. <u>Construction Completion Report</u>. Upon completion of construction required under this Settlement Agreement, Respondents shall submit to EPA a Construction Completion

19

Report for EPA review and approval. This report shall include, but not be limited to, identification of the boundaries subject to the ICs to be implemented at Ball Fields 5-8, the Ball Fields 5-8 Planting Strips, Ball Field 9 and the Ball Field 9 Planting Strips, a metes and bounds description and survey map, a detailed description of removal activities completed in these areas in accordance with this Settlement Agreement, a detailed description of the source and quality of any fill material imported to the Site, a complete description of the Post-Removal Site Controls and ICs to be employed at each parcel, a description of the nature and extent of all contamination left in place on-site, a summary of the aerial and vertical extent of the materials installed as part of the Site cover system, a summary of any excavation conducted on-site including the depth of the excavations, the quantity of waste removed and where it was disposed, and as-built drawings of all features and materials installed at each parcel as part of the Work with survey markers.

34. Final Report. Within 60 days after completion of all Work required by this Settlement Agreement, other than continuing obligations listed in Paragraph 101 (Notice of Completion of Work), Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with this Settlement Agreement, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, a schematic, map or drawing showing the overall Site layout following Site restoration activities, as-built drawings of all structures and utilities installed at the Site during Site restoration activities, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a responsible corporate official of Respondent: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

35. Off-Site Shipments.

a. Respondent may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if that facility is in compliance with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with Section 121(d)(3) of CERCLA and 40 C.F.R. § 300.440 regarding a shipment if Respondent obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b). Respondent may ship Investigation Derived Waste from the Site to an off-Site facility only if Respondent complies

20

with EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992), as amended or modified by EPA.

- b. Respondent may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, it provides written notice to the appropriate state environmental official in the receiving facility's state and to the OSC. This written notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name, location and RCRA identification number of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent also shall notify the state environmental official referenced above and the OSC of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondent shall provide the written notice after the award of the contract for the removal action and before the Waste Material is shipped.
- 36. Respondent shall conduct the Work required hereunder in accordance with CERCLA, the NCP, and in addition to guidance documents referenced above, *EPA Region 2's* "Clean and Green Policy" which may be found at http://www.epa.gov/greenercleanups/epa-region-2-clean-and-green-policy.

IX. PROPERTY REQUIREMENTS

- 37. Agreements Regarding Access and Non-Interference. Respondent shall provide EPA and its designated representatives with access to the Site. With respect to any portion of the Site that is not owned by Respondent and to which access is required to perform the Work under this Settlement Agreement, Respondent shall use best efforts to secure an agreement for access to such property, enforceable by Respondent and EPA. Any such agreement shall provide EPA, NYSDEC, Respondent, and their representatives, contractors, and subcontractors with access at all reasonable times to said property to conduct any activity required under this Settlement Agreement, including those activities listed in Paragraph 37.a (Access Requirements), within the time frames specified in the Design and Implementation Plan. Respondent shall refrain from using the Site in any manner that EPA determines will pose an unacceptable risk to human health or to the environment because of exposure to Waste Material, or interfere with or adversely affect the implementation, integrity, or protectiveness of this removal action, including the restrictions listed in Paragraph 37.b (Land, Water, or Other Resource Use Restrictions).
- a. <u>Access Requirements</u>. The following is a list of activities for which access is required at the Site:
 - (1) Monitoring the Work;
 - (2) Verifying any data or information submitted to EPA;
 - (3) Conducting investigations regarding contamination at or near the

Site;

- (4) Obtaining samples;
- (5) Assessing the need for, planning, implementing, or monitoring response actions;
- (6) Assessing implementation of QA/QC practices as defined in the approved construction QA/QC plan as provided in the Removal Action Work Plan and as defined in the approved QAPP;
- (7) Implementing the Work pursuant to the conditions set forth in Paragraph 79 (Work Takeover);
- (8) Inspecting and copying records, files, photographs, documents, sampling and monitoring data, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section X (Access to Information);
- (9) Assessing Respondent's compliance with this Settlement Agreement;
- (10) Determining whether the Site is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under this Settlement Agreement; and
- (11) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Site.
- b. <u>Land, Water, or Other Resource use Restrictions</u>. The following is a list of land, water, or other resource use restrictions applicable to the Site during the Work:
 - (1) Prohibiting use of contaminated groundwater;
- (2) Prohibiting the following activities which could result in exposure to contaminants in subsurface soils: moving vehicles, equipment, or materials off-site which were in contact with on-site soils without first decontaminating these items, proceeding with on-site Work without implementing dust control and environmental monitoring measures as specified within the Removal Action Work Plan, and allowing unauthorized personnel at the Site during construction work;
- (3) Ensuring that any new structures at the Site will not be constructed in a manner which could interfere with the removal action; and
- (4) Ensuring that any new structures on the Site will be constructed in a manner which will minimize potential risk of inhalation of contaminants: antimony, arsenic, cobalt, iron, lead and thallium.

- 38. Best Efforts. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance to secure access and use restriction agreements. If Respondent is unable to accomplish what is required through "best efforts" in a timely manner, Respondent shall notify EPA and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access and/or use restrictions, as applicable. All costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time, constitute Future Response Costs to be reimbursed under Section XIV (Payment of Future Response Costs).
- 39. Respondent shall not Transfer its Site unless it has: (a) first secured EPA's approval of, and transferee's consent to, an agreement that: (i) is enforceable by EPA; and (ii) requires the transferee to provide access to and refrain from using the Site to the same extent as is provided under Paragraphs 37.a and 37.b; and (b) implemented and recorded, as appropriate, all necessary Institutional Controls.
- 40. Respondent shall cooperate with EPA's and the State's efforts to secure and ensure compliance with such Institutional Controls.
- 41. In the event of any Transfer of the Site, unless the United States otherwise consents in writing, Respondent shall continue to comply with its obligations under this Settlement Agreement, including its obligation to secure access and ensure compliance with any land, water, or other resource use restrictions regarding the Site, and to implement, maintain, monitor, and report on Institutional Controls.

42. Notice to Successors-in-Title.

- a. Respondent shall, prior to entering into a contract to Transfer the Site, or 60 days prior to Transferring the Site, whichever is earlier:
- (1) Notify the proposed transferee that EPA has selected a removal action regarding the Site, that it has entered into this Settlement Agreement requiring implementation of such removal action, (identifying the name, docket number, and the effective date of this Settlement Agreement); and
- (2) Notify EPA and the State of the name and address of the proposed transferee and provide EPA and the State with a copy of the above notice that it provided to the proposed transferee.
- 43. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its rights to require land, water, or other resource use restrictions, and Institutional Controls, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

X. ACCESS TO INFORMATION

44. Respondent shall provide to EPA, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Respondent's possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of the Work under this Settlement Agreement within a period of three days from EPA's request unless an alternate time frame is proposed by Respondent and approved by EPA, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

45. Privileged and Protected Claims.

- a. Respondent may assert that all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondent complies with Paragraph 45.b, and except as provided in Paragraph 45.c.
- b. If Respondent asserts such a privilege or protection, it shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide the Record to EPA in redacted form to mask the privileged or protected portion only. Respondent shall retain all Records that it claims to be privileged or protected until EPA has had a reasonable opportunity to contest the privilege or protection claim and until any such claim has been resolved in Respondent's favor.
- c. Respondent may make no claim of privilege or protection regarding the following: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, engineering, or transport and disposal data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondent is required to create or generate pursuant to this Settlement Agreement.
- 46. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XI. RECORD RETENTION

47. Until ten years after EPA provides Respondent with notice, pursuant to Section XXVII (Notice of Completion of Work), that all Work has been fully performed in accordance with this Settlement Agreement, Respondent shall preserve and retain all non-identical copies of

Records (including Records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to its or any other party's liability under CERCLA with regard to the Site. Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work, provided, however, that Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

- 48. At the conclusion of the document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such Records, and, upon request by EPA, and except as provided in Paragraph 45 (Privileged and Protected Claims), Respondent shall deliver any such Records or copies thereof to EPA.
- 49. Respondent certifies that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site.

XII. COMPLIANCE WITH OTHER LAWS

- 50. Nothing in this Settlement Agreement limits Respondent's obligations to comply with the requirements of all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondent shall identify ARARs in the Removal Action Work Plan, subject to EPA approval.
- 51. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination, in very close proximity to the contamination, and in and adjacent to equipment and material staging areas utilized in association with the Work and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondent may seek relief under the provisions of Section XVI (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that it has submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

- 52. Emergency Response. If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, including a disturbance or a disruption of the Site or other change in Site conditions which may result in exposure to soil containing elevated contaminant levels, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such release, threat of release, and/or potential for exposure. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan. Respondent shall also immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer through the National Response Center at (800) 424-8802 of the incident or Site conditions, and provide a plan and schedule for the appropriate assessment and/or response actions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, such costs shall constitute Future Response Costs, and Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XIV (Payment of Future Response Costs).
- 53. Release Reporting. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer through the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within seven days after any such release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

XIV. PAYMENT OF FUTURE RESPONSE COSTS

- 54. <u>Payments of Future Response Costs</u>. Respondent shall pay to EPA all Future Response Costs not inconsistent with the NCP pursuant to the instructions in Paragraph 55.
- a. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a SCORPIOS Report, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice. Respondent shall make all payments within 30 days after Respondent's receipt of each bill requiring payment, except as otherwise provided in Paragraph 57 (Contesting Future Response Costs), and in accordance with Paragraph 55. (Method of Payment).
- b. <u>Deposit of Future Response Costs Payments</u>. The total amount to be paid by Respondent pursuant to Paragraph 54.a shall be deposited by EPA in the Site Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that

EPA may deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the Site Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site. Any decision by EPA to deposit a Future Response Cost payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondent.

55. <u>Method of Payment</u>. All payments to EPA under this Settlement Agreement shall be made by Fedwire Electronic Funds Transfer to:

Federal Reserve Bank of New York

ABA = 021030004

Account = 68010727

SWIFT address = FRNYUS33

33 Liberty Street

New York, NY 10045

Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number A24F and the EPA Index Number CERCLA-02-2016-2010. At the time of payment, Respondent shall send notice that payment has been made to Margaret Gregor and to the EPA Cincinnati Finance Office by email at cinwd_acctsreceivable@epa.gov, or by mail to:

EPA Cincinnati Finance Office 26 W. Martin Luther King Drive Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number A24F and the EPA docket number for this action.

- 56. <u>Interest</u>. In the event that any payment for Future Response Costs is not made by the date required, Respondent shall pay Interest on the unpaid balance. The Interest on all Future Response Costs shall begin to accrue on the date of the bill transmitted pursuant to Paragraph 55. The Interest shall accrue through the date of Respondent's payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including, but not limited to, payment of stipulated penalties pursuant to Paragraph 66 (Stipulated Penalties Work).
- 57. <u>Contesting Future Response Costs</u>. Respondent may submit a Notice of Dispute, initiating the procedures of Section XV (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 54 if it determines that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with

a specific provision or provisions of the NCP. Such Notice of Dispute shall be submitted in writing within 30 days after receipt of the bill and must be sent to the OSC. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If Respondent submits a Notice of Dispute, Respondent shall within the 30-day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 54. Simultaneously, Respondent shall establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation, and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within 5 days after the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 54. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in the manner described in Paragraph 54. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XV. DISPUTE RESOLUTION

- 58. The dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under the following Sections of this Settlement Agreement: Paragraph 57 of Section XIV (Payment of Future Response Costs); Section XVII (Stipulated Penalties); and Paragraph 79 (Work Takeover). The Parties shall attempt to resolve any disagreements concerning these Sections of this Settlement Agreement expeditiously and informally.
- 59. Informal Dispute Resolution. If Respondent objects to any EPA action taken pursuant to Paragraph 57 of Section XIV (Payment of Future Response Costs), Section XVII (Stipulated Penalties), or Paragraph 79 (Work Takeover), it shall send EPA a written Notice of Dispute describing the objection(s). For disputes regarding Section XVII (Stipulated Penalties), or Paragraph 79 (Work Takeover), any such Notice of Dispute shall be sent within 10 days after such action. For disputes regarding Paragraph 57 of Section XIV (Payment of Future Response Costs), any Notice of Dispute shall be submitted in writing within 30 days after receipt of a bill. EPA and Respondent shall have 14 days from EPA's receipt of Respondent's Notice of Dispute to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement.

28

- 60. Formal Dispute Resolution. If the Parties are unable to reach an agreement within the Negotiation Period, Respondent shall, within 20 days after the end of the Negotiation Period, submit a statement of position to the OSC. EPA may, within 20 days thereafter, submit a statement of position. Thereafter, an EPA management official at the Deputy Division Director level or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.
- 61. Except as provided in Paragraph 57 (Contesting Future Response Costs) or as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondent under this Settlement Agreement. Stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 69. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Settlement Agreement. In the event that Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XVII (Stipulated Penalties).

XVI. FORCE MAJEURE

- 62. "Force Majeure", for purposes of this Settlement Agreement, is defined as any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, including Respondent's contractors, that delays or prevents the performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and to use best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure event such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or increased cost of that performance.
- obligation under this Settlement Agreement for which Respondent intends or may intend to assert a claim of force majeure, Respondent shall notify EPA's OSC orally or, in his or her absence, the alternate EPA OSC, or, in the event both of EPA's designated representatives are unavailable, the Chief of the Removal Action Branch of the Emergency and Remedial Response Division, EPA Region 2, within three days of when Respondent first knew that the event might cause a delay. Within ten days thereafter, Respondent shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure event; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health

29

or welfare, or the environment. Respondent shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure event. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, including Respondent's contractors, knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 62 and whether Respondent has exercised its best efforts under Paragraph 62, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely or complete notices under this Paragraph.

64. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement Agreement that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

XVII. STIPULATED PENALTIES

- 65. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 66 and 67 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVI (Force Majeure). "Compliance" by Respondent shall include completion of all activities and obligations, including payments, required under this Settlement Agreement, or any deliverable approved under this Settlement Agreement, in accordance with all applicable requirements of law, this Settlement Agreement, the Removal Action Work Plan, and any deliverables approved under this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement. Respondent may request, and EPA shall consider, an extension for any milestone provided such request is made five business days prior to the milestone date.
- 66. <u>Stipulated Penalty Amounts Work (Including Payments and Excluding Deliverables).</u>
- a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 66.b:

Period of Noncompliance
1st through 14th day
15th through 30th day

b. <u>Compliance Milestones.</u>

- (1) Submission and, if necessary, revision and resubmission of any plan, report, or other deliverable required by Section VIII (Work to be Performed) or by the Removal Action Work Plan or by any plan that is prepared pursuant to Section VIII or the Removal Action Work Plan and approved by EPA;
- (2) Any deadline imposed by the Removal Action Work Plan or by any plan that is prepared pursuant to Section VIII or the Removal Action Work Plan and approved by EPA;
- (3) Any obligations imposed by Section XIII (Emergency Response and Notification of Releases);
 - (4) Any obligations imposed by Section IX (Property Requirements)
- (5) Permitting split or duplicate samples, quality assurance, and other requirements pursuant to Section VIII (Work to be Performed)
- (6) Designation of Contractors and/or Project Coordinator pursuant to Section VII (Designation of Contractor, Project Coordinator, and On-Scene Coordinator);
- (7) Establishment and maintenance of financial assurance in compliance with the timelines and other substantive and procedural requirements of Section XXV (Financial Assurance);
- (8) Timely notification regarding any delay or anticipated delay, consistent with Section XVI (Force Majeure);
- (9) Indemnification and Insurance Requirements set forth in Section XXIII (Indemnification) and Section XXIV (Insurance);
- (10) Timely submission of written notification of any off-site shipments of Waste Material from the Site to an out-of-state waste management facility pursuant to Paragraph 35;
- (11) Submission of documents and other information in accordance with X (Access to Information);
- (12) Payments required by Section XIV (Payment of Future Response Costs);
- (13) Performance of the Work in accordance with the Removal Action Work Plan or by any plan that is prepared pursuant to Section VIII and approved by EPA; and

- (14) Establishment of escrow accounts, if necessary, to hold contested Future Response Costs pursuant to the process set forth in Paragraph 57.
- 67. <u>Stipulated Penalty Amounts Deliverables</u>. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate deliverables other than those specifically listed above in Paragraph 66, pursuant to this Settlement Agreement:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 750	1st through 14th day
\$1,500	15th through 30th day
\$3,000	31st day and beyond

- 68. In the event that EPA assumes performance of all or any portion(s) of the Work pursuant to Paragraph 79 (Work Takeover), Respondent shall be liable for a stipulated penalty in the amount of \$5 million. Stipulated penalties under this Paragraph are in addition to the remedies available to EPA under Paragraphs 79 (Work Takeover) and Section XXV (Financial Assurance).
- 69. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Paragraph 26 (Work Plan and Implementation), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (b) with respect to a decision by the EPA Management Official at the Deputy Director level or higher, under Paragraph 60 (Formal Dispute Resolution), during the period, if any, beginning the 21st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within 15 days after the agreement or the receipt of EPA's decision.
- 70. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may provide Respondent with written notification of the failure and describe the noncompliance. EPA may send Respondent a written demand for payment of the penalties. Penalties shall accrue as provided in and consistent with the preceding Paragraph regardless of whether EPA has notified Respondent of a violation, however, any obligation to pay any penalties that may be assessed does not arise until notice of the failure and the description of the noncompliance have been provided by EPA.
- 71. All penalties accruing under this Section shall be due and payable to EPA within 30 days after Respondent's receipt from EPA of a demand for payment of the penalties. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 54 (Payments of Future Response Costs).

- 72. If Respondent fails to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.
- 73. The payment of penalties and Interest, if any, shall not alter in any way Respondent's obligation to complete the performance of the Work required under this Settlement Agreement.
- 74. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided however, that EPA shall not seek civil penalties pursuant to Section 106(b) or Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement Agreement, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 79 (Work Takeover).
- 75. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVIII. COVENANTS BY EPA

76. Except as provided in Section XIX (Reservations of Rights by EPA), EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement Agreement. These covenants extend only to Respondent and do not extend to any other person.

XIX. RESERVATIONS OF RIGHTS BY EPA

77. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

- 78. The covenants set forth in Section XVIII (Covenants by EPA) do not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:
- a. liability for failure by Respondent to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition of Future Response Costs;
 - c. liability for performance of response actions other than the Work;
 - d. criminal liability;
- e. liability for violations of federal or state law that occur during or after implementation of the Work;
- f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- g. liability arising from the past, present, or future disposal, release, or threat of release of Waste Materials outside of the Site; and
- h. liability for costs to be incurred by the Agency for Toxic Substances and Disease Registry, if determined to be necessary, related to the Site but not paid as Future Response Costs under this Settlement Agreement.

79. Work Takeover.

- a. In the event EPA determines that Respondent: (1) has ceased implementation of any portion of the Work; (2) is seriously or repeatedly deficient or late in their performance of the Work; or (3) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondent. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondent a period of three days within which to remedy the circumstances giving rise to EPA's issuance of such notice.
- b. If, after expiration of the three-day notice period specified in Paragraph 79.a, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary ("Work Takeover"). EPA will notify Respondent in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 79.b.

c. Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XX. COVENANTS BY RESPONDENT

- 80. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:
- a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund through Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claims under Sections 107 and 113 of CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding the Work, Future Response Costs, or this Settlement Agreement; and
- c. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law.
- 81. Except as provided in Paragraph 84 (Waiver of Claims by Respondent), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to any of the reservations set forth in Section XIX (Reservations of Rights by EPA), other than in Paragraph 78.a (liability for failure to meet a requirement of this Settlement Agreement), 78.d (criminal liability), or 78.e (violations of federal/state law during or after implementation of the Work), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.
- 82. Nothing in this Settlement Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).
- 83. Respondent reserves, and this Settlement Agreement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondent's deliverables or activities.

84. Waiver of Claims by Respondent.

a. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that it may have for all matters relating to the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

b. Exceptions to Waivers.

- (1) The waivers under this Paragraph 84 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person otherwise covered by such waivers if such person asserts a claim or cause of action relating to the Site against Respondent.
- (2) The waiver under Paragraph 84.a shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. § 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site; or if (iii) such person has been convicted of a criminal violation for the conduct to which the waiver would apply and that conviction has not been vitiated on appeal or otherwise.

XXI. OTHER CLAIMS

- 85. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.
- 86. Except as expressly provided in Paragraphs 84 (Waiver of Claims by Respondent) and Section XVIII (Covenants by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or a release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for

costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

87. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXII. EFFECT OF SETTLEMENT/CONTRIBUTION

- 88. Except as provided in Paragraphs 84 (Waiver of Claims by Respondent), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Section XX (Covenants by Respondent), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).
- 89. The Parties agree that this Settlement Agreement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs.
- 90. The Parties further agree that this Settlement Agreement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).
- 91. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement or the Site, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement or the Site, notify EPA in writing within ten days after service of the complaint or claim upon it. In addition, Respondent shall notify EPA within ten days after service or receipt of any Motion for Summary Judgment and within ten days after receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.
- 92. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of the EPA, for injunctive relief, recovery of response costs, or other

relief relating to the Site, Respondent agrees not to assert any defense or claim based on the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the past; provided however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XVIII (Covenants by EPA).

XXIII. INDEMNIFICATION

- 93. The United States does not assume any liability by entering into this Settlement Agreement. Respondent shall indemnify, save, and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, or any persons acting on Respondent's behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. Further, Respondent agrees to pay the United States all costs it incurs, including but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, or any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.
- 94. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 95. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXIV. INSURANCE

96. Respondent is self-insured and represents that it has and will maintain adequate insurance coverage or indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondent pursuant to this Settlement Agreement. For the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all

applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement.

XXV. FINANCIAL ASSURANCE

- 97. Within (30) days of the effective date of this Settlement Agreement, Respondent shall demonstrate its financial ability to complete the Work, initially valued at \$36 million, by submitting to EPA one or more of the following:
- a. Information showing that it has outstanding, rated, general obligation bonds that (i) are not secured by insurance, a letter of credit, or other collateral or guarantee and (ii) have a current rating of Aaa, or Baa as issued by Moody's, or AAA, AA, A, or BBB, as issued by Standard and Poor's on all such general obligation bonds; or
 - b. Such other form of financial insurance as EPA may approve in writing.

XXVI. MODIFICATION

- 98. The OSC may modify any plan or schedule or the Removal Action Work Plan in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but it shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties.
- 99. If Respondent seeks permission to deviate from any approved work plan or schedule or the Removal Action Work Plan, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 98.
- 100. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding any deliverable submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVII. NOTICE OF COMPLETION OF WORK

101. When EPA determines, after EPA's review of the Final Report, that all Work has been fully performed in accordance with this Settlement Agreement (excluding those continuing obligations required by this Settlement Agreement that do not fall within the definition of Work, such as the implementation of Institutional Controls), EPA will provide written notice to Respondent that the Work has been successfully completed. If EPA determines that such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Removal Action Work Plan, as appropriate, in order to correct such deficiencies. Respondent shall

implement the modified and approved Removal Action Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Removal Action Work Plan shall be a violation of this Settlement Agreement.

XXVIII. INTEGRATION/APPENDICES

102. This Settlement Agreement and its appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. "Appendix 1" is the map of the Site and is attached to and incorporated into this Settlement Agreement.

XXIX. EFFECTIVE DATE

103. This Settlement Agreement shall be effective upon receipt of a fully executed copy of this Settlement Agreement by Respondent from EPA.

IT IS SO AGREED AND ORDERED:

July 7, 2016

U.S. ENVIRONMENTAL PROTECTION AGENCY:

Walter E. Mugdan

Director, Emergency and Remedial Response Division U.S. Environmental Protection Agency, Region 2

Signature Page for Settlement Agreement Regarding Columbia Smelting and Refining Works Site

FOR _____

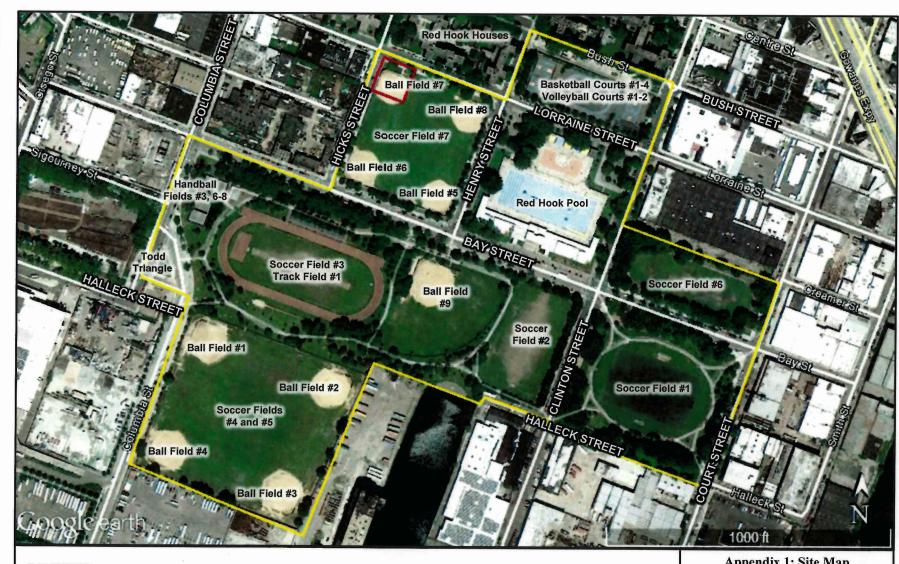
City of New York

Dated

Liam Kavanagh

First Deputy Commissioner

New York City Department of Parks and Recreation



LEGEND

- Approximate Footprint of the Historic Smelter Facility
- Red Hook Recreation Area

Appendix 1: Site Map

Columbia Smelting and Refining Works Site Brooklyn, New York

U.S. Environmental Protection Agency Region II