



Consulting Engineers and Scientists

DCA 1 Apartments Periodic Review Report

495 Howard Avenue, Brooklyn, New York NYSDEC BCP Site No: C224162

Submitted to:

DCA 1, L.P. c/o Omni New York LLC 885 Second Avenue, 31st Floor New York, NY 10017

Submitted by:

GEI Consultants, Inc., P. C. 110 Walt Whitman Road Huntington Station, NY 11746 631-760-9300

April 2018 Project 1325980

Nicholas J. Recehia, P.G.
Project Manager

Senior Engineer

Certification

I, Gary A. Rozmus, certify that I am currently a New York State registered professional engineer and that this Periodic Review Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction:
- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- Use of the site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Gary Rozmus, of GEI Consultants Inc., P. C., am certifying as Owner's/Remedial Party's Designated Site Representative for the Site.



NYS Professional Engineer # 056744

1/26/2018

Date

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

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Executive Summary

This Periodic Review Report (PRR) is a required element of the September 2016 Site Management Plan (SMP) for the DCA 1 Apartments located in Brooklyn, New York (hereinafter referred to as the "Site"). The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C224162 which is administered by New York State Department of Environmental Conservation (NYSDEC).

Upon completion of NYSDEC-approved remedial work, contamination remained on-Site that is managed under the SMP. Institutional and Engineering Controls (ICs and ECs) have been incorporated into the Site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. A component of the SMP is the completion and submittal of a PRR annually for the first 2-years upon issuance of the Certificate of Completion (COC), with the following PRRs to be submitted every third year thereafter.

Historical information obtained during a Phase I Environmental Site Assessment identified the presence of a dry cleaning business in a former building on the Site in the 1960s. As a result of the findings of the Phase I, several investigations were conducted at the property, which identified tetrachloroethene (PCE) as a contaminant of concern. Due to there being no plans for redevelopment of the Site, the Site was remediated in accordance with the remedy selected by the NYSDEC to prevent human exposure to the contaminated media below the Site.

The periodic review process is used for determining if a remedy continues to be properly managed, as set forth in the SMP, and continues to be protective of human health and the environment. An annual Site-wide inspection was utilized to evaluate the effectiveness of the ICs and EC of the Site. Overall, the ICs and EC applied at the Site are in place and unchanged from completion of the Site Remedial Action. The results of periodic review have led to the determination that the Site is in general compliance with the applicable requirements as presented in the SMP.

1. Site Overview

This Periodic Review Report (PRR) is a required element of the September 2016 Site Management Plan (SMP) for the DCA 1 Apartments located in Brooklyn, New York (hereinafter referred to as the "Site"). The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP), Site No. C224162 which is administered by New York State Department of Environmental Conservation (NYSDEC). This PRR was prepared by GEI Consultants, Inc., P. C., (GEI) on behalf of DCA 1, L.P., in accordance with the requirements of the NYSDEC's Division of Environmental Remediation (DER)-10 ("Technical Guidance for Site Investigation and Remediation"), dated May 2010, and the guidelines provided by the NYSDEC.

Upon completion of NYSDEC-approved remedial work, contamination remained on-Site that is managed under the SMP. Institutional and Engineering Controls (ICs and ECs) have been incorporated into the Site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. A component of the SMP is the completion and submittal of a PRR. After submittal of the initial PRR, the next PRR shall be submitted annually to the NYSDEC or at another frequency as may be required by the NYSDEC.

This is the first PRR to be submitted and covers the 18-month period following issuance of the COC (i.e., 2016 to 2017). This PRR summarizes the annual Site inspection, identification, assessment, and certification of all ECs/ICs required by the remedy for the Site, and the overall performance and effectiveness of the remedy during the year 2017. This PRR also includes recommendations regarding any necessary changes to the implemented remedy and/or current Monitoring Plan.

1.1 Site History and Remedial Program

DCA 1, L.P. entered into a Brownfield Cleanup Agreement (BCA), with the NYSDEC on September 11, 2012, to investigate and remediate an 0.019-acre property located in Brooklyn, Kings County, New York. The Site is identified as a portion of Block 1467 and Lot 1. The site is bounded by open space followed by a residential building to the north, Sterling Place to the south, a residential building to the east, and Howard Avenue to the west (**Figure 1**). The current Site plan, including the installed EC, is detailed on **Figure 2**.

Prior to implementation of the Remedial Action, several investigations were conducted at the property. These investigations concentrated characterization of impacts in the following media: soil, groundwater, and soil vapor.

The detections in soil were primarily limited to semi-volatile organic compounds and metals within the shallow historical fill layer, similar to those typically found within "urban fill"

type soils. Groundwater collected from monitoring wells both on-Site and upgradient of the Site show concentrations of tetrachloroethene (PCE) above the NYSDEC Ambient Water Quality Standards (AWQS) and Guidance Values for Class GA Groundwater. Soil vapor samples collected both on-Site and in the surrounding buildings indicated concentrations of PCE and trichloroethene (TCE).

Though concentrations of PCE was detected in each of these media, no evidence of an onsite source of PCE contamination was identified during the investigations. The concentrations of the surrounding properties suggested that an offsite source may be present. The only complete exposure pathway that existed was that of soil and soil vapor, due to the Site being uncapped.

There were no plans for redevelopment of the Site, so the Site was remediated in accordance with the remedy selected by the NYSDEC in the Decision Document dated October 23, 2015. The selected remedy was completed in May 2016 and consisted of the following:

- Design and construction of an engineered site cover to prevent human exposure to residual contaminated soil/fill remaining under the Site;
- Implementation of ICs, such as deed restrictions at the Site; and
- A long-term monitoring program to evaluate the effectiveness of the on-Site remedy and to verify that existing on-Site impacts do not impact public health of environment.

As the Site is not a hazardous waste treatment, storage, or disposal facility, it is not subject to the financial assurance requirements found at title 40 of the Code of Federal Regulations (CFR) part 264 or 265, subpart H Financial Assurance. A notarized letter stating this is included as **Appendix A**.

2. Remedy Evaluation

This PRR is intended to evaluate the ongoing management of the selected remedial program for the Site. The following is a brief summary of the controls implemented for the Site:

Institutional Controls:	1.	The property may be used and developed for restricted residential, commercial, and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
	2.	The remedial party or site owner is to complete and submit to the NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
	3.	The restricted use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYS Department of Health (DOH) or New York City DOH; and
	4.	Compliance with the NYSDEC-approved SMP.
Engineering Controls:	1.	Cover system consisting of porous concrete pavers and tree grate.

The remedial goals for the Site, as described in the NYSDEC-approved Remedial Action Work Plan, was to limit complete exposure pathways for the following media: soil and soil vapor. As there are currently no plans for development of the Site, which is used as a low-impact cement walkway to the adjacent building's courtyard, the remedy is considered adequate and effective. However, if future site use should change which would require intrusive work, additional complete pathways for exposure to contaminated soil and soil vapor would be present and the current remedy would need to be re-evaluated.

3. Institutional and Engineering Control Compliance Report

A series of ICs were required by the Decision Document to: (1) implement, maintain, and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the site to restricted-residential, commercial, or industrial uses only. ICs currently in place at the Site consist of those detailed above in Section 2.0.

The sole EC at the Site currently consists of an engineered Site cover. The site cover consists of concrete porous pavers and metal grating around an existing tree over the uncapped portions of the Site and maintenance of the existing concrete covered sidewalks to prevent human exposure to residual contaminated soil/fill remaining under the Site. The extent of the site cover is included as **Figure 2**.

3.1 Institutional and Engineering Control Requirements and Compliance

Determination of compliance with the IC/EC at the Site is made based on the following criteria:

- The ICs and EC applied at the Site are in place and uncharged from completion of the Remedial Action:
- Nothing has occurred that would impair the ability of such controls to protect the
 public health and the environment, or constitute a violation or failure to comply with
 any element of the SMP for such controls; and
- Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of such controls (future access cannot be guaranteed, but access for maintenance and inspections has not been an issue to date, and is not anticipated to become one).

The annual Site-wide inspection was performed on April 4, 2018, to evaluate the effectiveness of the ICs and EC of the Site. The inspection was completed to provide sufficient information to assess compliance of the ICs, including site usage, and an evaluation of the condition and continued effectiveness of the EC. The completed inspection form is included as **Appendix B**.

Overall, the ICs and EC applied at the Site are in place and unchanged from completion of the Site Remedial Action. The porous paving stones are in-place and there are no major cracks or breaches in the surrounding concrete sidewalks. Minor weeds, twigs, and leaves

originating from the Site trees were present on or surrounding the porous paving stones. There was no stormwater pooling in or around the capped area. Photos of the Site are included as **Appendix C**.

3.2 Institutional and Engineering Certification Forms

The Site ICs and EC are in compliance with the requirements stated above and certification can be completed. Certification forms signed by the current Site owner and responsible Engineer are included as **Appendix D**.

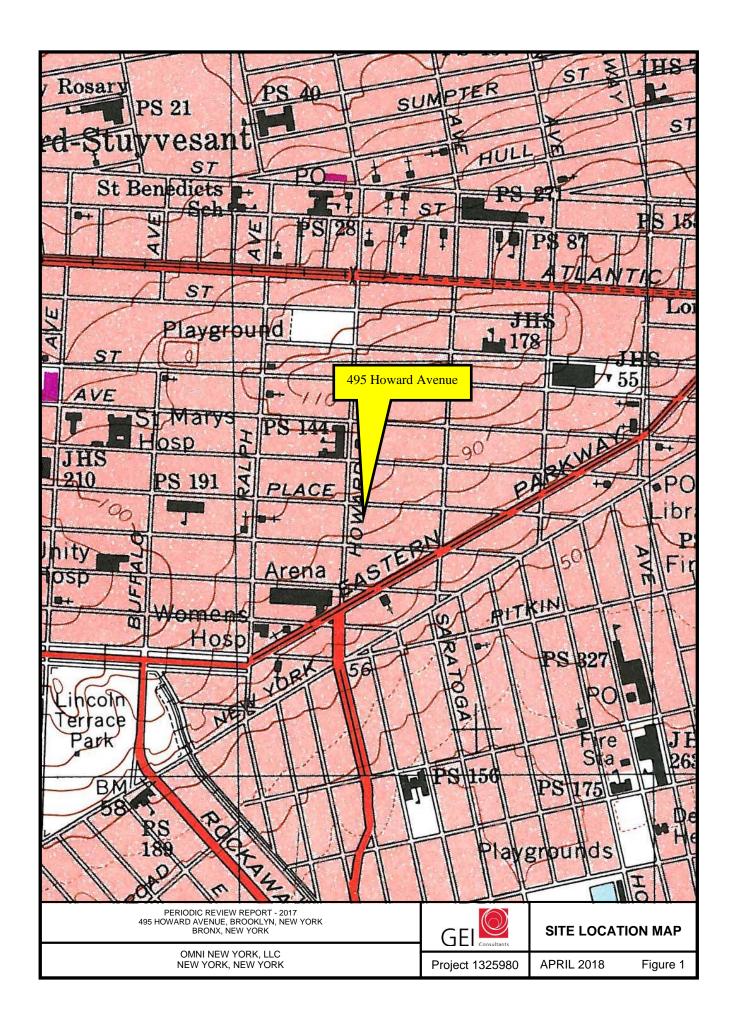
4. Conclusion and Recommendations

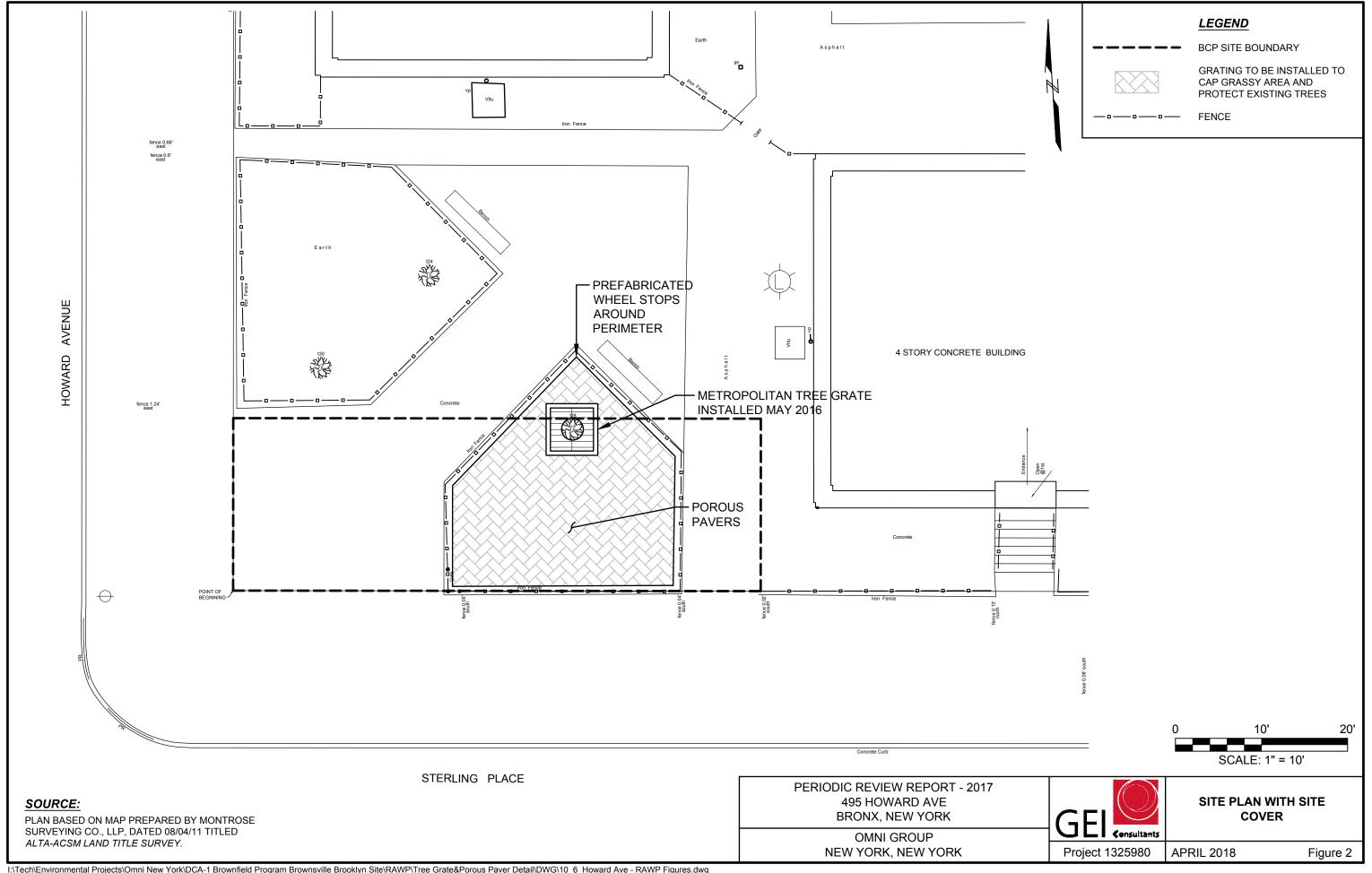
Overall, the remedy is performing properly and effectively, and is protective of public health and the environment. The remedy achieves the remedial objective for the Site, as detailed in the SMP, and prevents human exposure to residual contaminated soil/fill remaining under the Site. The ICs and EC applied at the Site are in place and unchanged from completion of the Site Remedial Action. Following the annual Site-wide inspection, it was determined that the ICs and EC implemented at the Site were compliant during this reporting period.

Though stormwater was not present during the annual Site inspection, there is a potential for the porous paving stones to be blocked by the detritus noted (i.e., weeds, twigs, and leaves). It is recommended that this area be cleaned periodically to allow the porous pavement the function at its full capacity to prevent drainage issues.

At this time, the frequency of the submittal of the PRR should not be changed. The next PRR is to be submitted in 2019 to document the remedy effectiveness for the year 2018.

Figures





Appendix A

Notarized No Financial Assurance Letter

DCA 1, L.P.

Nicholas J. Recchia Edward Bradshaw Environmental Practice Leader GEI Consultants, Inc., P.C. 110 Walt Whitman Road Suite 204 Huntington Station, NY 11746

April 16, 2018

Dear Mr. Recchia and Mr. Bradshaw:

This letter is to confirm that no financial mechanism was required for DCA-1 Apartments, NYSDEC Site No. C224162.

Feel free to contact me at 646-618-8715 if you need further information.

Sincerely,

Paul Shevchuk Omni New York LLC

cc: Lulu Chou

ABEL DANNY LANDAZURI
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01LA6258097
Qualified in Queens County
Commission Expires

Appendix B

Annual Inspection Form

Site Inspection Form

DCA- 1 Apartments Site C224162

General Information				
Project Name	Project Name DCA-1 Apartments			
Site No.	C224262 Location		495 Howard Ave Brooklyn, NY	
Date of Inspection	4/4/2018	Start/End Time	3:30 PM - 4:00 PM	
Inspector's Name(s)	Nicholas J. Recchia, P.G.			
Inspector's Title(s)	ENVIRONMENTAI PRACTICE LEADER - Hydropeologist			
Inspector's Contact Information	Wrecchipageicous Hards.com ph: 631-759-2973			
Inspector's Qualifications	Professional Garagest, MYS			
Describe present state of site	VACANT, UNDOWNED & PERCE IN, COVER IN Place			
Type of Inspection: ☑ Regular □ Other				
Weather Information				
Weather at time of this inspection? □ Clear □ Cloudy □ Rain □ Sleet □ Fog □ Snowing □ High Winds □ Other: Temperature:				

Overall Site Issues

	Activity	Corrective Action Needed and Notes
1	Is the site cover system consisting of the concrete pavers in place?	
2	Is the metal tree grate in place?	
3	Are perimeter controls curbing and fencing adequately installed (keyed into curb blocks) and maintained?	
4	Has there been any observations of disturbance or damage to the surface cover system?	
5	Is there evidence of past invasive construction or excavation activity on site?	
6	Is storm-water properly draining through the porous pavers?	Weeds And leaves Awiss should be removed

	Non-Compliance	
Describe any incidents of non-complian	ce not described above:	
None		

CERTIFICATION STATEMENT

"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 gathered and evaluated 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."

Print name			
Signature:_	Malel Of Calle	Date:	4/24/18

Appendix C

Site Inspection Photos



Photo 1: Looking northeast towards BCP Site No. C224162



Photo 3: Looking northwest at porous paving installed at Site; twigs, leaves, and twigs present.



Photo 2: Looking northeast at porous paving installed at Site; twigs, leaves, and twigs present.



Photo 4: Looking northwest at porous paving installed at Site; twigs, leaves, and twigs present.



Photo 5: Facing southwest looking down at grating surrounding tree on-Site; twigs, leaves, and twigs present.



Photo 7: Looking east towards BCP Site No. C224162.



Photo 6: Facing southwest looking down at grating surrounding tree on-Site; twigs, leaves, and twigs present.



Photo 8: Repaired soil borings/soil vapor sampling locations. No cracks in surrounding concrete sidewalk; no repairs necessary.



Photo 9: Repaired soil borings/soil vapor sampling locations. No cracks in surrounding concrete sidewalk; no repairs necessary.



Photo 10: Repaired soil borings/soil vapor sampling locations. No cracks in surrounding concrete sidewalk; no repairs necessary.

Appendix D

2017 Institutional and Engineering Controls Certification Form

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

- 1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.
- 2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.
- 3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the Certification cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this Certification form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



			Site Details		Box 1	
S	lite No.	C224162			DOX I	
\$	Ite Name D	CA 1 Apartments				
C	ite Address: hty/Town: Br county: Kings ite Acreage:		Zip Code: 11233			
R	eporting Peri	iod: October 24, 2016 to	o February 24, 2018			
					YES	NO
1.	ls the infor	rmation above correct?				$\frac{1}{2} - \frac{2}{3}$
	If NO, inclu	ude handwritten above o	or on a separate sheet.			
2.	Has some tax map ar	or all of the site property mendment during this Re	y been sold, subdivided, n eporting Period?	nerged, or undergone a		/
3.	Has there I (see 6NYC	been any change of use CRR 375-1.11(d))?	e at the site during this Rep	porting Period		
4.	Have any f	federal, state, and/or loca e property during this Re	eal permits (e.g., building, of porting Period?	discharge) been issued	E.	/
	If you answ that docur	wered YES to question nentation has been pro	ns 2 thru 4, include docu eviously submitted with	mentation or evidence this certification form.		
5.		currently undergoing dev) ¹ / ₂ 0	1
					Box 2	
					YES	NO
6.	Is the curre Restricted-I	ent site use consistent wi Residential, Commercial	ith the use(s) listed below il, and Industrial	?		G
7	Are all ICs/F	ECs in place and functio	oning as designed?		1	λП
	IF TH	IE ANSWER TO EITHER DO NOT COMPLETE TH	R QUESTION 6 OR 7 IS NO HE REST OF THIS FORM.), sign and date below a Otherwise continue.	nd	
A C	orrective Me	asures Work Plan mus	t be submitted along with	this form to address th	ese issu	les.
Siar	nature of Own	ner. Remedial Party or De	opionated Deserved #			

Box 2A

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

YES NO

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

Are the assumptions in the Qualitative Exposure Assessment still valid?
 (The Qualitative Exposure Assessment must be certified every five years)

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C224162

Box 3

Description of Institutional Controls

Parcel 1467-1

Owner DCA 1, L.P. Institutional Control

Monitoring Plan Site Management Plan

IC/EC Plan

These ICs are:

- the remedial party or site owner to complete and submit to the Department a periodic certification of Institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- the use and development of the controlled property for restricted residential, commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- the restricted use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and
- requires compliance with the Department approved Site Management Plan.

Box 4

Description of Engineering Controls

Parcel 1467-1 **Engineering Control**

Cover System

This cover system is comprised of the pavement or sidewalks comprising the site development, and a system of porous pavers and tree grates over the previously uncapped portion of the site.

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Periodic Review Report (PRR) Certification Statements

- 1. I certify by checking "YES" below that:
 - a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
 - b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.



- If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:
 - (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
 - (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
 - (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
 - (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
 - (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.



IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative	Date

IC CERTIFICATIONS SITE NO. C224162

Box 6

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

1 CARY ROZMIN at 1	Print business address
am certifying as a Professional Engineer for the	- Owner
4 , 0	OF (Owner, or Remedial Party)
Day A. Com	5/7/18
Signature of Professional Engineer, for the Own Remedial Party, Rendering Certification	er or Camp Date (Required for PE)
, remaining continuation	(Coganos for L)