



OFFICE OF ENVIRONMENTAL REMEDIATION  
100 Gold Street – 2<sup>nd</sup> Floor  
New York, New York 10038

**Daniel Walsh, Ph.D.**  
**Director**  
Tel: (212) 788-8841

**DECISION DOCUMENT**  
**NYC VCP and E-Designation Remedial Action Work Plan Approval**

November 25, 2015

Re: Williamsburg Bridgeview Apartments: 337-341 Berry Street  
Brooklyn Block 2443, Lot 6 (Formerly Lots 6, 37, and 41)  
Hazardous Materials E” Designation  
E-138: Greenpoint – Williamsburg Rezoning - CEQR 04DCP003K  
OER Project Number 15EHAZ471K / VCP Number 16CVCP037K

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated November 2015 for the above-referenced project.

The Plan was submitted to OER under the NYC Voluntary Cleanup Program and E-Designation Program.

The RAWP was released for public comment for 30 days as required by program rule.

**Project Description**

The development project consists of a new 11 story, 68,625 gross square foot building, including residential, retail, a roof garden for residents and community facility. The building will be approximately 168 feet tall. The project will be 100% affordable residential housing for families making no more than 60% of the area median income and will consist of 55 apartment units. The ground floor will include frontage on South 5th Street with 3,823 square foot of retail space and a 1,053 square foot community facility. Areas of the property not improved by the building will be improved either with a paved parking lot or landscaping. The building will occupy approximately 8,300 feet of the approximately 15,420 square foot site. The proposed development will include parking with an entrance from Berry St. and several small planting areas at each end of the parking area and one recreation area approximately 370 square feet in size at grade at the northeast corner of the proposed building. The estimated depth of excavation for the cellar is approximately 13 feet below grade and will not go below the water table. Approximately 3,750 cubic yards of soil (275 for the parking area and 3,480 for the building) will be excavated for the proposed development. Demolition of the existing building will be required for the proposed development. The demolition will be conducted in accordance with appropriate rules and regulations in New York City and State.

**Statement of Purpose and Basis**

This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program project known as “Williamsburg Bridgeview Apartments” pursuant to Title 43 of the Rules of the City of New York Chapter 14, Subchapter 1 and the Zoning Resolution and §24-07 of the Rules of the City of New York.

**Description of Selected Remedy for Hazardous Materials Description of Selected Remedy**

The remedial action selected for the Williamsburg Bridgeview Apartments site is protective of public health and the environment. The elements of the selected remedy are as follows:

1. Additional investigation onsite consisting of the installation of five (5) additional soil borings for the collection of soil and soil-gas samples within the parking area footprint. The vapor samples will be collected from either immediately below the existing building slab or at least 5 feet below the bottom of the slab (depending on the integrity of the existing slab) and will be analyzed for VOCs. The soil samples will be collected from approximately 0-2 foot interval below the bottom of the slab and analyzed for TCE, PCE, and 1,1,1-TCA or TCL VOCs. Four (4) permanent monitoring wells will be installed to determine

groundwater flow direction and groundwater quality onsite. Groundwater samples collected from the wells will be analyzed for TCL VOCs and SVOCs, pesticides, PCBs, and total and dissolved TAL metals. Three (3) of the wells will be adjacent to or within the footprint of the proposed building. The final location of the wells will be coordinated with the building architect and OER.

2. Preparation and submission of a RIR addendum to OER documenting the results of the additional remedial investigation activities for soil, soil-gas and groundwater. Updating of the Remedial Action Work Plan (RAWP), if required based on the results of the additional sampling.
3. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility(s).
4. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan.
5. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
6. Establishment of Track 4 Site-specific Soil Cleanup Objectives (SCOs).
7. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
8. Excavation and removal of soils exceeding Track 4 Site Specific SCOs. Approximately 60% of the site will be excavated to a depth of 13 feet bgs. The elevator pit will be excavated to a depth of 17 feet bgs. The perimeter of the Site adjacent to the existing high rise buildings will be excavated to 10 feet bgs along the east boundary and 4-5 feet bgs along the western boundary. The parking area will be excavated to a depth of 1-foot bgs for construction. A total of approximately 3,760 cubic yards of soil will be excavated and removed from this Site and properly disposed at an appropriately licensed or permitted facility.
9. Screening of excavated soil during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of excavated media on-Site.
10. Management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials.
11. Removal of all UST's that are encountered during soil removal actions. Registration of tanks and reporting of any petroleum spills associated with UST's and appropriate closure of any petroleum spills in compliance with applicable local, State and Federal laws and regulations.
12. Transportation and off-Site disposal of all soil/fill material at licensed or permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities. Appropriate segregation of excavated media on-Site.
13. The collection and analysis of end-point samples to determine the performance of the remedy with respect to attainment of SCOs. Endpoint locations may be revised based on the results of the additional sampling activities.
14. Demarcation of residual soil in landscaped areas.
15. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
16. Construction of an engineered composite cover consisting of a five-inch thick concrete building slab with an 6 to 8-inch clean granular sub-base beneath all building areas; 4-inch poured concrete on a 6-inch sub-base in sidewalk areas; 10 inches of base course material and 1-1/2 inches of asphalt in the parking area; and two feet of clean soil in all open space and landscaped areas.
17. Installation of a vapor barrier system consisting of vapor barrier beneath the building slab and outside of sub-grade foundation sidewalls to mitigate soil vapor migration into the building. The vapor barrier system will consist of at least a 20-mil vapor barrier the manufacturer and model of which are to be determined, below the slab throughout the full building area and outside all sub-grade foundation sidewalls. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier system is an Engineering Control for the remedial action. The remedial engineer will certify in the Remedial Action Report (RAR) that the vapor barrier system was designed and properly installed to mitigate soil vapor migration into the building.
18. Installation of an active sub-slab depressurization system (SSDS) consisting of a network of horizontal pipe set in the middle of a gas permeable layer immediately beneath the building slab and vapor barrier system. The horizontal piping will consist of fabric wrapped, perforated schedule 40, 4-inch PVC pipe

connected to a 4 or 6-inch cast iron or steel riser pipe that penetrates the slab and travels through the building to the roof. The gas permeable layer will consist of a 6-inch thick layer of 2-inch trap rock stone. The pipe will be finished at the roof line with a 4 or 6-inch goose neck pipe to prevent rain infiltration. The active SSDS will be hardwired and will include a blower installed on the roof line and a pressure gauge and alarm located in an accessible area in the basement. The manufacture and model of the blower will be determined at a later time. The active SSDS is an Engineering Control for the remedial action. The remedial engineer will certify in the RAR that the active SSDS was designed and properly installed to establish a vacuum in the gas permeable layer and a negative (decreasing outward) pressure gradient across the building slab to prevent vapor migration into the building. SSDS design details will be provided to OER for approval prior to commencement of construction.

19. Construction and operation of a SVE system for the street-level parking area. SVE design details will be provided to OER for approval prior to commencement of construction.
20. Groundwater remedy and monitoring if required based on the additional sampling activities and the NYSDEC.
21. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
22. Performance of all activities required for the remedial action, including acquisition of required permits and attainment of pretreatment requirements, in compliance with applicable laws and regulations.
23. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
24. Submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency.
25. Submission of a RAR that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, lists any changes from the RAWP, and describes all Engineering and Institutional Controls to be implemented at the Site.
26. The property will continue to be registered with an E-Designation at the NYC Buildings Department. Establishment of Engineering Controls and Institutional Controls in the RAWP and a requirement that management of these controls must be in compliance with an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

The remedy for Hazardous Materials described above conforms to the promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration OER guidance, as appropriate.

November 25, 2015

Date



Shana Holberton  
Project Manager

November 25, 2015

Date



Shaminder Chawla  
Deputy Director

cc: Sarah Williams, Procida Companies – swilliams@procidacompanies.com  
Bob Jackson, Equity Environmental Engineering – bob.jackson@equityenvironmental.com  
Aaron Werner, HPD – werner@hpd.nyc.gov  
Daniel Walsh, Shaminder Chawla, Zach Schreiber, Maurizio Bertini, Hannah Moore  
Shana Holberton, PMA-OER