



OFFICE OF ENVIRONMENTAL REMEDIATION

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

June 14, 2024

Re: 3706 15th Avenue
Brooklyn Block 5348, Lots 119, 41, 42
Hazardous Materials, Air Quality, Noise E Designation ,
E-692: Paperific Rezoning - CEQR 22DCP045K - 5/25/2023
E-176: Kings Material Supply Company - CEQR 04DCP041K - 10/17/2007
OER Project Number 24EHAN105K / 24CVCP016K

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated March 2024 with Stipulation Letter dated June 2024 and the Remedial Action Plan for Air Quality and Noise dated May 2024 for the above-referenced project.

These Plans were 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. That comment period ended on 12/28/2023. There were no public comments.

Project Description

The proposed future use of the Site will consist of a new four-story building encompassing the entire site footprint and will include a full cellar and an elevator. The cellar level, first floor, second floor, and mezzanine will be utilized as a public facility; and, the third and fourth floors and a portion of the roof will be utilized as commercial space. Proposed future uses include: lunchroom, kitchen, and mechanical spaces on the cellar level (11,445 sq ft gross floor area [GFA]); library, locker room, and classrooms on the first floor (11,396 sq ft GFA); lecture room on the second floor (11,445 sq ft GFA); office spaces and conference room on the second-floor mezzanine (2,558 sq ft GFA); commercial office spaces on the third and fourth floors (10,168 sq ft GFA per floor); and passive recreational space associated with the public facility on a portion of the roof

Statement of Purpose and Basis

This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program project known as “3706 15th Avenue” pursuant to the Zoning Resolution and §43-1474 of the Rules of the City of New York.

Description of Selected Remedy for Hazardous Materials

The remedial action selected for the 3706 15th Avenue site outlined in the March 2024 Remedial Action Work Plan (RAWP) is protective of public health and the environment. The elements of the selected remedy are as follows:

Remedial Plan: Environmental study is complete, and a cleanup plan is available for public comment.

The proposed remedial action will consist of:

1. Preparation of a Community Protection Statement and performance of all required NYC Voluntary Cleanup Program (VCP) Citizen Participation activities according to an approved Citizen Participation Plan.

2. Performance of a Community Air Monitoring Program (CAMP) for particulates and VOCs.
3. Establishment of Site-Specific (Track 4) Soil Cleanup Objectives (SCOs).
4. Site mobilization involving Site security setup, equipment mobilization, utility mark-outs, and marking and staking excavation areas.
5. Performance of additional Site characterization sampling after building demolition is completed by installing three groundwater monitoring wells. Sample results will be reviewed to assess groundwater quality at the Site and determine if elevated concentrations are present on-Site in on-Site groundwater. Although not anticipated, if groundwater results affect the proposed remedial action for the Site, NYC OER would be notified, and a Stipulation Letter would be submitted for NYC OER approval.
6. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by the disposal facility(s).
7. Excavation and removal of soil/fill exceeding Track 4 Site-specific SCOs. The building footprint, which encompasses the entire Site, will require excavation of an 11,483-sq-ft area to a depth of approximately 14 ft below grade. The Site will be equipped with an elevator, and the elevator pit will be excavated to a depth of 19 ft bgs, or an additional 5 ft below grade. An estimated 6,000 cu yd (approximately 9,000 tons) of soil will require excavation for construction of the new building.
8. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a photoionization detector (PID). Appropriate segregation of excavated media on-Site.
9. 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.
10. Removal of all underground storage tanks (USTs) that are encountered during soil/fill removal actions.
11. Registration of tanks and reporting of any petroleum spills associated with USTs and appropriate closure of these 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 the disposal facilities. Appropriate segregation of excavated media on-Site.
13. Collection and analysis of seven endpoint samples to determine the performance of the remedy with respect to attainment of Track 4 Site-specific SCOs. It is expected to achieve Track 1 remedy, samples will be analyzed for all parameters (Track 1).
14. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
15. 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.
16. Implementation of stormwater pollution prevention measures in compliance with applicable laws and regulations.
17. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and lists any changes from this RAWP.
18. Construction of an engineered composite cover consisting of a 6-inch-thick concrete building slab with an approximately 8-inch clean granular sub-base beneath all building areas.
19. Installation of a vapor barrier system consisting of a 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 a 20-mil vapor barrier (Stego Wrap 20-Mil Vapor Barrier or NYC OER-approved equivalent) below the slab throughout the full building area and outside all sub-grade foundation sidewalls to mitigate soil vapor migration into the building. All welds, seams, and penetrations will be properly sealed to prevent preferential pathways for vapor migration.
20. Installation, operation, and monitoring of a sub-slab depressurization system (SSDS) for two years after completion of the remedial action to mitigate potential exposures related to soil vapor intrusion. The SSDS will consist of a network of horizontal perforated piping installed in a permeable layer under the vapor barrier. The permeable layer will be 6-inch thick (minimum) washed aggregate or similar permeable material. The horizontal piping will consist of 3-inch diameter perforated Schedule 40 polyvinyl chloride (PVC) pipes with 4-inch solid Schedule 40 leader pipes connecting to the 4-inch vertical risers. The vertical risers will be constructed of 4-inch diameter cast iron pipe and exit through the cover systems with sealed penetrations.
21. Completion of a Soil Vapor Intrusion (SVI) Evaluation following two years of active SSDS operation to reassess the need for continued operation and to potentially switch the Site to a Track 1/Track 2 remedy. The SVI Evaluation will include two rounds of sampling with one round performed during the heating season.
22. As part of the Conditional remedy, soil vapor RAOs must be met for a Track 1 remedy to be achieved. Contingent remedial elements include the following: establishment of an approved SMP to ensure long-term management of engineering and institutional controls, including the performance of periodic inspections and certification that the controls are performing as they were intended.
23. Placement of Deed Restrictions on the property to document ongoing Site Management requirements. Deed Restrictions can be removed if the active SSDS is no longer needed and the system is converted to a passive SSDS

Description of Selected Remedy for Air Quality

The elements of the remedial action selected for Air Quality for the 3706 15th Avenue site are as follows:

In order to satisfy the requirements of the E-designation, space heating, hot water heater, and HVAC systems will be electrically powered. No fuel oil or natural gas will be utilized to power mechanical systems at the site.

The following will be installed:

1. Domestic Hot Water System: Two (2) Hot Water Heaters (Model DVE-120 manufactured by AO Smith), both electrical, will be in the cellar mechanical room. The two HWHs will provide domestic hot water to the building. Each HWH includes a 119 gallons storage tank.

Description of Selected Remedy for Noise

The elements of the remedial action selected for Noise for the 3706 15th Avenue site are as follows:

In order to meet the requirements of the E-Designation, the following window/wall attenuation requirement(s) will be achieved at the locations described below:

1. Minimum 28 dBA on all façades to maintain an interior noise level not greater than 45 dBA.

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
East and North Facades Floors 1-4 (Community Facility & Commercial) (W1, W2, W3, W4, W5, W6, W7, W8, Green Shaded Portion)	34 (required 28)	ASTM E-90 Lab Test Report for the window and glazing in Appendix E (Intertek Data File No. M2486.01D)	Manufacturer: EKO-OAKNA Model: Bluevolution 82 In-Swing Casement Window	1-3/8" IG (5/16" Laminated Exterior 13/16" Argon, 1/4" Annealed Interior)
All Facades Floors 1-4 and Roof (Community Facility & Commercial) (W1, W2, W3, W4, W5, W6, W7, W8, W9, Blue Shaded Portion)	31 (required 28)	ASTM E-90 Lab Test Report for the window and glazing in Appendix E (Intertek Data File No. M2485.01C)	Manufacturer: EKO-OAKNA Model: Bluevolution 82 Fixed Window	1-5/16" IG (7/16" Laminated Exterior 5/8" Argon, 1/4" Annealed Interior)
East, North, and West Facades Floors 1-4 (Community Facility and Commercial) (ED1, Red Shaded)	34 (required 28)	ASTM E-90 Lab Test Report for the window and glazing in Appendix E (Intertek Data File No. M2488.01C)	Manufacturer: EKO-OAKNA Model: Bluevolution 82 Door	1-3/8" IG (5/16" Laminated Exterior 13/16" Argon, 1/4" Annealed Interior)

The applicant commits to demonstrating that the selected manufacturer's window products achieve the minimum OITC requirement outlined in the table above. If the selected manufacturer does not have ASTM E90 test on file for the specific window assemblies to be installed, a mockup will be laboratory tested as per ASTM E90 to demonstrate compliance with the minimum OITC requirement.

In order to satisfy the requirements of the E-Designation, Alternate Means of Ventilation (AMV) will be installed in order to maintain a closed window condition. AMV for this project will be achieved by:

1. **Central System:** Installing two (2) RTUs and one (1) DOAS unit with condensing system and air handling units manufactured by AAON on the roof. The RTU-1 with model number RN-015-B-A-8-HJB0C-A04ND:00-0FEAH-QCB-00000-ABJBH-UC-CB0B-00-E0-A-AV0-EB-JA0A-00-000-AA0AB-G00A0F-000000B will serve ventilation for the lunchroom. The RTU-2 with model number RNA-030-C-A-8-HJB0C-A04NE:00-0AFAL-QCB-00000-ABLBL-UC-CB0B-00-W0-A-AZ0-EB-JA0A-00-000-AA0A00-G00A0F-000000B will serve ventilation for the classes and offices. The DOAS-1 with model number RNA-015-B-A-8-HJB0C-A04ND:00-0FEAJ-QCB-00000-AFJBH-UC-CB0B-00-E0-A-AV0-EB-JA0A-00-000-AA0AB0-G00A0F-000000B will serve ventilation for the corridors, lobbies, exits and kitchen. All units will provide 100% outside air.

Heating and cooling will be provided to all the spaces via electric VRF heat pump systems manufactured by Mitsubishi. The outdoor condenser units are installed on the roof. Each condenser will be connected to multiple air handlers. The 15 condensers will be air cooled condensers. The models of the condensers will be: PUZ-A12NKA7 (1), PURY-EP72TNU-A1 (2), PUHY-EP144TNU-A1 (3), PURY-EP168TNU-A1 (3) and PURY-EP144TNU-A1 (6). The indoor unit models will be as follows: PKA-A12LA.TH, PEFY-P12NMAU-E4, PEFY-P18NMAU-E4, PEFYP24NMAU-E4, PEFY-P36NMAU-E4, PEFY-P48NMAU-E4, PLFY-P12NFMU-E, PLFY-EP24NEMU-ER1, PKFY-P06NLMU-E, PKFY-P08NLMU-E, PKFY-P12NLMU-E and PKFY-P24NKMU-E2.TH.

In all cases, the rate of outside air (cfm) delivered to each habitable space (bedrooms and living spaces) will meet or exceed that specified in the 2022 New York City Mechanical Code table 403.3.1.1. These rates will be minimum 10 CFM/person and 0.12 CFM/SF for the classrooms, 7.5 CFM/person and 0.18 CFM/SF for the lunch room, 5 CFM/person and 0.06 CFM.SF for the office spaces, and 5 CFM/person and 0.12 CFM/SF for the libraries. For the corridors, minimum 0.06 CFM/SF are provided.

2. Compliance with Mechanical Code: Providing outside air to commercial spaces and common areas such as lobbies and corridors in accordance with the 2022 NYC Mechanical Code.

The remedies for Hazardous Materials, Air Quality, Noise E Designation 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.

6/11/2024

Date



Madeleine Frank
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6/11/2024

Date



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