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

July 20, 2020

Re: 292-314 Kent Avenue, Domino Sugar Filter House
Brooklyn Block 2414, Lot 25 (Former Lot 1)
Hazardous Materials, Air Quality, and Noise "E" Designation
E-337: Domino Sugar Project - CEQR 07DCP094K - 5/14/2014
OER Project Number 14EHAN588K / 15CVCP005K

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated 3/12/2020 with Stipulation Letter dated 3/12/2020 and the Remedial Action Plan for Air Quality and Noise dated 7/15/2020 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 10/27/2016. There were no public comments.

Project Description
The proposed future use of the existing building will consist of adaptively reusing the landmarked 12-story Domino Sugar Refinery building. The building would contain commercial office space and commercial/retail space. An additional 11,781 ft2 of space will be added to the cellar by adding cellar level rooms/areas below the South 2nd Street and South 3rd Street sidewalks and a portion of the streets, and the rear courtyard/plaza to be constructed west of the Refinery Building. The first floor will consist of three retail spaces as well as a commercial lobby. The extent of the current first floor footprints (35,774 ft2) will remain the same in the proposed redevelopment. Floors 3 through 14 will consist of office space.

Statement of Purpose and Basis
This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program project known as "Domino Sugar Site F - Refinery Building" 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
The remedial action selected for the Domino Sugar Site F - Refinery Building site is protective of public health and the environment. The elements of the selected remedy are as follows:

1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan;
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds;
3. Establishment of Track 4 Site-Specific Soil Cleanup Objectives (SCOs);
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas;
5. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility. A Waste Characterization Report documenting sample procedures, location, analytical results shall be submitted to NYCOER prior to start of remedial action;

6. Excavation and removal of soil/fill exceeding Track 4 Site-Specific SCOs. For development purposes, excavation will be required below the existing cellar slab and around the perimeter of the cellar to install additional cellar level rooms and a vault for two below grade suction tanks.
    - The remaining 60% of the existing concrete cellar slab will be removed and excavation will be performed across the entire interior of the refinery building as necessary to install a new concrete cellar mat slab across the entire cellar footprint. Some areas of the cellar will not require any excavation/removal, but some areas will require excavation to depths as great as 2ft - 6in. Deeper excavation to a depth of 3ft - 9in will be required for a crane pad within the east side of the cellar, 5ft - 10in for a pool, 5ft - 8in for a whirlpool, and 7ft - 6in will be performed for the new building's elevator pits. An estimated 1,400 cubic yards (2,100 tons) will require excavation from the interior of the cellar.
    - Excavation and disposal of soil/fill will be required to construct three additional cellar level rooms and a below grade vault to contain two suction tanks around the perimeter of the existing Refinery Building. A 2,505 ft^2 room to be installed on the south side of the building below the South 3rd Street sidewalk and a portion of South 3rd Street will require excavation of a 35 ft by 95 ft area to a depth ranging from approximately 15ft - 6in on the east end to 11 ft on the west end. An estimated 1,300 cubic yards (1,950 tons) will require excavation for this room.
    - A 5,150 ft^2 room to be located on the west side of the building below the plaza to be constructed behind the building will require excavation of a 35 ft by 200 ft long area to a depth ranging from approximately 9ft - 6in on the south end to 12ft – 6 in on the north end. An estimated 2,200 cubic yards (3,300 tons) will require excavation for this room.
    - A 2,600 ft^2 room to be located on the north side of the building below the South 2nd Street sidewalk and a portion of South 2nd Street will require excavation of a 35 ft by approximately 105 ft area to a depth ranging from approximately 16ft - 6in on the east end to 11ft on the west end. An estimated 1,200 cubic yards (1,800 tons) will require excavation for this room.
    - Two below grade suction tanks (total of area of approximately 1,500 ft^2) to be installed along the north side of the building below the South 2nd Street sidewalk and a portion of South 2nd Street will require excavation of a 35 ft by 60 ft area to a depth of approximately 11ft - 6in. An estimated 650 cubic yards (975 tons) will require excavation for the suction tank structure. Excavation for the suction tank vault will remove the SVOC hot-spot [B4(2-4)] located within the area that will be completed as South 2nd Street.
    - Grading will also be performed as needed for construction of South 2nd Street and South 3rd Street (and associated sidewalks). An estimated 5,000 to 8,000 tons of soil/fill will be removed from the Site and property disposed of at an appropriately licensed or permitted facility;
7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID;
8. 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;
9. Removal of all underground storage tanks encountered during soil/fill removal actions. Registration of tanks and reporting of any petroleum spills associated with UST's and appropriate closure of these petroleum spills in compliance with applicable local, State and Federal laws and regulations;
10. Transportation and off-Site disposal of all soil/fill material at 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;
11. Collection of seven endpoint samples (EP1 – EP17) for laboratory analysis of SVOCs and metals to determine the performance of the remedy with respect to attainment of Track 4 Site-Specific SCOs;
12. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations;
13. Installation of a vapor barrier system consisting of waterproofing membrane beneath the elevator pits, behind the new cellar walls, and below the new 2ft – 4ft thick concrete cellar mat slab to mitigate soil vapor migration into the building. The waterproofing membrane will consist of Grace Preprufe® 300R. Preprufe® 300R is a 1.2 mm (0.046in) thick HDPE film with a pressure sensitive adhesive that bonds to the poured concrete. 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 RAR that the vapor barrier system was designed and properly installed to

mitigate soil vapor migration into the building;

14. Construction and maintenance of an engineered composite cover to prevent human exposure to residual soil/fill remaining at the Site. The engineered composite cover will consist of the following:
    - Cellar slab: A new 2ft – 4ft thick concrete mat slab will be poured across the entire footprint of the refinery building and will extend into each of the rooms to be added around the perimeter of the cellar. The cellar mat slab will be underlain with Grace Preprufe® 300R and a 4 inch layer of ¾" bluestone.
    - Refinery Plaza: The typical detail for paved walkways will consist of compacted aggregate base, then an 8" thick reinforced cast in place concrete slab, and reinforced latex- modified setting bed, slurry bond coat. The finished surface will be a 12"x 24" concrete unit paver.
    - Sidewalks: Sidewalks will consist of a 6" aggregate base on top of the prepared, compacted subgrade, then a 4" concrete slab per NYCDOT standard.
    - Streets: Asphalt and/or concrete capped sidewalks and streets underlain with prepared fill (combination of gravel, clean soil or other fill material that meets OER-approved backfill and cover soil quality objectives).
15. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations;
16. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations;
17. Submission of a Remedial Closure Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, describes all Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP;
18. Submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual materials, including plans for operation, maintenance, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency; and
19. The property will continue to be registered with an E-Designation by the NYC Buildings Department. Establishment of Engineering Controls and Institutional Controls in this 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.

Description of Selected Remedy for Air Quality

The elements of the remedial action selected for Air Quality for the Domino Sugar Site F - Refinery Building site are as follows:

In order to satisfy the requirements of the E-designation, natural gas will be utilized at the Site for space heating, and/or HVAC systems. Remaining systems, including hot water, will be powered electrically.

In order to satisfy the requirement to use low NOx (< 30 ppm) burners, four Aerco BMK 3.0 3000MBH gas fired condensing boilers will be used.

In order to satisfy the requirements of the E Designation, four stack will be located on the roof. The four stacks will be located 82'-6" from the north line of lot (South 2nd Street) (12'-6" greater than the required 70ft from South 2nd Street), 69'-0" from the east line of the lot (Kent Avenue), 166'-5" from the south line of the lot (South 3rd Street), and 158'-6" feet from the west line of the lot (River Street). The four stacks will be located approximately 230.22 feet above grade.

Description of Selected Remedy for Noise

The elements of the remedial action selected for Noise for the Domino Sugar Site F - Refinery Building site are as follows:

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

1. 30 dBA in the commercial space (east façade for floors 1 through 5) based on an allowed reduction of 5 dBA from the attenuation requirement outlined in the E-Designation. It is understood that this reduction may prevent the project from obtaining a Final Notice of Satisfaction for the Noise E as the site is not protective for all allowable uses (see Section 1.2);

2. 28 dBA in the commercial space (west, north, south facades for floors 1 through 5) based on an allowed reduction of 5 dBA from the attenuation requirement outlined in the E-Designation. It is understood that this reduction may prevent the project from obtaining a Final Notice of Satisfaction for the Noise E as the site is not protective for all allowable uses (see Section 1.2); and
3. 26 dBA in the commercial space (all façades floors 6 and above) based on an allowed reduction of 5 dBA from the attenuation requirement outlined in the E-Designation. It is understood that this reduction may prevent the project from obtaining a Final Notice of Satisfaction for the Noise E as the site is not protective for all allowable uses (see Section 1.2).

Façade Floor Range	**OITC Rating**	**OITC Certification**	**Manufacturer and Model**	**Glazing**
East/Front Facade Floor 1 (retail), Floors 2- 5 WT-1A, WT-1C, WT-7A, WT-7B	31.2 achieved (assuming framing loss of operable (-5dbA reduction and fixed (-2dBA) curtain wall) 30 required	Full assembly rating based on similar glass only OITC 34 Viracon data in Appendix E. Full assembly ASTM E90 test report to be provided to OER prior to purchase and installation.	Focchi Curtain Wall	GL-01 1-1/2" IG (3/8" toughened exterior, 13/16" argon space, 5/16" toughened interior)
Side Facades (North and South) and West Façade (River Street) Floors 2 through 5 WT-1A	31.2 achieved (assuming framing loss of operable (-5dbA reduction and fixed (-2dBA) curtain wall) 28 required	Full assembly rating based on similar glass only OITC 34 Viracon data in Appendix E. Full assembly ASTM E90 test report to be provided to OER prior to purchase and installation.	Focchi Curtain Wall	GL-01 1-1/2" IG (3/8" toughened exterior, 13/16" argon space, 5/16" toughened interior)
Side Facades (North and South) and West Façade (River Street) Floor 1 (Retail) WT-7A, WT7B	31.2 achieved (assuming framing loss of operable (-5dbA reduction and fixed (-2dBA) curtain wall) 28 required	Full assembly rating based on similar glass only OITC 34 Viracon data in Appendix E. Full assembly ASTM E90 test report to be provided to OER prior to purchase and installation.	Focchi Curtain Wall	GL-01 1-1/2" IG (3/8" toughened exterior, 13/16" argon space, 5/16" toughened interior)
All Facades Floors 6 and Above WT-1A, WT-1C, WT-1D	31.2 achieved (assuming framing loss of operable (-5dbA reduction and fixed (-2dBA) curtain wall) 26 required	Full assembly rating based on similar glass only OITC 34 Viracon data in Appendix E. Full assembly ASTM E90 test report to be provided to OER prior to purchase and installation.	Focchi Curtain Wall	GL-01 1-1/2" IG (3/8" toughened exterior, 13/16" argon space, 5/16" toughened interior)
East (Kent Avenue) and West (River Street) Facades Floors 14, Roof, Main Roof, High Roof WT-02	31.2 achieved (assuming framing loss of operable (-5dbA reduction and fixed (-2dBA) curtain wall) 26 required	Full assembly rating based on similar glass only OITC 34 Viracon data in Appendix E. Full assembly ASTM E90 test report to be provided to OER prior to purchase and installation.	Focchi Curtain Wall	GL-02 1-11/16" IG (3/8" toughened exterior, 11/16" argon space, 9/16" laminated interior)

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. The glazing-only OITC ratings presented in the table may reduce substantially once noise transmission

through the window frames is evaluated. The glazing presented above may need to be reevaluated if the attenuation losses due to framing elements render the window attenuation performance inadequate to satisfy the requirements.

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. Compliance with Mechanical Code: Providing outside air to common areas such as lobbies and corridors in accordance with the 2014 NYC Mechanical Code.

The remedies for the Hazardous Materials, Air Quality, and Noise E Designation as described above conform to the promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration OER guidance, as appropriate.

07/20/2020

Date

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07/20/2020

Date

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