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

November 24, 2014

Re: Domino Sugar Site A – 254-268 Kent Avenue
Brooklyn Block 2414, p/o Lot 1
Hazardous Materials, Air Quality, and Noise "E" Designation
E Number E-337: Domino Sugar Project Action - CEQR 07DCP094K
OER Project Number 14EHAN401K / VCP Number 15CVCP002K

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated September 2014 with Stipulation Letter dated October 1, 2014 and the Remedial Action Plan (RAP) for Air Quality and Noise dated November 21, 2014 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 September 29, 2014. There were no public comments.

Project Description

The future use of the Site will consist of residential and commercial uses and will include a new approximately 313,912 gross square foot (gsf) building. The cellar level of the building will have 10,864 square feet of commercial storage area, a 12 car parking garage that will be accessible by car elevator from South 4th Street, a 2,750 square foot parking storage area, and space for the electrical, telecom, gas, water, sewer, mechanical and fire pump rooms. The ground level will consist of six separate retail spaces, an office lobby, residential lobbies, a car elevator to the cellar level parking garage from South 4th Street, and a loading dock. The building will consist of commercial office uses on floors 2, 3, and 4 through 18 (northern tower), and residential uses on floors 4 through 30 (southern tower). The cellar level will occupy the majority of the building footprint, with the exception of a small area at the corner of Kent Avenue, South 5th Street and River Street. Excavation to a depth of approximately 4 to 5 feet below grade will be performed in this area. The cellar slab will be constructed at an elevation of approximately 4 feet, but the foundation will consist of a 5 foot thick pile-supported mat slab. Therefore, the eastern end of the cellar will require excavation to a depth of approximately 22 feet below grade, the middle portion will require excavation to a depth of approximately 17 feet below grade, and the western end of Site will require excavation to a depth of approximately 12 feet below grade. Assuming an average excavation depth of approximately 17 feet, an estimated 17,010 cubic yards (25,500 tons) of soil will require excavation for the building's cellar level. In addition, five elevator pits will be excavated to a depth of approximately 8 feet beyond the building slab. The building will have all market-rate residential units. The proposed development is one of three new buildings to be developed on Block 2414 Lot 1 as part of the approved Domino Sugar Project.

Statement of Purpose and Basis

This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation project known as "Domino Sugar Site A" 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 Hazmat

The remedial action selected for the Domino Sugar Site A 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 NYCVCP 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 Site-Specific (Track 4) Soil Cleanup Objectives (SCOs);
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas;
5. Performance of geophysical/test pits/trenches prior to construction in proposed roads areas;
6. Completion of a Waste Characterization Study prior to excavation activities;
7. Excavation and removal of soil/fill exceeding Track 4 Site-Specific SCOs. For development purposes, excavation for the building's cellar and elevator pit would take place to a depth of approximately 22-26 feet. Additional excavation to a depth of approximately 4 to 5 feet below grade would be performed across the remainder of the Lot A that will be slab-on grade. If soil/fill containing analytes at concentrations above Track 4 Site-Specific SCOs is still present at the base of the excavation after removal of all soil required for construction of the building is complete, additional excavation will be performed to meet Track 4 Site-Specific SCOs. Approximately 12,800 tons of soils will be excavated and removed from this Site;
8. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.
9. Management of excavated materials including temporarily stockpiling and segregating to prevent co-mingling of contaminated material and non-contaminated materials;
10. Removal of underground storage tanks (USTs) (if encountered) and closure of petroleum spills (if evidence of a spill/leak is encountered during Site excavation) in compliance with applicable local, State and Federal laws and regulations;
11. 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;
12. Collection and analysis of end-point samples to determine the performance of the remedy with respect to attainment of SCOs;
13. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations;
14. Installation of a vapor barrier beneath the structure's slab and along foundation sidewalls. The barrier chosen for this project is Preprufe® 300R system and Bituthene 4000 manufactured by Grace. Preprufe 300 is a 1.2 mm (0.046in) thick HDPE film with a pressure sensitive adhesive that bonds to the poured concrete. Preprufe 300 will be installed below the building's cellar slab and both below and around the elevator pit and as well as below the at-grade portions of the building's 5ft thick pile-supported mat slab. Preprufe 300 will also be installed around the 5ft thick pile-supported mat slab to grade. Bituthene 4000 is a flexible preformed waterproof membrane combining a high performance cross laminated, HDPE carrier film with a unique super sticky self-adhesive rubber bitumen compound. Bituthene 4000 will be installed behind the cellar sidewalls to grade. The Preprufe 300R system will extend throughout the area occupied by the footprint of the new building and will extend up the sides of the 5-ft thick pile supported mat slab to grade in accordance with manufacturer specifications;
15. Construction and maintenance of an engineered composite cover consisting of the building's 5ft thick (at-grade) and 5 ft thick (cellar and elevator pit) pile-supported mat building slab to prevent human exposure to residual soil/fill remaining under the Site. Sidewalks and roadways will consist of a geotextile layer installed above a prepared subgrade, a 6 inch thick layer of a compacted aggregate base, and a 4 inch or 7 thick layer of concrete (sidewalks/driveways) or a layer of asphaltic concrete binder course below an asphaltic concrete top course (street);

16. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations;
17. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations;
18. Submission of a Remedial Action 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;
19. 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
20. 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 A site are as follows:

In order to satisfy the requirements of E-337, natural gas will be utilized at the site by three AERCO BMK 6.0 6000MBH condensing boilers and one AERCO BMK 3.0 3000MBH condensing boiler located on the roof of the southern tower. Both models are fitted with low NOx burners whose emissions measure less than 30 ppm NOx emissions at all firing rates when fired with natural gas. The boilers will provide domestic hot water for all residential units and heat for building areas including lobbies, common areas, retail areas, commercial office areas, and corridors. Emergency power will be provided by a Kohler Power Systems natural gas generator (Model Number 200REZXB), which will be located on the roof of the southern tower. All equipment specified complies with the low NOx emission requirements of a concentration of less than 30 ppm NOx at all firing rates. A stainless steel AL-29-4D stack will be located a minimum height of three feet above the southern tower bulkhead, for a termination height of elevation 363.6' National Geodetic Vertical Datum (NGVD). For analysis purposes and to account for the site's irregular grading, elevation 0.0 NGVD was considered "at grade" in both the air analysis and subsequent E Designation stack location requirement language as well as in the RAP. The windows on the north façade of the northern tower will all be fixed, inoperable windows, and air intake ducts will not be located from 170.3 feet to 270.3 feet NGVD on the north façade of the northern tower. The stack will be located 69' 5" from South 1st Street and 145' 4.5" from the lot line facing Building B.

Description of Selected Remedy for Noise

The elements of the remedial action selected for Noise for the Domino Sugar Site A site are as follows:

In order to satisfy the required window/wall attenuation, fixed and in-swing casement windows manufactured by F.A. & Partners, model FA100 will be utilized for all uses above the ground floor, including the school space. The glazing for these window will be 38.1 mm (1.5") IG (9.5 mm [3/8"] laminated exterior, 22.2 mm [7/8"] air space, 6.4 mm [1/4"] laminated interior). The proposed in-swing casement window with this glazing has been rated with an OITC of 35 as certified by the Lab Test Report included in the RAP. All windows (fixed, casement, and curtain wall) which will not have the same frame, gaskets, and glazing as the laboratory tested in-swing casement window will be tested per ASTM E-90 laboratory tests. The applicant commits to providing OER with an ASTM E-90 Lab Test Report for this/these window configuration(s) (glass and frame) prior to purchase and installation. The ground floor façades will use a storefront assembly manufactured by Kawneer, model Trifab VG (VersaGlaze) 451T Front, Store Front System, with a 1 1/8" glazing consisting of two sheets of glass separated by a 0.526" air space. The first sheet (exterior sheet) consists of two 0.128" thick pieces of glass with a 0.030" thick laminating sheet in between. The second sheet consists of two 0.130" thick pieces of glass with a .030" thick laminating sheet in between. The same storefront assembly would be used for all uses on the ground floor. The proposed ground floor storefront assembly has been rated with an OITC of 31.

Alternate Means of Ventilation for this project will be achieved by installing trickle vents in all residential apartment operable vents (Trimvent 90, SW and Patio Aluminum slot ventilator). In accordance with the Mechanical Code of the City of New York, living areas shall be provided with a minimum of 15 cubic feet per minute (cfm) of outdoor air per person. Studio and one bedroom apartments will be equipped with trickle vents to

provide a minimum of 30 cfm of outdoor air total; two bedroom apartments will be equipped with trickle vents to provide 45 cfm of outdoor air total. All bathrooms will be ventilated at a minimum rate of 20 cfm/bathroom. Trickle vents will be provided at a minimum frequency of one trickle vent per living room and/or bedroom. Lobby, common areas, public corridors, and commercial spaces will be provided with outside air in accordance with NYC Mechanical Code via louvers in the building's fascia or roof mounted intakes.

The remedies for Hazardous Materials, Air Quality, and Noise 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.

11-24-2014

Date

Shana Holberton
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11-24-2014

Date

Shaminder Chawla
Deputy Director

11-24-2014

Date

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