QWDC – Parcel 8

BCP # C241087

Long Island City, New York

DRAFT COMMUNITY AIR MONITORING PLAN

Prepared for

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Community Air Monitoring Plan (CAMP)

Purpose

The purpose of the CAMP is to protect downwind receptors (e.g., residences, businesses, schools, nearby workers, and the public) from potential airborne contaminants released as a direct result of soil disturbance or subsurface work. The CAMP helps to confirm that the subsurface work does not spread airborne contamination off-site by providing real-time monitoring protocols for VOCs and particulates (i.e., dust) at the downwind Site perimeter while the work is in progress. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown.

The CAMP does not establish action levels for worker respiratory protection, which are given in the Health and Safety Plan included in Appendix E and developed in accordance with 40 CFR 1910 and 1920.

Contaminant Source

The main contaminants of concern in Site soils are the petroleum and/or coal-tar-related VOCs, benzene, ethylbenzene, toluene, xylene (BTEX); the semi-volatile compound (SVOC) naphthalene; and polyaromatic hydrocarbons (PAHs). Metals represent a secondary and minor concern.

Activities Covered Under the CAMP

Soil disturbance requires implementation of the CAMP. FLS will implement the CAMP to ensure that potential impacts are monitored. Dust control in the form of water misting will be available.

Receptor Population

Potentially exposed receptors during remediation include passersby, the public using Gantry Plaza and Peninsula Parks and, to a lesser degree, individuals living, working, and shopping in the vicinity of the project. There is also a public elementary school (P.S. 78) and daycare (Little Ones), located within approximately one block of the Site.

Monitoring Plan

During soil disturbance, the proposed CAMP, entailing upwind and downwind perimeter monitoring will be implemented as described in the following sections. Due care will be taken to monitor and control fugitive odors and dust emissions from the Site, minimizing the risk of exposure to the surrounding receptor population during the RAWP.

Continuous Monitoring

Continuous monitoring will be conducted during excavation, installation of remedial systems and while advancing soil borings.

Periodic Monitoring

Periodic VOC monitoring will occur during non-intrusive activities such as collection of groundwater samples from monitoring wells. Periodic monitoring during sample collection will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap, monitoring during well bailing/purging, and taking a reading prior to leaving a sample location.

VOC Monitoring, Response Levels, and Actions

VOCs will be continually monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) using a PID. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The PID will be calibrated at least daily, or more often if needed. The PID will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work may resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work may resume, provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less (but in no case less than 20 feet) is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, work must cease. All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu g/m^3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area.

If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 $\mu g/m^3$ above the upwind level, work will cease and a re-evaluation of activities initiated. Work may resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu g/m^3$ of the upwind level and in preventing visible dust migration. All readings must be recorded and be available for State (DEC and DOH) personnel to review.