

APPENDIX E
COMMUNITY AIR MONITORING PROGRAM

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for

PRESIDENT STREET PROPOERTIES BROOKLYN, NEW YORK NYSDEC BCP NO.: C224221

Prepared For

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1.0 Introduction

This site-specific community air monitoring program (CAMP) was prepared in general compliance with the New York State Department of Health (NYSDOH) Generic CAMP and is intended to mitigate potential exposures of sensitive receptors to nuisance odors and dust resulting from remedial excavations, potential petroleum impacted materials and potential coal-tar impacted materials. Based on environmental and geotechnical investigations performed to date, petroleum impacts were documented in soil beginning at varying depths between 12 to 44 feet below grade surface (bgs) within the proposed work area. Coal-tar impacts were documented in soil beginning at depths between about 26 feet to 55 feet bgs in the eastern portion of the site. This CAMP is intended for implementation during the scope of the Interim Remedial Measure Work Plan (IRMWP), which includes driving sheet piles along the eastern property to about 40 feet bgs and remedial excavation to about 6 to 12 feet bgs and to support construction of a bulkhead/containment barrier. Accordingly, significant petroleum-impacted and coal tar-impacted material is not expected to be encountered during the remedial excavation.

2.0 Community Air Monitoring

Monitoring for dust and odors will be conducted during all ground intrusive activities by the Field Team Leader (FTL). Continuous monitoring at the perimeter of the work zones for odor, volatile organic compounds (VOCs), and dust may be required for all ground intrusive activities such as soil excavation and handling activities. The work zone is defined as the general area in which machinery is operating in support of remediation activities. A portable photoionization detector (PID) will be used to monitor the work zone and for periodic monitoring for VOCs during activities such as soil and groundwater sampling and soil excavation. The site perimeter will be monitored for fugitive dust emissions by visual observations as well as instrumentation measurements (if required). When required, particulate or dust will be monitored continuously with real-time field instrumentation that will meet, at a minimum, the performance standards from DER-10 Appendix 1B.

If VOC monitoring is required, the following actions will be taken based on VOC levels measured:

- If total VOC levels exceed 5 parts per million (ppm) above background for the 15-minute average at the perimeter, work activities will be temporarily halted and monitoring continued. If levels readily decrease (per instantaneous readings) below 5 parts per million (ppm) above background, work activities will resume with continued monitoring.
- If total VOC levels at the downwind perimeter of the hot zone persist at levels in excess of 5 ppm above background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps work activities will resume provided that the total organic vapor level 200 feet downwind of the hot 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 above background for the 15-minute average.

- If the total VOC level is above 25 ppm at the perimeter of the hot zone, activities will be shutdown.

If dust monitoring with field instrumentation is required, the following actions will be taken based on instrumentation measurements:

- If the downwind particulate level is 100 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression must be employed. Work may continue with dust suppression techniques provided that downwind PM10 levels do not exceed $150 \mu\text{g}/\text{m}^3$ above the background level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM10 levels are greater than $150 \mu\text{g}/\text{m}^3$ above the background level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM10 concentration to within $150 \mu\text{g}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

3.0 Vapor Emission Response Plan

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the hot zone, boring and well installation, and excavation activities will be halted or odor controls will be employed, and monitoring continued. When work shut-down occurs, downwind air monitoring as directed by the Health and Safety Officer (HSO) or FTL will be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

If the organic vapor level decreases below 5 ppm above background, sampling and boring and well installation can resume, provided:

- The organic vapor level 200 feet downwind of the hot zone or half the distance to the nearest residential or commercial structure, whichever is less, is below 1 ppm over background, and
- More frequent intervals of monitoring, as directed by the HSO or FTL, are conducted.

4.0 Major Vapor Emission

If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work site, or half the distance to the nearest residential or commercial property, whichever is less, all work activities must be halted or odor controls must be implemented, as described in Section 6. Relative to the site work, the nearest on-site commercial structure is the Lavender Lake Bar (temporarily closed as of March 17, 2020), about 140 feet away, and the nearest off-site commercial structure is the Pig Beach restaurant (temporarily closed as of March 17, 2020), about 30 feet north of the BCP site boundary. Lavender Lake Bar operates in the south-adjacent on-site building and uses a part of the exterior rear yard as seasonal seating for restaurant patrons. As of March 17, 2020, both commercial

restaurants were closed until further notice. The nearest off-site residential structures are about 350 feet west along Bond Street.

If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the hot zone, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).

If either of the following criteria is exceeded in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be implemented.

- Sustained organic vapor levels approaching 5 ppm above background for a period of more than 30 minutes, or
- Organic vapor levels greater than 5 ppm above background for any time period.

5.0 Major Vapor Emission Response Plan

Upon activation, the following activities will be undertaken:

- The local police authorities will immediately be contacted by the HSO or FTL and advised of the situation;
- Frequent air monitoring will be conducted at 30-minute intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the HSO or FTL; and
- All Emergency contacts will go into effect as appropriate.

6.0 Vapor and Dust Suppression Techniques

Preventative measures for dust generation may include wetting site fill and soil, construction of an engineered construction entrance with gravel pad, use of a truck wash area, covering soils with tarps, and limiting vehicle speeds to five miles per hour.

Work practices to minimize odors and vapors include limiting the time that the excavations remain open, minimizing stockpiling of contaminated-source soil, and minimizing the handling of contaminated material. Offending odor and organic vapor controls may include the application of foam suppressants, including Rusmar odor-control foam (RusFoam® OC AC645 or approved equivalent) or placing polyethylene sheeting or non-odorous soil over the odor or VOC source areas for short-term control of the odor and VOCs.

If odors develop and cannot otherwise be controlled, additional means to eliminate odor nuisances will include: direct load-out of soils to trucks for off-site disposal; use of chemical odorants in spray or misting systems; and, use of staff to monitor odors in surrounding neighborhoods.

Where odor nuisances have developed during remedial work and cannot be corrected using the discussed vapor suppression techniques, or where the release of nuisance odors cannot otherwise be

avoided due to on-site conditions or close proximity to sensitive receptors, odor control may be achieved by sheltering excavation and handling areas under tented containment structures equipped with appropriate air venting/filtering systems. If vapors and odors are generated that cannot be controlled, the need for excavation containment structures will be discussed with the NYSDEC and NYSDOH.

7.0 Monitoring of Nearby Occupied Structures

This section applies where structures within about 20 feet of the ground-intrusive work may be occupied during the planned remedial action. Where this condition exists, the following will be considered for incorporation into the CAMP:

- One of the CAMP monitoring stations will be placed between the remedial work area and nearest outside wall of the occupied structure. If site conditions warrant, a third station may be used to accomplish this task.
 - If 15-minute-average total VOC concentrations exceed 1 ppm above background near the outside wall or next to intake vents of the occupied structure, periodic VOC monitoring will be performed within the occupied structure.
 - If 15-minute-average total PM₁₀ concentrations exceed 150 µg/m³ above background near the outside wall or next to intake vents of the occupied structure, work activities will be temporarily suspended until suppression techniques are implemented and concentrations return to background.
- Where nuisances have developed during remedial work and cannot be corrected using the techniques described in Section 6, use of additional engineering controls may be considered, such as vapor/dust barriers or ventilation devices.
- Consideration should be given to scheduling or sequencing ground-intrusive activities during periods when potentially exposed populations may not be occupying the structure.

8.0 Reporting

A summary of CAMP findings, including triggered action levels, will be provided daily to the NYSDEC and NYSDOH project managers as part of daily reporting. In addition to a summary of CAMP findings, daily reports will include:

- An update of progress made during the reporting day;
- Locations of work and quantities of material imported and exported from the site;
- Locations of CAMP monitoring stations, soil stockpiles, and decontamination stations;
- References to map for site activities;
- A summary of any and all complaints with relevant details (names, phone numbers);
- An explanation of notable site conditions;

- Actions anticipated for the next reporting day; and
- Site photographs from the day's remedial activities.

Daily reports are not intended to be the mode of communication for notification to the NYSDEC or the NYSDOH of emergencies (accident, spill), requests for changes to the CAMP or the IRMWP, or other sensitive or time critical information; however, such conditions will also be included in the daily reports. Emergency conditions and changes to the CAMP or the IRMWP will be addressed directly to the NYSDEC and NYSDOH project managers via personal communication. If site conditions warrant, the remedial engineer may request to change from daily to weekly reports that include the above information.