

July 8, 2021

Ms. Mandy Yau
Division of Environmental Remediation
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

via email: man-tsz.yau@dec.ny.gov

Re: 3-60 Beach 79th Street, NYSDEC BCP Site: C241207
Pre-design Investigation Work Plan
GBTS Project: 17-9838

Dear Ms. Yau:

This Pre-design Investigation Work Plan (PDIWP) describes additional soil investigations that will be conducted at the above referenced Site. The purpose of this PDIWP is to collect additional information needed to prepare a final Remedial Design Document (RDD), which is required for the implementation of the Remedial Action Work Plan (RAWP) prepared for the Site.

The following Scope of Work will be implemented:

- Targeted soil and (as required) groundwater sampling to further characterize and delineate previously identified contamination by volatile organic compounds (VOCs) in the central and northwestern portions of the Site; and,
- Waste characterization sampling in order to secure disposal facility approval for off-Site disposal.

All Site investigative work will be in conformance with the NYSDEC-approved Remedial Investigation Work Plan (RIWP) and that document is incorporated by reference into this PDIWP.

BACKGROUND

The results of previous Site investigations, summarized in the NYSDEC-approved Remedial Investigation Report (RIR), document the presence of chlorinated VOCs (CVOCs) in groundwater, and in soil at concentrations above the applicable Protection of Groundwater (POG) Soil Cleanup Objectives (SCOs). The RAWP calls for removal and off-Site disposal of all soil/fill above the Site-wide restrictive native clay layer that exceed PG SCOs for CVOCs.

Additional soil sampling is needed in the vicinity of B9, B26, B27, B33 and B35 in the central part of the Site, and near B19 at the northwestern corner, to more precisely delineate the areal and vertical extent of CVOC contamination exceeding POG SCOs, and to provide waste characterization data (off-Site soil disposal may include material from Site development and/or soil removed to allow for the installation of the required cover system).

SITE PREPARATION SERVICES

Qualifications of On-site Remedial Personnel

Dan Bellucci, PE, a New York State licensed engineer, is the Remedial Engineer for the BCP Site and has primary direct responsibility for implementation of the remedial program. Mr. Bellucci is supported by senior GBTS personnel, including James Blaney, CHMM, the Qualified Environmental Professional (QEP), and Scott Spitzer, Technical Director-Environmental Consulting. Mr. Spitzer will be the Project Manager (responsible for directing/coordinating all project activities and the on-Site field team (GBTS personnel and subcontractors), and will serve as the Site Health and Safety Officer. Richard Hooker, PhD, will serve as the Quality Assurance Officer. Qualifications of GBTS personnel are provided in the Quality Assurance Project Plan (see below). The NYSDEC will be notified of any changes in senior on-site personnel prior to the initiation of fieldwork.

The Volunteer will ensure that qualified contractors are used. All on-site staff will be appropriately trained in accordance with Occupational Safety and Health Administration (OSHA) practices (29 CFR, Part 1910), and will be in compliance with New York City Department of Buildings safety training requirements for construction sites.

Health and Safety Plan

All activities will be performed per the Health and Safety Plan (HASP). The HASP will be reviewed with site personnel and subcontractors prior to the initiation of specific fieldwork where contaminated media are likely to be encountered. All proposed work will be performed in “Level D” personal protective equipment. Field personnel (including subcontractors) will be prepared to continue services wearing more protective levels of equipment should field conditions warrant.

Utility Markouts

A utility markout will be requested prior to initiating intrusive sampling activities.

Quality Assurance / Quality Control

Sampling will be conducted in accordance with the Quality Assurance Project Plan (QAPP) included in the approved RAWP, which includes Standard Operating Procedures for sampling and other fieldwork activities, as well as laboratory-specific protocols for emerging contaminants.

Laboratory

All samples will be collected in accordance with applicable NYSDEC guidelines and will be submitted to a New York State Department of Health (NYSDOH) ELAP-certified laboratory using appropriate chain of custody procedures. A trip blank will be supplied for each day of fieldwork involving sample collection. Field personnel will maintain all samples at cold temperatures and complete all chain of custody forms. Laboratory reports will include detailed Quality Assurance/Quality Control (QA/QC) analyses.

Investigation Derived Waste

Soil cuttings will be placed in appropriate containers and stored on-Site pending characterization and disposal at an appropriately licensed facility. Discarded personal protective equipment and fieldwork supplies will be disposed as municipal solid waste (no soil will be included in this waste stream).

Notifications

The NYSDEC will be notified in writing at least one week prior to the initiation of any of the on-Site work and during the course of the fieldwork if deemed necessary by on-Site personnel. Changes to fieldwork scheduling will be provided via email. All applicable local agencies will also be notified prior to the initiation of Site work.

Prior to the implementation of any of the investigative tasks outlined below, a request for a complete utility markout of the subject property will be submitted as required by New York State Department of Labor regulations. Confirmation of underground utility locations will be secured, and a field check of the utility markout will be conducted prior to the initiation of work. Any utilities on the Site will be protected (as necessary) by the contractor or owner.

PROPOSED FIELDWORK

Soil Sampling for VOC Delineation

Potential soil boring locations are provided on the attached Proposed Fieldwork Map. Boreholes will be advanced via a truck-mounted direct-push rig utilizing a barrel with disposable sleeves (to prevent cross-contamination). Available Site-specific stratigraphic information will be reviewed prior to fieldwork to identify the expected depth to the top of the clay layer at each boring location, and all borings will terminate at a maximum depth designed to ensure that the clay layer is not breached¹. Selected boring equipment will be capable of collecting soil cores at discreet intervals.

All recovered soil will be evaluated based on any field observations of overt contamination (PID readings, odors, staining, and/or the presence of nonaqueous-phase liquid). Field screening will be supplemented through use of a portable gas chromatograph (PGC), capable of detecting and quantifying VOCs in soil (e.g., FROG-5000 by Defiant Technologies). The PGC will be used to guide the soil sampling effort, by providing data indicating the presence or absence of contamination at levels indicating that step-out borings should be advanced, and/or assisting with sample collection from proper depth intervals².

A primary goal of the investigation is to generate data that will allow the practical delineation of areas requiring excavation during the remedial action. Field observations and results from the PGC will be used to qualitatively determine the likely areal and vertical limits of significant contamination. This initial assessment will be quantitatively confirmed by laboratory analysis of select samples, biased toward

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- 1 At any location where sampling from the bottom of the boring indicates elevated concentrations of CVOs, it will be assumed that contamination extends from this depth to the top of the clay layer.
 - 2 The use of field-screening technology is intended to speed up the investigation process by potentially limiting the need for a second round of soil borings and multiple laboratory submissions.

locations/depths that are likely to be representative of excavation endpoints capable of meeting the applicable SCOs. Soil samples will be analyzed for Target Compound List VOCs (USEPA Method 8260).

Additional samples will be submitted for laboratory analysis of VOCs and/or other Part 375 parameters if gross contamination is encountered in previously undocumented locations. The number of such samples will be determined in consultation with the NYSDEC project manager (sampling is intended to practically guide soil removal activities and as a contingency for documenting any previously unknown significant contamination; all final excavation extents will be sampled in accordance with RAWP requirements).

Waste Characterization Sampling

Waste characterization samples will be collected from borings, or via manual equipment at surface areas, in order to characterize soils in accordance with disposal facility requirements. The number and location of such samples will be determined prior to the start of fieldwork, in consultation with potential disposal facilities.

Groundwater Sampling

The RAWP specifies a one-time application of a chemical treatment at excavation bases to degrade CVOCs that may be present in post-excavation soils and/or in groundwater. Groundwater samples will be collected from existing wells following receipt of laboratory data for soil, as required by the supplier of the treatment reagents, in support of completing Site-specific design calculations.

Community Air Monitoring Program

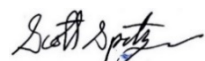
Air quality will be monitored for the presence of volatile organic compounds (VOCs) and respirable dust in accordance with the RIWP CAMP.

DOCUMENTATION

Fieldwork observations and laboratory results from the delineation fieldwork will be summarized in the applicable monthly status report submitted to NYSDEC, and in the Final Engineering Report. Delineation data will be incorporated into the RDD.

Please review this PDIWP and contact Scott Spitzer at (845) 452-1658 with any questions and/or concerns.

Sincerely,



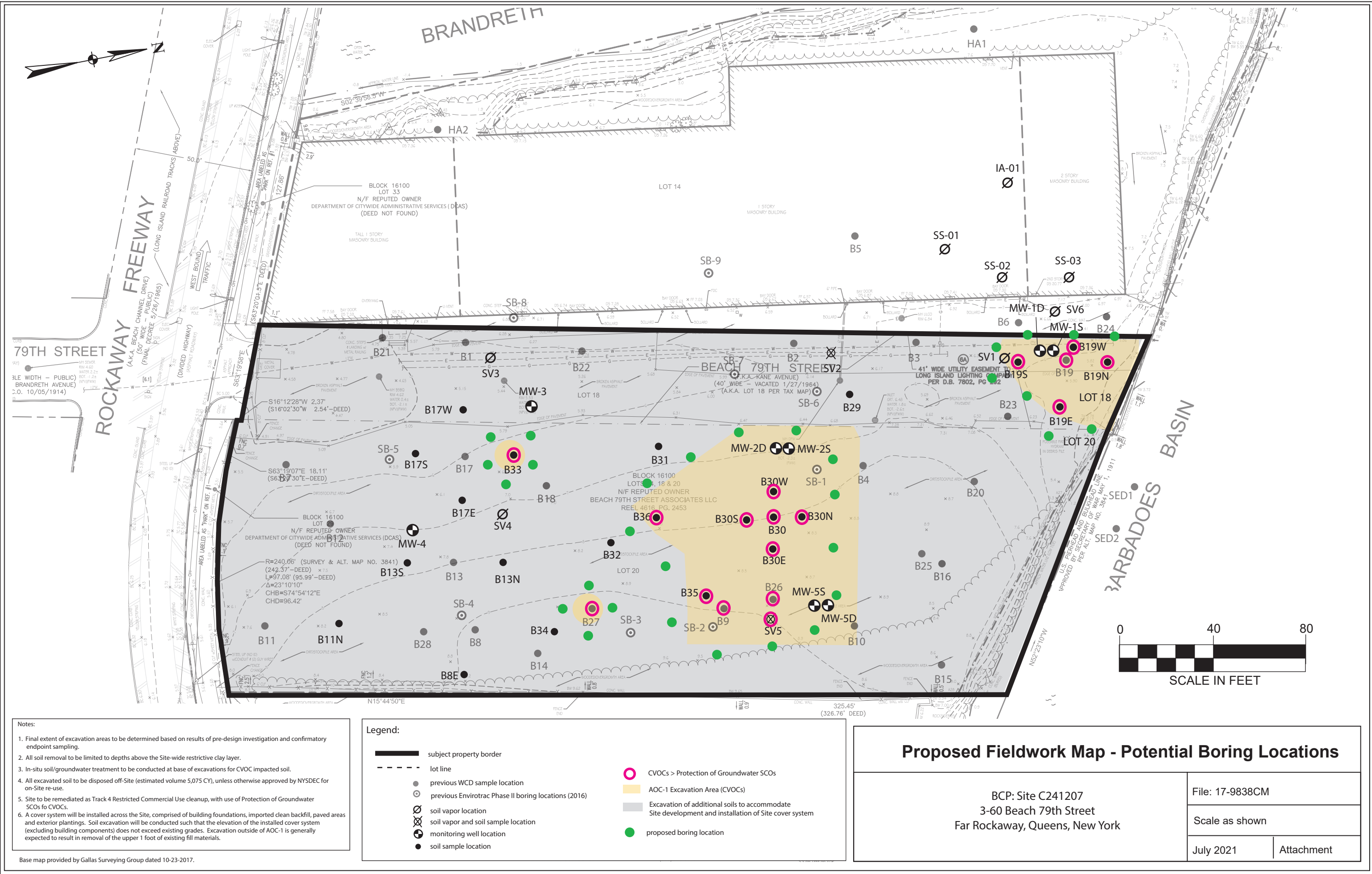
Scott Spitzer, Gallagher Bassett Technical Services
Senior Environmental Consultant
Technical Director – Environmental Consulting

I, James Blaney, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Pre-design Investigation Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the NYSDEC DER Technical Guidance for Site Investigation and Remediation (DER-10).



James Blaney, Gallagher Bassett Technical Services
Operations Manager, Environmental

Attachment: Proposed Fieldwork Map
HASP





TECHNICAL
SERVICES

**SITE INVESTIGATION
HEALTH AND SAFETY PLAN**

3-60 Beach 79th Street

Far Rockaway, Queens, New York

NYSDEC BCP Site: C241207

July 2021

GBTS Project: 17-9838CM

Technical Services Division

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SITE INVESTIGATION HEALTH AND SAFETY PLAN

July 2021

GBTS Project: 17-9838CM

Prepared By:

**Gallagher Bassett Technical Services
22 IBM Road, Suite 101
Poughkeepsie, New York 12601**

Prepared For:

**79 Arverne Development LLC
220-46 73rd Avenue
Bayside, New York**

The undersigned have reviewed this Site Investigation Health And Safety Plan and certify to 79 Arverne Development LLC and to the New York State Department of Environmental Conservation that the information provided in this document is accurate as of the date of issuance by this office.



Richard Hooker
Manager – Environmental Consulting
Gallagher Bassett Technical Services



Scott Spitzer
Technical Director – Environmental Consulting
Gallagher Bassett Technical Services

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Proposed Fieldwork Map
 NYSDOH Generic CAMP

1.0 INTRODUCTION

1.1 Purpose

This Site Investigation Health and Safety Plan (HASP) has been developed to provide the requirements and general procedures to be followed by Gallagher Bassett Technical Services (GBTS) and on-site subcontractors while performing remediation services at the 3-60 Beach 79th Street Site (C241207) located in Far Rockaway, Queens, New York.

This HASP incorporates policies, guidelines and procedures intended to protect the public health of the community during fieldwork activities, and therefore serves as a Community Health and Safety Plan. The objectives of the HASP are met by establishing guidelines to minimize potential exposures during fieldwork, and by planning for and responding to emergencies affecting the public adjacent to the site.

This HASP describes the responsibilities, training requirements, protective equipment and standard operating procedures to be utilized by all personnel while on the Site. All on-site personnel and visitors shall follow the guidelines, rules, and procedures contained in this HASP. The Project Manager or Site Health and Safety Officer (SHSO) may impose any other procedures or prohibitions necessary for safe operations. This HASP incorporates by reference applicable Occupational Safety and Health Administration (OSHA) requirements in 29 CFR 1910 and 1926.

The requirements and guidelines in this HASP are based on a review of available information and evaluation of potential on-site hazards. This HASP will be discussed with Site personnel and will be available on-site for review while work is underway. On-site personnel will report to the SHSO in matters of health and safety. The on-site project supervisor(s) are responsible for the enforcement and implementation of this HASP, which is applicable to all on-site field personnel, including contractors and subcontractors.

This HASP is specifically intended for the conduct of activities within the defined scope of work in specified areas of the Site. Changes in conditions or future actions that may be conducted at the Site may necessitate the modification of the requirements of the HASP. Although this HASP can be made available to interested persons for informational purposes, GBTS cannot be held accountable for the interpretations or activities of any other persons or entities other than the employees of GBTS or its subcontractors.

1.2 Site Location and Description

The Site is defined as the property located at 3-60 Beach 79th Street, Far Rockaway, Queens, New York. A Proposed Fieldwork Map illustrating the Site configuration and areas of work is included as an Attachment to this HASP.

1.3 Work Activities

Environmental investigation activities are detailed in the NYSDEC-approved Pre-design Investigation Work Plan (PDIWP) and Remedial Action Work Plan. The specific tasks detailed in the PDIWP are wholly incorporated by reference into this HASP. The PDIWP describes the tasks required to perform additional Site investigation in support of the proposed remedial action.

The Remedial Investigation Report (RIR) prepared for the Site documented soil contamination by elevated levels of volatile organic compounds (VOCs, including chlorinated compounds [CVOCs]), above NYSDEC Protection of Groundwater (PG) Soil Cleanup Objectives (SCOs), and semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), metals, and pesticides above the Restricted Commercial Use (CU) SCOs. CVOCs in soil have contaminated Site groundwater and on- and off-Site soil vapor. Soil and groundwater are also contaminated by low levels of per- and polyfluoroalkyl substances (PFAS).

2.0 HEALTH AND SAFETY HAZARDS

2.1 Hazard Overview for On-Site Personnel

Elevated concentrations of organic and non-organic compounds, including high levels of CVOCs, are documented in Site soil and groundwater, and high levels of CVOCs are in soil vapor. The possibility exists for on-site personnel to have contact with contaminated soils, groundwater and/or vapor during remediation activities. Contact with contaminated substances may present a skin contact, inhalation and/or ingestion hazard. These potential hazards are addressed in Sections 3.0 through 11.0, below.

2.2 Potential Hazards to the Public from Fieldwork Activities

The potential exists for the public to be exposed to contaminated media (soils, groundwater and/or vapor), which may present a skin contact, inhalation and/or ingestion hazard. Additional potential hazards associated with fieldwork activities include mechanical and physical hazards, traffic hazards from fieldwork vehicles, and noise impacts from operation of equipment.

Impacts to public health and safety are expected to be limited to hazards that could directly affect on-site visitors and/or trespassers. These effects will be mitigated through site access and control measures (see Section 6.0, below). Specific actions taken to protect the public health (presented in Sections 3.0 through 11, below) are anticipated to minimize any potential off-site impacts from contaminant migration, noise and traffic hazards.

3.0 PERSONAL PROTECTIVE EQUIPMENT

The levels of protection identified for the services specified in the RAWP represent a best estimate of exposure potential and protective equipment needed for that exposure.

Determination of levels was based on data provided by previous studies of the Site and information reviewed on current and past Site usage. The SHSO may recommend revisions to these levels based on an assessment of actual exposures and may at any time require Site workers, supervisors and/or visitors to use specific safety equipment.

The level of protective clothing and equipment selected for this project is Level D. Level D PPE provides minimal skin protection and no respiratory protection, and is used when the atmosphere contains no known hazard, oxygen concentrations are not less than 19.5%, and work activities exclude splashes, immersion or the potential for unexpected inhalation or contact with hazardous levels of chemicals. Workers will wear Level D protective clothing including, but not limited to, a hard hat, steel-toed boots, nitrile gloves (when handling soils and/or groundwater), hearing protection (foam ear plugs or ear muffs, as required), and safety goggles (in areas of exposed groundwater and when decontaminating equipment). Personal protective equipment (PPE) will be worn at all times, as designated by this HASP.

Disposable gloves will be changed immediately following the handling of contaminated soils, water, or equipment. Tyvek suits will be worn during activities likely to excessively expose work clothing to contaminated dust or soil (chemically-resistant over garments will be required in situations where exposures could lead to penetration of clothing and direct dermal contact by contaminants).

The requirement for the use of PPE by official on-site visitors shall be determined by the SHSO, based on the most restrictive PPE requirement for a particular Work Zones (see Section 6 for Work Zone definitions). All on-site visitors shall, at a minimum, be required to wear an approved hardhat and be provided with appropriate hearing protection as necessary.

The need for an upgrade in PPE will be determined based upon encountered Site conditions, including measurements taken in the breathing zone of the work area using a photo-ionization detector (PID). An upgrade to a higher level of protection (Level C) will begin when specific action levels are reached (see Section 5.0, below), or as otherwise required by the SHSO.

Level C PPE includes a full-face or half-mask air-purifying respirator (NIOSH approved for compound[s] of concern), hooded chemical-resistant clothing, outer and inner chemical-resistant gloves, and (as needed) coveralls, outer boots/boot covers, escape mask, and face shield. Level C PPE may be used only when: oxygen concentrations are not less than 19.5%; contaminant contact will not adversely affect exposed skin; types of air contaminants have been identified, concentrations measured, and a cartridge/canister is available that can remove the contaminant; atmospheric contaminant concentrations do not exceed immediately dangerous to life or health (IDLH) levels; and job functions do not require self-contained breathing apparatus (SCBAs). The need for Level B or Level A PPE is not anticipated for the planned remedial activities at this Site.

If any equipment fails and/or any employee experiences a failure or other alteration of their protective equipment that may affect its protective ability, that person will immediately leave the work area. The Project Manager and the SHSO will be notified and, after reviewing the situation, determine the effect of the failure on the continuation of on-going operations. If the failure affects the safety of personnel, the work site, or the surrounding environment, personnel will be evacuated until appropriate corrective actions have been taken.

4.0 CONTAMINANT CONTROL

Precautions will be taken during dry weather (e.g., wetting or covering exposed soils) to avoid generating and breathing dust-generated from soils. A PID (or equivalent equipment) will be used to monitor potential contaminant levels. Response to the monitoring will be in accordance with the action levels provided in Section 5.0.

5.0 MONITORING AND ACTION LEVELS

Concentrations of petroleum compounds in the air are expected to be below the OSHA Permissible Exposure Limits (PELs). Air monitoring will be conducted for VOCs and dust according to the NYSDOH Generic Community Air Monitoring Plan (provided as an Attachment). Monitoring will be conducted at all times that fieldwork activities which are likely to generate emissions are occurring. PID and dust readings consistently in excess of CAMP limits will be used as an indication of the need to initiate personnel monitoring, increase worker protective measures, and/or modify or cease on-site operations in order to mitigate off-site community exposure.

PID readings that consistently exceed background in the breathing zone (during any proposed tasks) will necessitate moving away from the source or implementing a higher PPE level.

6.0 SITE CONTROL/WORK ZONES

Site control procedures will be established to reduce the possibility of worker/visitor contact with environmental contaminants, to protect the public in the area surrounding the Site and to limit access to the Site to only those persons required to be in the work zone. Notices placed near the Site will warn the public not to enter fieldwork areas and direct visitors to report to the Project Manager or SHSO. Measures will be taken to limit the entry of unauthorized personnel into the specific areas of field activity and to safely direct and control all vehicular traffic in and near the Site (e.g., placement of traffic cones and warning tape).

Work Areas are defined as follows:

Exclusion Zone - The exclusion zone will be that area immediately surrounding the work being performed to accomplish fieldwork activities involving the handling or potential exposures to contaminated media.

Only individuals with appropriate PPE and training are allowed into this zone. It is the responsibility of the SHSO to prevent unauthorized personnel from entering the exclusion zone. When necessary (e.g., high traffic areas) the exclusion zone will be delineated with barricade tape, cones and/or barricades.

Dedicated Decontamination Area - A dedicated decontamination area for personnel and equipment (including contamination reduction and support zones) is not anticipated to be required during completion of fieldwork activities, but will be established and utilized, as warranted, based on changes in Site conditions. Care will be taken at all times to remove gloves, excess soil from boots, and soiled clothing (if necessary) before entering the Intermediate Zone.

Intermediate Zone - The intermediate zone, also known as the decontamination zone, is where patient decontamination should take place, if necessary. A degree of contamination still is found in this zone and some PPE is required, although it is usually of a lesser degree than that required for the exclusion zone.

Command Zone - The command zone is located outside the decontamination zone. All exposed individuals and equipment from the exclusion zone and the decontamination zone should be decontaminated before entering the command zone. Access to all zones must be controlled. Keeping onlookers, media, etc. well away from the Site is critical and will be the responsibility of both the SHSO and the Project Manager, and other Site personnel as appropriate.

7.0 NOISE CONTROL

All fieldwork activities will be conducted in a manner designed to reduce unnecessary noise generation, and to minimize the potential for both on-site and off-site harmful noise levels. The Project Manager and SHSO will establish noise reduction procedures (as appropriate to the Site and the work) to meet these requirements.

8.0 PERSONNEL TRAINING

Work zones that will accomplish the general objective stated above will be established by the Project Manager and the SHSO. Site access will be monitored by the SHSO, who will maintain a log-in sheet for personnel that will include, at the minimum, personnel on the Site, their arrival and departure times and their destination on the Site.

All workers will be properly trained in accordance with OSHA requirements (29 CFR 1910). Personnel exiting the work zone(s) will be decontaminated prior to exiting the Site.

Site-specific training will be provided to each employee. Personnel will be briefed by the SHSO as to the potential hazards to be encountered.

Training topics will include:

- Availability of this HASP;
- General site hazards and specific hazards in the work areas, including those attributable to known or suspected on-site contaminants;
- Selection, use, testing, and care of the body, eye, hand, and foot protection being worn, with the limitations of each;
- Decontamination procedures for personnel, their personal protective equipment, and other equipment used on the Site;
- Emergency response procedures and requirements;
- Emergency alarm systems and other forms of notification, and evacuation routes to be followed; and,
- Methods to obtain emergency assistance and medical attention.

9.0 DECONTAMINATION

The SHSO will establish a decontamination system and decontamination procedures (appropriate to the Site and the work) that will prevent potentially hazardous materials from leaving the Site. Vehicles will be brushed to remove materials adhering to surfaces. Sampling equipment will be segregated and, after decontamination, stored separately from PPE. All decontaminated or clean sampling equipment not in use will be protected and stored in a designated, controlled storage area.

10.0 EMERGENCY RESPONSE

10.1 Notification of Site Emergencies

In the event of an emergency, the SHSO will be immediately notified of the nature and extent of the emergency (the names and contact information for key site safety and management personnel, as well as other site safety contact telephone numbers, shall be posted at the Site).

Table 1 in this HASP contains Emergency Response Telephone Numbers, and immediately following is a map detailing the directions to the nearest hospital emergency room. This information will be maintained at the work Site by the SHSO. The location of the nearest telephone will be determined prior to the initiation of on-site activities. In addition to any permanent phone lines, a cellular phone will be in the possession of the SHSO, or an authorized designee, at all times.

10.2 Responsibilities

Prior to the initiation of on-site work activities, the SHSO will:

- Notify individuals, authorities and/or health care facilities of the potentially hazardous activities and potential wastes that may develop as a result of the remedial activities;
- Confirm that first aid supplies and a fire extinguisher are available on-site;
- Have a working knowledge of safety equipment available; and,
- Confirm that a map detailing the most direct route to the hospital is prominently posted with the emergency telephone numbers.

The SHSO will be responsible for directing notification, response and follow-up actions and for contacting outside response personnel (ambulance, fire department, or others). In the case of an evacuation, the SHSO will account for personnel. A log of individuals entering and leaving the Site will be kept so that everyone can be accounted for in an emergency.

Upon notification of an exposure incident, the SHSO will contact the appropriate emergency response personnel for recommended medical diagnosis and, if necessary, treatment. The SHSO will determine whether and at what levels exposure actually occurred, the cause of such exposure, and the means to prevent similar incidents from occurring.

10.3 Accidents and Injuries

In the event of an accident or injury, measures will be taken to assist those who have been injured or exposed and to protect others from hazards. If an individual is transported to a hospital or doctor, a copy of the HASP will accompany the individual.

The SHSO will be notified and respond according to the severity of the incident. The SHSO will investigate the incident and prepare a signed and dated report documenting the investigation. An exposure-incident report will also be completed by the SHSO and the exposed individual. The form will be filed with the employee's medical and safety records to serve as documentation of the incident and the actions taken.

10.4 Communication

No special hand signals will be utilized within the work zone. Field personnel will utilize standard hand signals during the operation of heavy equipment.

10.5 Safe Refuge

Vehicles and on-site structures will serve as the immediate place of refuge in the event of an emergency. If evacuation from the area is necessary, project vehicles will be used to transport on-site personnel to safety.

10.6 Site Security and Control

Site security and control during emergencies, accidents and incidents will be monitored by the SHSO. The SHSO is responsible for limiting access to the Site to authorized personnel and for oversight of reaction activities.

10.7 Emergency Evacuation

In case of an emergency, personnel will evacuate to the safe refuge identified by the SHSO, both for their personal safety and to prevent the hampering of response/rescue efforts.

10.8 Resuming Work

A determination that it is safe to return to work will be made by the SHSO and/or any personnel assisting in the emergency, e.g., fire department, police department, utility company, etc. No personnel will be allowed to return to the work areas until a full determination has been made by the above-identified personnel that all field activities can continue unobstructed. Such a determination will depend upon the nature of the emergency (e.g., downed power lines -- removal of all lines from the property; fire -- extinguished fire; injury -- safe transport of the injured party to a medical facility with either assurance of acceptable medical care present or completion of medical care; etc.). Before on-site work is resumed following an emergency, necessary emergency equipment will be recharged, refilled or replaced. Government agencies will be notified as appropriate. An Incident Report Form will be filed.

10.9 Fire Fighting Procedures

A fire extinguisher will be available in the work zone during on-site activities. This extinguisher is intended for small fires. When a fire cannot be controlled with the extinguisher, the area will be evacuated immediately. The SHSO will be responsible for directing notification, response and follow-up actions and for contacting ambulance and fire department personnel.

10.10 Emergency Decontamination Procedure

The extent of emergency decontamination depends on the severity of the injury or illness and the nature of the contamination. Whenever possible, minimum decontamination will consist of washing, rinsing and/or removal of contaminated outer clothing and equipment. If time does not permit decontamination, the person will be given first aid treatment and then wrapped in plastic or a blanket prior to transport.

10.11 Emergency Equipment

The SHSO will maintain a dedicated vehicle containing the following on-site equipment for safety and emergency response: fire extinguisher; first-aid kit; and, extra copy of this HASP.

11.0 SPECIAL PRECAUTIONS AND PROCEDURES

The activities associated with this remediation may involve potential risks of exposure to both chemical and physical hazards. The potential for chemical exposure to hazardous or regulated substances will be significantly reduced through the use of monitoring, personal protective clothing, engineering controls, and implementation of safe work practices.

11.1 Heat/Cold Stress

Training in prevention of heat/cold stress will be provided as part of the site-specific training. The timing of this project is such that heat/cold stress may pose a threat to the health and safety of personnel. Work/rest regimens will be employed, as necessary, so that personnel do not suffer adverse effects from heat/cold stress. Special clothing and appropriate diet and fluid intake regimens will be recommended to personnel to further reduce this temperature-related hazard. Rest periods will be recommended in the event of high/low temperatures and/or humidity to counter the negative effects of heat/cold stress.

11.2 Heavy Equipment

Working in the vicinity of heavy equipment is the primary safety hazard at the Site. Physical hazards in working near heavy construction equipment include the following: overhead hazards, slips/trip/falls, hand and foot injuries, moving part hazards, improper lifting/back injuries and noise. All workers will be properly trained in accordance with OSHA requirements (29 CFR 1910). No workers will be permitted within any excavated areas without proper personal protective equipment (PPE), including, as warranted, any necessary Level C equipment (e.g., respirators and protective suits). Air monitoring in excavation areas will be conducted for VOCs in accordance with Section 5.0.

11.3 Additional Safety Practices

The following are important safety precautions which will be enforced during the remedial activities.

- Medicine and alcohol can aggravate the effect of exposure to certain compounds. Controlled substances and alcoholic beverages will not be consumed during remedial activities. Consumption of prescribed drugs will only be at the discretion of a physician familiar with the person's work.
- Eating, drinking, chewing gum or tobacco, smoking, or other practices that increase the probability of hand-to-mouth transfer and ingestion of material is prohibited except in areas designated by the SHSO.

- Contact with potentially contaminated surfaces will be avoided whenever possible. Workers will not unnecessarily walk through puddles, mud or other discolored surfaces; kneel on the ground; or lean, sit, or place equipment on drums, containers, vehicles, or the ground.
- Personnel and equipment in the work areas will be minimized, consistent with effective site operations.
- Unsafe equipment left unattended will be identified by a "DANGER, DO NOT OPERATE" tag.
- Work areas for various operational activities will be established.

11.4 Daily Log Contents

The SHSO will establish a system appropriate to the Site, the work and the work zones that will record, at a minimum, the following information:

- Personnel on the Site (arrival and departure times) and their destination on the Site;
- Incidents and unusual activities Site such as (but not limited to) accidents, spills, breaches of security, injuries, equipment failures and weather-related problems;
- Changes to the HASP; and,
- Daily information, such as: changes to work and health and safety plans, work accomplished and the current Site status, and monitoring results.

12.0 EMERGENCY INFORMATION

12.1 Emergency Contact Information

The following page presents a table indicating emergency contact information. This table should be copied and freely distributed and/or posted at the Site to ensure ready access.

Emergency Contact Information

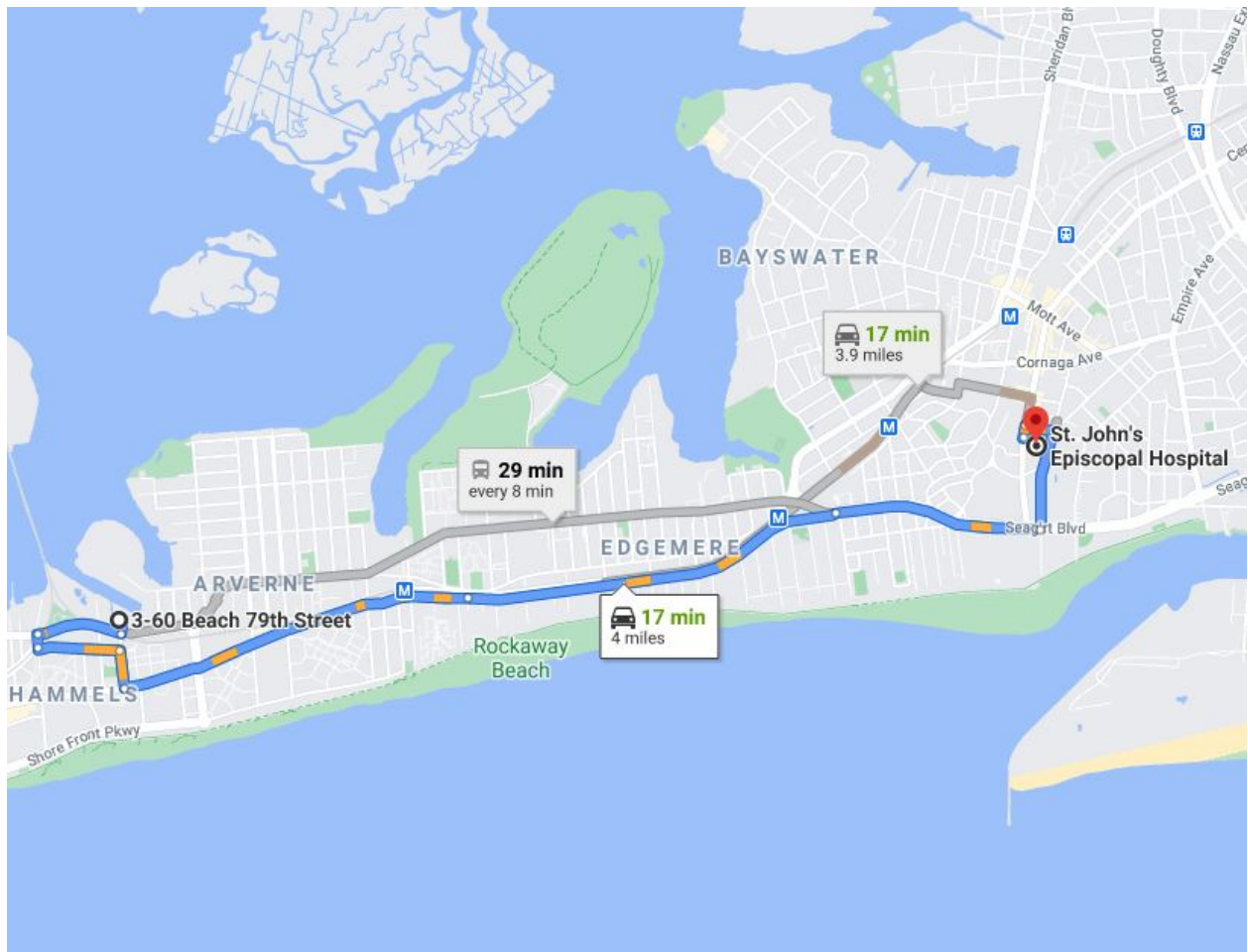
Emergency Agencies	Phone Numbers
EMERGENCY	911
HOSPITAL St. John's Episcopal Hospital 327 Beach 19 th Street Far Rockaway	(718) 869-7000 or 911
POLICE Far Rockaway Police Department 349 Beach 54 th Street Far Rockaway	(718) 318-1294 or 911
FIRE	911
City Hall	311
Water and Sewer Services	311
Site Health and Safety Officer, Scott Spitzer, GBTS	(845) 452-1658

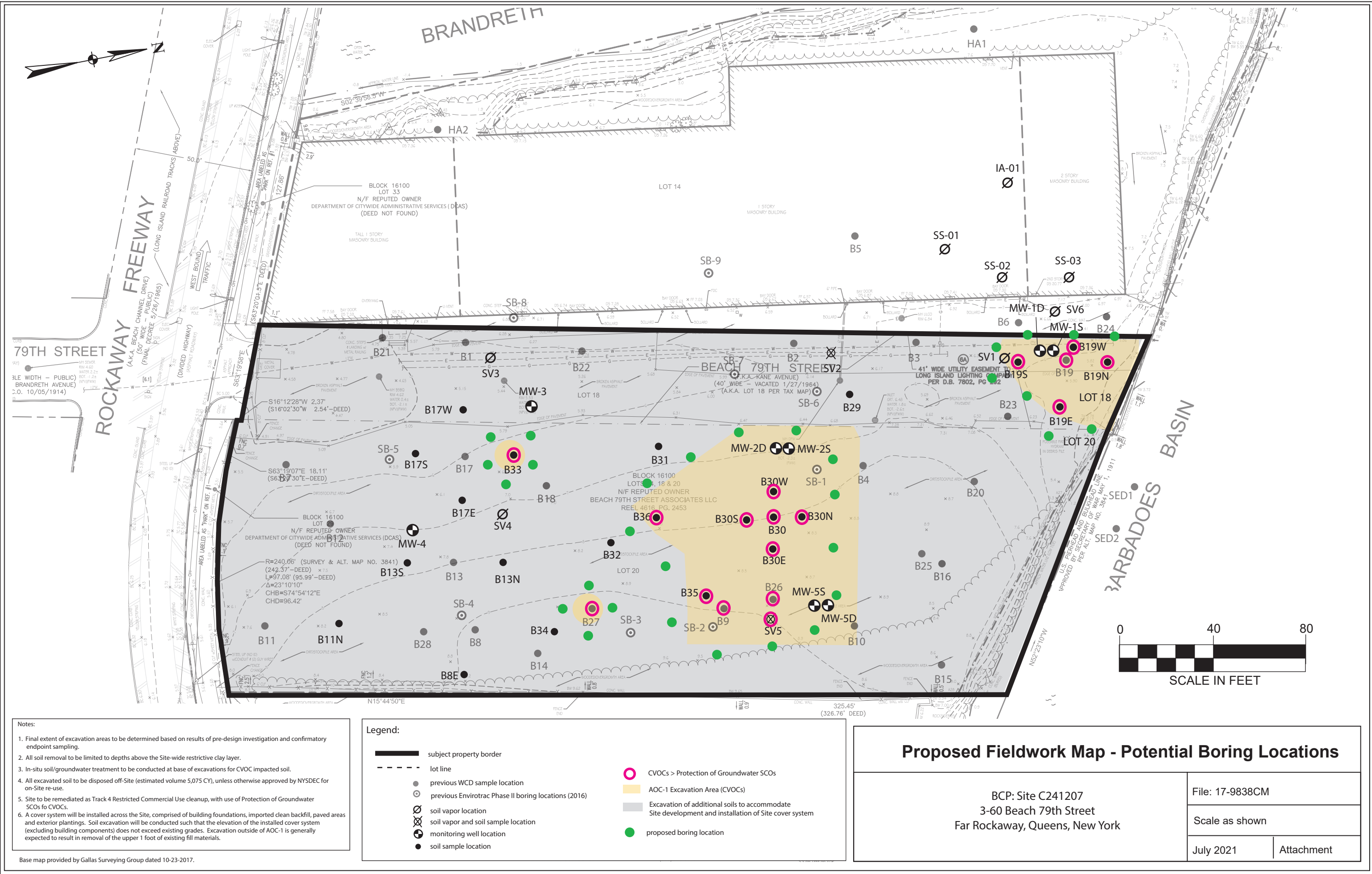
12.2 Directions to Hospital

Approximately 17 minutes travel time – 4 miles

- Head south on Beach 79th Street toward Beach Channel Drive
- Continue on Beach Channel Drive/Hammels Boulevard to Rockaway Beach Boulevard
- Turn left onto Rockaway Beach Boulevard
- Continue onto Edgemere Avenue
- Slight right onto Seagirt Boulevard
- Continue on Beach 19th Street to Beach 20th Street
- Turn left onto Beach 20th Street
- Hospital is on the right

12.3 Map to Hospital





Appendix 1A

New York State Department of Health Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. 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 activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
2. 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 activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can 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.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should 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 must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/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 must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind 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 PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009