# 250 Water Street; Site No: C231127

## New York, New York

## **Brownfield Cleanup Program (BCP) Application**

## submitted by

## **250 Seaport District, LLC**

June 2019



NEW YORK STATE OF OPPORTUNITY COPPORTUNITY Conservation

Prepared by Division of Environmental Remediation New York State Department of Environmental Conservation

## **RESPONSIVENESS SUMMARY**

### 250 Water Street; Site No: C231127 New York, New York

### Brownfield Cleanup Program Application submitted by 250 Seaport District, LLC

A Brownfield Cleanup Program (BCP) application for the 250 Water Street site was submitted to the New York State Department of Environmental Conservation (NYSDEC) by 250 Seaport District, LLC on November 15, 2018. The application was deemed complete on December 21, 2018 and it was then noticed for a 30-day public comment period.

The public comment period for the application by 250 Seaport District, LLC began on January 2, 2019 and concluded on March 6, 2019 after one 30-day extension. The NYSDEC received over 250 emails and letters from parents of children (and some children) attending either the adjacent Peck Slip public elementary school and the private Blue School, residents in the immediate neighborhood, local organizations, school officials, real-estate firms and elected officials commenting on the BCP application and asking questions about the proposed project.

The comments included letters from the Manhattan Bureau President Gale A. Brewer; Assemblymember Yuh-Line Niou; the Chairperson of the Manhattan Community Board 1, Anthony Notaro, Jr.; President of the Southbridge Tower Board of Directors; the Head of School and Board of Directors of the private elementary Blue School; the Peck Slip Elementary School Leadership Team and the PTA co-president; the Save Our Seaport organization; the Durst Corporation; 241 Water Street Holdings; and many parents and residents. In addition, conference calls were conducted with the New York City Councilperson Margaret Chin's office staff and the Manhattan Community Board #1 staff to address their concerns and answer questions.

The following is a summation of comments and questions received and the NYSDEC's, in consultation with the New York State Department of Health (NYSDOH), response to those comments and questions.

#### **BCP Eligibility Related Comments**

**Comment 1:** Most commenters believed that the NYSDEC should reject the application for admission to the Brownfield Cleanup Program, that this is a local matter and should be handled by the NYC Mayor's Office of Environmental Remediation (OER).

**Response 1**: The applicant had the opportunity to either apply to the NYC OER brownfields program as a volunteer or apply to the NYS Brownfield Cleanup Program. Because the applicant applied to the NYS program, the NYSDEC is statutorily required to act on the application in accordance with Environmental Conservation Law (ECL)

Article 27, Title 14. The NYSDEC currently oversees the remedial programs for over 430 BCP Sites, with more than 200 of those located within New York City.

**Comment 2:** Many commenters asked how this project meets the stated goal of the BCP to "encourage private-sector cleanups of brownfields and to promote their redevelopment as a means to revitalize economically blighted communities" when this section of Manhattan is clearly not economically blighted?

**Response 2:** NYS ECL 27-1405 defines a Brownfield site as "any real property where a contaminant is present at levels exceeding the soil cleanup objectives or other healthbased or environmental standards, criteria or guidance adopted by the department that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations." An evaluation of the economic vitality of the community where these brownfield sites are located is not a requirement under the brownfield statute when determining eligibility.

**Comment 3:** Many commenters asked how this project would ever meet the definition of affordable housing in this very affluent neighborhood and that there are no firm development plans.

**Response 3:** Should the project be deemed eligible, the applicant will need to provide a documentation (i.e., regulatory agreement with the appropriate state or local housing agency) that the project meets the definition of affordable housing as defined in 6 NYCRR Part 375-3.2(a). Unless/until such documentation is provided, the applicant would not be eligible for tangible property tax credits, only site preparation (remediation) tax credits.

**Comment 4:** Many commenters said the site is not listed in an Environmental Zone (En-Zone), and the developer has enough resources to do the development without the assistance of the BCP Program.

**Response 4:** A site's location with respect to an En-Zone is relevant to eligibility for tangible property (redevelopment) tax credits, but not a factor in determining eligibility for the BCP. An applicant's financial resources is also not a criterion for determining eligibility for the BCP.

**Comment 5:** The Southbridge Towers Board of Directors commented that "*certain other misrepresentations in the application attempt to mislead the NYSDEC and control the dialogue*" and urged the NYSDEC "*to reject the premature Brownfield Cleanup Program Application of 250 Seaport District, LLC.*"

**Response 5:** Concerns relating to zoning restrictions and municipal approval of the proposed development are outside the jurisdiction of the NYSDEC. The eligibility criteria for the BCP involve the contamination level on the property. To determine eligibility of a site, the DEC evaluates the degree of contamination on the site in relation to its proposed future use and current zoning (6 NYCRR 375-3.3). See Response 2 above. The Department uses zoning and information concerning the general category of reasonably

anticipated future use (i.e., industrial, commercial, restricted residential or residential) supplied by the applicant to determine the applicable Soil Cleanup Objectives ("SCOs"), as more fully described and detailed in NYSDEC's guidance document CP-51, Soil Cleanup Guidance and 6 NYCRR Part 375). For these purposes, it is essential for the NYSDEC to know the general category of anticipated use to ensure that the eligibility determination is properly made and the site is cleaned to the applicable standards. Whether the applicant receives the necessary variances or changes of use for the specific contemplated development plans are outside the scope of NYSDEC's eligibility determination.

**Comment 6:** The Save the Seaport group commented on the application and "asked that the NYSDEC disapprove the application and defer to the NYC OER to handle this complex environmental remediation and redevelopment project." They went on to provide rationale for this request.

**Response 6:** NYSDEC's Response has been broken down to address Save our Seaport's individual concerns:

**Comment 6a:** The New York City Mayor's Office of Environmental Remediation should be the agency handling the environmental remediation at the proposed site.

**Response 6a:** See Response 1. The NYSDEC handles numerous Brownfield Sites throughout the State of New York, including many Brownfield sites throughout the five boroughs of New York City. Both the NYSDEC's program and OER's program provide for voluntary participation. The DEC cannot compel a party to apply to OER's program.

**Comment 6b:** If remediation were to occur in the absence of a commitment to an approved development project, there is a high likelihood that the terms of the BCP approval would be violated.

**Response 6b:** The BCP is designed to encourage developers to participate in the remediation of a contaminated site by providing tax credits for the cleanup and redevelopment of the site. These tax credits are only available to the applicant when the entity has received a Certificate of Completion ("COC"), signifying the completion of the remedial program at the site. If an entity fails to implement a remedial program to the Department's satisfaction, a COC will not be issued and the applicant will not receive tax credits (see ECL § 27-1409(12)).

**Comment 6c:** The applicant's claimed plan to build an Affordable Housing Project is "disingenuous" and should disqualify the Applicant from consideration into the BCP.

**Response 6c:** See Response 3, above. Whether an applicant is seeking Tangible Tax Credits is not a relevant factor in NYSDEC's determination if the site is eligible to enter the BCP. If the applicant develops the site as affordable housing it will

qualify for Affordable Housing Tangible Property Tax Credits, which will be determined at a future date.

**Comment 6d**: The applicant affirms that the proposed use is consistent with comprehensive community master plans, waterfront revitalization plans or other adopted land use plans. Yet at its January 14, 2019 meeting, CB1 was told explicitly that there were no plans at this time for this site.

**Response 6d:** There is no requirement that the applicant have a fully devised redevelopment plan upon entering the BCP.

**Comment 6e:** There are a number of zoning and land use regulations pertaining to this site.

**Response 6e:** See Response 5, above. General land Use and Zoning information are needed to assess the Soil Cleanup Objectives applicable to the site. Zoning and land use restrictions are not within NYSDEC's jurisdiction.

**Comment 6f:** What plans are being made by the applicant regarding the loss of the existing 400 vehicle parking lot?

**Response 6f:** This issue is not pertinent to the eligibility of the site to enter the BCP.

**Comment 6g:** What is the role of the NYS Historic Preservation Office and will there be an archeologist assigned to this site.

**Response 6g:** As an eligibility determination into the BCP is a discretionary approval on the part of the NYSDEC, the site will be subject to review under the State Historic Preservation Act. At this time, it is premature to address what role the NYS Historic Preservation Office may have.

**Comment 6h**: What performance bond standards will be required by NYSDEC prior to approval for this site remediation to assure the community that the applicant is financially viable to complete a development project?

**Response 6h:** The BCP is a voluntary program and NYSDEC typically does not require financial assurance from an applicant. An applicant has financial incentives to complete the remedial program. If the remedial program is not completed to the satisfaction of NYSDEC, then the applicant will not receive tax credits. Additionally, if the site is determined to represent a significant threat to public health or the environment and the applicant withdraws from the BCP, NYSDEC would evaluate the site for inclusion on the State's Registry of Inactive Hazardous Waste Disposal Sites (Superfund).

### Public Health Related Comments

**Comment 7**: Many commenters were very concerned with the potential exposure through inhalation to airborne mercury and lead to the local community, especially the school children, if the site is excavated and asked what precautions will be taken if the project proceeds.

**Response 7:** If the site is deemed eligible for participation in the BCP, a site-specific Health and Safety Plan (HASP) and a Community Air Monitoring Plan (CAMP) will be developed prior to the start of any field work and will be incorporated into both the Remedial Investigation Work Plan (RIWP) and the Remedial Action Work Plan (RAWP). The draft RIWP requires a 30-day public comment period before approval, and the RAWP requires a 45-day public comment period before approval. The CAMP will be reviewed by the NYSDEC and NYSDOH prior to approval. Air monitoring will be conducted for particulates (dust), total volatile organic compounds (VOCs) and mercury vapor using real-time field monitoring instruments during all ground intrusive work, and any potentially contaminated material handling, staging, etc. The CAMP will include conservative action levels which, if exceeded, will require review and evaluation of work activities, work to be halted, and actions taken such as water misting the area, application of spray foam, or other best management activities to address any potential for dust, volatiles, or mercury to migrate from the work area. As an additional measure, special requirements will be required in the CAMP for work within 20 feet of potentially exposed individuals. These requirements will be determined in consultation with the NYSDOH. Once the remedial investigation is complete and the nature and extent of contamination has been determined, additional community protection measures will be evaluated and implemented as necessary. The NYSDOH generic CAMP is attached as Appendix IA.

**Comment 8:** Many commenters stated that "even if children are exposed to short-term inhalation of airborne mercury and lead vapors, they risk permanent damage to their nervous system, brain, cardiovascular system, and kidneys. This damage can even be fatal. If fact, breathing in the vapors from lead and mercury is more toxic than swallowing lead or mercury."

**Response 8:** The risk for health effects from an environmental contaminant depends on the toxicity of the contaminant and the magnitude, frequency and duration of exposure. Measures taken to reduce exposure during remedial activities, along with the community air monitoring plan, will help ensure that the levels of any site contaminants in air are kept below levels that would constitute a health concern.

**Comment 9**: Many commenters felt that there is simply no way to guarantee the safety of the school children and residents if the site is excavated and it will pose an unacceptable risk.

**Response 9:** To date, only a preliminary Phase 2 field investigation has been completed at the site. That investigation did detect mercury, lead, PCBs, petroleum related compounds and polyaromatic hydrocarbons (PAHs) in subsurface soil above the 6

NYCRR Part 375-6 restricted residential use soil cleanup objectives. If deemed eligible for the BCP, a Remedial Investigation will be required to fully characterize the nature and extent of the soil, groundwater and vapor contamination. This investigation will also include a qualitative on and off-site human health exposure assessment. This assessment must identify areas of concern and compounds of concern, evaluate actual or potential exposure pathways, characterize the potentially exposed receptors (residents, workers, recreational users, etc.), and identify how each unacceptable exposure pathway may be eliminated/mitigated. This assessment will also aid in designing safe, effective and efficient methods to remediate the site. One method may be to conduct all remedial work inside a large temporary structure or "tent" designed to prevent any off-site migration of airborne contaminants. See the attached figures of a remedial project performed in a temporary structure.

**Comment 10:** Many commenters asked what type of dust suppression would be used during site excavations?

**Response 10:** The methods for dust suppression during excavations will be detailed in the RAWP, but typically include temporary enclosures, and misting and water spray systems which can apply water directly to roads, excavations and stockpiles. The site perimeter will be monitored for fugitive dust emissions. If the downwind particulate level is greater than a specified level (typically 100 micrograms per cubic meter ( $\mu$ g/m<sup>3</sup>) above background (upwind perimeter) levels, then dust suppression would be employed. These action levels are below dust levels that are visible. If dust suppression methods are unsuccessful, work would need to be stopped and re-evaluation of activities would be initiated. Sustained concentrations would be reported to the NYSDEC and NYSDOH and reported in the daily field reports.

**Comment 11:** Many commenters asked what method and frequency of ambient air monitoring would be performed and how will those results be made available to the public?

**Response 11:** If the site is deemed eligible for the BCP, the details of the air monitoring to be performed will be outlined in the CAMP but at minimum will be conducted during all intrusive activities during both the remedial investigation and the actual site remediation. Results will be reported in weekly and monthly field reports and could be made available to the public through a remedial party hosted dedicated project website. See Response 7 above.

**Comment 12:** Many commenters asked if a BCP project of this scope ever been done immediately adjacent to two elementary schools and can it be done in a safe manner?

**Response 12:** Projects located adjacent to and on school property have been successfully completed. These include a significant arsenic contaminated soil removal on a school and residential properties in Middleport, NY (see: <u>https://www.dec.ny.gov/chemical/54220.html</u>); a PCB cleanup on school grounds in Elmira, NY (see: <u>https://www.dec.ny.gov/chemical/102390.html</u>); a coal tar remediation

at the Manhattan Center for Science and Mathematics and the Isaac Newton Junior High School for Science and Math (see https://www.coned.com/en/community-affairs/former-con-edison-manufactured-gas-plants/con-edison-manufactured-gas-plant-in-progress-site-updates-documentation); and a arsenic and lead cleanup in a residential neighborhood in Geneva, NY (see: https://www.dec.ny.gov/chemical/107812.html ).

**Comment 13:** Many commenters, including Manhattan Borough President Gale A. Brewer, have requested if the project is to proceed, that for the safety of the school children work be conducted during time periods when the schools are not in session.

**Response 13:** If the project is deemed eligible for the BCP, the actual remedial action that may be necessary will be determined based on the results of the remedial investigation, therefore a schedule to perform that work cannot be determined at this time. Regardless, protection of public health, especially the school children, will be an upmost priority. A schedule for the construction of any new building(s) on the property would need to be negotiated between the developer and local agencies.

**Comment 14:** Assemblymember Yuh-Line Niou commented that "it is critical that the DEC and HHC communicate thoroughly with our community throughout the entire process if this project is approved." Also, Assemblymember Niou commented that "the health and wellbeing of those who live here, those who make this neighborhood what it is today, come first."

**Response 14:** A draft Community Participation Plan (CPP) is the first deliverable once a Brownfield Cleanup Agreement (BCA) is executed between the applicant and the NYSDEC. Maximizing opportunities to engage the community in the entire process will be a key element in that plan. This will include issuance of fact sheets throughout the process, providing project documents and data in a timely manner to the public, public availability sessions to discuss the status of the project and the data collected, and other measures, as necessary. The NYSDEC and NYSDOH personnel assigned to the project are always available via email or direct phone contact.

**Comment 15:** The Manhattan Community Board 1 Chairperson Anthony Notaro, Jr. commented that "It is critical that the DEC and HHC take all necessary steps to make sure any disruption of the toxins is done with proper safeguards and oversight so that the health and wellbeing of those who live, visit or work in the area is the number one priority."

**Response 15:** The NYSDEC and the NYSDOH agree. The overall protectiveness of the public health and the environment is the first factor considered during the evaluation of remedy alternatives.

**Comment 16:** The Peck Slip School Leadership Team asked that "because the site is located next to two schools, and a de facto retirement community, it is imperative that the current protective cap remain as long as possible, the cleanup use specialized remediation plans and safety measures with young children and adults in mind and be performed in the most careful and efficient way, with disruption to the least amount of

soil." Also, they requested the NYSDEC to "deny the application of Howard Hughes Corporation into the Brownfield Cleanup Program until a time when their application becomes appropriate and necessary."

**Response 16:** The current paved commercial parking lot cap does serve as a barrier to prevent direct contact with contaminants in the fill below it and will remain in place until an approved Remedial Action Work Plan is in place. However, until a thorough investigation is performed, it is currently unknown whether other routes of migration and exposure are present. Any necessary remediation of the site is likely to be implemented concurrent with the contemplated development of the property. The remediation will be completed under the oversight of environmental professionals who will be implementing the CAMP and will have the authority to cease operations if action levels are exceeded. See Response 7 above.

**Comment 17:** The Blue School Board of Trustees advocated for a transparent process, recommended a community advisory group be formed, that as much work as possible be conducted when the schools are not in session and to "*prioritize the health and safety of our students and the community above all.*"

**Response 17:** The CPP will provide the mechanisms for a transparent process. The formation of a community advisory group will be considered.

### **BCP Process Related Comments**

**Comment 18:** Some commenters asked how they would be kept informed on the project if it is approved?

**Response 18:** As required under the BCP statute and regulations, a Citizen Participation Plan (CPP) is the first submittal by the remedial party once a Brownfield Cleanup Agreement (BCA) is executed. The CPP will explain how the public will be kept informed and identify the opportunities for the public to provide input to the project. In addition to the CPP, a Remedial Investigation Work Plan (RIWP) must be submitted by the remedial party once the BCA is executed. There is a 30-day public comment period for the RIWP. Fact sheets would be sent out periodically via the NYSDEC's listserv. Please see below for how to sign up. Project documents will be available at the site's document repositories and can be made available on NYSDEC public website and/or a remedial party hosted project specific website. Public availability sessions and public meetings with NYSDEC and NYSDOH can also be conducted. See attached BCP Citizen Participation Activities chart.

**Comment 19:** Many commenters believe it is premature to allow the site to be opened for remediation when there is no currently approved plan for the development of the site?

**Response 19**: No excavation of the site will occur until there is either an Interim Remedial Measure Work Plan (IRMWP) or a Remedial Action Work Plan (RAWP) approved by the NYSDEC and NYSDOH. An IRM can be conducted at a site when a source of

contamination or exposure pathway can be effectively addressed before issuance of a Decision Document. The RAWP will detail all necessary remedial measures to be completed for the applicant to receive a Certificate of Completion from the NYSDEC. Before either of these documents are approved, they will be made available to the public for comment. Both documents will contain a Community Health & Safety Plan (CHASP) and a Community Air Monitoring Plan (CAMP).

**Comment 20:** Some commenters asked if development were to occur on the site without participation in the BCP program, would the same assessment/remediation take place as part of the regular environmental assessment procedure, or does the BCP require a higher level of remediation than what would otherwise be required?

**Response 20:** The BCP may require a higher level of remediation since it has specific soil cleanup objectives that must be met for most of the commonly found environmental contaminants in soil. There would also be NYSDEC and NYSDOH oversight of the project and implementation of the CAMP, as discussed above. All excavated contaminated soil and fill would need to be properly transported and disposed of off-site at permitted facilities regardless of whether the project is in the BCP or not.

**Comment 21:** Some commenters asked what controls will there be to prevent the release of excavated soil from the trucks when they exit the site?

**Response 21:** Trucks used on BCP projects must meet all DOT requirements, including covering any load of excavated soils with a full tarp prior to the truck exiting the site to prevent spillage onto the city streets. The tires and exteriors of the trucks and other earth-moving equipment must be washed before leaving the site so that the soil is not tracked through the neighboring streets. Stone or pavement will be placed at a well-drained construction exit to limit the soil picked up on tires after washing. Safe truck routes will be established as part of the Community Health and Safety Plan. There will be daily monitoring by an environmental professional to ensure compliance.

**Comment 22:** Some commenters asked in the event of a flood or storm, what precautions will be taken so that deadly toxic elements don't wash over the neighborhood and schools?

**Response 22:** As evidenced during Superstorm Sandy, the site is in a flood prone area during major storm events, NYSDEC will require appropriate and necessary protocols be included in the remedial action work plan to prevent the spread of contamination off-site. This will include securing and removing equipment, removing stockpiled material and securing stockpile covers, removing hazardous material, fuels and hazardous waste from the site and fortifying storm water management systems such as berms.

**Comment 23:** Some commenters asked if the water at Peck Slip School and air be frequently tested before, during, and after cleanup?

**Response 23:** The potable drinking water at the Peck Slip School, as well as the rest of Manhattan, is provided from upstate reservoirs by the City of New York and is regularly sampled to ensure that it meets all drinking water quality standards. It would not be impacted from any possible groundwater contamination at 250 Water Street. Should the site be deemed eligible for participation in the BCP, the ambient air will be tested throughout the entire remedial process.

### Other Comments

**Comment 24:** Many commenters were concerned that the new building proposed for the site will not be in compliance with the C6-2A zoning for the South Street Seaport Historic District which has a 120-foot height restriction.

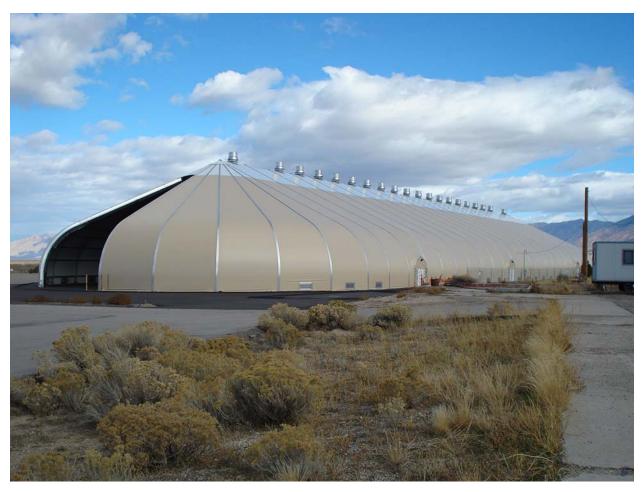
**Response 24:** See Response 5, above. Issues concerning compliance of specific development plans with local zoning and land use are outside of NYSDEC's jurisdiction and are not addressed under the BCP. Concerns relating to zoning issues at the Site are to be addressed by the relevant New York City agencies.

#### Receive Site Fact Sheets by Email

Have site information such as this fact sheet sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: <u>www.dec.ny.gov/chemical/61092.html</u>

It's quick, it's free, and it will help keep you better informed. As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies).

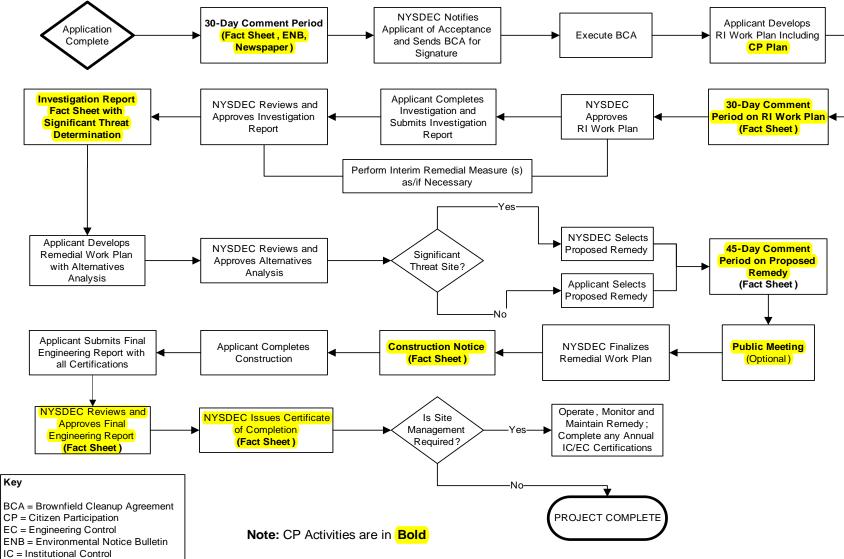
## Enclosed structures are fully customizable



Enclosed structures provide negative pressure contaminant. In other words, air can flow in but not out.



## - Brownfield Cleanup Program Process



RI = Remedial Investigation

Citizen Participation Activities	Timing of CP Activity(ies)
Application Process:	
<ul><li>Prepare site contact list</li><li>Establish document repository(ies)</li></ul>	At time of preparation of application to participate in the BCP.
<ul> <li>Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period</li> <li>Publish above ENB content in local newspaper</li> <li>Mail above ENB content to site contact list</li> <li>Conduct 30-day public comment period</li> </ul>	When NYSDEC determines that BCP application is complete. The 30-day public comment period begins on date of publication of notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the site contact list should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement (BCA):	
Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation <b>Note:</b> Applicant must submit CP Plan to NYSDEC for review and approval within 20 days of the effective date of the BCA.
Before NYSDEC Approves Remedial Investigation (RI) Work Plan:	
<ul> <li>Distribute fact sheet to site contact list about proposed RI activities and announcing 30-day public comment period about draft RI Work Plan</li> <li>Conduct 30-day public comment period</li> </ul>	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, public comment periods will be combined and public notice will include fact sheet. Thirty-day public comment period begins/ends as per dates identified in fact sheet.
After Applicant Completes Remedial Investigation:	
Distribute fact sheet to site contact list that describes     RI results	Before NYSDEC approves RI Report
Before NYSDEC Approves Remedial Work Plan (RWP):	
<ul> <li>Distribute fact sheet to site contact list about draft RWP and announcing 45-day public comment period</li> <li>Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager)</li> <li>Conduct 45-day public comment period</li> </ul>	Before NYSDEC approves RWP. Forty-five day public comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45- day public comment period.
Before Applicant Starts Cleanup Action:	
Distribute fact sheet to site contact list that describes     upcoming cleanup action	Before the start of cleanup action.
After Applicant Completes Cleanup Action:	
Distribute fact sheet to site contact list that announces that cleanup action has been completed and that NYSDEC is reviewing the Final Engineering Report	At the time the cleanup action has been completed. <b>Note:</b> The two fact sheets are combined when possible if there is not a delay in issuing the COC.
Distribute fact sheet to site contact list announcing NYSDEC approval of Final Engineering Report and issuance of Certificate of Completion (COC)	

#### 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 <u>ground intrusive</u> 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 <u>non-intrusive</u> 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 mcg/m<sup>3</sup> 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 mcg/m<sup>3</sup> 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 mcg/m<sup>3</sup> 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