WEST SIDE CORPORATION SITE

Frequently Asked Questions

What is the West Side Corporation Site? Where is the site located?

The West Side Corporation (WSC) site, located at 107-10 180th Street in Jamaica, Queens, is a 4.5-acre property that housed a dry cleaning chemical storage and distribution center from 1969 to 1982. The site is currently leased to the Atlantic Express Company for use as a bus depot.

Why does the site need to be cleaned up?

When the WSC closed, it left behind a site contaminated by spills and storage tank leaks, which resulted in the seepage of hazardous chemicals – specifically perchloroethylene (PCE or perc) -- through the soil and into the groundwater. The WSC site was listed in the New York State Registry of Inactive Hazardous Waste Sites in August 1997, because of its high concentrations of contaminants in the soil and groundwater. Today, a slow-moving plume of PCE-contaminated groundwater extends beyond the boundaries of the WSC site. Pollutants must be removed from both the soil and groundwater to prevent the plume from spreading further and to protect the area's groundwater supply.

What work will be done on the site?

Initial work will involve cleaning up the contaminated soil beneath the asphalt in three source areas. Source areas are areas of the site where leaking tanks or spills were originally located. They represent the most highly contaminated areas of the site. The soil will be cleaned up using technologies that allow for remediation "in place." This means that disturbance of the soil and creation of any possible exposure will be kept to a minimum. The two main clean up technologies to be used are Electrical Resistance Heating (ERH) and Soil Vapor Extraction (SVE). These technologies are explained in more detail below.

What are ERH and SVE? How do they work? Are they safe?

ERH is a technology that uses specially designed, electrically powered probes to heat up the ground in a defined area. (See Attachment.) By increasing the temperature in the ground, the PCE is converted from a liquid to a vapor state. The vapors move into the space between the water table and the ground surface (known as the unsaturated zone), which is the dry dirt below

the ground. The SVE system is then used to collect the vapors to assure that they are not released into the air. A vacuum pump draws the PCE vapors out of the unsaturated zone into a treatment system, where the PCE is destroyed.

A significant advantage of using an ERH and SVE system is that all of the clean-up work takes place underground. This minimizes the chance for human exposure to the contaminants – both to workers on the site and to residents in the surrounding neighborhood. Both ERH and SVE are proven technologies that have been used on major remediation sites around the country and have been shown to be very safe.

What is the schedule for clean-up of the site?

The project schedule calls for construction equipment to be brought onto the site in January 2005. It is anticipated that operation of the ERH and SVE systems will begin in March 2005. Operation and monitoring of the ERH system is expected to continue into September 2005. The SVE system will be operated, monitored, and maintained for a minimum of two years.

How will the contaminated groundwater plume be remediated?

Once ERH is completed, remediation of the contaminated groundwater plume will begin. The contaminated groundwater will be pumped from two recovery wells that will be capable of capturing the full length of the plume. The wells and treatment system will be located at the New York City Department of Environmental Protection's (DEP) Station 24, which is adjacent to the WSC site. After being captured and treated, the water will be discharged directly to the storm sewer system. Water treated at Station 24 **WILL NOT** be used for drinking purposes.

How will the effectiveness of the clean-up operation be measured?

Effectiveness will be measured in two ways. The first technique will measure the amount of chemicals that are being removed by ERH and SVE. The vapor streams pulled from the ground by ERH and SVE will be sampled for perc and other contaminants in order to calculate how many pounds per day are being removed. These operations will cease when the rate of contaminant removal drops to a point where continued operation is no longer deemed effective.

The second technique will measure the amount of contamination left in the ground following ERH. This will involve the collection of soil and groundwater samples from borings and

groundwater wells located near the treatment area. These samples will be analyzed for perc and other contaminants. The levels measured will be compared to concentrations present before treatment started.

Will any soil be removed from the site? If so, how? How much? Where will it be disposed?

While most of the soil will be cleaned up in place, some soil will be removed during the initial trenching activities and installation of wells and probes. These soils will be classified (hazardous or non-hazardous), containerized and sealed. It is estimated that one sealed roll-off container (similar in size to a dumpster) of hazardous soil and approximately four sealed roll-off containers of non-hazardous soil will need to be removed. The hazardous soil will be taken to a facility just outside Buffalo, NY for disposal, and the non-hazardous soil will be transported to a treatment facility in Philadelphia, PA. The truck routes for soil transport, which are detailed in the Community Protection Plan (CPP), will primarily use 180th Street and Liberty Avenue.

What are the expected community impacts during construction?

The community may experience impacts that are typical of any construction project in terms of truck traffic, noise, dust, etc. Heavy vehicles will have a limited access route to and from the project site from 180th Street (an industrial area) in order to avoid travel through residential areas. Noise levels will be monitored by a sound level meter to ensure that noise levels are 70 decibels (dB) or less at the property boundary. (For reference purposes, a vacuum cleaner at 10 feet is 67 dB.) Appropriate actions will be taken to reduce any noise levels that exceed the 70 dB limit. Minimal dust will be generated during installation of piping and other treatment equipment. On-site and perimeter air monitoring will ensure that air quality during construction is within acceptable limits. The CPP details information on air monitoring, as well as odor control.

What, if any, is the danger to children who ride Atlantic Express school buses?

There is no danger to school bus passengers.

What kind of emergency procedures are in place?

Although it is highly unlikely that an emergency situation will occur, contingency procedures will be in place before the start of clean-up activities. These will be detailed in the CPP and in

the Health and Safety Plan (HASP). Local police, fire, and emergency response authorities have been contacted and advised of the planned remediation activity. A meeting with these local officials to exchange detailed information on emergency procedures and security issues will be held prior to the start of work, and coordination will be ongoing.

What are the proposed security arrangements at the site?

The immediate work area, as well as the entire WSC property, will be fenced. Security personnel hired by the soil remediation contractor will monitor the work area 24 hours a day, 7 days a week. In addition, Atlantic Bus Company's current security staff will continue to patrol the area. Coordination between site security and local police will be ongoing.

What steps will be taken to ensure that the air around the site is safe during remediation?

Air monitoring equipment will be placed in the immediate work area, as well as on the perimeter of the WSC site. This equipment will continuously record air quality levels. Should elevated levels of contaminants be detected at any time, corrective measures will immediately be taken to ensure the safety of workers and the community. This will include suspension of work and other appropriate steps, as detailed in the CPP.

What are the proposed construction hours? How many people will be working at the site during construction?

Construction activities will take place during typical weekday construction hours (approximately 7:00 AM to 3:30 PM). Work will be coordinated with the bus company. A maximum of 20 people will be working at the site during mobilization and start-up operations (first two months). This number will decrease to fewer than five persons once the ERH operation begins.

Who will be overseeing work at the site?

The New York State Department of Environmental Conservation (DEC) and its consultants are supervising and monitoring the soil clean-up activities. DEC has hired the URS Corporation to provide construction management and full-time inspection of the clean-up.

What is the cost of the soil clean-up operation? Who is funding the work?

The contract for soil remediation is approximately $4 million. It is being funded by DEP.

Is the water in nearby homes safe to drink?

Absolutely. The drinking water in nearby homes is drawn from the upstate reservoir supply system, which is in no way affected by the WSC soil or groundwater contamination.

Who can I contact if I have additional questions?

For further questions related to the soil remediation project contact:

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Albany, New York 12233-7013
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For general project questions contact:

Sara Pecker, Director of Communications
Bureau of Water and Sewer Operations
New York City Department of Environmental Protection
59-17 Junction Boulevard
Flushing, New York 11373
phone: (718) 595-5487
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Who can I contact if I see a problem at the site?

During regular hours of operation, contact the contractor or site personnel at the office trailers. After work hours, contact on-site security personnel. Telephone numbers will be posted at the site and online (www.ci.nyc.ny.us/html/dep/html/news/bqa.html) as soon as the trailers are set up.

Where can I lean more about the project?

Project materials are available at the Queens Borough Public Library, 89-11 Merrick Boulevard, Jamaica.

What is Electrical Resistance Heating?