

# FACT SHEET No. 2

## Excavation Activities

July to November 2005

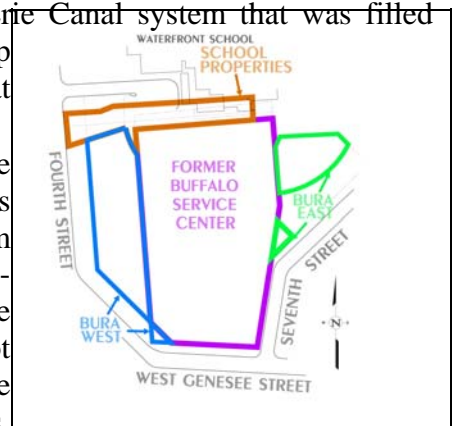
## Former Buffalo Urban Renewal Agency, Former Buffalo Service Center, and Waterfront School Properties Buffalo, New York

### Background

ESC Engineering of New York and our Buffalo-based contractors have been extremely busy since Fact Sheet No.1 was distributed and the public meeting was held at the Waterfront School in June. Thanks to the hard work of everyone involved, the project to clean up the sites south of the Waterfront School are ahead of schedule. Weather permitting, we will finish sooner than planned.

Three sites, and a portion of a fourth, are being cleaned by our team: the former Wilkeson Slip area, Buffalo Urban Renewal Agency (hereafter referred to as “BURA”) West, the former Buffalo Service Center, and a portion of BURA East in anticipation of the construction of HealthNow’s headquarters. The former Wilkeson Slip is being cleaned up under an Order on Consent between the New York State Department of Environmental Conservation (NYSDEC) and National Fuel Gas Distribution Corp. and the other sites are being cleaned up under the New York State Brownfield Cleanup Act.

- The former Wilkeson Slip area was part of the Erie Canal system that was filled around 1915. The materials used to fill the slip contained oily residues and other hydrocarbons that exceed today’s cleanup standards.
- For reference the wastes being removed from the site, contained compounds “called hydrocarbons because almost all of them are made entirely from hydrogen and carbon. Some are clear or light-colored liquids that evaporate easily, and others are thick, dark liquids or semi-solids that do not evaporate. Many of these products have characteristic gasoline, kerosene, or oily odors. Because modern society uses so many petroleum-based products (for example, gasoline, kerosene, fuel oil, mineral oil, and asphalt), contamination of the environment by them is potentially widespread.” (Agency for Toxic Substances and Disease Registry)
- BURA West, the former Buffalo Municipal Parking Lot, was used for many industrial activities decades ago. Limited areas of BURA West have soils with concentrations of hydrocarbons that exceed today’s cleanup standards.



- The former Buffalo Service Center was the site of a manufactured gas plant for nearly 100 years, until 1948. The soils contain residual tar and its related contaminants/compounds and purifying waste compounds.

A portion of BURA East that will be used for the new building construction is being cleaned. This area was the site of various industrial operations through the 1950s.

A number of simultaneous activities are occurring at these sites to remove residuals left by historical industrial practices, and to prepare the site for construction of the new office complex. The activities include:

1. Sampling and Testing,
2. Removal of Groundwater,
3. Excavating, and
4. Backfilling

### **Sampling and Testing**

All work is being conducted according to procedures approved, overseen, and documented by the New York State Department of Health (NYSDOH) and Department of Environmental Conservation (NYSDEC) including: a Health and Safety Plan, a Community Air Monitoring Plan, and various Work Plans. In addition, a NYSDEC inspector is assigned to the project and has an office trailer at the site. The NYSDOH is provided all air monitoring data as soon as they are received from the independent testing lab.

The state-approved plans dictate that the air, soil, and groundwater at the site be tested on a specific frequency and for specified compounds. The Work Plan and Health and Safety Plan were developed to ensure protection of site workers and the public. The Community Air Monitoring Plan is designed to verify that the Health and Safety Plan and Work Plan are effective. As an extra precaution, ESC Engineering and our contractors have taken more samples than required by the state to further ensure the safe working conditions at the site and for the community.

We are especially aware of the odor at the site. We are excavating oily fill that has been under water (groundwater in this case) for nearly 100 years and soils that contain tar, similar to what is found in road asphalt and roofing tar. Our first priority is safety. Air is monitored at the fence line upwind of the site, at the excavation area where our workers are located and downwind at three locations. These monitoring locations provide data that will allow us to stop work before there is any potential risk to the health of our workers and long before any potential health risk to the public is presented. To date, the air testing confirms that the odors at the site has not come close to posing any health risk to the workers or the public.

Several actions are being taken to control odors. First, a considerable amount of additional money was spent to complete extensive sampling and testing of the soils at the site. By doing this additional testing, the NYSDEC has approved our plan to load a majority of the soil directly from our excavation into trucks for shipment to a state-permitted landfill. Direct loading reduces the amount of time these soils remain at the site and therefore the odor they produce. The piles

of soil at the site are clean soils to be used for backfill or soils being shipped to facilities for recycling or treatment. Second, we use special foam to cover areas in the bottom and on the sides of the excavation that are particularly odorous. This foam prevents odors while we wait for trucks or at the end of a workday. Third, we cover areas of the site and stockpiles producing odor with tarps to contain the odors. Fourth, we use activated carbon to remove any odors in the exhaust from the groundwater treatment plant. Finally, and most importantly, we are ahead of schedule. Being ahead of schedule has two benefits; it reduces the number of days odor-producing materials remain in the neighborhood, and it allows us to place clean fill over the completed excavations.

### **Removal of Groundwater**

In accordance with the state-approved Work Plans, dewatering wells were installed in June 2005. These wells are currently being used to remove groundwater in the former Wilkeson Slip and adjacent areas. The groundwater is pumped to a treatment system at the site, and then discharged to the Buffalo Sewer Authority under appropriate permit for final treatment.

The dewatering system produces a number of important benefits for the project and the community: (1) it lowers the water table to allow the fill and soils to be excavated safely; (2) it removes the water that contains some of the same compounds that exist in the fill and soils at the site. Removing and treating this groundwater accelerates the cleanup and prevents this water from migrating away from these sites; (3) the groundwater is a contributor to the odor, collecting and treating it reduces the odor; and (4) the system is not selective, water from our sites as well as from the historical industrial sites in the area is collected and treated.

All samples of the groundwater have shown that the water collected and treated meets all applicable regulatory standards.

### **Excavating**

The goal of this project is to remove fill and soil that contain compounds from historical industrial activities at these sites that exceed the NYSDEC defined cleanup standards. Years of investigation have clearly defined the compounds that exist at these sites. The state-approved Work Plan was developed to remove those compounds from the sites and haul them to approved disposal facilities. While the concentrations of these compounds in the undisturbed ground and during the cleanup pose no threat to human health, there was a potential for these compounds to impact groundwater. Our clients along with the NYSDOH and NYSDEC have decided the best course of action to allow redevelopment of these sites is to excavate these materials.



View of Excavation Activities  
August 2005

To date, in excess of 50,000 tons of fill and soil have been excavated and removed from the site. The planned excavations are nearly 50 percent complete. The excavations on the Waterfront School property are completed and while little impacted fill was found under the school, an abandoned storm sewer was encountered. Following the excavation of the fill and soil, the materials remaining below and around the excavations are sampled to verify that the area is clean. After a series of clean samples have been collected and approved by the NYSDEC, the excavations are backfilled with clean soils. A special material will be placed under the existing school building to completely seal the area and fill the abandoned storm sewer. In the coming months, field work to remove environmental conditions left by historical activities will be completed.

### **Security**

Please be aware that no one is allowed in the work area except employees of the drilling company, ESC Engineering, our Buffalo-based subcontractors, and the NYSDEC who have been specifically identified and trained for the tasks being performed. The excavations throughout the site, and the heavy equipment and trucks all pose safety concerns for people not specifically trained in excavation safety. To ensure no one inadvertently gains access to the site, the property is surrounded by a fence and security is maintained 24 hours per day/seven days per week.

### **Closing**

This project is a perfect example of how progress can be made when the New York State regulations and business interests are aligned. These environmentally distressed properties are being cleaned up and placed back into service, bringing jobs and other improvements to the community. It is our goal to make the cleanup process as safe and effective as possible.

Please direct any questions you may have to the following contacts:

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