

June 24, 2013

GREENWICH HIGH SCHOOL ENVIRONMENTAL TESTING UPDATE

March 2013 Groundwater Monitoring Results and Future Groundwater Monitoring Plans & Summer 2013 Investigation Summary and Schedule

Highlights: *As presented in March 2013, a report of the findings of the GHS Environmental Study may be found in the Remedial Investigation Report and associated summary Updates, available on the GPS web site. The project has moved into the next phase with this Update providing information regarding:*

- *May 2013 groundwater monitoring results.*
- *Future groundwater monitoring activities planned for the GHS site.*

Additional testing is planned for June and July 2013 to support the design of future remediation activities for the site. The planned testing includes:

- *Collecting up to 50 soil samples (just beneath the ground surface) to support remediation design and planning.*
- *Surface water and sediment sampling within upstream areas of West Brothers Brook to further evaluate environmental conditions.*

Introduction

In mid-July 2011, during the course of excavation work for the Greenwich High School (GHS) Music Instructional Space and Auditorium (MISA) project, unexpected soil conditions were discovered in the west (or back) parking lot, adjacent to the athletic fields. This finding prompted several rounds of environmental testing, where initial test results showed levels of a class of chemicals known as polychlorinated biphenyls (or PCBs) in soil above standards set by the Connecticut Department of Energy and Environmental Protection (DEEP). Since this discovery, a comprehensive environmental study of the high school campus grounds has been completed. Separate phases of the study were completed in December 2011 and February, April, and June/July 2012, corresponding with school vacations. During these investigation phases, environmental samples were collected of soil, groundwater, sediments and surface water in the brook and pond, ambient air, and soil vapor. A report of the findings of these studies is presented in the Remedial Investigation report, and a summary of the results is available online in a Project Update format.

This project update provides information on the May 2013 groundwater sampling and details on future groundwater monitoring events. This Update also provides information regarding the planned June/July 2013 investigation.

May 2013 Groundwater Monitoring

A quarterly groundwater monitoring event was performed at the GHS site in May 2013. The groundwater analytical data and flow patterns continue to show that the impacts are not migrating offsite. Groundwater sampling and analysis were performed in the same manner as described in the Remedial Investigation report. The results from the May groundwater monitoring, which are posted to the GHS Environmental website, indicate that site conditions are very similar to what has been previously observed. Specifically, groundwater flow patterns were the same with groundwater entering the site from the east and the north and exiting the site in the southeast corner. In addition, impacts to groundwater were mostly limited to the area of impacted soil found beneath the west parking lot and fields 3 and 4. The next round of groundwater monitoring is planned for August 2013.

Planned Sampling Activities for Summer 2013

Additional soil, sediment and surface water sampling and testing is planned to support remediation planning and design. Soil sampling is planned for all areas of the site, excluding the synthetic turf athletic fields. Sediment and surface water sampling is planned for West Brothers Brook located upstream of the high school property. The planned activities are anticipated to begin at the end of June, after the last day of school, and will be completed by the end of July.

✓ Soil Sampling

Approximately 50 soil borings will be completed at the site during a 3-day period in June. The majority of the soil borings will be completed in the southeastern area of the site. The soil borings will be completed using a Geoprobe direct-push drilling machine (see photo).

Approximately 50 soil samples (one sample per boring) will be collected during the soil sampling program. The soil samples will be sent to a state-certified testing laboratory for analysis. The samples will be analyzed for polycyclic aromatic compounds (PAHs) and/or arsenic (*Refer to our March 6, 2012 Update for additional discussion of these classes of chemicals*).



✓ Surface Water and Sediment Sampling

Approximately five surface water and five sediment samples will be collected from West Brothers Brook. The samples will be collected from areas upstream of the GHS property. The samples will be analyzed for PCBs, PAHs, metals and pesticides at a state-certified laboratory.

What happens next?

Investigation activities will begin in late June, after the last day of school and will be complete by the end of July.

Additional activities over the coming months will include:

- Providing responses to public comments on the Investigation documents.
- Quarterly groundwater monitoring will continue through 2013. The next event is planned for August 2013.
- Preparing a Project Update, similar to this one, communicating the results of the June/July 2013 investigation as well as the August 2013 groundwater sampling event.
- Remedial planning and design and preparing a *Remedial Action Plan* (RAP). The RAP will present the proposed remedial action and describe the activities required to complete the remediation.

Personal Protective Equipment used during the Investigation

A Task Hazard Analysis (THA) has been completed for each activity to be performed during the investigation (soil sampling, surface water sampling, and sediment sampling). The THA process is a recommended step by the Occupational Safety and Health Administration (OSHA). Each THA evaluates the work to be done and how to complete the work in a manner that is protective of worker safety. The THAs completed for the GHS Site indicate that appropriate OSHA level of personal protective equipment is “Level D,” which means the Site workers will be wearing the following personal protective equipment:

- High visibility (e.g., florescent color) safety vests.
- Safety glasses for eye protection from debris.
- Chemical resistance gloves for skin protection during sampling.
- Work boots with safety (steel) toes for protection from falling and heavy objects.
- During drilling and other activities, workers will be wearing hard hats and hearing protection.

Site workers will not be wearing Tyvek suits (long sleeve white suits) because minimal exposure to soil occurs during sampling. Soil samples are contained within sampling tools during drilling and only small amounts of soil are removed by the workers. The soil that is removed is immediately placed in glassware for transfer to the laboratory.



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OR, please visit our website for further information:

<http://www.greenwichschools.org/>

see link for “GHS & MISA Environmental Testing & Reporting”