CBC Aids The City of Huber Heights with an ASTM - Phase II Site Assessment

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CBC Engineers & Associates, Ltd. was asked to assist the Huber Heights City Schools Board of Education with examining the construction site of their new Elementary School. The school location was to be on the former Standpipe Park Property in Huber Heights, Miami County, Ohio. During preliminary construction activities on the site, a landfill area was discovered that had not been known to the site design engineer or the city. CBC performed an ASTM - Phase II environmental assessment of the underlying soils and ground water to ensure there was no impact from the land fill.

In order for CBC Engineers & Associates, LTD. to present the appropriate answers to Huber Heights City Schools, a subsurface investigation was performed on the subject property by CBC Environmental personnel as part of the Phase II Environmental Site Assessment (ESA). The ESA involved four (4) soil borings, which were converted to "temporary" groundwater monitoring wells. Then soil borings were installed by "hollow-stem auger" methods, with "continuous split-spoon" sampling of the subsurface soils at two (2) feet intervals (i.e., ASTM D-1586 which includes a 140-pound hammer, 30 inch drop, and two-inch-O.D. "split-spoon " sampler).

The disturbed "split-spoon" samples were each "visually" classified, field screened using a MiniRae-2000 Photoionization Detector (PID), logged, sealed in EPA approved, "pre-cleaned", sterilized jars with Teflon lids and delivered Belmont Labs in Englewood, Ohio. Based on field observations and screening results, One (1), selected soil sample from each boring were submitted for chemical analysis. The terminal depth for all four (4) soil borings were submitted for chemical analysis. The terminal depth for all the four (4) soil borings installed was approximately (22) feet below ground surface.

The soil samples selected for laboratory analysis were collected at depth of about 14.0 to 16.0 and 18.0 to 20.0 feet below ground surface. During the drilling process the auger returns generated were continuously monitored utilizing the photoionization unit described above.

Both the subsurface soil samples collected and groundwater samples taken from the four (4) "temporary" monitoring wells used in this Phase II ESA were submitted for chemical analysis. These samples were analyzed for Volatile Organic Compounds (VOC's) (EPA Method SW-8260A); semi-Volatile Organic Compounds (semi-VOC's) (EPA Method SW-8270C); RCRA Metals (Standard EPA Methods- varies); Soil pH (EPA Method SW-9045C); Polychlorinated Biphenyls (PCB's). In addition, the four (4) groundwater samples were also tested for Herbicides by GC/ECD (EPA Method SW-8151); and Pesticides (EPA Method SW8081).

Good News for Huber Heights City Schools

The laboratory results received from analyzing the soil and groundwater samples obtained by standard penetration test methods from the four (4) exploratory borings and groundwater samples, indicate that ***the subsurface soils and groundwater underlying the subject properties have not been negatively impacted*** by any of the operations on or near the subject property or by nearby "release incidents". The level of arsenic and the low levels of Barium, Cadmium, Chromium, lead, and selenium detected in the soil and or/groundwater samples do not pose any health risks and/or environmental concerns for the subject site.

Based on the results from this subsurface investigation performed on the site, including "visual" observations made during the on-site activities and the laboratory results received, CBC determined that the soils and groundwater on this property have ***not*** been impacted from a landfill area that was discovered during preliminary site development activities. The measured concentrations of target compounds detected in the soil and groundwater samples submitted for analysis were well below the "Health Risk-based" standard limits set by the EPA.

The City of Huber Heights was cleared to continue construction after the removal of the landfill material from the site.

For more information on this project please contact our ***Director of Environmental & Land Development Services*** - **Ed Galaska** @ 937-428-6150.