Draft Scope of Work
Ashland - Marcon Erectors Site
Phase II Investigation
Meeting date: October 19, 2007

Purpose

The purpose of the Phase II Investigation to be conducted at the Marcon Erectors Site is to further characterize the vertical and/or lateral extent of impacted soil remaining along the Phase I Remediation excavation boundary (2006-2007) and adjacent areas to the north, south, east and west. More specifically, the purpose is to delineate the extent (if any) of the following:

- Light non-aqueous phase liquids (LNAPL), and
- Volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) impacts above New York State Department of Environmental Conservation (NYSDEC) Spills Technical and Administrative Guidance Memorandum (TAGM) #4046 soil guidance criteria.

Scope of Phase II Investigation

The Phase II Investigation will consist of the completion of soil borings via hollow stem auger utilizing split spoon sampling to the north, south, east and west of the Phase I excavation boundary to determine the lateral and vertical extent of soil impacts related to the site.

Lateral and Vertical Extent of Investigation

Lateral extent

The lateral extent of investigation will be determined by visual inspection in the field and laboratory analysis of soil samples. Visual inspection of completed soil borings will confirm the absence/presence of LNAPL, visual staining, and/or odor nuisance to confirm that the soils pass the NYDEC nuisance criteria. The investigation will continue laterally until visual inspection determines the absence of LNAPL, visual staining and/or an odor or until the horizontal boundary of the investigation has been encountered.

Based on discussions between Ashland and the NYDEC, a physical boundary has been identified as the pre-determined lateral limit of investigation for Phase II to the north, east and south of the Phase I excavation boundary as follows:

- North: the first residential property boundary
- East: Wegman property boundary

- South: Scajaquada Creek

To the west and southeast of the Phase I excavation, a termination point for the lateral extent of investigation has not been identified. Therefore, Ashland proposes that the lateral extent of investigation extend until one of the following scenarios is achieved:

- Visual inspection and laboratory analysis confirms the absence of soil impacts;
- Laboratory analysis (SVOCs and NYDOH 310.13) confirms the presence of non site related polycyclic aromatic hydrocarbons (PAHs) only. Previous investigations have reported the presence of PAHs in on and off-site soils, predominantly in fill materials. The fill material is ubiquitous over the Site and surrounding area; or
- Further investigation to the west and/or southeast is determined to be impracticable within the scope of the Phase II Investigation.

Vertical extent

Investigation will continue to the approximate depth of excavation (north, south, east or west) completed in that area during Phase I Remediation or deeper if dictated by visual or analytically determined soil impacts. If excavation was not completed in an area (such as the west), investigation will continue to 20 feet (ft) below ground surface (bgs). Approximate investigation depths are provided below:

- North: 10-12 ft bgs,
- South: 20-24 ft bgs (total depth of borings may decrease based on slope and proximity to the river),
- East: 20-24 ft bgs,
- Southeast: 24 ft bgs, and
- West: 20 feet bgs.

Method of Investigation

The investigation of the extent of soil impacts will be completed through the use of hollow stem auger utilizing split spoon sampling. The split spoon sample core will be collected at two foot intervals and visually inspected to determine whether a sample will be collected or investigation will continue to a further depth.

Generally, the soil borings locations will begin at the outermost location and continue inwards as appropriate. If a location is visually clean, a confirmation sample will be collected. Boring locations will then be selected moving “inward” to laterally identify the extent of impact. At the lateral extent of visual impacted soil, a sample will be collected from the clay layer encountered below the visually impacted zone in order to vertically delineate the impacted area.

- The soil boring will be visually inspected for LNAPL and staining at each two foot interval.
- PID/FID readings will be taken at each two foot interval and each geologic zone identified.
- If LNAPL, visual staining or odor is not identified within the soil boring, a confirmation sample will be collected and sent for laboratory analysis. A boring location will be selected "inward" from that location to identify the lateral extent of impact. A confirmation soil sample will be collected from the interval exhibiting the highest PID/FID reading. If all intervals exhibit a zero PID/FID reading, the confirmation soil sample will be collected from immediately above the water table.
- At the point that visual impacts are encountered (LNAPL, visual staining and/or odor), a soil sample will be collected from the clay layer beneath the impacted zone to vertically characterize the impacted area.

Proposed boring locations are provided in Figure 1.

Laboratory Analysis of Soil Samples

To the east, southeast, south and west, soil samples selected for laboratory analysis will be analyzed for petroleum related VOCs (8260B), SVOCs including PAHs (8270C), and fingerprint analysis (310.13). In the north, soil samples will be analyzed for SVOCs and fingerprint analysis only as the extent of VOC impacts in this area were delineated in Phase I.