

Ghobrial, Ayman

From: Ghobrial, Ayman
Sent: Monday, March 19, 2012 2:08 PM
To: OPPENHEIM, JAMES R (JROPPENHEIM@sunocoinc.com)
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Subject: AOI-5 Technical Comments
Attachments: Comments on RIRCcleanup Plan AOI-5.doc

Jim,

Attached please find the technical comments on reviewing the report titled, "**Site Characterization/Remedial Investigation Report/Cleanup Plan, AOI-5**". The report is dated December 13, 2011, and prepared by Langan Engineering & Environmental Services, Inc. for Sunoco's Philadelphia Refinery.

Please let me know if you would like to discuss.

Thanks,

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The following are comments on reviewing the report titled “**Site Characterization/Remedial Investigation Report/Cleanup Plan, AOI-5**”. The report is dated December 13, 2011, and prepared by Langan Engineering & Environmental Services, Inc. for Sunoco’s Philadelphia Refinery.

- Regarding the mobility and stability of LNAPL at AOI-5: DEP accepts Sunoco’s conclusion that the material appears to be immobile and stable, subject to the following condition: The LNAPL in wells WP-B, WP-A, A-21, SW-4, and SW-1 is located immediately adjacent to the Schuylkill River, and may be prevented from discharging to the river only by virtue of the structural integrity of the sheet pile bulkhead. If new evidence should appear to indicate, or to suggest, that LNAPL has discharged or may be discharging to the Schuylkill River from these areas, Sunoco will be responsible to investigate the circumstances, and to remediate any environmental contamination that may have occurred due to the release of LNAPL from this area.
- The sheet pile bulkhead should be recognized as an engineering control; therefore a Post Remediation Care Plan must be developed for the sheet pile bulkhead that will include periodic inspection for the structural integrity of the bulkhead. The UECA for AOI-5 will ultimately require compliance with the PRCP for the bulkhead and other areas with engineering controls.
- The LNAPL thickness at the newly installed monitoring wells (A-155 & A-14) is 1.15ft and 1.6ft respectively. Further delineation in the vicinity of the locations of the aforementioned wells is required to determine the extent of the LNAPL. Results of the LNAPL delineation and proposed recovery must be documented in the RIR/Cleanup Plan.
- The depth to ground water at the AOI-5 is less than five feet below the ground surface. The RIR proposes to further evaluate the vapor intrusion into indoor building pathway for the current occupied buildings via soil gas sampling. Results of additional evaluation and/or mitigation measures if needed should have been documented in the RIR/Cleanup Plan.
- Contaminants of concern (COC) found in soil are benzene and lead. Based on the current and future intended non-residential use, site investigation was conducted for shallow soil only (0-2ft). Exposure assessment was also conducted for the COC that were above the non-residential direct contact MSCs found in shallow soil. The potential direct contact pathway for soil greater than two feet is described as incomplete based on Sunoco’s existing permitting procedure (OSHA and personal protective equipment, PPE). . The PRCP may need to incorporate this internal permit procedure. Please also note that a future termination of the existing Sunoco internal permit procedure may become a reopener of an Act 2 release. In order for site soil to be eligible for a release of liability under Act 2, additional soil investigation will be required for the 2-15 ft. interval (or soil

to groundwater interface for the current scenario). Please follow the TGM on how to select a Cleanup Standard for soil medium for the non-residential scenario. Furthermore, the soil to groundwater pathway was not evaluated. The release of liability under Act 2 for soil will be granted only for those areas that has been investigated and remediated.

- The RIR proposes additional soil investigation and delineation for Areas 1 & 2 (SWMU-94) and Area 3 (SWMU-101). The proposed soil delineation should have been implemented and results should have been documented in the RIR.

- Issues regarding investigation and closure of the three SWMUs, Nos. 93, 94 (leaded tank bottom disposal areas), and No. 101 (Bulkhead Seepage Area), must be coordinated with the USEPA.