

The following are comments on reviewing the report titled **“Site Characterization/Remedial Investigation Report (RIR), AOI-7”**. The report is dated February 29, 2012, and prepared by Langan Engineering & Environmental Services, Inc. for Sunoco’s Philadelphia Refinery.

1. The LNAPL in the vicinity of the No. 3 Separator area 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 that LNAPL has discharged or may be discharging to the Schuylkill River from this area, Sunoco will be responsible to investigate and remediate any environmental contamination that may have occurred due to the release of LNAPL from this area. The RIR indicates that Sunoco will design and implement a hydraulic control system in this area to recover the LNAPL in this area, and the proposed remedial system will be presented in the Cleanup Plan for the AOI-7. We concur with Sunoco’s proposal.
2. 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 will ultimately require compliance with the PRCP for the bulkhead and other areas with engineering and /or hydraulic controls.
3. Contaminants of concern (COC) found in soil are benzene, 1, 2, 4 TMB, 1, 3, 5, TMB, naphthalene 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.
4. Issues regarding investigation and closure of the five SWMUs, Nos. 87, 88, 89 (northwestern fill area), and Nos, 90, 91 (storage tank area), must be coordinated with the USEPA.
5. The calculated site specific standards (Appendix I, Table 1-2, and 1-3) for naphthalene and 1, 2, 4 TMB in soil medium are identical to the MSC for these compounds.