Pennsylvania Act 2 Land Recycling Program

Separate Phase Liquid Screening Checklist

Conceptual Model – representation of an environmental system and the biological, physical, and chemical processes that determine the transport of contaminants from sources through environmental media to environmental receptors within the system (ASTM E-1689-95).

Questions	Yes?	No?	N/A?	Comments
1. Review available site data:				
a. Do you have the site use history?				
b. Do you know the geology and hydrogeology of the site? Are ground water use defined (e.g., used or non-use aquifer)?				
c. Do you know the size of the Separate phase liquid plume? If yes, is it:				
Shrinking?				
Stable?				
Growing?				
d. Are the potential pathways of SPL migration defined?				
d. Are the constituents of the Separate phase liquid known? If yes, indicate which applies:				

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Questions	Yes?	No?	N/A?	Comments
Gasoline?				
Diesel fuel?				
Heating oil?				
Metal working fluid?				
Lubrication oil?				
Mineral Oil				
Other?				
f. Are the location of potential				
receptors defined?				
2. Have the following site-specific SPL				
characteristics been estimated or measured:				
Specific gravity/density?				
Viscosity?				
Interfacial/Surface Tension?				
Others?:				
(indicate which)				
3. Has any vapor plume from SPL been defined, if applicable?				
e. If the answer was yes, are soil				
vapor or IAQ values above the IAQ guidance MSCs?				
4. Is the source known? If so, what is source and quantity of release?				

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Questions	Yes?	No?	N/A?	Comments
5. Is the date of release known? If so, what is				
date and duration?				
6. Is the SPL in soil? If yes, what soil type?				
7. Is the SPL in bedrock? If yes, in a Karst				
(i.e., carbonate) system or other porosity				
system.				
8. Are there human receptors in the vicinity				
of SPL, impacted soil, impacted groundwater,				
soil vapor or impacted surface water?				
9. Are there complete or potentially complete				
exposure pathways.				
10. Are there ecological receptors in the				
vicinity of SPL, impacted soil, impacted				
groundwater, soil vapor or impacted surface				
water.				
<i>If all questions are answered "yes", then the conceptual model is complete and the site should evaluate whether response triggers have been exceeded.</i>				