

Clean Fill Wanted Contaminated Soil & Site Development

by Timothy F. Carr, LEP

Low levels of contaminants are commonly encountered when developing urban and industrial sites. Soil can accumulate contaminants such as lead, polynuclear aromatic hydrocarbons, polychlorinated biphenyls, and pesticide residues. Spills of hazardous materials increase the contaminant load. During redevelopment, the presence of contaminated soil can cause significant technical and regulatory heartache, as well as costing time and money.

Each state has its own guidelines on the reuse of fill materials containing low levels of contaminants. For example, Connecticut has some of the most restrictive requirements for sites where soils have been removed for remedial purposes. Connecticut's Remediation Standard Regulations (RSRs)¹ define a Polluted Soil as "...soil affected by a release of a substance at a concentration above the analytical detection limit for such substance." Thus, petroleum hydrocarbons *only need be detected* at a site that has had an underground tank release for the soil to be considered "polluted."

The RSRs place restrictions on the reuse of this soil whether or not the

concentrations are below the lowest risk-based remedial standard and whether or not the soil is reused on-site or off-site. The RSRs do not apply to every site.

The options for off-site disposal/reuse of soil contaminated with low levels of pollutants can be limited and costly. Few sanitary landfills or commercial disposal outlets specialize in the reuse of soil with low levels of contaminants.

best option. It may be feasible to reuse the soil as compacted fill below slabs or foundations. Landscape islands and berms can be added to create areas to place fill.

If off-site reuse is the only option, the locations must be evaluated. Analytical testing for various parameters will be required to meet the requirements specific to each disposal site.

If the project design requires importing fill, analytical testing is a good idea to prevent buying someone else's problem. ■

¹ Regulations of Connecticut State Agencies 22a-133k-1 through 133k-3



Solutions to reuse or disposal of soils containing contaminants are best identified during the design phase of development. On-site reuse is often the

Fill excavation in
Stamford, Connecticut



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