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The key to cost effective management of clean and contaminated soils

July 23, 2008 - Green Buildings

All soils are not created equal especially when it comes to managing excess excavated soils as part of site development costs. Many owners and site developers are caught off-guard by the increasingly complex set of rules and regulations affecting off-site disposal of excess soils and fill. Long gone are the days when a property owner or site developer could expect to just excavate material and cheaply transport it to an off-site location or possibly sell it to someone looking for fill. Although those options may still be available, transportation costs often exceed the value of the material and making arrangements to move the material to such sites requires coordination with multiple owners, consultants and contractors.

Civil and in some cases criminal liability can be associated with the improper off-site management of soils which contain even a small amount of contamination or that contain naturally occurring chemicals at levels that may pose a health hazard at the potential reuse site. Another condition which often causes confusion is that some contaminants may be conditionally exempt from reporting under state regulations but still require management as solid waste. In Massachusetts, for example, contamination from wood ash and/or coal ash is exempt from state remediation regulations; however if the soil is removed from the site it may be considered hazardous waste if it contains toxic levels of lead or other compounds.

How to Protect Yourself:

Knowledge is power. It is far better to know in advance of purchase what the environmental conditions are at the site. Typically, an environmental due diligence investigation may be required as part of the lending requirements and more sophisticated site developers are routinely performing some level of environmental diligence prior to site purchase or development. However, many of the environmental due diligence studies do not provide the level of information that is critical in assessing the environmental conditions that will affect site development costs. Before beginning excavation at any site that will require off-site management of fill, every site owner and developer should be able to answer the following questions:

* What are the subsurface conditions at the site?
* What is the chemical profile of the soils?
* Are the soils clean, and if so how clean?
* Are the soils subject to any state or federal environmental regulations?
* Do the soils have any economic value as fill?
* What are my disposal options and costs?
* Do I need Environmental Insurance?

Oftentimes, the subsurface conditions of the site are assessed as part of a foundation engineering report or as part of an environmental investigation at the site. Although these reports may provide

some useful information especially in regards to the physical characteristics of the soils, oftentimes they do not perform the scope of analytical services that would be most useful in determining potential liabilities or identifying natural background conditions. Identifying the natural background conditions is important whereas that would allow an expanded range of reuse options and it is vital in demonstrating sufficient due diligence when it comes time to reusing the soils as fill at off-site locations. This can be particularly important when those off-site reuse locations are places that might have sensitive populations at risk such as playgrounds or residential development projects.

Site owners and developers, especially those that might be considered "deep pockets", should be very wary of where they place their soils whereas under federal and state laws the owner of any contaminated soil would retain long-term liability if improperly disposed, regardless of any contractual arrangements and indemnifications with the transport and disposal company. Ignorance is no excuse from the law and specific standards of care have been established through case law.

Many states have established natural background levels for a broad range of pollutants and have also established levels above which remedial measures are necessary. It is important to know beforehand if your site is in the latter group whereas this could greatly affect the profitability of the project or could conversely be used to negotiate a discounted price during purchasing. It is important to test the soils even where contamination is not suspected. Oftentimes, there are levels of petroleum hydrocarbons from vehicle use or impacts from historical uses that have not been documented. Historic, long term use of pesticides and other products on farm lands can impact what would otherwise appear to be un-impacted land. Also, any place that was built on filled land should be considered suspect if the source of the fill material is not known. A common practice years ago was to dispose of contaminated soils as fill, both knowingly and unknowingly.

Know Your Options

A broad range of options for managing soils are available to the site owner or developer who has done their homework and assessed the soil conditions at their site.