

DISPOSAL AND ONSITE USE OF CONTAMINATED SOILS AND RELATED WASTES AT MUNICIPAL SOLID WASTE LANDFILLS

Soils contaminated with moderate concentrations of total petroleum hydrocarbons and associated contaminants, such as volatile organic compounds, semi-volatile organic compounds, organochlorine pesticides, polychlorinated biphenyls, and California Assessment Manual metals, are wastes, as defined in California Water Code section 13050, whose discharge to land can affect the quality of the waters of the State if not properly managed. Contaminated soils have historically been discharged at municipal solid waste (MSW) landfills within the Los Angeles Region, where they are either landfilled or used as cover materials. However, site-specific Waste Discharge Requirements for Region landfills do not include specific requirements for contaminated soils profiling or waste disposal procedures. Regional Board Order No. R4-2011-0052 (Order) was adopted to establish Region-wide waste acceptance requirements for the disposal or on-site use of contaminated soils at MSW landfills that are protective of the environment.

The Order establishes three levels of contamination with respect to contaminated soil disposal. A limit for soils that are not subject to the proposed requirements (clean or low-level contaminated soils), an intermediate limit for contaminated soils appropriate for disposal at unlined landfills, and a limit for more contaminated soils (but not at designated or hazardous levels), that are only appropriate for disposal in lined landfills, where pollutants in waste are much less likely to be released to offsite. The Order requires that landfill operators develop Waste Acceptance Programs, to be approved by the Executive Officer, to assure that contaminated soils are properly profiled. Reuse of contaminated soils is permissible only to intermediate levels of contamination and only if the operator can demonstrate that there is no resultant degradation of stormwater quality. This is consistent with State recycling laws and landfill regulations which promote the use of contaminated soils as part of construction practices or environmental control facilities at landfills.

With regard to on-site use of contaminated soils, it is important to consider that State regulations (Title 27 of California Code of Regulations) allow a broader suite of materials to be used as daily cover materials at MSW landfills and that some of these wastes, including green wastes, treated sludges, and treated auto shredder wastes, are used as cover materials at one or more landfills in the Region. The Order does not limit the acceptance of these wastes or require additional profiling before they are discharged at MSW landfills. However, because daily cover materials are exposed to stormwater, the Order requires expanded stormwater pollution prevention plans (SWPPP) that incorporate enhanced best management practices (BMPs) specified for the reuse of contaminated soils and related wastes and expanded stormwater monitoring programs. Proposed BMPs focus on limiting surface water contact with exposed contaminated soils and related wastes and deployment of a robust suite of stormwater control systems. Expanded stormwater monitoring requirements include the submittal of a surface water monitoring plan, for the Executive Officer's approval, that includes a site-specific list of contaminants of concern, that allows for sampling of all qualifying storm events, and that evaluates results in comparison to established stormwater benchmarks. Exceedance of benchmarks that are not controlled by effective implementation of the SWPPP can lead to a landfill operator being required to obtain a site specific or regional general NPDES stormwater permit or cease the reuse of a specific waste(s). Furthermore, the Order provides the Regional Board Executive Officer with the authority to revise surface water monitoring plans to optimize stormwater monitoring as necessary.