

RECOMMENDED MINIMUM VERIFICATION ANALYSES

San Mateo County Environmental Health Services Division

This list incorporates known contaminants associated with the specific SUBSTANCE (minimally referenced to State Water Resources Control Board's September 2012 [LUFT Guidance Manual](#)) and the costs of the analysis weighed against the overall public health benefits. It is subject to change at any time and can be modified by the regulator for any specific SUBSTANCE based on site specific circumstances. This list is intended to comply with the requirements of California Code of Regulations Title 23, Division 3, Chapter 16, Article 7 and Health and Safety Code Division 20, Chapter 6.7. San Mateo County's [Characterization and Reuse of Petroleum Hydrocarbon Impacted Soil](#) document should be evaluated for issues regarding potential reuse of any excavated soil. Sampling should be conducted in accordance with [USEPA SW846](#) and San Mateo County's Tank Removal Guidance.

TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS

A copy of the **chromatogram** for all TPH analysis is required to be submitted. All discrete peaks **must** be identified and quantified. All TPH analysis that are flagged by the laboratory as not matching the standard that was requested to be compared to **must** also be identify and quantify against the standard of TPH (gasoline, diesel, motor oil, heating fuel, stoddard solvent, hydraulic oil, aviation fuel, jet fuel, kerosene) that matches the sample result the most. **Silica gel** is allowed for diesel analysis when a companion run is made without silica gel cleanup.

SUBSTANCE	COMPONENT	ANALYTICAL METHOD
Gasoline	TPH as Gasoline	TPH-G, EPA 8015 or 8260B/C
	BTEX, Fuel Oxygenates, naphthalene, Chlorinated Hydrocarbons (deepest soil sample or water sample only), and Ethanol Add Lead and Lead Scavengers for tanks older than 1992	EPA 8260B/C
Diesel, Jet fuels, and Fuel Oils #1 and #2	TPH as Diesel (see silica gel note above for diesel)	TPH-D, EPA 8015
	BTEX, Naphthalene and Chlorinated Hydrocarbons (deepest soil sample or water sample only)	EPA 8260
Waste Oil or Unknown Fuel, and Hydraulic Lifts	TPH as motor oil, hydraulic oil	EPA 8015 (quantified to standard that best matches)
	BTEX, Fuel Oxygenates, naphthalene, Chlorinated Hydrocarbons, and Ethanol; (deepest soil sample or water sample only) Add Lead and Lead Scavengers for tanks and lifts older than 1992	EPA 8260B/C
	SVOCs for PCBs and PAHs	EPA 8270
	Metals: Cd, Cr, Pb, Zn, Ni (soil only)	WET, EPA 6010 or 6020 (ICAP) or EPA 7000 series (AA)
Dry Cleaning Substance	TPH as Stoddard Solvent	EPA 8015
	Chlorinated Hydrocarbons	EPA 8260B/C

BTEX = Benzene, Toluene, Ethylbenzene, and total Xylenes

Fuel Oxygenates = Methyl tert-Butyl Ether (MTBE), tert-Butyl Alcohol (TBA), di-Isopropyl Ether (DIPE), tert-Amyl Methyl Ether (TAME)

Lead Scavengers = Ethyl tert-Butyl Ether (ETBE), 1,2-Dibromoethane (EDB), 1,2-Dichloroethane (EDC)

Chlorinated Hydrocarbons: Tetrachloroethane (PCE), Trichloroethene (TCE), cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, and Vinyl Chloride.

PCBs = Polychlorinated Biphenyls

PAHs = Polyaromatic Hydrocarbons, 16 priority pollutant PAHs as defined in [LUFT Manual](#)

WET=Waste Extraction Test method as described in the CCR, Title 22, Division 4.5, Chapter 11