SAN MATEO COUNTY HEALTH
ENVIRONMENTAL HEALTH SERVICES

Environmental Health Services
Hazardous Materials Program (CUPA)
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Recommended Minimum Verification Analyses for Underground Storage Tanks

This list incorporates known contaminants associated with a 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 Environmental Health Services 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 U.S. EPA SW846 and San Mateo County's tank removal guidance.

TOTAL PETROLEUM HYDROCABRON (TPH) ANALYSIS

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

TABLE REFERENCES

***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

***PAHs** = Polyaromatic Hydrocarbons, 16 priority pollutant PAHs as defined in LUFT Manual

***PCBs** = Polychlorinated Biphenyls

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

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Substance	Component	Analytical Method
Gasoline	TPH as Gasoline	• TPH-G • EPA 8015 or 8260B/C/D
	• ***BTEX** • ***Fuel Oxygenates** • Naphthalene • Ethanol • *Lead & ***Lead Scavengers** (for tanks older than 1992 only)*	EPA 8260 B/C/D
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 • ***Chlorinated Hydrocarbons** (deepest soil sample or water sample only)	EPA 8260B/C/D
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** • Ethanol (deepest soil sample or water sample only) • *Lead and ***Lead Scavengers** (for tanks and lifts older than 1992)*	EPA 8260B/C/D
	SVOCs for ***PAHs**	EPA 8270
	***PCBs**	EPA 8082A
	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 • ***Chlorinated Hydrocarbons**	• EPA 8015 • EPA 8260B/C/D
Per-and Polyfluoroalkyl Substances (PFAS)	• PFAS – when suspected (fire-fighting foams, plating shops)	• SW-846 Test Method 8327