Sampling Frequencies and Contamination Concentration Limits for the Sanitation Districts' Soil Acceptance Program

SOIL SAMPLING FREQUENCIES

Required sampling frequencies will be based on the estimated volume of soil to be approved for delivery. These frequencies are as follows:

- Up to 1,000 cubic yards (yd^3) - One sample per 500 yd^3.
- From 1,000 yd^3 to 5,000 yd^3 - Two samples for the first 1,000 yd^3, and one sample per 1,000 yd^3 thereafter.
- More than 5,000 yd^3 – Appropriate frequencies will be determined by Sanitation Districts' Hazardous Waste Monitoring Staff (HWMS).

The required frequency of sampling can be adjusted by the HWMS. Samples must be collected, preserved, and submitted to the laboratories within 24-hours of collection along with proper documentation.

SOIL ACCEPTANCE CRITERIA AND ANALYTICAL CONCENTRATION LIMITS

Soil subject to these Waste Discharge Requirements may require any or all of the following analyses based upon site information and the discretion of the Sanitation Districts' HWMS.

Accepted soil will be determined as appropriate for 1) Unrestricted Reuse, 2) Disposal on Unlined Areas or 3) Disposal on Lined Areas. The acceptable levels for each category are detailed below. The levels shown for each category are maximums; the HWMS may lower acceptable concentrations for specific instances.

Hydrocarbon Contamination:

Determined by EPA Method 8015B.

Unrestricted Reuse-

Total Petroleum Hydrocarbons (TPH) (C4-C12) or (C13-C22) < 10 mg/kg

TPH (C23 or greater) < 500 mg/kg

Disposal on Unlined Areas –

TPH (C4-C12) < 500 mg/kg

TPH (C13-C22) < 1,000 mg/kg

Disposal on Lined Areas –

TPH (C4-C12) < 1,000 mg/kg

TPH (C13-C22) < 10,000 mg/kg

Soil with an average TPH > 50,000 mg/kg is not acceptable for disposal at any Sanitation Districts' landfill.

In order to accept soil that exceeds the concentrations listed in this section, a study must be submitted to verify that the disposal of such soil would not contribute to any contamination or pollution in waters of the State.

Volatile Organic Compounds:

Determined by EPA Method 8260-B. Reporting limits vary between < 2µg/kg and < 100 µg/kg for all constituents.

Appropriate limits will be determined for soil acceptance categories by the Sanitation Districts' HWMS. The HWMS shall consider the contaminant concentration levels in the California Code of Regulations Title 22 § 66261.24, the California Human Health Screening Level (CHHSL), and the Preliminary Remediation Goal (PRG).

The CHHSL and PRG Residential Contamination Levels will be considered for soils intended for unrestricted reuse, and Industrial Contamination Levels will be considered for soils intended for disposal.

Semi-Volatile Organic Compounds:

Determined by EPA Method 8270-C. Reporting limits must be < 1,000 µg/kg for all constituents.

Appropriate limits will be determined for soil acceptance categories by the Sanitation Districts' HWMS. The HWMS shall consider the contaminant concentration levels in the California Code of Regulations Title 22 § 66261.24, the CHHSL, and the PRG.

The CHHSL and PRG Residential Contamination Levels will be considered for soils intended for unrestricted reuse, and Industrial Contamination Levels will be considered for soils intended for disposal.

Organic Persistent and Bioaccumulative Compounds (Polychlorinated Biphenyls, Pesticides, and Herbicides):

Determined by EPA Method 8270, 8080, 8140, 8150, 8082, 8151, 8150, and 8081. Reporting limits must meet the test requirements.

> Appropriate limits will be determined for soil acceptance categories by the Sanitation Districts' HWMS. The HWMS shall consider the contaminant concentration levels in the California Code of Regulations Title 22 § 66261.24.

Metals:

Determined by EPA Method 6010 (CAM 17 Metals), and 7471A. Reporting limits must meet the test requirements.

> Appropriate limits will be determined for soil acceptance categories by the Sanitation Districts' HWMS. The HWMS shall consider the contaminant concentration levels in the California Code of Regulations Title 22 § 66261.24, the CHHSL, and the PRG.
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> The CHHSL and PRG Residential Contamination Levels will be considered for soils intended for unrestricted reuse, and Industrial Contamination Levels will be considered for soils intended for disposal.

ANALTYICAL TESTS

Contaminant	Method	Reporting Limits
Volatile Organic Compounds	EPA8260B	vary between <2 and <100 µg/kg
Semi-Volatile Organic Compounds:	EPA8270C	<1,000 µg/kg
Total Petroleum Hydrocarbons		
C4-C12	EPA8015B	0.50 mg/kg
C13-C22	EPA8015B	5.0 mg/kg
C23 or greater	EPA8015B	5.0 mg/kg
Organic Persistent and Bioaccumulative Chemicals		
Aldrin	EPA8081A	5.0 µg/kg
Chlordane	EPA8081A	50 µg/kg
2,4-Dichlorophenoxyacetic Acid	EPA8151	10 µg/kg
DDD	EPA8081A	5.0 µg/kg
DDT, DDE	EPA8081A	5.0 µg/kg
Dieldrin	EPA8081A	5.0 µg/kg
Endrin	EPA8081A	5.0 µg/kg
Heptachlor (and its epoxide)	EPA8081A	5.0 µg/kg
Kepone	EPA8270C	<1,000 µg/kg
Lindane	EPA8081A	5.0 µg/kg
Methoxychlor	EPA8081A	5.0 µg/kg
Mirex	EPA8081A	10 µg/kg
Pentachlorophenol	EPA8270C	<1,000 µg/kg
Polychlorinated Biphenyls (PCBs)	EPA8082	50 µg/kg
Toxaphene	EPA8081A	200 µg/kg
Trichloroethylene	EPA8260B	varies between <2 and <100 µg/kg
2,4,5-Trichlorophenoxypropionic Acid (Silvex)	EPA8151	10 µg/kg
Metals		
Antimony	EPA6010	10 mg/kg
Arsenic	EPA6010	2.0 mg/kg
Barium	EPA6010	1.0 mg/kg
Beryllium	EPA6010	0.50 mg/k g
Cadmium	EPA6010	0.50 mg/kg
Chromium	EPA6010	1.0 mg/kg
Cobalt	EPA6010	1.0 mg/kg
Copper	EPA6010	2.0 mg/kg
Lead	EPA6010	2.0 mg/kg
Mercury	EPA7471A	0.020 mg/kg
Molybdenum	EPA6010	2.0 mg/kg
Nickel	EPA6010	2.0 mg/kg

ANALTYICAL TESTS (Continued)

Contaminant	Method	Reporting Limits
Selenium	EPA6010	2.0 mg/kg
Silver	EPA6010	1.0 mg/kg
Thallium	EPA6010	10 mg/kg
Vanadium	EPA6010	1.0 mg/kg
Zinc	EPA6010	5.0 mg/kg