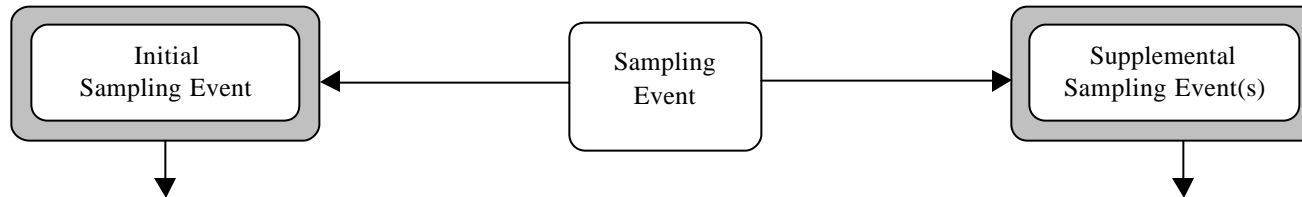


SOIL SAMPLING

**Gasoline Analytical Group (GAG; motor gasoline, aviation gasoline, and gasohol)
and Kerosene Analytical Group (KAG; diesel, kerosene, Jet-A, Jet-B, JP-4, and JP-5) Discharges**

Note: Prices listed represent the maximum allowable compensation under state funding



At a minimum, one high, one medium, and one low (above background) soil samples (based on OVA readings) should be collected per source area¹ (e.g., tanks, remote dispensers) from above the smear zone¹. If all corrected (unfiltered minus filtered) OVA readings are below background (generally less than 10 ppm on the OVA), then only one soil sample per source area should be collected for confirmation².

The soil samples should be analyzed for all of the following parameters:

BTEX/MTBE (EPA Method partial 8021B or partial 8260B) £\$**100.00**³
PAHs⁴ (EPA Method 8310, 8100, or partial 8270C);
 ≤\$**135.00** (8310), ≤\$**127.50** (8100), ≤\$**135.00** (partial 8270C)
TRPHs (FL-PRO) ≤\$**97.50**

The soil samples that will be analyzed for EPA Method partial 8021B or partial 8260B should be collected in the field using EPA Method 5035 (see memorandum dated July 15, 1998). EnCores samplers or disposable syringes should be included in the cost proposal at a maximum of twice the number of samples to be collected. For example, if one high sample, one medium sample, and one low soil sample will be collected and three EnCores are needed per sample, then the maximum number of EnCores that may be included in the work order is 18 (3x3x2). Extra EnCores or syringes are not necessary for every sampling event and need to be determined based on site-specific criteria such as depth of the borings.

Additional soil samples for lab analyses may need to be collected to:

- Confirm the initial sampling event results.
- Better determine the range of OVA readings that indicate the soils are contaminated at levels above the SCTLs.
- Collect initial or additional soil samples from the smear zone for lab analyses. The soil samples selected from the smear zone for lab analyses should correspond to high OVA readings and not to medium and low OVA readings.
- Delineate the soil contamination with lab samples if it is determined that the OVA is not a valid screening tool for the site.

Analyses conducted after the initial sampling event can be limited to the petroleum contaminants that were detected in the initial sampling event.

¹ More than one high sample, one medium sample, and one low soil sample can be collected during the initial event. For example, a work order could include the collection of two high samples, two medium samples, and one low sample (or some other combination) from a source area above the smear zone, and the collection of one high sample from the smear zone.

² If the corrected OVA readings are undetermined due to a high biogenic (methane) vapor component in the soils, then subsequent soil sampling events must utilize an OVA/FID that has a maximum upper measuring limit of at least 5,000 ppm.

³ The price that should be included in the work order is for the low-level analysis (≤\$**100.00**). If a high level analysis (£\$**66.50**) is performed, then a cost reduction should be requested by the consultant at invoicing if the low level price is higher than the high level price.

⁴ The lab may analyze PAHs using EPA Method partial 8270C, but the price should not exceed \$**135.00** (what is allowed for EPA Method 8310). The method detection limits in undiluted samples should be equal to, or be less than, the soil cleanup target levels.