



5.7 EQUIPMENT PREPARATION / DECONTAMINATION

Decontaminate all soil and sediment sampling devices used to collect samples for chemical analysis prior to use and in between sample locations. Once equipment is decontaminated, protect it from incidental contact with potential contaminant sources by wrapping in aluminum foil or placing in sealed plastic bags.

The following is a recommended generic procedure for decontamination of sampling equipment where trace levels of contaminants are being investigated. (The listed procedure is not appropriate for every investigation and should be tailored to the contaminants and sampling methods being utilized):

1. Wash with non-phosphate detergent
2. Rinse with tap-water
3. Rinse with 0.1N nitric acid rinse (when cross-contamination from metals is a concern)
4. Rinse with Deionized/distilled water
5. Rinse with pesticide grade solvent (when semi-volatile and non-volatile organic contamination may be present)
6. Rinse with Deionized/distilled water (twice; once if Step 5 is not needed)

The procedure selected must be clearly documented in the SAP. Whenever possible, obtain sets of sampling tools so that decontamination can be done in batches, preferably just once a day at the start or end of a sampling day. Additionally, any heavy equipment necessary for the advancement of any sampling device must be steam cleaned or high pressure/hot water washed prior to and between sample locations. Examples of these types of equipment include auger flights, drill rods, and backhoe buckets.

Depending on site-specific features, soil samples may need to be collected beneath concrete pads, floors, or asphalt paved areas. If the equipment used to remove the concrete or asphalt has the potential to come into direct contact with the underlying soil, it must also be decontaminated. Decontaminate this equipment prior to and between sample locations in a manner similar to decontamination procedures discussed above for heavy equipment.