

### §761.310

random numbers of centimeters to the sampling area, is on the lower left corner when facing the surface.

(2) Mark the random number selected for the length distance, in centimeters, from the origin to the right (at the bottom of the area away from the origin).

(3) From the marked length distance on the bottom of the area, move perpendicularly up from the bottom of the area into the area for the distance randomly selected for the width.

(4) Use the point determined in paragraph (d)(3) of this section as the lower left corner of the 10 centimeter by 10 centimeter sample.

#### §761.310 Collecting the sample.

Use the standard wipe test as defined in §761.123 to sample one 10 centimeter by 10 centimeter square (100 cm<sup>2</sup>) area to represent surface area PCB concentrations of each square meter or fraction of a square meter of a nearly flat, non-porous surface. For small surfaces, use the same procedure as for the standard wipe test, only sample the entire area, rather than 10 centimeter by 10 centimeter squares.

#### §761.312 Compositing of samples.

For a surface originally contaminated by a single source of PCBs with a uniform concentration, it is permissible to composite surface wipe test samples and to use the composite measurement to represent the PCB concentration of the entire surface. Composite samples consist of more than one sample gauze extracted and chemically analyzed together resulting in a single measurement. The composite measurement represents an arithmetic mean of the composited samples.

(a) *Compositing samples from surfaces to be used or reused.* For small or irregularly shaped surfaces or large nearly flat surfaces, if the surfaces are contaminated by a single source of PCBs with a uniform concentration, composite a maximum of three adjacent samples.

(b) *Compositing samples from surfaces to be disposed of off-site or on-site.* (1) For small or irregularly shaped surfaces, composite a maximum of three adjacent samples.

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(2) For large nearly flat surfaces, composite a maximum of 10 adjacent samples.

#### §761.314 Chemical analysis of standard wipe test samples.

Perform the chemical analysis of standard wipe test samples in accordance with §761.272. Report sample results in micrograms per 100 cm<sup>2</sup>.

#### §761.316 Interpreting PCB concentration measurements resulting from this sampling scheme.

(a) For an individual sample taken from an approximately 1 meter square portion of the entire surface area and not composited with other samples, the status of the portion is based on the surface concentration measured in that sample. If the sample surface concentration is not equal to or lower than the cleanup level, by inference the entire 1 meter area, and not just the immediate area where the sample was taken, is not equal to or lower than the cleanup level.

(b) For areas represented by the measurement results from compositing more than one 10 centimeter by 10 centimeter sample, the measurement for the composite is the measurement for the entire area. For example, when there is a composite of 10 standard wipe test samples representing 9.5 square meters of surface area and the result of the analysis of the composite is 20 µg/100 cm<sup>2</sup>, then the entire 9.5 square meters has a PCB surface concentration of 20 µg/100 cm<sup>2</sup>, not just the area in the 10 cm by 10 cm sampled areas.

(c) For small surfaces having irregular contours, where the entire surface was sampled, measure the surface area. Divide 100 cm<sup>2</sup> by the surface area and multiply this quotient by the total number of micrograms of PCBs on the surface to obtain the equivalent measurement of micrograms per 100 cm<sup>2</sup>.

### Subpart Q—Self-Implementing Alternative Extraction and Chemical Analysis Procedures for Non-liquid PCB Remediation Waste Samples

SOURCE: 63 FR 35468, June 29, 1998, unless otherwise noted.

**§ 761.320 Applicability.**

This subpart describes self-implementing comparison testing requirements for chemical extraction and chemical analysis methods used as an alternative to the methods required in §§ 761.272 or 761.292. Any person conducting comparison testing under this subpart must comply with the requirements of § 761.80(i), including notification. Use alternative methods only after successful completion of these comparison testing requirements and after documentation of the results of the testing.

**§ 761.323 Sample preparation.**

(a) The comparison study requires analysis of a minimum of 10 samples weighing at least 300 grams each. Samples of PCB remediation waste used in the comparison study must meet the following three requirements.

(1) The samples must either be taken from the PCB remediation waste at the cleanup site, or must be the same kind of material as that waste. For example, if the waste at the cleanup site is sandy soil, you must use the same kind of sandy soil in the comparison study. Do not use unrelated materials such as clay soil or dredged sediments in place of sandy soil.

(2) PCB remediation waste may contain interferences which confound or hamper sample extraction and chemical analysis. These interferences may be from chemicals or other attributes preexisting in the waste material, resulting from the PCB contamination source, or resulting from treatment to remove or destroy PCBs. Comparison study samples must also contain these interfering materials to demonstrate successful analysis in their presence. For example, a PCB remediation waste may have been co-disposed with chlorobenzene solvents or chlorinated pesticides. These chlorinated compounds would have to be present in the comparison study compounds at the same levels found, or at the highest levels expected to be found, in the PCB remediation waste. As another example, for PCB remediation waste which had been solvent washed with liquid amines to remove PCBs, comparison study samples would have to contain concentrations of these amines at the same lev-

els found, or at the highest levels expected to be found, in the PCB remediation waste.

(b) Prior to initiating the comparison study, confirm the following PCB concentrations in the comparison study samples using the methods specified in § 761.292. All samples of non-liquid PCB remediation waste must have PCB concentrations between 0.1 and 150 ppm.

(1) A minimum of three comparison study samples must have PCB concentrations above the cleanup level specified for the site in § 761.61(a)(4) and a minimum of three comparison study samples must have PCB concentrations below the specified cleanup level.

(2) At least one comparison study sample must have a PCB concentration  $\geq 90$  percent and  $\leq 100$  percent of the cleanup level.

(3) At least one comparison study sample must have a PCB concentration  $\geq 100$  percent and  $\leq 110$  percent of the cleanup level.

(c) If the comparison study samples do not have the concentrations or concentration ranges required by paragraph (b) of this section, for purposes of use in this chemical extraction and chemical analysis comparison study, a person may adjust PCB concentrations by dilution. Any excess material resulting from the preparation of these samples, which is not used as an analytical sample, is regulated as the PCB concentration in the component having the highest PCB concentration of the component materials in the sample.

**§ 761.326 Conducting the comparison study.**

Extract or analyze the comparison study samples using the alternative method. For an alternative extraction method or alternative analytical method to be comparable to the methods required in § 761.292, all of the following conditions must be met.

(a) All samples having PCB concentrations greater than or equal to the level of concern, as measured by the methods required in § 761.292, are found to be greater than or equal to the level of concern as measured by the alternative method (no false negatives).

(b) Only one sample which contains PCBs at a level less than the level of