pulled tight. Select the three parameters and the sampling location as follows:

(i) Determine the radial component (r) of the location for each sample.

(A) Tie to a stake or otherwise fasten one of the strings at ''b,'' the bottom of the pile, as a reference point for finding *r*.

(B) Measure the circumference ''c,'' the distance around the bottom of the pile. Determine *r* from *b* in one of two ways:

(*1*) Multiply *c* by a randomly generated fraction or percentage of one.

(*2*) Select a random number between one and the total number of centimeters in *c*.

(C) Locate *r* by starting at *b,* the place where the fixed string meets the base of the pile, and travel clockwise around the edge of the pile at the base for the distance you selected in paragraph (c)(3)(i)(B) of this section.

(D) Fasten the second string at the selected distance. The second string marks the first parameter *r*.

(ii) Determine the second parameter s of the location for each sample.

(A) Measure the distance, *l,* along the string, positioned in paragraph (c)(3)(i)(D) of this section, from the top to the bottom of the pile at the selected radial distance *r*. Determine the distance *s* from *l* in one of two ways:

(*1*) Multiply *l* by a randomly generated fraction or percentage of one.

(*2*) Select a random number between one and the total number of centimeters in *l*.

(B) Mark, for example by placing a piece of tape on the string positioned according to paragraph (c)(3)(i)(D) of this section, the distance *s,* up from the bottom of the pile on the string at *r*.

(iii) Determine the third and final parameter *t* of the location for each sample.

(A) Mark and number 1 cm intervals from one end of a rigid device, for example a rod, dowel, stake, or broom handle, for measuring the distance from the top of the pile to the bottom at the point *s* selected in paragraph (c)(3)(ii)(B) of this section. The marked and numbered device shall be of sufficient strength to be forced down through the maximum depth of the pile and sufficient length to measure the depth of the waste in the pile at any point.

(B) Take the measuring device, constructed according to paragraph (c)(3)(iii)(A) of this section, and at position s, push the end of the device marked with zero straight down into the pile until it reaches the bottom of the pile or ground level. The vertical distance ''v'' is the number of centimeters from the surface of the pile at point s on the string to the bottom of the pile or ground level. Read the distance *v* on the measuring device at the surface of the pile. From the distance *v,* determine *t,* in one of two ways:

(*1*) Randomly generate a fraction of one and multiply the fraction times v.

(*2*) Select a random number between zero and the total number of centimeters of the vertical distance *v*.

(iv) Dig a hole straight down into the pile for *t* centimeters (inches) from the surface of the pile at *s*.

(v) At depth *t,* directly under the s mark on the string, outline the top of the sample container and collect (shovel) all waste under the outline in the following order of preference in paragraphs (c)(3)(v)(A) through (c)(3)(v)(C) of this section. It is possible that some of the eight sampling locations will not provide 19 liters of sample.

(A) For a depth of 30 cm.

(B) Until the container is full.

(C) Until the ground level is reached.

(d) *Compositing the samples.* Composite the eight 19-liter samples and subsample in accordance with §761.350. Send the subsample to a laboratory for further sampling as described in §§761.353 and 761.355 and for chemical extraction and analysis. If there is insufficient sample for a 19-liter sample from the composite sample composed of the eight iterations of sample site selection, according to the procedures in paragraphs (c)(3)(i) through (c)(3)(v) of this section, select additional sample sites, collect additional samples and composite the additional waste in the samples until a minimum of 19 liters is in the composite.

[63 FR 35469, June 29, 1998, as amended at 64 FR 33762, June 24, 1999]

§761.348 Contemporaneous sampling.

Contemporaneous sampling is possible when there is active generation of

waste and it is possible to sample the waste stream as it is generated. Collect eight 19-liter samples as follows.

(a) Collect each sample by filling a 19-liter (5 gallon) container at a location where the PCB bulk product waste is released from the waste generator onto a pile or into a receptacle container before the waste reaches the pile or receptacle container.

(b) Determine a sample collection start time using a random number generator or a random number table to select a number between 1 and 60. Collect the first sample at the randomly selected time in minutes after start up of the waste output, or if the waste is currently being generated, after the random time is selected. For example, if the randomly selected time is 35, begin collection 35 minutes after the start up of waste generation. Similarly, if waste output is ongoing and the random start determination occurred at 8:35 a.m., collect the first sample at 9:10 a.m. (35 minutes after the random start determination).

(c) Collect seven more samples, one every 60 minutes after the initial sample is collected. If the waste output process stops, stop the 60–minute interval time clock. When the process restarts, restart the 60–minute interval time clock and complete the incomplete 60–minute interval.

(d) Composite the eight 19-liter samples and subsample in accordance with § 761.350.

§ 761.350 Subsampling from composite samples.

(a) *Preparing the composite.* Composite the samples (eight from a flattened pile; eight or more from a conical pile; eight from waste that is continuously generated) and select a 19-liter subsample for shipment to the chemical extraction and analysis laboratory for further subsampling. There are two options for the preparation of the composite:

(1) *Option one.* Place all of the contents of all 19-liter samples that you collected into a 209 liter (55 gallon) drum or similar sized, cylinder-shaped container. Completely close the container, and roll it 10 or more complete revolutions to mix the contents.

(2) *Option two.* Add the 19-liter samples one at a time to a 209 liter (55 gallon) drum. Between the addition of each 19-liter sample, stir the composite using a broom handle or similar long, narrow, sturdy rod that reaches the bottom of the container. Stir the mixture for a minimum of 10 complete revolutions of the stirring instrument around the container at a distance approximately half way between the outside and center of the container.

(b) *Selecting a 19-liter subsample from the composite.* Once the composite is mixed, pour the mixture of waste out on a plastic sheet and either divide it into 19-liter size piles or make one large pile.

(1) From 19-liter sized piles, use a random number generator or random number table to select one of the piles.

(2) From one large pile, flatten the pile to a depth of 30 cm and divide it into 4 quarters of equal size. Use a random number generator or random number table to select one quarter of the pile. Further divide the selected quarter pile into 19-liter portions and use a random number generator or random number table to select one 19-liter portion. A square having a 25 cm side or a circle having a diameter of approximately 28.5 cm when projected downwards 30 cm equals approximately 19 liters.

(c) *Transferring the sample to the analytical laboratory.* Place the selected 19-liter subsample in a container, approved for shipment of the sample, to the chemical extraction and analysis laboratory, for the next step in sample selection in accordance with § 761.353.

§ 761.353 Second level of sample selection.

The second level of sample selection reduces the size of the 19-liter subsample that was collected according to either § 761.347 or § 761.348 and subsampled according to § 761.350. The purpose of the sample size reduction is to limit the amount of time required to manually cut up larger particles of the waste to pass through a 9.5 millimeter (mm) screen.

(a) *Selecting a portion of the subsample for particle size reduction.* At the chemical extraction and analysis laboratory, pour the 19-liter subsample onto a