

Environmental Protection Agency

§ 761.280

that is not in a container and porous surfaces.

(b) Use the following procedures to sample bulk PCB remediation waste that is in a single container.

(1) Use a core sampler to collect a minimum of one core sample for the entire depth of the waste at the center of the container. Collect a minimum of 50 cm³ of waste for analysis.

(2) If more than one core sample is taken, thoroughly mix all samples into a composite sample. Take a subsample of a minimum of 50 cm³ from the mixed composite for analysis.

(c) Use the following procedures to sample bulk PCB remediation waste that is in more than one container.

(1) Segregate the containers by type (for example, a 55-gallon drum and a roll-off container are types of containers).

(2) For fewer than three containers of the same type, sample all containers.

(3) For more than three containers of the same type, list the containers and assign each container a unique sequential number. Use a random number generator or table to select a minimum of 10 percent of the containers from the list, or select three containers, whichever is the larger.

(4) Sample the selected container(s) according to paragraph (b) of this section.

§ 761.267 Sampling non-porous surfaces.

(a) Sample large, nearly flat, non-porous surfaces by dividing the surface into roughly square portions approximately 2 meters on each side. Follow the procedures in § 761.302(a).

(b) It is not necessary to sample small or irregularly shaped surfaces.

§ 761.269 Sampling liquid PCB remediation waste.

(a) If the liquid is single phase, collect and analyze one sample. There are no required procedures for collecting a sample.

(b) If the liquid is multi-phasic, separate the phases, and collect and analyze a sample from each liquid phase. There are no required procedures for collecting a sample from each single phase liquid.

(c) If the liquid has a non-liquid phase which is >0.5 percent by total weight of the waste, separate the non-liquid phase from the liquid phase and sample it separately as a non-liquid in accordance with § 761.265.

§ 761.272 Chemical extraction and analysis of samples.

Use either Method 3500B/3540C or Method 3500B/3550B from EPA's SW-846, Test Methods for Evaluating Solid Waste, or a method validated under subpart Q of this part, for chemical extraction of PCBs from individual and composite samples of PCB remediation waste. Use Method 8082 from SW-846, or a method validated under subpart Q of this part, to analyze these extracts for PCBs.

§ 761.274 Reporting PCB concentrations in samples.

(a) Report all sample concentrations for non-liquid PCBs on a dry weight basis as micrograms of PCBs per gram of sample (ppm by weight). Report surface sampling results as µg/100 cm². Divide 100 cm² 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 cm².

(b) Report all sample concentrations for liquid PCBs on a wet weight basis as micrograms of PCBs per gram of sample (ppm by weight).

Subpart O—Sampling To Verify Completion of Self-Implementing Cleanup and On-Site Disposal of Bulk PCB Remediation Waste and Porous Surfaces in Accordance With § 761.61(a)(6)

SOURCE: 63 FR 35465, June 29, 1998, unless otherwise noted.

§ 761.280 Application and scope.

Follow the procedures in this subpart when sampling to verify completion of the cleanup for self-implementing, on-site disposal of bulk PCB remediation waste and porous surfaces consistent with the levels of § 761.61(a)(4)(i) and (iii). The objective of this subpart is not to search for new contamination.

Confirmation of compliance with the cleanup levels in § 761.61(a)(4) is only verifiable for the area sampled in accordance with this subpart. Do not make conclusions or extrapolations about PCB concentrations outside of the area which has been cleaned up and verified based on the results of this verification sampling.

§ 761.283 Determination of the number of samples to collect and sample collection locations.

This section addresses how to determine the number of samples to collect and sample collection locations for bulk PCB remediation waste and porous surfaces destined to remain at a cleanup site after cleanup.

(a) *Minimum number of samples.* (1) At each separate cleanup site at a PCB remediation waste location, take a minimum of three samples for each type of bulk PCB remediation waste or porous surface at the cleanup site, regardless of the amount of each type of waste that is present. There is no upper limit to the number of samples required or allowed.

(2) This is an example of how to calculate the minimum number of required samples at a PCB remediation waste location. There are three distinct cleanup sites at this example location: a loading dock, a transformer storage lot, and a disposal pit. The minimum number of samples to take appears in parentheses after each type of waste for each cleanup site. The PCB remediation wastes present at the loading dock are concrete (three samples) and clay soil (three samples). The non-liquid PCB remediation wastes present at the transformer storage lot are oily soil (three samples), clay soil (three samples) and gravel (three samples). The PCB remediation wastes present at the disposal pit are sandy soil (three samples), clay soil (three samples), oily soil (three samples), industrial sludge (three samples), and gravel (three samples).

(b) *Selection of sample locations—general.* (1)(i) Use a square-based grid system to overlay the entire area to be sampled. Orient the grid axes on a magnetic north-south line centered in the area and an east-west axis perpen-

dicular to the magnetic north-south axis also centered in the area.

(ii) If the site is recleaned based on the results of cleanup verification conducted in accordance with § 761.61(a)(6), follow the procedures in paragraph (b) of this section for locating sampling points after the recleaning, but reorient the grid axes established in paragraph (b)(1)(i) of this section by moving the origin one meter in the direction of magnetic north and one meter in the direction east of magnetic north.

(2) Mark out a series of sampling points 1.5 meters apart oriented to the grid axes. The sampling points shall proceed in every direction to the extent sufficient to result in a two-dimensional grid completely overlaying the sampling area.

(3) Collect a sample at each point if the grid falls in the cleanup area. Analyze all samples either individually or according to the compositing schemes provided in the procedures at § 761.289. So long as every sample collected at a grid point is analyzed as either an individual sample or as part of a composite sample, there are no other restrictions on how many samples are analyzed.

(c) *Selection of sample locations—small cleanup sites.* When a cleanup site is sufficiently small or irregularly shaped that a square grid with a grid interval of 1.5 meters will not result in a minimum of three sampling points for each type of bulk PCB remediation waste or porous surface at the cleanup site, there are two options.

(1) Use a smaller square grid interval and the procedures in paragraph (b) of this section.

(2) Use the following coordinate-based random sampling scheme. If the site is recleaned based on the results of cleanup verification conducted in accordance with § 761.61(a)(6), follow the procedures in this section for locating sampling points after the recleaning, but select three new pairs of sampling coordinates.

(i) Beginning in the southwest corner (lower left when facing magnetic north) of the area to be sampled, measure in centimeters (or inches) the maximum magnetic north-south dimension of the area to be sampled. Next, beginning in the southwest corner, measure