

T30S335.332

APPENDIX I

**DRY WEIGHT DETERMINATION FOR SOLIDS-BASED INDUSTRIAL SOLID WASTE AND
HAZARDOUS WASTE**

The dry weight determination provisions of §335.326 of this title (relating to Dry Weight Determination) specify that the generator must determine the dry weight of each hazardous waste stream. This appendix outlines the method to be used by the generator.

1. Collect a representative sample by grab or composite. Collection methods and sample preservation shall be by methods to minimize volatilization.
2. An aliquot of about 100 grams or more shall be weighed in a tared evaporating dish, casserole, or similar container. Record tare weight as "A" and container plus sample as "B."
3. This sample shall be evaporated at 73 degrees to 75 Celsius for two hours. Cool and weigh the sample plus container and record weight as "C."
4. Evaporate sample again in a drying oven at 103 degrees to 105 degrees Celsius per Standard Methods, 15th Edition, Method 209A. Cool and weigh sample plus container and record weight as "D."

All work should be done with all laboratory precautions necessary, including use of fume hoods and absence of ignition sources as appropriate.

$$\begin{aligned} \text{Weight of water} &= C - D \\ \text{Weight of Water-free Waste} &= (B - A) - (C - D) \\ &= \text{Weight of original sample minus weight of water} \\ \text{Dry Weight Ratio} &= \frac{(B - A) - (C - D)}{(B - A)} \\ &= \text{Weight of water-free waste divided by weight of original sample} \end{aligned}$$

APPENDIX II

**DRY WEIGHT DETERMINATION FOR OIL AND ORGANIC-BASED INDUSTRIAL SOLID WASTE AND
HAZARDOUS WASTE**

The dry weight determination provisions of §335.326 of this title (relating to Dry Weight Determination) specify that the generator must determine the dry weight of each hazardous waste stream. This appendix outlines the method to be used by the generator.

1. Collect a representative sample by grab or composite. Collection methods and sample preservation shall be by methods to minimize volatilization.
2. An aliquot of about 25 grams or more shall be weighed to the nearest 0.1 mg in a tared evaporating dish or beaker. Record tare weight as "A" and container plus sample as "B."

3. Dilute sample with 100 ml of hexane. Filter sample through a crucible with a glass fiber filter (Whatman Grade 934AH and 984H; Gelman Type A/E; millipore type AP40; or equivalent. Available in diameters of 2.2 cm to 4.7 cm). Rinse evaporating dish or beaker with two 20 ml portions of hexane and filter through the crucible. Discard the solids and filter and save the filtrate.

4. Weigh approximately 25 grams of predried, anhydrous magnesium sulfate (MgSO_4) in a 400 ml beaker to the nearest 0.1 mg. Record the weight of the beaker and MgSO_4 as "C." Add the filtrate from Step 3 and stir for a few minutes with a glass rod. (Caution: Heat may be generated upon addition of filtrate.) Carefully decant the liquid portion in the beaker.

5. Dry the beaker at 73-75 degrees Celsius for one hour. Cool and weigh the beaker and record the weight as "D."

All work shall be done with all laboratory precautions necessary, including use of fume hoods and absence of ignition sources as appropriate.

$$\text{Weight of water} = D - C$$

$$\text{Weight of Water-free Waste} = (B - A) - (D - C)$$

$$= \text{Weight of original sample minus weight of water}$$

$$\text{Dry Weight Ratio} = \frac{(B - A) - (D - C)}{(B - A)}$$

$$(B - A)$$

$$= \text{Weight of water-free waste divided by weight of original sample}$$