VOLATILE ORGANIC COMPOUND TESTING METHODS

(a) For surface coating material, such as paint, varnish, stain, and lacquer, the volatile matter content, water content, density, volume of solids, and weight of solids shall be determined by Method 24 of Appendix A to 40 CFR Part 60.

(b) For printing inks and related coatings, the volatile matter and density shall be determined by Method 24A of Appendix A to 40 CFR Part 60.

(c) For solvent metal cleaning equipment as defined in 15A NCAC 02D .0930, the following procedure shall be followed to perform a material balance test:

1. Clean the degreaser sump before testing;
2. Record the amount of solvent added to the tank with a flow meter;
3. Record the weight and type of workload degreased each day;
4. At the end of the test run, pump out the used solvent and measure the amount with a flow meter. In addition, estimate the volume of metal chips and other material remaining in the emptied sump;
5. Bottle a sample of the used solvent and analyze it to find the percent that is oil and other contaminants. The oil and solvent proportions may be estimated by weighing samples of used solvent before and after boiling off the solvent; and
6. Compute the volume of oils in the used solvent. The volume of solvent displaced by this oil plus the volume of makeup solvent added during operations equals the solvent emissions.

(d) For bulk gasoline terminals as defined in 15A NCAC 02D .0927, emissions of volatile organic compounds shall be determined by the procedures in 40 CFR 60.503.

(e) For organic process equipment, leaks of volatile organic compounds shall be determined by Method 21 of Appendix A to 40 CFR Part 60. Organic process equipment shall include valves, flanges and other connections, pumps and compressors, pressure relief devices, process drains, open-ended valves, pump and compressor seal system degassing vents, accumulator vessel vents, access door seals, and agitator seals.

(f) For determination of solvent in filter waste, such as muck and distillation waste, in accordance with 15A NCAC 02D .0912, the tester shall derive the quantity of volatile organic compounds per quantity of discarded filter muck. The procedure to be used in making this determination shall be the test method "Standard Method of Test for Dilution of Gasoline-Engine Crankcase Oils," ASTM D322 except the filter muck is to be used instead of crankcase oil.

(g) For sources of volatile organic compounds not covered by the methods specified in Paragraphs (b) through (e) of this Rule, one of the applicable test methods in Appendix M to 40 CFR Part 51 or Appendix A to 40 CFR Part 60 shall be used to determine compliance with volatile organic compound emission standards.

(h) Compounds excluded from the definition of volatile organic compound in 15A NCAC 02D .0901 shall be treated as water.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5);
Eff. June 1, 2008;