WAC 173-303-110  Sampling, testing methods, and analyses.  (1) Purpose. This section sets forth the testing methods to be used to comply with the requirements of this chapter. Quality control procedures specified by the testing method or an approved equivalent method must be followed for the analytical result to be considered valid for designation. All methods and publications listed in this section are incorporated by reference.

(2) Representative samples.  
(a) The methods and equipment used for obtaining representative samples of a waste will vary with the type and form of the waste. The department will consider samples collected using the sampling methods below or the most recent version of such methods for wastes with properties similar to the indicated materials, to be representative samples of the wastes:
(i) Crushed or powdered material - ASTM Standard D346-04e1;
(ii) Extremely viscous liquid - ASTM Standard D140-01 (2007);
(iii) Fly ash-like material - ASTM Standard D2234/D2234M-03e1;
(iv) Soil-like material - ASTM Standard D1452-80 (2000);
(v) Soil or rock-like material - ASTM Standard D420-98 (2003);
(vi) Containerized liquid wastes - "COLIWASA" described in SW-846, as incorporated by reference at WAC 173-303-110 (3)(a), or the equivalent representative sampling method described in ASTM D5743-97 (2003). Per this method, the selection of an appropriate device must be best suited for the characteristics of the waste being sampled; and
(vii) Liquid waste in pits, ponds, lagoons, and similar reservoirs - "Pond Sampler" described in SW-846, as incorporated by reference at WAC 173-303-110 (3)(a).

(b) Copies of these representative sampling methods are available from the department except for the ASTM standards which can be obtained by writing to:

ASTM  
100 Barr Harbor Drive  
West Conshohocken, PA 19428-2959

(3) Test procedures. Copies of the test procedures listed in this subsection can be obtained by writing to the appropriate address below:

For copies of Department of Ecology test methods:
Attn: Test Procedures  
Hazardous Waste Section  
Department of Ecology  
P.O. Box 47600  
Olympia, Washington 98504-7600

For copies of SW-846, including updates, and 40 C.F.R. Part 261:
Superintendent of Documents  
U.S. Government Printing Office  
Washington, D.C. 20402  
202-512-1800

For copies of ASTM methods:
ASTM  
100 Barr Harbor Drive  
West Conshohocken, PA 19428-2959

For copies of APTI methods:
The document titles and included test procedures are as follows:


(b) Biological Testing Methods for the Designation of Dangerous Waste, Department of Ecology Publication #80-12, the latest revision, describing procedures for:

(i) Static acute fish toxicity test; and
(ii) Acute oral rat toxicity test.

(c) Chemical Test Methods for Designating Dangerous Waste, Department of Ecology Publication #97-407, revised December 2014 describing methods for testing:

(i) Ignitability;
(ii) Corrosivity;
(iii) Reactivity;
(iv) Toxicity characteristic leaching procedure;
(v) Halogenated organic compounds; and
(vi) Polycyclic aromatic hydrocarbons.

(d) (Reserved);

(e)(i) The determination of Polychlorinated Biphenyls in Transformer Fluids and Waste Oils, EPA-600/4-81-045; and

(f) Appropriate analytical procedures to determine whether a sample contains a given toxic constituent are specified in Chapter Two, "Choosing the Correct Procedure" found in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846;

(g) The following publications for air emission standards (in addition to (a) of this subsection):

(ii) ASTM Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), ASTM Standard D4809-06.


(h) The following publications:
(i) "NFPA 30 Flammable and Combustible Liquids Code" (2015), available from the National Fire Protection Association, NFPA Headquarters, 1 Batterymarch Park, Quincy, MA 02169-7471.


(iv) Method 1664, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Nonpolar Material) by Extraction and Gravimetry. Available from NTIS, PB99-121949, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.


(4) Substantial changes to the testing methods described above will be made only after the department has provided adequate opportunity for public review and comment on the proposed changes. The department may, at its discretion, schedule a public hearing on the proposed changes.

(5) Equivalent testing methods. Any person may request department approval for the use of an equivalent testing method by submitting a petition, prepared in accordance with WAC 173-303-910(2), to the department.

(6) Reporting analytical results. Ecology requires that all test methods report their analytical results for solid and soil samples on a dry weight basis. Reporting on a dry weight basis compensates for variability in water content and provides a consistent procedure for all analytical results provided to ecology for designation purposes.

(7) "Ground-Water Monitoring List" Appendix IX to 40 C.F.R. Part 264 is replaced with the version in Appendix 5 of Chemical Test Methods for Designating Dangerous Waste, Department of Ecology Publication #97-407, revised December 2014. The Appendix "Ground-Water Monitoring List" in Chemical Testing Methods includes the columns "Suggested methods" and "PQL."