

SEMI-VOLATILE ORGANIC COMPOUNDS (PAHs, Bis(2-ethylhexyl)phthalate, and Bis(2-ethylhexyl)adipate)	
Test Description	Determination of semivolatile organic compounds (SVOCs) in drinking water
Test Use	Useful for evaluating finished drinking water, source water, and drinking water in any treatment stage.
Test Department	Organic Chemistry: Phone 860-920-6581/6693 Fax 860-920-6703
Methodology	EPA Method 525.2: Liquid-Solid Extraction and Capillary Column GC/MS
Availability	Year-round
Sample Requirements	Three (3) 1-L samples One (1) Field Blank (containing lab-provided reagent water) per sampling trip.
Container type /Preservative	1-L amber glass bottle with Teflon-lined screw caps, with preservative vials attached: 50 mg Sodium Sulfite preservative for chlorinated samples, then 1.0 mL Hydrochloric Acid preservative (1:1 HCl/Reagent Water) for all samples
Collection Instructions (Note 1)	For taps, remove aerators and let water run 4-5 minutes. For outdoor locations, sampling location should be in accordance with a preapproved quality assurance project plan.
Sample Holding Time & Transport	Samples are iced or refrigerated and kept in the dark at 4°±2°C from time of collection until extraction. Samples must be extracted (i.e. lab initiates test) within 14 days of collection.
Unacceptable Conditions	Incomplete requisition form. Insufficient sample volume. Samples received beyond the 14-day holding time. Improper collection/container/preservative.
Requisition Form	Use the Organics/Radiation Water Examination request form.
Required Information	Fill out entire requisition form.
Limitations	Samples that are received by the lab that test positive for chlorine will have qualified results, and may require re-collection.
Additional Comments	See Table 1 for list of compounds which the CT PHL can determine with this method.

Note 1: See *New England States Environmental Sampling Guide*, latest edition.

<https://www.epa.gov/sites/production/files/2015-06/documents/NE-States-Sample-Collection-Manual.pdf>

Table 1. Compounds Determinable by EPA Method 525.2.

The laboratory is certified for the following analytes:
Benzo[a]pyrene (CAS# 50-32-8)
Bis(2-ethylhexyl)adipate (CAS# 103-23-1)
Bis(2-ethylhexyl)phthalate (CAS# 117-81-7)
The laboratory analyzes following polyaromatic hydrocarbons (PAHs) upon request:
Naphthalene (CAS#91-20-3)
2-Methylnaphthalene (CAS#91-57-6)
1-Methylnaphthalene (CAS#90-12-0)
Acenaphthylene (CAS#208-96-8)
Acenaphthene (CAS# 83-32-9)
Fluorene (CAS# 86-73-7)
Phenanthrene (CAS# 85-01-8)
Anthracene (CAS#120-12-7)
Fluoranthene (CAS#000206-44-0)
Pyrene (CAS# 129-00-0)
Benz[a]anthracene (CAS# 56-55-3)
Chrysene (CAS#218-01-9)
Benzo[b]fluoranthene (CAS# 205-82-3)
Benzo[k]fluoranthene (CAS# 207-08-9)
Indeno[1,2,3,c,d]pyrene (CAS#193-39-5)
Dibenz[a,h]anthracene (CAS# 53-70-3)
Benzo[g,h,i]perylene (CAS#191-24-2)