

Method	Sample Type	Maximum Holding Times	Container Type	Preservation
EPA Method 8280	Aqueous	Extraction: 30 days ⁽¹⁾ Analysis: 45 days ⁽²⁾	Glass Container	< 6 °C dark ⁽⁹⁾
	Solid	Extraction: 30 days ⁽¹⁾ Analysis: 45 days ⁽²⁾	Glass Container	≤ 6 °C dark ⁽⁹⁾
	Fish/Tissue	Extraction: 30 days ⁽¹⁾ Analysis: 45 days ⁽²⁾	Glass Container	≤ 6 °C ⁽⁶⁾ < -10 °C dark ⁽⁷⁾
EPA Method 8290	Aqueous	Extraction: 30 days ⁽¹⁾ Analysis: 45 days ⁽²⁾	Glass Container	≤ 6 °C dark ⁽⁹⁾
	Solid	Extraction: 30 days ⁽¹⁾ Analysis: 45 days ⁽²⁾	Glass Container	≤ 6 °C dark ⁽⁹⁾
	Fish/Tissue	Extraction: 30 days ⁽¹⁾ Analysis: 45 days ⁽¹⁾	Glass Container	< 6 °C ⁽⁶⁾ < -10 °C dark ⁽⁷⁾
EPA Method 1613B	Aqueous	Extraction: 1 year ⁽¹⁾ Analysis: 1 year ⁽²⁾	Amber Glass Container	< 4 °C dark ^{(3) (9)}
	Solid Fish/Tissue	Extraction: 1 year ⁽¹⁾ Analysis: 1 year ⁽²⁾	Amber Glass Container	< 4 °C dark ⁽⁶⁾ < -10 °C dark ⁽⁷⁾
EPA Method 1614	Aqueous ⁽³⁾	Extraction: 1 year ⁽¹⁾ Analysis: 1 year ⁽²⁾	Amber Glass Container	< 6 °C dark ^{(3) (9)}
	Solid Fish/Tissue	Extraction: 1 year ⁽¹⁾ Analysis: 1 year ⁽²⁾	Amber Glass Container	< 6 °C dark ⁽⁶⁾ < -10 °C dark ⁽⁷⁾
Modified EPA Method 1625	All samples	Extraction: 7 days ⁽¹⁾ Analysis: 40 days ⁽²⁾	Glass Containers	≤ 4 °C dark ^{(3) (9)}
EPA Method 1668A/C	Aqueous	Extraction: 1 year ⁽¹⁾ Analysis: 1 year ⁽²⁾	Amber Glass Container	< 6 °C dark ^{(3) (9)}
	Solid Fish/Tissue	Extraction: 1 year ⁽¹⁾ Analysis: 1 year ⁽²⁾	Amber Glass Container	< 6 °C dark ⁽⁶⁾ < -10 °C dark ⁽⁷⁾
EPA Method 1694	Aqueous	Extraction: 7 days ⁽¹⁾ Analysis: 40 days ⁽²⁾	Amber Glass Containers	< 6 °C dark ⁽⁹⁾
	Solid	Extraction: 7 days ⁽¹⁾ Analysis: 40 days ⁽²⁾	Amber Glass Containers	< 6 °C dark ⁽⁶⁾ < -10 °C dark ⁽⁷⁾
EPA Method 1699	Aqueous ⁽³⁾	Extraction: 7 days ⁽¹⁾ Analysis: 40 days ⁽²⁾	Amber Glass Container	< 6 °C dark ⁽⁹⁾
	Solid Fish/Tissue	Extract/Analyze: 1 year	Amber Glass Container	< 6 °C dark ⁽⁶⁾ < -10 °C dark ⁽⁷⁾

Method	Sample Type	Maximum Holding Times	Container Type	Preservation
Modified EPA Method 537	Aqueous ⁽⁸⁾	Extraction: 14 days ⁽¹⁾ Analysis: 28 days ⁽²⁾	Polypropylene or HDPE	≤ 10 °C ⁽⁶⁾ < 6 °C dark ⁽¹⁰⁾
	Solid	Extraction: 60 days ⁽¹⁾ Analysis: 30 days ⁽²⁾	Polypropylene or HDPE	≤ 10 °C ⁽⁶⁾ < 6 °C dark ⁽⁷⁾
EPA Method 537	Aqueous ⁽⁸⁾	Extraction: 14 days ⁽¹⁾ Analysis: 28 days ⁽²⁾	Polypropylene	≤ 10 °C ⁽⁶⁾ < 6 °C dark ⁽¹⁰⁾
EPA Method 23	MM5 Train	Extraction: 30 days ⁽¹⁾ Analysis: 45 days ⁽²⁾ Trap Prep: 30 days	Train and/or Amber Glass Container	Adsorbents on ice ⁽⁶⁾
CARB Method 428 ⁽⁴⁾	MM5 Train	Extraction: 30 days ⁽¹⁾ Analysis: 45 days ⁽²⁾ Trap Prep: 30 days	Train and/or Amber Glass Container	< 6 °C dark ⁽⁵⁾
CARB Method 429	MM5 Train	Extraction: 21 days ⁽¹⁾ Analysis: 40 days ⁽²⁾ Resin QC Date: 21 days	Train and/or Amber Glass Container	≤ 4 °C dark ⁽⁹⁾
EPA 613	Aqueous	Extraction: 7 days ⁽¹⁾ Analysis: 40 days ⁽²⁾	Amber Glass Container	≤ 4 °C dark ^{(3) (9)}
NCASI 551 ⁽⁴⁾	All Samples	NA	NA	< 4 °C dark ⁽⁹⁾
PCN	Aqueous	Extraction: 1 year ⁽¹⁾ Analysis: 1 year ⁽²⁾	Amber Glass Container	< 6 °C dark ^{(3) (6)} < -10 °C dark ⁽⁹⁾
	Solid Fish/Tissue	Extraction: 1 year ⁽¹⁾ Analysis: 1 year ⁽²⁾	Amber Glass container	< -10 °C dark ⁽⁷⁾
EPA Method TO-9A	Air/PUF	Extraction: 7 Days ⁽¹⁾ Analysis: 40 days ⁽²⁾ PUF Prep: 30 days	PUF or Amber Glass Container	< 4 °C ⁽⁶⁾ ≤ 4 °C ⁽⁹⁾

- (1) From collection
- (2) From extraction
- (3) If residual chlorine is present sodium thiosulfate is added as per the method
- (4) Holding times set by Vista Analytical Laboratory
- (5) Recommended by Vista Analytical Laboratory
- (6) From collection until laboratory receipt
- (7) Solid/Tissue matrices not extracted within 21 days will be stored <-10 °C
- (8) Preserved in the field with Trizma (for chlorinated drinking water samples)
- (9) From collection until sample extraction
- (10) Matrix storage temperature at Vista Analytical Laboratory

References

1. California Environmental Protection Agency, Air Resources Board, Method 429; Determination of Hydrocarbon (PAH) Emissions from Stationary Sources (1997); Sections 4.2.2.5, 4.3.5, 5.4.
2. EPA Method 1613 Rev. B; Tetra- Through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS (1994); Section 8.0
3. EPA Method 1614A; Brominated Diphenyl Ethers in Water, Soil, Sediment, and Tissue by HRGC/HRMS (2010); Section 8.0
4. EPA Method 1699; Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS (2007); Section 8.0
5. EPA Method 8280B; Polychlorinated Dibenzo-p-Dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/Low-Resolution Mass Spectrometry (HRGC/LRMS) (2007); Section 8.0
6. EPA Compendium Method TO-9A; Determination of Polychlorinated, Polybrominated and Brominated/Chlorinated Dibenzo-p-Dioxins and Dibenzofurans in Ambient Air (1999); Section 10.2.6, 11.3.4.
7. EPA Method 1625C; Semivolatile Organic Compounds by Isotope Dilution GCMS (1989); Section 5.1.2.
8. EPA Method 23; Determination of Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans from Municipal Waste Combustors; Section 5.0
9. EPA Method 1668C; Chlorinated Biphenyl Congeners in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS (2010); Section 8.0
10. EPA Method 537.1 Version 1.0; Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) (2018); Section 8.0
11. NCASI Procedure for the Preparation and Isomer Specific Analysis of Pulp and Paper Industry Samples for 2,3,7,8-TCDD and 2,3,7,8-TCDF; Technical Bulletin No. 551 (1989); Page 16
12. EPA Method 8290A; Polychlorinated Dibenzo-p-Dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC-HRMS) (2007); Section 8.0
13. EPA Method 1694; Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS (2007); Section 8.0
14. EPA Method 613; 2,3,7,8-Tetrachloro-dibenzo-p-Dioxin (1984); Section 9.0