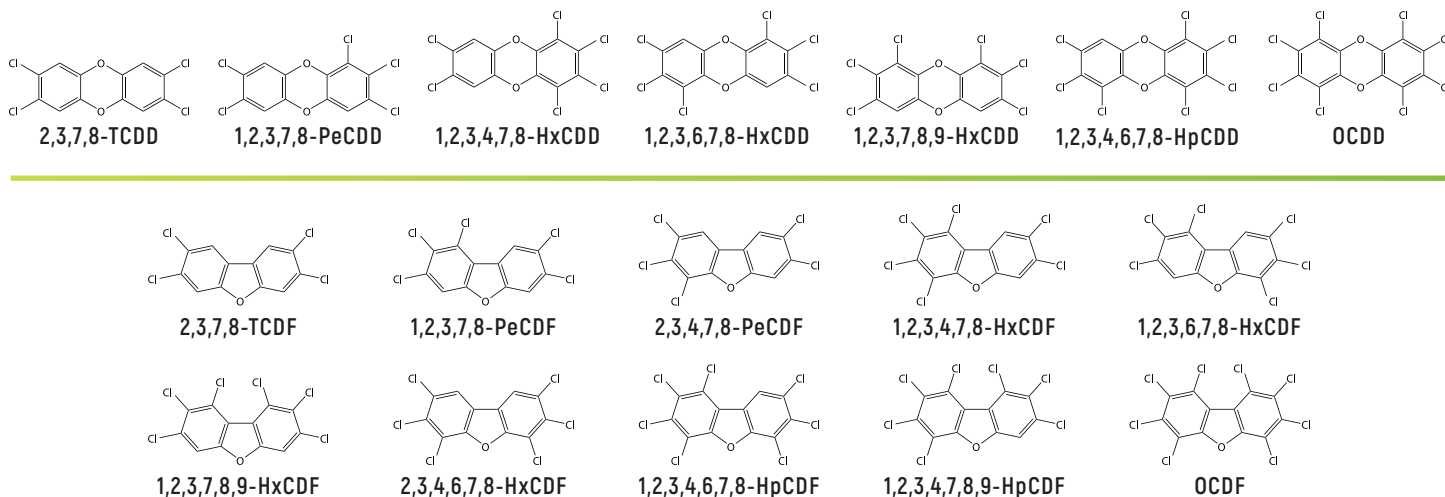


# SERVICES SUMMARY 8280M

## Testing for Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans by High Resolution GC/MS: EPA Method 8280M



METHOD	CONGENERS	DESCRIPTION	MATRIX	RL/PQL <sup>1</sup>	TAT <sup>2</sup>	CONTAINER	PRESERVATION*	HOLD TIMES <sup>3</sup>	MIN VOLUME
8280M	PCDD/PCDFs (Tetra - Octa)	Low resolution GC/MS   17 Dioxin/Furan congeners and Totals   All Matrices	Water	10-50 ng/L	10 Days	Two 1-Liter (AG)	Refrigerate <6° C Unpreserved	30 Days	100 mL
			Solid	1.0-5.0 µg/Kg		One 4-8 oz (AG)			1 g
8280M	2,3,7,8 TCDD Only	Low resolution GC/MS   2,3,7,8 Tetrachlorodibenzo-p-dioxin <u>only</u>   All matrices	Water	10 ng/L	10 Days	Two 1-Liter (AG)	Refrigerate <6° C Unpreserved	30 Days	100 mL
			Solid	1.0 µg/Kg		One 4-8 oz (AG)			1 g
<b>Notes</b>									
<sup>1</sup> RLs/PQLs subject to change, please contact lab for current limits. <sup>2</sup> Standard TAT is measured by business days – rush/customized TAT may be available by prearrangement.			<sup>3</sup> Some State or Federal agencies may have alternative hold times and those must be met. *All methods require samples to remain in darkness or out of direct contact with sunlight.						

### Method Overview

This SW846 method provides procedures for the detection and quantitative measurement of (7) polychlorinated dibenzo-p-dioxins and (10) polychlorinated dibenzofurans (tetra through octa) in a variety of environmental matrices including: solid, aqueous, ash, etc. For optimal sensitivity and selectivity, Pace Analytical uses a modified approach to report 8280M, by using some elements of the 8290 methodology on a lower sample volume. Method 8280M is normally utilized in conjunction with RCRA regulatory action in support of remediation activities, as the method of choice for incinerator ash characterization, and in Appendix 9 analysis (tetra-hexa) of groundwater samples.

### Method Detection Limits

Actual detection limits achieved by method 8280M will vary according to the sample matrix and by homologue group but to be valid, must meet the requirements of the method. In order to achieve lower detection limits, sample extracts must undergo an extensive cleanup process prior to analysis in order to remove interferences. For a complete list of reportable analytes and current limits, please contact Pace Analytical®.

#### Method QAQC:

- Labeled internal standard recoveries are continuously monitored to ensure data quality and method compliance.
- Lab Blanks – 1 per 20 samples.

#### Certifications:

NELAC • Multiple States • ISO/IEC 17025: 2017

#### Instrumentation:

3 – GC/HRMS – Autospec Ultima  
High Resolution Mass Spectrometers  
3 – GC/HRMS – Autospec Premier  
High Resolution Mass Spectrometers

#### Sample Matrices:

Waste Water • Ground Water • Soil/Sediment  
Hazardous Waste • Fly Ash

