

STATUS TABLES FOR
SW-846, THIRD EDITION

FINAL UPDATES I, II, IIA, IIB, III, IIIA, IIIB AND IV
PLUS OTHER NEW AND REVISED SW-846 METHODS
AT THE OSW METHODS WEB SITE

REVISED FEBRUARY 2007

HOW TO USE THIS DOCUMENT

This document provides historical information regarding EPA-published SW-846 methods and chapters. It contains two status tables, namely; the "SW-846 Method Status Table," which is a listing of SW-846 methods; and the "Status Table for SW-846 Chapter Text and Other Documents," which lists all other documents in SW-846 (e.g., chapters).

Use the "SW-846 Method Status Table" as a reference guide to identify the historical and latest versions of SW-846 methods. Methods in this status table are listed sequentially by method number. The column showing "Other Methods" includes those new and revised methods that appear as new SW-846 methods at EPA's Office of Solid Waste Methods Team internet site, <http://www.epa.gov/SW-846/>. An integrated version of the manual through Final Update IV is also available at the Methods Team internet site.

Methods that have "deleted" as the latest status are those methods that have been removed from SW-846 for various reasons, and you will not find that method at the Methods Team web site. See the associated update rulemakings or notices for an explanation regarding why a method was deleted from SW-846.

Use the "Status Table for SW-846 Chapter Text and Other Documents" as a reference guide to identify the historical and latest versions of chapters and other SW-846 documents (e.g., the Disclaimer).

With the publication of the final Methods Innovation Rule, SW-846 and its methods are no longer required in general by any RCRA regulation. See 40 CFR 260.11(a)(11) for a listing of those SW-846 methods that may be still required by the RCRA regulations for the analysis of method-defined parameters.

Do **not** use a status table as a guide for putting together a paper version of SW-846. Refer to the "Table of Contents" of the update for the order in which chapters and methods should appear in SW-846.

SW-846 METHOD STATUS TABLE

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
0010	--	--	--	--	--	Modified Method 5 Sampling Train
--	--	--	0011 (Up. III)	--	--	Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources
0020	--	--	--	--	--	Source Assessment Sampling System (SASS)
--	--	--	0023A (Up. III)	--	--	Sampling Method for Polychlorinated Dibenzo- <i>p</i> -Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources (Note: This method is a revision of Method 23, 40 CFR Part 60.)
--	--	--	--	25D Referral	--	Determination of the Volatile Organic Concentration of Waste Samples
--	--	--	--	25E Referral	--	Determination of Vapor Phase Organic Concentration in Waste Samples
0030	--	--	--	--	--	Volatile Organic Sampling Train
--	--	--	0031 (Up. III)	--	--	Sampling Method for Volatile Organic Compounds (SMVOC)
--	--	--	0040 (Up. III)	--	--	Sampling of Principal Organic Hazardous Constituents from Combustion Sources Using Tedlar® Bags
--	--	--	0050 (Up. III)	--	--	Isokinetic HCl/Cl ₂ Emission Sampling Train
--	--	--	0051 (Up. III)	--	--	Midget Impinger HCl/Cl ₂ Emission Sampling Train
--	--	--	0060 (Up. III)	--	--	Determination of Metals in Stack Emissions
--	--	--	0061 (Up. III)	--	--	Determination of Hexavalent Chromium Emissions from Stationary Sources

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	0100 (Up. III)	--	--	Sampling for Formaldehyde and Other Carbonyl Compounds in Indoor Air
--	--	--	--	207 Referral	--	A Method for Measuring Isocyanates in Stationary Source Emissions
1010	--	--	1010A (Up. IIIB)	--	--	Test Methods for Flash Point by Pensky-Martens Closed Cup Tester (Method text is a referral to ASTM Standard D 93-79 or Standard D 93-80)
1020	1020A	--	1020B (Up. IIIB)	--	--	Standard Test Methods for Flash Point by Setaflash (Small Scale) Closed-cup Apparatus (Method text is a referral to ASTM Standard D 3278-78)
--	--	--	1030 (Up. III)	--	--	Ignitability of Solids
--	--	--	--	1040	--	Test Method for Oxidizing Solids
--	--	--	--	1050	--	Test Methods to Determine Substances Likely to Spontaneously Combust
1110	--	--	1110A (Up. IIIB)	--	--	Corrosivity Toward Steel
--	--	--	1120 (Up. III)	--	--	Dermal Corrosion
1310	1310A	--	1310B (Up. IIIB)	--	--	Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test
--	1311	--	--	--	--	Toxicity Characteristic Leaching Procedure
--	--	1312 (Up. II)	--	--	--	Synthetic Precipitation Leaching Procedure
1320	--	--	--	--	--	Multiple Extraction Procedure
1330	1330A	--	--	--	--	Extraction Procedure for Oily Wastes

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
3005	3005A	--	--	--	--	Acid Digestion of Waters for Total Recoverable or Dissolved Metals for Analysis by FLAA or ICP Spectroscopy
3010	3010A	--	--	--	--	Acid Digestion of Aqueous Samples and Extracts for Total Metals for Analysis by FLAA or ICP Spectroscopy
--	--	3015 (Up. II)	--	3015A	--	Microwave Assisted Acid Digestion of Aqueous Samples and Extracts
3020	3020A	--	--	--	--	Acid Digestion of Aqueous Samples and Extracts for Total Metals for Analysis by GFAA Spectroscopy
--	--	--	3031 (Up. III)	--	--	Acid Digestion of Oils for Metals Analysis by Atomic Absorption or ICP Spectrometry
3040	--	--	3040A (Up. III)	--	--	Dissolution Procedure for Oils, Greases, or Waxes
3050	3050A	--	3050B (Up. III)	--	--	Acid Digestion of Sediments, Sludges, and Soils
--	--	3051 (Up. II)	--	3051A	--	Microwave Assisted Acid Digestion of Sediments, Sludges, Soils, and Oils
--	--	--	3052 (Up. III)	--	--	Microwave Assisted Acid Digestion of Siliceous and Organically Based Matrices
[3060, in the 2nd Ed.]	--	--	3060A (Up. III)	--	--	Alkaline Digestion for Hexavalent Chromium
--	--	--	--	--	3200 (7/05)	Mercury Species Fractionation and Quantification by Microwave Assisted Extraction, Selective Solvent Extraction and/or Solid Phase Extraction
3500	3500A	--	3500B (Up. III)	3500C	--	Organic Extraction and Sample Preparation
3510	3510A	3510B (Up. II)	3510C (Up. III)	--	--	Separatory Funnel Liquid-Liquid Extraction

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	--	--	3511 (11/02)	Organic Compounds in Water by Microextraction
3520	3520A	3520B (Up. II)	3520C (Up. III)	--	--	Continuous Liquid-Liquid Extraction
--	--	--	3535 (Up. III)	3535A	--	Solid-Phase Extraction (SPE)
3540	3540A	3540B (Up. II)	3540C (Up. III)	--	--	Soxhlet Extraction
--	--	3541 (Up. II)	--	--	--	Automated Soxhlet Extraction
--	--	--	3542 (Up. III)	--	3542A (5/05)	Extraction of Semivolatile Analytes Collected Using Method 0010 (Modified Method 5 Sampling Train)
--	--	--	3545 (Up. III)	3545A	--	Pressurized Fluid Extraction (PFE)
--	--	--	--	3546	--	Microwave Extraction
3550	--	3550A (Up. II)	3550B (Up. III)	3550C	--	Ultrasonic Extraction
--	--	--	3560 (Up. III)	--	--	Supercritical Fluid Extraction of Total Recoverable Petroleum Hydrocarbons
--	--	--	3561 (Up. III)	--	--	Supercritical Fluid Extraction of Polynuclear Aromatic Hydrocarbons
--	--	--	--	3562	--	Supercritical Fluid Extraction of Polychlorinated Biphenyls (PCBs) and Organochlorine Pesticides
--	--	--	--	--	3570 (11/02)	Microscale Solvent Extraction (MSE)
3580	3580A	--	--	--	--	Waste Dilution

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	3585 (Up. III)	--	--	Waste Dilution for Volatile Organics
3600	3600A	3600B (Up. II)	3600C (Up. III)	--	--	Cleanup
3610	3610A	--	3610B (Up. III)	--	--	Alumina Cleanup
3611	3611A	--	3611B (Up. III)	--	--	Alumina Column Cleanup and Separation of Petroleum Wastes
3620	3620A	--	3620B (Up. III)	3620C	--	Florisil Cleanup
3630	3630A	3630B (Up. II)	3630C (Up. III)	--	--	Silica Gel Cleanup
3640	--	3640A (Up. II)	--	--	--	Gel-Permeation Cleanup
3650	3650A	--	3650B (Up. III)	--	--	Acid-Base Partition Cleanup
3660	3660A	--	3660B (Up. III)	--	--	Sulfur Cleanup
--	--	3665 (Up. II)	3665A (Up. III)	--	--	Sulfuric Acid/Permanganate Cleanup
3810	--	--	--	Deleted	--	Headspace
--	--	--	--	3815	--	Screening Solid Samples for Volatile Organics
3820	--	--	--	--	--	Hexadecane Extraction and Screening of Purgeable Organics
--	--	--	4000 (Up. III)	--	--	Immunoassay
--	--	4010 (Up. IIA)	4010A (Up. III)	--	--	Screening for Pentachlorophenol by Immunoassay

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	4015 (Up. III)	--	--	Screening for 2,4-Dichlorophenoxyacetic Acid by Immunoassay
--	--	--	4020 (Up. III)	--	--	Screening for Polychlorinated Biphenyls by Immunoassay
--	--	--	--	--	4025 (10/02)	Screening for Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans (PCDD/Fs) by Immunoassay
--	--	--	4030 (Up. III)	--	--	Soil Screening for Petroleum Hydrocarbons by Immunoassay
--	--	--	4035 (Up. III)	--	--	Soil Screening for Polynuclear Aromatic Hydrocarbons by Immunoassay
--	--	--	4040 (Up. III)	--	--	Soil Screening for Toxaphene by Immunoassay
--	--	--	4041 (Up. III)	--	--	Soil Screening for Chlordane by Immunoassay
--	--	--	4042 (Up. III)	--	--	Soil Screening for DDT by Immunoassay
--	--	--	4050 (Up. III)	--	--	TNT Explosives in Soil by Immunoassay
--	--	--	4051 (Up. III)	--	--	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) in Soil by Immunoassay
--	--	--	--	4425	--	Screening Extracts of Environmental Samples for Planar Organic Compounds (PAHs, PCBs, PCDDs/PCDFs) by a Reporter Gene on a Human Cell Line
--	--	--	--	4670	--	Triazine Herbicides as Atrazine in Water by Quantitative Immunoassay
--	--	--	5000 (Up. III)	--	--	Sample Preparation for Volatile Organic Compounds

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	5021 (Up. III)	--	5021A (6/03)	5021: Volatile Organic Compounds in Soils and Other Solid Sample Matrices Using Equilibrium Headspace Analysis 5021A: Volatile Organic Compounds in Various Sample Matrices Using Equilibrium Headspace Analysis
5030	5030A	--	5030B (Up. III)	--	5030C (5/03)	Purge-and-Trap for Aqueous Samples
--	--	--	5031 (Up. III)	--	--	Volatile, Nonpurgeable, Water-Soluble Compounds by Azeotropic Distillation
--	--	--	5032 (Up. III)	--	--	Volatile Organic Compounds by Vacuum Distillation
--	--	--	5035 (Up. III)	--	5035A (7/02)	Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples
5040	--	5040A (Up. II)	Deleted (Up. III)	--	--	Analysis of Sorbent Cartridges from Volatile Organic Sampling Train (VOST): Gas Chromatography/Mass Spectrometry Technique
--	--	5041 (Up. II)	5041A (Up. III)	--	--	Analysis for Desorption of Sorbent Cartridges from Volatile Organic Sampling Train (VOST)
--	--	5050 (Up. II)	--	--	--	Bomb Preparation Method for Solid Waste
6010	6010A	--	6010B (Up. III)	6010C	--	Inductively Coupled Plasma-Atomic Emission Spectrometry
--	--	6020 (Up. II)	--	6020A	--	Inductively Coupled Plasma-Mass Spectrometry
--	--	--	--	6200	--	Field Portable X-Ray Fluorescence Spectrometry for the Determination of Elemental Concentrations in Soil and Sediment
--	--	--	--	6500	--	Dissolved Inorganic Anions in Aqueous Matrices by Capillary Ion Electrophoresis
--	--	--	--	6800	--	Elemental and Speciated Isotope Dilution Mass Spectrometry

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	--	--	6850 (1/07)	Perchlorate in Water, Soils and Solid Wastes Using High Performance Liquid Chromatography/Electrospray Ionization/Mass Spectrometry (HPLC/ESI/MS/MS)
--	--	--	--	--	6860 (1/07)	Perchlorate in Water, Soils and Solid Wastes Using Ion Chromatography/Electrospray Ionization/Mass Spectrometry (IC/ESI/MS or IC/ESI/MS/MS)
7000	7000A	--	--	7000B	--	Flame Atomic Absorption Spectrophotometry
--	--	--	--	7010	--	Graphite Furnace Atomic Absorption Spectrophotometry
7020	--	--	--	Deleted	--	Aluminum (Atomic Absorption, Direct Aspiration)
7040	--	--	--	Deleted	--	Antimony (Atomic Absorption, Direct Aspiration)
7041	--	--	--	Deleted	--	Antimony (Atomic Absorption, Furnace Technique)
7060	--	7060A (Up. II)	--	Deleted	--	Arsenic (Atomic Absorption, Furnace Technique)
7061	7061A	--	--	--	--	Arsenic (Atomic Absorption, Gaseous Hydride)
--	--	7062 (Up. II)	--	--	--	Antimony and Arsenic (Atomic Absorption, Borohydride Reduction)
--	--	--	7063 (Up. III)	--	--	Arsenic in Aqueous Samples and Extracts by Anodic Stripping Voltammetry (ASV)
7080	--	7080A (Up. II)	--	Deleted	--	Barium (Atomic Absorption, Direct Aspiration)
--	7081	--	--	Deleted	--	Barium (Atomic Absorption, Furnace Technique)
7090	--	--	--	Deleted	--	Beryllium (Atomic Absorption, Direct Aspiration)
7091	--	--	--	Deleted	--	Beryllium (Atomic Absorption, Furnace Technique)
7130	--	--	--	Deleted	--	Cadmium (Atomic Absorption, Direct Aspiration)

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
7131	--	7131A (Up. II)	--	Deleted	--	Cadmium (Atomic Absorption, Furnace Technique)
7140	--	--	--	Deleted	--	Calcium (Atomic Absorption, Direct Aspiration)
7190	--	--	--	Deleted	--	Chromium (Atomic Absorption, Direct Aspiration)
7191	--	--	--	Deleted	--	Chromium (Atomic Absorption, Furnace Technique)
7195	--	--	--	--	--	Chromium, Hexavalent (Coprecipitation)
7196	7196A	--	--	--	--	Chromium, Hexavalent (Colorimetric)
7197	--	--	--	--	--	Chromium, Hexavalent (Chelation/Extraction)
7198	--	--	--	--	--	Chromium, Hexavalent (Differential Pulse Polarography)
--	--	--	7199 (Up. III)	--	--	Determination of Hexavalent Chromium in Drinking Water, Groundwater and Industrial Wastewater Effluents by Ion Chromatography
7200	--	--	--	Deleted	--	Cobalt (Atomic Absorption, Direct Aspiration)
7201	--	--	--	Deleted	--	Cobalt (Atomic Absorption, Furnace Technique)
7210	--	--	--	Deleted	--	Copper (Atomic Absorption, Direct Aspiration)
--	7211	--	--	Deleted	--	Copper (Atomic Absorption, Furnace Technique)
7380	--	--	--	Deleted	--	Iron (Atomic Absorption, Direct Aspiration)
--	7381	--	--	Deleted	--	Iron (Atomic Absorption, Furnace Technique)
7420	--	--	--	Deleted	--	Lead (Atomic Absorption, Direct Aspiration)
7421	--	--	--	Deleted	--	Lead (Atomic Absorption, Furnace Technique)
--	7430	--	--	Deleted	--	Lithium (Atomic Absorption, Direct Aspiration)
7450	--	--	--	Deleted	--	Magnesium (Atomic Absorption, Direct Aspiration)
7460	--	--	--	Deleted	--	Manganese (Atomic Absorption, Direct Aspiration)

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THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	7461	--	--	Deleted	--	Manganese (Atomic Absorption, Furnace Technique)
7470	--	7470A (Up. II)	--	--	--	Mercury in Liquid Waste (Manual Cold-Vapor Technique)
7471	--	7471A (Up. II)	--	7471B	--	Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)
--	--	--	7472 (Up. III)	--	--	Mercury in Aqueous Samples and Extracts by Anodic Stripping Voltammetry (ASV)
--	--	--	--	7473	--	Mercury in Solids and Solutions by Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry
--	--	--	--	7474	--	Mercury in Sediment and Tissue Samples by Atomic Fluorescence Spectrometry
7480	--	--	--	Deleted	--	Molybdenum (Atomic Absorption, Direct Aspiration)
7481	--	--	--	Deleted	--	Molybdenum (Atomic Absorption, Furnace Technique)
7520	--	--	--	Deleted	--	Nickel (Atomic Absorption, Direct Aspiration)
--	--	--	7521 (Up. III)	Deleted	--	Nickel (Atomic Absorption, Furnace Method)
7550	--	--	--	Deleted	--	Osmium (Atomic Absorption, Direct Aspiration)
--	--	--	7580 (Up. III)	--	--	White Phosphorus (P ₄) by Solvent Extraction and Gas Chromatography
7610	--	--	--	Deleted	--	Potassium (Atomic Absorption, Direct Aspiration)
7740	--	--	--	Deleted	--	Selenium (Atomic Absorption, Furnace Technique)
7741	--	7741A (Up. II)	--	--	--	Selenium (Atomic Absorption, Gaseous Hydride)
--	--	7742 (Up. II)	--	--	--	Selenium (Atomic Absorption, Borohydride Reduction)

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7760	7760A	--	--	Deleted	--	Silver (Atomic Absorption, Direct Aspiration)
--	7761	--	--	Deleted	--	Silver (Atomic Absorption, Furnace Technique)
7770	--	--	--	Deleted	--	Sodium (Atomic Absorption, Direct Aspiration)
--	7780	--	--	Deleted	--	Strontium (Atomic Absorption, Direct Aspiration)
7840	--	--	--	Deleted	--	Thallium (Atomic Absorption, Direct Aspiration)
7841	--	--	--	Deleted	--	Thallium (Atomic Absorption, Furnace Technique)
7870	--	--	--	Deleted	--	Tin (Atomic Absorption, Direct Aspiration)
7910	--	--	--	Deleted	--	Vanadium (Atomic Absorption, Direct Aspiration)
7911	--	--	--	Deleted	--	Vanadium (Atomic Absorption, Furnace Technique)
7950	--	--	--	Deleted	--	Zinc (Atomic Absorption, Direct Aspiration)
--	7951	--	--	Deleted	--	Zinc (Atomic Absorption, Furnace Technique)
8000	8000A	--	8000B (Up. III)	--	8000C (3/03)	Determinative Chromatographic Separations
8010	8010A	8010B (Up. II)	Deleted (Up. III)	--	--	Halogenated Volatile Organics by Gas Chromatography
--	8011	--	--	--	--	1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by Microextraction and Gas Chromatography
8015	8015A	--	8015B	8015C	8015D (6/03)	8015C: Nonhalogenated Organics by Gas Chromatography 8015D: Nonhalogenated Organics by Gas Chromatography Using GC/FID
8020	--	8020A (Up. II)	Deleted (Up. III)	--	--	Aromatic Volatile Organics by Gas Chromatography
--	8021	8021A (Up. II)	8021B (Up. III)	--	--	Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors

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8030	8030A	--	Deleted (Up. III)	--	--	Acrolein and Acrylonitrile by Gas Chromatography
--	--	8031 (Up. II)	--	--	--	Acrylonitrile by Gas Chromatography
--	--	8032 (Up. II)	8032A (Up. III)	--	--	Acrylamide by Gas Chromatography
--	--	--	8033 (Up. III)	--	--	Acetonitrile by Gas Chromatography with Nitrogen-Phosphorus Detection
8040	8040A	--	Deleted (Up. III)	--	--	Phenols by Gas Chromatography
--	--	--	8041 (Up. III)	8041A	--	Phenols by Gas Chromatography
8060	--	--	Deleted (Up. III)	--	--	Phthalate Esters
--	--	8061 (Up. II)	8061A (Up. III)	--	--	Phthalate Esters by Gas Chromatography with Electron Capture Detection (GC/ECD)
--	8070	--	8070A (Up. III)	--	--	Nitrosamines by Gas Chromatography
8080	--	8080A (Up. II)	Deleted (Up. III)	--	--	Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography
--	--	8081 (Up. II)	8081A (Up. III)	8081B	--	Organochlorine Pesticides by Gas Chromatography
--	--	--	8082 (Up. III)	8082A	--	Polychlorinated Biphenyls (PCBs) by Gas Chromatography
				8085	--	Compound-independent Elemental Quantitation of Pesticides by Gas Chromatography with Atomic Emission Detection (GC/AED)

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
8090	--	--	Deleted (Up. III)	--	--	Nitroaromatics and Cyclic Ketones
--	--	--	8091 (Up. III)	--	--	Nitroaromatics and Cyclic Ketones by Gas Chromatography
--	--	--	--	8095	--	Explosives by Gas Chromatography
8100	--	--	--	--	--	Polynuclear Aromatic Hydrocarbons
--	8110	--	Deleted (Up. III)	--	--	Haloethers by Gas Chromatography
--	--	--	8111 (Up. III)	--	--	Haloethers by Gas Chromatography
8120	--	8120A (Up. II)	Deleted (Up. III)	--	--	Chlorinated Hydrocarbons by Gas Chromatography
--	--	8121 (Up. II)	--	--	--	Chlorinated Hydrocarbons by Gas Chromatography: Capillary Column Technique
--	--	--	8131 (Up. III)	--	--	Aniline and Selected Derivatives by Gas Chromatography
8140	--	--	Deleted (Up. III)	--	--	Organophosphorus Pesticides
--	8141	8141A (Up. II)	--	8141B	--	Organophosphorus Compounds by Gas Chromatography
8150	8150A	8150B (Up. II)	Deleted (Up. III)	--	--	Chlorinated Herbicides by Gas Chromatography
--	--	8151 (Up. II)	8151A (Up. III)	--	--	Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzoylation Derivatization
8240	8240A	8240B (Up. II)	Deleted (Up. III)	--	--	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
8250	--	8250A (Up. II)	Deleted (Up. III)	--	--	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
--	8260	8260A (Up. II)	8260B (Up. III)	--	8260C (8/06)	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
--	--	--	--	8261	8261A (10/06)	Volatile Organic Compounds by Vacuum Distillation in Combination with Gas Chromatography/Mass Spectrometry (VD/GC/MS)
--	--	--	--	--	8265 (3/02)	Volatile Organic Compounds in Water, Soil, Soil Gas and Air by Direct Sampling Ion Trap Mass Spectrometry (DSITMS)
8270	8270A	8270B (Up. II)	8270C (Up. III)	8270D	--	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
--	--	8275 (Up. II)	8275A (Up. III)	--	--	Semivolatile Organic Compounds (PAHs and PCBs) in Soils/Sludges and Solid Wastes Using Thermal Extraction/Gas Chromatography/Mass Spectrometry (TE/GC/MS)
8280	--	--	8280A (Up. III)	8280B	--	Polychlorinated Dibenzo- <i>p</i> -Dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/Low Resolution Mass Spectrometry (HRGC/LRMS)
--	--	8290 (Up. II)	--	8290A	--	Polychlorinated Dibenzo- <i>p</i> -dioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS)
8310	--	--	--	--	--	Polynuclear Aromatic Hydrocarbons
--	--	8315 (Up. II)	8315A (Up. III)	--	--	Determination of Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)
--	--	8316 (Up. II)	--	--	--	Acrylamide, Acrylonitrile and Acrolein by High Performance Liquid Chromatography (HPLC)
--	--	8318 (Up. II)	--	8318A	--	<i>N</i> -Methylcarbamates by High Performance Liquid Chromatography (HPLC)

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	8321 (Up. II)	8321A (Up. III)	8321B	--	Solvent-Extractable Nonvolatile Compounds by High-Performance Liquid Chromatography/Thermospray/Mass Spectrometry (HPLC/TS/MS) or Ultraviolet (UV) Detection
--	--	--	--	--	8323 (1/03)	Determination of Organotins by Micro-liquid Chromatography-electrospray Ion Trap Mass Spectrometry
--	--	--	8325 (Up. III)	--	--	Solvent Extractable Nonvolatile Compounds by High Performance Liquid Chromatography/Particle Beam/Mass Spectrometry (HPLC/PB/MS)
--	--	8330 (Up. II)	--	8330A	8330B (10/06)	Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)
--	--	8331 (Up. II)	--	--	--	Tetrazene by Reverse Phase High Performance Liquid Chromatography (HPLC)
--	--	--	8332 (Up. III)	--	--	Nitroglycerine by High Performance Liquid Chromatography
--	--	8410 (Up. II)	--	--	--	Gas Chromatography/Fourier Transform Infrared (GC/FT-IR) Spectrometry for Semivolatile Organics: Capillary Column
--	--	--	8430 (Up. III)	--	--	Analysis of Bis(2-chloroethyl) Ether and Hydrolysis Products by Direct Aqueous Injection GC/FT-IR
--	--	--	8440 (Up. III)	--	--	Total Recoverable Petroleum Hydrocarbons by Infrared Spectrophotometry
--	--	--	--	8510	--	Colorimetric Screening Procedure for RDX and HMX in Soil
--	--	--	8515 (Up. III)	--	--	Colorimetric Screening Method for Trinitrotoluene (TNT) in Soil
--	--	--	8520 (Up. III)	--	--	Continuous Measurement of Formaldehyde in Ambient Air
--	--	--	--	8535	--	Screening Procedure for Total Volatile Organic Halides in Water
--	--	--	--	8540	--	Pentachlorophenol by UV-induced Colorimetry

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	--	9000	--	Determination of Water in Waste Materials by Karl Fischer Titration
--	--	--	--	9001	--	Determination of Water in Waste Materials by Quantitative Calcium Hydride Reaction
9010	9010A	--	9010B (Up. III) 9010C (Up. IIIB)	--	--	Total and Amenable Cyanide: Distillation
9012	--	--	9012A (Up. III) 9012B (Up. IIIB)	--	--	Total and Amenable Cyanide (Automated Colorimetric, with Off-line Distillation)
--	9013	--	--	--	9013A (11/04)	Cyanide Extraction Procedure for Solids and Oils
--	--	--	9014 (Up. III)	--	--	Titrimetric and Manual Spectrophotometric Determinative Methods for Cyanide
--	--	--	--	--	9015 (11/04)	Metal Cyanide Complexes by Anion Exchange Chromatography and UV Detection
9020	9020A	9020B (Up. II)	--	--	--	Total Organic Halides (TOX)
--	9021	--	--	--	--	Purgeable Organic Halides (POX)
9022	--	--	--	--	--	Total Organic Halides (TOX) by Neutron Activation Analysis
--	--	--	9023 (Up. III)	--	--	Extractable Organic Halides (EOX) in Solids
9030	9030A	--	9030B (Up. III)	--	--	Acid-Soluble and Acid-Insoluble Sulfides: Distillation
--	9031	--	--	--	--	Extractable Sulfides

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	9034 (Up. III)	--	--	Titrimetric Procedure for Acid-Soluble and Acid-Insoluble Sulfides
9035	--	--	--	--	--	Sulfate (Colorimetric, Automated, Chloranilate)
9036	--	--	--	--	--	Sulfate (Colorimetric, Automated, Methylthymol Blue, AA II)
9038	--	--	--	--	--	Sulfate (Turbidimetric)
9040	--	9040A (Up. II) 9040B (Up. IIB)	9040C (Up. IIIB)	--	--	pH Electrometric Measurement
9041	9041A	--	--	--	--	pH Paper Method
9045	9045A	9045B (Up. II) 9045C (Up. IIB)	9045D (Up. IIIB)	--	--	Soil and Waste pH
9050	--	--	9050A (Up. III)	--	--	Specific Conductance
--	--	9056 (Up. II)	--	9056A	--	Determination of Inorganic Anions by Ion Chromatography
--	--	--	9057 (Up. III)	--	--	Determination of Chloride from HCl/Cl ₂ Emission Sampling Train (Methods 0050 and 0051) by Anion Chromatography
9060	--	--	9060A (Up. IIIB)	--	--	Total Organic Carbon
9065	--	--	--	--	--	Phenolics (Spectrophotometric, Manual 4-AAP with Distillation)
9066	--	--	--	--	--	Phenolics (Colorimetric, Automated 4-AAP with Distillation)

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
9067	--	--	--	--	--	Phenolics (Spectrophotometric, MBTH with Distillation)
9070	--	--	9070 (Up. IIIA) 9070A (Up. IIIB)	--	--	n-Hexane Extractable Material (HEM) for Aqueous Samples (Note: Method text is a referral to Method 1664: n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry)
9071	--	9071A (Up. II)	9071B (Up. IIIA)	--	--	n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples
--	--	--	--	9074	--	Turbidimetric Screening Method for Total Recoverable Petroleum Hydrocarbons in Soil
--	--	9075 (Up. II)	--	--	--	Test Method for Total Chlorine in New and Used Petroleum Products by X-Ray Fluorescence Spectrometry (XRF)
--	--	9076 (Up. II)	--	--	--	Test Method for Total Chlorine in New and Used Petroleum Products by Oxidative Combustion and Microcoulometry
--	--	9077 (Up. II)	--	--	--	Test Methods for Total Chlorine in New and Used Petroleum Products (Field Test Kit Methods)
--	--	--	9078 (Up. III)	--	--	Screening Test Method for Polychlorinated Biphenyls in Soil
--	--	--	9079 (Up. III)	--	--	Screening Test Method for Polychlorinated Biphenyls in Transformer Oil
9080	--	--	--	--	--	Cation-Exchange Capacity of Soils (Ammonium Acetate)
9081	--	--	--	--	--	Cation-Exchange Capacity of Soils (Sodium Acetate)
9090	9090A	--	--	--	--	Compatibility Test for Wastes and Membrane Liners

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
9095	--	--	9095A (Up. III) 9095B (Up. IIIB)	--	--	Paint Filter Liquids Test
--	--	9096 (Up. II)	--	--	--	Liquid Release Test (LRT) Procedure
9100	--	--	--	--	--	Saturated Hydraulic Conductivity, Saturated Leachate Conductivity, and Intrinsic Permeability
9131	--	--	--	--	--	Total Coliform: Multiple Tube Fermentation Technique
9132	--	--	--	--	--	Total Coliform: Membrane-Filter Technique
9200	--	--	Deleted (Up. III)	--	--	Nitrate
--	--	--	9210 (Up. III)	9210A	--	Potentiometric Determination of Nitrate in Aqueous Samples with an Ion-Selective Electrode
--	--	--	9211 (Up. III)	--	--	Potentiometric Determination of Bromide in Aqueous Samples with Ion-Selective Electrode
--	--	--	9212 (Up. III)	--	--	Potentiometric Determination of Chloride in Aqueous Samples with Ion-Selective Electrode
--	--	--	9213 (Up. III)	--	--	Potentiometric Determination of Cyanide in Aqueous Samples and Distillates with Ion-Selective Electrode
--	--	--	9214 (Up. III)	--	--	Potentiometric Determination of Fluoride in Aqueous Samples with Ion-Selective Electrode
--	--	--	9215 (Up. III)	--	--	Potentiometric Determination of Sulfide in Aqueous Samples and Distillates with Ion-Selective Electrode

METHOD NUMBER (Date in parenthesis is found at bottom right-hand corner of method)						METHOD TITLE
THIRD ED (9/86)	FIN. UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FIN. UP. III (12/96) IIIA (4/98) IIIB (11/04)	FIN. UP. IV (2/07)	OTHER METHODS (e.g., at web site)	
--	--	--	--	9216	--	Potentiometric Determination of Nitrite in Aqueous Samples with Ion-Selective Electrode
9250	--	--	--	--	--	Chloride (Colorimetric, Automated Ferricyanide AAI)
9251	--	--	--	--	--	Chloride (Colorimetric, Automated Ferricyanide AAI)
9252	--	9252A (Up. II)	Deleted (Up. III)	--	--	Chloride (Titrimetric, Mercuric Nitrate)
--	--	9253 (Up. II)	--	--	--	Chloride (Titrimetric, Silver Nitrate)
9310	--	--	--	--	--	Gross Alpha and Gross Beta
9315	--	--	--	--	--	Alpha-Emitting Radium Isotopes
9320	--	--	--	--	--	Radium-228
HCN and H ₂ S Test Methods	HCN and H ₂ S Test Methods	HCN and H ₂ S Test Methods (Up. II)	HCN and H ₂ S Test Methods (Up. III) Deleted (Up. IIIB)	--	--	Test Method to Determine Hydrogen Cyanide Released from Wastes and Test Method to Determine Hydrogen Sulfide Released from Wastes

Note: Draft Update IV Method 9058, "Determination of Perchlorate Using Ion Chromatography with Chemical Suppression Conductivity Detection," and Method 4500, "Mercury in Soil by Immunoassay," were not finalized as part of Final Update IV. See the Final Update IV Federal Register Notice.

STATUS TABLE FOR SW-846 CHAPTER TEXT AND OTHER DOCUMENTS

TITLE	THIRD ED. (9/86)	FINAL UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FINAL UP. III (12/96) IIIA (4/98) IIIB (11/04)	FINAL UP. IV (2/07)	CURRENT FINAL VERSION
Disclaimer	--	✓	--	✓ (Up. III)	--	Rev 1 (12/96)
Abstract	✓	✓	✓ (Up. II)	--	--	Rev 2 (9/94)
Table of Contents	✓	✓	✓ (Up. II & IIB)	✓ (Up. III, IIIA, and IIIB)	✓	Rev 7 (2/07)
Method Index and Conversion Table	✓	--	--	--	--	Rev 0 (9/86)
Preface and Overview	✓	--	--	✓ (Up. III)	--	Rev 1 (12/96)
Acknowledgments	✓	--	--	--	--	Rev 0 (9/86)
Chapter One -- Quality Control	✓	✓	--	--	--	Rev 1 (7/92)
Chapter Two -- Choosing the Correct Procedure	✓	✓	✓ (Up. II)	✓ (Up. III)	✓	Rev 4 (2/07)
Chapter Three -- Inorganic Analytes	✓	✓	✓ (Up. II)	✓ (Up. III)	✓	Rev 4 (2/07)
Chapter Four -- Organic Analytes	✓	--	✓ (Up. II)	✓ (Up. III)	✓	Rev 4 (2/07)
Chapter Five -- Miscellaneous Test Methods	✓	--	✓ (Up. II)	✓ (Up. III, IIIA and IIIB)	✓	Rev 5 (2/07)

TITLE	THIRD ED. (9/86)	FINAL UP. I (7/92)	FIN. UP. II (9/94) IIA (8/93) IIB (1/95)	FINAL UP. III (12/96) IIIA (4/98) IIIB (11/04)	FINAL UP. IV (2/07)	CURRENT FINAL VERSION
Chapter Six -- Properties	✓	--	✓ (Up. II & IIB)	✓ (Up. III and IIIB)	✓	Rev 5 (2/07)
Chapter Seven -- Characteristics Introduction and Regulatory Definitions	✓	✓	✓ (Up. II)	✓ (Up. III and IIIB)	--	Rev 4 (11/04)
Chapter Eight --Methods for Determining Characteristics	✓	--	✓ (Up. II)	✓ (Up. III and IIIB)	--	Rev 3 (11/04)
Chapter Nine -- Sampling Plan	✓	--	--	--	--	Rev 0 (9/86)
Chapter Ten -- Sampling Methods	✓	--	--	✓ (Up. III)	✓	Rev 3 (2/07)
Chapter Eleven -- Ground Water Monitoring	✓	--	--	--	✓	Rev 1 (2/07)
Chapter Twelve -- Land Treatment Monitoring	✓	--	--	--	--	Rev 0 (9/86)
Chapter Thirteen -- Incineration	✓	--	--	--	--	Rev 0 (9/86)
Appendix -- Company References	✓	--	--	--	--	Rev 0 (9/86)