

EIM Help – About EIM Methods

Version 1.6
December 2018

EIM Method Categories

Method Categories	Method Code and Description Examples	Where to Enter Method In Result Template
Analysis Happens in lab Lab normally provides	EPA213.2 - Cadmium by Graphite Furnace Atomic Absorption (GFAA)	Result Method (column AY)
Measurement Happens in field	GWLMV - Groundwater level by calibrated electric tape measurement	
Derivation For derived data in EIM – will not be used for any new data entry	7DADMax - Calculated arithmetic mean average value of seven consecutive measures of daily maximum temperatures from a specific set of data. These are used for existing derived data in EIM but we no longer accept daily averages in EIM – they are calculated now.	
Collection	AUGER-HND - Auger, hand	Sample Collection Method (column AA)
Preparation Lab sometimes provides	EPA200.2 - Total Recoverable Metals Digestion	Sample Preparation Method (column AB)
Preservation	ETHANOL85 - Sample preserved in 85% ethanol	Sample Method Other (column AC)
Bioassay Happens in lab Lab normally provides	EPA-BIO100.1-2 - Hyalella azteca 10-d Survival and Growth Test for Sediments, 2nd Ed	Bioassay Method (column AO in Bioassay template)

EIM Method Coding Scheme

EIM uses specific coding schemes depending on the source of the method, like US EPA or Standard Methods. **Method Codes (shaded column) go into your templates.** Method Reference and Source are found in the method details. See examples below:

Method Code Prefix	Method Reference	Method Source	Method Code Example	Method Description Example	Method Category	Notes
US EPA Methods						
EPA	EPA Water Methods	USEPA	EPA353.2	Nitrogen, Nitrate-Nitrite (Colorimetric, Automated Cadmium Reduction)	Analysis	

Method Code Prefix	Method Reference	Method Source	Method Code Example	Method Description Example	Method Category	Notes
SW	EPA SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods	USEPA	SW8015C	Nonhalogenated Organics by Gas Chromatography, Revision 3	Analysis	Revision numbers are designated by letters: A = 1, B = 2, C = 3 etc.
		USEPA	SW8081M	Organochlorine Pesticides by Gas Chromatography (GC), modified	Analysis	M = modified
		USEPA	SW8270DSIM	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Selective Ion Monitoring, Revision 4	Analysis	SIM = selective ion monitoring
		USEPA	SW1311	Toxicity Characteristic Leaching Procedure (TCLP)	Prep	See EIM Help Document – TCLP and SPLP Data
CLP	EPA Contract Laboratory Program	USEPA	CLP-DLM02.0	Dioxins and Furans Analysis, Multi-Media, Multi-Concentration, EPA Contract Lab Program (CLP), DLM02.0	Analysis	
RSK	EPA National Risk Management Research Lab	USEPA	RSK-175	EPA SOP for Analysis of Dissolved Gas (Methane, Ethane, and Ethylene) in Ground Water by a Standard Gas Chromatographic Technique.	Analysis	
Department of Ecology and Other Washington State Methods						
NW	Washington State Analytical Methods for Petroleum Hydrocarbons	WADOE	NWTPH-DX	Semivolatile Petroleum Products Method for Soil and Water	Analysis	See EIM Help Document - Entering Petroleum Hydrocarbon Data
		WADOE	NWTPH-DXP	Semivolatile Petroleum Products Method for Soil and Water, Prep	Prep	
WTPH	Washington State Guidance for Remediation of Petroleum Contaminated Soils	WADOE	WTPH-DX	Total Petroleum Hydrocarbons as Heavy Fuel in Soil	Analysis	WTPH is only for pre-June 1997 data

Method Code Prefix	Method Reference	Method Source	Method Code Example	Method Description Example	Method Category	Notes
SOP	Washington State Department of Ecology, Manchester Environmental Laboratory SOP	WADOE	SOP710071	Salinity, Refractometric	Analysis	
PSEP	Puget Sound Estuary Program Protocols	WAPSEP	PSEP-ORG89	Puget Sound Estuary Protocols, Organic Compounds in Sediment and Tissue, Rev. 1989	Analysis	
Other Government Methods						
NOAA	National Oceanic and Atmospheric Administration		NOAA-TM59	Organic Contaminants in Sediments and Tissues by Extraction, Cleanup, and Gas Chromatography/Mass Spectrometry	Analysis	
ACE	US Army Corps of Engineers	USACE	ACE-LSTV	Grain Size Analysis, Laboratory Soils Testing, USACE EM 1110-2-1906 Appendix V	Analysis	
I	US Geological Survey	USGS	I-2030-85	Alkalinity of Water Samples by Electrometric Titration, automated (USGS)	Analysis	
O	US Geological Survey	USGS	O-2134-01	Determination of Four Selected Mosquito Insecticides & a Synergist in Water Using LLE & GC/MS (USGS)	Analysis	
GWL	US Geological Survey NWIS Groundwater Measurement Method	USGS	GWLMT	Groundwater level by electric tape measurement.	Measurement	
USDA	US Department of Agriculture		USDA4D3a1	Phosphorus by Bray P-1 Extraction and UV-Visible Spectrophotometer, Dual-Beam	Analysis	

Method Code Prefix	Method Reference	Method Source	Method Code Example	Method Description Example	Method Category	Notes
Organization Methods						
SM	Standard Methods for the Examination of Water and Wastewater	APHA	SM4500SiOE	Silica - Automated Method for Molybdate-Reactive Silica	Analysis	4500, 2550 = chapter
		APHA	SM2550B-F	Temperature, Field Method	Measurement	SiO = analyte (if applicable) B, C, D, E etc. = subchapter -F indicates field measurement
MSA	Soil Science Society of America and American Society of Agronomy - Methods of Soil Analysis, Parts 1-5		MSA10-3.7.1	Sulfate, Soluble Constituents in Soil, Waters and Aqueous Extracts (Ch. 10-3.7.1) using Turbidimetric method	Analysis	10 = chapter 3.7 = subchapter (if applicable) .1 (if applicable) = method under subchapter
ASTM	ASTM International - Standard Test Methods	ASTM	ASTMD2216	Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass	Analysis	
NIOSH	National Institute for Occupational Safety and Health	NIOSH	NIOSH7400	Asbestos and Other Fibers in Air by Phase Contrast Microscopy (PCM)	Analysis	
RTI	Research Triangle Institute, Research Triangle Park, NC		RTI-TREL	Trace Elements in Tissue by Acid Digestion and Inductively Coupled Plasma Emission (ICP), Research Triangle Institute	Analysis	
NCA	National Council for Air and Stream Improvement		NCASI85.01	Resin Acids and Fatty Acids	Analysis	
Commercial Methods						
HACH	Hach Company (HACH)		HACH-8226	Hardness, Total (as CaCO ₃), buret titration	Analysis	
			HACH-CL8P	Chloride by HACH 8-P field kit, silver nitrate drop count titration	Measurement	
SBE	Sea-Bird Electronics, Inc.		SBE13-DO	Dissolved Oxygen (DO), Sea-Bird Electronics SBE 13 sensor	Measurement	

Method Code Prefix	Method Reference	Method Source	Method Code Example	Method Description Example	Method Category	Notes
Academic Methods						
MSCL	Mississippi State Chemical Laboratory, Mississippi State University		MSCL-LIPID	Percent Lipids in Tissue, Mississippi State Chemical Lab	Analysis	
Author Method Examples Code is based on last name, publication year (in most cases)						
	Journal or Publication		BLIGHDYER59	Rapid method of total lipid extraction and purification, Bligh and Dyer, 1959	Prep	Bligh, E.G. and Dyer, W.J. A rapid method of total lipid extraction and purification. Can. J. Biochem. Physiol. 37: 911-917, 1959.
			KRONE89	Butyltins in Sediment and Tissue, Krone et al., 1989	Analysis	Krone, C.A., D.W. Brown, D.G. Burrows, R.G. Bogar, S.-L. Chan and U. Varanasi, 1989. A method for analysis of butyltin species and the measurement of butyltins in sediment and English sole livers from Puget Sound. Marine Environmental Research, 27:1-18.
Collection Method Examples Code is based on type of collection device (in most cases)						
			VANVEEN.10	Grab sampler, Van Veen, 0.10 m2	Collection	
			BAIL-PVC	Bailer, PVC	Collection	
			AUGER-HND	Auger, hand	Collection	

How to Find EIM Methods

Where	Who	What	Format	How	Currency
Result Spread-sheet	All Users	Method Code	List	Go to Valid Value Lookup tab – go to columns Sample Collection Method (AA) Sample Preparation Method (AB) and Sample Method Other (AC) and Result Method (AY)	Not kept up to date very often
Data Loader	All Users	Method Code, Description, & Reference	Search Form or Download	Go to EIM Help (external) or EIM Help (internal Ecology staff.) Go to Valid Values > Method. Search by Category, Code or Description - or download all methods into spreadsheet format.	Real time

Data Editor	Internal Ecology Staff	Method Code, Description, & Reference	Search Form or Download	Go to Valid Values > Methods. Search by Category, Code, or Description. Method code alias's (synonyms) are in dropdown menu (if applicable)	Real time
--------------------	------------------------	---------------------------------------	-------------------------	---	-----------

Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
3/06/09	1.0	Original document	CN
6/18/09	1.1	Added method source column to match WQX data model	CN
11/06/09	1.2	Updated references to spreadsheet column headings per data model change	CL
7/13/12	1.3	Added bioassay method category. Removed reference to ready-made download methods (dropped from EIM) under How to Find EIM Methods. Updated instructions for new Editor format.	CN
8/1/13	1.4	Added derivation method category. Updated references to spreadsheet column headings per data model change.	CN
09/13/17	1.5	Updated links and terminology and TCLP info. Changed title from "Working with EIM Methods" to "About EIM Methods."	KC
12/12/18	1.6	Updated method description for GWLMT and GWLMV	KC