

EIM Help – Entering Suspended Sediment Data

Version 3.2
January 2016

What is Suspended Sediment?

Suspended sediment, also known as **suspended particulate matter** or **SPM**, is composed of the solid organic and inorganic particles carried by the water column. Suspended sediment is found in water bodies like lakes and Puget Sound, water courses like rivers and streams, and stormwater systems. If you sampled suspended sediment from stormwater, also see “[Stormwater and Combined Sewer Data](#).”

How is Suspended Sediment Collected?

Suspended sediment samples are collected in several ways:

In-Situ Sediment Trap: A device is placed in the water column for a specific period to passively and continuously collect suspended sediment. The trap is often placed on the bottom or a specific distance above the bottom. The sediment collected in the trap is dried and analyzed.

Continuous-Flow Centrifuge: Source water is pumped through a running centrifuge. Particles settle out in the centrifuge while the water is discharged. The remaining sediment is dried and analyzed. Sometimes water samples are collected and analyzed from the inlet and discharge outlet of the centrifuge, to assess its efficiency. Do not enter centrifuge discharge water data into EIM.

In-Line Filtration: Source water is pumped through an in-line filter. The sediment collected in the filter is dried and analyzed.

How Do I Enter My Suspended Sediment Data into EIM?

Enter only your sediment analyses values into EIM. Do *not* enter calculated sediment accumulation rates into EIM.

Required Fields

In addition to EIM’s standard required fields described in the [Result Help Document](#), fill out the following fields and valid values:

EIM Field Name	Col	Sediment Trap Sediment	Centrifuge Sediment	Centrifuge Inlet Water	In-Line Filtration Sediment
Field Collection Start Date	F	DD/MM/YYYY			
Field Collection Start Time	G	HH:MM:SS (24 hour time)			
Field Collection End Date	H	DD/MM/YYYY			
Field Collection End Time	I	HH:MM:SS (24 hour time)			

EIM Field Name	Col	Sediment Trap Sediment	Centrifuge Sediment	Centrifuge Inlet Water	In-Line Filtration Sediment
Field Collection Comment	J	Optional (ex. Suspended sediment in water column collected by sediment trap)	Optional (ex. Suspended sediment in water column collected by centrifuge)	<i>Water sample collected at centrifuge inlet</i>	Optional (ex. Suspended sediment in water column collected by in-line filtration system)
Field Collection Reference Point	M	Enter one: <i>Sediment Surface</i> (most common) <i>Water Surface</i> See “Entering Field Collection Depth or Height” for more info	Leave blank	Leave blank	Leave blank
Field Collection Upper Depth	N	If you sampled above the Field Collection Reference Point (e.g. Sediment Surface), enter a negative number (-1.5)	Leave blank	Leave blank	Leave blank
Field Collection Lower Depth	O	If you sampled from a single depth, enter the same value you entered for Field Collection Upper Depth	Leave blank	Leave blank	Leave blank
Field Collection Depth Units	P	<i>FT</i> or <i>M</i>	Leave blank	Leave blank	Leave blank
Sample Composite Flag	V	Y	Y	Y for composite N for grab	Y
Sample Matrix	X	<i>Solid/ Sediment</i>	<i>Solid/ Sediment</i>	<i>Water</i>	<i>Solid/ Sediment</i>
Sample Source	Y	Enter one: <i>Fresh/Surface Water</i> <i>Brackish Water</i> <i>Salt/Marine Water</i> For stormwater, enter Sample Source Code from Sample Sources for Stormwater table below			
Sample Collection Method	AA	Enter Method Code from Sample Collection Methods for Sediment Traps table below	<i>SED-CENTRIFUGE</i> (Suspended sediment / particulate matter (SPM) by centrifuge, continuous flow composite)	See EIM Method reference table for valid values.	<i>SED-INLINE-FILTER</i> (Suspended sediment / particulate matter (SPM) collected by in-line filtration)
Sample Preparation Method	AB	Optional	Optional	Optional	Enter Method Code based on filter size from Sample Preparation Methods for In-Line Filtration table below
Fraction Analyzed	AT	<i>Suspended</i>	<i>Suspended</i>	<i>Total</i>	<i>Suspended</i>
Result Basis	AV	<i>Dry</i>	<i>Dry</i>	Leave blank	<i>Dry</i>
Result Method	AY	Enter analytical lab method. See EIM Method reference table for valid values.			

Sample Collection Methods for Sediment Traps

Collection Method Code	Collection Method Description
SEDTRAP	Suspended sediment / suspended particulate matter (SPM) trap, type undifferentiated
SEDTRAP-BOTTLE	Suspended sediment / suspended particulate matter (SPM) trap with upright bottle(s) in frame
SEDTRAP-CYLINDER	Suspended sediment / suspended particulate matter (SPM) trap with upright cylinder(s) in frame
SEDTRAP-FULLER	Suspended sediment / suspended particulate matter (SPM) trap with low-profile, flow-over, single-chamber tray and baffle design
SEDTRAP-HAMLIN	Suspended sediment / suspended particulate matter (SPM) trap with low-profile, flow-over, dual-chamber tray and baffle design

Sample Preparation Methods for In-Line Filtration

Sample Preparation Method Code	Sample Preparation Method Description
FILTER.45um-CA	Water sample filtered with 0.45 micron (micrometer) cellulose acetate filter (CA)
FILTER.45um-GFF	Water sample filtered with 0.45 micron (micrometer) glass fiber filter (GFF)
FILTER.45um-PP	Water sample filtered with 0.45 micron (micrometer) polypropylene filter (PP)
FILTER.45um	Water sample filtered with 0.45 micron (micrometer) filter (material unspecified)
FILTER.70um-GFF	Water sample filtered with 0.70 micron (micrometer) glass fiber filter (GFF)
FILTER1.5um-GFF	Water sample filtered with 1.5 micron (micrometer) glass fiber filter (GFF)
FILTER5um	Water sample filtered with 5 micron (micrometer) filter (material unspecified)

Sample Sources for Stormwater

Sample Source Code	Sample Source Description
CSO Outfall	Combined Sewer Overflow (CSO) outfall
CSS In-Line	Combined Sewer System (CSS) in-line
CSS Catch Basin	Combined Sewer System (CSS) catch basin
Stormwater BMP Effluent	Stormwater, Best Management Practice (BMP) effluent
Stormwater BMP Mid	Stormwater, Best Management Practice (BMP) treatment zone (like stormwater pond)
Stormwater BMP Influent	Stormwater, Best Management Practice (BMP) influent
Stormwater Catch Basin	Stormwater, catch basin
Stormwater In-Line	Stormwater, in-line conveyance or drainage
Stormwater Outfall	Stormwater, outfall
Stormwater Sheetflow	Stormwater, sheetflow

Revision History

Revision Date	Revision No.	Summary of Changes	Reviser(s)
3/6/09	1.1	Original Document (should have been named 1.0)	CL
10/6/09	1.2	Updated references to spreadsheet column headings per data model change	CL
8/1/13	2.0	Updated with new field names and permitted values per data model changes. Added new requirement to enter Result Basis for sediment. Updated with new 'permitted values only' requirement for the Field Collection Reference Point. Added sediment trap Collection Methods and stormwater Sample Sources tables. Updated to reflect the new rules for Fraction Analyzed. Added related help document links.	CL
4/15/15	2.1	Updated EIM Collection Methods. For Centrifuge, changed Fraction Analyzed for Inlet Water to Total. Updated Stormwater Sample Sources table. Verified links are current.	CL
4/21/15	3.0	Combined Sediment Trap, Centrifuge, and In-Line Filtration help documents into one. Renamed accordingly. Removed separate help document section (links included inline). Updated Sample Collection Method Codes for centrifuge and in-line filtration.	CL, CN, KC
7/8/15	3.1	Combined Collection Methods SEDTRAP-NORTON96 and SEDTRAP-CYLINDER5.21 into SEDTRAP-CYLINDER. Changed SEDTRAP-NORTON-SW to SEDTRAP-BOTTLE	CN, KC
01/25/16	3.2	Updated method codes and descriptions in the Sample Preparation Methods for In-Line Filtration table	KC