DEPARTMENT OF WATER AFFAIRS
RESOURCE QUALITY SERVICES
PRIVATE BAG X313, PRETORIA, 0001
TELEPHONE (012) 808 9500 FACSIMILE (012) 808 0338 or 808 2702

Use this form to register a new Monitoring Variable and the associated Analysis Method for an Analyst (Laboratory or Monitor).

Please Note: • **For *each* analysis method a *separate* form must be completed.**

- Items marked with ✚ are **compulsory** information that must be supplied to enable registration of the Monitoring Variable and the associated Analysis Method.
- Please place an **X** next to the appropriate choice.

1. ✚ **Analyst** (Analysing Institution) **OR Monitor** (Field analysis and / or observation) Supply name only.	

NB: The Analyst / Monitor must be an existing WMS stakeholder or detail must be supplied to register the Analyst / Monitor as a stakeholder. - Ask for the **Liaison Entity - Institution** form – see end of this form for contact information.)

2. Monitoring **Variable Abbreviation**	

3. ✚ Monitoring **Variable Name** Describe the property that is measured or determined.	

4. ✚ **Monitoring Variable Type**

	Absorbed	Substance taken up
	Acid Extractable-Solids	Substance that can be removed with acid from solids
	Acid Extractable-Water	Substance that can be removed with acid, from water
	Acid Soluble	Substance capable of being dissolved in acid
	Alkaline Extractable	Substance that can be removed with alkali from solids
	Biotopes	Microhabitat: area where main environment condition and biota adapted to uniform
	Dissolved	The soluble/broken up/dispersed non-filterable substance in a liquid
	Free	Substance not chemically bound in a molecule
	Isotope	Atoms with the same atomic number but with different numbers of neutrons
	Leachate	Soluble substances removed by the percolating action of a liquid from a medium
	Neutral Extractable-Solids	Substance that can be removed at neutral pH from solids
	Neutral Extractable-Water	Substance that can be removed at neutral pH from water
	Oxidisable matter	Substance capable of undergoing a chemical reaction with oxygen
	Physical measurement	Perceptible to the physical senses
	Redox Potential	Reversible chemical reaction: one reaction is oxidation, the reverse: reduction
	Residual	Something left after parts have been taken away
	Sampling area	The section of the water body that is sampled (site length in Rivers database)
	Saturated	No more of a substance can be dissolved/all available valence bonds are filled
	Suspended	Particles held in suspension in a liquid
	Total-Solids	Whole/full quantity of substance in a solid
	Total-Water	Whole/full quantity of a substance in water
	Trihalomethanes	Substituted methane compounds with three halogen atoms per molecule
	Volatiles	Substances that change readily from solid or liquid to vapour
	Other describe:	

✚ Eco Compartment Sample substance or environment in which monitoring is performed.	
	Aquatic environment
	Atmospheric
	Biological matter
	Inorganic solids
	Water
	Other (describe)

5. ✚ Measuring **Unit** unit of measurement for reporting the property that is measured or determined.

	Unit	Abbreviation
	Becquerel per litre	Bq/l
	Cells per millilitre	Cells/ml
	Colony forming unit per 1 millilitre	cfu/1ml
	Colony forming unit per 100 millilitre	cfu/100 ml
	Colour units	Colour units
	Cubic metre per day	m^3/d
	Degree Celsius	ºC
	Gram	g
	Gram per litre	g/l
	Kilolitre	kl
	Kilolitre per day	kl/d
	Mega litre	Ml
	Metre	m
	Microgram per gram	µg/g
	Microgram per litre	µg/l
	Millibecquerel per litre	mBq/l
	Milligram per gram	mg/g

	Unit	Abbreviation
	Milligram per litre	mg/l
	Millisiemens per centimetre	mS/cm
	Millisiemens per metre	mS/m
	Millivolts	mV
	Most probable number per 100 millilitre	MPN/100ml
	Nanogram per litre	ng/l
	Nephelometric turbidity units	NTU
	None *(if no unit is used)*	null
	Number per cubic metre	n/cubic metre
	Per mille relative to SMOW	δ‰SMOW
	Percentage	%
	Qualitative estimate	Estimate
	Score	Score
	Total odour number	TON
	Tritium units (118 MB/l)	TU
	Units of pH	pH units
	Other: (Please describe in next line.)	

6. ✚ **Type** the characteristic of the Value

Fundamental – Single	Fundamental – Multiple	Derived
Determinations that produce a single result value e.g. SO4, pH	Determinations that produce multiple result values e.g. Algae	Calculated from more than one single values e.g. Hardness, Indexes

7. ✚ Analysis **Method** description of the analysis technique that is used, e.g.:
ICP EMISSION SPECTROSCOPY: FILTER SAMPLE THROUGH 0.45UM MEMBRANE; ACIDIFY TO PH < 2; MEASURE AT 311.071NM

8. ✚ **Sample/Observation** Indicator indicates if the analysis is done on a sample or determined in the field – observation.

Sample	Observation

9. **Document** Name document number and page number where detailed description of analysis method can be found.

10. ✚ **Detection Limit** lowest reliable value that can be determined by the analysis method.

11. ✚ **Result Detection Limit Type**

Fixed detection limit	Counting statistic	Zero detection limit
the detection limit as described in point 9	measured during radio activity counts, results will be accompanied by counting statistics	measurement made by counting e.g. count of bacteria

12. ✚ **Result Value Type** how result values are reported to DWA&F

True value	Detection Limit
actual determined values	when the result value that is smaller than the detection limit is reported as < [detection limit] e.g. 0.43 reported as < 0,5

13. ✚ **Valid Decimal** the valid number of decimals to use with an analytical method at a laboratory.

14. **Relative Standard Deviation** the estimate of the mean deviation irrespective of sign.

15. ✚ **Start Date** of analysis method at this laboratory. Format: yyyy-mm-dd. - -

16. End Date when an analysis method is no longer in use. (Not compulsory). - -

17. Cost the cost of an analysis measurement (not implemented yet). (Not compulsory).

18. **Contract** Number DWA&F contracted laboratory (Not compulsory).

19. **Expiry date** of Contract. (Not compulsory). - -

20. ✚ **Container** only if the monitoring/analysis is derived from a sample.

21. ✚ **Preservation method** only if the monitoring/analysis is derived from a sample.

22. ✚ **Shelf life** of sample: number of hours if the monitoring/analysis is derived from a sample.
Shelf life is dependent on the preservation method used.

23. Does Laboratory supply the container for sample collection? Yes No

24. ✚ **Observation** if the analysis method is an observation.

	Bacteriological field analysis		Invertebrate		Secchi
	Field readings		Logger		Not applicable
	Habitat		Profile		Unknown
	HQI		Residual chloride		Other. Please describe in next line.

~~For any queries please contact:~~

Triana Louw
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E-mail ~~wms@dwa.gov.za~~

✚ **The information on this form was supplied by:** (Please supply full contact information.)

Office / Laboratory:		Telephone No:	
Contact Person:		e-mail address:	