

WATER MATRIX CLASSIFICATION SUMMARY

Matrix	Definition	Examples
Drinking Water	Water of sufficiently high quality (wholesome) that it can be consumed or used without risk of immediate or long term harm. Water that is free from disease-producing organisms, poisonous substances, chemical, biological, and radioactive contaminants which would make it unfit for human consumption. Statutory Private and Public waters and operational samples both fall within this category.	<ul style="list-style-type: none"> • Regulatory Tap water • Bottled Water • Tanker/Bowser water • Treated surface or ground waters
Ground Water	Water that does not run off, and is not taken up by plants, but soaks down beneath the ground surface into soil pore spaces and ultimately into the fractures of rock formations (called an aquifer when it can yield a usable quantity of water). The term is not applied to water that is percolating or held in the top layers of the soil, but to that below the water table and is generally restricted to water that has been drawn up from aquifers.	<ul style="list-style-type: none"> • Well water • Borehole water • Spring Water
Land Leachate	Water draining from landfill sites or which has percolated through contaminated land.	<p>Borehole Samples from;</p> <ul style="list-style-type: none"> • Landfill Leachate • Contaminated Land <p>Runoff Samples from;</p> <ul style="list-style-type: none"> • Landfill Leachate • Contaminated Land
Prepared Leachate	Leachate that has been prepared by the laboratory (by agitating or percolating a known mass of sample with a known volume of water) which must be tested in order to ascertain whether the original sample can be accepted for landfill or is appropriate for use in construction projects.	<ul style="list-style-type: none"> • Prepared Leachate for WAC tests • Prepared Leachate for testing in support of Construction Products Directive (CPD)
Process Water	Water that serves in any level of an industrial/manufacturing process, with the difference from Trade effluents being that they are not discharged to a wastewater system.	<ul style="list-style-type: none"> • Cutting fluid • Cooling waters • Make-up water • Tap water (not drinking) • 'Grey water'

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Process (High Purity & DI) Waters	Ultra-Pure Process Waters that are limited to those that have been through an industrial or manufacturing process of polishing or deionisation to remove all of the dissolved metals and salts present.	<ul style="list-style-type: none"> • Reverse Osmosis waters • Dialysis waters • Endoscopy waters • Renal unit waters • Semi-conductor waters
Recreational Water	Water used for recreational purposes (i.e. for enjoyment, amusement, or pleasure) or for therapeutic uses and can be split into two discrete sectors – Man made or Natural.	<p>Recreational waters: Man made</p> <ul style="list-style-type: none"> • Spa (including hot tub/Jacuzzi/plunge pool etc.) • Hydrotherapy pools • Swimming pool waters (outdoor and indoor) • Fountains <p>Recreational waters: Natural</p> <ul style="list-style-type: none"> • Saline (including bathing water beaches and salt water swimming pools) • Fresh waters • Bathing waters lakes • Springs
Saline Water	Water that contains a significant concentration of dissolved salts. This category does not include waters used for recreational purposes (i.e. bathing beach waters) which are covered under the Recreational Water category.	<ul style="list-style-type: none"> • Sea Water • Estuarine/Tidal/Brackish Water • Formation Water
Surface Water	Water which is open to the atmosphere and subject to surface runoff, Water that runs across the top of soil or bedrock without infiltrating through either material. Generally, it is accepted to be water collected on the surface of the earth for example in rivers, streams, lakes, reservoirs or wetlands.	<ul style="list-style-type: none"> • River water • Lake/Open Reservoir water (Non Bathing)
Trade Effluent	Liquids discharged to the wastewater system from industrial processes and ultimately to either controlled waters or to sewer. Premises producing trade effluent vary in size from small laundrettes to large chemical manufacturing facilities.	<p>Water used in</p> <ul style="list-style-type: none"> • Production facilities • Washing facilities • Cooling facilities
Treated Sewage	Liquid sewage that has been remediated prior to discharge, using any of a large number of processes (aeration, reed beds) to reduce its environmental impact and generally in order to meet consented discharge levels.	<ul style="list-style-type: none"> • Partially treated sewage (e.g. primary sedimentation effluent) • Treated sewage effluent
Untreated Sewage	Liquid waste from domestic or industrial establishments that is carried away in sewers or drains for dumping or for treatment to convert it into a form that is not toxic.	<ul style="list-style-type: none"> • Crude sewage