

WAT-PS-10 Assigning Groundwater Assessment Criteria for Pollutant Inputs – Draft for Consultation

Glossary

Term	Definition
Assessment limit	<p>The concentration of a substance which should not be exceeded.</p> <p>Assessment Limits may be modified by the application of exemptions.</p>
Assessment point	<p>A point associated with a receptor where an assessment limit should be met.</p>
Background water quality	<p>The concentrations of chemical, physical, biological, or radiological constituents, or other characteristics in or of groundwater at a particular point in time and upgradient of an activity that have not been affected by that activity.</p>
Capacity	<p>The ability of the water environment to assimilate a pollutant, related to the background water quality and the relevant water quality standard.</p>
Compliance point	<p>The point where the compliance concentration is measured and therefore where this concentration must be achieved.</p>
Compliance concentration	<p>The concentration of a substance at a compliance point back-calculated using:</p> <ul style="list-style-type: none">• the appropriate assessment limit;• the fate and transport process influencing the concentration of the substance between the assessment point and the compliance point;

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	<ul style="list-style-type: none"> • other factors such as technical feasibility etc.
Conceptual Site Model	A written or graphical representation of a site that presents the available information in a clear and transparent structure to aid decision making.
Control measures	A regime designed to ensure that a concentration on a discharge licence, a remedial target for contaminated land or a control level on a landfill permit, is met.
Deterioration	A worsening of the water body status class
Detailed Quantitative Risk Assessment	Numerical assessment of risk posed to a receptor, taking into account the hydrogeological regime and factors influencing the fate and transport of the contaminants. Usually undertaken using numerical models.
Direct discharge	The introduction of substances into groundwater without percolation through the ground or subsoil.
Drinking Water Standards (DWS)	Standards adopted by the Scottish Government and used by SEPA to define when water is fit for human consumption
Environmental quality standards (EQS)	Standards adopted by the Scottish Government and used by SEPA to protect aquatic plants and animals and define surface water body classification for status purposes. These are published in the Standards Directions 2014
Groundwater	Water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil (defined in the GWD and the WFD).
Hazardous substance	Substances or groups of substances that are toxic, persistent and liable to bio-accumulate, and other

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	substances which give rise to an equivalent level of concern (defined in the WFD).
Indirect discharge	The introduction of substances into groundwater after percolation through the ground or subsoil.
Inland water	Inland water means all standing or flowing water on the surface of the land and all groundwater on the landward side of the baseline from which the breadth of territorial waters is measured (defined in the WFD).
Input	The introduction of pollutants into groundwater as a result of past or present human activity, from a point or diffuse source.
JAGDAG	Joint Agency Groundwater Directive Advisory Group
Limit of detection (LoD)	The output signal or concentration value above which it can be affirmed, with a stated level of confidence that a sample is different from a blank sample that does not contain the substance of interest.
Limit of quantification (LoQ)	The output signal or concentration value above a substance can not only be detected but predefined goals for bias and precision are also met.
Pathway	A route for contaminant migration between source and receptor.
Plume	A volume of contaminated groundwater that extends beyond the original source of the contamination due to transport of the contaminant mass in groundwater. The size and shape of the plume is influenced by the local geology, the groundwater flow regime, the nature of the

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	contaminants and the time since the contamination first entered the groundwater.
Pollution	Anthropogenic contamination causing harm to a receptor. Receptors include surface waters, GWDTEs, current abstractions and future groundwater resource potential.
Pollutant linkage	A connection existing between an input and a receptor via a pathway.
Natural groundwater quality	Groundwater quality that that has not been affected by anthropogenic influences.
Receptor	<p>The water use or part of the water environment that could be impacted by an input. Relevant receptors for groundwater include:</p> <ul style="list-style-type: none"> • surface waters; • dependent terrestrial ecosystems; • current abstractors; • future groundwater resource.
Saturation zone	The part of the ground below the water table in which all accessible voids (spaces and fissures) are filled with water.
Source	Contamination hazard with the potential to cause harm
Status	The physical, chemical or ecological condition of a water body, defined in accordance with the WFD
Surface water	Surface water means inland waters (other than groundwater), transitional waters, and coastal waters (defined in the WFD). In this context SEPA regards springs as surface waters.

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Threshold values	Standards based upon risk to human health and used to maintain a minimum level of groundwater quality with respect to potable use.
UK TAG	The United Kingdom Technical Advisory Group, a partnership of UK and Ireland environment and conservation agencies set up to interpret and support the implementation of the Water Framework Directive (WFD).