Water Framework Directive

Threshold Values for Assessing Groundwater Chemical Status

July 2009

An Agency within the Department of the Environment
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NIEA Northern Ireland Environment Agency
www.ni-environment.gov.uk

Threshold values for assessing groundwater chemical status

Parameter	Unit	To examine if groundwater abstraction is causing saline or other intrusions	To examine if the quality of groundwater that is abstracted for potable use is deteriorating, possibly resulting in a need for increased purification	To examine the spatial extent of a groundwater body or group of bodies that are exceeding an EU standard or threshold value
Arsenic	µg/l			7.5
Cadmium	µg/l			3.75
Lead	µg/l			18.8
Mercury	µg/l			0.75
Ammonium	mg/l			0.29
Chloride	mg/l	25		
Sulphate	mg/l			187.5
Trichloroethylene	µg/l			7.5
Tetrachloroethylene	µg/l			7.5
Electrical Conductivity	µS/cm	800	1875	
Atrazine	µg/l			0.075
MCPA	µg/l			0.075
Mecoprop	µg/l			0.075
Nitrate (as NO_3)	mg/l		37.5	37.5
Simazine	µg/l			0.075

The method for deriving threshold values and applying them can be found at:
http://www.wfduk.org/LibraryPublicDocs/gw_chemical_classification_paper_final_draft

To examine if groundwater is providing a significant contribution to the failure of the environmental objectives of associated surface water bodies, the following parameters have threshold values defined as per below

Molybdate Reactive Phosphorus	75% of any relevant surface water Environmental Quality Standard
Ammonium	
Nitrite	
Nitrate	
Sodium	
Boron	
Chromium	
Iron	
Lead	
Nickel	
Mercury	
Cadmium	
Copper	
Manganese	
Aluminium	
Cyanide	
Lindane	
Diuron	
4,4 - DDT	
Dieldrin	
Cypermethrin	
Bentazone	
Glyphosate	
Chlortoluron	
Isoproturon	
2,4 Dichlorophenoxyacetic acid	
1,2-Dichloroethane	
Vinyl Chloride	
Total Tetrachloroethene &	
Benzene	
Benzo(alpha)pyrene	
Total Polycyclic Aromatic	
Total Trihalomethanes	