



The pollution mitigation indices are as follows:

Device	Total suspended solids mitigation index	Total metals mitigation index	Soluble metals mitigation index <sup>1</sup>	Hydrocarbons <sup>3</sup>
Aqua-swirl™ vortex grit separator	0.8 (0.5 on trunk roads and motorways where the suspended solids level is very high)	0.5 <sup>4</sup>	The Aquaswirl™ is not designed to remove soluble pollutants	0.7 <sup>3</sup>
Aqua-filter™ stormwater filtration unit	0.8	0.8	0.6	0.7 <sup>3</sup>
Aqua-swirl™ and Aqua-filter™ in sequence	1.2 <sup>2</sup>	0.9	0.6	1.0 <sup>2,3</sup>
Aqua-Xchange™	0.8 when installed as a layer in a filter drain	0.9	1.0	0.6 when installed as a layer in a filter drain

These indices can only be assumed when the treatment device is properly sized for the anticipated rate of runoff and the level of pollution in the runoff is not unusually high.

<sup>1</sup> When drainage schemes are designed for road developments in accordance with the Design Manual for Roads and Bridges, the mitigation index for soluble metals is required because particulate metals are considered separately in the total suspended solids assessment

<sup>2</sup> When designing in accordance with the SuDS Manual (Ciria C753), when two devices are used in sequence to target the same pollutant, half of the mitigation index of the second component should be allowed in the calculation.

<sup>3</sup> The test procedures applied to manufactured treatment devices do not include measurement of hydrocarbon removal. Therefore, we have estimated that the Aqua-swirl™ removes free-phase hydrocarbons by flotation, and also removes hydrocarbons that are adhered to suspended solids. However, hydrocarbons are known to preferentially adhere to the smaller particles so the Aqua-filter™ will also remove a high proportion of those hydrocarbons as it is more effective at removing smaller suspended particles.

<sup>4</sup> Where metals are present in the runoff in particulate form, particularly from vehicle emissions, the Aqua-swirl™ will effectively remove those particles in admixture with other suspended solids.