

| The Water Quality SuDS Handbook

SPEL
Life in Water

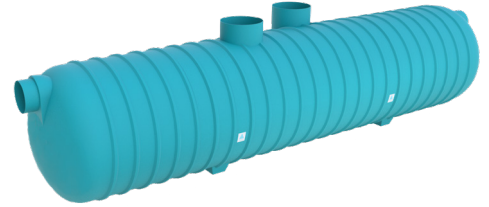


The Product Range Mitigation Index

SPEL ESR Range

Bypass Treatment System

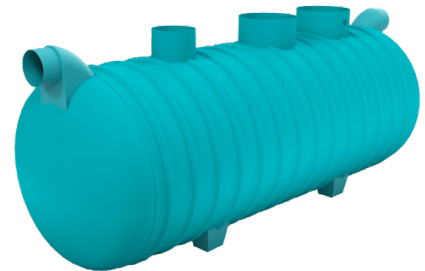
	Product Certified Mitigation Index	Covers Low Risk Pollution Index	Covers Medium Risk Pollution Index	Covers High Risk Pollution Index
TSS	0.8	0.5 ✓	0.7 ✓	0.8 ✓
Metals	0.6	0.4 ✓	0.6 ✓	0.8 ✗
Hydrocarbon	0.9	0.4 ✓	0.7 ✓	0.9 ✓



SPEL ESR Range

Full Flow Treatment System

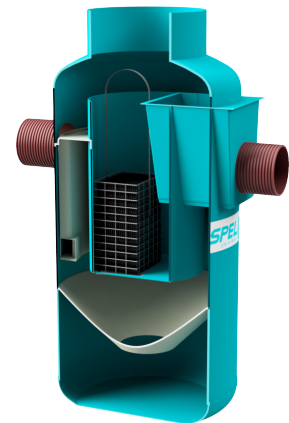
	Product Certified Mitigation Index	Covers Low Risk Pollution Index	Covers Medium Risk Pollution Index	Covers High Risk Pollution Index
TSS	0.8	0.5 ✓	0.7 ✓	0.8 ✓
Metals	0.6	0.4 ✓	0.6 ✓	0.8 ✗
Hydrocarbon	0.9	0.4 ✓	0.7 ✓	0.9 ✓



SPEL Smartceptor

Vortex Separator

	Product Certified Mitigation Index	Covers Low Risk Pollution Index	Covers Medium Risk Pollution Index
TSS	0.5	0.5 ✓	0.7 ✗
Metals	0.4	0.4 ✓	0.6 ✗
Hydrocarbon	0.5	0.4 ✓	0.7 ✗



SPELFilter

This product is not a primary hydrocarbon treatment system

	Product Certified Mitigation Index	Covers Low Risk Pollution Index	Covers Medium Risk Pollution Index	Covers High Risk Pollution Index
TSS	0.9	0.5 ✓	0.7 ✓	0.8 ✓
Metals*	0.8	0.4 ✓	0.6 ✓	0.8 ✓
Hydrocarbon	n/a	0.4 ✗	0.7 ✗	0.9 ✗

**Includes dissolved metals*



The Product Range Mitigation Index

Floating Treatment Wetlands

	Product Certified Mitigation Index	Covers Low Risk Pollution Index	Covers Medium Risk Pollution Index	Covers High Risk Pollution Index
TSS	0.7	0.5 ✓	0.7 ✓	0.8 ✗
Metals	0.7	0.4 ✓	0.6 ✓	0.8 ✗
Hydrocarbon	0.5	0.4 ✓	0.7 ✗	0.9 ✗



From the Ciria SuDs Manual (C753):

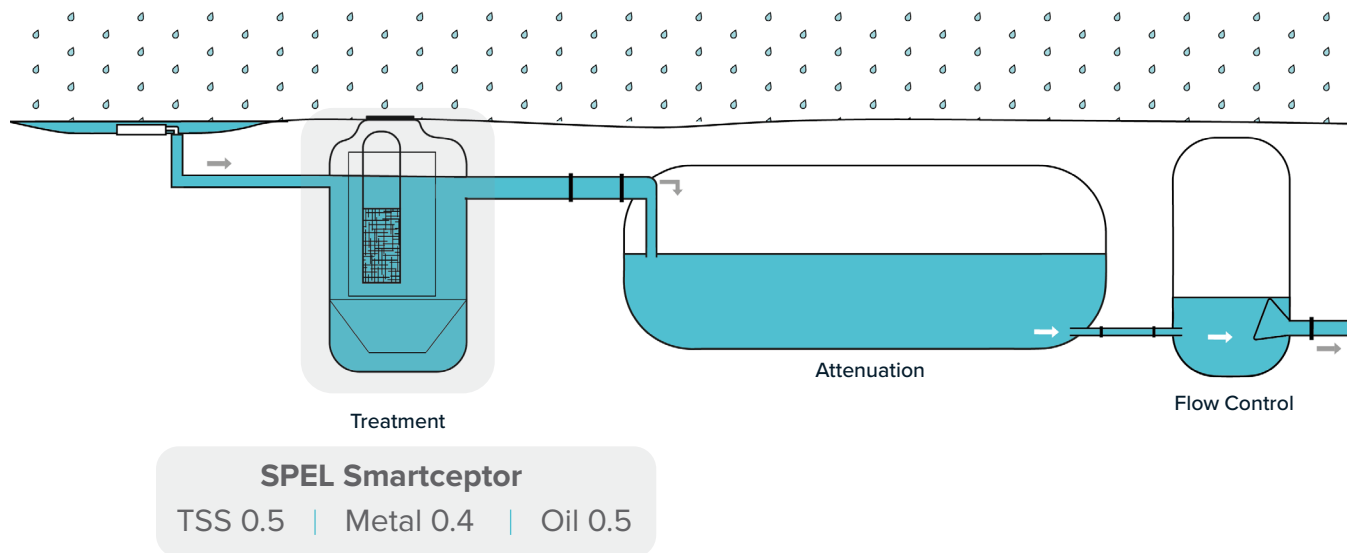
26.2 Pollution hazard indices for different land use classifications				
Land use	Pollution hazard level	Total suspended solids (TSS)	Metals	Hydrocarbons
Residential roofs	Very low	0.2	0.2	0.05
Other roofs (typically commercial/industrial roofs)	Low	0.3	0.2 (up to 0.8 where there is potential for metals to leach from the roof)	0.05
Individual property driveways, residential car parks, low traffic roads (eg cul de sacs, homezones and general access roads) and non-residential car parking with infrequent change (eg schools, offices) ie < 300 traffic movements/day	Low	0.5	0.4	0.4
Commercial yard and delivery areas, non-residential car parking with frequent change (eg hospitals, retail), all roads and trunk roads/motorways ¹	Medium	0.7	0.6	0.7
Sites with heavy pollution (eg haulage yards, lorry parks, highly frequented lorry approaches to industrial estates, waste sites), sites where chemicals and fuels (other than domestic fuel oil) are to be delivered, handled, stored, used or manufactured; industrial sites; trunk roads and motorways ¹	High	0.8 ²	0.8 ²	0.9 ²

26.3 Indicative SuDS mitigation indices for discharges to surface waters			
Type of SuDS component	Mitigation Indices		
	TSS	Metals	Hydrocarbons
Filter strip	0.4	0.4	0.5
Filter drain	0.4 ²	0.4	0.4
Swale	0.5	0.6	0.6
Bioretention system	0.8	0.8	0.8
Permeable pavement	0.7	0.6	0.7
Detention basin	0.5	0.5	0.6
Pond ⁴	0.7 ³	0.7	0.5
Wetland	0.8 ³	0.8	0.8
Proprietary treatment systems ^{5,6}	These must demonstrate that they can address each of the contaminant types to acceptable levels for frequent events up to approximately the 1 in 1 year return period event, for inflow concentrations relevant to the contributing drainage area.		

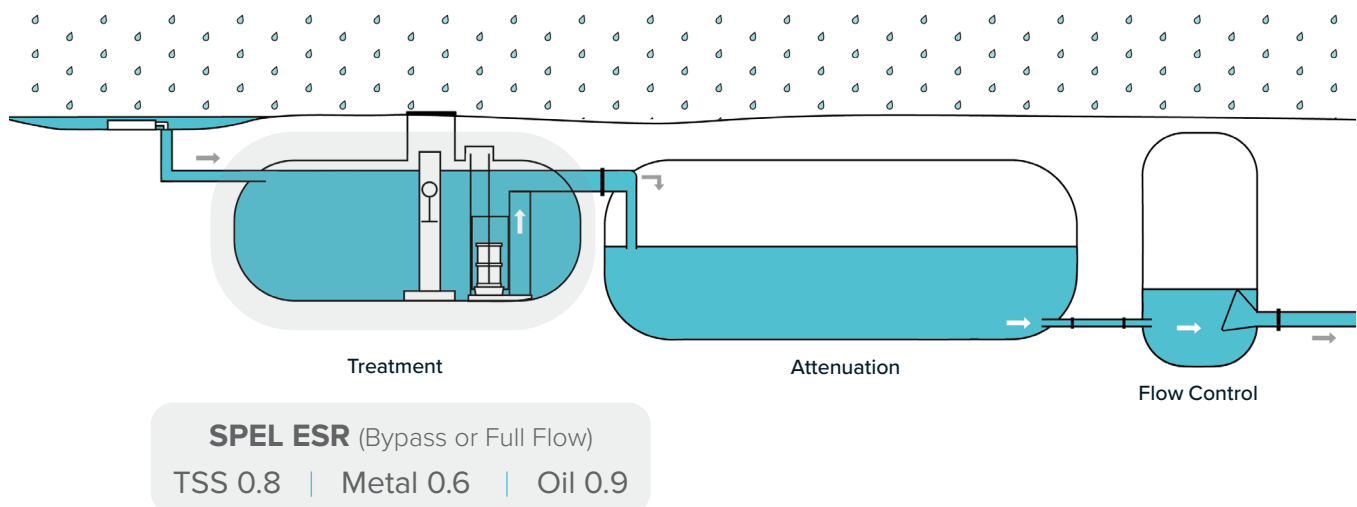
Simplifying the Simple Index Approach

Your SuDS Treatment Train with SPEL Products

Low Mitigation Index = TSS 0.5 | Metal 0.4 | Oil 0.4



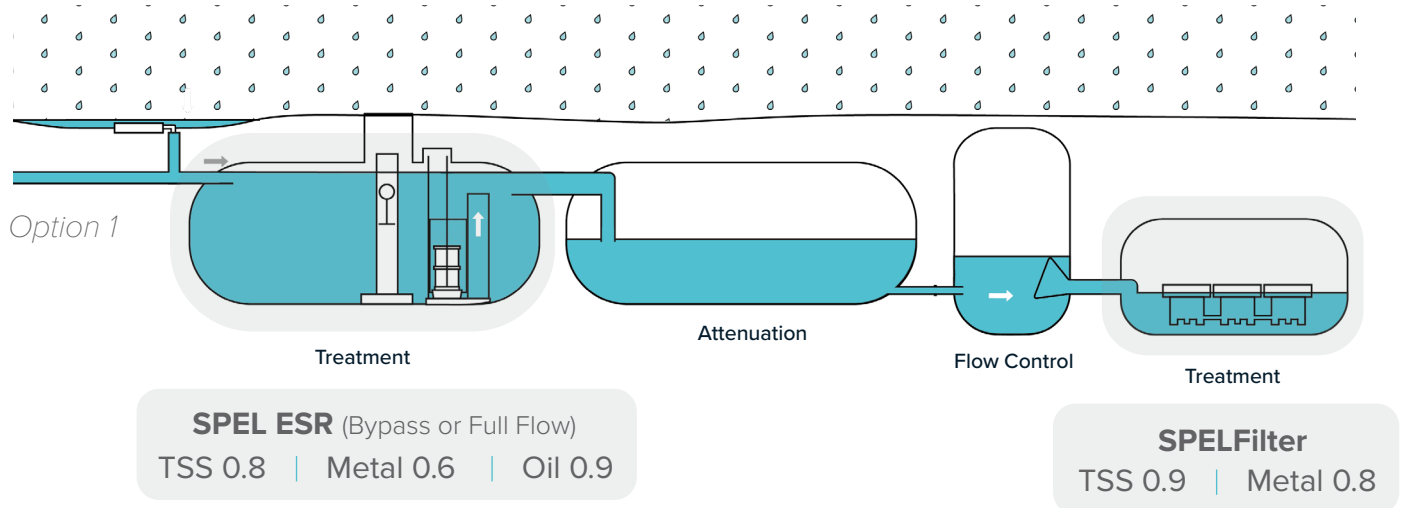
Medium Mitigation Index = TSS 0.7 | Metal 0.6 | Oil 0.7



Simplifying the Simple Index Approach

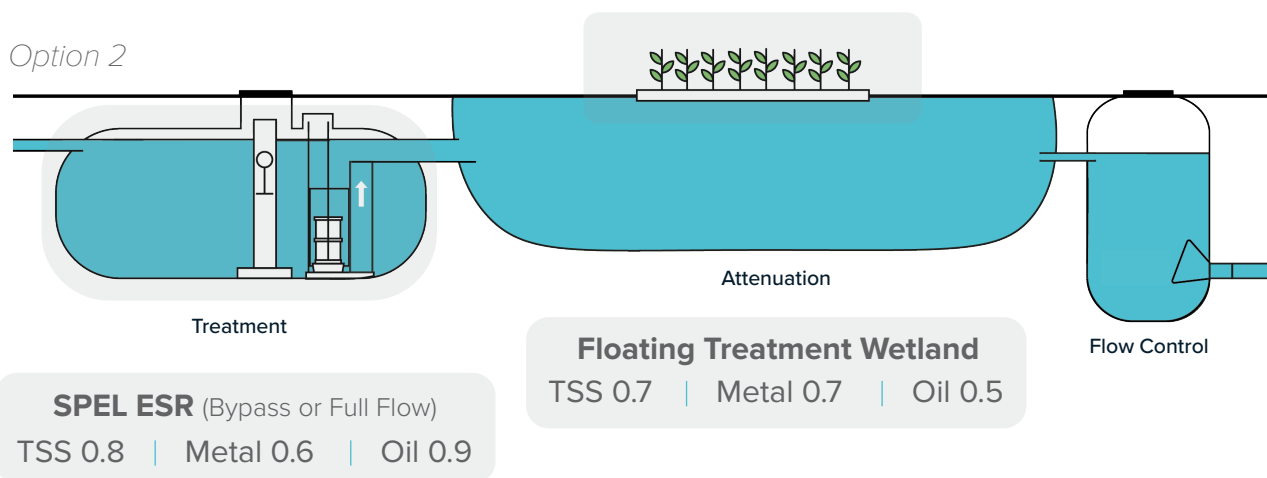
Your SuDS Treatment Train with SPEL Products

High Mitigation Index = TSS 0.8 | Metal 0.8 | Oil 0.9



SPEL ESR + 50% of SPELFilter = TSS 1.0 | Metal 1.0 | Oil 0.9

High Mitigation Index = TSS 0.8 | Metal 0.8 | Oil 0.9



SPEL ESR + 50% of FTW = TSS 1.0 | Metal 0.9 | Oil 1.0

SPEL SuDS Handbook

With SPEL Products

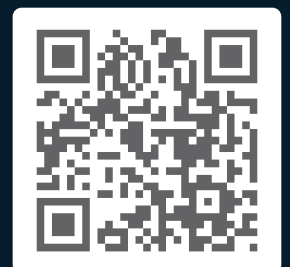
An all-in-one guide outlines the best practices, ensuring your treatment train is SuDs compliant and achieving the best results for longer.



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