

## **Re-Medi8 – Bio remediation soil for Sustainable Drainage Systems**

### **Define What -**

Re-Medi8 is a unique filter media that removes sediment particles (below 63 micron), dissolved heavy metals and hydrocarbons from surface water runoff. The product can be used in proprietary SuDs source control systems or in green infrastructure to clean runoff to achieve a known water quality level. It will assist developers meet the requirements of the WFD. It can also be potentially used to enable the harvesting and re-use of surface water for non-potable applications.

### **Define Why –**

Re-Medi8 has been used widely throughout other parts of Europe but is relatively new as a concept to the UK, we are not aware of a similar product currently available on the UK market. The product has been tested and approved by the DIBt in Germany, and has been installed on schemes since 2002 in Germany and the UK since 2006.

Re-medi8, which is totally organic media, contributes to sustainable water by removing heavily contaminated fine sediment, hydrocarbons, and dissolved heavy metals from surface water runoff and as such helps to significantly reduce diffuse pollution into receiving water bodies.

### **Define How –**

Re-Medi8 can be used in proprietary and soft SuDS structures to remove sediments, hydrocarbons and dissolved heavy metals, but not pathogens from surface water runoff. It uses the processes of filtration, ionic exchange, adsorption, precipitation, degradation and biosorption to remove the pollutants. In addition to this Stormwater Management can hydraulically calculate the required depth of the media to ensure the required treatment efficiency.

### **Costs –**

One of the main advantages of the Re-Medi8 filter media is the long maintenance interval. Dependant on the pollutant load the media will have a service life of 10-20 years before replacement is required. Typical costs are circa £950m<sup>3</sup> which will treat 720m<sup>2</sup> = £0.065-£0.13p cost m<sup>2</sup> per annum.

**Date of Launch in UK** - Please provide the actual or proposed launch date.

The product was officially launched at IWEX Birmingham in April 2015.

### **Water or Building Regulations -**

As Re-Medi8 was developed to allow developers comply with the German soil protection and Groundwater protection acts, there are currently no water quality standards for surface water per se, therefore the default standards depending on the final destination of the run off are EQS (Environmental Quality Standards) or drinking water standards

### **Approval -**

Re-Medi8 has been independently tested and approved by the German DIBt and verified by an independent UK field test on an installation over 8 years old. There are also a wide range of other European case studies that can be presented to further validate the products credentials.