

2.0 Managing our Environmental Impact

2.5.5 Environmental Improvement Case Study: Capture Green

As part of our commitment to minimise our environmental impact WPD have been working with Capture Green to install a variety of creosote removal systems into sites around WPD's estate. Some sites have been entirely new 'turnkey' installations on brownfield sites and others have been retrofitted into existing pole storage areas. The technology inside the Green Rhino Water Remediation system enables contaminated surface water to be processed on site, mitigating the requirement for vacuum tankering from within bunded areas. This has helped to reduce cost, time on site and offers a highly efficient environmental solution.

Willenhall Grid Site

Willenhall Grid site is a strategic pole storage point for the Midlands, where in excess of 400 poles are stored. Capture Green designed and implemented a new stillage system on the site which enables poles to be racked individually, reducing health and safety risk to operatives. Storing poles individually means they can be 'slung and chained' without the need to leave poles apart from each other and risk entrapment. The containment area is over 600m² and utilises a 4 bay Water Remediation Chamber system that processes surface water, removing the contaminants typically found in

creosote and allowing the water to drain away to compliant levels. The only concrete utilised on the site was for the stillage foundations with the main containment area being made of geotextile and liner based materials. This method eliminated the extensive volumes of concrete and more intrusive construction methods that are traditionally used to create an equivalent containment area.

Hanham, Bristol

WPD utilised a pre-fabricated Green Rhino Steel secondary containment system for a distribution transformer at Hanham, Bristol. This system is designed to be installed within a day. The system is prefabricated and certified off-site, meaning that it can be quickly mobilised. A prefabricated bund offers less disruption on site with reduced health and safety risk, network disruption and overall cost. The system utilises a Green Rhino Hydrocarbon Removal Cartridge (HRC) which is capable of allowing filtered bund water to drain to acceptable discharge levels. This means that the bund will not fill up with contaminated water and does not require vacuum tankering.

WPD is also utilising a variety of Green Rhino Oil and Sediment Filtration systems that can be used to overpump contaminated excavations and bunded areas. The systems are utilised with existing pump media and prevent the requirement for vacuum tinkering and overall costs. In addition to filters, Green Rhino Oil

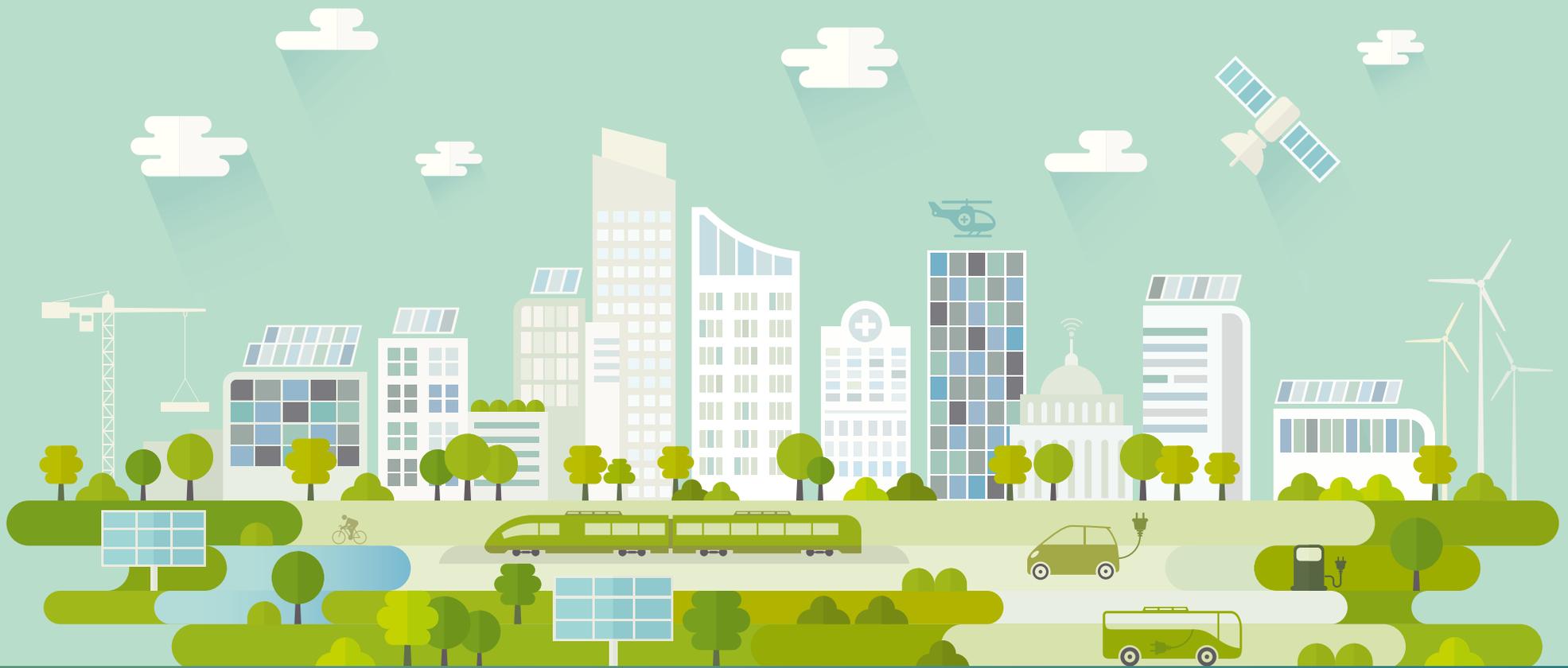


Retention Pillows have been used to collect excess oil from contaminated water. This technology removes and solidifies the contaminant hydrocarbon, encapsulating it so it cannot leak out. This means that the filtered water can be over pumped to a suitable point of drainage.

Capture Greens's Green Rhino Filtration products are now also being utilised by other WPD main contractors, such as Adler and Allen and Morgan Sindall.



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Environment and Innovation

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