



Wastewater used to produce concrete



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Yorkshire Water held a trial of producing concrete using reused treated wastewater, which the company says is a UK first.

Rather than being discharged into a watercourse, it was collected and transported to Tarmac’s site in Bradford. The wet concrete was then poured into a series of 10x20 metre slabs at Yorkshire Water’s Esholt wastewater treatment site, set to become the foundations for a new National Test Centre for emerging water technologies.

Reusing the water in this way lowers the cost of treatment, reduces carbon emissions, and lessens pressure on drinking water supplies, according to Yorkshire Water.

The slabs will be tested over time to assess their strength, colour and weathering, to see if the product is suitable for widespread use. If they pass, the water firm will look into further developing the use of reused water supplies for concrete manufacturing and other business uses.

Yorkshire Water project manager, Phillip Blaen, said “Water supply and protecting the environment are two of our five big goals so this is a priority for us. We are excited about this project and the benefits it can bring to our customers.”

Tarmac managing director for North and Scotland, Shaun Davidson, said “Water conservation is an important part of our resource efficiency programme supporting Tarmac’s commitment to embedding circular economic thinking across the whole supply chain. We’re really pleased to be working in partnership with Yorkshire water to see this innovative project come to fruition.”

The test centre will allow third parties access to water and wastewater to create new treatment methods. Taking them through conceptual design to commercial viability in real-world environment should facilitate the adoption of successful technologies. The site will be open to contractors, technology owners, other water companies and universities.

