

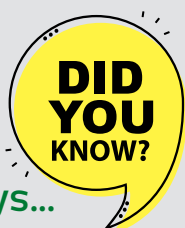
# EnviroHub Water Treatment Solutions

## Concrete Washout



### The UK's Environmental Authorities :

- The Environment Agency (England and Wales)
- Scottish Environment
- Protection Agency (SEPA)
- Local Waterboards
- Local Councils



### What the law says...

Under UK legislation, it is an offence to discharge polluting substances into controlled waters (surface water and groundwater) without prior approval from the Regulators.\*

### Concrete washwater poses a significant environmental threat. To avoid damage, it must be treated properly.

When water comes into contact with uncured concrete, this creates a [very high pH level](#) (typically 12 to 13 on the scale which runs from 1 to 14) and contains traces of other [toxic](#) elements, such as Chromium. If discharged or spilled, this contaminated water then has the potential to pollute both land and the aquatic environment, causing significant damage.

UK regulators such as the Environment Agency and Scottish Environment Protection Agency have considerable powers to [prosecute companies](#) that fail to adequately control environmentally harmful materials and processes.

To avoid the environmental, legal and financial consequences of uncontrolled concrete washwater, it is vital to develop control over the washing down of any plant or equipment that has come into contact with fresh concrete.

\*Environmental Permitting Regulations 2010 (amended 2012) and the Water Resources Act 1991 (as amended)



## Can washout water be safely diluted? **No!**

Due to the logarithmic scale of pH measurement a huge volume of water would be needed to dilute concrete washout to a safe level. For example 1 litre of concrete washout would need approximately 100,000 litres of tap water.



## So, what is best practice for Concrete Washout?

### Firstly, plan the final disposal method

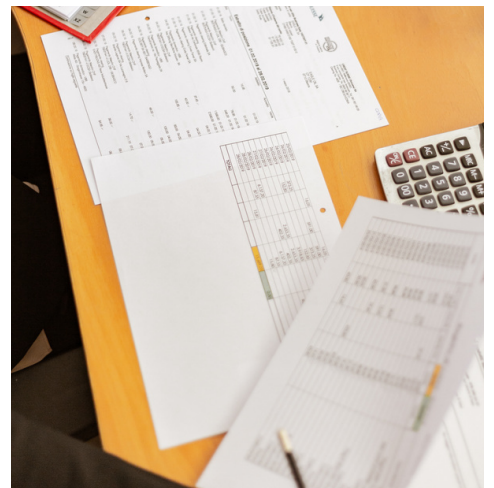
Foul sewers will generally accept treated concrete washout water providing the pH is below 10. You must also ensure a consent to discharge is obtained, and understood.

### Then, plan the location of washout facilities

- The Treating and using water that contains concrete and silt at construction sites: RPS 235 document
- specifies that concrete washout should not take place within 10m of a body of water such as a river or pond. You can read the RPS 235 in full [here](#).
  - Ensure that the difference between foul sewers and surface water drains (which discharge to the nearest watercourse) is communicated to the site team. Also ensure the washout cannot spill or overflow into drainage gullies or surface water drains.
  - Concrete wagons should be able to easily access the facility.
  - Many washout solutions require a 110v power supply.
  - Allow excess concrete to harden and use as backfill or dispose of as dry waste.
  - Minimise the amount of equipment washout required. For example, scrape excess concrete off equipment prior to washing.
  - Clean down the washout facilities after use, to prevent concrete setting on the equipment used.

### Lastly, focus on your site documentation

- Identify the location of washout facilities clearly on logistics paperwork.
  - Identify the method of washout treatment and disposal (solids and water).
- If the water is to be removed from site for disposal, ensure
- a suitable licenced waste management facility is used in accordance with the Duty of Care for Waste Management.
  - Ensure equipment-specific training and wider toolbox talks on the subject of concrete washout management are planned in.



## Video Guide to EnviroHub Concrete Washout



### Why Choose EnviroHub?

Features an automatic CO2 dosing system – no manual intervention required.

High-pressure pump to re-use neutralised water for further washouts – reduce overall water consumption.

As a modular system, you can easily discuss your requirements with our consultant and select the kit suitable for your specific site needs.

The system is easy to use and ensures compliance with environmental regulations, reducing stress for site managers.

We support our customers throughout every step of the hire process, providing consultations and technical support whenever necessary.



**RVT offers a free site assessment and best practice guidance**

**BOOK NOW**



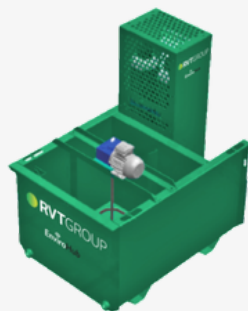
## Envirohub Concrete Washout Treatment Solutions

For effective treatment, you need an effective washout solution. When deciding on treatment options, you should:

- Consider the volume of concrete activity that will be taking place to ensure the system will have the capacity to keep up with the busiest periods.
- Consider systems with automatic correction, avoiding the need for the manual addition of correction agents.
- Consider closed-loop systems that allow treated water to be reused for future washouts.

RVT have teamed up with the manufacturers of EnviroHub to offer the construction industry brand-new concrete wash out systems that separate the aggregate and solids. These can then be re-used on site (e.g. as backfill) or disposed of as standard dry construction waste.

### EnviroHub Concrete Water Treatment Unit



- 1.2m3 water holding tank.
- CO2 dosing apparatus in controlled enclosure.
- Easy to move around via chain lift or fork pockets.
- Agitator motor ensures consistent treatment.

### EnviroHub Concrete Washout



- Aggregate separation filter bags.
- Suitable for smaller concrete chute washout and tools, barrows, mortar tub etc washdown.
- Easy to move around via chain lift or fork pockets.
- Approx. 375 litre washout capacity.
- Onboard wash-down hose for water recycling (optional).

### EnviroHub Monitoring Unit



- Suitable for all water types.
- Monitor a wide range of parameters including pH, turbidity and flow.
- Rugged, self-contained and elevated above ground level for protection.
- Quick to use with low power requirement.
- Works in poor radio connectivity areas.
- Easy access for cleaning and maintenance.