

## **Concrete Washwater Treatment System** (The RCW)



Siltbuster's new RCW Concrete Washwater Treatment System has been specifically designed to handle the washwater from truck chutes.

## How it works...

#### Stage I - Solids/Liquid Separation

Waste concrete washed off truck chutes is discharged into specialist dewatering bags located in the twin reception chamber at the front of the unit.

Solids and cement fines are retained in the bag and allowed to hydrate whilst the bleed water seeps through the fabric into the main hoppers for pH adjustment.

#### Stage 2 - Automatic pH Adjustment

Bleed water enters the main treatment chamber and undergoes automatic pH adjustment using carbon dioxide to reduce the pH to a preset limit (typically between 6 and 9) before being released to sewer, water course, discharged to ground or reused.

The disposal of waste concrete, mortar and untreated alkaline waste water (which have a pH ranging from 10 to in excess of 12) contravenes most Environmental Management Systems and may breach Environmental Legislation. The RCW provides the solution.

BATTERY POWERED or MAINS OPERATION Can be operated by either 12V battery or 110 Volt electricity supply and comes complete with its own battery charger as standard.

SPACE SAVING INTEGRATED TREATMENT Combines solids removal and pH adjustment in a single integrated unit. Waste concrete and wash water is discharged into specialist dewatering bags at the front of

Siltbuster's new RCW unit is perfect for the treatment of concrete and mortar wash water

the RCW unit



# **Key features...**

#### BEST PRACTICE pH ADJUSTMENT

Innovative Carbon Dioxide dosing system provides simple but effective pH adjustment - no more need for the storage or use of acid on site.

#### COMPACT DESIGN

Suitable for use on small sites and remote locations.

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#### www.siltbuster.com • 01600 772256 • enquire@siltbuster.com

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Email enquire@siltbuster.com Web www.siltbuster.com



# Ideal for treating waste water from:

Washing out of Truck Mixer Concrete Chutes

Concrete pours in Urban & Remote Rural Locations

#### The Benefits of Carbon Dioxide

The use of carbon dioxide to neutralise the highly alkaline water has several key advantages over the traditional approach of using concentrated acid for pH adjustment :

- 1. Neutralisation is more easily controlled eliminating the risk of the pH of the treated water becoming too acidic (less than 6.5)
- 2. Health and Safety concerns are reduced, plant operators are not required to work with strong acids
- 3. Decommissioning of the treatment system is simplified. In a traditional system excess acid would need to be disposed of as a hazardous waste whereas partially spent carbon dioxide cylinders can be returned to the supplier.

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	( <b>H</b> ₃O⁺)	) pH	
	-10 <sup>-14</sup>	14-	Oven elegner
	-10 <sup>-13</sup>	13-	Concrete Wash Water
	-10 <sup>-12</sup>	12-	Household ammonia
	-10 <sup>-11</sup>	11-	
Alkaline	-10 <sup>-10</sup>	10-	
	-10⁻ <sup>9</sup>	9-	- Baking soda
	-10 <sup>-8</sup>	8-	
Neutral	-10 <sup>-7</sup>	7-	- Pure water
	-10⁻ <sup>6</sup>	6-	
	-10 <sup>-5</sup>	5-	
Acidic	-10-4	4-	
	-10 <sup>-3</sup>	3-	
	-10 <sup>-2</sup>	2-	- Lemon juice
	-10 <sup>-1</sup>	1-	
	-10	0-	

<b>Technical Specification</b>	Model				
	RCW Unit				
	Length	Width	Height		
Unit size	2.8m	I.9m	1.35m (excl. gas bottles)		
Carcass material	Mild steel (EN10025 S275) shotblasted to min. SA2.5				
Surface protection	2 Pack High Solids Anti-Corrosive Epoxy Primer; Modified Acrylic External Finish Units supplied in RAL5001 Blue as Standard, other Colours to Order				

For more information on how Siltbuster Limited can assist with waste concrete handling, waste water treatment and pH adjustment of alkaline water or our other dirty water treatment solutions call us on 01600 772256 or email : enquire@siltbuster.com

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