



Did you know these fast facts?

- ◆ Concrete washout water (or wash water) is a slurry containing toxic metals.
- ◆ Concrete washout water has a PH level near 12.
- ◆ Rainfall may cause concrete washout water to overflow and be transported to surface waters; altering soil chemistry, inhibiting plant growth and contaminating groundwater.

Best Management Practice Objectives

- ◆ Collect and retain all the concrete washout water and solids in leak proof containers, so that this caustic material does not reach the soil surface which then can migrate to surface waters or into ground water.
- ◆ Recycle 100% of the collected concrete washout water and solids.
- ◆ Support the diversion of recyclable materials from landfills.

Suggested uses for washout materials:

Uses	Washwater	Cement Fines	Fine aggregate	Coarse aggregate	Hardened concrete	Unused wet concrete
Reused to washout additional mixer truck chutes or drums	X					
Reused as a ready mixed concrete ingredient	X	X	X	X		
Reused as an ingredient of precast concrete products	X	X	X	X		X
Reused as crushed concrete projects		X	X	X	X	
Reused to pave the yards of ready mixed concrete plants						X
Returned treated water back to a surface water	X					

Washwater recycling, treatment, disposal

Washwater from concrete truck chutes, hand mixers or other equipment can be passed through a system of weirs or filters to remove solids and then be reused to wash down more chutes and equipment at the construction site or as an ingredient for making additional concrete.

Solids recycling

The coarse aggregate materials that are washed off concrete truck chutes into a washout container can be either separated by a screen and placed in aggregate bins to be reused at the construction site or returned to the ready mix plant and washed into a reclaimer.

Hardened concrete recycling

When the washwater in a construction site concrete washout container has been removed or allowed to evaporate, the hardened concrete that remains can be crushed and reused as a construction material.

Wet concrete recycling

Unused concrete can be returned to the ready mixed plant and can either be used to pour precast concrete products, pave the ready mixed plant's yard, washed into a reclaimer or dumped on an impervious surface and allowed to harden so it can be crushed and recycled as aggregate.

Washout things to remember

A sign should be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.

Educate employees, subcontractors, and suppliers on the concrete waste management techniques required.

Washout all concrete into designated areas only.

Environmental & Human Health Impacts

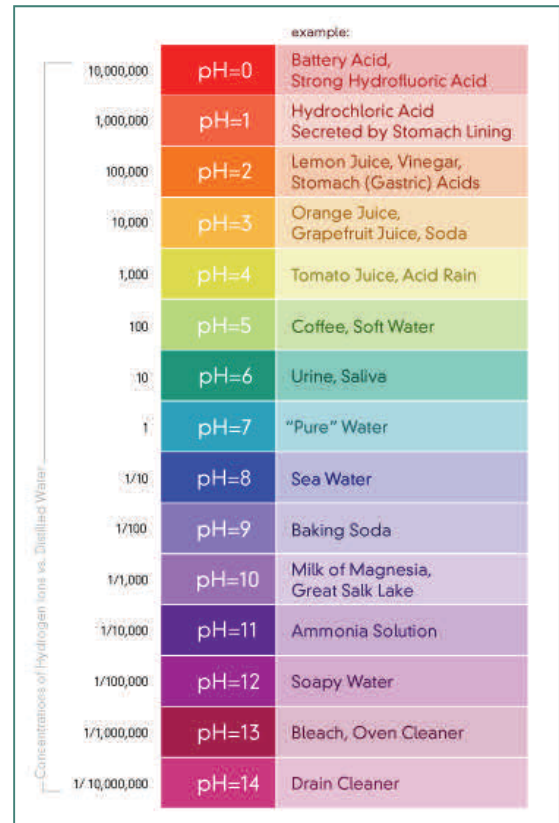
Concrete recycling is an increasingly popular way to utilize existing concrete left when structures or roadways are demolished. To prevent construction rubble from being added to landfills more attention has been given to the environmental concerns.

Concrete washout water is caustic and corrosive, having a pH near 12. In comparison, Drano liquid drain cleaner has a pH of 13.5. Safe pH ranges for aquatic life habitats are 6.5-9 for freshwater and 6.5-8.5 for saltwater.

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Washout Containers

Different types of washout containers are available for collecting, retaining and recycling the washwater and solids at construction sites as shown:



Metal washout container



Chute washout box



Vinyl washout container



Washout sack



Hay bale and plastic washout pit

Information provided in this brochure is from the EPA "Stormwater Best Management Practice: Concrete Washout" found at:

www.epa.gov/npdes/pubs/concretewashout.pdf

For additional information:

- ◆ www.concreterecycling.org
- ◆ www.nrmca.org
- ◆ www.rmc-foundation.org

A TIDY SITE IS A GOOD SITE!!