

Frequently Asked Questions

Concrete Cutting Wastewater

October 2004

Question: Concrete cutting wastewater is just dirty water – so what’s the problem?

Answer: The dirt in concrete cutting wastewater can smother living things in streams. In addition, it typically has a very high pH (a measure of acidity or alkalinity) and as such can have a dramatic effect on our waterways. This water has a high pH because the concrete being cut has lime in it and lime has a high pH.

Question: Why is high pH water so bad?

Answer: High pH water is damaging to our environment as it attacks the sensitive membranes of fish and eels in our streams. These sensitive membrane include the gills of fish and eels as well as their skins. Fish and eels use their gills to breathe and in the case of eels it is the mucus on their skin which enables them to swim effectively in water. This mucus helps eels retain moisture and protects their skin from damage. This means fish and eels in stream were high pH water from concrete cutting finally ends up after going down the stormwater system can die or be severely burned by high pH water.

Question: If I use more water then that will dilute it, so there is no problem.

Answer: The volume of water needed to reduce the pH of the concrete cutting fines to a neutral level pH – i.e. pH 7 would be for a typical small concrete cutting job in the order of 100 cubic metres. Dilution is not the solution and adding water will only magnify the adverse effects on the watercourse or stream and extend the effects downstream – the only solution is to prevent this high pH water entering the stormwater system or directly into a watercourse or the sea.

Question: We need to use water to cool the blade in order to cut the concrete. I can’t see any way around that.

Answer: The Regional Council understands that water must be used to cool the blades that are cutting concrete. The Council is concerned about what happens after this is done and feels that if more time was spent planning what to do with this water, rather than allowing to flow into the stormwater system, then this problem could be easily managed.

Question: But it's just a drain – taking away the wastewater like it should.

Answer: All outside cesspits drain to the stormwater system and ultimately to the nearest waterway without treatment. This means whatever goes down the drain will end up in the nearest waterway, stream or the beach. The stormwater system is designed to drain clean rainwater only.

Question: It's only a little bit of dirty water, it won't do any harm.

Answer: There are many other people in the region carrying out similar activities to yours which, when combined, can amount to a significant amount of pollution entering our waterways every day. As well as this, even a small amount of pH affected dirty water can cause significant damage to a stream through smothering and burning aquatic life.

Question: But it will cost more money if I have to dispose of the wash water properly.

Answer: There are easy inexpensive solutions to ensure that concrete cutting wastewater does not enter the stormwater system which only take a few minutes to determine and implement. This could be a lot less expensive than the clean up costs if your wastewater enters the stormwater system, not to mention the potential fines that may be imposed.

If you would like further assistance on any of these matters please call the Council on 09 366 2000 and ask to speak to a member of the Pollution Control Team.