



CASE STUDY HOW A MAJOR CORPORATE SURRENDERED ITS ENVIRONMENTAL STRESS



THIS IS THE STORY OF HOW ONE OF THE LARGEST MANUFACTURERS OF HOUSEHOLD AND PERSONAL GOODS IN THE WORLD, NEARLY SHUT DOWN THEIR AUSTRALIAN MANUFACTURING BASE BECAUSE OF WASTE PROBLEMS.

Not only did Virotec solve these waste issues, but we now operate their entire waste collection and disposal system.

They concentrate on what they do best – manufacturing and selling without having to worry about their waste, which is non core business.

SOME BACKGROUND

This company is one of the largest manufacturers of household and personal goods in the world. It has annual worldwide sales of over US\$9 billion. In Australia, the annual turnover is around \$400 million.

The Australian plant produces consumer goods for the South Pacific region and has two separate manufacturing facilities.

The effluent treatment plant produces 480,000L of effluent per week and consists of a primary clarifier, bioreactor and secondary clarifier. The bioreactor was extremely difficult to control which resulted in very poor settling within the secondary clarifier.

As a result, the trade waste limits for phosphorous, TSS and COD, as determined by the local water

authority, were regularly exceeded.

WHAT VIROTEC DID WAS SIMPLE

Virotec did two things. We solved their initial waste water problem so they remained in business. We then took control of their whole waste water management system so that they could concentrate on their core business.

Solving their initial problem was easy. Our R&D Department had developed patented non-toxic, non-hazardous and environmentally safe reagents. These had an acid neutralising capacity, excellent settling rate characteristics and a high phosphate and metal binding efficiency.

Just to make sure, our treatment methodology was trialled over a two week period before full scale implementation. In both cases, the results were better than expected.

The original treatment method used conventional polymers to produce a dense, stable sediment that was easily recovered and dewatered. Virotec's technology was complementary to the existing treatment facilities so minimal capital works and plant modifications were necessary.

The used reagent is not a hazardous or prescribed waste material because a proportion of the bound phosphate is plant available and not water leachable. We also showed the company how the sediment can be reused as an agricultural soil fertiliser.

THE RESULTS ARE MIND BLOWING

Before Virotec was called in, the average phosphorous level in the effluent was 2.8 times the council discharge limit. It is now down to one-sixtieth of the limit so there has been a phosphorous reduction of 97.9%.

Total solids went from being 1.8 times the discharge limit to 5.5% of the limit. The numbers for COD were equally impressive falling from 1.2 times the limit to just 7.6% .

Sludge volumes were substantially reduced and the need for major capital expenditure to meet the increasing effluent throughput was eliminated.

VIROTEC NOW RUNS THE SHOW

Running a trade waste treatment facility was problematic for this company. It was a distraction to their core business and as we had a track record, both parties sat down and discussed how Virotec could make their manufacturing life easier and more economic.

Virotec now operates their trade waste facility. It is completely automated with Virotec providing any design, engineering and trials as well as the reagents, relationships with the relevant authorities and ongoing monitoring.



As the Environmental Manager said "sometimes we don't even realise that we have a waste treatment plant. No one ever needs to go to check it out and Virotec does all the things that we used to do - we just get on with doing what we have to".

FOR YOUR FREE SITE AUDIT, PLEASE CALL VIROTEC TODAY ON 1300 660 460