

CASE STUDY

TREATMENT OF SOLVENT CONTAMINATION IN WASTEWATER THROUGH THE ADDITION OF BCP11

BACKGROUND

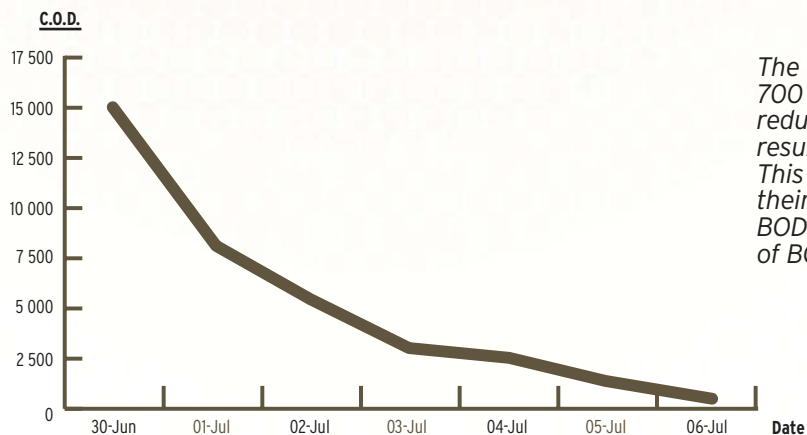
Wastewater from a solvent recovery plant that redistills and purifies used solvents was the subject of biological wastewater treatment. The wastewater is derived from a couple of sources such as rainwater washing contaminants from the process equipment and the ground surrounding the equipment. The other source is from process water contaminated with various chemicals.

The treatment process involved adjustment of the pH and aeration of a container filled with contaminated water. BCP11 was added to the tank along with BCP35 to ensure a complete degradation of low and high molecular weight contaminants. The initial concentration of COD was about 15,000.

DISCUSSION

The tank was left over a seven-day period with COD readings taken each day. The pH was adjusted to approximately 7.5 with sulphuric acid. Foaming was observed at the 3-4 day mark and started to settle out after that. By day 5 the foaming was greatly reduced.

WASTEWATER CONTAMINATED WITH SOLVENTS



The final COD figure was less than 700 ppm and equates to a 96% reduction. Theoretically the BOD results would be reduced similarly. This plant will now be able to meet their municipal discharge limits for BOD thanks to the effectiveness of BCP11.