

Australian Truckwash Technologies Pty Ltd

Market segment
Vehicle washing

Commission date
June 2000

Customer problem
Customer builds, owns and operates numerous heavy vehicle washing facilities (including trucks, trains and aeroplanes) both in Australia and overseas.

Water used at each facility is recycled and as a result a common complaint is that the water used for washing is discoloured or 'looks dirty'. This is primarily due to the high content of dirt and emulsified grease, oils and other hydrocarbons present.

Customer objective
To eliminate discolouration of recycled water used for vehicle washing by removing emulsified oil.
To meet regulatory discharge requirements.
To increase recycling periods.
To decrease associated maintenance requirements.

Conventional options available to the Customer
The conventional approach available to the customer involved selection of an appropriate coagulant/flocculant/defoamer to chemically aggregate emulsified oil in the wash water and then to settle out the aggregated particles in large ponds or holding tanks.

Outcomes achieved with BALEEN
At its 'green field' site in Melbourne, the BALEEN filter is used in a two stage batch process, firstly to separate physical contaminants to 25 micron during recycle, and then secondly, employed periodically to separate chemically aggregated emulsified oil and hydrocarbons in-line, to thereby providing an alternative to the traditional settling pond approach.

Apart from the small footprint of BALEEN compared with the large land area required for settling tanks, oil recovery is considerably simpler and substantially more efficient when using BALEEN, with waste oil collected as a likely by-product for waste oil recyclers.