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Report on WEDA 2002
Trial at Ockeridge No2
Main clean Cowleigh .

After a successful presentation of VR600 and Robovid in Sept 2002 by Klas Lange and Paul Keenan , WEDA were engaged to clean on line a 4ML reservoir with significant sediment problems at Cowleigh Worcestershire .

Due to the fact that this system had not been used before within Severn Trent it was decided to conduct a trial , with a rigorous emphasis on all aspects of hygiene and safety at a similar site that could be easily isolated in case of high turbidity.

Prior to the trial it was first established that the VR600 and associated equipment were acceptable under DWI Reg 25 and that all parts and materials were suitable for contact with potable water . The necessary risk assessments , method statements , temporary medical screening and contingency plans were completed with full cooperation from all WEDA and Robovid personnel. EA consent to discharge was obtained where necessary .

At the trial site all equipment to come in contact with potable water was disinfected with chlorine equivalent 1 to 100 hypochlorite, left to stand 30 minutes then rinsed . During the on line trial waste water was passed through a sediment retrieval and de-chlor tank , waste water was dechlorinated to 0.03ppm . Turbidity was monitored continually at the outlet to customers and at no point was this greater than 0.5 ntu's with an average of 0.25 ntu's, ie 15 times less than the cut off point we had set . Water samples were taken from the reservoir for bacteriological analysis before and after the trial and these were clear .

After the trial the reservoir was drained and physically inspected , I was particularly impressed by the way all sediment had been completely removed over the cleaned area, even around the bases of the many circular columns supporting the roof .

CONTINUATION

Having completed a successful trial the crew were able to move to the main site, turbidity was once again monitored throughout the clean which was completed on line in one day , at no point was turbidity greater than 0.6 ntu's with an average of 0.27 ntu's . Samples taken for bacteriological analysis before and after were clear . During the cleaning operation Paul Keenan demonstrated the use of Robovid remote controlled submarine for inspection purposes , the images taken were of exceptional quality . An equally high standard record of the work undertaken at both sites was provided in VHS video cassette format taken by the VR600 onboard camera .

The work at both sites was undertaken to a high professional standard and to a very successful conclusion . Due to the obvious advantages of sediment removal without the obligation to take reservoirs and tanks off line , I would hope that this technology will have an important part to play in future cleaning and inspection programs .

T .White .
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