

Results of 'PASt21' – the Portuguese initiative for performance assessment of water and wastewater treatment plants

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ABSTRACT

Performance assessment of water supply and wastewater services is today a major issue. Over the past six years, the National Civil Engineering Laboratory (Portugal) has been developing performance assessment systems for drinking water treatment plants (WTPs) and wastewater treatment plants (WWTPs). In 2009, a national field-test was launched in Portugal, 'PASt21', involving 27 plants (10 WTPs and 17 WWTPs). This paper presents an overview of the second generation of the performance indicator (PI) systems for the overall performance assessment of WTPs and WWTPs, the extent to which the systems were applied in the 5-year study period (2006–2010), and the aggregated results (average, median, percentiles 25 and 75, maximum and minimum) of representative PIs in each assessment group. It was concluded that all indicators are relevant, and the results show the ability of the proposed PI systems to assess the overall performance of a given treatment plant. The aggregated results are very important for the continuous improvement of the plant performance through benchmarking and periodic reassessment of targets.

Key words | performance assessment, performance indicators, wastewater treatment plants, water treatment plants

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