

Interactive comment on “Removal of paraquat pesticide with Fenton reaction in a pilot scale water system” by C. Oliveira et al.

Anonymous Referee #2

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This paper reports on the potential of using the Fenton reaction to remove the pesticide Paraquat inside a water distribution system. The research, although quite applied, is interesting and worthy of publication in DWES. However, I suggest authors address the following comments: - please proof-read the article well, there are quite a number of typographical/grammatical errors: * P. 234 line 2: "it was studied" should be rephrased * P. 234 line 13: faster, not fastest * P. 234 line 18: removed the "of" after "in situ" * P. 234 line 21: "over long periodS" (add S) * P. 234 line 24: add AN before "accident" * P. 235 line 25: whether, not weather * P. 235 line 26: add "system" after distribution * P. 241 line 22: worse, not worst * P. 242 line 11: faster, not fastest - in this article, paraquat was added from an organic solvent, which will result in extremely high organic matter concentrations, higher than what is usually observed in real water mains, BUT

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the concentration of paraquat is also much higher than usually encountered. Authors should acknowledge these both statements. - P. 237 line 25: the tap water was passed over an iron filter: what type of filter is that? Does it remove colloidal iron only, or also dissolved iron? - the temperatures used (>20°C) are not always very relevant for practical water distribution mains (at least not for drinking water produced from ground water). Will the effect of temperature still be minimal at temperatures as low as 9-10°C? - P. 240 line 27: how is pH 5 close to the pH of natural water???? - P. 243: the pipes corrode fast under low pH and high H₂O₂ dosing conditions. What is the practical meaning for all of this when one wants to use Fenton in a water distribution main? Authors should comment on this.

Interactive comment on Drink. Water Eng. Sci. Discuss., 6, 233, 2013.

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