



THE UNIVERSITY OF BRITISH COLUMBIA

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Professor Zhen He,
Editor-in-Chief,
Journal of Hazardous Materials

Re: Submission of the Manuscript “Complete defluorination of 6:2 FTCA in IEX regeneration wastewater: comprehensive comparison of UV/S and UV/PS”

Dear Professor He,

My co-authors and I are pleased to submit the above noted manuscript for publication in *the Journal of Hazardous Materials*.

This paper highlights the results of our research on the application of UV/sulfur based photochemical processes for the destruction of PFAS, 6:2 FTCA as an alternative to the regulated PFOA, in concentrated streams generated from regeneration of saturated ion exchange resins.

To the best of our knowledge, this manuscript is the first study and report on the impact of salinity in regeneration wastes and IEX still bottoms, with different compositions, on the fate and destruction of 6:2 FTCA. Through detailed experimental work supported by kinetics and thermodynamic assessments, we demonstrated complete defluorination of 6:2 FTCA in hydroxide containing regeneration wastes by simultaneous oxidation and reduction processes. The results presented herein, hence, provide invaluable insights for the water industry and scientific community regarding the assessment of PFAS degradability and the underlying mechanisms governing their transformation in photochemical systems, and thereby deserve publication in the Journal of Hazardous Materials.

I would like to declare on behalf of my co-authors that the work described here is original research that has not been published previously, and is not under consideration for publication elsewhere, in whole or in part. I would also certify that the graphic table of content is prepared according to the journal guidelines and has not been published elsewhere.

I look forward to your response. Please contact me if there are any questions and/or you require additional documents.

Yours sincerely,

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