RC2: <u>'Comment on bg-2022-226'</u>, Anonymous Referee #2, 07 Jan 2023 reply

This is a review report for the manuscript, entitled: "Alkalinity and nitrate dynamics reveal dominance of anammox in a hyper-turbid estuary" by Norbisrath et al (Manuscript number: bg-2022-226). Overall, stable isotope analysis reveals that N2 production in tidal rivers and fluid slurries are contributed by denitrification and anammox processes, respectively, and discusses two nitrate/nitrite respiration pathways and their effects on TA production. However, the authors' focus seems to be on these two nitrate/nitrite respiration pathways, with only a small amount of text devoted to the contribution of nitrate/nitrite respiration pathways to TA. The experimental design idea is good, but it seems to be inconsistent with the focus of the article, and the authors are recommended to reorganize the story line. I do not think the manuscript can be published in its current form.

Dear referee #2,

We thank you for your feedback. We do appreciate time and efforts, referees spent to assess our manuscript, independent of the overall outcome of such a comment. However, admittedly, we feel that we are unable to respond to your the comments, in particular due to the brevity and untargeted nature of the comment. Also we are confident that by addressing referee #1 comments this story line will become more clear and we also will carefully consider reorganizing it.