

## General.

We would like to appreciate the editor for providing the important comments. We have taken full account of the comments and revised the manuscript. All the changes made and appeared in the revised text are shown in red. All detailed answers to comments are displayed in blue.

## Comments of Editor

1) *please update the solubility of DEA in line 235.*

Response: We have updated this content.

Lines 239: ...DEAH<sup>+</sup> with relatively low solubility (solubility of 20.52 mol kg<sup>-1</sup> for aminium chloride form (Ge et al., 2011b)) showed...

2) *please remove the reference to BJ in line 446 since TA/ammonium ratios in BJ are not significantly different between clean and polluted days.*

Response: The revision has been made.

Line 447: ...in XA...

3) *please remove 'impact' in line 496*

Response: The revision has been made.

Line 497: ...the mechanisms...

**Once again, we deeply appreciate the time and effort you've spent in reviewing our manuscript.**