



**SDI Review Form 1.6**

Journal Name:	<a href="#">Asian Journal of Chemical Sciences</a>
Manuscript Number:	Ms_AJOCS_45061
Title of the Manuscript:	Heavy metal and major ionic contamination level in surface and groundwater of an urban industrialised city: a case study of Rangpur city, Bangladesh
Type of the Article	Original Research Article

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<p>The manuscript titled “Heavy metal and major ionic contamination level in surface and groundwater of an urban industrialised city: a case study of Rangpur city, Bangladesh” show a case study about heavy metal and major ionic contamination level in surface and groundwater of an urban industrialised city (Rangpur city, Bangladesh).</p> <p>The manuscript achieves the purpose defined in the abstract, it is scientifically robust and technically sound, but it is not well structured and it is not written with care. I'm convinced that the study is not innovative, but the results may be used in the future by other researchers.</p> <p>Therefore, I believe that the <b>manuscript can be accepted for publication after the following MAJOR revisions:</b></p> <p>A native English speaker should check the manuscript.</p> <p>Can authors perform some results processing? This could improve the presentation of the data obtained. For example: water quality index, SAR (Sodium Absorption Ratio) and salinity index. See:</p> <p>Debels P, Figueroa R, Urrutia R, Barra R, Niell X. Evaluation of water quality in the Chilí an River (Central Chile) using physicochemical parameters and a modified water quality index. Environmental Monitoring and Assessment 110 2005: 301–322.</p> <p>Buccolieri A, Buccolieri G, Cardellicchio N, Maci A. Underground waters quality in the Province of Lecce (Apulia, Southern Italy) Annali di Chimica 95(3-4) 2005: 227-237.</p> <p>Ramesh S, Sukumaran N, Murugesan AG, Rajan MP. An innovative approach of Drinking Water Quality Index—A case study from Southern Tamil Nadu, India. Ecological Indicators, 10(4), 2010: 857-868.</p> <p><b>Abstract.</b> Replace “Major cation chemistry showed their dominance in the order of Na &gt; Ca &gt; Mg = K and Ca &gt; Na &gt; Mg &gt; K” with “Major cation chemistry showed their dominance in the order of Na<sup>+</sup> &gt; Ca<sup>2+</sup> &gt; Mg<sup>2+</sup> = K<sup>+</sup> and Ca<sup>2+</sup> &gt; Na<sup>+</sup> &gt; Mg<sup>2+</sup> &gt; K<sup>+</sup>”.</p> <p><b>Abstract.</b> Replace “SO<sub>4</sub>” with “SO<sub>4</sub><sup>2-</sup>”.</p> <p><b>Abstract.</b> Replace “CO<sub>3</sub>, HCO<sub>3</sub> and Cl” with “CO<sub>3</sub><sup>2-</sup>, HCO<sub>3</sub><sup>-</sup> and Cl<sup>-</sup>”.</p> <p><b>Throughout the manuscript.</b> Replace “μS cm<sup>-1</sup>” with “μS□cm<sup>-1</sup>”.</p> <p><b>Throughout the manuscript.</b> Replace “mg L<sup>-1</sup>” with “mg□L<sup>-1</sup>”.</p> <p><b>Throughout the manuscript.</b> Replace “me L<sup>-1</sup>” with “meq□L<sup>-1</sup>”.</p> <p><b>Line 112.</b> The authors write “....range of 1.89 to 9.40....”. Are the authors sure of a pH of 1.89? How many times has this measure been repeated?</p> <p><b>Table 2.</b> The authors should check significant digits for mean values. For example, for EC they report a mean equal to “1191.08”. This value can be reported as “1191”.</p> <p><b>Throughout the manuscript.</b> Replace “&amp;” with “and”.</p> <p><b>Throughout the manuscript.</b> The cations Ca, Mg, K and Na must be written as Ca<sup>2+</sup>, Mg<sup>2+</sup>, K<sup>+</sup> and Na<sup>+</sup>.</p>	<ul style="list-style-type: none"> <li>Thanks for the suggestion. Yes, we have already added some parameters useful for irrigation water quality including SAR, SSP, RSC and hardness.</li> <li>Corrections already done according to the advice.</li> <li>pH of one effluent sample was 1.89 and for authenticity of the result it was checked twice at the Laboratory.</li> </ul>



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	<p><b>Throughout the manuscript.</b> The anions <math>\text{CO}_3</math>, <math>\text{HCO}_3^-</math>, <math>\text{SO}_4</math>, <math>\text{OH}^-</math>, <math>\text{PO}_4</math>, <math>\text{BO}_3</math> and <math>\text{Cl}</math> must be written as <math>\text{CO}_3^{2-}</math>, <math>\text{HCO}_3^-</math>, <math>\text{SO}_4^{2-}</math>, <math>\text{OH}^-</math>, <math>\text{PO}_4^{3-}</math>, <math>\text{BO}_3^{3-}</math> and <math>\text{Cl}^-</math>.</p> <p><b>Figure 2.</b> The cations must be written as <math>\text{Ca}^{2+}</math>, <math>\text{Mg}^{2+}</math>, <math>\text{K}^+</math> and <math>\text{Na}^+</math> and the anions must be written as <math>\text{CO}_3^{2-}</math>, <math>\text{HCO}_3^-</math>, <math>\text{SO}_4^{2-}</math>, <math>\text{PO}_4^{3-}</math>, <math>\text{BO}_3^{3-}</math> and <math>\text{Cl}^-</math>.</p> <p><b>Line 45.</b> The authors mention arsenic, but it was not determined in the work. In my opinion, it is better to eliminate arsenic from this sentence.</p> <p><b>Line 70.</b> Replace “Total twenty nine (29) surface” with “Total 29 samples, surface”.</p> <p><b>Line 194.</b> Replace “Chloride (Cl) is” with “Chloride is”. It is superfluous to write one and the other.</p> <p><b>Line 214.</b> Replace “sulphate (<math>\text{SO}_4</math>)” with “sulphate”. It is superfluous to write one and the other.</p> <p><b>Line 228.</b> Replace “borate (<math>\text{BO}_3</math>)” with “borate”. It is superfluous to write one and the other.</p> <p><b>Line 303.</b> Replace “iron (Fe)” with “iron”. It is superfluous to write one and the other.</p> <p><b>Line 336.</b> Replace “Copper (Cu)” with “Copper”. It is superfluous to write one and the other. ....etc.....</p> <p>Therefore, the authors should check these repetitions (they are excessive) throughout the manuscript.</p> <p><b>Line 379.</b> Replace “But higher content of ...” with “Higher content of ...”.</p>	
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	