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## ACCEPTED MANUSCRIPT

#### The role of antibiotics in mercury methylation in marine sediments

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#### Highlights

- > Complexation of Hg with the antibiotics resulting in the dissolution of Hg compounds from the sediment.
- > Hg ions in the sediment can also promote the degradation of antibiotics.
- > The degradation of TC/OTC radicals generates  $CH^{3+}$  groups which can react with Hg<sup>0</sup> to form MeHg.

#### Abstract

The role of antibiotics commonly used in fish culture activities in methylmercury

(MeHg) formation in mariculture sediments (MS) and in reference sediments (RS)

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