Dear Editor,

We have revised the following parts.

1.Line 1 Obtaining the correct NMHC data for ambient air in urban: comparison of NMHC data between indirect and direct methods.

2.Line 44 Therefore, there is an urgent need to ensure the quality and technical specifications of the NMHC real-time monitoring system and the reliability of NMHC real-time monitoring data. However, we evaluated whether the existing methods used for measuring NMHC were accurate and scientific.

3.Line 51 Thus, we believe that the correct NMHC value is within this range.

4.Line 66 There are three stations for environmental air real-time monitoring near Shanghai Chemical Industry Park: Zhelin, Caojing, and Shanyang.

5.Line 76 Therefore, we continued to analyze the sum of concentrations of the real-time VOC-monitoring components and the sum of VOC concentrations converted to carbon based on the number of carbon responses of different functional groups.

6.Line 94 However, there is no mature standard associated with real-time monitoring technologies used for NMHCs; thus, a standard test for assessing instrument practicability is required. The detection principles, key component types, and technical parameters of real-time monitoring instruments for NMHCs differ considerably, which causes specific difficulties in data quality control.

7.Line 161 The real-time monitoring of NMHC values is considered credible only after the consistency of the measured atmospheric NMHC concentration meets the stipulated requirement.

8.Line 200 We assumed that the measured THC concentration in the zero gas was fixed and used it as the intercept; it was subtracted from the THC concentration sample gas to obtain the correct THC concentration.

9.Line 354 In summary, 10 real-time monitoring NMHC instruments were tested, and the main problems in the experimental results were carefully analyzed by mainly focusing on the low concentration error, oxygen interference, humidity impact, and response factor.

10.Line 357 Therefore, we optimized and conducted an experimental program for the real-time monitoring of the NMHC instrument using the direct method.