REview of

Investigation of indoor and outdoor air quality at elementary schools in Hanoi, Vietnam:

- This paper investigates PM2.5, PM10, CO2, NO2, and VOCs concentration inside class rooms and in school yards at some elementary schools (ELS) of Hanoi to find the difference of indoor and outdoor air quality at elementary schools in Hanoi. The results showed the basic to assess the air quality at elementary schools both indoor and outdoor environment

New findings and update of the results: measurement of air pollutants using sensor was developed recently, this paper presented a new sensor data of PM2.5, PM10, CO2, NO2, and VOCs for indoor environment at elementary school of Hanoi

However, there are some other limitations to the current manuscript.

In general, the authors should check again the sentences throughout the paper and use of proper English grammar and construction. Many sentences were difficult to understand.

1. Introduction: The authors should make focus on the necessary of the study, emphasize on why the experiments were conducted in elementary schools in Hanoi and the purpose for this measurement

2. Methodology

- Methodology should describe more detail. There are some unclear points or lack of information in the methods such as meteorological data (wind speed, humidity..), location of indoor sampling sites (first floor? Second floor? How far from sampling sites to traffic conjunction, market and so on…, how distance between measurement sensors? more detail information in the table 1 should be added. For examples, ELS 4, 6, 7 with the same site description but with different results of indoor and outdoor air quality, and then the authors could not explain their different results clearly.

- The measurements were conducted for 1 hour but in the morning period or afternoon period, school- time or break- time? Which time period? Every sampling site should sample with the same time frame. And wind velocity is necessary to describe because it may relate to relationship between indoor and outdoor air quality

- The measurement instrument should be calibrated before sampling. The authors should add more information on sensitivity of all measurement devices.

3. Results and discussions

- Data in Fig. 1, 2, 3 were average level in one hour? The authors need to describe. And how many values were measured in 1 hour? Authors should add more static data for Fig 1-3 and time-series of data to convince the conclusions about emission sources of in door air quality

- Some explanations in this manuscript were not clear to convince the conclusions

- The emission sources inside class of elementary school are limited, not like in house, office building. However, do teachers use chalk in the class, and how many students in one classroom where sensors located? These points need to consider for contribution to indoor air pollution in elementary school.

- Conclusions should more concise and clear

- Other limitations can be seen in the manuscript in yellow text

**PHẢN BIỆN LẦN 2:**

1. Bài báo đã chỉnh sửa và giải trình tương đối đầy đủ.

2. Về cơ bản bài báo đã đáp ứng yêu cầu, "Đồng ý cho đăng bài báo" nhưng vẫn yêu cầu rà soát chỉnh sửa lại ngữ pháp, văn phong cho rõ nghĩa hơn theo như file đính kèm.

**PHẢN BIỆN LẦN 3:**

Đồng ý cho đăng bài báo