

We thank the reviewer for both his specific comments and the technical correction. Below we are address his comments in detail.

### **Specific Comments**

- We have carefully reviewed the literature and included the most relevant papers so far. While there is a large amount of papers regarding the use of high volume samplers, only a very limited number of papers concern the actual measurement and calibration procedure. We are open to include more references, but unfortunately, the reviewer does not recommend any specific papers.
- Nonetheless, we revisited the literature and found four additional sources that support the purpose of our paper. All the following papers include some discussion about the calibration procedure, however none explains the used equations in the same level of detail as we do. The following references will be included into the final manuscript to account for previous work as well as similar derivations:
  - o Lee Jr, R. E., Caldwell, J. S., & Morgan, G. B. (1972). The evaluation of methods for measuring suspended particulates in air. *Atmospheric Environment* (1967), 6(9), 593-622.
  - o Lynam, D. R., J. O. Pierce, and J. Cholak. "Calibration of the High-Volume Air Sampler." *American Industrial Hygiene Association Journal* 30.1 (1969): 83-88.
  - o ATPI 435 Atmospheric Sampling Course
  - o US EPA Appendix B of 40 CFR 50
- We agree that including a discussion regarding the effect of improperly calibrated Hi-Vol samplers would add relevance to the paper. This will be included in the finalized version.
- We believe including data is a good idea but gets away from the motivation of this paper to highlight the physics behind the calibration process. We feel that the pure calculation part is well covered in the literature – it is the background on where the equations come from that is missing. However, we will include a remark where such an example can be found (i.e. in the Tisch Environmental manuals).

### **Technical Corrections**

- Will be implemented as suggested.