

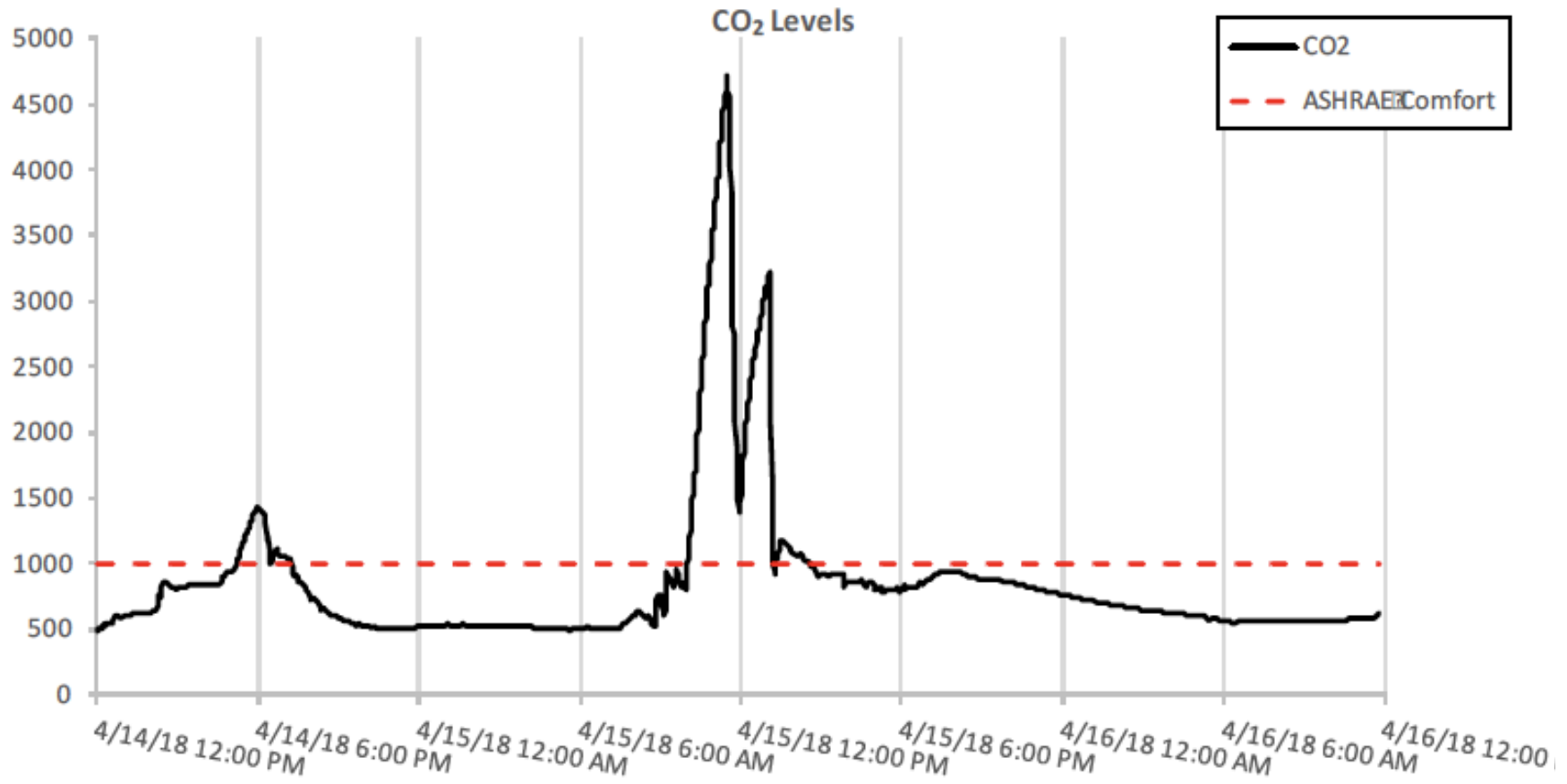
Air Quality Test Results

Business Meeting – July 8, 2018

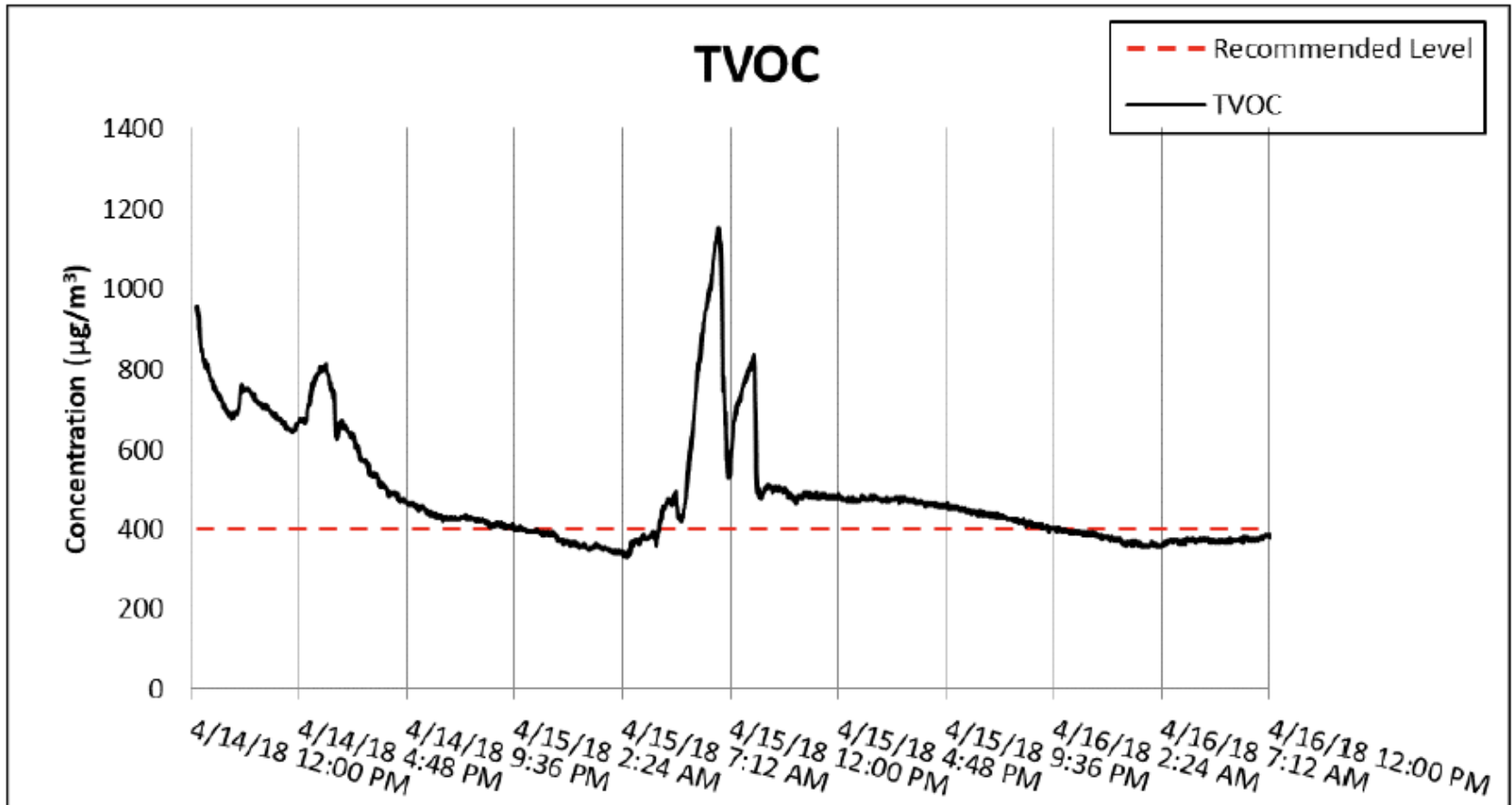
VOC Questions

- 1. Can we measure it?
- 2. Is there an identifiable problem?
- 3. Can we do anything about the identified problem?

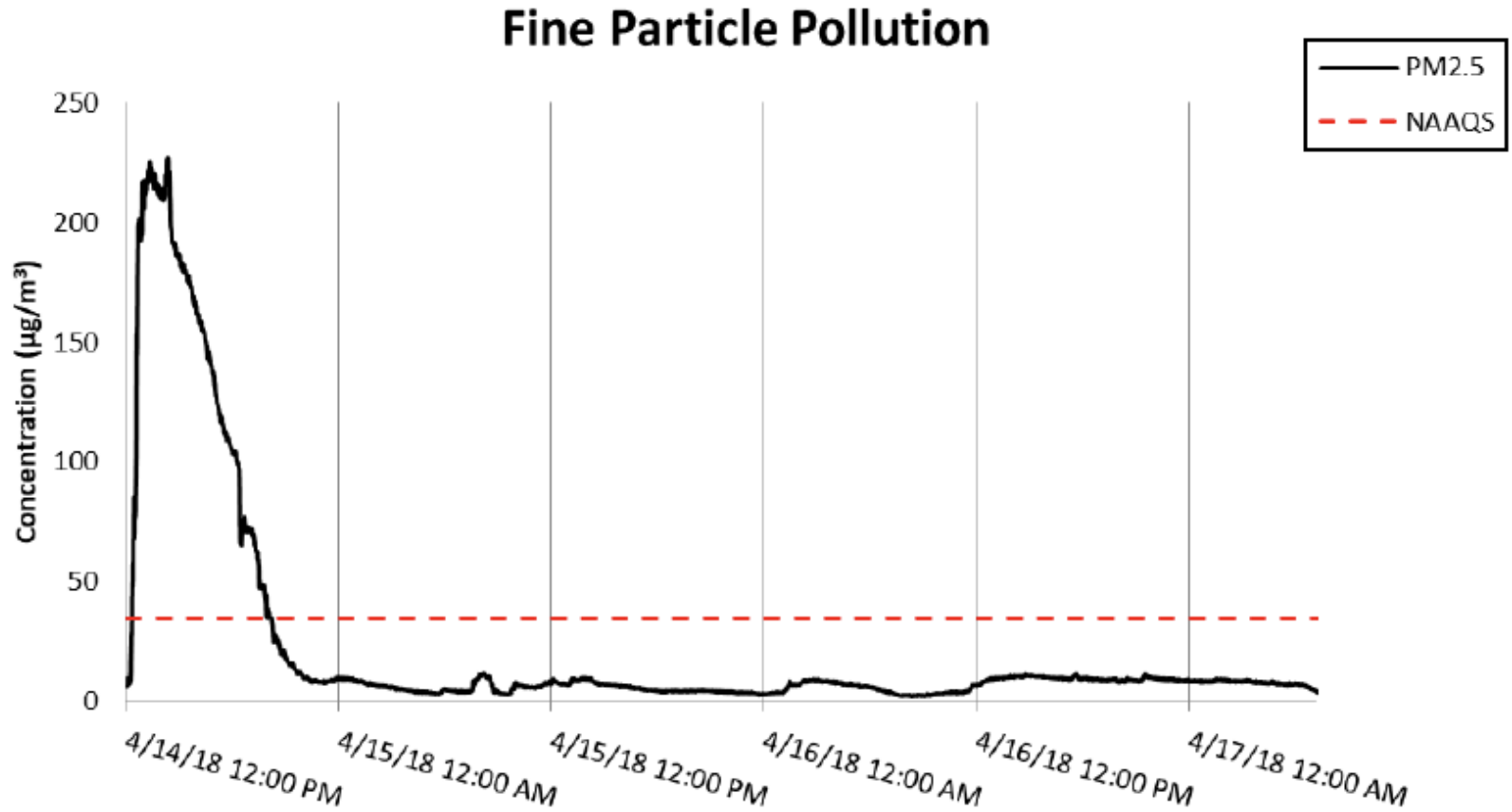
1st Test – CO₂



1st Test – TVOC



1st Test – Fine Particles



Summary of 1st Test

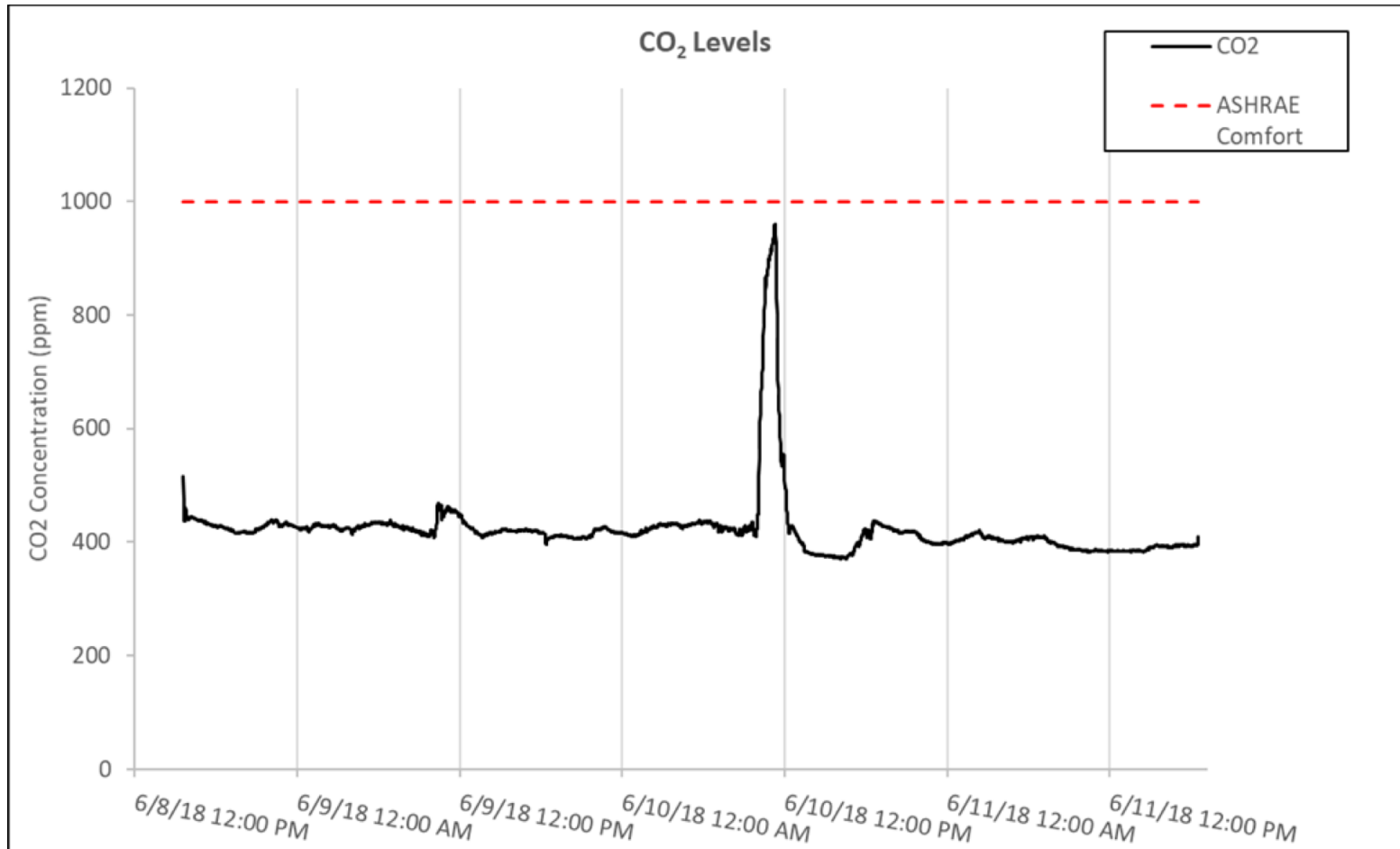
CU mechanical engineering students installed air quality monitors in the Worship hall for 3 days in April. The results of these first tests are as follows:

1. VOCs & CO₂ spiked on Sunday 4/15 during Meeting and Program Hour above the recommended levels due to human presence.
2. Fine Particles and to a lesser extent VOCs peaked on Saturday during workday on 4/14.
3. Radon testing in New Horizons failed due equipment malfunction.

Building & Grounds has taken the following steps to increase fresh air flow and mitigate VOCs & CO₂ in the Worship hall:

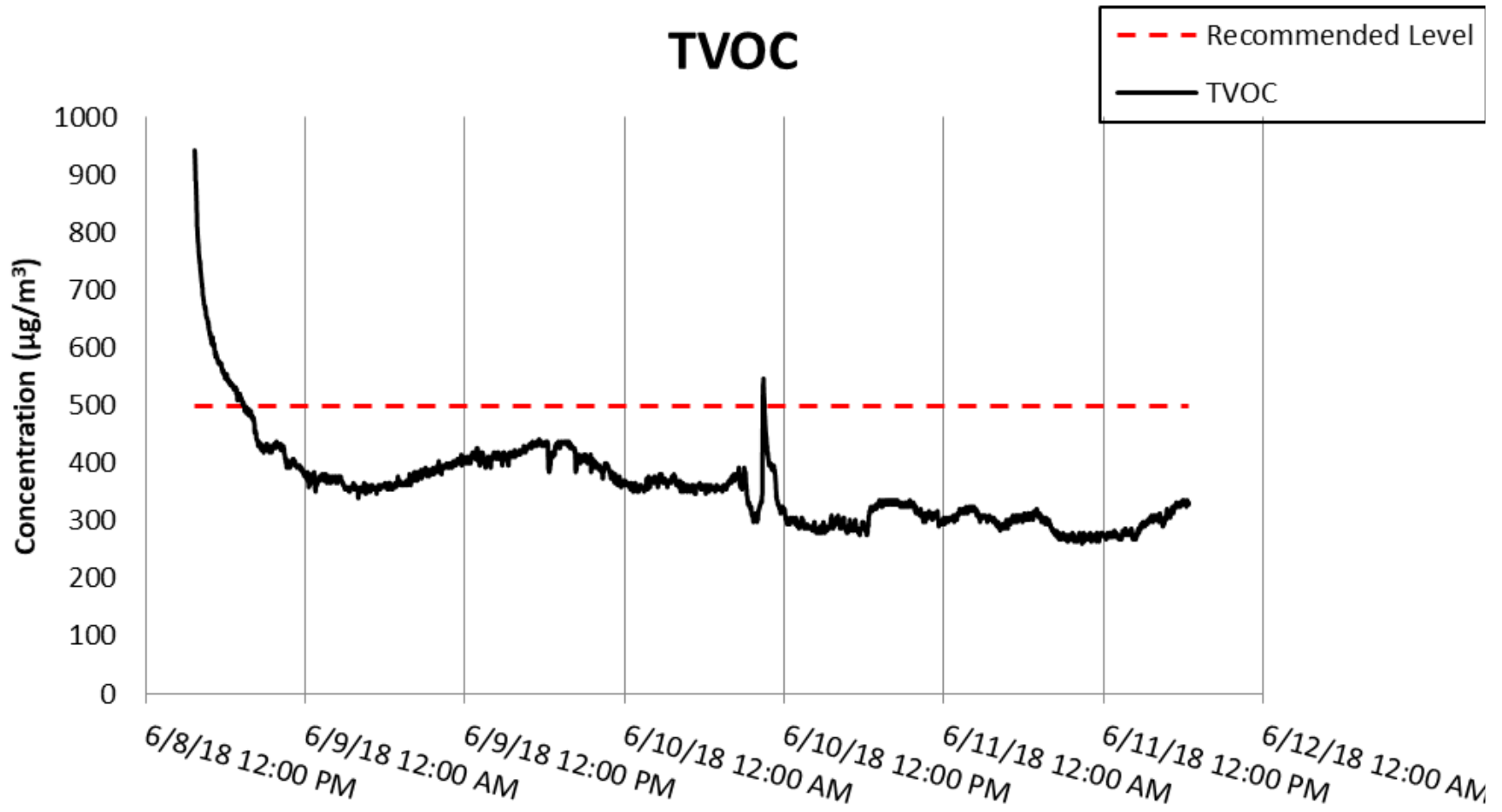
1. Changed the HVAC program to run the fan continuously on Sundays.
2. Opened the high windows during warm weather months.

2nd Test – CO₂

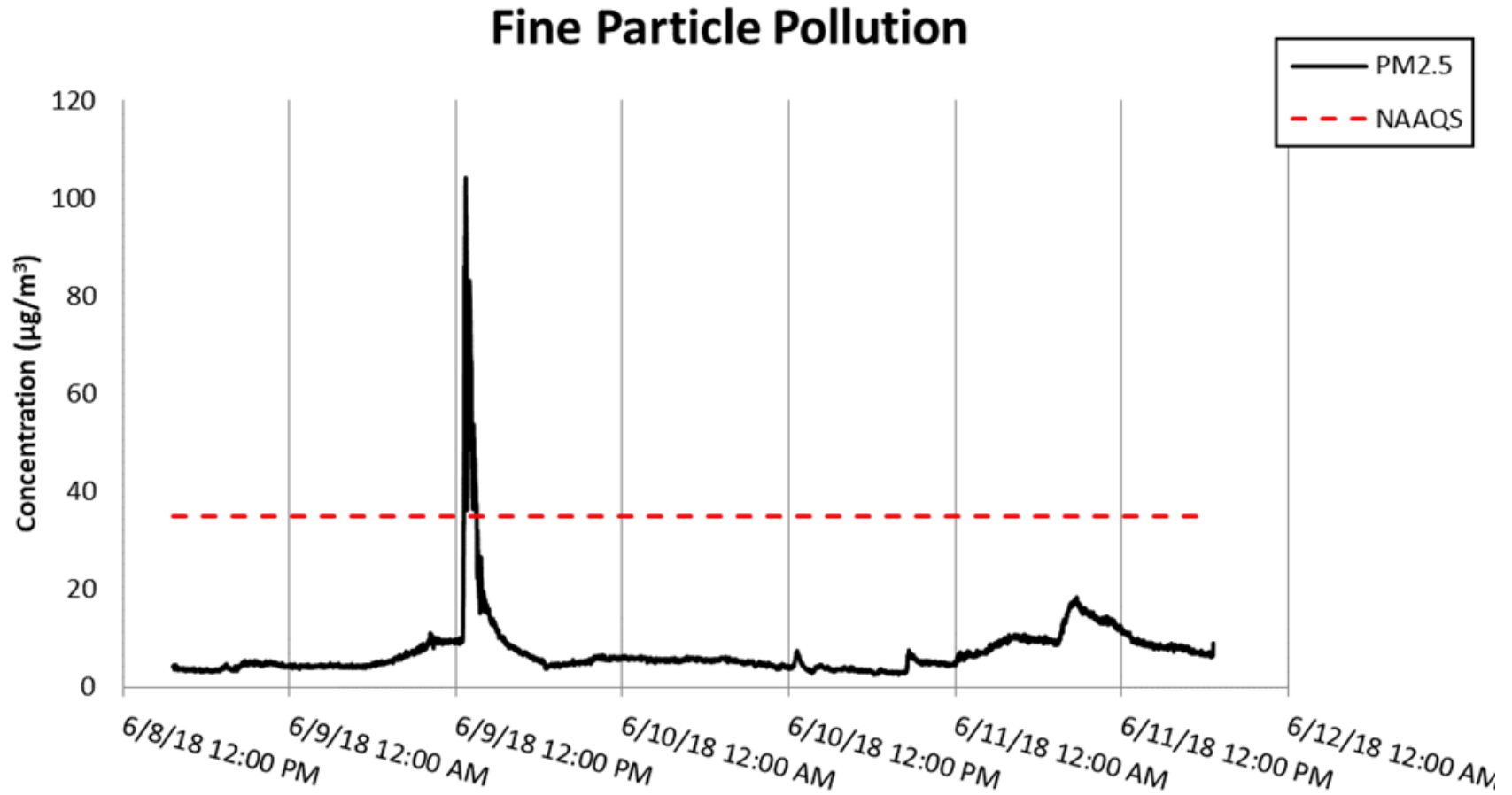


2nd Test – TVOC

TVOC



2nd Test – Fine Particles



Summary of 2nd Test

The CU engineers retested for 3 days in June. The results of these tests are as follows:

1. VOCs & CO₂ spiked on Sunday 6/10 during Meeting at a significantly reduced levels, below the recommended levels. There was no program hour.
2. Fine Particles peaked on Saturday a few minutes after noon when the Quilting group would have heated up their lunch.
3. Radon testing showed an average of 2.1 pCi/L, below the recommended value of 4 pCi/L.

Note: The TVOC monitor starts with a peak that diminishes as it warms up.