

Citizen Notes and Comments for the SCAQMD Rule 1180 and 1180.1
Public Hearing of 5 January 2024, starting at 9 AM

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Note 1: The SCAQMD Staff Presentation for their 12 October 2023 Working Group Meeting #5 (45 pages) has added the requirement (p. 25 of 45) for 'Real-Time Monitoring of PAHs' after an SCAQMD Executive Officer provides written notice that 'Real-Time Monitoring of PAHs' is feasible. Citizen appreciates this addition to the Rule 1180 / Rule 1180.1 requirements on this important issue.

Note 2: Citizen notes that Rule 1180 and 1180.1 allow for both 'Real-Time Monitoring' and 'Near-Real-Time Monitoring' as acceptable practice. Citizen therefore requests and requires that the PAH requirement be amended to create the updated requirement that PAH Monitoring shall commence after an SCAQMD Executive Officer provides written notice that 'Real-Time or Near-Real-Time Monitoring of PAHs' is feasible.

Note 3: It is Citizen's understanding that 'Real-Time or Near-Real-Time-Monitoring' is already considered feasible by the SCAQMD for either Black Carbon, or PM-2.5 particulate matter. If either are presently not yet considered feasible by the SCAQMD, these additional requirements should be incorporated into the present Rule 1180 and Rule 110.1, in order to be properly protective of the Public Health and Safety:

(3a) 'Real-Time or Near-Real-Time Monitoring of PM-2.5' shall commence after an SCAQMD Executive Officer provides written notice that 'Real-Time or Near-Real-Time Monitoring of PM-2.5' is feasible.

(3b) 'Real-Time or Near-Real-Time Monitoring of Black Carbon' shall commence after an SCAQMD Executive Officer provides written notice that 'Real-Time or Near-Real-Time Monitoring of Black Carbon' is feasible.

Note 4: It is Citizen's understanding that the present-day SCAQMD Planning for MATES-VI includes simultaneous monitoring at various sites and at various times for: (4a) [PAH] amounts, (4b) [Black Carbon] amounts, and (4c) [PM-2.5]. This simultaneous and co-located measurements of (4a)-(4c) provide a unique opportunity for the SCAQMD to **develop** an ongoing calibration for PAH's where:

$$[\text{PAH}] = \mathbf{A}_{\text{PAH}} * [\text{Black Carbon}] + \mathbf{B}_{\text{PAH}} * [\text{PM-2.5}]$$

where those calculated $\{\mathbf{A}_{\text{PAH}}\}$ and $\{\mathbf{B}_{\text{PAH}}\}$ themselves can be intermittently updated as the MATES-VI progresses, essentially making $\{\mathbf{A}_{\text{PAH}}(t); \mathbf{B}_{\text{PAH}}(t)\}$, where '(t)' is time. These data can then be used, along with (3a) and (3b) above, to construct a 'Real-Time or Near-Real-Time Metric for PAHs'. For accuracy, these mean calculated [PAH] values, and their 60% Confidence Intervals (60% C.I.), which is a standard widely-used statistic metric for variance; to thereby resulting in a robust PAH bound. This coordination between the SCAQMD Rule 1180 and 1180.1 Teams and the SCAQMD MATES-VI Teams should enable this 'Real-Time or Near-Real-Time Metric for PAHs' to function as a 'Real-Time or Near-Real-Time Monitoring of PAHs', which would allow the SCAQMD Executive Officer provides written notice that 'Real-Time Monitoring of PAHs' is now feasible.

Note 5: The SCAQMD Staff Report of December 2023 notes in Table 2-5, on page 2-16, that:

Table 2-5: Real-Time Fenceline Air Monitoring Technologies Used by Rule 1180 Facilities
Black Carbon (BC), Monitoring Technology: Aethalometer,

while PAR-1180, page 22, Table 1, notes for Total VOCs, Black Carbon (BC), and PM-2.5 (PM) that:

Health Standard-Based Notification Threshold: [VOCs: N/A], [BC: N/A], [PM-2.5: 35 ug/m³]
Information-Based Notification Threshold: [VOCs: 730 ppb], [BC: N/A], [PM-2.5: N/A]

It is clear that an Information-Based Notification Threshold is allowed for BC even if the Health Standard Based data are not available. This BC-value should be set by the SCAQMD in PAR-1180.

The SCAQMD Staff Report noted on page 2-22 that: *“Facilities reported quarterly average of black carbon hourly concentrations and quarterly maximum of black carbon hourly concentrations. Staff initially considered using that data to establish an information-based notification threshold for black carbon. Considering black carbon is included as part of the PM2.5 measurements, for which health standard-based notification thresholds are established, staff will not include an information-based notification threshold for black carbon.”* This is terrible. They could do it, but they don't want to because it is: *“included as part of the PM2.5 measurements”* and as a result Public Health and Safety is compromised because PM-2.5 has an “N/A” for *information-based notification thresholds*. Thus, the SCAQMD needs to either: *establish an information-based notification threshold for Black Carbon -or- establish an information-based notification threshold for PM-2.5*, as a substitute.

Note 6: The SCAQMD Staff Report of December 2023 notes on page 2-16: *“PAHs are not in the top ten routine and non-routine chemical pollutants emitted by California refineries.”* Its ambiguity is in whether 'top ten' means 'top ten in total quantity', or 'top ten in Public Health and Safety Risk'. Even if it were supposed to mean 'top ten in Public Health and Safety Risk', one must also consider the possibility of non-routine Catastrophes. The PAR-1180 should be clarified regarding this point. In either case, whether PAH's are in the 'top ten' or not, it does not relieve the SCAQMD of the necessity of developing improved PAH monitoring and evaluation metrics. If one were to use the 'top ten' argument in its extreme version, there would never be a need, according to that philosophy, to measure anything more than maybe 10 or so pollutants, which clearly shows using this 'top ten' argument improperly risks Public Health and Safety.

Note 7: Early in this round of Rule 1180 and 1180.1 development, the SCAQMD Staff noted that the minimum requirement was to Report results of and SCAQMD assessment to the Stationary Source Committee once every five calendar years. Citizen noted that 5 years is a long time to ignore technology, and Citizen got a verbal commitment that the SCAQMD Staff would Report SCAQMD assessments regarding PAH's to the Stationary Source Committee once every year. This enhanced scrutiny for PAH's should captured as a formal going forward SCAQMD Staff requirement; instead of the page 2-19 note that *“Staff will continue to monitor and assess the development of real-time air monitoring technologies for PAHs and report the results of the assessment to the Stationary Source Committee every five calendar years.”*

END OF CITIZEN NOTES AND COMMENTS