Citizen Notes and Comments on Rule 1180 and 1180.1 for 12 October SCAQMD Working-Group Meeting #5

Submitted on 11 October 2023 for the SCAQMD Working Group Meeting #5 on Rule 1180 Expansion by Dr. Genghmun Eng ("Citizen"), 5215 Lenore Street, Torrance, CA 90503

- **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 previously highlighted ('Further Notes and Concerns Regarding Facility PAH Emissions: Note 1, Submitted 11 July 2023') the SCAQMD Staff noted in their Working Group Meeting #1 that their present rules and procedures require updating their Board on technology progress once every 5 years. Citizen noted back then that, for Public Health and Safety, progress and updates on PAH assessment should be done more often, and SCAQMD Staff verbally agreed to do a yearly PAH update assessment to their Board. This SCAQMD commitment should be explicitly captured in these Working-Groups Meeting charts. This yearly update to the SCAQMD Board by the SCAQMD Staff becomes even more important, to document progress, or lack of it, towards 'Real-Time Monitoring of PAH's', given the requirements for the SCAQMD Executive Officer to evaluate its feasibility.
- **Note 3:** On p. 33 of 45, 'Root Cause Analysis', the flowchart box labeled "Root Cause is an off-site source?" would probably be better labeled as "Is Root Cause believed to be an off-site source?", as root-cause analysis often requires many steps to achieve reasonable certainty on a Primary Root Cause, as being the most likely one of many alternatives considered. Pathways for 'Yes' and 'No' should also be labeled in the final archived form for this SCAQMD Presentation page.
- **Note 4:** Regarding 'Root Cause Analysis' (p. 33 of 45); A 'Fishbone Diagram' identifying potential Root-causes, and how their likelihoods were amplified or reduced during the Root-cause Analysis phase, is an important standard 1-page Root Cause Analysis Summary Tool. It's inclusion should be required for any and all Root Cause Analysis reporting, both as part of the historical record, and as an efficient guide to helping determine the most likely Root-cause in an efficient manner.
- **Note 5:** Regarding 'Text Notifications' (p. 27 of 45), Citizen favors the Short-Messaging-Service (SMS) format with its 160-character limit. This should be done as an adjunct to the exemplary long-form email that is illustrated. Citizen further notes that a lot of the long-form email shown is dedicated to presenting historical and administrative information, a lot of which may be unnecessary for inclusion in an SMS. Citizen believes that highlighting threshold exceedances is more valuable and impactful in the shorted SMS format, compared to using a Multimedia Messaging Service (MMS) format which can result in messages 10X longer, risking the messages not being read.
- **Note 6:** Citizen agrees it is a good idea to have both a SMS Threshold-Exceedance Message (TEM), as well as a follow-on SMS Now-Below-Threshold (NBT) Message. Both message types do not need to include the exact same information. Having a unique identification number for both TEM and NBT messages is a good idea. The simplest would be something like: 'N9270120C' where "N" indicates it is a notification indexer; 'C' indicates year 2023; '9' indicates month (with 'A', 'B', 'C' for October, November, or December); '27' indicated day-of-month; and '0120' is the hours and minutes on a 24-hour clock). High noon Christmas Day 2023 would then be 'NC251200C'.
- **Note 7:** For the TEM, instead of having a 'Link to OEHHA Air Chemical Data Base', where someone would have to go look that up, Citizen suggests putting in the actual CAS Number for the chemical. It will help people receiving the text message to better manage what their needed responses should be. For the NBT, the CAS Number is not needed, as NBT's represent a return to normalcy.

Note 8: Citizen proposes these <160 character TEM and NBT message formats. Example here is based on the same representative situation used in the SCAQMD Presentation (p. 27 of 45):

PROPOSED MODIFED INFORMATIONAL TEXT

Valero Wilmington Refinery (C2-East Sensors) shows 30.5 ppb Hydrogen Sulfide (CAS-7783064), 9-27-2023, 1:20:00AM WilmingtonRefineryMonitoring.org N9270120C (153 char.)

Valero Wilmington Refinery (C2-East Sensors) below 30.0 ppb Hydrogen Sulfide Threshold, 9-27-2023, 2:30:00AM WilmingtonRefineryMonitoring.org N9270230C (149 char.)

Inclusion of a link to the TEM and NBT source then allows the message receiver to efficiently find out any additional information that they need. Also, having the 'Notification Threshold' is unnecessary, because every TEM message is already an exceedance. Even if the first message were a high multiple of the 'Notification Threshold', knowing the actual value is a lot more important than knowing the 'Notification Threshold', since that is an administrative action threshold, and the existence of the notice itself already communicates that something is not normal. Finally, since most TEM and NBT messages are not expected to be reporting a full-scale disaster, the above proposed NBT message has the threshold value built into it, making that data available to all message receivers.

Note 9: After the first TEM message is sent out, what happens if the situation gets worse or better with time? Citizen suggests the following thresholds for TEM messages, until an NBT level is reached:

TEM Message #2: When Threshold-Exceedance goes 40.0% or more of TEM Message #1

.OR. When Threshold-Exceedance goes below 30.0% or more of TEM Message #1

These levels are carefully selected, so that two successive 40% increases (1.4)x(1.4) = 1.96 corresponds to a near doubling of the TEM levels, while two successive 30% decreases (0.7)x(0.7) = 0.49 corresponds to a reduction by nearly 1/2 of the TEM levels.

END OF CITIZEN NOTES AND COMMENTS