Bridget McCann
Manager, Technical and Regulatory Affairs

August 14, 2019

Michael Krause
Manager, Planning and Rules
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Via e-mail at: mkrause@aqmd.gov

Re: SCAQMD Proposed Rule 1109.1 Working Group Meeting #8 Comments Establishing Baseline Emissions to Calculate Emission Reductions and Cost Effectiveness for Refinery Sector Equipment

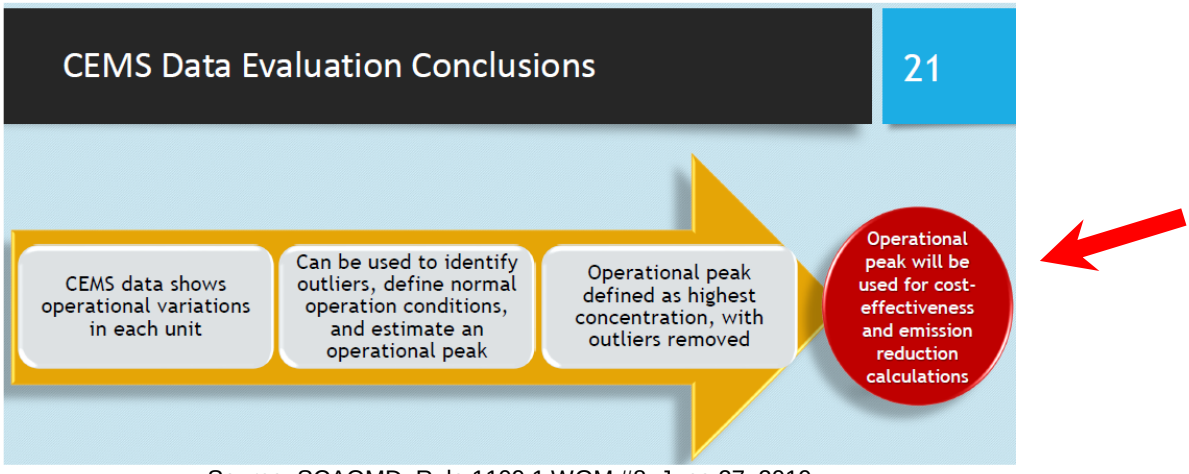
Dear Mr. Krause,

Western States Petroleum Association (WSPA) appreciates the opportunity to participate in South Coast Air Quality Management District (SCAQMD or District) Proposed Rule 1109.1, NOx Emission Reduction for Refinery Equipment (PR1109.1), Working Group Meetings (WGMs). As the District has stated, this proposed rulemaking is part of the District's larger project to transition facilities in the Regional Clean Air Incentives Market (RECLAIM) program to a command-and-control structure (i.e., the "RECLAIM Transition Project"). WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in five western states including California. WSPA has been an active participant in air quality planning issues for over 30 years. WSPA-member companies operate petroleum refineries and other facilities in the South Coast Air Basin that are within the purview of the RECLAIM Program administered by the SCAQMD and will be impacted by PR1109.1.

WSPA recently participated in WGM #8 for PR1109.1. At this meeting, District staff proposed that: "Operational peak (emissions) will be used for cost effectiveness and emissions reduction calculations."[1] This was presented in the WGM slide excerpted below.

As described to the Working Group, this proposed approach would use a calculated "Operational Peak" emissions level (i.e., pollutant concentrations) to establish a pre-Rule 1109.1 emissions baseline for each piece of refinery equipment. The Operational Peak baseline would then serve as the basis for estimating (potential) emissions reductions from Best Available Retrofit Control Technology (BARCT) levels under PR1109.1.

[1] SCAQMD, Rule 1109.1 WGM #8, June 27, 2019, Slide 21.



Source: SCAQMD, Rule 1109.1 WGM #8, June 27, 2019

As commented by WSPA and other stakeholders at the Working Group meeting, we believe this proposal is inappropriate for several important reasons.

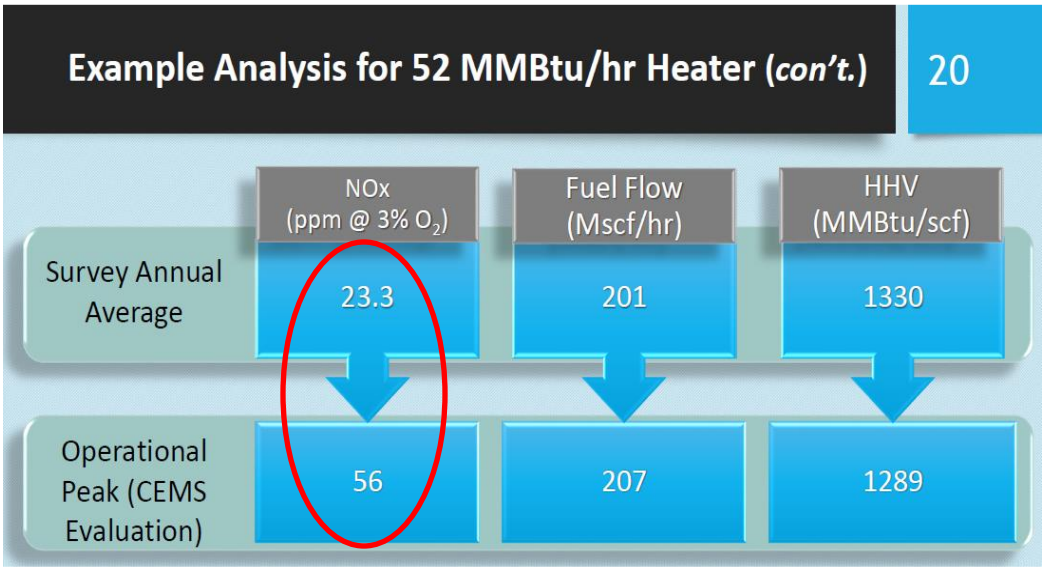
1. Use of an Operational Peak baseline would cause a gross overstatement of emission reductions associated with PR1109.1.

The District presented an example analysis at WGM #8 which clearly demonstrated that using the Operational Peak method would significantly overstate the baseline emissions and cause a similarly significant overstatement of projected BARCT emissions reductions. This overstatement is clearly known because much of the refinery equipment subject to this rule is required to continuously monitor emissions with Continuous Emissions Monitoring Systems (CEMS), and all of these equipment are required to report NO_X emissions pursuant to District Rule 2012, Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_X) Emissions.

In the District's example (summarized on the below slide), the District assigned an Operational Peak value of 56 ppm for a refinery heater based on review of 1-hr average NO_X CEMS data obtained from a facility (all concentrations corrected to 3% O_2). That value, while indicative of peak short-term concentrations, is significantly higher than the reported annual average NOx emissions concentration of 23.3 ppm.[2]

The Operational Peak approach would overstate baseline emissions in this example by more than 100 percent when compared to the actual reported annual emissions. While we do not currently have sufficient information to know whether baseline emissions for hundreds of other equipment subject to PR1109.1 would be overstated to that exact degree, we certainly know that a baseline emissions estimate using the Operational Peak approach will also be overstated relative to the actual annual emissions.

[2] SCAQMD, Rule 1109.1 WGM #8, June 27, 2019, Slide 22.



Source: SCAQMD, Rule 1109.1 WGM #8, June 27, 2019

2. Use of an Operational Peak baseline for refinery equipment (instead of reported actual emissions) disregards the federally-enforceable aggregate NO_X emissions cap applicable to RECLAIM program facilities.

While the Operational Peak approach may provide a reasonable approximation of short-term potential to emit during "normal" operations, it completely fails to account for the RECLAIM program's federally-enforceable cap on aggregate RECLAIM NO_X emissions. According to the District, refinery sector NO_X emissions under RECLAIM have ranged between 11 and 12 tons per day (TPD) in recent years.[3] Inflating these actual emissions by ~100% would result in an emissions baseline greater than the reported emissions for the entire RECLAIM program.[4]

3. Use of an Operational Peak baseline appears to violate United States Environmental Protection Agency (USEPA) regulations and policy.

The Clean Air Act and implementing USEPA regulations at 40 CFR Part 51 contain legally binding requirements concerning requirements for the preparation of State Implementation Plans (SIPs) and rules thereunder. These include specific requirements for determining the creditability of emissions reductions for stationary source permitting/offsetting and SIP accounting purposes.[5]

[3] Refinery sector NOx emissions reported at 11.5 TPD (2011) in the 2015 Draft Final Staff Report for Proposed Amendments to Regulation XX Regional Clean Air Incentives Market (RECLAIM) NOx RECLAIM (Dec 4, 2015). More recently, the District reported 11.3 TPD for refinery sector NOx emissions at the Proposed Rule 1109.1 Working Group Meeting #1 (Feb 21, 2018, slide 8).

[4] According SCAQMD Annual RECLAIM Audit Report for 2017 Compliance Year, overall NOx RECLAIM program emissions were between 19.9 TPD and 21.1 TPD between the 2011-2017 compliance years. See Table 3-1.

[5] USEPA guidance on this topic is available at https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/facility-based-mobile-source-measures/sip-credit-guidance.

For major stationary sources, the topic of creditability has been addressed by USEPA under the Emission Offset Interpretative Ruling [6] which generally defines baseline emissions as "the average rate, in tons per year, at which the emissions unit actually emitted the pollutant …."[7] [emphasis added] Such baseline emission values are prohibited from exceeding emission limits with which the major stationary source was required to comply.[8]

As noted above, the Operational Peak approach would knowingly overstate the baseline emissions for individual equipment (as compared to reported actual emissions) and would completely disregard the fact that RECLAIM facilities in the aggregate are subject to a federally-enforceable cap on NO_X emissions pursuant District Rule 2002. This would seem to directly conflict with the Emission Offset Interpretative Ruling. For individual permitted equipment, the Operational Peak approach would also conflict with the District's requirements for emission reduction crediting. Pursuant to Rule 1309, all stationary and mobile source emission reductions must be real, quantifiable, permanent, and federally enforceable.[9]

For purposes of SIP accounting, USEPA generally requires a baseline emissions inventory from the most recent calendar year unless the State (or sub-State agency) demonstrates why an alternative inventory is appropriate.[10] The District has accounted for the RECLAIM program in the most recent SIP emissions inventories (found in the Air Quality Management Plan) based on aggregate NO_X RECLAIM emissions cap. This was consistent with USEPA policy for SIP accounting of market-based programs. As noted above, the Operational Peak approach causes an overstatement of baseline emissions for individual equipment (as compared to their actual reported emissions) and would completely disregard the federally-enforceable cap on aggregate NO_X RECLAIM emissions. Quite simply, the Operational Peak approach is incompatible with USEPA requirements for SIP accounting.

The Operational Peak approach also appears incompatible with USEPA requirements for quantifying control measure reductions. In order to obtain SIP credit, emission reductions must be shown to be permanent, enforceable, quantifiable, and surplus as those terms are defined by USEPA.[11] By overstating emissions from individual equipment and completely ignoring the federally-enforceable cap on NO_X RECLAIM emissions, the Operational Peak approach would cause an overstatement of the emissions reductions even possible under PR1109.1.

4. Operational Peak values may be useful for calculating baseline Potential to Emit (PTE) for equipment, but PTE cannot be used to calculate the quantity of creditable emissions reductions.

We appreciate that the District is doing the Operational Peak analysis, as this analysis is both useful and informative for understanding the range of short-term emission levels which occur for individual refinery equipment which will be subject to PR1109.1. This information can also inform calculated PTE levels for equipment without a permitted PTE limit. However, the Operational Peak analysis, and PTE values derived therefrom, are simply not appropriate for calculating long-term (i.e., annual) baseline emission levels for the reasons outlined above. For individual

[6] 40 CFR Part 51, Appendix S - Emission Offset Interpretative Ruling.
[7] 40 CFR Part 51, Section II.30.ii Baseline actual emissions.
[8] 40 CFR Part 51, Sections II.30.ii.b. and II.30.ii.c.
[9] SCAQMD R1309(b)(4) - Emission Reduction Eligibility Requirements.
[10] 40 CFR § 51.1110((b) - Baseline emissions inventory for RFP plans.
[11] 40 CFR § 51.1110((a)(5) - Creditability of emission control measures for RFP plans.

equipment, emission reductions are not creditable if they exceed the amount of actual emissions (known from reported values). Nor would they be creditable if the aggregate reductions exceeded RECLAIM's federally-enforceable cap on NO_X emissions. The Operational Peak approach would fail both of these tests. Similarly, the Operational Peak analysis is not an appropriate baseline for calculating cost effectiveness.

We recommend that the District rely on the annual average NO_X emissions data which was submitted by the facilities in order to characterize baseline emissions. These reported annual emissions levels are representative of the NO_X emissions which actually occurred during the baseline period. These data, in the aggregate, are also reflective of the effective market limitations imposed on the program by the NO_X RECLAIM cap.

WSPA appreciates the opportunity to provide these comments related to PR1109.1. We look forward to continued discussion of this important rulemaking. If you have any questions, please contact me at (310) 808-2146 or via e-mail at bridget@wspa.org.

Sincerely,

Cc: Wayne Nastri
Dr. Philip Fine
Susan Nakamura
Tom Umenhofer
Patty Senecal