



California Council for Environmental and Economic Balance

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June 26, 2017

Mr. Alexander “Sandy” Crockett
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Submitted electronically via acrockett@baaqmd.gov

RE: Proposed 2017 Amendments New Source Review – Rules 2-1, 2-2, and 2-6.

Dear Mr. Crockett,

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we submit the following comments on proposed amendments to Regulation 2, Rules 1, 2, and 6 (Rules 2-1, 2-2, and 2-6, respectively). CCEEB represents many facilities and businesses that operate in the Bay Area Air Quality Management District (District or BAAQMD) that would be subject to these amended rules.

Our high-level concerns are as follows:

- **Any significant crude slate change is already regulated in NSR permitting** – Any refinery that seeks to significantly modify its crude slate is already subject to all applicable NSR permitting requirements and emission limits established by a permit to operate. A modification of equipment resulting from crude slate changes would trigger NSR and any emissions increase above permitted limits would incur a violation. CCEEB believes that the proposed amendments to Rule 2-1 are redundant, at best, but more problematically, likely conflict with existing permits.
- **Crude slate attributes not correlated to air quality, insufficient definition of “significant change,” and unclear authority to regulate** – The crude slate attribute of metals (iron, nickel and vanadium content, ppm by weight) proposed by District staff is unrelated to changes in air emissions. CCEEB wishes to work with District staff to improve this definition, as well as that of “significant change,” or at least understand how staff intends to use this information. Additionally, CCEEB is unsure of what authority the District uses to regulate crude slate inputs absent changes to equipment and operations.

- **Timing for approval of crude slate changes does not match real-world processing of crude slate, and NSR appears to be triggered after the event** – Given the economic and practical implications of crude slate purchasing for facilities, CCEEB is seeking clarity around the process for crude slate reviews. Additionally, since NSR is a “pre-construction permitting requirement,” we note and question that the review process proposed in amendments to Rule 2-1 appears to occur after processing, i.e., ex post rather than ex ante, and, as such, seems to be an inappropriate application of NSR.
- **Incomplete rationale for reduced GHG BACT threshold; need additional examples of GHG BACT** – The lowering of the GHG BACT applicability threshold to 25,000 tons per year (tpy) CO₂e from 75,000 tpy CO₂e is a significant change in the District’s NSR program with limited rationale provided by staff. Additionally, given that GHG BACT is technology forcing, CCEEB seeks further examples of current GHG BACT.

Changes at facilities are currently captured by NSR and permitted emission limits

The proposed amendments to Rule 2-1 are based upon, “a concern [...] that refineries may be changing their crude slate in a way that constitutes a ‘modification,’” that result in increased emissions missed by NSR permitting.¹ However, CCEEB has not seen evidence of this problem, nor has staff offered concrete examples to substantiate this concern.

The District’s NSR program applies to stationary sources “whenever a facility wants to install a new source of air emissions or make a modification to an existing source” and is a “pre-construction permitting requirement.”² While the intent of the proposed amendments to Rule 2-1 are to capture crude slate changes, District staff has previously stated that “refineries would likely need to make changes to their facilities to accommodate different sources of crude oil with different compositions” and that “[i]t is anticipated that refineries will update and/or modify their equipment to meet stricter regulatory [...] requirements and [...] process crude oil from different sources.” Any change to a refinery’s crude slate would result in an equipment modification that would trigger NSR permitting requirements.

Changes at a facility that do not trigger NSR, but result in increased emissions, would encounter limits set by a permit to operate (title V). Thus, if a crude slate did not trigger NSR permitting requirements but increased emissions, it would be restricted by a facility’s permit to operate or else subject to potential violations and penalties. For these reasons, and consistent with staff analysis, we believe the District’s concern that crude slate changes outside of NSR and tile V will increase emissions is unfounded.

¹ BAAQMD Workshop Report for Proposed Revisions to: Regulation 2, Rule 1 (Permits – General Requirements) Regulation 2, Rule 2 (Permits – New Source Review) and Regulation 2, Rule 6 (permits – Major Facility Review), May 2017, p.1.

² Ibid

Principal attributes of crude slate, authority to regulate, and significant change,

Crude slate attributes need to have a clear relationship to changes in emissions

The proposed amendments to Rule 2-1 are meant to address District staff concerns that moving to new crude slates may result in increased emission.³ Subsection 2-1-243.5 lists five attributes to consider as part of the definition of “significant crude slate change”⁴ including metal content (ppm by weigh) for iron, nickel, and vanadium. CCEEB does not believe this attribute is correlated to emissions, and asks that it be removed from the definition, as it is irrelevant.

Unclear authority to regulate

Under the California Health and Safety Code Section 40001(c), “[p]rior to adopting any rule or regulation to reduce criteria pollutants, a[n] [air] district shall determine that there is a problem that the proposed rule or regulation will alleviate and that the rule or regulation will promote the attainment or maintenance of state or federal ambient air quality standards.” The proposed amendments to Rule 2-1 do not meet this standard in two ways. First, no existing air quality problem is clearly defined by the District, only a concern that emissions may increase with no evidence presented as justification.⁵ Second, given the existing NSR permitting regulations and permit to operate emission limits mentioned above, the proposed amendments appear to be unnecessary.

Significant crude slate change

Rule 2-1 defines a significant crude slate change as one that is greater than three standard deviations from the mean of each principal attribute, established over a four-year historical baseline.⁶ Staff justifies this definition “because this is the standard approach in statistics for differentiating [...] what constitutes a significant change.” CCEEB believes this is inadequate, and that the definition must include a demonstration that emissions will actually change significantly. Again, CCEEB asks the District to clarify, as required by H.&S.C. Section 40001(c), what present air quality problem is being address under the proposed NSR changes.

Concerns regarding the timing of District review and approval of crude slate changes

General process and approval not matching real world conditions

In the simplest of terms, a business operates by taking a material (input), applying some process to alter it (production), and turning into something new (output). For refineries,

³ BAAQMD Workshop Report for Proposed Revisions to: Regulation 2, Rule 1 (Permits – General Requirements) Regulation 2, Rule 2 (Permits – New Source Review) and Regulation 2, Rule 6 (permits – Major Facility Review), May 2017, p.1.

⁴ Ibid, p.12. The five principal attributes are defined in Rule 2-1-243.1-5 as API gravity; sulfur content (percent by weight); vapor pressure; benzene, toluene, ethylbenzene, and xylene content (percent by volume); and iron, nickel and vanadium content (ppm by weight).

⁵ BAAQMD Workshop Report for Proposed Revisions to: Regulation 2, Rule 1 (Permits – General Requirements) Regulation 2, Rule 2 (Permits – New Source Review) and Regulation 2, Rule 6 (permits – Major Facility Review), May 2017, p.1.

⁶ Ibid, p.13. “If the average monthly value of the crude oil that the refinery processes deviates from the mean [of each principal attribute established over a four-year historical baseline period of 2013-2016] by more than three standard deviations, then this will constitute a ‘significant crude slate change’.”

this input is the crude slate that is processed. Crude slates are the central economic investment, with purchasing decisions occurring weeks, if not months, before the actual crude arrives. CCEEB has concerns regarding the responsiveness and methodology of District staff for reviewing and approving crude slate information. While we respect and understand that Staff work as efficiently and quickly as possible, the design of the proposed amendments to Rule 2-1 seem not to be aligned to the real-world purchasing and processing of crude slates.

NSR permitting ex post

The District's NSR permitting program is focused on new or modified sources, *ex ante*. But the proposed amendments to Rule 2-1 apply to crude slate changes that occur after the event, *ex post*. As described in Rule 2-1-243, staff would use crude slate values "averaged over the calendar month during which processing occurs." Once the facility reports the data, and after the processing has occurred, the District would then evaluate and determine if any significant change has occurred, *ex post*. The applicability of *ex post* permitting appears to contradict, the "pre-construction permitting requirement" intent of NSR (*ex ante*), and seems to be an inappropriate application of Regulation 2.⁷

Rationale for reduced GHG BACT threshold and examples of technology

Rationale for lowering GHG BACT applicability threshold

Lowering the GHG BACT applicability threshold in Rule 2-2 to 25,000 tpy CO₂e from 75,000 tpy CO₂e is a significant change in the District's NSR program. CCEEB wishes to further understand the basis for selecting 25,000 tpy CO₂e as the emissions threshold at which a facility would be subject to BACT.

Examples of GHG BACT technology

CCEEB also asks staff to provide additional examples of BACT. At the June 12, 2017 workshop, staff stated the proposed amendments to Rule 2-2 are expected to be "technology forcing" but that existing GHG BACT technology is not widely available commercially. For example, the only example provided by staff was carbon capture and sequestration (CCS), an experimental and emerging technology not likely to be commercially viable for many years. The District should provide additional examples of GHG BACT.

Understanding what would be considered GHG BACT helps inform regulated business as to what would be required under proposed Rule 2-2 and what compliance options would be available to them, which in turn could prompt useful public participation and comments on the draft rule.

⁷ BAAQMD Workshop Report for Proposed Revisions to: Regulation 2, Rule 1 (Permits – General Requirements) Regulation 2, Rule 2 (Permits – New Source Review) and Regulation 2, Rule 6 (permits – Major Facility Review), May 2017, p.1.

Website Navigation

CCEEB does not understand why on the BAAQMD webpage the proposed amendments to Reg. 2 are listed on the “regulatory workshops (archive)” page as opposed to the rule development page. For consistency in the rule development process, the District should make all rule development information easily accessible on the main “rules under development” page.

Thank you for the opportunity to submit these comments. Please feel free to contact me at billq@cceb.org and 415-512-7890 ext. 115, or my colleague Janet Whittick at janetw@cceb.org and ext. 111.

Sincerely,

A handwritten signature in black ink that reads "Bill Quinn". The signature is written in a cursive style with a large, stylized "B" and "Q".

Bill Quinn
CCEEB Chief Operating Officer and Bay Area Partnership Project Manager

cc: Jack Broadbent, BAAQMD
Eric Stevenson, BAAQMD
Janet Whittick, CCEEB
Devin Richards, CCEEB