

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Preliminary Draft Staff Report

Proposed Amended Rule 1301 – General
Proposed Amended Rule 1302 – Definitions
Proposed Amended Rule 1303 – Requirements
Proposed Amended Rule 1701 – General
Proposed Amended Rule 1702 – Definitions, and
Proposed Amended Rule 1703 – PSD Analysis.

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EXECUTIVE SUMMARY

The purpose of the proposed amendments are to harmonize the Best Available Control Technology (BACT) requirements for both attainment and non-attainment pollutants in New Source Review (NSR) and Prevention of Significant Deterioration (PSD), programs governed by Regulation XIII and Regulation XVII, respectively. The amendments also clarify that permits may be issued in accordance with Regulation XIII, provided the facility complies with all applicable District rules and regulations or the facility is on an approved schedule for compliance with all District rules and regulations.

BACKGROUND

BACT is the cornerstone of the District's permitting process. In adopting Regulation XVII (PSD) in 1988, the Board affirmed its commitment to BACT by requiring that all sources with a net increase in emissions apply BACT even for attainment pollutants. This policy was reaffirmed in both the 1989 and 1999 amendments to Regulation XVII. At the time of adoption, the BACT definition and calculation procedure in Regulation XVII was synonymous with the BACT definition in Regulation XIII. In adopting Regulation XVII, the Board determined that it would be effective only upon delegation from U.S. EPA. The U.S. EPA revoked delegation on March 3, 2003, after the District indicated it could not implement the revised calculation methods in U.S. EPA's 2003 "NSR Reform". The District received partial delegation of PSD on July 25, 2007. The partial delegation applies to completely new facilities and modified facilities that do not use the NSR Reform calculation. (Sources requesting averaging provisions or different calculation methods are still required to seek PSD permits from U.S. EPA Region IX).

The requirements for BACT were amended in Rule 1303 in December 1995. One change was to bifurcate BACT into major source and minor source BACT. In addition, the definition of BACT was amended to establish BACT for a category or class of source, rather than on a permit-by-permit basis, for minor sources. A separate amendment in June 1990 changed the calculation procedure to determine whether or not BACT is required for permit modifications (BACT is required for a net emissions increase). The calculation procedure is now based on potential to emit basis both before and after the modifications. Previously, the calculation procedure was based on past actual emissions compared to future potential emissions. None of the amendments made to BACT in Regulation XIII were made to Regulation XVII and a disconnect between the two definitions developed.

The District was recently designated as "attainment" for carbon monoxide (CO) effective June 11, 2007. With this designation, all sources with a net emission increase in CO are subject to the BACT requirements of Regulation XVII. All sources, including minor sources, are now subject to PSD analysis for CO and the BACT requirements of Regulation XVII.

Carbon monoxide is a pollutant that is dangerous to public health. CO also plays a role in the formation of tropospheric ozone. All major combustion sources that have been permitted in the last decade have included controls for CO that has been effective in minimizing the emissions of CO. The BACT standard for CO has been a major force in controlling and reducing CO emissions.

As the South Coast Basin has been declared attainment for CO, Regulation XIII no longer applies, since pursuant to Rule 1301(b)(1) – Applicability, Regulation XIII applies only to non-attainment air contaminants, ozone depleting compounds, and ammonia. Currently, Rule 1302(z) defines non-attainment air contaminant as one which has been declared non-attainment either by the California Air Resources Board (CARB) for the state standard or by U.S. EPA for the federal standard, and includes precursors that are specifically listed in current Rule 1302(af) and do not include CO. Staff believes that there is a need to continue to require CO sources to utilize BACT, both to assist in maintaining the federal and state CO standards and to limit any impact CO can have on the formation of tropospheric ozone. However, staff does not recommend offsets for attainment air pollutants. There is existing precedent for requiring BACT, but not offsets, under Regulation XIII for certain pollutants that are not non-attainment pollutants (such as ammonia and ozone depleting compounds).

Initially, BACT requirements in Regulation XVII were in alignment with BACT requirements in Regulation XIII. As Regulation XIII was amended, Regulation XVII was not, and that created a differentiation between the requirements for major and minor sources. Currently, the BACT definition under Regulation XIII is more stringent than the BACT requirements under Regulation XVII, even though there is a difference in the calculation methodology. Evaluating BACT on a source category basis as required under Regulation XIII is more stringent than a case-by-case basis as required under Regulation XVII. A case-by-case evaluation considers site-specific concerns and costs that would not be considered on a source category basis. The calculation procedure to determine if BACT is triggered may be more stringent under Regulation XVII than Regulation XIII because it calculates the emissions increase based on comparison between past actual emissions to future potential emissions. District staff has not previously implemented the BACT requirement provisions of Rule 1701(b) (1) for minor sources for any of the pollutants that the District is in attainment, which includes SO₂, NO₂, and most recently CO (SO₂ and NO₂ are treated as non-attainment air contaminants as they are considered precursors to PM₁₀ and NO₂ is also a precursor to ozone). District staff did not intend to require a more stringent BACT requirement for an attainment pollutant compared to a non-attainment pollutant for minor sources. Therefore, although the rule language in Regulations XIII and XVII is not exactly the same, staff's interpretation is that the BACT requirement of Rule 1701(b) (1) for an attainment pollutant at a minor source should be the same as, and no more stringent than, the BACT requirement for that pollutant if it were a non-attainment pollutant or a precursor to a non-attainment pollutant at a minor source.

PROPOSED AMENDMENTS

The purpose of the amendments to Rule 1301 – General; Rule 1302 – Definitions; Rule 1303 – Requirements; Rule 1701 – General; Rule 1702 – Definitions; and Rule 1703 – PSD Analysis; is to harmonize the BACT requirements for attainment and non-attainment pollutants. The BACT requirement in Regulation XVII incorporates federal requirements rather than the BACT requirement in Regulation XIII which differentiates between major and minor sources. There is no such differentiation in Regulation XVII. Although Regulation XVII addresses the permitting of extremely large sources of attainment pollutants, it was not designed to address the vast majority of the sources that the District permits.

District permitting staff will continue to require CO BACT for major sources under Regulation XVII, either through limited delegation negotiated with U.S. EPA or through U.S. EPA's PSD Regulations, if required. Staff is deleting the BACT requirements for attainment pollutants at minor sources from Rule 1701(b) (1) and adding it under Rule 1303 since the definition of BACT under Regulation XVII for a major source is the same as the definition of BACT for a major source under Regulation XIII. The only difference will be between the definition of BACT for a major source and BACT for a minor source in Regulation XIII and our BACT guidelines document where the AQMD is required to consider cost in determining BACT, for minor sources.

Staff is proposing to amend the rules so that current non-attainment contaminants that in the future become attainment contaminants are also subject to BACT, but not offsets. The direct and most appropriate way to accomplish this is to add the words “any attainment air contaminant” to Rule 1303 – Requirements, Section (a)(1) which requires the application of BACT to new or relocated sources and modifications. This makes it necessary to add a definition of “attainment air contaminant” to Rule 1302 – Definitions. Staff is proposing to add “or state ambient air quality standard” after the words “national ambient air quality standard” in Rule 1302 – Definitions. Rule 1301 – General, is being amended to clarify that the scope of NSR includes BACT for a net emission increase of an attainment air contaminant.

By adding “any attainment air contaminant” to Rule 1303(a) (1), the requirement of BACT for all contaminants (attainment, non-attainment, ozone depleting compound – ODC, and ammonia) is automatically reflected in Rule 1303(a) (2) and (a) (3). BACT for all regulated air contaminants will be one uniform definition for major sources; one uniform definition for minor sources; and updated consistently within the BACT guidelines. For example, BACT for net emission increase of either an attainment air contaminant, non-attainment air contaminant, ammonia, or ODC at a minor source will be updated considering economic and technical feasibility.

In addition, staff is proposing amendments to Regulation XVII. Currently, Rule 1703 – PSD Analysis, Section (a) (2) provides that a permit to construct must be denied unless “each permit unit is constructed using BACT for each criteria air contaminant for which

there is a net emission increase”. Currently, this provision would apply to minor sources of attainment pollutants. Staff does not believe the Board intends that attainment pollutants at minor sources be treated more stringently than non-attainment pollutants. Thus, staff recommends deleting Rule 1703(a) (2).

The proposed amendments will cause all pollutants, regardless of attainment status, to comply with BACT. These amendments merely transfer the BACT requirements for minor sources from Regulation XVII, which is a federal delegated PSD regulation, to Regulation XIII, the NSR regulation. The proposed amendments will also provide a safety mechanism to ensure BACT is required for all net emission increases in case U.S. EPA withdraws its delegation of PSD authority to the District.

Additionally, the proposed amendments would clarify that compliance with Regulation XIII does not preclude a facility from complying with all other District rules and regulations. Staff is proposing language explaining past practice that permits may be issued in accordance with Regulation XIII provided the facility is in compliance with or on an approved schedule of compliance. The proposed rule language in Rule 1303(b)(4) strengthens the regulation and clarifies that Staff may issue permits in accordance with Regulation XIII at a facility pending full compliance at the facility, if the modification or construction is consistent with a facility complying with all District rules and regulations, including Regulation V – Procedure Before the Hearing Board, and Regulation VIII – Orders for Abatement, which provide a means of obtaining an approved schedule of compliance.

The following are the amendments proposed:

- ❖ Rule 1301 – General: Add attainment air contaminants to section (a) and (b) (1).
- ❖ Rule 1302 – Definitions: It is proposed to add the definition of “Attainment Air Contaminant” to the rule.
- ❖ Rule 1303 – Requirements: The addition of “any attainment air contaminant” in Section (a) (1) is meant to clarify that BACT requirements apply to both attainment and non-attainment contaminants.
- ❖ Rule 1303 – Requirements: Paragraph (b)(4) has been replaced with language for additional requirements in order to ensure that a facility that is in compliance with all District rules and regulations or is on an approved schedule for compliance with all applicable District rules and regulations. The purpose of this language is as explained above.
- ❖ Rule 1701 – General: With the proposed amendment to Rule 1303, staff believes that sub-section (b) (1) is no longer relevant and proposes deletion of Rule 1701(b) (1).
- ❖ Rule 1702 – Definitions: Definition of BACT in Section (e) (1) is proposed to be modified to reflect the proposed amendments.

- ❖ Rule 1703 – PSD Analysis: Section (a) (2) is proposed to be deleted to reflect the proposed amendments.

EMISSION INVENTORY AND EMISSION IMPACTS

The proposed amendments are not expected to result in a significant change in the emission inventory of attainment air contaminants and are designed to minimize the increase in emissions from new and existing sources undergoing modifications to the extent controls are technologically feasible.

COST, COST EFFECTIVENESS AND INCREMENTAL COST EFFECTIVENESS

The proposal could result in a control cost difference for specific permit units if there is a difference in control technology requirements between reasonably available control technology and BACT for carbon monoxide. Such instances are expected to be an exception rather than the rule. Since this amendment is not an AQMP control measure, the analysis for cost-effectiveness and incremental cost-effectiveness pursuant to California Health & Safety Code Section 40920.6 is not applicable.

CEQA ANALYSIS

Pursuant to State California Environmental Quality Act (CEQA) Guidelines, the AQMD is the Lead Agency and will prepare the appropriate CEQA document to address the potential environmental impacts from implementing the proposed amendments. The document will be circulated to the public for review and comment and will be available online, at the SCAQMD's Public Information Center, or by contacting the SCAQMD staff via phone, fax or e-mail. Comments on the CEQA document will be responded to and included in the final CEQA document.

SOCIOECONOMIC ANALYSIS

The socioeconomic impacts of the proposed amendments are currently being assessed and will be made available 30 days prior to the public hearing.

AQMP AND LEGAL MANDATES

The California Health and Safety Code require the AQMD to adopt an Air Quality Management Plan (AQMP) to meet state and federal ambient air quality standards in the South Coast Air Basin. In addition, the California Health and Safety Code require that the AQMD adopt rules and regulations that carry out the objectives of the AQMP. While Proposed Amended Rule 1301 – General; Proposed Amended Rule 1302 – Definitions; Proposed Amended Rule 1303 – Requirements; Proposed Amended Rule 1701 – General; Proposed Amended Rule 1702 – Definitions; and Proposed Amended Rule 1703 – PSD Analysis; are not control measures included in the AQMP, their requirements are

consistent with the AQMP objectives. Since this proposal is not an AQMP control measure and does not result in emission reductions, cost effectiveness is not applicable.

COMPARATIVE ANALYSIS

This proposal does not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting or recordkeeping requirements, and therefore, is not subject to the comparative analysis provisions of California Health & Safety Code Section 40727.2. Nevertheless, the PSD BACT requirement in Regulation XVII is equivalent to BACT requirement in federal PSD regulations and the BACT requirement for major sources in Regulation XIII is at least as stringent as LAER in federal NSR regulations. The BACT requirement for minor sources in Regulation XIII is more stringent than federal NSR regulations, since BACT does not apply to minor sources in federal NSR.

RESOURCE IMPACTS

Proposed amendments to Rule 1301 – General; Rule 1302 – Definitions; Rule 1303 – Requirements; Rule 1701 – General; Rule 1702 – Definitions; and Rule 1703 – PSD Analysis; can be implemented within the current staffing levels. No increases are anticipated with the proposed amendments.

FINDINGS

Before adopting, amending or repealing a rule, the AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined in Health and Safety Code Section 40727. The draft findings are as follows:

Necessity – The AQMD Governing Board has determined that a need exists to replace Rule 1301 – General; Rule 1302 – Definitions; Rule 1303 – Requirements; Rule 1701 – General; Rule 1702 – Definitions; and Rule 1703 – PSD Analysis, in order to harmonize the BACT requirements of attainment and non-attainment pollutants for both NSR and PSD, and clarify the facility-wide compliance requirements for issuance of permits in accordance with NSR.

Authority – The AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections 40000, 40001, 40440, 42300 (permit system), and 40702 of the California Health and Safety Code.

Clarity – The AQMD Governing Board has determined that Rule 1301 – General; Rule 1302 – Definitions; Rule 1303 – Requirements; Rule 1701 – General; Rule 1702 – Definitions; and Rule 1703 – PSD Analysis, as proposed to be amended, are written or displayed so that its meaning can be easily understood by the persons directly affected.

Consistency – The AQMD Governing Board has determined that Rule 1301 – General; Rule 1302 – Definitions; Rule 1303 – Requirements; Rule 1701 – General; Rule 1702 – Definitions; and Rule 1703 – PSD Analysis, as proposed to be amended, are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

Non-Duplication – The AQMD Governing Board has determined that Rule 1301 – General; Rule 1302 – Definitions; Rule 1303 – Requirements; Rule 1701 – General; Rule 1702 – Definitions; and Rule 1703 – PSD Analysis as proposed to be amended, do not impose the same requirements as any existing state or federal regulation and is necessary and proper to execute the power and duties granted to, and imposed upon, the District.

Reference – The AQMD Governing Board, in amending the rule, references the following statutes which the AQMD hereby implements, interprets, or makes specific: Health and Safety Code Sections 42300, 40920.5, and CAA §§ 110 (minor source NSR), 171, 172 and 182.

CONCLUSIONS AND RECOMMENDATION

Staff recommends amendments, as proposed to Rule 1301 – General; Rule 1302 – Definitions; Rule 1303 – Requirements; Rule 1701 – General; Rule 1702 – Definitions; and Rule 1703 – PSD Analysis for the reasons stated in this staff report.