

BAY AREA AIR QUALITY

MANAGEMENT

DISTRICT

Public Workshop / Webcast:

Revisions to District New Source Review & Title V Permitting Programs

District Regulation 2 - Rules 1, 2, 4 & 6

February 22, 2012

Air District Staff Introductions

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To participate on-line

- Please sign in by sending email with name & affiliation to: Reg2Workshop@baaqmd.gov
- Send questions via email to: <u>Reg2Workshop@baaqmd.gov</u>

Please complete our brief webcast evaluation survey at: <u>www.surveymonkey.com/s/DX66GRS</u>



Overview of Presentation

Part 1: Introduction and Background to Proposed Amendments

- Introduction to New Source Review &
 Title V Permitting Programs
- Recent Developments Necessitating Changes
- Overview of Proposed Amendments
- Rule Development Process

Questions & comments on Part 1



Overview of Presentation

Part 2: Discussion of Specific Amendments

- Regulation 2, Rule 2 New Source Review
- Regulation 2, Rule 4 Emissions Banking
- Regulation 2, Rule 6 Title V Major Facility Review
- Regulation 2, Rule 1 General Requirements

Questions & comments on Part 2



Glossary of Terms

Commonly used terms

- PM: Particulate Matter
- NO_x: Oxides of Nitrogen
- $-O_3$: Ozone
- GHGs: Greenhouse gases
- TACs: Toxic Air Contaminants
- BACT: Best Available Control Technologies
- NAAQS: National Ambient Air Quality Standards



PART 1: INTRODUCTION AND BACKGROUND

Updates to BAAQMD
New Source Review and
Title V Permitting
Programs - Regulation 2,
Rules 1, 2, 4, and 6





Outline of Part 1

- Review of New Source Review ("NSR") and Title V Permitting Programs
- Summary of Changes Under Consideration
 - New Permit Requirements for PM_{2.5} and GHGs
 - Need to Obtain EPA approval of "Prevention of Significant Deterioration" permit regulations
 - Clarification of certain regulatory language
- Public Participation Process and Next Steps



Affected Stationary Source Permitting Programs

 New Source Review and Title V are primarily aimed at Major Stationary Sources . . .





- But California law and District regulations also apply certain provisions to smaller sources:
 - "Best Available Control Technology" applies to sources emitting 10 pounds per day of "criteria" pollutants
 - Offset requirements for ozone precursors (NO_x and POC) apply to facilities emitting 10 tons per year



- New Source Review ("NSR") a preconstruction permitting program
 - More stringent requirements for Non-Attainment pollutants (called "Non-Attainment NSR")
 - Less stringent requirements for attainment pollutants (called "Prevention of Significant Deterioration", or "PSD")



- Non-Attainment NSR Permitting:
 - A District regulatory program, approved by EPA
 - Permitting Requirements:
 - Use "Best Available Control Technology" (BACT)
 - Offset new emissions with emission reductions elsewhere
 - Compliance Certification
 - Alternatives Analysis
 - Public Review Process



PSD Permitting:

- A federal program administered under EPA's federal requirements (but District processes and issues permits)
- Permitting Requirements:
 - Best Available Control Technology
 - Air Quality Impact Analysis Requirements
 - No Violation of NAAQS or PSD Increment
 - Public Review Process



- Title V an operating permit program
 - Does not impose any additional substantive regulatory requirements
 - Collects all applicable requirements in a single permitting document to improve enforceability and transparency
 - Requires monitoring to ensure compliance
 - Enhances public review and participation



Affected District Permit Regulations

Regulation- Rule	Title	Date Last Amended
2-1	Permits – General Requirements	3/4/2009
2-2	Permits – New Source Review	6/15/2005
2-4	Permits – Emissions Banking	12/21/2004
2-6	Permits – Major Facility Review	4/16/2006



New Federal Permitting Requirements: PM2.5

- PM_{2.5} Fine Particulate Matter is a pollutant of emerging regulatory concern
- Bay Area designated "Non-Attainment" of PM_{2.5}
 NAAQS
- District must therefore implement "Non-Attainment NSR" requirements for PM_{2.5} (and precursors):
 - Apply "Best Available Control Technology"
 - Offset new emissions with emission reductions elsewhere
 - Compliance certification and alternatives analysis
 - Public participation in permitting decisions



New Federal Permitting Requirements: GHGs

- Greenhouse gases (GHGs) contribute to global climate change
- EPA now treats GHGs as "regulated" air pollutants
- New Source Review regulations must cover major GHG sources
 - Regulated under less stringent "Prevention of Significant Deterioration" program because no NAAQS for GHGs
 - Must require "Best Available Control Technology"
- Title V regulations also must cover major GHG sources



EPA Approval of "Prevention of Significant Deterioration" Program

- EPA has approved District "Non-Attainment NSR" and Title V permitting regulations
- EPA has not approved District "Prevention of Significant Deterioration" regulations
- Thus, Federal Regulations, not District regulations, apply for this permitting program
- Leads to inconsistency and confusion



Regulatory Proposals Being Considered

- Add PM_{2.5} to District NSR permitting regulations (Reg. 2, Rule 2)
- Add GHGs to District Title V permitting regulations (Reg. 2, Rule 6)
- Develop District "Prevention of Significant Deterioration" Regulations for EPA Approval (in Reg. 2, Rule 2)



Regulatory Proposals (cont'd)

- Non-Substantive Changes:
 - Clarify certain regulatory language to aid in implementation and avoid potential misinterpretation
 - Reorganize Regulation 2, Rule 2 to follow standard
 District regulation structure



Public Participation Process & Next Steps

- Public Workshop February 22, 2012
- Written comments encouraged please submit by March 2, 2012
- Staff will develop final proposal based on public input
- Staff will prepare staff report, CEQA and socioeconomic analyses, and related documentation
- Board consideration at public hearing: Summer 2012
- Adopted rules must be submitted to CARB and EPA



Questions & Comments on Part 1

Send questions & comments via email to:

Reg2Workshop@baaqmd.gov



PART 2: DISCUSSION OF SPECIFIC AMENDMENTS

Detailed Discussion of Specific Amendments to Regulatory Provisions in Regulation 2, Rules 1, 2, 4, and 6





Overview of Part 2

- Detailed Discussion of Proposed Amendments
- Amendments to New Source Review Permitting Rules
 - Regulation 2, Rule 2: New Source Review
 - Regulation 2, Rule 4: Emissions Banking
- Amendments to Title V Permitting Rules
 - Regulation 2, Rule 6: Major Facility Review
- Amendments to General Requirements for Permitting
 - Regulation 2, Rule 1: General Requirements

Email questions/comments to Reg2Workshop@baaqmd.gov



2-2-300	STANDARDS
2-2-301	Best Available Control Technology Requirement
2-2-302	Offset Requirements, Precursor Organic Compounds and Nitrogen Oxides
2-2-303	Offset Requirements, PM _{2.5} , PM ₁₀ and Sulfur Dioxide
2-2-304	PSD BACT Requirement
2-2-305	PSD Source Impact Analysis Requirement
2-2-306	PSD Additional Impacts Analysis Requirements
2-2-307	PSD Class I Area Impacts
2-2-308	Compliance Certification
2-2-309	Denial, Failure to Meet Permit Conditions



- Section 2-2-301 Best Available Control Technology
 - Proposed amendment to add PM_{2.5} as a pollutant subject to District BACT Requirement
 - No other substantive changes; revisions to regulatory language are clarifications to existing requirement only
 - Applies to "District BACT Pollutants" (new defined term)
 - Applies at sources with District BACT Pollutant PTE of 10+ lb/day
 - Applies to (i) new sources and (ii) modifications with any increase in emissions (using actual-to-potential test in Section 2-2-604)
 - Applies on a "pollutant-specific basis"



- Sections 2-2-302 and 2-2-303 Emission Offsets
 - Add PM2.5 and precursors to offset requirements (with no inter-pollutant offset trading allowed)
 - Eliminate offset deferral provision (current § 2-2-241)
 - Clarify offset calculation methodology "un-offset cumulative increase" calculation in §§ 2-2-605 – 2-2-608
 - Clarify procedures for use and reimbursement of Small Facility Bank for NOx and POC (§§ 2-2-302.1, 2-2-302.4)



- Sections 2-2-304 through 2-2-307 PSD
 - Incorporation by Reference of Federal PSD Requirements
 - Applicability of PSD Permitting Requirements: "PSD Projects"
 - Specific PSD Implementation Provisions
 - Section 2-2-304 PSD BACT
 - Section 2-2-305 PSD Source Impact Analysis
 - Section 2-2-306 PSD Additional Impacts Analysis
 - Section 2-2-307 PSD Class I Area Impacts



- PSD Applicability: Sections 304 through 307 apply to "PSD Projects" as defined in Section 2-2-224
 - Applies to sources emitting "PSD Pollutants"
 - Applies at facilities over the PSD "Major Facility" thresholds (100/250 tpy, 100,000 tpy CO2e for GHGs)
 - Applies to new sources and modifications that will result in significant net increase in emissions of a PSD Pollutant
 - "net increase" defined in Section 2-2-220
 - "significant" defined in Section 2-2-226



- Section 2-2-304 PSD BACT
 - Applies to "PSD Projects"
 - Applies to all PSD Pollutants for which there will be a significant net increase in emissions from the project
 - Applies to all sources from which there will be an increase in emissions of such pollutants
 - All such sources must apply federal BACT as set forth in EPA's PSD BACT requirements in 40 C.F.R. § 52.21(j) (and related guidance)



- Section 2-2-305 PSD Source Impact Analysis
 - Applies to "PSD Projects"
 - Requires a Source Impact Analysis for all PSD
 Pollutants for which there will be a significant net increase in emissions
 - Applicant must submit an analysis with its application, and APCO must review and approve the analysis
 - Analysis must be conducted in accordance with EPA Guideline in 40 C.F.R. Part 51, App. W and related EPA guidance
 - Must show no violation of NAAQS or PSD Increment



- Section 2-2-306 PSD Additional Impacts Analysis
 - Requires analysis of impacts to visibility, soils and vegetation from PSD project
 - Requires analysis of growth associated with PSD Project
 - Incorporates by reference EPA standards for preparing these analyses
 - Applicant must prepare and submit analyses, APCO must review and approve them



- Section 2-2-307 Class I Area Impacts
 - APCO must give notice of any PSD Project located within 100 km of Class I Area to the Federal Land Manager (FLM) of the Class I Area – Section 2-2-402
 - FLM then reviews the project for impacts on any air-quality-related-values (AQRVs) in Class I Area
 - If FLM notifies APCO of finding of adverse impact on AQRV, APCO reviews finding and denies permit upon concurrence with finding



- Other Standards retained in Reg. 2, Rule 2
 - Section 2-2-308 Compliance Certification
 - Section 2-2-309 Denial of Permit to Operate for failure to comply with conditions
- Standards proposed for removal from Reg. 2, Rule
 - Section 2-2-317 "Case-by-Case MACT" requirement moved to Title V permitting in Reg. 2-6
 - Sections 2-2-310, 2-2-311, 2-2-314, 2-2-315 & 2-2-316
 - deleted as redundant



- Reg. 2-2 Administrative Requirements (400s)
 - Application requirements clarified (§ 2-2-401)
 - Process for District evaluation of application and public review and comment (§§ 2-2-402 – 2-2-406)
 - New public notice requirement for permits involving emissions increases above "significant" thresholds specified in § 2-2-226
 - No other substantive changes to application review process
 - Related miscellaneous clarifications (§§ 2-2-407 2-2-414)



- Reg. 2-2 Monitoring and Records (500s)
 - PSD Pre-construction requirements will be addressed by incorporating federal requirements (See § 2-2-305.1)
 - PSD Post-construction monitoring provisions remain the same



Amendments to NSR Permitting (Reg. 2-2)

- Reg. 2-2 Manual of Procedures (600s)
 - Retains "actual-to-potential" emissions increase test in Section 2-2-604 (for District BACT and PSD)
 - Specifies how to calculate offset requirements
 - "Cumulative Increase" from each permit issued for facility is increase in PTE from the permit minus contemporaneous on-site ERCs
 - Offsets need to be provided for the cumulative increase associated with each permit issued since baseline date.
 - Specifies how to treat fugitive emissions and cargo carrier emissions in specific circumstances



Amendments to NSR Permitting (Reg. 2-2)

- Reg. 2-2 General Provisions (100s)
 - No substantive changes
 - PSD pre-construction monitoring requirement thresholds will be incorporated by reference in PSD Source Impact Analysis requirement
 - Case-by-Case MACT Requirement will be moved to Title V permitting (Reg. 2-6)



Amendments to NSR Permitting (Reg. 2-2)

- Reg. 2-2 Definitions (200s)
 - Several new definitions to implement PSD requirements
 - Several other new definitions (e.g., "District BACT Pollutant", "Pollutant-Specific Basis")
 - Some revisions to existing definitions
 - Adding PM2.5 to definition of "Major Modification"
 - Clarifying BACT definition
 - General definitions moved to Reg. 2-1
 - Obsolete/redundant definitions removed



Emissions Banking Amendments (Reg. 2-4)

- Add PM_{2.5} to list of bankable pollutants (§ 2-4-203)
- Add provisions for determining creditable
 PM_{2.5} fraction of existing banked PM₁₀ credits
 (new § 2-4-416 still under development)
- Delete obsolete provision on banking credits from mobile source reductions (§ 2-4-301.8)



Title V Permitting Amendments (Reg. 2-6)

- Add GHGs as "Regulated Air Pollutant"
 - 100,000 tpy CO2e threshold for GHG to be "Regulated"
 - 100 tpy mass threshold for facility to be "Major"
 - New definitions of "GHG" and "CO2e"
- Move "case-by-case MACT" requirement to Reg. 2-6
- Re-arrange certain definitions



- Proposed amendments are primarily clarifications that do not change existing requirements
- A number of the proposed amendments are intended to support the amendments to the NSR and Title V permitting rules
- Proposed amendments also include a few minor changes to improve implementation of the District's permitting programs



- Definitions of "modification" and "alteration"
- Clarification of "modify" (Section 2-1-234)
 - Change that increases emissions above a permitted level
 - If no permit limit, change that increases emissions above maximum physical capacity
 - For toxics, change that increases risk over 1 in 106/0.20 HI
- Clarification of "alter" (Section 2-1-233)
 - Any change that is not a "modification"
 - Remove three specific scenarios listed as alterations status of such changes will depend on whether emissions will increase



- Clarification of Temporary Permitting under "Accelerated Permitting Program"
- Substantive requirements for program moved from exemption in 2-1-106 to permitting requirements in 2-1-302.2
 - Applicant must make preliminary determination of compliance with BACT, toxic risk, and school proximity requirements
 - District issues temporary permit while completing full review
 - Applicant can use temporary permit until full decision made
- Section 2-1-106 allows applicant to proceed under temporary permit without getting an authority to construct.



- Clarification of Portable Equipment Permitting and Statewide "PERP" Registration
 - Move substantive requirements for District portable equipment permits from "portable" definition in § 2-1-220 to permitting provision in § 2-1-413
 - Eliminate list of specific portable equipment eligible for PERP treatment – any qualifying portable equipment is eligible
 - Revise District definition of "portable" in § 2-1-220 to track definition in CARB PERP regulations



- Clarification of Permit Application Requirements
- Move list of information required in permit applications from definition of "complete application" in § 2-1-202 to requirements for permit applications in § 2-1-402
- Add 2 specific categories to list of information required:
 - Requirement to submit NSR-related information for applications subject to NSR requirements
 - Catch-all requirement to submit any information requested by APCO necessary to conduct full evaluation of permit application



- Revisions to timeline for acting on applications:
- Clarify that when a CEQA approval is appealed, APCO is not required to issue permit until after CEQA appeal is resolved (§ 2-1-408)
- Clarify provisions for "startup" period for projects where startup will take longer than 180 days (§ 2-1-411)
 - Authority to Construct authorizes operation during "startup" period of 90 days, extendable to 180 days, until Permit to Operate is issued
 - For some projects, startup period may take over 180 days and so a longer window needs to be provided before Permit to Operate is issued



- Codify Important Legal Rules of Interpretation
- Applicability of general requirements in Reg. 2-1 to other rules in Regulation 2 (§ 2-1-102)
- Effect of explanatory notes provided with regulatory text (§ 2-1-130)
- Compliance with material representations in permit applications (2-1-320)
- Compliance with SIP provisions and other legal requirements (2-1-321)



- Clarifications to Language of Exemption Provisions
- Miscellaneous clean-up of exemption provisions
- Add new exemption for biomass composting (Subsection 2-1-115.4.2)
- Delete exemption for space heaters (Subsection 2-1-113.2.14)



- Clarifications to Language of Definitions
- Move location of a number of definitions:
 - General definitions used in multiple permitting rules should be in General Requirements provisions in Reg. 2-1
 - Rule-specific definitions used only in one particular rule should be in the particular rule in which they are used.
- Delete obsolete and redundant definitions
- Clarify language in certain definitions



Questions & Comments on Part 2

Send questions & comments via email to:

Reg2Workshop@baaqmd.gov



Conclusion and Next Steps

- Please provide any written comments by March 2 to Carol Lee at <u>clee@baaqmd.gov</u>
- Staff will be finalizing a proposal for consideration by the District's Board of Directors – to receive notice, make sure we have your contact information
- The Board will hold a public hearing, which we anticipate will be in the Summer of 2012
- Please complete our webcast evaluation survey at <u>www.surveymonkey.com/s/DX66GRS</u>

