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

Please complete our brief webcast evaluation survey at: www.surveymonkey.com/s/DX66GRS
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\textsubscript{x}: Oxides of Nitrogen
- O\textsubscript{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 ($\text{NO}_x$ and POC) apply to facilities emitting 10 tons per year
Affected Stationary Source Permitting Programs (cont’d)

- New Source Review (“NSR”) – a pre-construction 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
Affected Stationary Source Permitting Programs (cont’d)

• 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

<table>
<thead>
<tr>
<th>Regulation Rule</th>
<th>Title</th>
<th>Date Last Amended</th>
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<tbody>
<tr>
<td>2-2</td>
<td>Permits – New Source Review</td>
<td>6/15/2005</td>
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<tr>
<td>2-4</td>
<td>Permits – Emissions Banking</td>
<td>12/21/2004</td>
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<tr>
<td>2-6</td>
<td>Permits – Major Facility Review</td>
<td>4/16/2006</td>
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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

Public Workshop/Webcast: Revisions to District New Source Review & Title V Permitting Programs
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)
• 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
## Amendments to NSR Permitting (Reg. 2-2)

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<tr>
<th>Section</th>
<th>Description</th>
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<td>STANDARDS</td>
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<tr>
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<td>Best Available Control Technology Requirement</td>
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<tr>
<td>2-2-302</td>
<td>Offset Requirements, Precursor Organic Compounds and Nitrogen Oxides</td>
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<tr>
<td>2-2-303</td>
<td>Offset Requirements, PM$<em>{2.5}$, PM$</em>{10}$ and Sulfur Dioxide</td>
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<tr>
<td>2-2-304</td>
<td>PSD BACT Requirement</td>
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<tr>
<td>2-2-305</td>
<td>PSD Source Impact Analysis Requirement</td>
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<td>2-2-306</td>
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<td>2-2-307</td>
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<tr>
<td>2-2-308</td>
<td>Compliance Certification</td>
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<tr>
<td>2-2-309</td>
<td>Denial, Failure to Meet Permit Conditions</td>
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Amendments to NSR Permitting (Reg. 2-2)

- 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”
Amendments to NSR Permitting (Reg. 2-2)

• 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)
Amendments to NSR Permitting (Reg. 2-2)

• 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
Amendments to NSR Permitting (Reg. 2-2)

• 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
Amendments to NSR Permitting (Reg. 2-2)

- 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)
Amendments to NSR Permitting (Reg. 2-2)

• 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
Amendments to NSR Permitting (Reg. 2-2)

- 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
Amendments to NSR Permitting (Reg. 2-2)

• 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
Amendments to NSR Permitting (Reg. 2-2)

- 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 2
  - 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
Amendments to NSR Permitting (Reg. 2-2)

• 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)
Amendments to NSR Permitting (Reg. 2-2)

• 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 PM$_{10}$ 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
General Requirements (Reg. 2-1)

• 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
General Requirements (Reg. 2-1)

• 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
General Requirements (Reg. 2-1)

- 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.
General Requirements (Reg. 2-1)

• 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
General Requirements (Reg. 2-1)

• 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
General Requirements (Reg. 2-1)

• 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
General Requirements (Reg. 2-1)

- 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)
General Requirements (Reg. 2-1)

• 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)
General Requirements (Reg. 2-1)

• 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 clee@baaqmd.gov

• 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 www.surveymonkey.com/s/DX66GRS