



## South Coast Air Quality Management District

### Permit Streamlining Task Force Sub-Committee Meeting

June 24, 2008  
2:00 – 4:00 p.m.  
Conference Room CC8

1

## Agenda

- Call to Order/Opening Remarks
- EPA's Final PM<sub>2.5</sub> NSR Rule
- Boiler MACT Determinations
- Compliance Certification of State-Only Requirements
- Applicability of Periodic Monitoring for State-Only Requirements
- Permit Application Form Redesign
- Permit Application Inventory Status Update
- Other Permit Streamlining Recommendations
- Next Meeting Schedule

2



## Final PM<sub>2.5</sub> NSR Implementation Rule

### Permit Streamlining Task Force Sub-Committee Meeting

June 24, 2008

Mohsen Nazemi, DEO  
SCAQMD

3

## PM<sub>2.5</sub> Implementation Rules

EPA promulgated three (3) sets of Final Rules which establish the framework for implementing preconstruction permitting for PM<sub>2.5</sub>

- April 25, 2007 – Final Implementation Rule for Non-NSR Provisions of PM<sub>2.5</sub> NAAQS
- September 21, 2007 – Final Implementation Rule for establishing PSD increments, significant impact levels and significant monitoring concentrations
- May 16, 2008 – Final Implementation Rule for NSR

4

## Final PM<sub>2.5</sub> NSR Implementation Rule General Provisions

- Final Rule Publication: 5/16/08 (73 FR 28321)
- Effective Date: July 15, 2008
- Establishes major source thresholds for Prevention of Significant Deterioration (PSD) and Non-Attainment (NA) NSR for direct PM<sub>2.5</sub> emissions
  - Attainment area: 100\*/250 tpy
  - Non-attainment area: 100 tpy

\* For source categories listed in 40CFR 51.166(b)(1)(i)(a) and 52.21(b)(1)(i)(a); for all others 250 tpy

5

## Final PM<sub>2.5</sub> NSR Implementation Rule General Provisions

- Establishes significant emission rates (SER) for PSD and NA NSR for direct PM<sub>2.5</sub> emissions and precursors
  - PM<sub>2.5</sub>: 10 tpy
  - SO<sub>2</sub>, NO<sub>x</sub>, VOC: 40 tpy
  - NH<sub>3</sub>: states must develop SER for NH<sub>3</sub>
- Establishes major source thresholds for PSD and NA NSR for direct PM<sub>2.5</sub> emissions
- States are not required to account for condensable PM for PM<sub>10</sub> / PM<sub>2.5</sub> until 1/1/2011 or test method rulemaking, whichever is earlier

6

## Final PM<sub>2.5</sub> NSR Implementation Rule Precursors- SIP Requirements

- SO<sub>2</sub> is always a precursor
- NO<sub>x</sub>: “presumed in”
- VOC : “presumed out”
- NH<sub>3</sub> : “presumed out”
  - States may submit demonstration that VOC and/or ammonia emissions in a specific area contribute significantly to ambient PM<sub>2.5</sub> concentrations or NO<sub>x</sub> emissions in a specific area do not contribute significantly to ambient PM<sub>2.5</sub> concentrations

7

## Final PM<sub>2.5</sub> NSR Implementation Rule PSD Requirements

- BACT applies to units that emit PM<sub>2.5</sub> and precursors
- Must demonstrate compliance with NAAQs
- PSD Increments, Significant Impact Levels and Significant Monitoring Concentrations to be finalized by December 2008

8



## Final PM<sub>2.5</sub> NSR Implementation Rule PSD Implementation

- EPA & delegated states: July 15, 2008
- SIP-approved programs: States have up to 3 years to revise SIP consistent with 40 CFR 51.166: until then states may follow PM<sub>10</sub> surrogate policy

9

## Final PM<sub>2.5</sub> NSR Implementation Rule Non-Attainment (NA) NSR

- All states:
  - begin PM<sub>2.5</sub> program (LAER, offsets and other requirements) on July 15, 2008;
  - PM<sub>10</sub> surrogate program no longer applies
- SIP-approved NA NSR rules:
  - States have up to 3 years to revise SIP consistent with 40 CFR 51.165;
  - Until then states must follow appendix S requirements for PM<sub>2.5</sub>
  - Under appendix S (for interim implementation)
    - only SO<sub>2</sub> is a precursor

10

## Final PM<sub>2.5</sub> NSR Implementation Rule Offsets - Interpollutant Trading

- Requires offsets for increases in PM<sub>2.5</sub> and precursor emissions at a ratio of 1:1
- Direct PM<sub>2.5</sub> emissions may be offset with reductions of precursors at established ratios:
  - SO<sub>2</sub> : PM<sub>2.5</sub> @ 40:1
  - NO<sub>x</sub> : PM<sub>2.5</sub> @ 200:1 (Eastern US)
  - NO<sub>x</sub> : PM<sub>2.5</sub> @ 100:1 (Western US)

11



## Boiler MACT Determination

Permit Streamlining Task Force  
Sub-Committee Meeting

June 24, 2008

Mohsen Nazemi, DEO  
SCAQMD

12

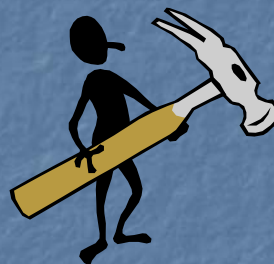
## Boiler MACT Determination - Background

- NESHAP for Industrial/Commercial/Institutional Boilers and Process Heaters (ICI Boilers) (40 CFR Part 63, Subpart DDDDD)
- EPA used health threshold provisions to develop a health based compliance alternative (HBCA) for Hydrochloric acid and Manganese
- Initial final rule published: Sept 13, 2004 – Using CO as surrogate for organic HAPs
- A lawsuit was filed by environmental groups challenging EPA's HBCA standards instead of MACT standards for this ICI Boiler NESHAP
- On July 30, 2007, the Court of Appeals (District of Columbia Circuit) vacated and remanded EPA's Boilers Rule
- When a court vacates a regulation, it is as if the regulation was never promulgated, triggering Section 112 (j) of the CAA.

13

## MACT Hammer (CAA Section 112 (j))

- When EPA fails to meet a deadline for establishing MACT standards or when a Court vacates a rule, the "hammer provisions" apply
- This requires Permitting agencies to use a case-by-case basis to develop MACT standards
- MACT floor to be set for new sources "shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source" or for existing source "average emission limitation achieved by the best performing 12% of existing sources".



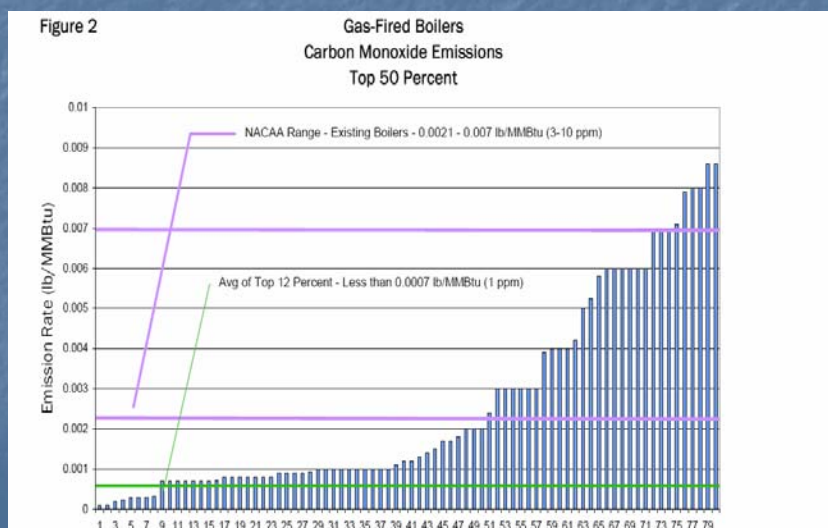
14

# National Association of Clean Air Agencies (NACAA)

- NACAA formerly was known as STAPPA/ ALAPCO
- NACAA formed a technical workgroup to gather and review available information on emission data
- As part of the workgroup, SCAQMD was asked to share source test data on natural gas and landfill gas fired boilers
- NACAA developed a Model Permit Guidance for ICI Boilers: Reducing Hazardous Air Pollutants from Industrial Boilers: Model Permit Guidance
- Available on <http://www.4cleanair.org/>
- NACAA proposed ICI Boiler MACT also uses CO as surrogate for organic HAPs

15

## Emission Units: Rank of Order of Performance (Top 50%)



5



TABLE 1 – Summary of EPA and NACAA Recommended Emission Limits for ICI Boilers (Natural Gas Only)

	Carbon Monoxide (CO)	Particulate	HCl	Mercury
NACAA Database	161 boilers	No data	Insufficient data	Insufficient data
Average of the Top 12% (or top 5)	less than 0.0007 (1 ppm)	N/A	N/A	N/A
EPA Vacated Rule	400 ppm for new large and limited use boilers; no limit for others	Not applicable No control	No control	No control
NACAA Proposal	3 - 10 ppm (0.002 - 0.007)	Not applicable No control	No control	No control

17

## What Are Required of Affected Sources?

- Is it a Major Source NESHAP (10 or 25 tpy of one or multiple HAPs)?
- Part I & Part II MACT Case-by-Case Applications
  - Part 1 - Notification of Applicability
  - Part 2 - Comprehensive description of emissions and controls
- Part 1 due date: December 2008
- Part 2 due date: 30 days after source is notified by the districts
- District has 60 days to deem the application complete and 18 months after Part 2 application is submitted to issue permit which has a case-by-case ICI Boiler MACT in the permit

18

# Compliance Certification for State-Only Requirements

## Applicability of Periodic Monitoring for State-Only Requirements

By Greg Adams

19



## Redesign of Permitting Forms

Permit Streamlining Task Force  
Sub-Committee Meeting

June 24, 2008

Mohan Balagopalan, Sr. Engineer  
SCAQMD

20

# Redesign of Permitting Forms

- Selection of contractor to redesign permit application forms completed and contract to be awarded

## Scope of work:

- All forms to be reader enabled – ability to save forms after entering data with Adobe Reader
- Improve design and enable data validation
- Convert all Word forms to PDF and reader enable (e.g., RECLAIM forms)
- New supplemental forms and intelligent forms to be created
- Any Input on Forms?

21



## Permit Inventory Status Update

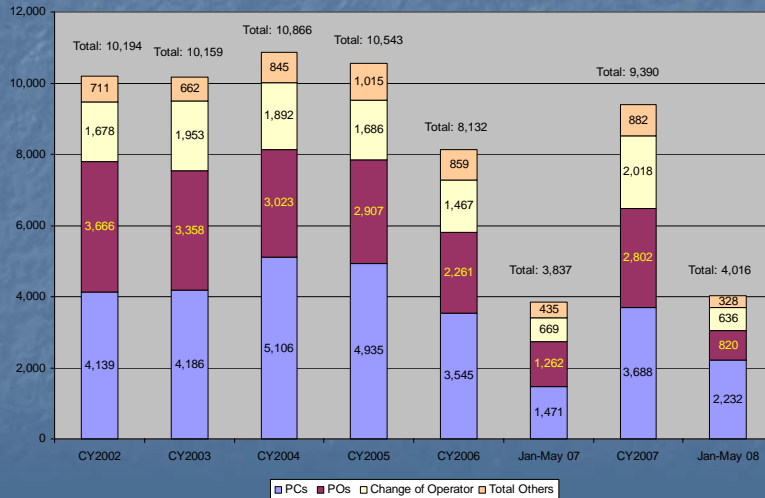
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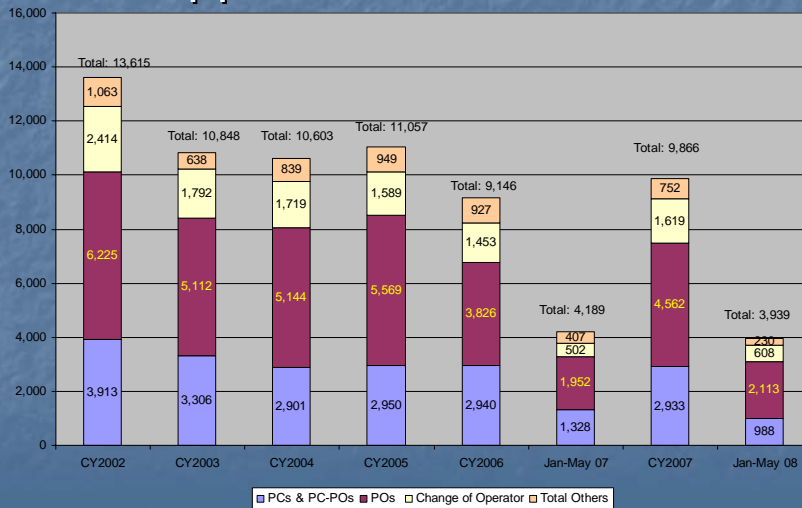
22

# Permit Inventory Status Update - Applications Received



23

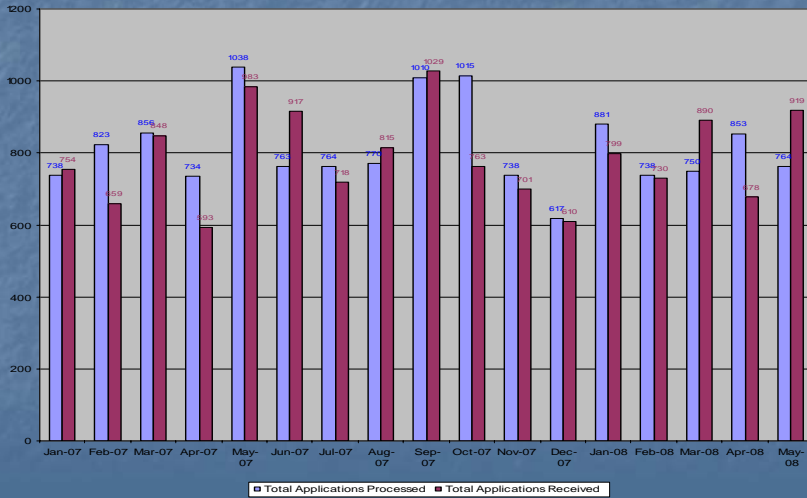
# Permit Inventory Status Update - Applications Processed



24

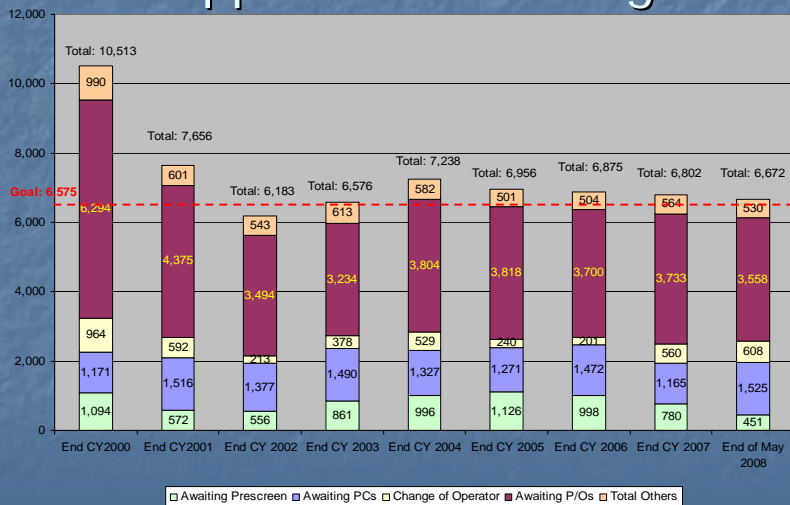


# Permit Inventory Status Update - Applications Processed & Received



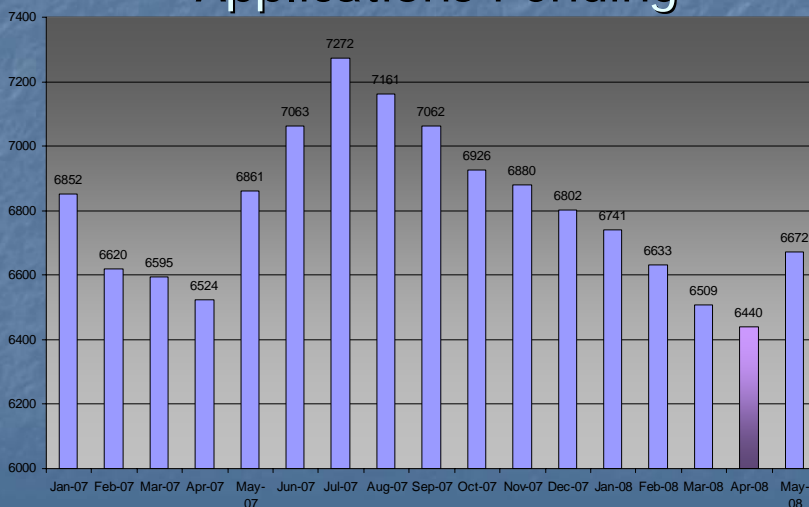
25

# Permit Inventory Status Update - Applications Pending



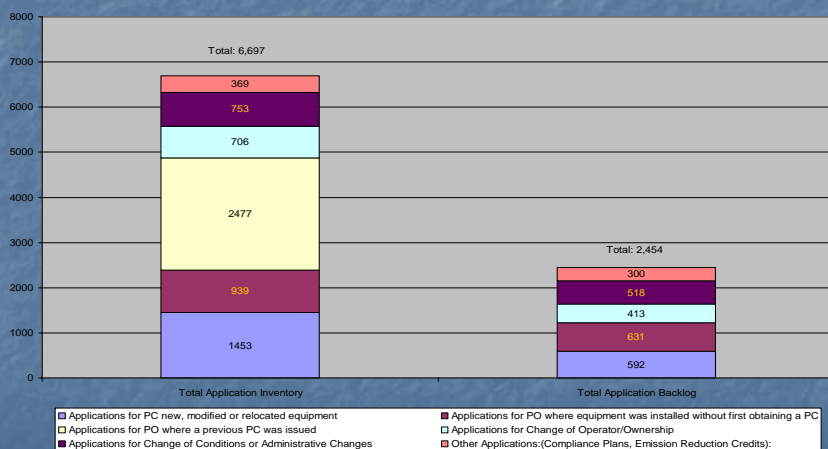
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## Permit Inventory Status Update - Applications Pending



27

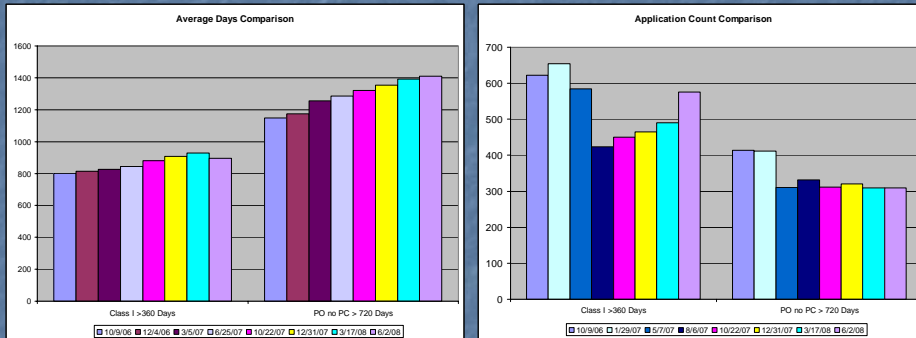
## Permit Inventory Status Update - Applications Pending\*



\* As of June 2, 2008

28

# Permit Inventory Status Update - Aged Application Report



## Next Meetings

Date	Time	Place
Tuesday, August 26, 2008	2-4 p.m.	Conference Room CC-8
Tuesday, October 21, 2008	1-3 p.m.	Conference Room CC-8