

# **Review of the California Ambient Air Quality Standard for Nitrogen Dioxide**

**June 12, 13, 2006**

**San Francisco, California**



**Air Resources Board**



**Office of Environmental  
Health Hazard Assessment**

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**California Environmental Protection Agency**

# Agenda Summary

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- Brief staff summaries
- AQAC review of topic areas
- Oral public comments
- Staff responses to comments
- Presentation of AQAC findings
- Conclusion, closing remarks

# Staff Presentation Overview

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- Definition of ambient air quality standard
- The Children's Environmental Health Protection Act (SB25, Escutia, 1999)
- Standard setting process in California
- Role of AQAC
- Staff Review and Findings
- OEHHA Recommendations and Basis

# What Is An Ambient Air Quality Standard?

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- Legal definition of clean air
- Elements
  - Definition of the pollutant
  - Averaging time
  - Concentration
  - Monitoring method
  - Form
- Provide a basis for preventing or abating adverse health effects

# Standard Setting Does Not Include

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- Attainment designation
- Feasibility of controls
- Cost of controls
- Implementation of controls

# Why Are We Reviewing the State NO<sub>2</sub> Standard?

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- Address requirements of Children's Environmental Health Protection Act (SB25, Escutia, 1999)
- Protect public health
- Comply with State law

# Results of 2000 AAQS Prioritization Process\*

## Priority Pollutant

## Review Schedule

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PM10 (including sulfates)

2002

Ozone

2005

Nitrogen dioxide

2006

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\*Adapted from Staff Report Entitled "Adequacy of CA Ambient Air Quality Standards: Children's Environmental Health Protection Act," December 2000.

# California Standard-Setting Process

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- Federal Clean Air Act gives CA authority to set its own air quality standards
- Federal law does not apply to State regulations
- Standard setting process follows requirements of:
  - CA Health & Safety Code
  - CA Administrative Procedure Act

# Current NO<sub>2</sub> Standards (ppm)

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One Hour

Annual

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California

0.25

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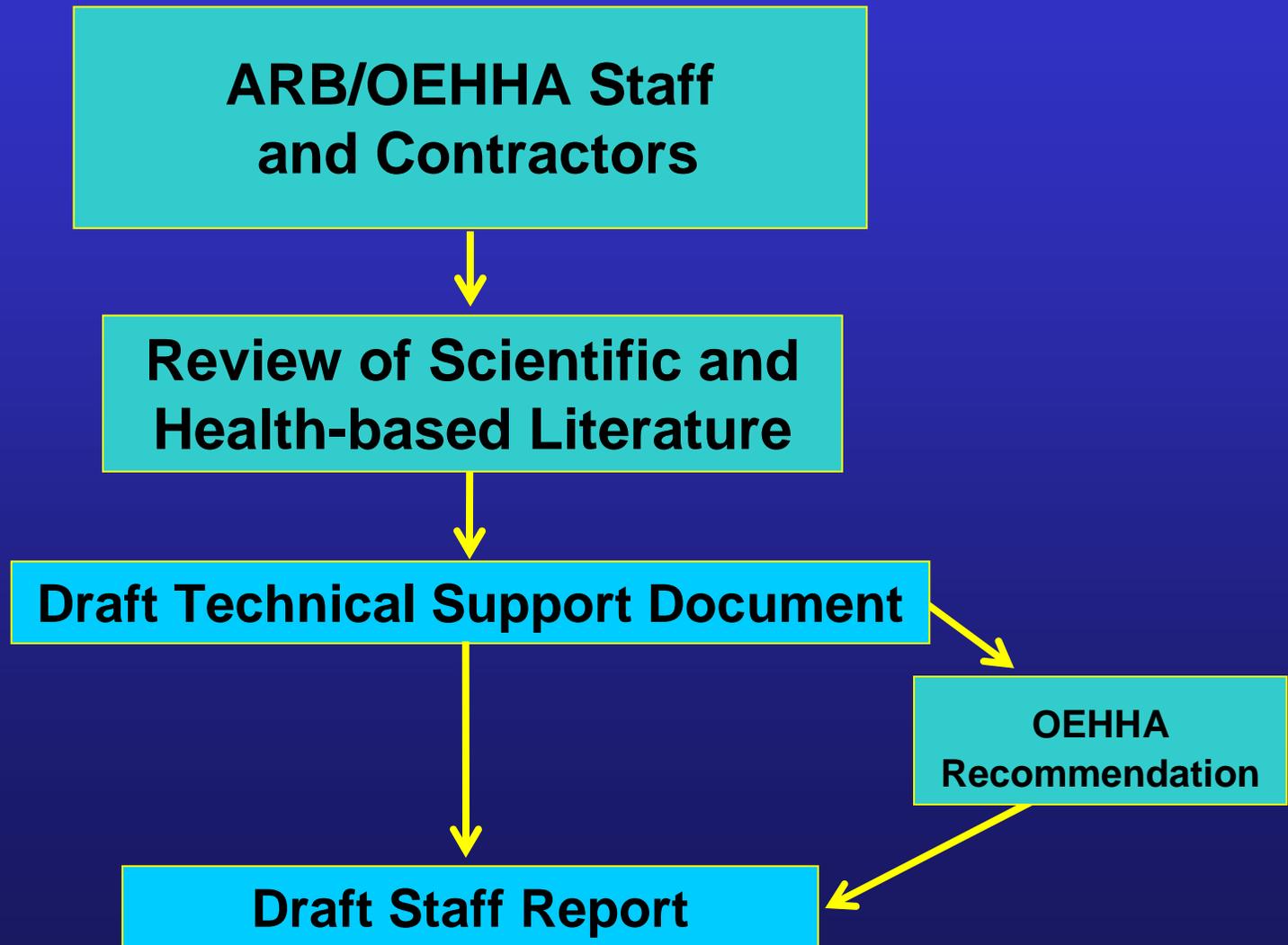
US EPA

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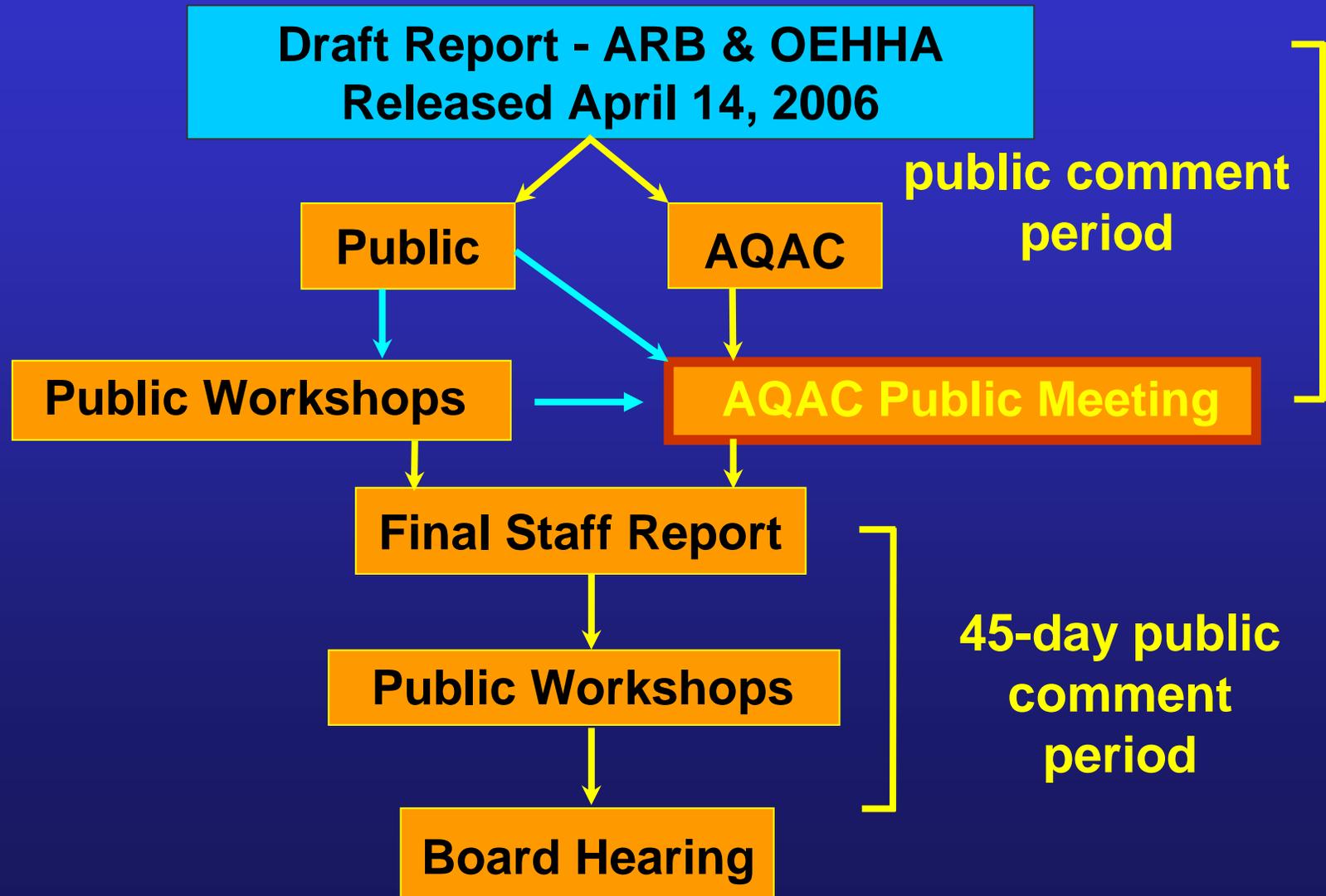
0.053

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# What Are the Regulatory Steps in a Standard Review?



# What Are the Regulatory Steps in a Standard Review (Con't)?



# The Role of AQAC

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- H&SC §39606 (C) - Requires peer review of the scientific basis of the staff report and recommendations
- AQAC peer review process:
  - Review staff report and recommendations
  - Consider public comments on the report and recommendations
  - Prepare a written evaluation of the report and recommendations

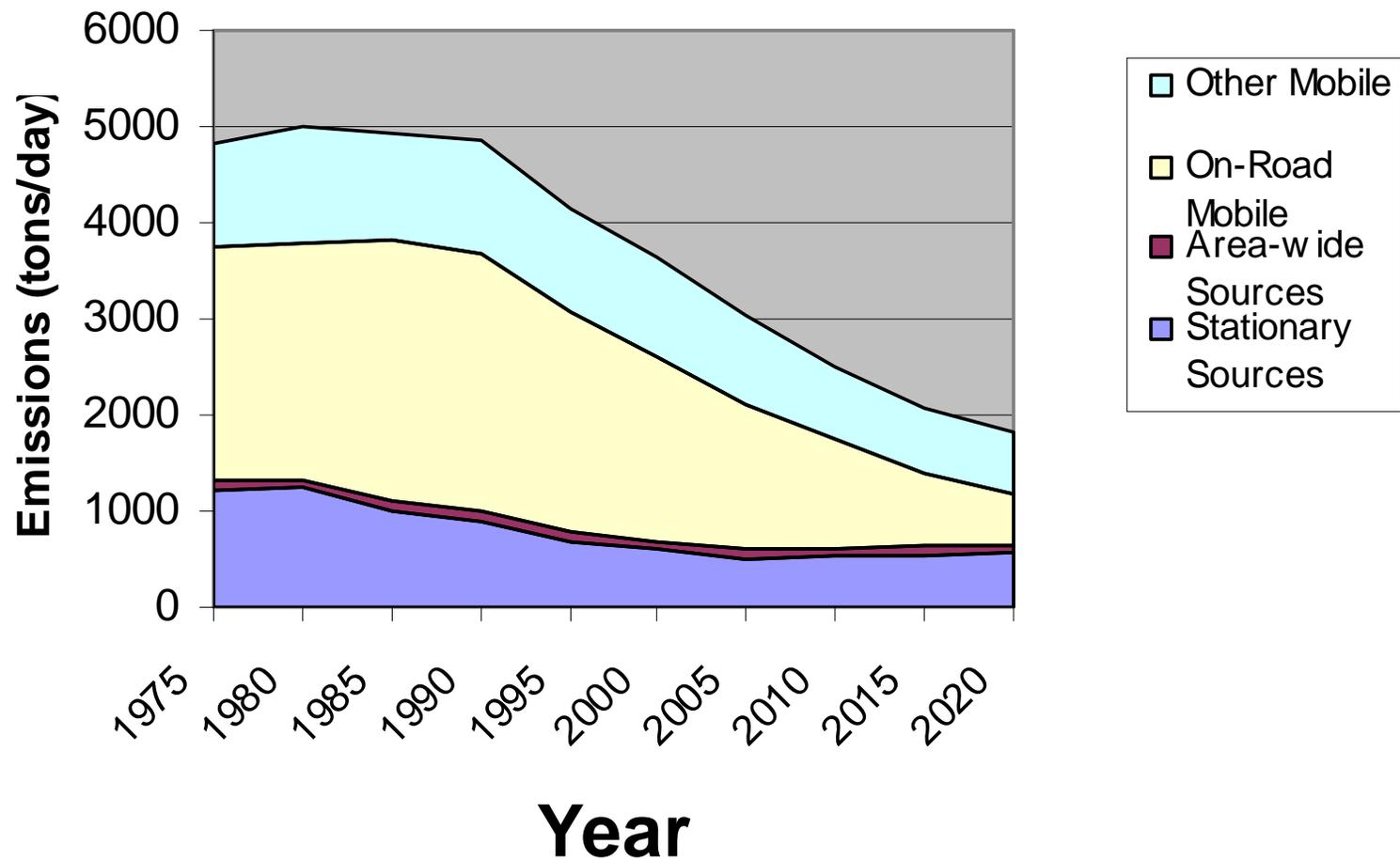
# **Staff Review and Findings**

# Sources and Levels

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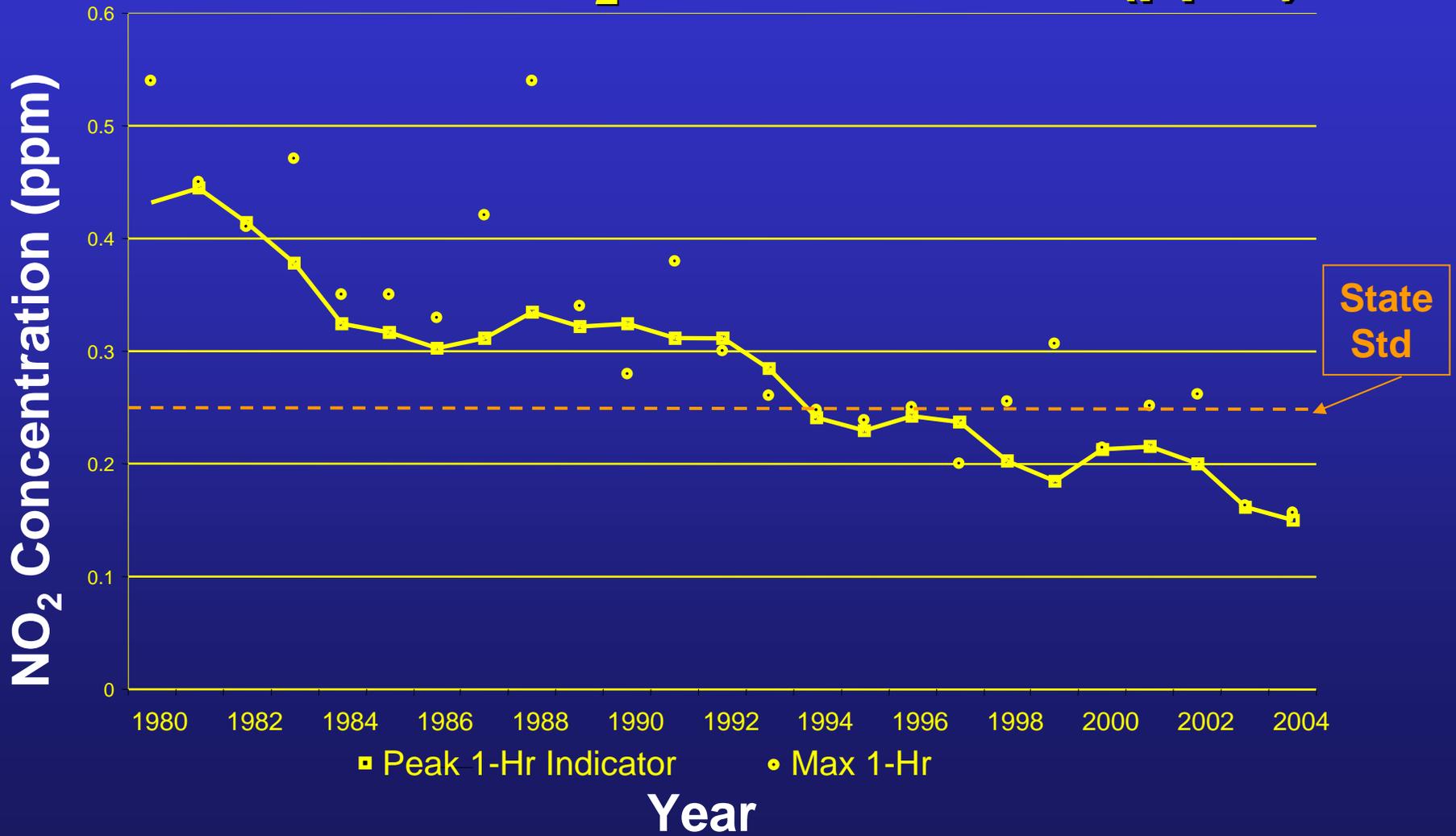
- Product of combustion sources
- Also produced from nitric oxide (NO), a product of combustion, and reactive hydrocarbons
- An outdoor and indoor pollutant

## Oxides of Nitrogen Emission Trends (tons/day) Statewide Annual Average



# South Coast Air Quality Trends

## One-hour NO<sub>2</sub> Concentration (ppm)



# South Coast Air Quality Trends

## Annual Average NO<sub>2</sub> Concentration (ppm)

