A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

POLA Air Quality Monitoring Program Expansion Update

Wilmington Community Meeting

Environmental Management Division
Port of Los Angeles

Presented by
Lisa Wunder, Environmental Specialist

April 17, 2008

THE PORT
OF LOS ANGELES

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Background

- Monitoring Began in February 2005
  - Community Stations
    - » Wilmington (Saint Peter & Paul School)
    - » San Pedro (Liberty Hill Plaza)
  - "Source Dominated" Station
    - » Terminal Island
  - "Background" Station
    - » Berth 47
- Parameters Measured
  - PM2.5 (filter-based) at all stations
  - PM10 (filter-based) at the Wilmington station
  - Elemental carbon (filter-based) at all stations
  - Meteorological monitoring conducted at each site
- Historical graphs, tables, and annual monitoring reports may be viewed at the POLA website: www.portoflosangeles.org

A CLEANER PORT.
A BRIGHTER
FUTURE.

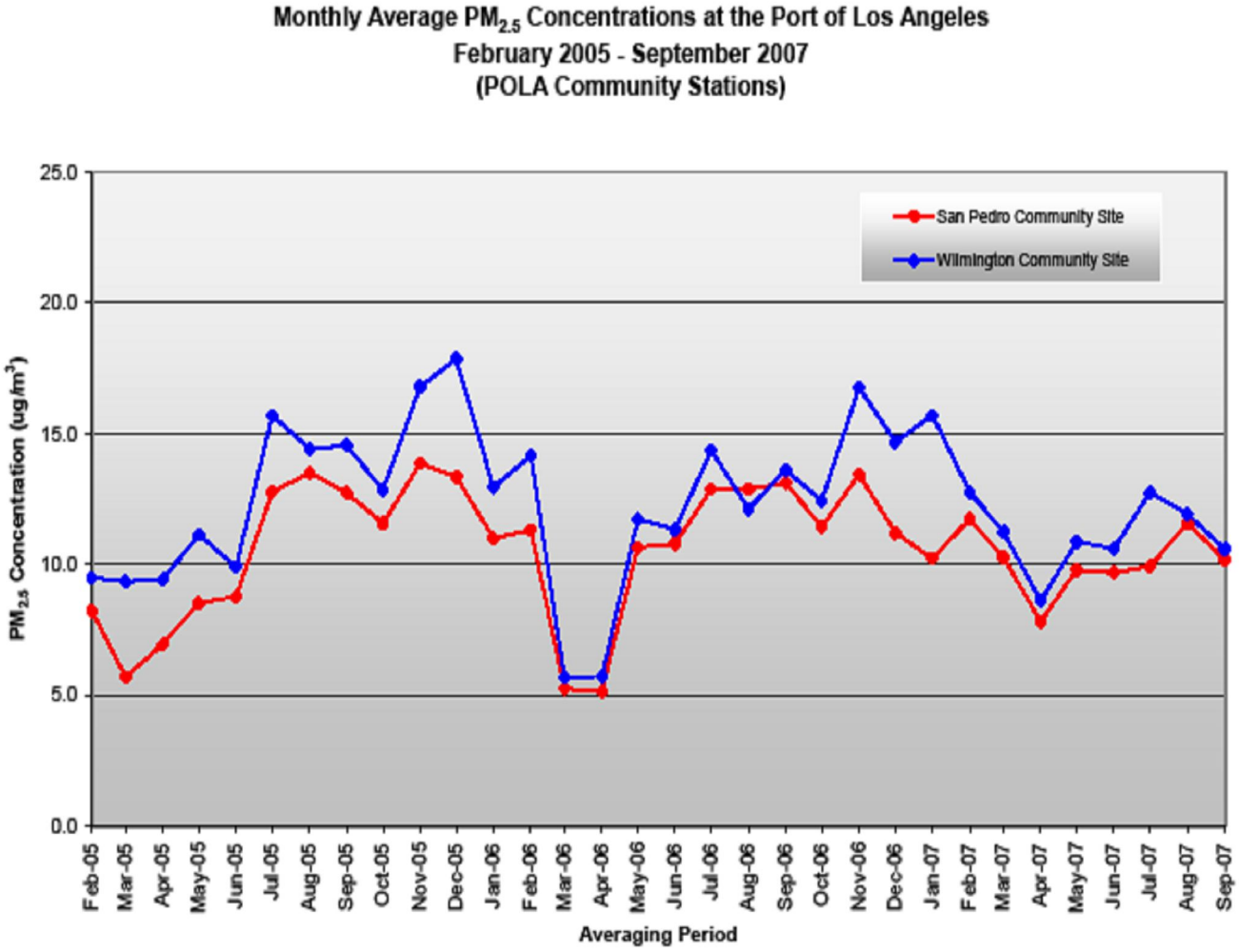
AIR

POLA Air Monitoring Network

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

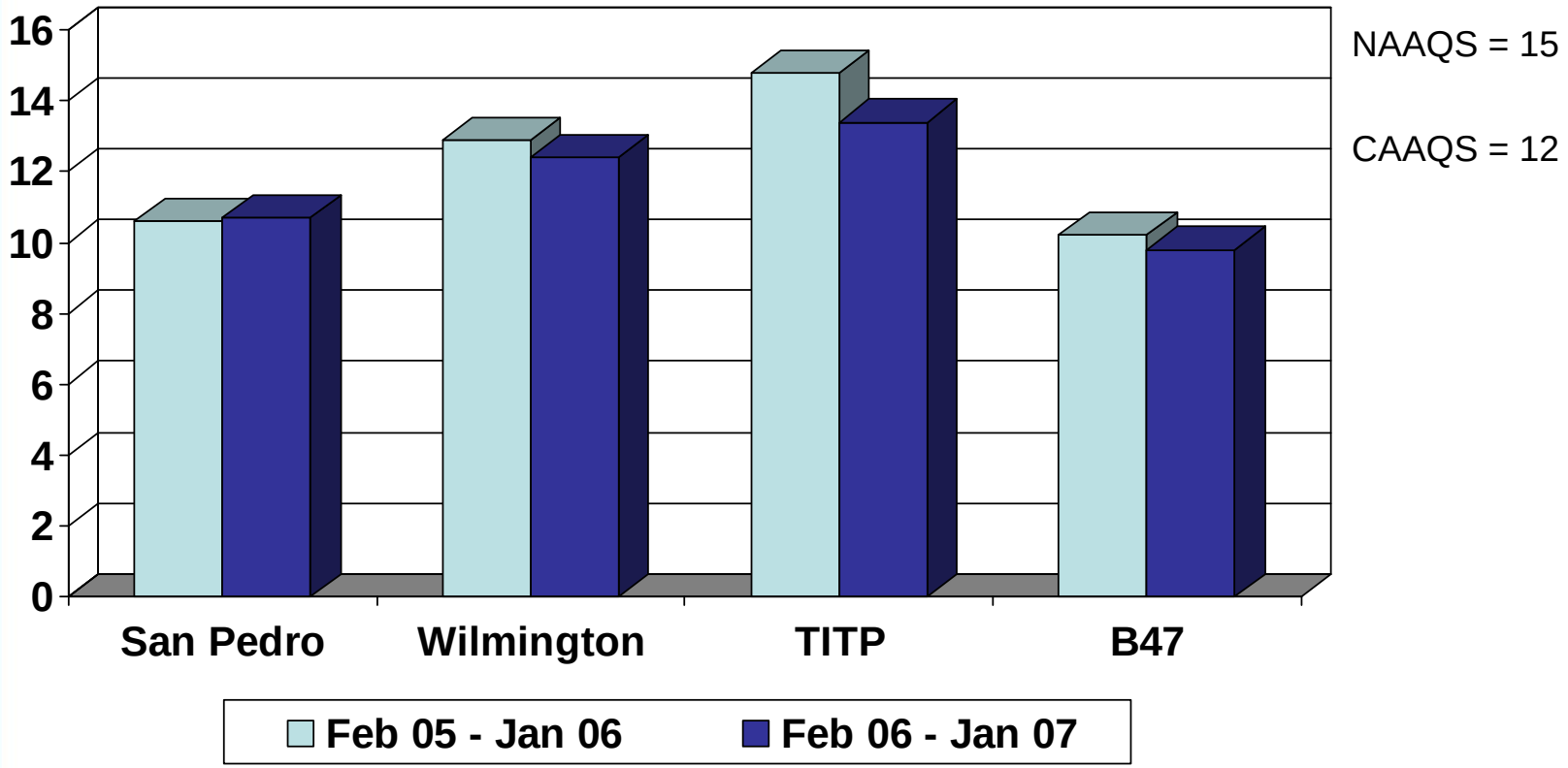
PM2.5 Monthly Monitoring Results



A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

PM2.5 Annual Average Monitoring Results (ug/m³)



A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Expanded Air Monitoring Network

Real-Time Air Pollutant Monitoring

- NO_2 (nitrogen dioxide)
- SO_2 (sulfur dioxide)
- CO (carbon monoxide)
- O_3 (ozone)
- $PM_{2.5}$
- PM_{10}
- Ultrafine Particle Counter
- PAH monitor (polycyclic aromatic hydrocarbons)
  - USEPA grant

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Berth 47

- "Coastal boundary" station
- Expanded monitoring began November 2007

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Terminal Island Treatment Plant

- "Source-Dominated" Station
- Expanded monitoring began November 2007

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Saints Peter and Paul School

- Wilmington Community Station
- 2004 Validation Study
- Expanded monitoring began March 2008
- SCAQMD partnership

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Promenade (formerly LHP)

- San Pedro Community Station
- 2004 Validation Study
- 2007 Validation Study
- Start-up April 2008
- Will collect concurrent samples

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Continuous Air Monitoring

- Joint website showing data from four POLA stations as well as the two POLB stations:

  http://caap.airsis.com/
- Data uploaded at hourly intervals
  - NO_2, SO_2, CO, O_3, PM, Ultrafines, and PAHs
  - Wind Speed, Direction, Temperature
- Map View, Current Data, Historical Data, Reports
- Publicly-accessible
  - POLA Website: www.portoflosangeles.org
  - San Pedro Bay Ports Clean Air Action Plan Website: www.cleanairactionplan.org
- Site Enhancement
  - Glossary

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Future of Monitoring/Results

- Track long term air quality trends and success of the San Pedro Bay Ports Clean Air Action Plan
- Conduct Source Apportionment studies
- Collaborate with agencies and organizations to improve data and conduct special studies
  - SCAQMD/ARB
  - USC
  - University of Denver

A CLEANER PORT.
A BRIGHTER
FUTURE.

AIR

Contact Information

Lisa Wunder
Environmental Specialist
Port of Los Angeles
Environmental Management Division

P.O. Box 151
San Pedro, CA 90731
lwunder@portla.org

(310) 732-7688 direct
(310) 732-3675 main
(310) 547-4643 fax
www.portoflosangeles.org