Getting to Know the Air Resources Board's PQAO

Darsi Goto
Air Resources Board
PQAO Training, 2014

Overview

- Air Quality in California
- ARB PQAO structure
- Challenges
- Benefits
- Roles and Responsibilities

California has some of the worst air quality in the United States.

Causes

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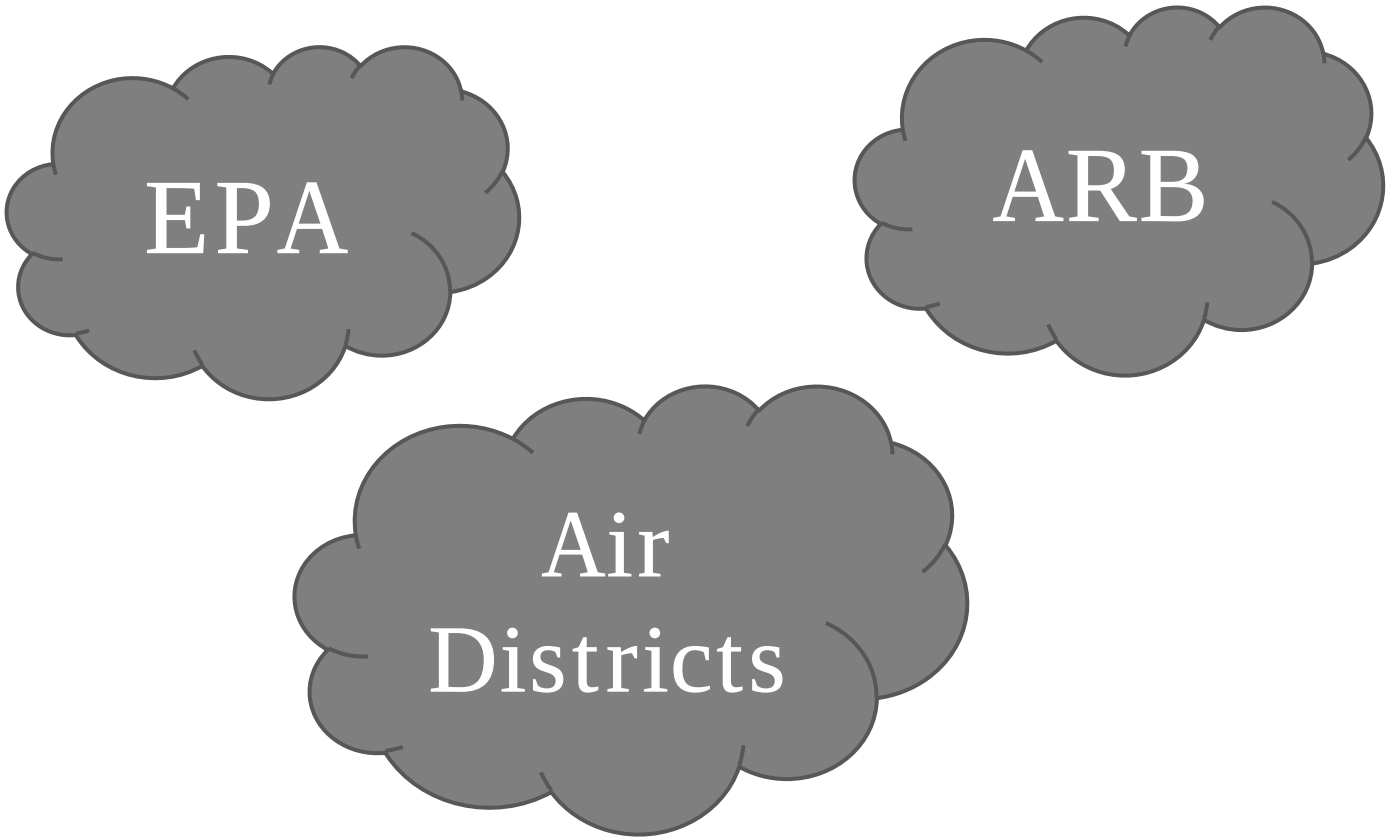
California's topography is perfect for trapping and forming air pollutants.

Cloudy with a chance of miscommunication



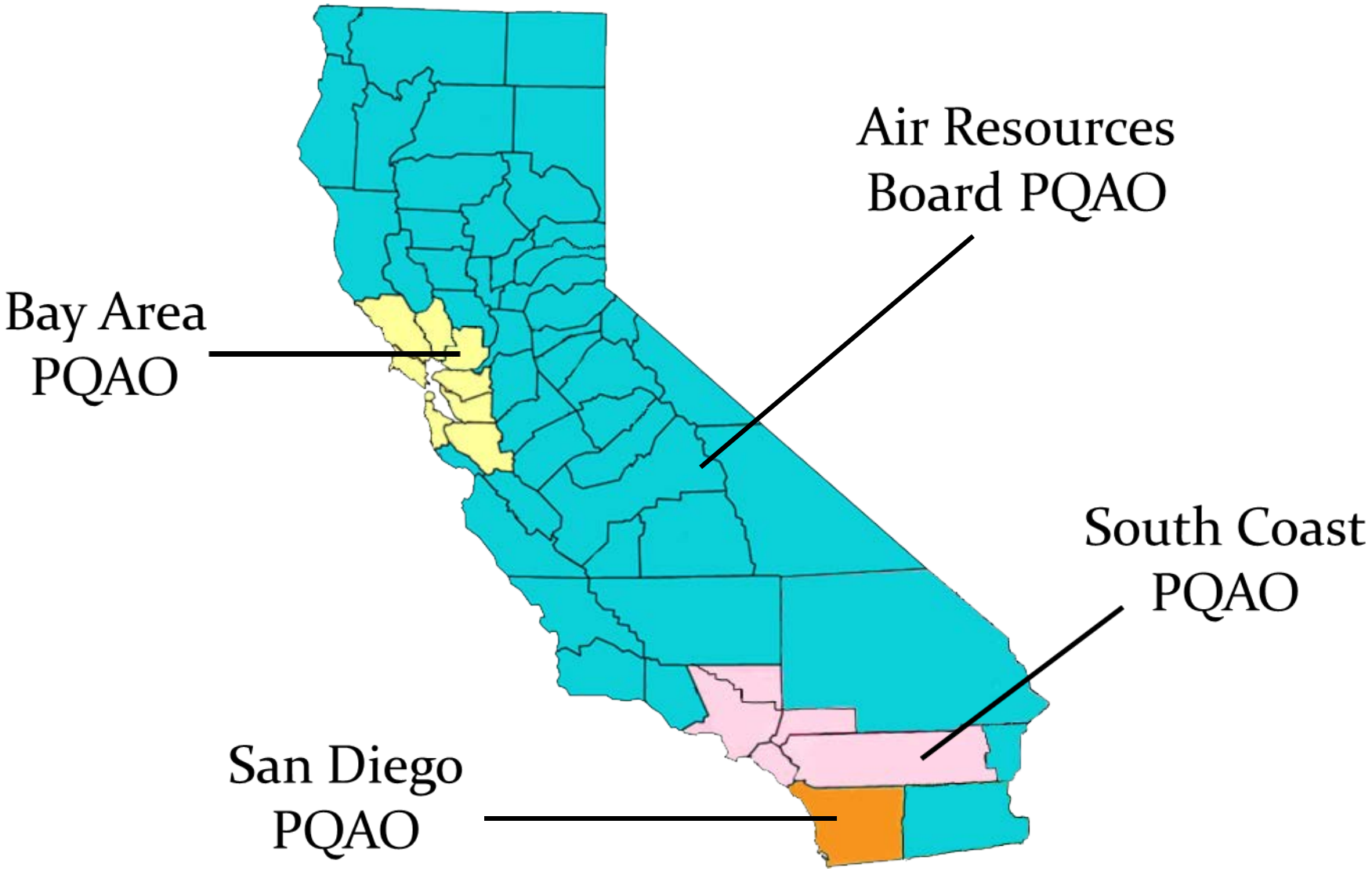
Primary Quality Assurance Organization (PQAO)

- Monitoring organization or group of organizations
- Quality assurance oversight
- Ensures that data is
  - Consistent
  - High quality
  - Defensible

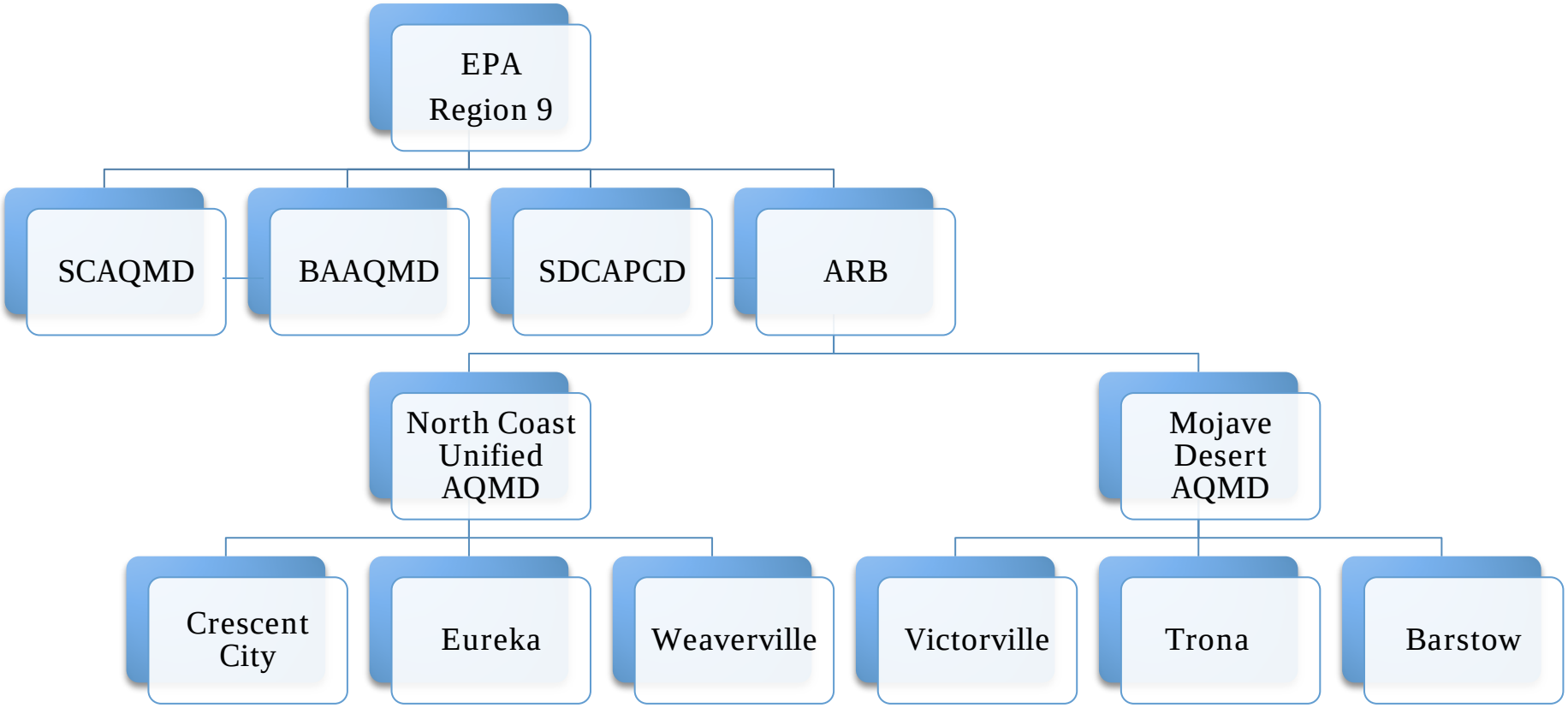
ARB is a PQAO

- Consists of all monitoring organizations in California except
  - Bay Area AQMD
  - South Coast AQMD
  - San Diego County APCD
  - Tribal monitoring organizations
- 32 air districts
- Over 180 air monitoring sites

PQAOs in California

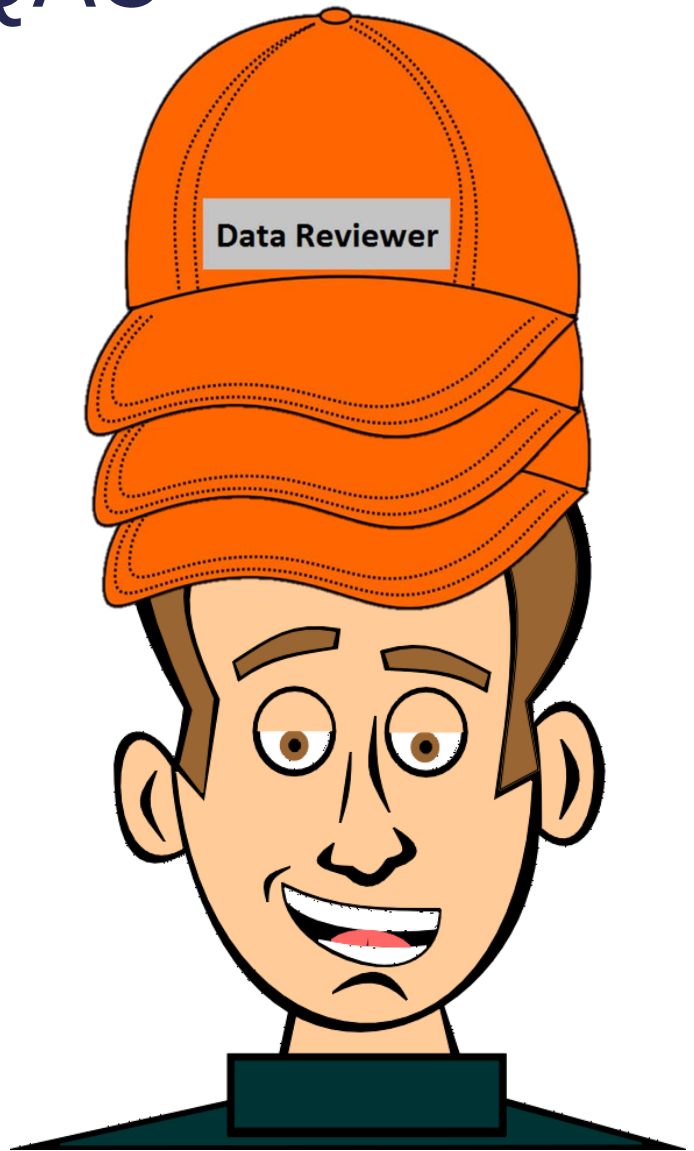


PQAO Organization Chart



Challenges of ARB's PQAO

- Large number of monitoring organizations
- Large geographical area
- New organization
- Varying resources amongst districts

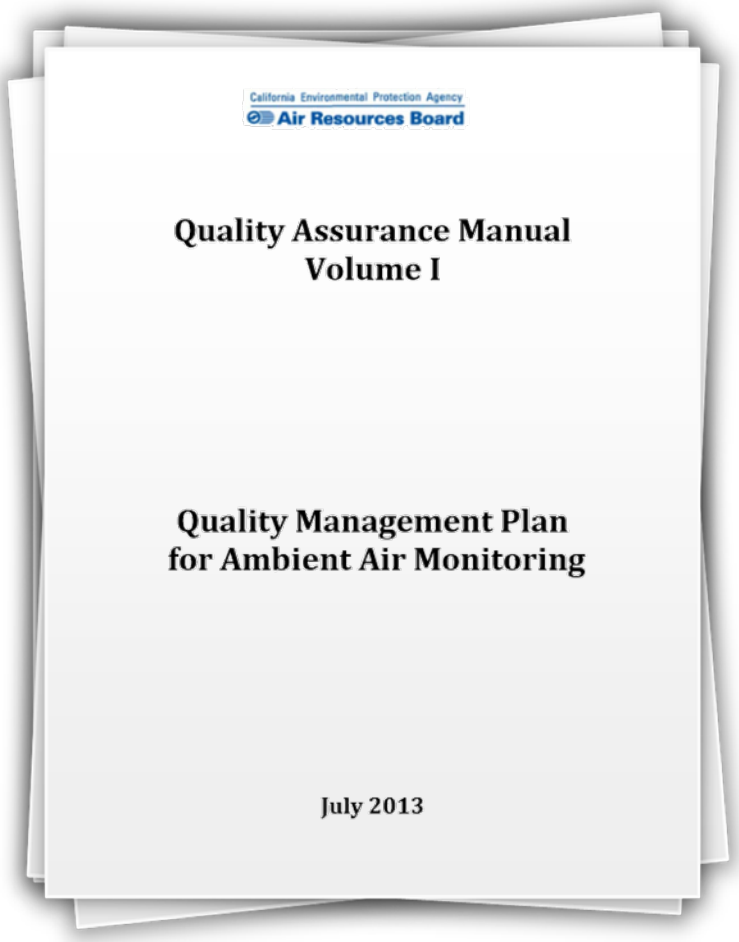


Benefits of ARB's PQAO

- Strengthens air monitoring programs
  - Improved communication between organizations
  - Consistency of practices and procedures
  - **Time and money savings…**

Shared Resources

- Quality management documents
  - Required by federal regulations
  - QMP, QAPPs, SOPs
  - Districts can utilize existing documents or develop their own
  - Write an addendum



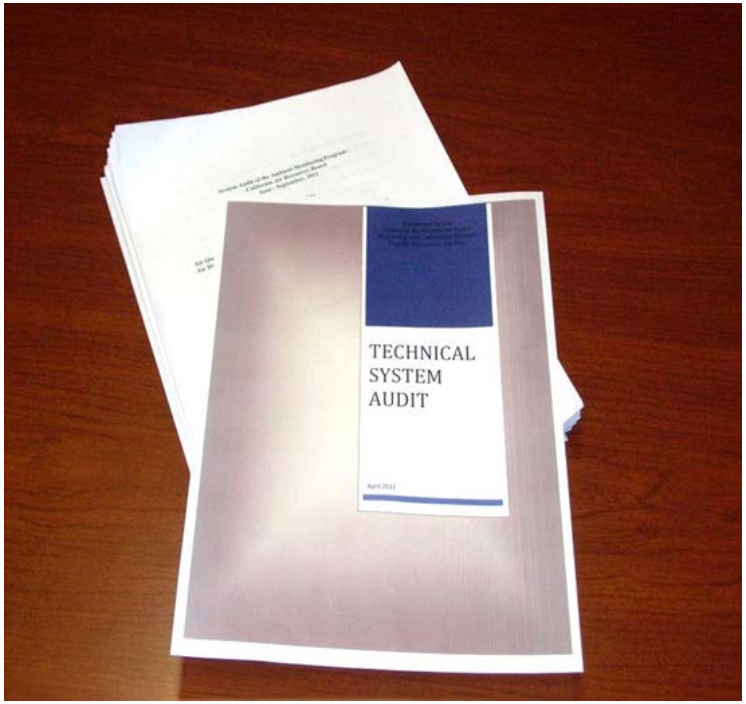
Shared Resources

- Quality management documents

Monitoring Organization	Gaseous Criteria Pollutants			
	SO_2	NO_2	CO	O_3
Air Resources Board	TECO 43	TECO 42	Dasibi 3008 TECO 48	ARB - API 400A ARB Pending - API 400E/T400
Antelope Valley	N/A	ARB - TECO 42	Dasibi 3008 TECO 48	ARB - API 400A ARB Pending - API 400E/T400
Eastern Kern	N/A	N/A	N/A	N/A
Great Basin	N/A	N/A	N/A	In Progress - TECO 49i
Imperial	N/A	In Progress - API 200A	In Progress - API T300	In Progress - API T400 ARB - API 400A
Lake	N/A	N/A	N/A	ARB - API 400A ARB Pending - API 400E/T400
Mendocino	N/A	N/A	N/A	ARB - API 400A ARB Pending - API 400E/T400
Mojave Desert	In Progress - API 100E	In Progress - API 200E	In Progress - API 300E	In Progress - API 400E
Monterey Bay	MO Pending- TECO 43c	In Progress - TECO 42C	MO Pending - TECO 48	MO Pending - TECO 49c
North Coast	In Progress - TECO 43i	In Progress - TECO 42i	In Progress - TECO 48i	In Progress - TECO 49i

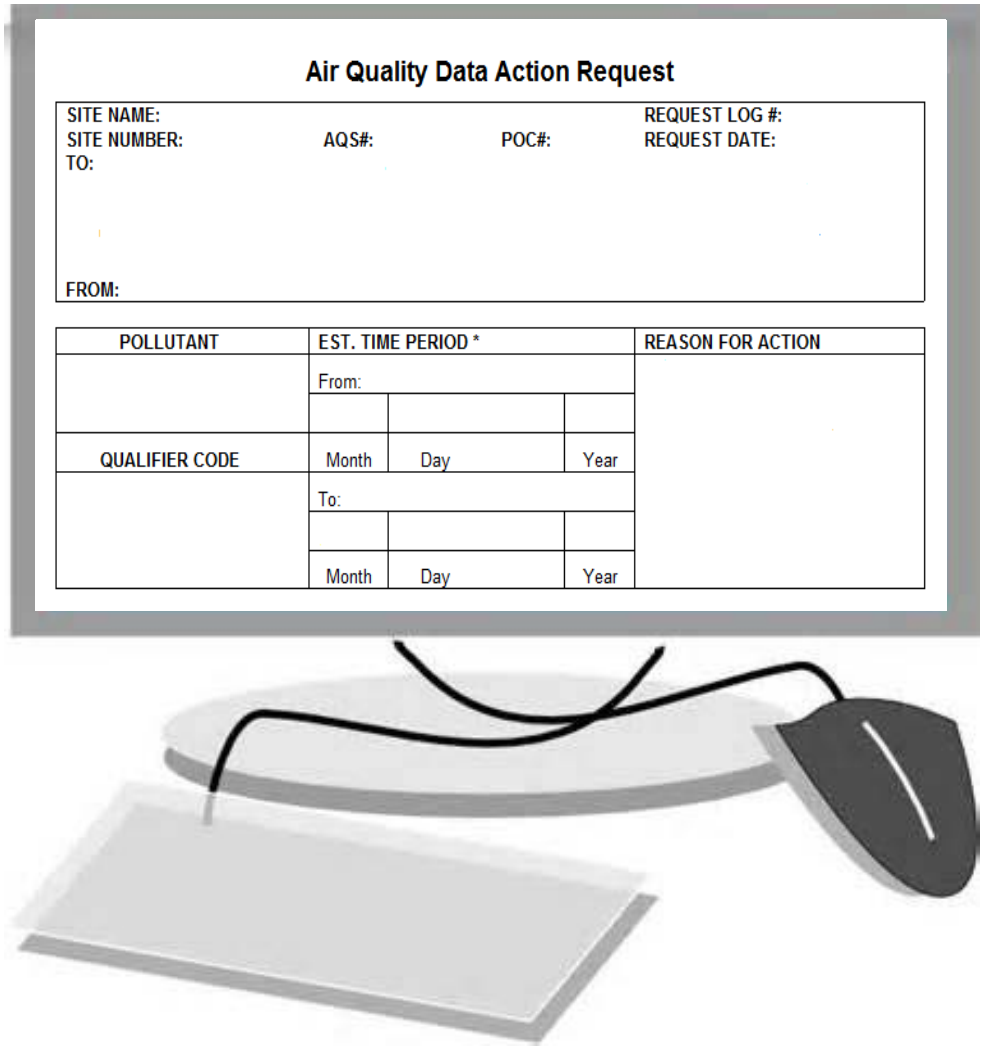
Shared Resources

- Audits



Shared Resources

- Corrective Action
  - Air Quality Data Action (AQDA) Request
  - Corrective Action Notification (CAN)

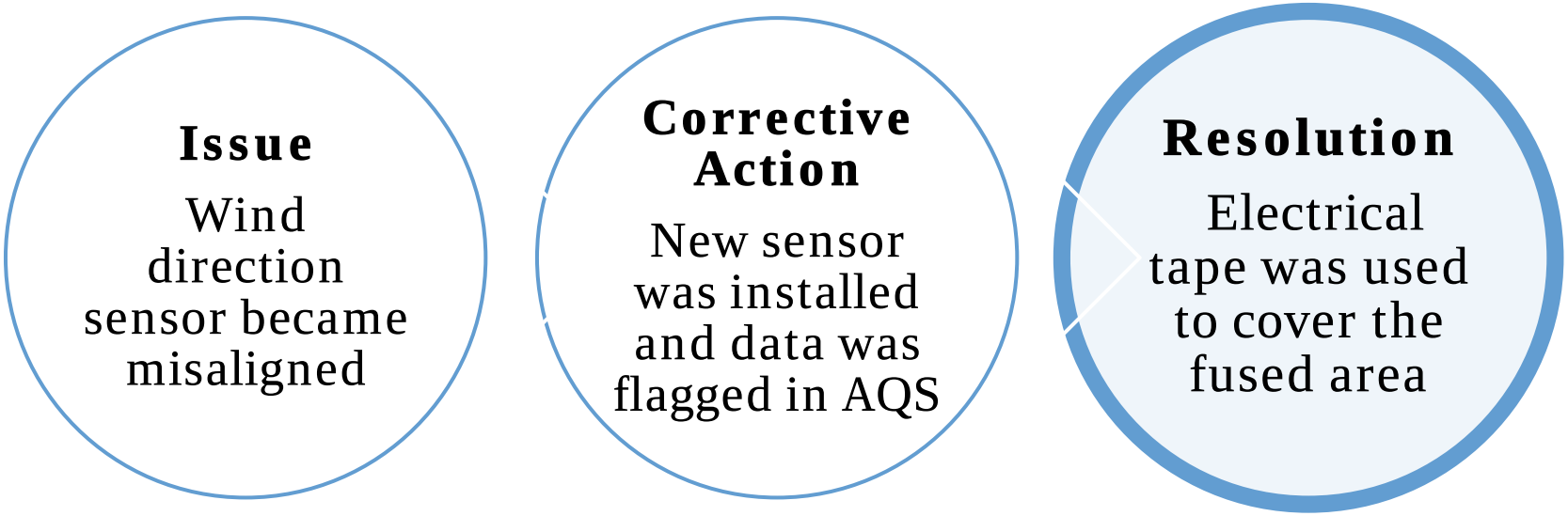


Air Quality Data Action Request

SITE NAME:			REQUEST LOG #:
SITE NUMBER:	AQS#:	POC#:	REQUEST DATE:
TO:			
FROM:			

POLLUTANT	EST. TIME PERIOD *			REASON FOR ACTION
	From:			
QUALIFIER CODE	Month	Day	Year	
	To:			
	Month	Day	Year	

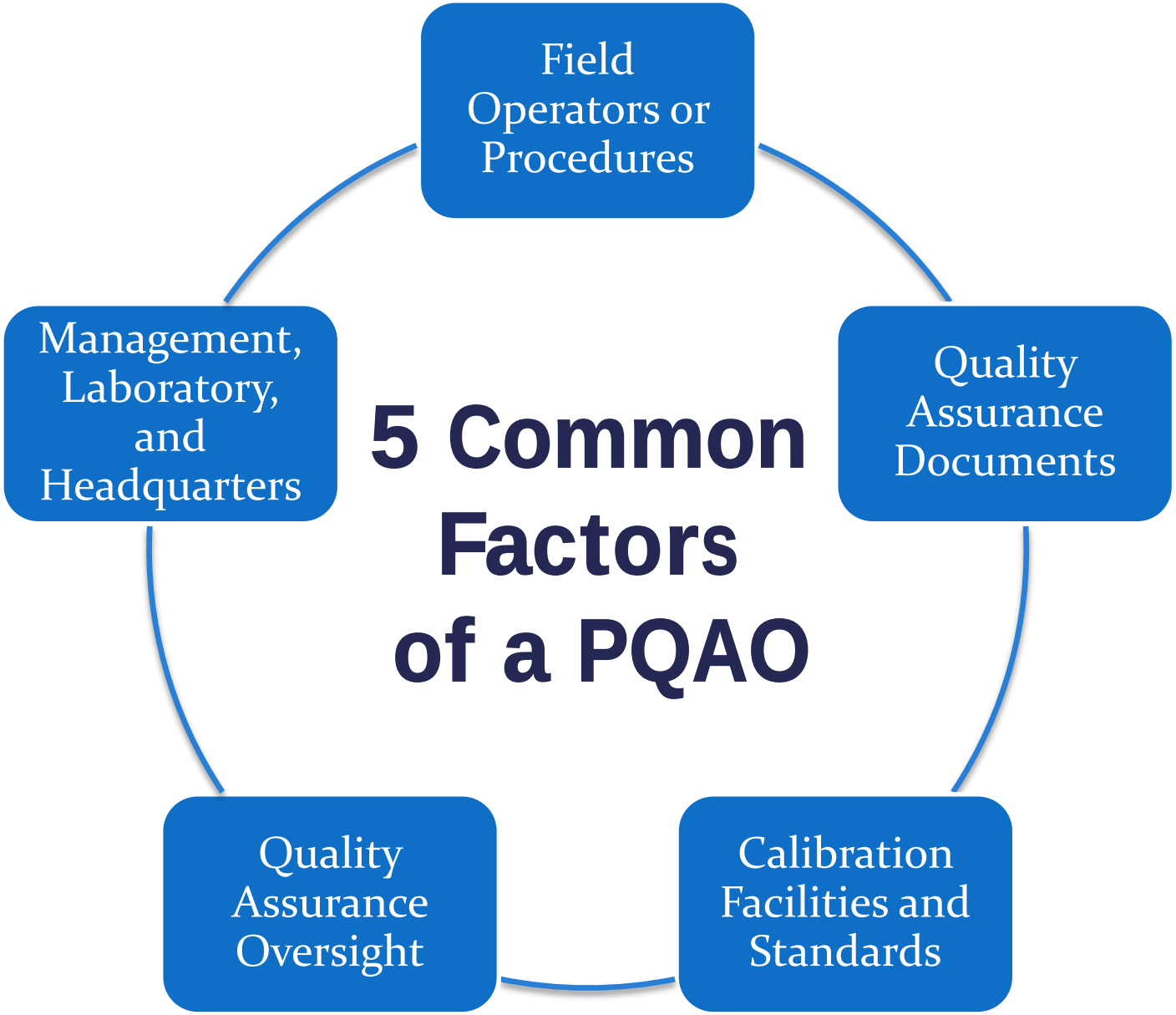
CAN Example



- ✓ Appropriate individuals were notified
- ✓ Proper documentation

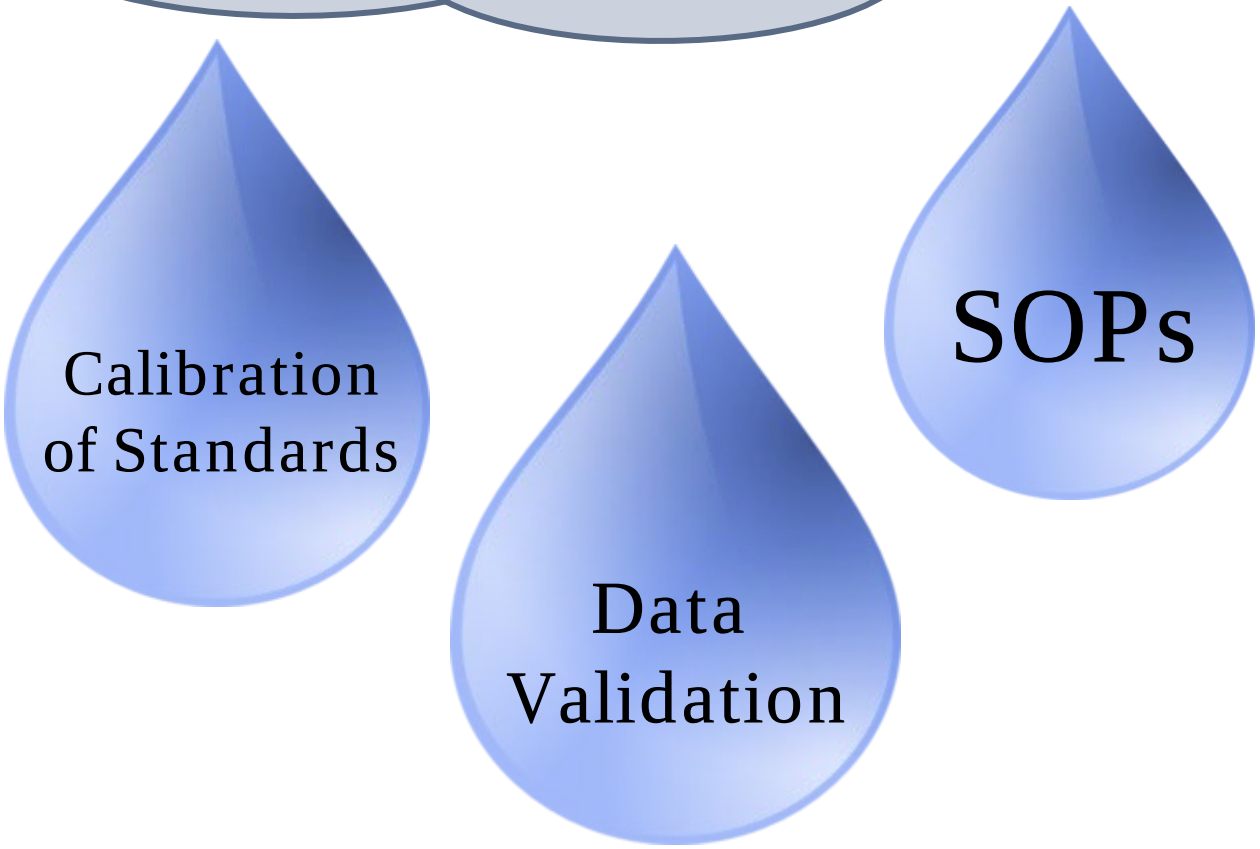
Shared Resources

- Communication and Networking
  - ARB Quality Assurance Website
  - California Air Pollution Control Officers Association (CAPCOA)
  - Work groups, conference calls, PQAO list serve
  - Training opportunities
  - ARB PQAO liaison


Field Operators or Procedures
Quality Assurance Documents
Calibration Facilities and Standards
Quality Assurance Oversight
Management, Laboratory, and Headquarters
5 Common Factors of a PQAO

Independent PQAO	ARB PQAO
Quality management documents	ARB quality management documents for utilization
Calibration facilities and standards	ARB's Standards Laboratory
Independent Audits	Audits performed by ARB
Collocated monitoring requirements	Collocated monitoring requirements are PQAO-wide

Responsibilities



Roles and Responsibilities Documents (R&R Documents)

- Establish roles and responsibilities of both ARB and districts as part of the PQAO
- Collaboratively addresses five common factors
- Documents are individualized for each districts
- “Living” documents – may change as ARB or district responsibilities change

Roles and Responsibilities

Oversight by a common quality assurance organization

ARB

Conduct performance and technical system audits

Issue AQDAs

Maintain CAN database

Provide procedures/criteria for data validation

District

Participate in performance and technical system audits

Resolve AQDAs

Utilize CAN process or ARB approved alternative

Utilize ARB procedures/criteria for data validation or ARB approved alternative

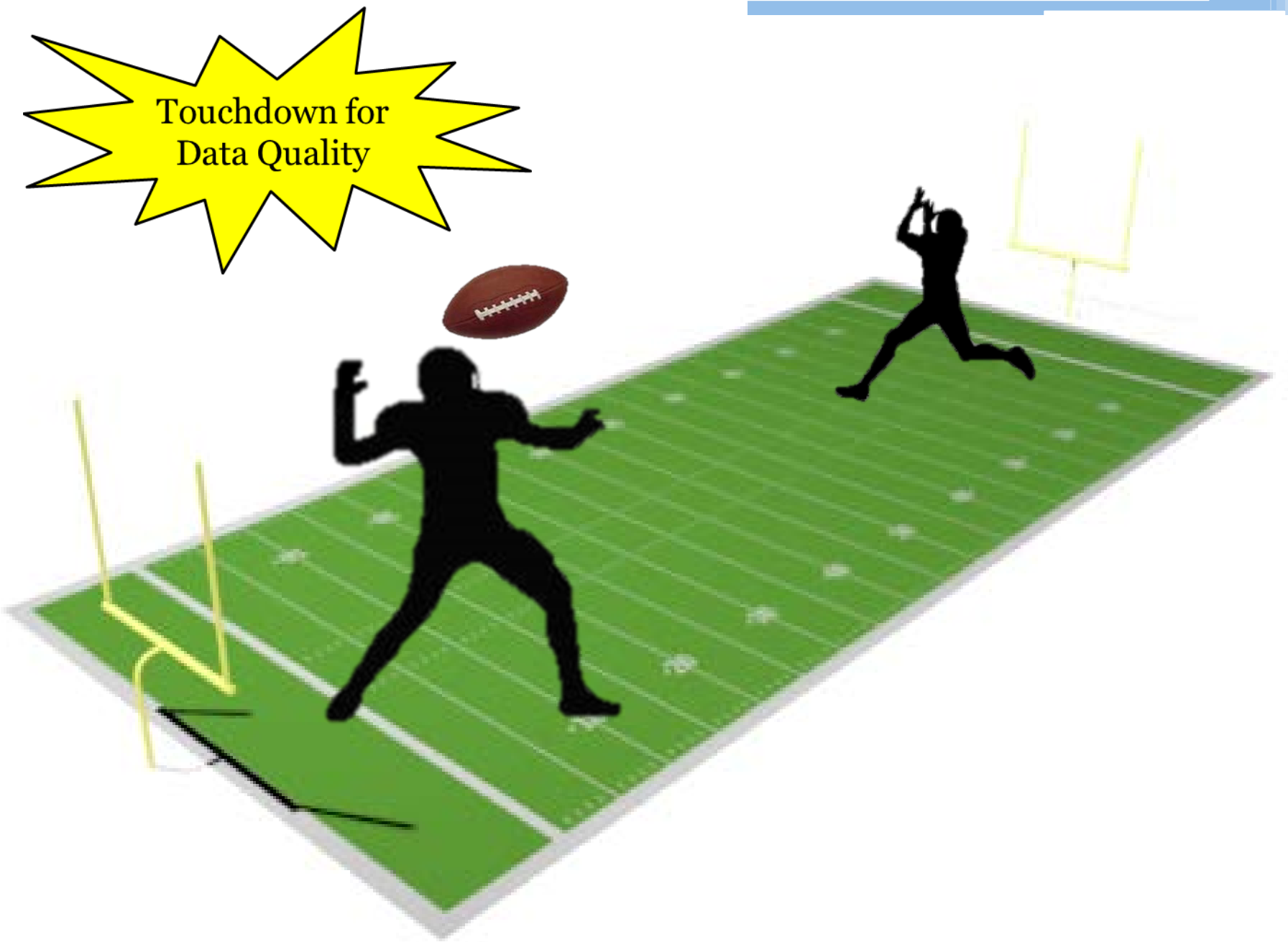
~~Roles and Responsibilities~~

Rest and Relaxation

PQAO and Data Quality

Implementation of a PQAO ensures
consistent, high quality, defensible data

- Streamlined activities and communication
- Effective utilization of resources
- Consistency of practices and procedures


Touchdown for
Data Quality

Contact Information

Mike Miguel, Chief
Quality Management Branch / PQAO Coordinator
mmiguel@arb.ca.gov or 916-322-0960

Patrick Rainey, Manager
Quality Management Section
prainey@arb.ca.gov or 916-327-4756

Darsi Goto – Air Pollution Specialist
dlgoto@arb.ca.gov or 916-324-9656

ARB Quality Assurance Website -
www.arb.ca.gov/aaqm/qa/qa.htm