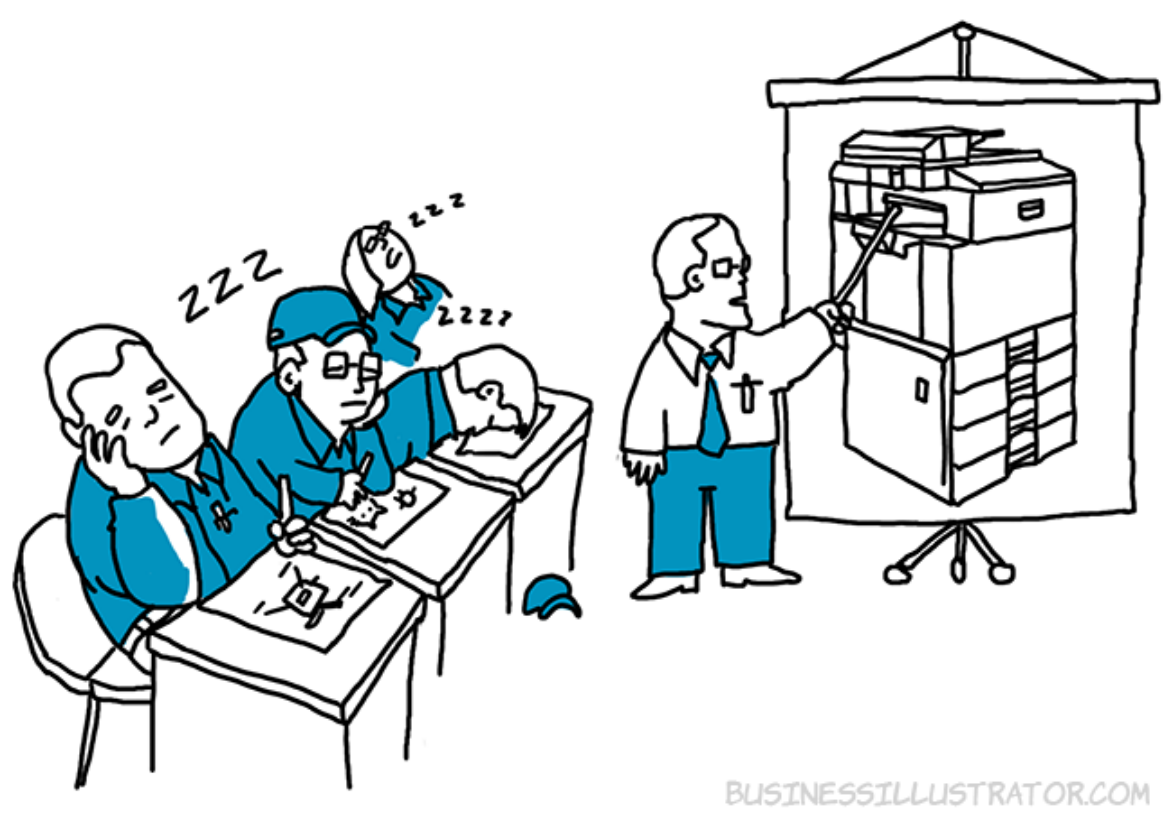
CARB Air Monitoring Field Training Program

Air Monitoring Field training program for station operators and calibration staff

Objectives:

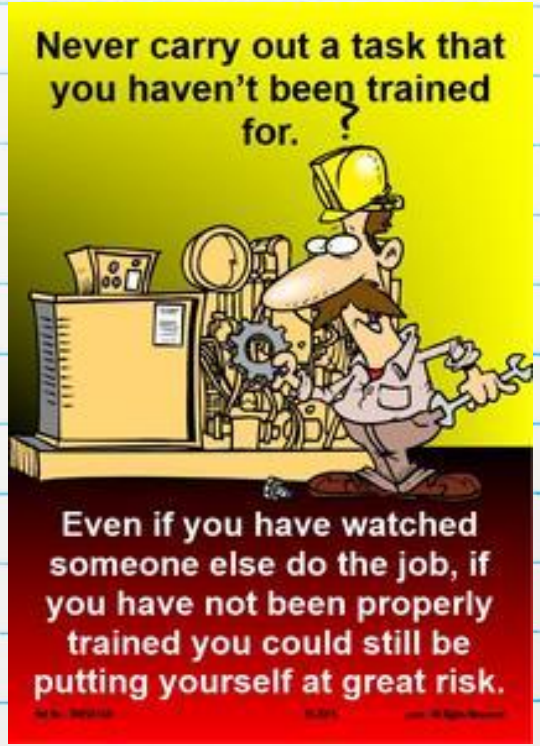
- Why do we need a training program?
- What should be included?
- How can you use CARB's training program?

Why do we need a training program?



"IF IT WASN'T DOCUMENTED

IT WASN'T DONE"


Never carry out a task that you haven't been trained for.
Even if you have watched someone else do the job, if you have not been properly trained you could still be putting yourself at great risk.

WEAR YOUR SAFETY HARNESS CORRECTLY!

Results of Ineffective Training

- Poor job performance
- Low job satisfaction
- Safety hazards and injuries
- Lower customer satisfaction
- Legal repercussions
- Wasted resources – high cost/ low return

What should be included in a training program?

- WHO will do the training?
  - QFT – Qualified Field Trainer

What should be included in a training program?

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  - QFT – Qualified Field Trainer
- WHAT are the trainee's responsibilities?
  - Be an interactive learner

What should be included in a training program?

- WHO will do the training?
  - QFT – Qualified Field Trainer
- WHAT are the trainee's responsibilities?
  - Be an interactive learner
- WHAT will be covered?
  - Tasks and timelines

I received the handbook.
I reviewed the handbook.
I understood the handbook.

APPENDIX A

AIR MONITORING FIELD TRAINING PROGRAM ACKNOWLEDGEMENT FORM

I have received a copy of the AQSB Field Training Program and have had the opportunity to discuss the training program and my training plan with my manager and trainer.

_____ _____

Employee Signature Date

APPENDIX B
***Example* Field Training Plan for (Name)**
Start date:_____

US EPA and CARB Basic Training

Course	Expected Completion Date	Date Completed	Trainer's Initials
• AP101: Air Academy Online Training (AAOT)	(i.e. within 3 months of start)		
• AP102: Air Quality Training Program (AQTP) - Online Training			
• Primary Quality Assurance Organization - Module 1 (Fundamentals of Air Monitoring and Station Setup and Operation)			
• Primary Quality Assurance Organization - Module 2 (Data Validation)			
• APTI RE-100-1: Basic Concepts in Environmental Sciences - Module 1: Basic Concepts			
• APTI SI-474: Introduction to Environmental Statistics			
• APTI SI-409: Basic Air Pollution Meteorology			
• **Tour of CARB Facilities (Sacramento)** o Sacramento T-Street monitoring station o Instrument repair shop o Stockroom and warehouse o Standards laboratory o Inorganic and organics laboratories			

General Field Training

Task	Expected Date	Date Completed	Trainer's Initials
• Defensive Driver Training (annual requirement)			
• Heat Illness Prevention Training (annual requirement)			
• Climbing and Safety Training (initial and annual refresher required)			
• Orientation to sites of responsibility			
• Site routine operation schedules			
• Site maintenance			
• Residence time calculations			

https://ww2.arb.ca.gov/resources/documents/field-operator-and-calibrator-training-plan-example

Course or Task

Expected Completion Date

Date Completed

Trainer's Initials

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Online Training

Onboarding

General

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Trainee's Initials

Site Operator Training

Task	Expected Date	Date Completed	Trainer's Initials
• Instrument specific orientation Each instrument has a check sheet listing areas covered (attach when completed), SOP's			
• Instrument specific monthly QC forms			
• Site Operating Principles			
• Sample shipping, media, calendar schedule and sample storage			
• Field Documentation o Log book entries o Monthly Flow Report o Nightly calibrations o Precision reporting			
• Quality Assurance o Standards and Certifications o Air Quality Data Actions (AQDA) o Corrective Action Notifications (CAN) o Audits, Trace, Flow, EPA-TSA			

Calibrator Training

Task	Expected Date	Date Completed	Trainer's Initials
• Instrument specific monthly QC forms			
• Instrument specific orientation Each instrument has a check sheet listing areas covered (attach when completed)			
• Calibration Principles			
• Use of Transfer Standards			
• Calibration Documentation o Calibration reports o Air Quality Data Actions (AQDA) o Corrective Action Notifications (CAN)			

Document Review

AQ Data Management System

Documentation Review

Task	Expected Date	Date Completed	Trainer's Initials
• SOPs and instrument manuals for instruments under care			
• CFR review			
• U.S. EPA Handbook Vol II review (emphasis on DV tables)			
• Branch memos and policies related to air monitoring			

AQ Data Management System

Task	Expected Date	Date Completed	Trainer's Initials
• Introduction to CARB Air Quality Data Management System (DMS)			
• Introduction to CARBLogger			
• Databases: AQS, AQMIS, AQI's, POC's etc.			
• Data Management Tools o DMS Homepage o Control Charts o Data Matrix			
• Data Review, Verification, and Validation Principles, Level 1 obligations, Level 2 obligations, Review Schedule			

All required training for (staff name) has been completed and proficiency has been satisfactorily demonstrated.

Manager Signature

Date

Documentation

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Manager Signature _____ Date _____

All required training for __(staff name)_____ has been completed and proficiency has been satisfactorily demonstrated.

_____ _____

Manager Signature Date

Key parts of a training program

- Have a Qualified Field Trainer

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- Have a Qualified Field Trainer
- Acknowledgement Form

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  - Operation, safety, QA/QC, sample handling, databases, etc.
- Training timeline (expected completion dates)
- Dates training was completed
- Initials of both trainee and trainer
- Manager's signature

How Can you use CARB's training program?

- Edit CARB's document - MAKE IT YOUR OWN

How Can you use CARB's training program?

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- Review the details and expectations with Trainee

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- Include a Manager sign off

How Can you use CARB's training program?

- Edit CARB's document - MAKE IT YOUR OWN
- Review the details and expectations with Trainee
- Add completion dates with initials of both Trainer and Trainee
- Include a Manager sign off
- Review and update at least:
  - annually,
  - before you use it with a new employee,
  - and when procedural changes are made

Why do we need a training program?

What should be included?

How do you use the training program?

Why do we need a training program?

DOCUMENTATION and CONSISTENCY

What should be included?

How do you use the training program?

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DOCUMENTATION and CONSISTENCY

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EXPECTATIONS - TASKS - DATES - SIGNATURES

How do you use the training program?

Why do we need a training program?

DOCUMENTATION and CONSISTENCY

What should be included?

EXPECTATIONS - TASKS - DATES - SIGNATURES

How do you use the training program?

CUSTOMIZE and UPDATE REGULARLY

QUESTIONS?

Kathy Gill, Chief
kathleen.gill@arb.ca.gov
(916) 445-9483

Reggie Smith, Air Resources Supervisor
reginald.smith@arb.ca.gov
(916) 327-1238

https://ww2.arb.ca.gov/resources/documents/field-operator-and-calibrator-training-plan-example