

SLAMS, SPM, and Non-Regulatory Monitors

PQAO Training

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Overview

- Discuss purpose and requirements of State and Local Air Monitoring Stations Monitors
- Discuss purpose and requirements of Special Purpose Monitors
- Discuss purpose and requirements of Non-Regulatory Monitors
- Compare and contrast similarities and differences between them

Acronyms

40 CFR 58 - Code of Federal Regulations for Air Quality Surveillance

ARM - Approved Regional Method

AQ - Air Quality

CARB - California Air Resources Board

E-BAM - Environmental Beta Attenuation Monitor

FEM - Federal Equivalent Method

FRM - Federal Reference Method

NAAQS - National Ambient Air Quality Standards

SBCAPCD - Santa Barbara County Air Pollution Control District

SLAMS - State and Local Air Monitoring Stations

SPM - Special Purpose Monitor

U.S. EPA - United States Environmental Protection Agency

SLAMS Monitors

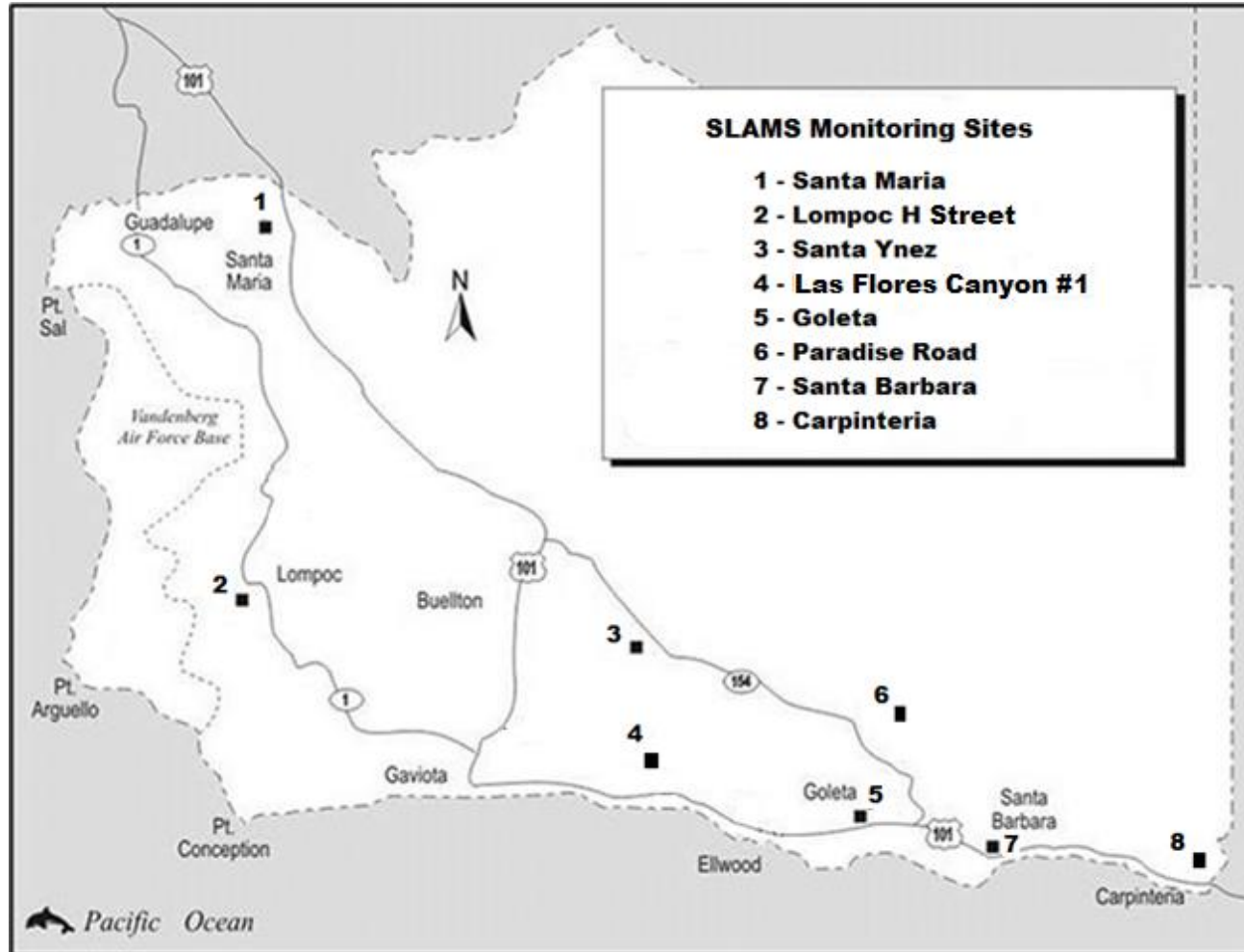


State & Local Air Monitoring Station (SLAMS) Monitors

- Primarily exist for comparison to National Ambient Air Quality Standards (NAAQS), and to determine attainment of those standards
- Must satisfy all applicable requirements of 40 CFR 58 Appendices A-E
- Provide timely air quality data to the public*
- Support air pollution research studies*

**True of all three types of monitors covered in this presentation*

Santa Barbara County SLAMS Monitors



SPMs – Special Purpose Monitors

- Fulfill very specific or short-term monitoring goals
- If using FEM/FRM/ARM, 40 CFR 58 Appendix A & C requirements are required unless waived by EPA Regional Administrator, and Appendix E requirements are optional but encouraged
- If using FEM/FRM/ARM and operated longer than 24 months, U.S. EPA may compare SPM data against NAAQS unless 40 CFR 58 Appendix A, C, & E requirements were not met
- Discontinuation of SPMs do not require U.S. EPA approval if ran <24 months
- In order to obtain SPM designation, it must be an entirely new monitor installation

SPMs – Special Purpose Monitors

Carpinteria BAM-1022 PM2.5 monitor

- Funded from U.S. EPA 103 American Rescue Plan Direct Award grant

- Installed to provide PM2.5 data for AB 1550 communities (low-income) which are impacted by sources of pollution such as freeway traffic, wildfire smoke, and other local sources

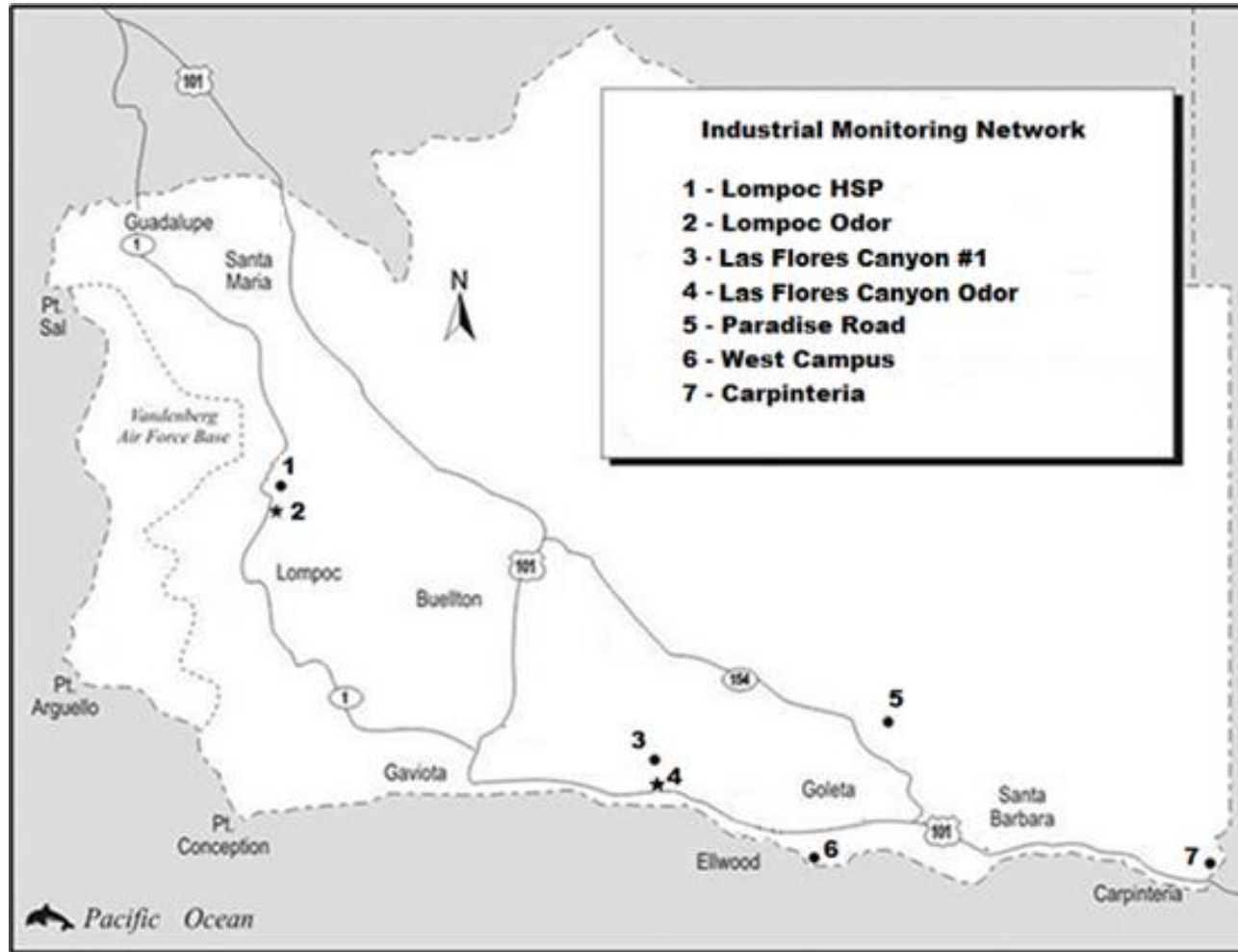
- Prior to installation the nearest PM2.5 station was Santa Barbara, and SBCAPCD would regularly install E-BAMs in Carpinteria during episodes of unhealthy AQ



Non-Regulatory Monitors

- Not suitable for comparison to NAAQS
- Monitors for non-criteria pollutants
- Monitors for criteria pollutants which are non-FEM, FRM, or ARM
- Can still be used to provide timely air quality data to the public, support air pollution research studies, and verify permit compliance

Santa Barbara Non-Regulatory Monitors



Key Differences

	SLAMS	SPM	Non-Regulatory
AQS Reporting	Yes	Usually yes, may vary by funding	Varies
AirNow AQI Reporting	Yes	Yes	Yes
Must satisfy 40 CFR 58 requirements	Yes	Yes, unless waived by EPA	Varies
Count towards minimum monitoring requirements	Yes	No	No
NAAQS comparable	Yes	Yes, if ran for >24 months	No
Shut-down at will	No - requires EPA approval	Yes, if ran for <24 months	Yes
Subject to QA Audits	Yes	Yes, if reporting to AQS	No

Take-aways

- Be thoughtful and deliberate when choosing what equipment to use for new monitor installations. Even if a monitor begins as a SPM, if using FEM/FRM/ARM equipment and operated >24 months, it will undergo conversion to a SLAMS monitor.
- Regardless of the monitor designation, if you received grant funding from CARB or U.S. EPA you will likely be required to submit data to AQS
- Reach out to CARB and U.S. EPA liaisons for help on a case-by-case basis

References & Additional Info

40 CFR Part 58.16 - SPMs & AQS data submission:

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-58/subpart-B/section-58.16>

40 CFR Part 58.20 - SPMs & NAAQS:

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-58/subpart-C/section-58.20>

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