

SACRAMENTO VALLEY AIR BASIN CONTROL COUNCIL

AIR QUALITY PROGRAM OVERVIEW

AIR BASIN – defined as area that shares the same air mass – pollution transport considered
SACRAMENTO VALLEY - nine air districts with 11 counties (Placer and Solano are partial)
TOPOGRAPHY - Coast Range to Sierra Nevada mountains and Redding to Sacramento
METEOROLOGY – inversions common (warm air over cold air) and stagnant atmosphere
POPULATION – total of 2,664,000 urban Sacramento, Yuba City/Marysville, Chico and Redding and large rural expanse with smaller cities and towns

AIR QUALITY STANDARDS – federal and California – one hour, eight hour, 24 hour & annual
AIR POLLUTANTS - ozone (O₃ aka smog), particulate matter (2.5 and 10 micron size), oxides of nitrogen (NO & NO₂), volatile organic compounds (VOC hydrocarbons), sulfur oxides (SO₂) and carbon monoxide (CO). Toxic pollutants (e.g., formaldehyde, benzene, hexavalent chromium)

AGENCIES – US Environmental Protection Agency (EPA Region IX San Francisco), California Air Resources Board (ARB) and local air quality districts

REGULATIONS AND RULES – Code of Federal Regulations (CFR), CA Code of Regulations (CCR) e.g., Health and Safety Code and local air district rules

AIR PROGRAMS –

Air Monitoring – NAMS, SLAMS, special purpose with continuous or periodic sampling

Permitting – new and modified facilities and equipment and annual permit renewals

Rules – examples are nuisance, boiler, vapor recovery, new source review with BACT

Smoke Management Program – managing agricultural and prescribed burning

Emission Inventories – types of facilities, pollution emission types and quantities

Incentives – emission reduction credits (ERCs) and grants (Carl Moyer)

Communication – web sites (e.g., spare the air), printed informational material, fact sheets, advisory groups, public meetings, workshops and hearings

Compliance – facility inspections, office visits, training meetings, warning notices, notices of violation, settlement conferences and fines

Hearing Board – compliance variances and permit appeals – required members

District Budget – federal grants (105), CA state subvention and permit & inspection fees

EMISSION SOURCES – examples are power plants, gasoline terminals, manufacturing facilities, aggregate plants, food processors, gas stations and automobiles

EMISSION TYPES – examples are fossil fuel combustion, material handling, VOC evaporation, open agricultural burning and fugitive dust

POLLUTION CONTROLS – cyclone, fabric filter, scrubber, catalyst, design change, product reformulation, car pool lane and onramp metering