

2007 AQMP CONTROL MEASURE ENVIRONMENTAL ANALYSIS

Control Measure No.	AQMP Control Measure Description	Agency	Pollutant	Not Significant	Control Measure	Potential Impact					
						Secondary Air	Energy	Hazard	Water	Solid/Haz Waste	
MEASURES TO BE IMPLEMENTED BY THE SCAQMD											
CTS-01	Industrial Lubricants	SCAQMD	VOC		Reduce VOC emissions from industrial lubricants. Low-VOC lubricants.	X		X			X
CTS-02	Clean Coating Certification Program	SCAQMD	VOC		Seek to implement an ultra-low VOC content certification program. Incentive program; super compliant coatings.	X		X			X
CTS-03	Consumer Product Labeling & Emission Reductions from use of Consumer Products at Institutional and Commercial Facilities	SCAQMD	VOC	1, 2	Develop new rules to establish a VOC labeling program & require use of low-or zero-VOC consumer products. Prohibition/limitation of use.						
FUG-01	Improved Leak Detection and Repair	SCAQMD	VOC	2, 3	Use "Smart LDAR" to readily detect a leak. Smart leak detection/repair program.						
FUG-02	Emission Reductions from Gasoline Transfer & Dispensing Facilities (GDF)	SCAQMD	VOC	2, 3	Reduce VOC and toxic emissions from GDF operations by improving CARB enhanced vapor recovery (EVR) regulation. Enhanced in-station diagnostics.						
FUG-03	Cutback Asphalt	SCAQMD	VOC		Reduce emissions from asphalt paving applications by limiting the use of cutback asphalt and /or replacing it with emulsified asphalt.				X		
FUG-04	Emission Reductions from Pipeline & Storage Tank Degassing	SCAQMD	VOC		Require the vapor space exhaust to be vented to an air pollution control device. Enhanced control technology; increased control efficiency; establish concentration limits; expand source categories (smaller tank, etc.).	X			X		X
CMB-01	NOx Reductions from Non-RECLAIM ovens, Dryers & Furnaces	SCAQMD	NOx		Use low-NOx burners through retrofit or replacement.	X		X		X	X
CMB-02	Reductions of Emissions in RECLAIM (BARCT)	SCAQMD	SOx		Identifies a series of control approaches as part of (BARCT) to seek further reduction in SOx allocation. SOx reduction controls (i.e., sulfur recovery, etc).	X		X		X	X
CMB-03	Further NOx Reductions from Space Heaters	SCAQMD	NOx		Establish more stringent emission limits for new space heaters through use of low-NOx burners and heat pumps.			X			X
CMB-04	Natural Gas Fuel Specifications	SCAQMD	NOx	1, 2	Establish an upper limit of the heating value of natural gas.						
BCM-01	PM Control Devices (Baghouses/Wet Scrubbers/Electrostatic Precipitators, Other Devices)	SCAQMD	PM		Install Continuous Opacity Monitor System or Bag Leak Detection System for top process emitters. Baghouse filter, ventilation/hood systems.	X		X		X	X
BCM-02	PM Emission Hot Spots-Localized Control Program	SCAQMD	PM		Establish a localized program to supplement the regional approach to address PM hot spots. Fencing; mowing; paving; soil stabilization; street sweeping; housekeeping.	X		X		X	
BCM-03	Emission Reductions from Wood Burning Fireplaces & Woodstoves	SCAQMD	PM		Include voluntary or mandatory wood burning curtailment during period of poor air quality. Certification standards; prohibit garbage burning.	X		X		X	X

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BCM-04	Additional PM Emission Reductions from Rule 444-Open Burning	SCAQMD	PM		Reduce PM emissions through further reduction of open burning practices. Prohibit burns; ails to burn (shipping, grinding, composting, etc).	X	X			X
BCM-05	Emission Reductions from Under-fired Charbroilers	SCAQMD	PM		Seek to stimulate technology advancement in reducing PM emissions from under-fired charbroilers.	X	X		X	X
MCS-01	Facility Modernization	SCAQMD	ALL		Existing equipment retrofitted or replaced with BACT at the end of a pre-determined lifespan & use of super compliant materials/process change.	X	X	X	X	X
MCS-02	Urban Heat Island	SCAQMD	ALL		Provide incentives for voluntary actions to reduce VOC or NOx by lowering the ambient temp by use of reflective/lighter colored roofing and paving materials. Increase tree planting.		X		X	
MCS-03	Energy Efficiency & Conservation	SCAQMD	NOx		Provide incentives for businesses to use energy efficient equipment, early retirement of existing equipment.					X
MCS-04	Emissions Reduction from Greenwaste Composting	SCAQMD	VOC, PM, NH3		Development & implementation of BMPs that would aim for reductions of PM10, VOC, & NH3.	X	X			X
MCS-05	Emission Reductions from Non-dairy Livestock Waste	SCAQMD	VOC, PM, NH4		Require air pollution control devices for larger facilities & seek reductions from smaller facilities. Best mgmt practices (use of belt/drying system); enclosures; VOC/odor control (i.e. afterburner).	X	X		X	X
MCS-06	Improved Startup, Shutdown, & Turnaround Procedures	SCAQMD	ALL	1, 2	Reduce emissions during equipment startup, shutdown & turnaround procedures. Best mgmt practices.					
MCS-07	Application of All Feasible Measures	SCAQMD	ALL		Attainment of further emission reductions through the amendment of existing rules & regs. Implement new BART standard-all sources.	X	X	X	X	X
FLX-01	Economic Incentive Programs	SCAQMD	ALL	Speculative	Complement command-and-control measures using an Intercredit Trading Program. Incentive program; early installation of advanced control technology.					
FLX-02	Petroleum Refinery Pilot Program	SCAQMD	VOC, SOx, PM		Provide an alternative means of compliance to existing refineries (e.g. offsite reductions).	X	X	X	X	X
EGM-01	Emission Reductions from New or Redevelopment Projects	SCAQMD	NOx, VOC, PM2.5		Mitigate significant impacts from new and redevelopment projects. Dust control;alt fuel; diesel PM filter; low-emitting engines; low VOC cigs; energy conservation; mitigation fee.	X	X	X	X	X
EGM-02	Emission Budget & Mitigation for General Conformity Projects	SCAQMD	ALL		Determine emissions from each source category, offsetting emissions exceeding budgets & mitigation fees. Further control of all sources; mitigation fee.	X	X	X	X	X

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EGM-03	Emissions Mitigation at Federally Permitted Sites	SCAQMD	ALL		Mitigation measures for federally permitted projects impacting the District. Further control of all sources; mitigation fee.	X	X	X	X	X
MOB-01	Mitigation Fee Program for Federal Sources	SCAQMD	ALL		Implement a mitigation fee program to be adopted by U.S. EPA.	X	X	X	X	X
MOB-02	Expanded Exchange Program	SCAQMD	ALL		Expand lawn mower/leaf blower exchange programs. Low-emitting engines/electrical engines.	X	X			X
MOB-03	Backstop Measure for Indirect Sources of Emissions from Ports & Port-Related Facilities	SCAQMD	ALL		Address emissions from all stationary & mobile sources at ports & related facilities. PM filter/catalysis; use of non-diesel equipment (i.e., electrical, fuel cells, LNG, CNG, etc); alt diesel fuel (i.e. low sulfur, emulsified, etc); hoods, shoreside power (SCR); vessel speed reduction.	X	X	X	X	X
MOB-04	Emissions Reduction from Carl Moyer Program	SCAQMD	NOx, PM2.5		Proposes to take credit for emission reductions achieved through past & future projects funded under this program for SIP purposes. Retrofit/repower engines (NOx control); early retirement.	X	X	X		X
District Staff's Recommended Control Measures for Under State and Federal Jurisdiction										
ONRD-01	Smog Check Improvements	CARB/EPA	VOC, NOx, PM	2, 3	Propose improvements to existing program for light & medium duty vehicles, including motorcycles. Testing (lower standards); inspections.					
ONRD-02	Expanded BAR Vehicle Retirement & Mandatory Part Replacement	CARB/EPA	VOC, NOx		Promote permanent retirement of eligible vehicles through financial incentives. Propose mandatory parts replacement after mileage cap.					X
ONRD-03	CA Phase 3 Reformulation Gasoline Modifications	CARB/EPA	VOC, NOx		Offset the impacts of greater use of ethanol in low level blended gasoline through gasoline reformulation; remove ethanol.	X	X	X	X	
ONRD-04	More Stringent Motorcycle Standards	CARB/EPA	VOC, NOx	1	Establish 50% reduction to exhaust emission standards over all 3 classes of motorcycles beginning with 2010 model. Certification standards; engine modification; catalytic control.					
ONRD-05	PM Testing for Light- & Medium-Duty Vehicles	CARB/EPA	PM		Include light- & medium-duty diesels into current Smog Check program. Testing; inspection; possible replacement.					X
ONRD-06	Accelerated Penetration of Partial Zero-Emission & Zero-Emission Vehicles	CARB/EPA	VOC, NOx, PM		Focus on implementation of technologies capable of achieving partial zero-tailpipe emissions. Alt fuels; advanced technology (partial zero emitting vehicles); old battery disposal.		X	X	X	X
ONRD-07	Greater use of Diesel Fuel Alternatives and Diesel Fuel Reformulation	CARB/EPA	NOx, PM		Two-phase approach to achieve add'l emissions from diesel fuel engines. Fuel reformulation; diesel alternatives (Fischer-Tropsch, biodiesel, emulsified).	X	X	X	X	X
ONRD-08	Accelerated Retrofits of Heavy-Duty Vehicles	CARB/EPA	NOx, PM		Accelerate retrofits for vehicles primarily in the South Coast jurisdictional boundaries.	X	X			X

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ONRD-09	In-Use Emission Reductions from on-Road Heavy-Duty Vehicles	CARB/EPA	VOC, NOx, PM		Accelerated replacement of vehicles meeting the 2010 on-road heavy-duty exhaust standards, beginning in 2010. Accelerated engine replacement/repower (natural gas, SCR, PM traps, etc).	X	X	X		X
ONRD-10	Further Emission Reductions from Out-of-State/International Registered Heavy-Duty Vehicles	CARB/EPA	NOx, PM		Development of federal incentives program similar to Carl Moyer Program for heavy-duty vehicles registered outside CA. Retrofits (i.e., catalysts, PM traps, etc.).	X	X			X
ONRD-11	Enhanced Inspection & In-Use Emissions Tracking of Heavy-Duty Vehicles	CARB/EPA	VOC, NOx, PM		Have CARB develop an expanded inspection & maintenance program for heavy-duty diesel vehicles. Testing; inspection; possible replacement					X
ONRD-12	Further Emissions Reductions from Heavy-Duty Trucks Providing Freight Drayage Services	CARB/EPA	VOC, NOx, PM		Retrofit or replace existing over-the-road trucks providing drayage serves at marine ports, intermodal facilities, or warehouses.	X	X			X
OFFRD-01	Construction/Industrial Equipment Fleet Modernization	CARB/EPA	VOC, NOx, PM		New off-road diesel engines meet more stringent emissions standards. Accelerated engine replacement/retrofit/repower; alt fuels.	X	X			X
OFFRD-02	Accelerated Turnover & Catalyst Based Standards for Pleasure Craft	CARB/EPA	VOC, NOx, PM		By 2014 outboard engines and personal watercraft meets Tier 3 standard levels. Accelerated retirement/retrofit engines.	X				X
OFFRD-03	More Stringent Exhaust Standards for Off-Road Recreational Vehicles	CARB/EPA	VOC, NOx		New emission standards and accelerated fleet turnover are proposed to reduce emissions from this category. Catalyst technology.	X				X
OFFRD-04	Evaporative Standards for Recreational Vehicles & Pleasure Craft	CARB/EPA	VOC		Through retrofit, incentives, and regulation, to reduce evaporative emissions. New evaporative standards.	X				X
OFFRD-05	Further Emission Reductions from Locomotives	CARB/EPA	NOx, PM		Operating in the Basin to meet Tier 3 equivalent emissions by 2014. Accelerated replacement; control tech (SCR, PM filters, hybrid battery engines).	X	X	X		X
OFFRD-06	Clean Marine Fuel Requirements for Ocean-Going Marine Vessels	CARB/EPA	NOx, SOx, PM		Require all ocean-going vessels to use 0.2 % sulfur content marine distillate fuels beginning in 2008.	X	X	X	X	
OFFRD-07	Further Emission Reductions from Ocean-Going Marine Vessels & Harbor Craft While at Berth	CARB/EPA	VOC, NOx, SOx, PM		Use shore-side power or other equivalently clean alternative technology while at berth, clean technologies (i.e., SCR, hood)	X	X	X		X
OFFRD-08	Further Emission Reductions from Cargo Handling Equipment	CARB/EPA	NOx		Additional emission reductions from cargo handling equipment beyond the state reg. Accelerated retirement/retrofit (i.e., catalysts, PM traps, alt fuel-emulsified diesel)	X	X		X	X
OFFRD-09	Vessel Speed Reduction	CARB/EPA	NOx	1, 2	Implement a 12 knot speed limit to ocean-going vessels traveling within 40 nautical miles of Point Fermin.					

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OFFRD-10	Further Emission Reductions from Ocean-Going Marine Vessels	CARB/EPA	NOx		Slide valve designs and other technologies can reduce oxides of nitrogen emissions. Retrofits (i.e., catalyst, SCR, slide valves, etc).	X	X			X
OFFRD-11	Emission Reductions from Aircraft	CARB/EPA	VOC, NOx		Federal government to establish more stringent emissions for aircraft engines. New emission standards; cleaner fuel; emission fees	X	X	X	X	X
OFFRD-12	Lower Exhaust & Evaporation Standards & Fleet Modernization for Lawn & Garden Equipment	CARB/EPA	VOC		More stringent exhaust & evaporative standards and incentives for accelerated fleet turnover as well as electrification.	X	X			X
OFFRD-13	Emission Reductions from Airport Ground Support Equipment	CARB/EPA	VOC, NOx, PM		Reduce airport ground support equipment emissions primarily through electrification and emission standards.	X	X			X
CONS-01	Further Emission Reductions from Consumer Products	CARB/EPA	VOC		Achieve the maximum technologically & commercially feasible VOC emission reductions from consumer products. Ultra low VOC products.	X		X	X	X
Long-Term Control Strategy[(182)(E)(5) Measures or "Black Box"]										
LTM-01	Reactivity-Based Controls	ALL	VOC		Require architectural & misc. coatings & solvent categories to be formulated w/ min. 50% by volume acetone reactivity-equivalent materials beginning 2015.	X		X	X	
LTM-01 (2)	Reactivity-Based Controls	ALL	VOC		Same as above, but it is for Consumer Products	X		X	X	
LTM-02	Further Emission Reduction from NOx Reclaim Facilities	ALL	NOx	Speculative	Part-1-Starting 2008 RECLAIM allocations reduced to offset emission increase due to natural gas w/ Wobbe Index >1360. Part-2-Reduce NOx due to evolving BARCT. BARCT & BACT (i.e. SCR, etc.).					
LTM-03	Long-Term Measure for Fugitive Emissions	ALL	VOC	Speculative	Additional emission reductions targeted for GDF, refineries chemical plants & greenwaste facilities. Low-emitting packings, seals; leakless devices; vapor recovery systems.					
LTM-04	Concurrent Reductions from Global Warming Strategies	ALL	ALL	1, 2	Quantify concurrent emission reductions associated w/ GHG programs targeted at stationary & mobile sources in Basin. Renewable energy sources.					
LTM-05	Further VOC Reductions from Mobile Sources	ALL	VOC	Speculative	CARB will achieve further VOC reductions from various on and off-road mobil sources by 2020, including: Light/Med Duty Vehicles; Smog Check; On-road Heavy Duty Vehicles; Off-road Vehicles; Marine Vessels; Aircraft; Locomotives; Pleasure Craft; Lawn & Garden Equip.; Fuels; Consumer Prod. & Pesticides. Fleet turnover; retrofits (i.e., oxidation catalysts/ evaporative emission controls).					
1. Control technologies do not generate significant impacts										

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2.	Changes in operating practices with no impact identified.									
3.	Changes in testing, inspection, or enforcement procedures with no									
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