Appendix B – Initial List of Control Measures

Measure	Pollutant	Description	Source	Source Code
"CashforClunkers"lawn&gardenprogram		Offer \$75 for owners to turn in old, 2 and 4-stroke lawn & garden equipment and purchase electric or push mower	Non-road	DC RACM - 2003
"Southern"reformulatedgasoline(verylowRVP)	VOC	Very Low RVP	On-road	MA Strategies - 2004
1RegenerativeThermalOxidizer	VOC	Process vent gas treatment	Stationary	NEET Database - ongoing
1ThermalOxidizers	VOC	Process vent gas treatment	Stationary	NEET Database - ongoing
3RCleanMultiFuels-CLEANCOAL	VOC	Work practices (general)	Pollution Prevention	NEET Database - ongoing
3RMultiVenturiOffgasScrubber		Emission capture systems	Stationary	NEET Database - ongoing
4DayWorkWeek/FlexibleWorkSchedules		Encourage employers to adopt a shorter work week, with employees working 4 10-hour days	Mobile	DC RACM - 2003
AcceleratedimplementationofEnhancedI/M	VOC			MA Strategies - 2004
AcceleratedVehicleRetirement	NOx/VOC	Implement an accelerated vehicle retirement, or "scrappage" program in conjunction with an I/M program.	Mobile	EPA Measures - 1999
AccesstoJobsProgram		Identifies gaps in transit service between places of residence and places of work for low wage workers	Mobile	DC RACM - 2003
AcetalResinsProduction	VOC		Stationary	EPA Measures - 1999
AcrylicFibers/MonoacrylicFibersProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/gmact/gmactpg.html	Stationary	EPA Measures - 1999
Acrylicplastisols2	VOC	Acrylic plastisols are being investigated as a new type of low-solvent industrial coating. Acrylic polymers offer a number of distinct advantages over polyvinyl chloride such as superior exterior durability and a more favorable environmental image.	Stationary	Regulatory Impact Analysis - 1997
Acrylonitrile-Butadiene-StyreneProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr4/pr4pg.html	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
AdaptiveControlTechniquesforEngineManagemen t25	NOx/VOC	Non-linear adaptive control techniques control air/fuel ratios more precisely over a wider range of operating conditions and operate catalytic converters over the narrow range in which they are efficient. Adapts to aging or faulty engines and to varying fuel properties such as volatility.		Regulatory Impact Analysis - 1997
AdditionalTransitStores		Establish additional stationary transit stores in the region	Mobile	DC RACM - 2003
Addozonealerttocountywebsite				EACs - 2004
Addselectivecatalyticreduction(SCR)	NOx/PM		Diesel locomotives	Regulatory Impact Analysis - 1997
AdhesiveApplications	VOC	VOC content limits for compliant adhesives + Emission capture and control system for non- compliant adhesives + Transfer efficiency requirements for adhesive applicators + Solvent cleaning, storage and disposal comply with Rule 1171	Stationary	EPA Measures - 1999
Adhesives-industrial	VOC	SCAQMD Rule 1168	Stationary	EPA Measures - 1999
AdipicAcidManufacturing	NOx	Thermal Reduction	Stationary	EPA Measures - 1999
AdipicAcidManufacturing	NOx	Extended Absorption	Stationary	EPA Measures - 1999
Adoptaschoolbusprogram				EACs - 2004
Adoptlocalcleanairpolicy				EACs - 2004
Adoptmeasurestoreducelawnareaandmowerusaget hroughxeriscaping	NOx		Landuse	SAQMD Clean Air Plan - 2003
AdvancedAcetylenicGlycol(AAG)technology9	VOC	To address the need for substrate wetting in waterborne systems, a new-generation surfactant has been developed based on Advanced Acetylenic Glycol (AAG) technology. The AAG technology provides greater flexibility and mobility, as well as other benefits.		Regulatory Impact Analysis - 1997
AdvancedAirfoilRetrofit	NOx/VOC	Rather than using airfoils designed originally for		Regulatory Impact Analysis - 1997

Pollutant	Description	Source	Source Code
	the airline industry, systems using airfoils designed specifically for wind towers offer substantial savings. One estimate is that substitution of such airfoils onto existing towers causes a 20 - 30 percent increase in electricity generation.		
NOx		Non-road	Regulatory Impact Analysis - 1997
VOC	See Website - http://www.epa.gov/ttn/uatw/pr4/pr4pg.html	Stationary	EPA Measures - 1999
NOx/VOC	Non-linear adaptive control techniques control air/fuel ratios more precisely over a wider range of operating conditions and operate catalytic converters over the narrow range in which they are efficient. Adapts to aging or faulty engines and to varying fuel properties such as volatility.		Regulatory Impact Analysis - 1997
	Establish additional stationary transit stores in the region	Mobile	DC RACM - 2003
			EACs - 2004
NOx/PM		Diesel locomotives	Regulatory Impact Analysis - 1997
VOC	VOC content limits for compliant adhesives + Emission capture and control system for non- compliant adhesives + Transfer efficiency requirements for adhesive applicators + Solvent cleaning, storage and disposal comply with Rule 1171	Stationary	EPA Measures - 1999
VOC	SCAQMD Rule 1168	Stationary	EPA Measures - 1999
NOx	Thermal Reduction	Stationary	EPA Measures - 1999
NOx	Extended Absorption	Stationary	EPA Measures - 1999
			EACs - 2004
			EACs - 2004
	NOx VOC NOx/VOC NOx/PM VOC VOC NOx	the airline industry, systems using airfoils designed specifically for wind towers offer substantial savings. One estimate is that substitution of such airfoils onto existing towers causes a 20 - 30 percent increase in electricity generation. NOx VOC See Website - http://www.epa.gov/ttn/uatw/pr4/pr4pg.html NOx/VOC Non-linear adaptive control techniques control air/fuel ratios more precisely over a wider range of operating conditions and operate catalytic converters over the narrow range in which they are efficient. Adapts to aging or faulty engines and to varying fuel properties such as volatility. Establish additional stationary transit stores in the region NOx/PM VOC VOC content limits for compliant adhesives + Emission capture and control system for non-compliant adhesives + Transfer efficiency requirements for adhesive applicators + Solvent cleaning, storage and disposal comply with Rule 1171 VOC SCAQMD Rule 1168 NOx Thermal Reduction	the airline industry, systems using airfoils designed specifically for wind towers offer substantial savings. One estimate is that substitution of such airfoils onto existing towers causes a 20 - 30 percent increase in electricity generation. NOX Non-road VOC See Website - http://www.epa.gov/ttn/uatw/pr4/pr4pg.html NOx/VOC Non-linear adaptive control techniques control air/fuel ratios more precisely over a wider range of operating conditions and operate catalytic converters over the narrow range in which they are efficient. Adapts to aging or faulty engines and to varying fuel properties such as volatility. Establish additional stationary transit stores in the region NOx/PM Diesel locomotives VOC VOC content limits for compliant adhesives + Emission capture and control system for non-compliant adhesives + Transfer efficiency requirements for adhesive applicators + Solvent cleaning, storage and disposal comply with Rule 1171 VOC SCAQMD Rule 1168 Stationary Stationary

Measure	Pollutant	Description	Source	Source Code
Adoptmeasurestoreducelawnareaandmowerusaget hroughxeriscaping	NOx		Landuse	SAQMD Clean Air Plan - 2003
AdvancedAcetylenicGlycol(AAG)technology9	VOC	To address the need for substrate wetting in waterborne systems, a new-generation surfactant has been developed based on Advanced Acetylenic Glycol (AAG) technology. The AAG technology provides greater flexibility and mobility, as well as other benefits.		Regulatory Impact Analysis - 1997
AdvancedAirfoilRetrofit	NOx/VOC	Rather than using airfoils designed originally for the airline industry, systems using airfoils designed specifically for wind towers offer substantial savings. One estimate is that substitution of such airfoils onto existing towers causes a 20 - 30 percent increase in electricity generation.		Regulatory Impact Analysis - 1997
Aerodynamicdevices	NOx		Non-road	Regulatory Impact Analysis - 1997
AerosolMetalsMonitor		Ambient Monitoring	Monitoring	NEET Database - ongoing
AerosolPaints	VOC	Bay Area Air Quality Management District's (BAAQMD's) rule + additional reductions from standards similar to those of SCAQMD.	Stationary	EPA Measures - 1999
AerospaceAssemblyandComponentManufacturing Operations	VOC	VOC content limits for coatings, adhesives, and maskents + Cleaning operations and solvent storage and disposal comply with Rule 1171	Stationary	EPA Measures - 1999
AerospaceIndustries	VOC	See Website - http://www.epa.gov/ttn/uatw/aerosp/aeropg.html	Stationary	EPA Measures - 1999
AerospaceManufacturingandRework	VOC	EPA's National Emission Standard for Hazardous Air Pollutant (NESHAP) + area-specific limits for specialty coatings to reflect local plant operations.	Stationary	EPA Measures - 1999
AgriculturalBurning	NOx	Seasonal Ban (Ozone Season)	Stationary	EPA Measures - 1999
Agriculturaldieselengineelectrification	NOx		Offroad	SAQMD Clean Air Plan - 2003
Agriculturaldieselengineelectrification	VOC		Offroad	SAQMD Clean Air Plan - 2003
Agriculturalequipmentretrofits		Require agricultural equipment to be retrofitted	Non-road	DC RACM - 2003

Appendix B - Initial List of Control Measures				Tuge D-3
Measure	Pollutant	Description	Source	Source Code
		with emissions controls		
Agriculturalequipmentuserestrictions		Mandatory restrictions on use of agricultural equipment during Code Red Ozone Action Days	Non-road	DC RACM - 2003
Agriculture: Ammoniar estrictions on confined animal feeding operations	PM2.5		Area	CT Memo - 2005
AIMSurfaceCoatings				CT RACM - 2001
Aircraft:ReduceEmissionsbyAlteringOperations(e. g.,Taxiing)	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
AircraftNon-GateIdling		Sign MOUs with airlines to limit idling of aircraft while taxiing	Area	DC RACM - 2003
AircraftNon-GateIdling				EACs - 2004
Aircraftsurfacecoating	VOC	MACT	Stationary	EPA Measures - 1999
Aircurtaindestructor-landclearing				EACs - 2004
AirportCleanAirPlan				EACs - 2004
AirportCongestionPricing		Charge higher aircraft landing fees during busy times of day to reduce airport delays and congestion	Area	DC RACM - 2003
AirQualityOutreachandActionDays				EACs - 2004
AirStripping/SoilDecontamination	VOC		Stationary/Are a	SAQMD Clean Air Plan - 2003
Aliphaticisocyanates17	VOC	Urethane technology provides strong linkage for molecules in coatings, and is finding its way into high-solid, powder, and waterborne technologies. For example, isophorone diisocyanate is gathering strength in the powder coatings market, while use of hexamethylene diisocyanate in waterbased coatings is expected to grow. A family of low-temperature unblocking isocyanates as also been developed, and is being marketed to the painting		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
Measure	Pollutant	•	Source	Source Code
		and coating industry.		
AlkalineFuelCells(AFC)6	NOx/VOC	Long used by NASA on space missions, these cells can achieve power generating efficiencies of up to 70 percent. They use alkaline potassium as the electrolyte. Until recently they were too costly for commercial applications, but several companies are examining ways to reduce costs and improve operating flexibility.		Regulatory Impact Analysis - 1997
AllowDistricttoOptintoTest-onlyProgram	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Alternatecommuteinfrastructure				EACs - 2004
Alternateworkschedules				EACs - 2004
Alternativefuelforcountyfleets				EACs - 2004
alternativefuelshuttlebuses	NOx		Landuse	SAQMD Clean Air Plan - 2003
Alternativefuelvehicles				EACs - 2004
AluminumRollingMills	VOC	Add-on controls achieving a 95-percent reduction in VOC emissions and/or VOC-content standards for lubricants	Stationary	EPA Measures - 1999
AmbientEngineeringBiofilters	VOC	Emission capture systems	Stationary	NEET Database - ongoing
AminoResinsProductions	VOC	See Website - http://www.epa.gov/ttn/uatw/amino/aminopg.html	Stationary	EPA Measures - 1999
Ammonia-NaturalGas-FiredReformers	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
Ammonia-NaturalGas-FiredReformers	NOx	Oxygen Trim + Water Injection	Stationary	EPA Measures - 1999
Ammonia-NaturalGas-FiredReformers	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Ammonia-NaturalGas-FiredReformers	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
Ammonia-NaturalGas-FiredReformers	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
AmmoniaPlants	NOx	Controls based on those for process heaters and industrial boilers	Stationary	EPA Measures - 1999
AmmoniaProduction;FeedstockDesulfurization	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
Amorphoussilicon(a-Si)	NOx/VOC	A solar film on which research efforts is focused because of its potential for increased unit efficiency and ease of manufacturing. Efficiency gains are evident: from less than one percent in 1974 to 10.2 percent in 1994. Researchers are currently seeking laboratory efficiency ratings of 13 percent. Lower efficiency ceiling of a-Si compared to crystalline silicon offset by lower manufacturing costs.		Regulatory Impact Analysis - 1997
Announceozoneactiondaysonradio				EACs - 2004
AnnualGasolineVehiclePollutionFee		Levy an annual fee on petroleum-powered vehicles based on mileage driven and emission rates.	Mobile	DC RACM - 2003
Anti-idlingprovisions-dieselengines-				EACs - 2004
Applicationofagriculturalpesticides	VOC	Water based carriers for pesticides	Stationary	EPA Measures - 1999
AppointOzoneActionCoordinator-				EACs - 2004
Askgaragestolimitidling				EACs - 2004
Asphalt/CoalTarApplications-MetalPipes	VOC	Pending	Stationary	EPA Measures - 1999
AsphalticConcrete;RotaryDryer;ConversionPlant	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
AsphaltProcessing	VOC	Pending	Stationary	EPA Measures - 1999
AsphaltRoofingManufacturing	VOC	Pending	Stationary	EPA Measures - 1999
AugmenttruckandBusInspectionswithCommunity-basedInspections	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
AutoandLightDutyTruck(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999
AutobodyRefinishing	VOC	High-volume, low pressure (HVLP) spray systems + gun-cleaning equipment + proper disposal for clean-up solvents + California's Best Available Retrofit Control Technology limits.	Stationary	EPA Measures - 1999
AutobodyRefinishingControls				EACs - 2004
AutomatedElectricVehicleChargingSystem15	NOx/VOC	Development of an automated system that would dock, or couple, an EV to a battery charging system. The project will address inductively and		Regulatory Impact Analysis - 1997

Appendix B - Initial List of Control Measures				Tuge D-0
Measure	Pollutant	Description	Source	Source Code
		conductively coupled systems. This project is expected to build on previous research into such an automated system, resulting in a prototype test unit of a commercially viable system. This project, if successful, will improve the perceived convenience and, thus, commercial viability of EVs.		
$Automate speed enforcement and lower the speed limit \\to 55 mph for heavy duty vehicles$	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
AutomaticVehicleLocatorSystem		System would provide bus location information to WMATA dispatchers. This would decrease wait time and improve on-time arrival/departure.	Mobile	DC RACM - 2003
AutomobileandLight- dutytrucksurfacecoatingoperations	VOC	Low solvent coatings	Stationary	EPA Measures - 1999
AutomobileAssembly	VOC	Spray booth abatement at 5.8 lbs/gal solids applied + without spray booth abatement, a 10-lbs/gal level	Stationary	EPA Measures - 1999
AutomobileInsuranceisChargedatthepumporinsura nceismileagebased	NOx			SAQMD Clean Air Plan - 2003
Automobilerefinishing	VOC	Federal Rule	Stationary	EPA Measures - 1999
Automobilerefinishing	VOC	FIP Rule (VOC content & TE)	Stationary	EPA Measures - 1999
Automobilerefinishing	VOC	CARB BARCT limits	Stationary	EPA Measures - 1999
Availability/ExtentofNOxControls	NOx		Stationary	EPA Measures - 1999
BACTandoffsetsfornewormodifiedpointsources				EACs - 2004
Bakeries		Adopt SCAQMD Rule 1153: Commercial Bakery Ovens	Area	DC RACM - 2003
Banactivitiessuchas2-strokeengines	NOx		Offroad	SAQMD Clean Air Plan - 2003
Banactivitiessuchas2-strokeengines	VOC		Offroad	SAQMD Clean Air Plan - 2003
Banopenburningduringozoneaction				EACs - 2004
Banorlimitopenburning				EACs - 2004
Banorrestrictuseofrecreationalvehicles	NOx		Offroad	SAQMD Clean Air Plan - 2003

Appenaix B – Initial List of Control Measures				rage B-9
Measure	Pollutant	Description	Source	Source Code
Banorrestrictuseofrecreationalvehicles	VOC		Offroad	SAQMD Clean Air Plan - 2003
BantheuseofVOC-bornepesticidesonspare-the- airdays	VOC		Area	SAQMD Clean Air Plan - 2003
BantransfersystemsinPetroleumDryCleaning	VOC		Stationary/Are a	SAQMD Clean Air Plan - 2003
BanVehiclesfromDowntownStreets		Restrict private vehicle use in certain downtown areas during business hours, encouraging pedestrian and bicycle use instead.	Mobile	DC RACM - 2003
BatchProcesses	VOC	Current technologies achieving 98-percent control efficiency with exemptions based on considerations of volatility, annual emissions and flow rate.	Stationary	EPA Measures - 1999
BEPs				EACs - 2004
BestAvailableRetrofitControlTechnology(BARCT)for10tpyVOCsources	VOC			MA Strategies - 2004
Bestmgtpractices-engines				EACs - 2004
Bestpracticesforfueling				EACs - 2004
BeverageCanCoating	VOC	Incineration	Stationary	EPA Measures - 1999
Beveragecansurfacecoatingindustry	VOC	Low solvent inks or Incineration	Stationary	EPA Measures - 1999
Biodiesel(On-Road)		Require regional use of biodiesel fuel for on-road vehicles	Mobile	DC RACM - 2003
Biodieselreadytrucks				EACs - 2004
Bio-dieselsolidwastetrucks				EACs - 2004
BiofiltrationofGaseousEffluents	VOC	Process vent gas treatment	Stationary	NEET Database - ongoing
Biomimeticcoatings1	VOC	Synthetic routes are being developed for new water soluble polymers to enable the formulation of effective and durable waterborne protective coatings. The aim is to develop novel watersoluble polymers which on evaporation of water undergo a phase transformation similar to protein		Regulatory Impact Analysis - 1997

Appendix B - Initial List of Control Measures				Tuge D-10
Measure	Pollutant	Description	Source	Source Code
		molecules where hydrophobic moieties, present in the polymer, form the matrix of the film. This approach to produce zero-VOC solvent systems avoids the water sensitivity and reductions in performance and durability experienced by the current generation of water-based coatings.		
Blowdowncontrolsatnaturalgaspipelinecompressor stations	NOx/VOC		Stationary	CT Memo - 2005
BoatManufacturing	VOC	Pending	Stationary	EPA Measures - 1999
BoilersandProcessHeatersinPetroleumRefineries	NOx	NOx emission limit + Approved Alternative Emission Control Plan + Continuous NOx stack monitoring	Stationary	EPA Measures - 1999
BoseAnti- AirPollutantandEnergyConservationSystem		Fund trial of Bose system in local vehicle fleets. The Bose system is a mechanical system that uses high-speed centrifugal separation to remove light combustible gases from the exhaust stream. The system can be used with all types of fuel.	Mobile	DC RACM - 2003
Brownfielddevelopment				EACs - 2004
BuildPark&RideLotsatMajorIntersectionsofComm uterHighways		Construct new park & ride commuter lots along HOV facilities	Mobile	DC RACM - 2003
Bulkgasolineterminals	VOC	Vapor collection systems + Vapor tight tank trucks, Water-based cements	Stationary	EPA Measures - 1999
BulkTerminals	VOC	Balanced/Adsorber/Testing	Stationary	EPA Measures - 1999
burningduringtheozoneseason	NOx		Area	SAQMD Clean Air Plan - 2003
burningduringtheozoneseason	VOC		Area	SAQMD Clean Air Plan - 2003
BusTraffic-SignalPre-emption	NOx		Landuse	SAQMD Clean Air Plan - 2003
ButylRubberProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr1/pr1pg.html	Stationary	EPA Measures - 1999
Buyinbulk;lesspackaging				EACs - 2004
By-ProductCokeManufacturing;OvenUnderfiring	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
C.G.S.section29-252			Stationary	CT Memo - 2005
Cadmiumtelluride	NOx/VOC	A solar film on which research effort is focused due to its likely ease of production, likely improved efficiency and ability to compete with crystalline silicon modules. Laboratory efficiency ratings have reached 16 percent with commercial efficiency of 6 percent. Research indicates manufacturing techniques are likely very low cost, including electrodeposition, spraying, and high rate evaporation.		Regulatory Impact Analysis - 1997
CaliforniaLowEmissionVehiclePhase2(CALEV2)	NOx/VOC		Mobile	CT Memo - 2005
CaliforniaLow-EmissionVehicles	NOx/VOC	Adopt the California low-emission vehicle program	Mobile	EPA Measures - 1999
Californiaperiodicheavy- dutydieselvehiclefleetinspectionprogram	PM2.5		Mobile	CT Memo - 2005
CaliforniaSpark-IgnitionEngines(Dec2000)				TX SIP - 2000-2004
CANSOLVRegenerableSO2ControlTechnology	PM	Emission capture systems	Stationary	NEET Database - ongoing
CapandTradeEmissionsReductionProgramsimilart oRECLAIM	NOx		Stationary	SAQMD Clean Air Plan - 2003
CapandTradeEmissionsReductionProgramsimilart oRECLAIM	VOC		Stationary	SAQMD Clean Air Plan - 2003
CARBDieselFuel(On-Road)		Implement CARB diesel fuel standards	Mobile	DC RACM - 2003
CarbonBlackManufacture	VOC	Flare	Stationary	EPA Measures - 1999
CarbonBlackProduction	VOC	Pending	Stationary	EPA Measures - 1999
CarbonylSulfideProduction(Misc.OrganicNESHA P)	VOC	Pending	Stationary	EPA Measures - 1999
CARBsetstighterrequirementsformanufacturerstoc ertifyemissionsfromnewpassengervehicles	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
CARBsetstighterrequirementsfornewpassengerveh icles(LEVIII)	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003

Measure	Pollutant	Description	Source	Source Code
Cargohandlingequipmentatshipbuildersandports	PM2.5	Description	Mobile	CT Memo - 2005
	PMI2.5			
CarSharingProgram		Fund incentives for new car sharing customers (I.e. Flexcar or Zipcar services)	Mobile	DC RACM - 2003
CarSharingPrograms	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
CatalyticOxidationwithHeatrecovery	VOC	Emission capture systems	Stationary	NEET Database - ongoing
CelluloseAcetateManufacture	VOC	Carbon Adsorption	Stationary	EPA Measures - 1999
CelluloseFoodCasingManufacturing	VOC	Pending	Stationary	EPA Measures - 1999
Cement	NOx	Production procedures + SCR -2.8lb/ton	Stationary	EPA Measures - 1999
CementKilnEmissionLimits(March2003)				TX SIP - 2000-2004
CementKilns	NOx	Continuous monitoring and recording of NOx emissions + NOx emission limit	Stationary	EPA Measures - 1999
CementKilns	NOx	Require combustion controls and post-combustion controls (SNCR) to achieve reductions of up to 70 percent on certain processes	Stationary	EPA Measures - 1999
CementManufacturing-Dry	NOx	Selective Non-Catalytic Reduction - NH3 Based	Stationary	EPA Measures - 1999
CementManufacturing-Dry	NOx	Mid-Kiln Firing	Stationary	EPA Measures - 1999
CementManufacturing-Dry	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
CementManufacturing-Dry	NOx	Selective Non-Catalytic Reduction - Urea Based	Stationary	EPA Measures - 1999
CementManufacturing-Dry	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
CementManufacturing-Wet	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
CementManufacturing-Wet	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
CementManufacturing-Wet	NOx	Mid-Kiln Firing	Stationary	EPA Measures - 1999
CeramicClayManufacturing;Drying	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
CeramicTechnologyforAdvancedHeatEngines4		Ceramic engine components are desirable for their durability and longevity.		Regulatory Impact Analysis - 1997
Certainfinalrecommendedmeasuresforresidential,c ommercialandindustrialsector			Stationary	CT Memo - 2005

Appendix B - Initial East of Control Medsures		·		Tuge D-13
Measure	Pollutant	Description	Source	Source Code
Cetaneadditivestodieselfuel				EACs - 2004
Changeworkschedule				EACs - 2004
ChangeZoningOrdinancestoEncourageIn-fill	NOx		Landuse	SAQMD Clean Air Plan - 2003
CHANOxRemovalSystem34	NOx	This system removes NOx pollutants from small stationary diesel engines. There are currently no feasible controls for these engines.		Regulatory Impact Analysis - 1997
CharcoalManufacturing	VOC	Incineration	Stationary	EPA Measures - 1999
CleanAirPartnersProgram		This program motivates individuals to take voluntary actions to reduce emissions on Ozone Action Days	Mobile	DC RACM - 2003
CleanFuelsfromMunicipalSolidWaste,Biomass,an dOtherWasteFuels22	NOx/VOC	Development and demonstration of technologies and/or production processes to synthesize clean alternative fuels from various energy-rich, renewable sources, such as biomass, municipal solid waste, landfill gas, and other low cost or "free" waste fuels. The project is expected to result in pilot-scale production demonstrations, scale-up process design and cost analysis, overall environmental impact analysis, and projections for ultimate clean fuel costs and availability, for alternative fuels that are determined to offer the most promise		Regulatory Impact Analysis - 1997
Cleaningsolvents	VOC	Disposal practices for waste solvents	Stationary	EPA Measures - 1999
Clearcoatpowder21	VOC	The Low Emission Paint Consortium is researching the development of a powder clearcoat, although this type of coating has many difficulties to overcome in terms of durability and appearance in comparison with current methods. A trade-off with powder coatings is that powder requires higher bake requirements and new equipment and application systems.		Regulatory Impact Analysis - 1997
Clusterdevelopment,SmartGrowth,				EACs - 2004
			· ·	•

Measure	Pollutant	Description	Source	Source Code
CNGRefuseHaulers		Purchase new CNG powered trash trucks instead of conventional diesel vehicles	Mobile	DC RACM - 2003
CNGRentalCars		Purchase CNG rental cars for use in the region	Mobile	DC RACM - 2003
CNGTaxicabs		Replace regional taxicabs 7 years or older with CNG or other alternative fuel vehicles	Mobile	DC RACM - 2003
CoalCleaning-ThermalDryer;FluidizedBed	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
CoatingofMetalPartsandProducts	VOC	VOC content limits for coatings + Solvent cleaning and storage comply with Rule 1171 + Emission collection and control system for non-compliant coatings	Stationary	EPA Measures - 1999
Coemployees-restrictmowingduring				EACs - 2004
CokeBy-ProductPlants	VOC	Pending	Stationary	EPA Measures - 1999
CokeOvens:Pushing,QuenchingandBatteryStacks	VOC	Pending	Stationary	EPA Measures - 1999
CokeOvens:TopSideandDoorLeaks	VOC	Established MACT and LAER emission limits for coke batteries	Stationary	EPA Measures - 1999
Coldcleaning	VOC	NESHAP/MACT	Stationary	EPA Measures - 1999
Coldcleaning	VOC	Airtight degreasing system	Stationary	EPA Measures - 1999
Coldcleaning	VOC	SCAQMD 1122 (VOC content limit)	Stationary	EPA Measures - 1999
Coldlensblockingmethods("LoctiteColdBloc")6	VOC	New uv-curing "cold" blocking adhesive enables optical manufacturers to produce lens surfaces that are practically distortion free, and virtually eliminates the environmental concerns (solvents) of the current technique. This technique facilitates easy debonding using a variety of debonding agents and techniques. The adhesive is a significant advance in the lens blocking process, as it eliminates heat-induced blocking strain, which is the most significant problem encountered with current hot pitch blocking methods. Process reduces costly processing time, and is compatible with existing tooling.		Regulatory Impact Analysis - 1997

Appendix B - Initial List of Control Medsures				Tuge D-13
Measure	Pollutant	Description	Source	Source Code
Combifilter-ActiveDieselParticulateFilter	VOC/PM	Emission capture systems	Stationary	NEET Database - ongoing
CombustionTurbines	VOC	Pending	Stationary	EPA Measures - 1999
Commercial, Institutional Incinerators	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
CommercialEthyleneOxideSterilization	VOC	Control emissions from the main sterilizer vent and vacuum pump drains at 99-percent from ethylene oxide (EtO) sterilizers using greater than 600 pounds of EtO per year.	Stationary	EPA Measures - 1999
Community-basedshuttlesystem	NOx		Landuse	SAQMD Clean Air Plan - 2003
Commuteemissionreductionprogram				EACs - 2004
CommuterChoiceProgram				EACs - 2004
CommuterChoiceTaxCredit		Employers subsidize employees' monthly transit or vanpool costs and receive a tax credit for incurred expenses.	Mobile	DC RACM - 2003
Commutesolutionsprograms-				EACs - 2004
Compatibleinnovativecoatings27	VOC	Ciba is working on developing compatible powder, high solid and waterborne epoxy systems. Examples of areas of research include: new high flow solid epoxy resin for powder coating applications with smoother appearance; and new waterborne epoxy resins and epoxy hardeners with environmental advantages.		Regulatory Impact Analysis - 1997
comprees;carpool,flexible,etc				EACs - 2004
ComputerizedTrafficSignals	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Congestionmitigation-trafficsignal				EACs - 2004
CongestionPricingonLowOccupancyVehicles		Impose a fee on vehicles containing two or fewer persons that use designated roadways during the peak AM period	Mobile	DC RACM - 2003
Conserveenergyincountyproperty				EACs - 2004
Constructionequipment				EACs - 2004
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The penals B - Initial List of Control Measures				Tage B-10
Measure	Pollutant	Description	Source	Source Code
Constructionequipmentretrofitswithoxidationcataly stsandparticulatefilters	NOx/VOC		Mobile	CT Memo - 2005
Constructionequipmentuserestrictions		Restrict use of construction equipment during expected ozone exceedance days	Non-road	DC RACM - 2003
Constructionretrofits		Require construction equipment operating on state and local contracts to be retrofitted with particulate fitlers and/or oxidation catalysts	Non-road	DC RACM - 2003
Consumer&commercialproducts				CT RACM - 2001
Contractincentivesforlowemissionvehicles				EACs - 2004
ControlandPowerElectronics	NOx/VOC	Manual adjustment of individual controls on individual tower systems is expensive and time consuming. By using computers and electronic components on the systems it becomes possible to manipulate an entire farm in real time. It is expected that systems would also able to adjust to extreme weather conditions independently, thus avoiding catastrophic failures.		Regulatory Impact Analysis - 1997
ControlExtendedIdlingofBusesandTrucks		Step-up enforcement of existing regulations to prevent extended vehicle idling	Mobile	DC RACM - 2003
ControllCengines>500HP				EACs - 2004
Control of Gaseous Emissions from Active Land fills	VOC	Landfill sampling and monitoring requirements + Collection system with treatment and control device for VOC	Stationary	EPA Measures - 1999
ControlParkingatSchools		Restrict high school students from driving to and parking at high schools when bus service is available.	Mobile	DC RACM - 2003
Controls on Power Plants Outside Non attainment Area		Require power plants operating in counties adjacent to Washington nonattainment area to install nonattainment area controls	Stationary	DC RACM - 2003
Conv.CoatingofProduct;AcidCleaningBath	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Convenience Commercial Centers in Residential Area		Change zoning ordinances to allow neigborhood-	Mobile	DC RACM - 2003
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The penals B - Initial List of Control Measures				1 uge B-17
Measure	Pollutant	Description	Source	Source Code
S		serving retail establishments in residential areas		
ConversiontoAlternativeFueledVehiclesProgram	NOx/VOC	Tax credits or deductions to for conversion to or purchase of alternative fueled vehicles and alternative fuel stations	Mobile	EPA Measures - 1999
Convertoff- roaddieselequipmenttozeroemission,e.g.,electrifica tion,battery,solar,orfuelcell	NOx		Offroad	SAQMD Clean Air Plan - 2003
Convertoff- roaddieselequipmenttozeroemission,e.g.,electrifica tion,battery,solar,orfuelcell	VOC		Offroad	SAQMD Clean Air Plan - 2003
Converttouseoflow-sulfurgasoline				EACs - 2004
Coolcitiesprogram				EACs - 2004
Copperindiumdiselenide(CIS)	NOx/VOC	A solar film on which research effort is focused due to its ability to withstand outdoor exposure without significant deterioration. This film also appears easier to produce and gain efficiencies than alternatives. In 1995, a laboratory efficiency rate of 17.1 percent was recorded with 10.2 percent for a production prototype module.		Regulatory Impact Analysis - 1997
CRT(R)Filter	PM		Mobile	NEET Database - ongoing
CrystallineSilicon	NOx/VOC	Silicon crystals were the first technology explored and applied to market devices. Research continues because it is the only technology with demonstrated long term reliability, competitive cost, and high efficiency. Newer cells have demonstrated a 24% efficiency rating. Commercial production modules are expected with an efficiency of 14%.		Regulatory Impact Analysis - 1997
CTNOx"RACT"Regulation	NOx		Stationary	CT Memo - 2005
CutbackAsphalt	VOC	VOC content limit	Stationary	EPA Measures - 1999
CutbackAsphalt	VOC	Switch to emulsified asphalts	Stationary	EPA Measures - 1999
CutbackAsphalt				EACs - 2004
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Measure	Pollutant	Description	Source	Source Code
CutbackAsphalt:IncreasedRuleEffectiveness	VOC		Stationary	CT Memo - 2005
DecliningCapRule	VOC	Cap and Trade program with an allowable emissions cap for major VOC sources set below a baseline. Emission allotments for each cap can be sold and traded for emission reductions below the assigned cap.	Stationary	EPA Measures - 1999
Degreasing	VOC	Alternative cleaners or cleaning processes.	Stationary	EPA Measures - 1999
Delay/reschedulelandscaping				EACs - 2004
DemonstrationoftheUseofFastChargedElectricGro undSupportEquipmentasaMeansofReducingAirpor tEmissions	NOx/PM	Fugitive emission controls	Stationary	NEET Database - ongoing
Developandfundaprogramforneighborhoodelectric vehicles	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Developastationcar/lowemissionvehicleshareprogr am	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
DiaphragmSensors(FiberOptics)26				Regulatory Impact Analysis - 1997
DieselandGasolineTrucksandBusesRetrofitwith3- waycatalystsongasoline- burningheavydutytrucksthatcurrentlyhave2- waycatalystsornocatalysts	NOx		Mobile	SAQMD Clean Air Plan - 2003
DirectInjection(DI)DieselV66	VOC	Targeted for the executive car, minivan, multipurpose, and sport utility market, cost effective features include electronic rotary fuel injection, fixed-geometry inlet prot, conventional wastegated turbocharger, cooled EGR, with advanced control algorithms, and an oxidation catalyst. As with the CIDI engine, the V6 DI engine will benefit from current DI engine research of light weight engines and parts and emission control technologies.		Regulatory Impact Analysis - 1997
DiscountMulti-TripBusFares		Introduce discount programs reducing cost of multiple bus rides through purchase of pass books	Mobile	DC RACM - 2003

Appenaix B – Initiai List of Control Measures				F uge D-19
Measure	Pollutant	Description	Source	Source Code
		(e.g. 10-trip tickets)		
DistributedgeneratorsR.C.S.A.section22a-174-42	NOx/VOC		Stationary	CT Memo - 2005
Downtownshuttles;rapidtransitbus				EACs - 2004
Drive-throughfacilitiesonozone				EACs - 2004
drivingtoschool				EACs - 2004
DryCleaning-Perchloroethylene	VOC	MACT (condensers/adsorbers)	Stationary	EPA Measures - 1999
Drycleaning-petroleum	VOC	MACT	Stationary	EPA Measures - 1999
Dual-curephotocatalysttechnology12	VOC	Low-solvent, low-VOC coatings are being developed that use photocatalysts to react with the coating material and accelerate the curing process. These photocatalysts allow the coatings to cure from liquids to solids quickly under UV or visible light. A family of such photocatalysts is being developed and tested. Major uses include tape adhesives and protective topcoats for aircraft. Development of solventless backing saturants for electrical tape backings has essentially been completed. Optimal dual cure resin formulations have been identified and utilized in preparing complete tape constructions.		Regulatory Impact Analysis - 1997
Dual-curephotocatalysttechnology4	VOC	Dual-cure photocatalyst technology is being researched for a variety of coating and adhesive uses, such as aerospace topcoats, aerospace primers, and solventless manufacture of tape backings. Significant progress has been made in improving the performance of the urethane/acrylate formulation being used for the aerospace topcoat application. Technical challenges have continued with the aerospace primer formulation.		Regulatory Impact Analysis - 1997
Dualfueldiesel/LNGpower	NOx		Diesel locomotives	Regulatory Impact Analysis - 1997
EarlyBusEngineReplacement		Replaces high-polluting diesel engines in	Mobile	DC RACM - 2003
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Measure	Pollutant	Description	Source	Source Code
		WMATA buses with new diesel engines		
EastmanAQ1350polymer2	VOC	A new water-dispersible hot-melt adhesive raw material, which can form the basis for use in a variety of applications including nonwoven products such as disposable diapers, packaging, bookbinding and labels. Products containing the water-dispersible adhesive are more easily repulped or recycled.		Regulatory Impact Analysis - 1997
EB-curableepoxyresinsforcomposites9	VOC	Major advancement in the formulation of epoxy resin systems capable of being cured (cross-linked) by ionizing radiation. This development could be the link in making polymer matrix composites and adhesives a cost-effective system for manufacturing a broad range of products in both high-tech and high-volume commercial applications. Further optimization of these resin systems is currently being performed for specific aircraft, aerospace, and defense applications. Substantially reduced manufacturing costs (25-65% less expensive) and curing times; and improvements in part quality and performance.		Regulatory Impact Analysis - 1997
ECMB funded energy efficiency and renewable energy measures	NOx/VOC		Stationary	CT Memo - 2005
EDV®WetScrubbingSystem	NOx/PM	Emission capture systems	Stationary	NEET Database - ongoing
EK35®	PM	Fugitive emission controls	Stationary	NEET Database - ongoing
Electrical/electroniccoating	VOC	SCAQMD Rule	Stationary	EPA Measures - 1999
Electrical/electroniccoating	VOC	MACT	Stationary	EPA Measures - 1999
Electricforklifts-county				EACs - 2004
Electricnewforkliftpurchasesandforkliftrentals	NOx		Offroad	SAQMD Clean Air Plan - 2003
Electricnewforkliftpurchasesandforkliftrentals	VOC		Offroad	SAQMD Clean Air Plan - 2003
Electrificationandsingleenginetaxiing	NOx		Offroad	SAQMD Clean Air Plan - 2003

Measure	Pollutant	Description	Source	Source Code
ElectrificationorUseofAlternateFuelsinAirportServ iceEquipment	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
ElectronBeam(EB)curing8	VOC	EB curing with existing technology has already been shown to dramatically reduce or eliminate solvent emissions in wood finishing. Currently, new advances in EB equipment and processes are being developed, including a new, lower-energy EB system and a new transport system for the EB treatment of powders. EB processes result in improved product performance and higher productivity, but require different curing equipment, and in some cases, application may be more difficult.		Regulatory Impact Analysis - 1997
ElectronicFuelInjectionforCNG,LNG,LPG,Hydrog en	NOx/VOC		Mobile	NEET Database - ongoing
EliminateTimedParking	NOx		Landuse	SAQMD Clean Air Plan - 2003
Eliminatevehiceemissioncontrol				EACs - 2004
Emission-basedparkingfees	NOx		Landuse	SAQMD Clean Air Plan - 2003
Emission-basedregistrationfees	NOx		Landuse	SAQMD Clean Air Plan - 2003
EmissionsfromDecontaminationofSoil	VOC	Approved VOC mitigation plan + Monitor for VOC contamination	Stationary	EPA Measures - 1999
EmissionsfromPetroleumStorageTanks		Adopt SCAQMD Rule 1178: Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities	Area	DC RACM - 2003
EmployeeCommuteOptions	NOx/VOC	In areas not already required to implement an ECO program, evaluate the potential emission reductions to be achieved by implementing such a program and consider its implementation to achieve additional reductions and stabilize mobile source emissions.	Mobile	EPA Measures - 1999
EmployerMetroShuttleBusServices		Provide incentives for businesses to provide employee shuttle service to the nearest rail or	Mobile	DC RACM - 2003

Tippenaix B - Initial List of Control Measures				Tage D-22
Measure	Pollutant	Description	Source	Source Code
		transit stop		
EmployerOutreach(PrivateSector)		Provide regional outreach to encourage large private-sector employers to voluntarily implement alternative commute strategies to reduce vehicle trips to work sites	Mobile	DC RACM - 2003
EmployerOutreach(PublicSector)		Provide regional outreach to encourage public- sector employers to voluntarily implement alternative commute strategies to reduce vehicle trips to work sites	Mobile	DC RACM - 2003
EmptytheERCbank	VOC			MA Strategies - 2004
EmulsifiedAsphalt	VOC	VOC content limit	Stationary	EPA Measures - 1999
Encourage55duringpeakozone				EACs - 2004
Energizer-reducevehiclefleet;90% offorklifts- battery				EACs - 2004
Energyconservation-33citybuildings				EACs - 2004
Energyconservationatcobldgs				EACs - 2004
Energyconservationplan				EACs - 2004
Energyefficientbuildings				EACs - 2004
Energyefficientpublicbuildings				EACs - 2004
Energyefficienyprograms				EACs - 2004
Energyreduction-LNB;waterbasedpaints				EACs - 2004
EngineTestFacilities	VOC	Pending	Stationary	EPA Measures - 1999
EnhancedRuleComplianceatExistingStationarySou rces	NOx	Step up enforcement of and compliance with existing rules for emissions control by stationary sources	Stationary	DC RACM - 2003
EnhancedRuleEffectiveness				CT RACM - 2001
Enhancerealtimetrafficinformationtoallowdriversto makebetterdecisionsaboutwhenandwheretotravel	NOx		Landuse	SAQMD Clean Air Plan - 2003

Appendix B – Initial List of Control Medsures				Fuge B-23
Measure	Pollutant	Description	Source	Source Code
EnsureemissionreductionsinSEPs,				EACs - 2004
EnviroKleen®	PM	Adhesives and sealants	Pollution Prevention	NEET Database - ongoing
EOLYSSystem33	PM	Combines the use of a particulate trap with the action of the catalytic additive to ensure that particulates are destroyed during combustion.		Regulatory Impact Analysis - 1997
EPANOxSIPcall				CT RACM - 2001
EpichlorohydrinElastomersProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr1/pr1pg.html	Stationary	EPA Measures - 1999
EpoxyResinsProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr2/pr2pg.html	Stationary	EPA Measures - 1999
EquipmentleaksforVOCinthesyntheticorganicchem icalmanufacturingindustry	VOC	Monitoring and repair	Stationary	EPA Measures - 1999
EquipmentleaksofVOCfromon- shorenaturalgasprocessingplants	VOC	Inspection and repair	Stationary	EPA Measures - 1999
EquipmentleaksofVOCinpetroleumrefineries	VOC	Inspection and repair	Stationary	EPA Measures - 1999
EstablishaHeavy-DutySmogCheckProgram	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Establishcleanairlabeling,energyconservationandp ubliceducationprograms	NOx		Offroad	SAQMD Clean Air Plan - 2003
Establish Clean Fleet Requirements for public fleets	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Ethanolalternativefuelvehicles				EACs - 2004
EthyleneProcesses	VOC	Pending	Stationary	EPA Measures - 1999
Ethylene-PropyleneRubberProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr1/pr1pg.html	Stationary	EPA Measures - 1999
ExhaustGasRecirculation27	NOx	This specific technology makes EGR more effective by ensuring EGR is applied at the high loads heavy-duty diesel engines (HDDEs) often run at, and providing an acceptable air flow to ensure		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		the fuel is being burnt efficiently. Continuing work includes assessments of EGR on engine durability, particulate emissions improvements, and transient engine performance.		
ExplosivesProduction	VOC	Pending	Stationary	EPA Measures - 1999
Extendenergyefficiencyrequirements				EACs - 2004
ExtendRampMetering		Install signals to control flow of vehicles at selected freeway ramp entrances to maintain level of service	Mobile	DC RACM - 2003
FabricCoating	VOC	Incineration	Stationary	EPA Measures - 1999
FederalMotorVehicleControlprogram				CT RACM - 2001
FederalNon-roadGasolineEngines				CT RACM - 2001
FederalNon-roadHeavyDutydieselengines				CT RACM - 2001
FerroalloysProduction:SilicomanganeseandFerroM anganese	VOC	National emission standards for hazardous air pollutants (NESHAP) for production of ferroalloys	Stationary	EPA Measures - 1999
FiberglassManufacturing;Textile- TypeFiber;RecupFurnaces	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Flares	VOC	Fugitive emission controls	Stationary	NEET Database - ongoing
FlexiblePolyurethaneFoamFabricationOperations	VOC	Pending	Stationary	EPA Measures - 1999
FlexiblePolyurethaneFoamProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/foam/foampg.html	Stationary	EPA Measures - 1999
FlexibleVinylandUrethaneCoatingandPrinting	VOC	Low solvent coatings or Incineration	Stationary	EPA Measures - 1999
FluidCatalyticCrackingUnits;CrackingUnit	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
Foam-controlagents11	VOC	More sophisticated foam-control agents are being developed and used as formulators move from solvent-based to waterborne coating systems. Foam is a common problem in waterborne systems, and it can adversely affect the coating's appearance and durability. Prudent use of foam control agents can minimize or eliminate the adverse effects of		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		foam without impacting other surface properties.		
Formregionalstakeholdersgroup				EACs - 2004
FuelCellTechnologies7	NOx/VOC	Development and demonstration of fuel cell technologies for on- and off-road mobile sources to improve the commercial viability of fuel cells, including improvements in power density, fuel storage, reformer efficiency, system integration, and cost reduction. This program is expected to result in several projects that would support promising fuel cell technologies for on- and off-road vehicles. Fuel cell technologies that will be considered include proton exchange membrane, solid oxide, direct methanol, phosphoric acid, and molten carbonate. Mobile source applications that will be considered in this category include light, medium-, and heavy-duty on-road vehicles, locomotives, ships, utility vehicles, neighborhood electric vehicles, and other off-road equipment applications. Peripheral technologies involving fuel infrastructure, on-board fuel storage, and hydrogen reforming shall be included if they have potential to advance the commercial viability of fuel cell applications.		Regulatory Impact Analysis - 1997
FuelCellVehicle8	NOx/VOC	Chrysler is teaming with Delphi Energy and Engine Management Systems to build within two years a "proof of concept" fuel cell vehicle that runs on gasoline. The technology will be a five-step process to refine gasoline on-board a vehicle. This could improve fuel efficiency by 50 percent, provide up to 400 miles range, be at least 90 percent cleaner, and cost no more than a current mid-size car.		Regulatory Impact Analysis - 1997
FuelFiredEquipment;ProcessHeaters,PropaneGas	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
FugitiveEmissions:Oil&GasProductionFacilities&	VOC	Identify all major & critical equipment + I & M	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
ConveyingStations		Program		
Galliumarsenide	NOx/VOC	It is possible to increase any solar cell's efficiency by focusing a more direct source of solar energy on it. In application, cells need to withstand extreme conditions in order to see an efficiency increase. This alloy demonstrated an efficiency of 28 percent under concentrated sunlight.		Regulatory Impact Analysis - 1997
Garbagetruckregulation	PM2.5		Mobile	CT Memo - 2005
GasChromatograph	VOC	Ambient Monitoring	Monitoring	NEET Database - ongoing
Gascollectionsystem-solidwastelandfill				EACs - 2004
Gaseous-andLiquid- FueledInternalCombustionEngines	VOC	VOC and NOx emission limits for stationary and portable engines	Stationary	EPA Measures - 1999
Gas- firedWaterHeaters,SmallBoilers,andProcessHeater s(Dec2002)				TX SIP - 2000-2004
GasolineDistribution(Stage1)	VOC	Improved seals on storage tanks and performing leak detection and repair of vapor and liquid leaks from equipment used to transfer gasoline Vapor processors are to collect and treat or recover vapors displaced during cargo tank loading operations.	Stationary	EPA Measures - 1999
GasolineLoadingRacks:IncreasedRuleEffectivenes s	VOC		Stationary	CT Memo - 2005
GasProductionandfromPetroleumProduction	VOC		Industrial Process	SAQMD Clean Air Plan - 2003
GasTaxIncrease		Increase state and local gas taxes to add 10% to purchase price of gasoline. Use proceeds to fund regional transit operations.	Mobile	DC RACM - 2003
GasTurbines	NOx	Detailed equations 40 CFR 60.332	Stationary	EPA Measures - 1999
GasTurbines	NOx	Limits for turbines burning natural gas at 25-42 ppm and as low as 9-15 ppm.+ limits for turbines burning distillate oil at 65 ppm or below, and as	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
		low as 25-42 ppm		
GasTurbines	NOx	Turbines >25 MW: Wet injection + SCR - 9 ppm (0.04 lb/mm Btu & 8-25 MW: Low NOx combustion - 42 ppm	Stationary	EPA Measures - 1999
GasTurbines-JetFuel	NOx	Selective Catalytic Reduction + Water Injection	Stationary	EPA Measures - 1999
GasTurbines-JetFuel	NOx	Water Injection	Stationary	EPA Measures - 1999
GasTurbines-NaturalGas	NOx	Steam Injection	Stationary	EPA Measures - 1999
GasTurbines-NaturalGas	NOx	Selective Catalytic Reduction + Low NOx Burners	Stationary	EPA Measures - 1999
GasTurbines-NaturalGas	NOx	Selective Catalytic Reduction + Steam Injection	Stationary	EPA Measures - 1999
GasTurbines-NaturalGas	NOx	Selective Catalytic Reduction + Water Injection	Stationary	EPA Measures - 1999
GasTurbines-NaturalGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
GasTurbines-NaturalGas	NOx	Water Injection	Stationary	EPA Measures - 1999
GasTurbines-Oil	NOx	Selective Catalytic Reduction + Water Injection	Stationary	EPA Measures - 1999
GasTurbines-Oil	NOx	Water Injection	Stationary	EPA Measures - 1999
Gearbox	NOx/VOC	The turbine blades' rotation causes wear on a system's gearbox. By using improved gearboxes, it is possible to lower total system cost (gearboxes are approximately 20 percent of total system cost). If as projected, infinitely variable speed tower systems become available, then it would no longer be necessary to maintain a gearbox in a tower system. Improved design and use of composite materials will reduce system cost by increasing the system's life span.		Regulatory Impact Analysis - 1997
Glass	NOx	Pressed / blown - LNB 13 lb/ton & Container - LNB 6 lb/ton & Flat - SNCR 9.5 lb.ton	Stationary	EPA Measures - 1999
GlassForming	VOC	Silicon-water emulsions replacement for petroleum-based lubricants	Stationary	EPA Measures - 1999
GlassFurnaces	NOx	Combustion modifications, process changes and post-combustion controls (SNCR) + RACT limits	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
		of 5.3-5.5 lbs NOx/ton of glass removed with limits as low as 4.0 lb NOx/ton of glass removed + coordinate installation of controls with routine furnace rebuilds		
GlassMeltingFurnaces	NOx	NOx emission limit + Continuous NOx monitoring from unit + Alternative Emission Control Plan	Stationary	EPA Measures - 1999
GraphicArts	VOC	VOC content of graphic art materials + VOC content limit for fountain solutions + Emission control system for non-compliant materials + Solvent cleaning and storage and disposal of VOC-containing materials comply with Rule 1171	Stationary	EPA Measures - 1999
GraphicArts- RotogravurereandFlexographicPrinting	VOC	Permanent total enclosures, where possible + VOC limits for inks + low-solvent clean-up solutions	Stationary	EPA Measures - 1999
HazardousOrganicNESHAP(CoveringManufactur eOfSeveralOrganicCompounds)	VOC	See Website - http://www.epa.gov/ttn/uatw/hon/honpg.html	Stationary	EPA Measures - 1999
Heavy-DutyDieselEngineStandards R.C.S.A.section22a-174-36a	NOx/VOC		Mobile	CT Memo - 2005
heavydutydieselstrategies				EACs - 2004
Heavy-DutyDieselVehicleControlsandFuels	VOC		Mobile	CT Memo - 2005
Heavy- DutyDieselVehicles:FuelAdditivesToReduceEmis sions	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:IntermodalFreightEfficiency	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:PreventiveMaintenance/Rebui ldRequirementsatSpecificMileage	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy-DutyDieselVehicles:ReduceTruckIdling	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:RequireLowSulfurDieselFuel EarlierThanEPAMayRequire	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999

Appendix B – Initiat List of Control Medsures				F uge D-29
Measure	Pollutant	Description	Source	Source Code
Heavy- DutyDieselVehicles:RequireUseOfOxydieselFuel	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:Upgrading/RetrofitEquipment	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy-DutyEngineECMRecalibration	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
HeavyTransitRail	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
HighAirFlowBio-airVENT	VOC	Process vent gas treatment	Stationary	NEET Database - ongoing
Highcetanedieselfuelforonroadvehicles		Require onroad diesel vehicles to use high cetane fuel	Mobile	DC RACM - 2003
Highsolidsaliphaticpolyurethanecoatings16	VOC	Three novel approaches to high solids aliphatic polyurethane coatings have been developed: a 100% solids, VOC free, instant setting, aliphatic polyurethane coating system; a high solids mixand-apply aliphatic polyurethane coating system; and a high solids single component aliphatic polyurethane coating system.		Regulatory Impact Analysis - 1997
HighwayPaints	VOC	VOC content limits	Stationary	EPA Measures - 1999
Highway Vehicles-Gasoline	NOx/VOC	Transportation Control Package	Mobile	EPA Measures - 1999
Highway Vehicles-Gasoline	NOx/VOC	Federal Reformulated Gasoline	Mobile	EPA Measures - 1999
HighwayVehicles-LDGasoline	NOx/VOC	High Enhanced I/M	Mobile	EPA Measures - 1999
HighwayVehicles-LDGasoline	NOx/VOC	Fleet ILEV	Mobile	EPA Measures - 1999
HighwayVehicles-LDGasTrucks	NOx/VOC	Tier 2 Standards	Mobile	EPA Measures - 1999
Homeheatingoilsulfurreductions	PM2.5		Mobile	CT Memo - 2005
Hotmeltspraytool1	VOC	A newly-redesigned, solvent-free, hot melt spray tool is under to development to reduce VOC emissions. Further details not available.		Regulatory Impact Analysis - 1997
HOVlanes-I-24,40				EACs - 2004
HRVOCWebpage(Dec2004)				TX SIP - 2000-2004

Measure	Pollutant	Description	Source	Source Code
Hybridvehicles				EACs - 2004
HydrazineProduction	VOC	Pending	Stationary	EPA Measures - 1999
Hyper- immobilizingAbsorbentDeactivatingPowder	VOC	Manufacturing (general)	Pollution Prevention	NEET Database - ongoing
HazardousOrganicNESHAP(CoveringManufactur eOfSeveralOrganicCompounds)	VOC	See Website - http://www.epa.gov/ttn/uatw/hon/honpg.html	Stationary	EPA Measures - 1999
Heavy-DutyDieselEngineStandards R.C.S.A.section22a-174-36a	NOx/VOC		Mobile	CT Memo - 2005
heavydutydieselstrategies				EACs - 2004
Heavy-DutyDieselVehicleControlsandFuels	VOC		Mobile	CT Memo - 2005
Heavy- DutyDieselVehicles:FuelAdditivesToReduceEmis sions	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:IntermodalFreightEfficiency	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:PreventiveMaintenance/Rebui ldRequirementsatSpecificMileage	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy-DutyDieselVehicles:ReduceTruckIdling	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:RequireLowSulfurDieselFuel EarlierThanEPAMayRequire	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:RequireUseOfOxydieselFuel	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy- DutyDieselVehicles:Upgrading/RetrofitEquipment	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Heavy-DutyEngineECMRecalibration	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
HeavyTransitRail	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
HighAirFlowBio-airVENT	VOC	Process vent gas treatment	Stationary	NEET Database - ongoing
Highcetanedieselfuelforonroadvehicles		Require onroad diesel vehicles to use high cetane fuel	Mobile	DC RACM - 2003
Highsolidsaliphaticpolyurethanecoatings16	VOC	Three novel approaches to high solids aliphatic polyurethane coatings have been developed: a 100% solids, VOC free, instant setting, aliphatic polyurethane coating system; a high solids mixand-apply aliphatic polyurethane coating system; and a high solids single component aliphatic polyurethane coating system.		Regulatory Impact Analysis - 1997
HighwayPaints	VOC	VOC content limits	Stationary	EPA Measures - 1999
HighwayVehicles-Gasoline	NOx/VOC	Transportation Control Package	Mobile	EPA Measures - 1999
HighwayVehicles-Gasoline	NOx/VOC	Federal Reformulated Gasoline	Mobile	EPA Measures - 1999
HighwayVehicles-LDGasoline	NOx/VOC	High Enhanced I/M	Mobile	EPA Measures - 1999
HighwayVehicles-LDGasoline	NOx/VOC	Fleet ILEV	Mobile	EPA Measures - 1999
Highway Vehicles-LDGasTrucks	NOx/VOC	Tier 2 Standards	Mobile	EPA Measures - 1999
Homeheatingoilsulfurreductions	PM2.5		Mobile	CT Memo - 2005
Hotmeltspraytool1	VOC	A newly-redesigned, solvent-free, hot melt spray tool is under to development to reduce VOC emissions. Further details not available.		Regulatory Impact Analysis - 1997
HOVlanes-I-24,40				EACs - 2004
HRVOCWebpage(Dec2004)				TX SIP - 2000-2004
Hybridvehicles				EACs - 2004
HydrazineProduction	VOC	Pending	Stationary	EPA Measures - 1999
$Hyper\ immobilizing Absorbent Deactivating Powder$	VOC	Manufacturing (general)	Pollution Prevention	NEET Database - ongoing
I/Mforheavy-dutydieselvehicles	PM2.5		Mobile	CT Memo - 2005
ICEngines	NOx	Lean burn - LEC 2 gm/bhp-hr & Rich Burn - SNCR 2 gm/bhp-hr & Diesel -SCR 2 gm/bhp-hr	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
ICEngines-Gas, Diesel, LPG	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICEngines-Gas, Diesel, LPG	NOx	Ignition Retard	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Cyclone	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Cyclone	NOx	Natural Gas Reburn	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Cyclone	NOx	Coal Reburn	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Cyclone	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/FBC	NOx	Selective Non-Catalytic Reduction - Urea	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Stoker	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Wall	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Wall	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Wall	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-Coke	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coke	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-Coke	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-DistillateOil	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-DistillateOil	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-DistillateOil	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-DistillateOil	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-LiquidWaste	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-LiquidWaste	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-LiquidWaste	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-LiquidWaste	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-LPG	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-LPG	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-LPG	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
ICIBoilers-LPG	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-MSW/Stoker	NOx	Selective Non-Catalytic Reduction - Urea	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Oxygen Trim + Water Injection	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-ProcessGas	NOx	Oxygen Trim + Water Injection	Stationary	EPA Measures - 1999
ICIBoilers-ProcessGas	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-ProcessGas	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-ProcessGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-ResidualOil	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-ResidualOil	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-ResidualOil	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-ResidualOil	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Wood/Bark/Stoker	NOx	Selective Non-Catalytic Reduction - Urea	Stationary	EPA Measures - 1999
I/Mforheavy-dutydieselvehicles	PM2.5		Mobile	CT Memo - 2005
ICEngines	NOx	Lean burn - LEC 2 gm/bhp-hr & Rich Burn - SNCR 2 gm/bhp-hr & Diesel -SCR 2 gm/bhp-hr	Stationary	EPA Measures - 1999
ICEngines-Gas,Diesel,LPG	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICEngines-Gas,Diesel,LPG	NOx	Ignition Retard	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Cyclone	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Cyclone	NOx	Natural Gas Reburn	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Cyclone	NOx	Coal Reburn	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Cyclone	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/FBC	NOx	Selective Non-Catalytic Reduction - Urea	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
ICIBoilers-Coal/Stoker	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Wall	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Wall	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coal/Wall	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-Coke	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Coke	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-Coke	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-DistillateOil	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-DistillateOil	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-DistillateOil	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-DistillateOil	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-LiquidWaste	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-LiquidWaste	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-LiquidWaste	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-LiquidWaste	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-LPG	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-LPG	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-LPG	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-LPG	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-MSW/Stoker	NOx	Selective Non-Catalytic Reduction - Urea	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Oxygen Trim + Water Injection	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-NaturalGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
ICIBoilers-ProcessGas	NOx	Oxygen Trim + Water Injection	Stationary	EPA Measures - 1999
ICIBoilers-ProcessGas	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-ProcessGas	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-ProcessGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-ResidualOil	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ICIBoilers-ResidualOil	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-ResidualOil	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ICIBoilers-ResidualOil	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ICIBoilers-Wood/Bark/Stoker	NOx	Selective Non-Catalytic Reduction - Urea	Stationary	EPA Measures - 1999
Idlingrestriction-heavy-dutydiesel				EACs - 2004
Idlingrestrictionsforconstructionequipment		Limit idling by construction equipment	Non-road	DC RACM - 2003
Idlingrestrictionsforlawn&gardenequipment		Limit idling by commercial lawn & garden equipment	Non-road	DC RACM - 2003
Implementaprogramtoreplacecatalystsinlightdutyv ehiclesandtrucks,includingSUVs	NOx		On-Road Mobile Light Duty Vehicle Technology Control Measures	SAQMD Clean Air Plan - 2003
ImplementNOxRACTBeyondNonattainmentArea		Take credit for reductions due to implementation of NOx RACT rules beyond nonattainment area	Area	DC RACM - 2003
ImplementOTCBeyondNonattainmentArea		Take credit for reductions due to implementation of OTC measures beyond nonattainment area	Area	DC RACM - 2003
Implementregistrationandinspectionprogramforhea vy-duty(>50hp)off-roaddieselengines	NOx		Offroad	SAQMD Clean Air Plan - 2003
Implementregistrationandinspectionprogramforhea vy-duty(>50hp)off-roaddieselengines	VOC		Offroad	SAQMD Clean Air Plan - 2003
Implementsteps-purchasealternative				EACs - 2004

Tippenaix B - Initial List of Control Measures		T		Tuge D-30
Measure	Pollutant	Description	Source	Source Code
Implementtollboothsandpay-to-driveroads	NOx		Landuse	SAQMD Clean Air Plan - 2003
Implementtrafficcalmingmeasurestoreducevehicles peedandencouragebicycleandpedestrianactivity	NOx		Landuse	SAQMD Clean Air Plan - 2003
Implement VOCRACT Beyond Nonattain ment Area		Take credit for reductions due to implementation of VOC RACT rules beyond nonattainment area	Area	DC RACM - 2003
ImprovedAirfoilMaterials	NOx/VOC	Utilization of wind power necessitates a device (airfoil) which will capture wind energy. By using newer materials and changing the number of blades, improved energy generation and lower costs may be achieved. Improved airfoil design using composite materials (fiberglass, wood/epoxy) and fewer blades (2-3) will reduce system cost while increasing energy conversions/efficiencies.		Regulatory Impact Analysis - 1997
Incidentmgt/Intelltrans.System				EACs - 2004
Includefuelefficiency/emission				EACs - 2004
IncludeNOxscreeningintheHeavy- DutyVehicleInspectionProgram	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Increasedcompliancewiththeanti- idlingrestriction;schoolbusandtruckstopsignage;sta teandlocalpoliceenforcement	PM2.5		Mobile	CT Memo - 2005
Increasesthepriceofgasolinetopayfordamagesofpoll ution,costofglobalwarming(greenhousegases),andc ostofpetroleumdependency	NOx		Landuse	SAQMD Clean Air Plan - 2003
IncreaseVehicleRegistrationFeeandTrafficandPark ingViolationFines	NOx		Landuse	SAQMD Clean Air Plan - 2003
Industrial,InstitutionalandCommercialBoilers,Stea mGenerators,andProcessHeaters	NOx	NOx emission limit, methods to meet the limit is not specified	Stationary	EPA Measures - 1999
IndustrialandCommercialBoilers	NOx	Limits for boilers larger than 100 mmBtu/hr at levels of 0.t 5 lb/mmBtu or below for coal and 0.05 lb/mmBtu for oil and gas + limits for mid-size boilers between 50-100 mmBtu/hr at 0.10	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
		lb/mmBtu for gas, 0.12 lb/mmBtu for distillate oil and 0.30 lb/mmBtu for residual oil, 0.38 lb/mmBtu for coal + boilers smaller than 50 mmBtu/hr make annual "tune-ups" to minimize excess air		
IndustrialBoilers	VOC	Pending	Stationary	EPA Measures - 1999
IndustrialCoalCombustion	NOx	RACT to 50 tpy (Low NOx Burners)	Stationary	EPA Measures - 1999
IndustrialCoalCombustion	NOx	RACT to 25 tidy (Low NOx Burners)	Stationary	EPA Measures - 1999
Industrialequipmentretrofits		Require industrial equipment to be retrofitted with emissions controls	Non-road	DC RACM - 2003
IndustrialIncinerators	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
Industrialmaintenancecoating	VOC	AIM Coating Federal Rule	Stationary	EPA Measures - 1999
Industrialmaintenancecoating	VOC	South Coast Phase II	Stationary	EPA Measures - 1999
Industrialmaintenancecoating	VOC	South Coast Phase I	Stationary	EPA Measures - 1999
Industrialmaintenancecoating	VOC	South Coast Phase III	Stationary	EPA Measures - 1999
IndustrialNaturalGasCombustion	NOx	RACT to 25 tpy (Low NOx Burners)	Stationary	EPA Measures - 1999
IndustrialNaturalGasCombustion	NOx	RACT to 50 tpy (Low NOx Burners)	Stationary	EPA Measures - 1999
IndustrialOilCombustion	NOx	RACT to 25 tpy (Low NOx Burners)	Stationary	EPA Measures - 1999
IndustrialOilCombustion	NOx	RACT to 50 tpy (Low NOx Burners)	Stationary	EPA Measures - 1999
IndustrialProcessCoolingTowers	VOC	See Website - http://www.epa.gov/ttn/uatw/mactfnl.html	Stationary	EPA Measures - 1999
Industrialsurfacecoating:Largeappliances	VOC	Low solvent coatings	Stationary	EPA Measures - 1999
Industrialsurfacecoating:surfacecoatingofplasticpar tsforbusinessmachines	VOC	Low VOC coatings	Stationary	EPA Measures - 1999
IndustrialWastewaterTreatment	VOC	Wastewater stream enclosed to point of treatment + require 95-percent control of volatiles + regulations on wastewater streams with lower VOC concentration than those identified in EPA's Control Techniques Guideline (CTG)	Stationary	EPA Measures - 1999

inppendix B – Initial List of Control Measures				Tage B-30
Measure	Pollutant	Description	Source	Source Code
IndustrialWastewaterTreatment/PubliclyOwnedTr eatmentWorks	NOx/VOC		Area	CT Memo - 2005
Injector/IntensifierSystem24	NOx	This system is designed to reduce NOx emissions from heavy-duty diesel vehicles through a new natural gas fuel injector system. The natural gas injector system will be fabricated installed and certified.		Regulatory Impact Analysis - 1997
In-Process;BituminousCoal;CementKiln	NOx	Selective Non-Catalytic Reduction - Urea based	Stationary	EPA Measures - 1999
In-Process;BituminousCoal;LimeKiln	NOx	Selective Non-Catalytic Reduction - Urea based	Stationary	EPA Measures - 1999
In-Process;ProcessGas;CokeOven/BlastFurnaces	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
In-Process;ProcessGas;CokeOvenGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
In-ProcessFuelUse;BituminousCoal;General	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
In-ProcessFuelUse;NaturalGas;General	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
In-ProcessFuelUse;ResidualOil;General	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Installpassivegasvents-landfill				EACs - 2004
InstallRemoteSensingtoIdentifyHigh- EmittingVehicles	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Institutional/CommercialBoilers	VOC	Pending	Stationary	EPA Measures - 1999
IntegratedIronandSteelManufacture	VOC	Pending	Stationary	EPA Measures - 1999
IntellidyneFuelEconomizer	NOx/VOC	Other	Stationary	NEET Database - ongoing
InternalCombustionEngines-Gas	NOx	Ignition Retard	Stationary	EPA Measures - 1999
InternalCombustionEngines-Gas	NOx	Air-to-Fuel Ratio	Stationary	EPA Measures - 1999
InternalCombustionEngines-Gas	NOx	Air-to-Fuel Ratio + Ignition Retard	Stationary	EPA Measures - 1999
InternalCombustionEngines-Gas	NOx	L-E (Medium Speed)	Stationary	EPA Measures - 1999
InternalCombustionEngines-Gas	NOx	L-E (Low Speed)	Stationary	EPA Measures - 1999
InternalCombustionEngines-Gas	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
InternalCombustionEngines-Oil	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
InternalCombustionEngines-Oil	NOx	Ignition Retard	Stationary	EPA Measures - 1999
IntroducelowNOxenginesearly	NOx		M3 On-road heavy duty diesel	Regulatory Impact Analysis - 1997
Iron&SteelMills-Annealing	NOx	Low NOx Burners + Selective Catalytic Reduction	Stationary	EPA Measures - 1999
Iron&SteelMills-Annealing	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
Iron&SteelMills-Annealing	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Iron&SteelMills-Annealing	NOx	Low NOx Burners + Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
Iron&SteelMills-Annealing	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
Iron&SteelMills-Annealing	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
Iron&SteelMills-Galvanizing	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
Iron&SteelMills-Galvanizing	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Iron&SteelMills-Reheating	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
Iron&SteelMills-Reheating	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Iron&SteelMills-Reheating	NOx	LEA	Stationary	EPA Measures - 1999
IronandStealIndustry/SinterPlants	VOC	Deoiling control limit on oil and grease for mill scale.	Stationary	EPA Measures - 1999
IronandSteelFoundries	VOC	SCAQMD's rule for combustion gas limiting the discharge of carbon monoxide	Stationary	EPA Measures - 1999
IronandSteelMills	NOx	Low NOx burners and FGR for reheat furnaces + SCR and low NOx burners for annealing furnaces + low NOx burners and FGR for galvanizing furnaces	Stationary	EPA Measures - 1999
IronFoundries	VOC	Pending	Stationary	EPA Measures - 1999
IronProduction;BlastFurnace;BlastHeatingStoves	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
KraftPulpMills	NOx	Industrial boilers regulated same as Industrial and Commercial Boilers + SNCR for recovery boilers + lime kilns regulated same as Cement Kilns	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
LABSORB(tm)RegenerativeSO2scrubbing	PM	Emission capture systems	Stationary	NEET Database - ongoing
LandDevevelopmentCode/Tree	T IVI	Emission capture systems	Stationary	EACs - 2004
LandfillGases	VOC	New Source Performance Standard + lower size cutoff based on area's major source definition + regulating landfills with more than 500,000 tons in place.	Stationary	EPA Measures - 1999
Landscape/treeordinances				EACs - 2004
Landscapeordinance-noresid				EACs - 2004
LargeAppliance(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999
LargeWaterHeatersandSmallBoilers	NOx	NOx emission limit + Compliance Certification Program for equipment manufacturers + Retrofit Compliance Certification Program	Stationary	EPA Measures - 1999
LaserRemoteSensing	NOx	Real-time monitoring/information display	Models and Environmenta 1 Software	NEET Database - ongoing
LaserRemoteSensing	NOx	Ambient modeling/simulation	Models and Environmenta 1 Software	NEET Database - ongoing
LasIR	NOx	Emissions Monitoring	Monitoring	NEET Database - ongoing
Lawn&gardenequipmen:				EACs - 2004
Lawnandgardenequipmentbuybackandscrappagepr ograms	NOx/VOC		Mobile	CT Memo - 2005
LawnMowerandGardenReplacementProgram	NOx/VOC	Voluntary program to replace gasoline powered lawn and garden equipment with electric powered equipment	Mobile	EPA Measures - 1999
LeanBurnCatalysts31	NOx	Major challenges in this project are the development of a catalyst with the three following attributes: 1) Sufficient and selective lean NOx activity; 2) Robustness, particularly hydrothermal durability; and 3) economically practical.		Regulatory Impact Analysis - 1997

Appendix B – Initiat List of Control Wedsures				rage B-41
Measure	Pollutant	Description	Source	Source Code
		Development of a lean burn catalyst is critical for the commercialization of the lean burn engine.		
LeatherTanningandFinishingOperations	VOC	Pending	Stationary	EPA Measures - 1999
LimeKilns	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
LimeKilns	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
LimeKilns	NOx	Selective Non-Catalytic Reduction - Urea Based	Stationary	EPA Measures - 1999
LimeKilns	NOx	Selective Non-Catalytic Reduction - NH3Based	Stationary	EPA Measures - 1999
LimeKilns	NOx	Mid-Kiln Firing	Stationary	EPA Measures - 1999
Limitingpleasurecraft/vehicleuseabove100F	VOC		Offroad	SAQMD Clean Air Plan - 2003
LNGCombustionTechnologyforLocomotives23	NOx/VOC	Develop and demonstrate, via the GasRail USA program, LNG combustion technology for locomotives capable of reducing NOx emissions by 75% or more compared to conventional diesel technology. In partnership with Southwest Research Institute, the project would optimize a newly developed combustion technology in a multicylinder locomotive engine. This will be followed by integration of the combustion system into one or more Metrolink passenger locomotives for operation in the SCAQMD Basin.		Regulatory Impact Analysis - 1997
LongerTermEngineRetrofitorAftertreatment	NOx		Offroad	SAQMD Clean Air Plan - 2003
LoTOx(tm)Technology	NOx	Emission capture systems	Stationary	NEET Database - ongoing
LowEmission,AlternativeFuelTechnologiesforOn-RoadApplications21	NOx/VOC	Development and demonstration of low-emission, alternative fuel technologies for light-, medium-, and heavy-duty mobile sources. Alternative clean fuels that will be considered include, but are not necessarily limited to, natural gas, propane, methanol, ethanol, hydrogen, and Hythane. In addition, reformulated gasoline and diesel fuels have been developed that produce lower emissions. When used in conjunction with advanced emission controls, additives, and new engine technologies,		Regulatory Impact Analysis - 1997

Appendix B - Initial List of Control Measures				Tuge D-42
Measure	Pollutant	Description	Source	Source Code
		these appear to have promise to meet some CARB LEV standards.		
Low-EmissionAsphalt		Adopt SCAQMD Rules 1108: Cutback Asphalt (less than 0.5% VOC evaporating at 260F) and 1108.1: Emulsified Asphalt (less than 3% VOC evaporating at 260F)	Area	DC RACM - 2003
Lowemissiondieselforfleets				EACs - 2004
Low-EmissionFurnaces		Adopt SCAQMD Rule 1111: NOx Emissions from Natural Gas Fired, Fan-Type Central Furnaces (no more than 40 nanograms of NOx per joule of useful heat)	Area	DC RACM - 2003
Low-emissionsagriculturalequipment		Require sale of low-emissions agricultural equipment in region	Non-road	DC RACM - 2003
Low-emissionsconstructionequipment		Require sale of low-emissions construction equipment in region	Non-road	DC RACM - 2003
Low-EmissionWaterHeaters		Adopt SCAQMD Rule 1121: Control of NOx from Residential Type Natural Gas Fired Water Heaters	Area	DC RACM - 2003
Loweremissionstandardsforgasolinetrucks	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Lowerspeedlimit-55fortrucksduring				EACs - 2004
Low-NOxDieselFuel(On-Road)		Require regional use of low-NOx fuel for on-road diesel vehicles	Mobile	DC RACM - 2003
lowNOxlimitsforboilers/heatersintheheatinputrang eof75,000to2,000,000Btu/hr	NOx		Stationary	SAQMD Clean Air Plan - 2003
LowReidVaporPressureGas				EACs - 2004
LowSfuels-asap				EACs - 2004
Low-SulfurFuelforElectricGeneratingUnits R.C.S.A.section22a-174-19a	PM2/5		Stationary	CT Memo - 2005
LowSulfurFuelOil(340ppm);80percentReductionin SOxEmissions	NOx		Marine (commercial)	Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
Low-sulfurTypeIIfuelsinallvehicles				EACs - 2004
LowVOCstripingmaterial				EACs - 2004
LABSORB(tm)RegenerativeSO2scrubbing	PM	Emission capture systems	Stationary	NEET Database - ongoing
LandDevevelopmentCode/Tree				EACs - 2004
LandfillGases	VOC	New Source Performance Standard + lower size cutoff based on area's major source definition + regulating landfills with more than 500,000 tons in place.	Stationary	EPA Measures - 1999
Landscape/treeordinances				EACs - 2004
Landscapeordinance-noresid				EACs - 2004
LargeAppliance(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999
LargeWaterHeatersandSmallBoilers	NOx	NOx emission limit + Compliance Certification Program for equipment manufacturers + Retrofit Compliance Certification Program	Stationary	EPA Measures - 1999
LaserRemoteSensing	NOx	Real-time monitoring/information display	Models and Environmenta 1 Software	NEET Database - ongoing
LaserRemoteSensing	NOx	Ambient modeling/simulation	Models and Environmenta 1 Software	NEET Database - ongoing
LasIR	NOx	Emissions Monitoring	Monitoring	NEET Database - ongoing
Lawn&gardenequipmen:				EACs - 2004
Lawnandgardenequipmentbuybackandscrappagepr ograms	NOx/VOC		Mobile	CT Memo - 2005
LawnMowerandGardenReplacementProgram	NOx/VOC	Voluntary program to replace gasoline powered lawn and garden equipment with electric powered equipment	Mobile	EPA Measures - 1999
LeanBurnCatalysts31	NOx	Major challenges in this project are the development of a catalyst with the three following attributes: 1) Sufficient and selective lean NOx		Regulatory Impact Analysis - 1997

Appendix B – Initial List of Control Measures	Page B-44			
Measure	Pollutant	Description	Source	Source Code
		activity; 2) Robustness, particularly hydrothermal durability; and 3) economically practical. Development of a lean burn catalyst is critical for the commercialization of the lean burn engine.		
LeatherTanningandFinishingOperations	VOC	Pending	Stationary	EPA Measures - 1999
LimeKilns	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
LimeKilns	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
LimeKilns	NOx	Selective Non-Catalytic Reduction - Urea Based	Stationary	EPA Measures - 1999
LimeKilns	NOx	Selective Non-Catalytic Reduction - NH3Based	Stationary	EPA Measures - 1999
LimeKilns	NOx	Mid-Kiln Firing	Stationary	EPA Measures - 1999
Limitingpleasurecraft/vehicleuseabove100F	VOC		Offroad	SAQMD Clean Air Plan - 2003
LNGCombustionTechnologyforLocomotives23	NOx/VOC	Develop and demonstrate, via the GasRail USA program, LNG combustion technology for locomotives capable of reducing NOx emissions by 75% or more compared to conventional diesel technology. In partnership with Southwest Research Institute, the project would optimize a newly developed combustion technology in a multicylinder locomotive engine. This will be followed by integration of the combustion system into one or more Metrolink passenger locomotives for operation in the SCAQMD Basin.		Regulatory Impact Analysis - 1997
LongerTermEngineRetrofitorAftertreatment	NOx		Offroad	SAQMD Clean Air Plan - 2003
LoTOx(tm)Technology	NOx	Emission capture systems	Stationary	NEET Database - ongoing
LowEmission,AlternativeFuelTechnologiesforOn-RoadApplications21	NOx/VOC	Development and demonstration of low-emission, alternative fuel technologies for light-, medium-, and heavy-duty mobile sources. Alternative clean fuels that will be considered include, but are not necessarily limited to, natural gas, propane, methanol, ethanol, hydrogen, and Hythane. In addition, reformulated gasoline and diesel fuels have been developed that produce lower emissions.		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		When used in conjunction with advanced emission controls, additives, and new engine technologies, these appear to have promise to meet some CARB LEV standards.		
Low-EmissionAsphalt		Adopt SCAQMD Rules 1108: Cutback Asphalt (less than 0.5% VOC evaporating at 260F) and 1108.1: Emulsified Asphalt (less than 3% VOC evaporating at 260F)	Area	DC RACM - 2003
Lowemissiondieselforfleets				EACs - 2004
Low-EmissionFurnaces		Adopt SCAQMD Rule 1111: NOx Emissions from Natural Gas Fired, Fan-Type Central Furnaces (no more than 40 nanograms of NOx per joule of useful heat)	Area	DC RACM - 2003
Low-emissionsagriculturalequipment		Require sale of low-emissions agricultural equipment in region	Non-road	DC RACM - 2003
Low-emissionsconstructionequipment		Require sale of low-emissions construction equipment in region	Non-road	DC RACM - 2003
Low-EmissionWaterHeaters		Adopt SCAQMD Rule 1121: Control of NOx from Residential Type Natural Gas Fired Water Heaters	Area	DC RACM - 2003
Loweremissionstandardsforgasolinetrucks	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Lowerspeedlimit-55fortrucksduring				EACs - 2004
Low-NOxDieselFuel(On-Road)		Require regional use of low-NOx fuel for on-road diesel vehicles	Mobile	DC RACM - 2003
lowNOxlimitsforboilers/heatersintheheatinputrang eof75,000to2,000,000Btu/hr	NOx		Stationary	SAQMD Clean Air Plan - 2003
LowReidVaporPressureGas				EACs - 2004
LowSfuels-asap				EACs - 2004
Low-SulfurFuelforElectricGeneratingUnits R.C.S.A.section22a-174-19a	PM2/5		Stationary	CT Memo - 2005

February 14, 2007

Measure	Pollutant	Description	Source	Source Code
LowSulfurFuelOil(340ppm);80percentReductionin SOxEmissions	NOx		Marine (commercial)	Regulatory Impact Analysis - 1997
Low-sulfurTypeIIfuelsinallvehicles				EACs - 2004
LowVOCstripingmaterial				EACs - 2004
Magneticallycontrolleddepositionofmetalsusinggas plasma7	VOC	Methods of spraying materials on a substrate in a controlled manner are being researched in an attempt to eliminate the waste inherent in the present process. Thin layers of secondary material are plated on substrates either by plating or spraying processes. Plating operations produce large amounts of hazardous liquid waste. Spraying, while one of the less waste intensive methods, produces `over spray' which is waste that is a result of the uncontrolled nature of the spray stream. In many cases the over spray produces a hazardous waste.		Regulatory Impact Analysis - 1997
MagneticTapes(SurfaceCoating)	VOC	See Website - http://www.epa.gov/ttn/uatw/magtape/magtappg.ht ml	Stationary	EPA Measures - 1999
MagnetWireCoatingOperations	VOC	VOC content limits for compliant coatings + Emission capture and control system for non- compliant coatings + Cleaning operations and solvent storage and disposal comply with Rule 1171	Stationary	EPA Measures - 1999
Mandatorychipreflashingforheavy- dutydieseltrucks	NOx/VOC		Mobile	CT Memo - 2005
MandatoryFacilityReductiononSpareAirDays	NOx		Stationary	SAQMD Clean Air Plan - 2003
MandatoryFacilityReductiononSpareAirDays	VOC		Stationary	SAQMD Clean Air Plan - 2003
ManufactureOfPaints,Coatings,andAdhesives	VOC	Pending	Stationary	EPA Measures - 1999
ManufactureofPolymericCellularProducts(Foam)	VOC	Discontinue use of VOC blowing agents in non- expandable molding operations + Quantity limitations on blowing agents in expandable	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
		molding operations		
ManufacturingOfNutritionalYeast	VOC	Pending	Stationary	EPA Measures - 1999
ManufacturingTechniques	NOx/VOC	The manufacture of wind tower components is to date a labor intensive process (airfoils are traditionally hand laid). Development and use of computerized mass production techniques promises to reduce lay-up times and increase orders.		Regulatory Impact Analysis - 1997
MarinaGasolineRefueling	VOC	Stage I and II vapor recovery at marinas that dispense more than 10,000 gallons per month.	Stationary	EPA Measures - 1999
MarineCoatingOperations	VOC	VOC content limits for marine coatings + Solvent cleaning and storage comply with Rule 1171 + Emission collection and control system for non-compliant coatings	Stationary	EPA Measures - 1999
MarineEngines:OperatingRestrictions	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
MarineEngines:Refueling/Fuels	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
Marinesurfacecoating	VOC	Add-on control levels	Stationary	EPA Measures - 1999
Marinesurfacecoating	VOC	MACT	Stationary	EPA Measures - 1999
MarineVesselLoadingOperations	VOC	Sets standards and requires RACT for VOC and HAP emissions from new and existing marine tank vessel loading operations Sets NESHAP and requires MACT for existing and new major marine tank vessel loading operations	Stationary	EPA Measures - 1999
Mechanical, electric, railroad coating	VOC	MACT level of control	Stationary	EPA Measures - 1999
Mechanical, electric, railroad coating	VOC	SCAQMD Limits	Stationary	EPA Measures - 1999
Media/puiblicrelationsprogram				EACs - 2004
MedicalWasteIncinerators	NOx	250 ppmv	Stationary	EPA Measures - 1999
MedicalWasteIncinerators	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
MedicalWasteIncinerators	NOx	Controls similar to those for municipal waste combustors	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
Medium-DutyCNGEngineConversionKit18	NOx/VOC	Support for field demonstration of improved software and hardware for a medium-duty CNG engine conversion kit to support the existing medium-duty vehicle population. The SCAQMD previously supported field demonstration of the first generation kit in a contract with Thermo Power Corporation. This kit has operated well in the field. However, improvements in performance and fuel economy are needed if the kit is to be commercially viable. Hardware and software modifications to achieve improved performance and fuel economy are currently being developed. The proposed project would support field demonstration of the second generation kit.		Regulatory Impact Analysis - 1997
MetalCan(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999
Metalcoil&cancoating	VOC	Incineration	Stationary	EPA Measures - 1999
Metalcoil&cancoating	VOC	MACT	Stationary	EPA Measures - 1999
Metalcoil&cancoating	VOC	BAAQMD Rule 11 Amended	Stationary	EPA Measures - 1999
MetalCoil(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999
Metalcoilsurfacecoating	VOC	Incineration	Stationary	EPA Measures - 1999
MetalContainer,Closure,andCoilCoatingOperation s	VOC	VOC content limits for compliant coatings + Emission capture and control system for non- compliant coatings + Cleaning operations and solvent storage and disposal comply with Rule 1171	Stationary	EPA Measures - 1999
Metalfurniture,appliances,parts	VOC	SCAQMD Limits	Stationary	EPA Measures - 1999
Metalfurniture,appliances,parts	VOC	MACT	Stationary	EPA Measures - 1999
Micro-emulsiontechnology15	VOC	New microemulsion technology creates an effective way to decrease VOC levels up to 50% or more and still maintain effective paint-stripping performance. This solvent technology allows water to be incorporated into hydrocarbon-based paint strippers		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		while making minimal performance sacrifices.		
MiscellaneousMetalPartsandProducts(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999
Mobilezonesprayboothventilationsystem6	VOC	New process design endeavors to reduce the volume of air to be treated from spray paint booths, thereby increasing efficiency and improving air pollution abatement (in particular, reducing VOC emissions). Most of the ventilation air is recycled through the booth to maintain laminar flow; the machinery is located on the supply side of the booth rather than on the exhaust side. 60 to 95% reduction in spray booth exhaust rate should result.		Regulatory Impact Analysis - 1997
MobotecSystem	NOx/PM	Emission capture systems	Stationary	NEET Database - ongoing
MoleculeQuantumMechanicAirPurification	NOx/VOC	Other	Stationary	NEET Database - ongoing
MoltenCarbonateFuelCell(MCFC)4	NOx/VOC	The molten carbonate fuel cell uses an electrolyte of lithium and potassium carbonates and operates at approximately 650C (1200F). Due to the high temperature involved, noble metal catalysts are not required for the cell electrochemical oxidation and reduction process.		Regulatory Impact Analysis - 1997
Moreefficienttraffickingsystems				EACs - 2004
MotorVehicleandMobileEquipmentNon- AssemblyLineCoatingOperations	VOC	VOC content limits for compliant coatings + Emission capture and control system for non- compliant coatings + Cleaning operations and solvent storage and disposal comply with Rule 1171	Stationary	EPA Measures - 1999
Motor Vehicle Assembly Line Coating Operations	VOC	VOC content limit for compliant coatings + Solvent cleaning and storage comply with Rule 1171 + Emission capture and control system for non-compliant coatings	Stationary	EPA Measures - 1999
Motorvehiclecoating	VOC	MACT	Stationary	EPA Measures - 1999
Motorvehiclecoating	VOC	Incineration	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	0 0 1
		P******	Source	Source Code
Multi-junctioncells(galliumarsenideandIII- Valloys)	NOx/VOC	It is possible to increase any solar cell's efficiency by focusing a more direct source of solar energy on it. In application, cells need to withstand extreme conditions in order to see an efficiency increase. This alloy demonstrated an efficiency in excess of 30 percent under concentrated sunlight. The expectation is to exceed 32 percent efficiency.		Regulatory Impact Analysis - 1997
Municipalsolidwastelandfill	VOC	RCRA standards	Stationary	EPA Measures - 1999
MunicipalWasteCombustorControls	NOx		Stationary	CT Memo - 2005
MunicipalWasteCombustors	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
MunicipalWasteCombustors	NOx	EPA's regulation for large, existing MWCs emitting more than 250 tons/day + more stringent limits (e.g., 30-50 ppmv) or shorter averaging periods (e.g., 8-hr average).	Stationary	EPA Measures - 1999
MunicipalWasteCombustors(Beganoperationbetwe en12/20/89and9/20/94)	NOx	180 ppm at 7% oxygen	Stationary	EPA Measures - 1999
Natural-Gas-Fired,Fan-TypeCentralFurnaces	NOx	NOx emission limit	Stationary	EPA Measures - 1999
NaturalGasFuelSpecifications	NOx		Area	SAQMD Clean Air Plan - 2003
Naturalgasprocessingplant-reduceNoxandVOCemissionsby90%				EACs - 2004
NaturalGasProduction;Compressors	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
NaturalGasTransmissionandStorage	VOC	Pending	Stationary	EPA Measures - 1999
NeopreneProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr1/pr1pg.html	Stationary	EPA Measures - 1999
Newinfrastructure-rideshareprogram				EACs - 2004
Newlatexpolymerapplicationmethod5	VOC	New latex polymer application method eliminates the acetate rinse-out and the resultant solvent- contaminated water waste stream and distillation air emissions.		Regulatory Impact Analysis - 1997
Newphotoinitiatorsystems25	VOC	Ciba is working on advanced photoinitiator systems		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		that enable paints and coatings to dry rapidly without the need for heating or the release of solvents into the atmosphere. Key future research is targeting extending the range of photoinitiators for paints and coatings.		
NewUV-curetechnologyapplications7	VOC	New UV-cure applications are being developed for use in the automotive industry. These applications include coatings for metal and plastics, interior and exterior applications, adhesives, and gasketing.		Regulatory Impact Analysis - 1997
Newvehiclespowered	NOx		M4 On-road heavy duty diesel	Regulatory Impact Analysis - 1997
Nitric/adipicacids	NOx	Nitric acid - 2.3 lb/ton extended adsorption; Adipic acid - 7.4 lb/ton extended adsorption	Stationary	EPA Measures - 1999
NitricAcidManufacturing	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
NitricAcidManufacturing	NOx	Extended Absorption	Stationary	EPA Measures - 1999
NitricAcidManufacturing	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
NitricAcidPlants	NOx	3.0 lb/ton of acid produced	Stationary	EPA Measures - 1999
NitricandAdipicAcidPlants	NOx	Consider a standard of 2.0 lbs NOx/ton of nitric acid produced, representing approximately 95-percent control. Even lower standards are achievable using SCR. The nation's four adipic acid plants are already regulated at over 80-per-cent efficiency.	Stationary	EPA Measures - 1999
NitrileButadieneRubberProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr1/pr1pg.html	Stationary	EPA Measures - 1999
NitrogenOxides(NOx)EmissionControl	NOx	Process vent gas treatment	Stationary	NEET Database - ongoing
Non-acrylateSystems10	VOC	In the research development of UV and EB curable alternatives to acrylates, a number of "new" systems have been developed that reduce emissions, such as cationic systems, alternating free radical induced copolymerization of donor/acceptor		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		type monomers, various hybrid systems, and photoinduced addition reactions for the formation of polymeric networks.		
Non-majorVOCsourcebakeries	NOx/VOC		Stationary	CT Memo - 2005
Non-NylonPolyamidsProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr2/pr2pg.html	Stationary	EPA Measures - 1999
Non- ozonedepletingsealantsforammunitionapplications 22	VOC	Research program aimed at investigating solvent-free or solvent-safe case mouth sealants for military ammunition by evaluating state-of-the-art, commercially-available non-ozone depleting sealants. Economic benefits include reduced costs (elimination of toxic ozone-depleting chemicals environmental protection activities), increased production rates, and reduced lot rejection rate (which currently averages 6% per year).		Regulatory Impact Analysis - 1997
Non-RoadEngineStandards8	VOC		Mobile	CT Memo - 2005
NonroadGasolineEngines	NOx/VOC	Federal Reformulated Gasoline	Mobile	EPA Measures - 1999
Non-RoadVehiclesandEngines	NOx/VOC	Achieve reductions from lawn and garden equipment and recreational vessels	Mobile	EPA Measures - 1999
Non-ThermalPlasmaReactor30	NOx/VOC	"Packed-bed reactor" transforms exhaust gas pollutants into less harmful constituents. Simultaneous particulate and NOx removal in diesel engine exhaust		Regulatory Impact Analysis - 1997
NonutilityBoilers	NOx	Natural Gas and Distillate Oil- Low heat release rate - 0.10 lb/mmBtu; High heat -0.20 lb/mmBtu Residual Oil- Low heat release rate - 0.3 lb/mmBtu; High heat release rate - 0.4 lb/mmBtu Coal- Mass Feed Stoker - 0.5 lb/mmBtu; Spreader Stoker and FBC - 0.6 lb/mmBtu; Pulverized Coal - 0.7 lb/mmBtu; Lignite - 0.6 lb/mmBtu	Stationary	EPA Measures - 1999
NOxAnalyzers	NOx	Emissions Monitoring	Monitoring	NEET Database - ongoing
NOxBudgetProgram(EPANOxSIPCall)	NOx		Stationary	CT Memo - 2005

Measure	Pollutant	Description	Source	Source Code
NOxControlsonCommercialPowerGeneratingEqui pment		Adopt OTC Additional NOx Controls Rule throughout nonattainment area (applies to industrial boilers, stationary combustion turbines and reciprocating engines, emergency generators, load shavers and cement kilns)	Stationary	DC RACM - 2003
NOxemissionlimitsonasphalticconcreteproductionf acilities	NOx		Stationary	SAQMD Clean Air Plan - 2003
NOxemissionlimitsonasphalticconcreteproductionf acilities	VOC		Stationary	SAQMD Clean Air Plan - 2003
NOxLimitForPowerPlants		Cap the emission rate from each utility boiler and turbine below NOx SIP Call limits	Stationary	DC RACM - 2003
NOxRACTRules	NOx	States' NOx RACT rules	Stationary	EPA Measures - 1999
off-roadvehiclereplacements				EACs - 2004
Offsetlithography	VOC	Low solvent inks and fountain solutions	Stationary	EPA Measures - 1999
Off-SiteWasteandRecoveryOperations	VOC	Pending	Stationary	EPA Measures - 1999
Oilandnaturalgasproduction	VOC	Equipment and maintenance	Stationary	EPA Measures - 1999
OilandNaturalGasProduction	VOC	For major oil and natural gas production facilities, the rule requires controls at the following emission points: (1) process vents at certain size glycol dehydration units; (2)tanks with flashing emission potential; and (3) certain fugitive emission sources at natural gas processing plants. For natural gas transmission and storage facilities that are major sources of hazardous air pollutants, the rule requires emission controls at process vents at certain size glycol dehydration units.	Stationary	EPA Measures - 1999
On-boardRefuelingVaporRecovery	VOC		Mobile	CT Memo - 2005
On-boardRefuelingVaporRecovery				CT RACM - 2001
On-roadvehiclereplacement				EACs - 2004
OpenBurning	NOx	Episodic Ban (Daily Only)	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
Openburning	VOC	Episodic ban	Stationary	EPA Measures - 1999
OpenBurning		Eliminate open burning in counties adjacent to nonattainment area	Area	DC RACM - 2003
OpenBurning				EACs - 2004
Openburningban-expanded				EACs - 2004
Opentopdegreasing	VOC	SCAQMD 1122 (VOC content limit)	Stationary	EPA Measures - 1999
Opentopdegreasing	VOC	Airtight degreasing system	Stationary	EPA Measures - 1999
Opentopdegreasing	VOC	MACT	Stationary	EPA Measures - 1999
Optimizedautomobilecatalyst35	NOx/VOC	Airflow Catalysts is attempting to reengineer the traditional automobile catalyst. The redesign is an effort to minimize costs by reducing the amounts of costly rare metals in the catalyst. The new design will seek to react all contaminants (NOx, HC, CO) in the same area of the converter, rather than in three separate areas. The company is also seeking to minimize the need for air injection for NOx control.		Regulatory Impact Analysis - 1997
OrganicAcidsManufacture	VOC	RACT Extended to Other Areas	Stationary	EPA Measures - 1999
OrganicChemicalPlants	NOx	Controls on industrial boilers and process heaters for these sources	Stationary	EPA Measures - 1999
OrganicLiquidsDistribution(Non-Gasoline)	VOC	Pending	Stationary	EPA Measures - 1999
Organic protective coatings and application technolog y3	VOC	High performance, non-toxic, low VOC content coatings for Navy use are being developed, including investigation of low VOC polymer technology to produce low VOC binder systems. Reactive monomers and diluents and low molecular weight resins have been used to develop low viscosity binder systems for future near-zero VOC aircraft coatings. In addition, recent advances in water-borne resin technology has allowed for the development of a high performance water-borne		Regulatory Impact Analysis - 1997

Appendix B – Initial List of Control Medsures				F иде Б-33
Measure	Pollutant	Description	Source	Source Code
		topcoat which goes beyond mere compliance with environmental regulations. Non-toxic inhibitor systems have been developed and formulated into non-toxic aircraft corrosion inhibiting primers. Coating corrosion resistance, physical performance properties and VOC content were evaluated in the development of the best materials. The non-toxic inhibited primers have been optimized, and service evaluation at Navy maintenance facilities is in progress.		
OTC-architecturalandindmain				EACs - 2004
OTC-consumerproducts				EACs - 2004
OTC-lowemissionspaint				EACs - 2004
OTCPhaseIINOxMOU		Require reductions in emissions from regional power plants through the OTC Phase II NOx MOU	Stationary	DC RACM - 2003
OTC-portablefuelcontainers				EACs - 2004
OxygenEnrichmentMembrane32	NOx/VOC	Membrane system uses DuPont Teflon AF fiber as the oxygen exchange mechanism for a underhood module to feed oxygen-enriched air directly to the engine chamber. The membrane separates ambient air into oxygen-rich and nitrogen-rich streams. The oxygen rich stream is directed to the manifold to improve combustion, while the nitrogen rich stream can be fed into the exhaust as a plasma to reduce NOx emissions.		Regulatory Impact Analysis - 1997
PahlmanProcess	NOx/PM	Emission capture systems	Stationary	NEET Database - ongoing
PaintStrippingOperations	VOC	Pending	Stationary	EPA Measures - 1999
Paper,Fabric,andFilmCoatingOperations	VOC	VOC content limits for compliant coatings + Coating applicator transfer efficiency + Emission capture and control system for non-compliant coatings	Stationary	EPA Measures - 1999
PaperandOtherWebs(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
Papersurfacecoating	VOC	Incineration	Stationary	EPA Measures - 1999
ParkingLotTreePlantingToReduceVehicleTempera turesAnd,Thereby,EvaporativeEmissions	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
PartnershipforNewGenerationVehicle1	NOx/VOC	Multi-agency Federal partnership with US automakers and suppliers, and universities to develop advanced manufacturing technologies, near-term vehicle improvements, and prototypes with up to triple efficiency. The partnership is evaluating many of the individual technologies listed below such as lean NOx catalysts, CIDI engine, reformulated or alternative fuels for CIDI, CIDI fuel injection, EGR in addition to improved manufacturing processes that would allow higher temperatures or reduced weight. Other goals include reducing the vehicle weight, aerodynamics, rolling resistance, accessory energy use, and regenerative braking that increase vehicle efficiency and reduce emissions.		Regulatory Impact Analysis - 1997
PesticideActiveIngredientProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pest/pestpg.html	Stationary	EPA Measures - 1999
PesticideApplication	VOC	Reformulation - FIP rule	Stationary	EPA Measures - 1999
PesticideApplication	VOC	Ozone season limits on pesticide application and prohibition of solvent-containing fumigants + emissions regulations for fumigation chambers + lowest VOC-emitting alternative	Stationary	EPA Measures - 1999
PetroGuard	VOC	Petroleum, oils, and lubricants	Pollution Prevention	NEET Database - ongoing
Petroleumdrycleaners	VOC	Carbon adsorption	Stationary	EPA Measures - 1999
PetroleumDryCleaning				EACs - 2004
PetroleumRefineries	NOx	Regulate refinery boilers and process heaters like other industries + regulate fluid catalytic cracking units by controlling CO boilers + SNCR or low	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
		NOx burners on tail gas incinerators		
PetroleumRefineries- CatalyticCracking(FluidandOther)Units,CatalyticR eformingUnits,andSulfurPlantUnits	VOC	Controls for emissions of air toxics from storage tanks, equipment leaks, process vents, and wastewater collection and treatment systems. Provides emissions averaging across operations and across refineries.	Stationary	EPA Measures - 1999
PetroleumRefineries- OtherSourcesNotDistinctlyListed	VOC	Controls for emissions of air toxics from other nonspecific refinery sources, processes, and systems. Provides emissions averaging across operations and across refineries.	Stationary	EPA Measures - 1999
Petroleumrefineryfugitives	VOC	Equipment and maintenance	Stationary	EPA Measures - 1999
Petroleumrefinerywastewatersystems	VOC	Covers, Floating roofs, Combustion devices or Carbon adsorption	Stationary	EPA Measures - 1999
PetroleumSolventDryCleaners	VOC	Operating practices + Leak controls + Tight storage containers + Waste stream filtration system + Emission control devices	Stationary	EPA Measures - 1999
PharmaceuticalsandCosmeticsManufacturingOper ations	VOC	Surface condensers on equipment vents + Control devices on VOC transfer to storage operations + Control devices on drying operations	Stationary	EPA Measures - 1999
PharmaceuticalsProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pharma/pharmpg.html	Stationary	EPA Measures - 1999
PhaseIIMARAMA/NESCAUMUtilityBoiler	NOx		Stationary	EPA Measures - 1999
PhosphoricAcidFuelCell(PAFC)3	NOx/VOC	This is the most commercially developed type of fuel cell. It is already being used in such diverse applications as hospitals, nursing homes, hotels, office buildings, schools, utility power plants, and an airport terminal. Phosphoric acid fuel cells generate electricity at more than 40% efficiency, and nearly 85% if steamthat the fuel cell produces is used for cogeneration, compared to 30% for the most efficient internal combustion engine. Operating temperatures are in the range of 400		Regulatory Impact Analysis - 1997

appendix B - Initial List of Control Measures				Tuge D-30
Measure	Pollutant	Description	Source	Source Code
		degrees F. These fuel cells also can be used in larger vehicles, such as buses and locomotives.		
PhotographicChemicalProduction	VOC	Pending	Stationary	EPA Measures - 1999
PhotovoltaicsforMilitaryApplications		This technology involves demonstrating the use of photovoltaic technology, reducing the amount of pollutants from fossil-fueled electrical gensets within DOD, and enhancing energy security. The focus will be to develop a modular, standardized power processing center (PPC) that will service multiple source photovoltaic/engine hybrid and demand reduction applications.		Regulatory Impact Analysis - 1997
PhthalatePlasticizersProduction	VOC	Pending	Stationary	EPA Measures - 1999
Planningforfuturegreenspaces				EACs - 2004
PlasmaEnhancedESP		Emission capture systems	Stationary	NEET Database - ongoing
PlasmaTreatmentofAutomotiveExhaust28	NOx/VOC	Plasma (ionized gas) treatment of lean-burn exhaust emissions in both gasoline and diesel lean-burn engines. Current plasma systems (gas-phase plasma discharges) appear to have low NOx conversion and/or high energy consumption. An alternative approach is being pursued to improve emission reduction and energy consumption.		Regulatory Impact Analysis - 1997
Plastic, Rubber, and Glass Coatings	VOC	VOC content limits for compliant coatings + Coating applicator transfer efficiency + Emission capture and control system for non-compliant coatings	Stationary	EPA Measures - 1999
PlasticPartsandProducts(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999
PlasticsProducts;Specific;(ABS)Resin	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
PleasureCraftCoatingOperations	VOC	VOC content limits for applicable coatings + Solvent cleaning and storage comply with Rule 1171	Stationary	EPA Measures - 1999
PlywoodandCompositeWoodProducts	VOC	Pending	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
PM10AmbientAirSampling		Ambient Monitoring	Monitoring	NEET Database - ongoing
PolyesterResinOperations	VOC	Polyester residual monomer content limit + Process requirements to limit VOC loss + Spray applicator requirements + Solvent cleaning operations comply with Rule 1171 + Emission control system for non-compliant polyester materials	Stationary	EPA Measures - 1999
PolyetherPolyolsProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/polyol/polyolpg.html	Stationary	EPA Measures - 1999
PolyethyleneTerephtalateProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr4/pr4pg.html	Stationary	EPA Measures - 1999
Polymericcoatingofsupportingsubstratesfacilities	VOC	Carbon adsorption or Incineration	Stationary	EPA Measures - 1999
Polyolresins, crosslinkers and reactive diluents 14	VOC	Recent developments with polyol resins, crosslinkers and reactive diluents will enable the future formulation of higher-solids, ultralow-VOC coatings and, ultimately, of solventless liquid coatings. In spite of the increasing popularity of waterborne and powder coatings, many companies see a future for higher-solids coatings and are investing in new technology, particularly for industrial (original equipment manufacturer) and special-purpose applications.		Regulatory Impact Analysis - 1997
PolystyreneProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr4/pr4pg.html	Stationary	EPA Measures - 1999
Polyurethanereactive(PUR)technology3	VOC	New, accelerated-cure versions of hot-melt adhesives technology for recreational vehicle and building components customers has been developed. Also applicable to the profile wrapping segment of the woodworking industry, which can use the adhesives to make window and door components that withstand hot and cold temperatures, rain and snow. Users can increase process speeds, while at the same time produce		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		stronger products in a solvent-free environment.		
pooling;flexschedules;alternatefuel				EACs - 2004
Port/harborelectrification	NOx/VOC		Mobile	CT Memo - 2005
Portablefuelcontainerbuybackpromotions	NOx/VOC		Stationary	CT Memo - 2005
PortableToxicChemicalDetector		Fugitive emission controls	Stationary	NEET Database - ongoing
Powder-basedprimers20	VOC	GM is working on a prototype powder primer to try on one of its vehicle lines; such a primer would contain no VOCs. New chemistry research is being conducted on both epoxy and polyester powder primers.		Regulatory Impact Analysis - 1997
PP3-FFuelOilTreatment,		Fuels and fuel additives	Pollution Prevention	NEET Database - ongoing
PP-CCylinderoiladditive		Petroleum, oils, and lubricants	Pollution Prevention	NEET Database - ongoing
Preconditioningofdieselengines	NOx		Offroad	SAQMD Clean Air Plan - 2003
Prepolymersandultralow-viscosityreactivediluentstechnologies10	VOC	Two technologies have been developed to help solve formulation problems with decreased levels of VOCs in two-part, solventborne polyurethane coatings. One technology is a process to make narrow-molecular-weight-distribution, isocyanate-terminated polyurethane prepolymers. The other technology is the creation of ultralow-viscosity oxazolidine and aldimine/oxazolidine reactive diluents. Use of these materials achieves low-VOC formulations, controlled reactivity of low-VOC systems and enhanced coating performance, as well as formulation flexibility and ease of use.		Regulatory Impact Analysis - 1997
Primary Copper Smelters; Reverb Smelting Furnace	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
Printing, Coating, and Dyeing Of Fabrics	VOC	Pending	Stationary	EPA Measures - 1999
Printing/Publishing(SurfaceCoating)	VOC	See Website - http://www.epa.gov/ttn/uatw/print/printpg.html	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
Printing-Letterpress	VOC	Carbon Adsorption	Stationary	EPA Measures - 1999
Printing-Lithographic	VOC	New CTG to Other Areas	Stationary	EPA Measures - 1999
ProcessHeaters	NOx	Limits of 0.036 lb/mmBtu for gas and 0.05 lb/mmBtu for other liquid fuels+ limits same as mid-sized industrial boilers for gas, distillate oil and residual oil-fired units	Stationary	EPA Measures - 1999
ProcessHeaters	VOC	Pending	Stationary	EPA Measures - 1999
Processheaters(revised)	NOx	NG - ULNB 0.05 lb/mm Btu / Oil - ULNB 0.14 lb/mm Btu	Stationary	EPA Measures - 1999
ProcessHeaters-DistillateOil	NOx	Low NOx Burners + Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-DistillateOil	NOx	Low NOx Burners + Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-DistillateOil	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-DistillateOil	NOx	Ultra Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-DistillateOil	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-DistillateOil	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-DistillateOil	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ProcessHeaters-LPG	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-LPG	NOx	Ultra Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-LPG	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-LPG	NOx	Low NOx Burners + Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-LPG	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-LPG	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ProcessHeaters-LPG	NOx	Low NOx Burners + Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-NaturalGas	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-NaturalGas	NOx	Ultra Low NOx Burners	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
ProcessHeaters-NaturalGas	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-NaturalGas	NOx	Low NOx Burners + Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-NaturalGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-NaturalGas	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ProcessHeaters-NaturalGas	NOx	Low NOx Burners + Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-OtherFuel	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ProcessHeaters-OtherFuel	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-OtherFuel	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-OtherFuel	NOx	Ultra Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-OtherFuel	NOx	Low NOx Burners + Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-OtherFuel	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-OtherFuel	NOx	Low NOx Burners + Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-ProcessGas	NOx	Low NOx Burners + Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-ProcessGas	NOx	Low NOx Burners + Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-ProcessGas	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ProcessHeaters-ProcessGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-ProcessGas	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-ProcessGas	NOx	Ultra Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-ResidualOil	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
ProcessHeaters-ResidualOil	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-ResidualOil	NOx	Low NOx Burners + Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-ResidualOil	NOx	Ultra Low NOx Burners	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
ProcessHeaters-ResidualOil	NOx	Low NOx Burners + Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProcessHeaters-ResidualOil	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
ProcessHeaters-ResidualOil	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
ProheatGen4			Mobile	NEET Database - ongoing
Propane/ButaneFuelBlends19	NOx/VOC	Emissions testing on multiple light-duty vehicles using propane/butane blends, which may be costeffective low-emission alternative fuels for light, medium-, and heavy-duty vehicles. It is expected that the proposed project will result in emission benefits and help AQMD, ARB, the petroleum industry, and automobile manufacturers identify a potentially clean, cost-effective alternative fuel with capability for wide-scale application to all types of internal combustion engines. Generate data on emissions, lubricant compatibility, combustion chamber and intake valve deposits, component durability, and catalyst durability. Operate and evaluate three or more new vehicles for a minimum of 50,000 miles using selected butane/propane blends. Conduct periodic emission tests during mileage accumulation to determine the effects of operation on regulated emissions, speciated hydrocarbons, and the specific reactivity (ozoneforming potential) of exhaust emissions. At test completion dismantle engines and quantify and rate deposits.		Regulatory Impact Analysis - 1997
Protectnaturalareas;minimizeuseof				EACs - 2004
ProteinExchangeMembraneFuelCell(PEMFC)9	NOx/VOC	These cells operate at relatively low temperatures (about 200 F), have high power density, can very their output quickly to meet shifts in power demand, and are suited for applications, such as in automobiles, where quick startup is required. According to the U.S. DOE, "they are the primary candidates for light-duty vehicles, for buildings,		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
ProtonExchangeMembraneFuelCells(PEMFC)5	NOx/VOC	and potentially for much smaller applications such as replacements for rechargeable batteries in video cameras." Fueling stations are a large obstacle in introducing hydrogen powered vehicles to the public on a large scale. From the best calculations available, fueling stations are cost effective, and they are starting to be built across the country. A fueling station will cost \$4.5 million to build, but will produce as well as dispense the fuel. Hydrogen fuel costs 3.8 cents per mile, while gas costs 4.5 cents per mile. 11 pounds of hydrogen would provide a 400 mile driving range for a midsized car. The tank for this fuel is 3 times the size of a gas tank, and fueling would take about ten minutes. These cells operate at relatively low temperatures (about 200 degrees F), have high power density, can vary their output quickly to meet shifts in power demand, and are suited for applications, such as automobiles, where quick startup is required. According to DOE, "they are the primary candidates for light-duty vehicles, for buildings, and potentially for much smaller applications such as replacements for rechargeable batteries in video cameras."		Regulatory Impact Analysis - 1997
Providefreepublictransit	NOx		Landuse	SAQMD Clean Air Plan - 2003
Providefreepublictransitduringepisodes	NOx		Landuse	SAQMD Clean Air Plan - 2003
Providefreereplacementgascapstolight- andmedium-dutyvehicleowners	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Provideincentivesformicroturbineenginesinsmallpo wergenerationapplications	VOC		Offroad	SAQMD Clean Air Plan - 2003
ProvideTruckstopElectrificationForIn- TruckServices	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
Publicawarenessprogram				EACs - 2004
PublicEducationonNOxandROGsourcesinSchoolsa ndSmallBusinesses	NOx		Landuse	SAQMD Clean Air Plan - 2003
PubliclyOwnedTreatmentWorks	VOC	Source reduction approaches requiring industrial pretreatment controlling VOCs where they are most concentrated	Stationary	EPA Measures - 1999
PubliclyOwnedTreatmentWorks(POTW)Emission s	VOC	See Website - http://www.epa.gov/ttn/uatw/potw/potwpg.html	Stationary	EPA Measures - 1999
PulpandPaper	VOC	Maximum Achievable Control Technology standards for the integrated pulp and paper industry	Stationary	EPA Measures - 1999
PulpandPaperProduction	VOC	Pending	Stationary	EPA Measures - 1999
Purchase15CNGvehicles				EACs - 2004
Purchase1hybridelectricbus				EACs - 2004
Purchase2alternativefuelvehicles				EACs - 2004
PVManufac-turing(PVMat)	NOx/VOC	One of the primary hindrances to PV market acceptance is the difficulty in taking laboratory results and replicating them under real world conditions. A public-private partnership, funded for 5 years at \$118 million, sought to address this problem by improving PV manufacturing processes, module development, and balance of system (BOS) components. For example, BOS components account for 50% of the system cost but 99% of repair issues. The goal was to increase PV module supply [currently demand outstrips supply (as of May, firms are taking no further orders for 1997)] and ensure that the U.S. production remains internationally competitive.		Regulatory Impact Analysis - 1997
QC-TILDAS		Other	Stationary	NEET Database - ongoing
QuaternaryAmmoniumCompoundsProduction	VOC	Pending	Stationary	EPA Measures - 1999
RACTatmajorsources				EACs - 2004

Measure	Pollutant	Description	Source	Source Code
RayonProduction	VOC	Pending	Stationary	EPA Measures - 1999
RCL®CatalyticCombustion		Combustion	Pollution Prevention	NEET Database - ongoing
ReasonablyAvailableControlTechnology(RACT)f or25tpyVOCsources	VOC			MA Strategies - 2004
ReciprocatingInternalCombustionEngines	NOx	Limits for rich-burn gas-fired engines between 0.4-0.8 g/bhp-hr, for lean-burn engines as low as 0.5-0.6 g/bhp-hr and for diesel engines at 0.5-1.1 g/bhp-hr.	Stationary	EPA Measures - 1999
ReciprocatingInternalCombustionEngines	VOC	Pending	Stationary	EPA Measures - 1999
Reducedenginetaxi,aircrafttowing,congestionreduction	NOx		M15 Airports	Regulatory Impact Analysis - 1997
Reducedidlingscenario	NOx		Airports	Regulatory Impact Analysis - 1997
Reducelocomotiveidling				EACs - 2004
ReduceParkingFeesatFacilitiesOutsidetheBeltway AdjacenttoMetro		Reduce parking fees at Metro parking facilities or county/city managed facilities outside of the Beltway that are located near Metro stations.	Mobile	DC RACM - 2003
ReducethenumberofpublicparkingspacesintheCityo fSacramentoby25%	NOx		Landuse	SAQMD Clean Air Plan - 2003
ReductionsonNOxRACTfornon-NOxBudgetunits	NOx/VOC		Stationary	CT Memo - 2005
RefineryFlares	NOx	Adoption of a Flare Monitoring and Recording Plan	Stationary	EPA Measures - 1999
ReformulatedGasoline	NOx/VOC	Opt into the federal reformulated gasoline program	Mobile	EPA Measures - 1999
ReformulatedGasoline				CT RACM - 2001
ReformulatedGasoline-PhaseI3	VOC		Mobile	CT Memo - 2005
Reformulationsofaerosolproducts(suchasspraypain t,rustproofing,andWD-40)	VOC			MA Strategies - 2004
RegenerativeThermalOxidizer		Emission capture systems	Stationary	NEET Database - ongoing
RegulatesmallICengines				EACs - 2004

Appendix B - Initial List of Control Measures				Tuge D-07
Measure	Pollutant	Description	Source	Source Code
Regulationofadditionalprintingoperations	NOx/VOC		Stationary	CT Memo - 2005
Removalofexemptiononcutbackasphaltuse	NOx/VOC		Area	CT Memo - 2005
RenewablePortfolioStandards(DPUC) C.G.S.section16-245a	NOx/VOC		Stationary	CT Memo - 2005
Replace/retrofitconstructionequip				EACs - 2004
Repowerheavy- dutydieselvehicleswithnewer,loweremittingengines	NOx		On-Road	SAQMD Clean Air Plan - 2003
Repoweroldunitswith2004standardcertifiedengines	NOx/VOC		M6 On-road heavy duty diesel	Regulatory Impact Analysis - 1997
Repowerwithnaturalgasengines	NOx		M5 On-road heavy duty diesel	Regulatory Impact Analysis - 1997
Requireasurchargetobepaidbydriversduringthesum merseasonbasedonthenumberofdrivingmiles	NOx		Landuse	SAQMD Clean Air Plan - 2003
Requirecaptureefficiencytestingatallmajorsourceso fVOC,andmorestringentreportingrequirements,incl udingon-lineCEMs.	VOC			MA Strategies - 2004
Requirelow-NOxfuelforagriculturalequipment		Require agricultural equipment to use low-NOx fuel during ozone season	Non-road	DC RACM - 2003
RequireOn- BoardDiagnosticsonNewDieselandGasolineTrucks andBuses	NOx		Mobile	SAQMD Clean Air Plan - 2003
Requirepassengervehiclesnotmeetingthestandardso fpassengercarstopayanannualfeeand/orafeeuponpur chase	NOx		Landuse	SAQMD Clean Air Plan - 2003
RequireSNCRatallmajorNOxsources(50tpy+)	NOx			MA Strategies - 2004
RequirethatCongestionMitigationAirQuality(CMA Q)fundsbeusedonlyforprojectsthatsignificantlyimp roveairquality	NOx			SAQMD Clean Air Plan - 2003

Measure	Pollutant	Description	Source	Source Code
RescindRestrictedEmissionStatuspermitsandrequir eemissionrateswithRACTorBARCT	VOC			MA Strategies - 2004
ResidentialFuelCells7	NOx/VOC	Fuel cell that is small enough to fit into a closet and capable of generating 2-10 kW of power.		Regulatory Impact Analysis - 1997
ResidentialLNBwaterheater				EACs - 2004
ResidentialSpaceandWaterHeaters	NOx	Set limit on new sources of 0.09 lbs//mmBtu of heat output + incentives to replace older space and water heaters	Stationary	EPA Measures - 1999
Restrictionsonoutdoorwoodburningfurnaces	NOx/VOC		Stationary	CT Memo - 2005
RestrictionsonwoodstovesnotsubjecttoNSPS;nobur ndays	NOx/VOC		Stationary	CT Memo - 2005
Restrictorbancertainoff-roadengineuse- e.g.,target2- strokeenginesunder5horsepower(limitsorbansonla wnmowers,jetskis,ORVs,chainsaws,weedwackers, andleafblowers)	VOC			MA Strategies - 2004
RetrofitenginesforNOx:	NOx		M9 Non-road diesel	Regulatory Impact Analysis - 1997
RetrofitenginesforNOx:waterinjection/emulsion	NOx		M9 Non-road diesel	Regulatory Impact Analysis - 1997
ReviseallexistingAirPermitsfor25tpyorhigherVOC sourcestorequirestrictermonitoring,recordkeepinga ndcontrollevels(wouldhitthelargestdozenorsoemitt erse.g.,Rexam,Globe)	VOC			MA Strategies - 2004
RocketTestingFacilities	VOC	Pending	Stationary	EPA Measures - 1999
RotaryRegenerativeOxidizerwithElectricDriveand FulFlowOn-LineBake-out		Emission capture systems	Stationary	NEET Database - ongoing
RotaryValveRTO(RL)		Process vent gas treatment	Stationary	NEET Database - ongoing
RTIDryRegenerableAlkaliCarbonateProcess		Emission capture systems	Stationary	NEET Database - ongoing
Rubberandplasticsmanufacturing	VOC	SCAQMD o low VOC	Stationary	EPA Measures - 1999

Appendix B – Initial List of Control Medsures				Гиде B-09
Measure	Pollutant	Description	Source	Source Code
RubberTireManufacturing	VOC	Pending	Stationary	EPA Measures - 1999
Rubbertiremanufacturingindustry	VOC	VOC capture systems + Control devices	Stationary	EPA Measures - 1999
SafeYellowIC8	VOC	A product has been developed for enhancing powder coatings by increasing the flow of the resins, eliminating orange peel and allowing the replacement of more expensive organic pigment on a one for one basis. The manufacturers of this product say it is an improved coating with lower costs.		Regulatory Impact Analysis - 1997
Sand/Gravel;Dryer	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
Schoolbusengineretrofit				EACs - 2004
Schoolbusretrofits,newlow- emissionschoolbusesanduseofultralowsulfurdieself uel	NOx/VOC		Mobile	CT Memo - 2005
ScreenPrintingOperations	VOC	VOC content of screen printing materials + Solvent cleaning and storage and disposal of VOC- containing materials comply with Rule 1171	Stationary	EPA Measures - 1999
season-EACareas				EACs - 2004
SecondaryAluminumProduction;SmeltingFurnaces /Reverb	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Selectivecatalyticreduction(SCR)	NOx		M11 Diesel locomotives	Regulatory Impact Analysis - 1997
SemiconductorManufacturing	VOC	Solvent cleaning station requirements + Emission control system on photoresist operations +C content limits for cleanup solvents	Stationary	EPA Measures - 1999
SemiconductorManufacturing	VOC	Pending	Stationary	EPA Measures - 1999
ServiceStations-StageI	VOC	Vapor Balance	Stationary	EPA Measures - 1999
$Set lower emissions standards for newhand held and no \\n-hand held lawn and garden equipment/State/Federal$	NOx		Offroad	SAQMD Clean Air Plan - 2003
Setloweremissionstandardsfornewoff-roadspark-	NOx		Offroad	SAQMD Clean Air Plan - 2003

Measure	Pollutant	Description	Source	Source Code
ignitedengines(<25hp)				
Setmorestringentemissionstandardsfornewmarinev esselsandpursueapproachestoreduceland- basedportemissions	VOC		Offroad	SAQMD Clean Air Plan - 2003
SetNewConsumerProductsLimitsfor2006	VOC		Area	SAQMD Clean Air Plan - 2003
SetNewConsumerProductsLimitsfor2008–2010	VOC		Area	SAQMD Clean Air Plan - 2003
Setuserestrictionsforeachonroadvehicletypeduringe pisodes	NOx		Landuse	SAQMD Clean Air Plan - 2003
SetVOC/ROG/NOxstandardfordieselfueledrefriger ationunitsontrucks	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
Shell Global Solutions Third Stage Separator (TSS)		Emission capture systems	Stationary	NEET Database - ongoing
Shiftelectricloadprofile				EACs - 2004
ShipbuildingandShipRepair	VOC	Enhanced application techniques achieving a minimum 65-percent transfer efficiency + California's general limit of 340 grams per liter for marine coatings.	Stationary	EPA Measures - 1999
ShipbuildingandShipRepair(SurfaceCoating)	VOC	See Website - http://www.epa.gov/ttn/uatw/shipb/shipbpg.html	Stationary	EPA Measures - 1999
SidelSRUfluegascondensers		Emission capture systems	Stationary	NEET Database - ongoing
SmallCompressionIgnitionDirectInjection(CIDI)D ieselEngines5	VOC	Research is being conducted into lightweight engine materials, alternative fuels, and catalytic converters in an effort to apply the advantages of CIDI engines (high thermal efficiency, operating flexibility, low start-up emissions) to passenger cars, while controlling negative characteristics (heavy engine components and production of suboptimal levels of NOx and particulate emissions).		Regulatory Impact Analysis - 1997
SmallIndustrial,Institutional,andCommercialBoiler s,SteamGenerators,andProcessHeaters	NOx	NOx emission limit, methods to meet the limit is not specified	Stationary	EPA Measures - 1999
SmallSourceBACT			Stationary	CT Memo - 2005

Appendix B - Initial List of Control Medsures			1	Tuge B-71
Measure	Pollutant	Description	Source	Source Code
Smokingvehicleban				EACs - 2004
SOCMIbatchprocesses	VOC	Vapor collection system + incineration	Stationary	EPA Measures - 1999
SOCMIbatchreactorprocesses	VOC	New CTG	Stationary	EPA Measures - 1999
SOCMI-Distillation	VOC	New CTG level control	Stationary	EPA Measures - 1999
SOCMIfugitives	VOC	Equipment and maintenance	Stationary	EPA Measures - 1999
SOCMI-ReactorProcesses	VOC	New CTG level control	Stationary	EPA Measures - 1999
sodiumbicarbonateinjection		Emission capture systems	Stationary	NEET Database - ongoing
Solae-switchtoalternativefuel				EACs - 2004
SolidOxideFuelCell(SOFC)2	NOx/VOC	The solid oxide fuel cell generates power electrochemically, avoiding the air pollutants and efficiency losses associated with combustion processes. Fuels cells operate continuosly, generating power as long as natural gas, coalderived gas, or other hydrocarbon fuels are supplied. The solid electrolyte allows for the simplest of fuel cell plant designs, and requires no external fuel reforming. Capable of using either natural gas or cleaned coal gas, it emits no sulfur pollutants and as much as 60 to 65 percent less carbon dioxide than a conventional coal-burning plant.		Regulatory Impact Analysis - 1997
SolidWasteDisposal;Government;OtherIncinerator;Sludge	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
SolventCleaningOperations	VOC	Compliant solvent requirement by cleaning application + Cleaning devices and methods requirement + Storage and disposal requirements + Emission control system for non-compliant solvents and cleaning procedures	Stationary	EPA Measures - 1999
SolventCleaningOperations— Cleaningofcoatings/adhesivesapplicationequipmen t	VOC	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
SolventCleaningOperations— Cleaningofinkapplicationequipment	VOC	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	Stationary	EPA Measures - 1999
SolventCleaningOperations— Cleaningofpolyesterresinapplicationequipment	VOC	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	Stationary	EPA Measures - 1999
SolventCleaningOperations— Repair&maintenancecleaning	VOC	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	Stationary	EPA Measures - 1999
SolventCleaningOperations— Surfacecleaningformfg,&surfaceprepforcoating,ad hesive,orinkapplication	VOC	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	Stationary	EPA Measures - 1999
SolventCleaningOperations— Ultravioletinkremovalfromgraphicarts	VOC	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	Stationary	EPA Measures - 1999
SolventDegreasers	VOC	Operating practice requirements + VOC content limits of solvents + Clean Air Solvent Certificates	Stationary	EPA Measures - 1999
SpaceHeaters-DistillateOil	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
SpaceHeaters-DistillateOil	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
SpaceHeaters-DistillateOil	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
SpaceHeaters-DistillateOil	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
SpaceHeaters-NaturalGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
SpaceHeaters-NaturalGas	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
SpaceHeaters-NaturalGas	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
SpaceHeaters-NaturalGas	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
SpaceHeaters-NaturalGas	NOx	Oxygen Trim + Water Injection	Stationary	EPA Measures - 1999
SpandexProduction	VOC	Pending	Stationary	EPA Measures - 1999
Stage1vaporrecovery				EACs - 2004
Stage1vaporrecovery				EACs - 2004

Measure	Pollutant	Description	Source	Source Code
Stage1VaporRecovery>25,000				EACs - 2004
Stage1vaporrecovery-EACareas				EACs - 2004
StageIIVaporRecovery	VOC	Rules to achieve a 95-percent level of control efficiency + require California certification of equipment + limit exemptions to facilities with throughputs below 10,000 gallons per month + semi-annual inspections.+ Stage II program in Moderate nonattainment areas	Stationary	EPA Measures - 1999
StageIIVaporRecovery				CT RACM - 2001
StageIIVaporRecovery:Pressure-VentValves	VOC		Stationary	CT Memo - 2005
StageI-truckunloading	VOC	Vapor balance	Stationary	EPA Measures - 1999
StageI-truckunloading	VOC	Vapor balance + PN valves	Stationary	EPA Measures - 1999
StageIVaporRecovery				EACs - 2004
StageIVaporRecoveryatGasolineServiceStations	VOC		Stationary	CT Memo - 2005
Stakeholderdevelopment				EACs - 2004
StarchManufacturing;CombinedOperations	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
State&LocalFleetReplacement		Replace public sector gasoline-fueled automobile fleet with hybrid vehicles (i.e. Toyota Prius)	Mobile	DC RACM - 2003
StationaryGasTurbines	NOx	Continuous in-stack NOx and oxygen monitoring system + Selective Catalytic Reduction	Stationary	EPA Measures - 1999
StationaryInternalCombustionEngines	NOx	NOx emission limit	Stationary	EPA Measures - 1999
StationCarsToPromoteUserFriendlinessOfMassTra nsportation	NOx/VOC	Voluntary measures	Mobile	EPA Measures - 1999
SteelFoundries	VOC	Pending	Stationary	EPA Measures - 1999
SteelFoundries;HeatTreatingFurnaces	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
SteelProduction;SoakingPits	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
StorageTankDegassing	VOC	Degassing procedures required + Control device to capture VOCs displaced from tanks	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
StorageVesselsforPetroleumLiquids	VOC	Floating roofs	Stationary	EPA Measures - 1999
Strictercontrolsonillegalburning				EACs - 2004
Styrene-AcrylonitrileProduction	VOC	See Website - http://www.epa.gov/ttn/uatw/pr4/pr4pg.html	Stationary	EPA Measures - 1999
SubsidizePurchaseofBikeAccessories	NOx		Landuse	SAQMD Clean Air Plan - 2003
SulfatePulping-RecoveryFurnaces	NOx	Low NOx Burners + Flue Gas Recirculation	Stationary	EPA Measures - 1999
SulfatePulping-RecoveryFurnaces	NOx	Selective Non-Catalytic Reduction	Stationary	EPA Measures - 1999
SulfatePulping-RecoveryFurnaces	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
SulfatePulping-RecoveryFurnaces	NOx	Oxygen Trim + Water Injection	Stationary	EPA Measures - 1999
SulfatePulping-RecoveryFurnaces	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
SupercriticalCO2asapaintsolvent30	VOC	Supercritical CO2 is being investigated as a replacement for traditional paint solvents, eliminating VOC emissions.		Regulatory Impact Analysis - 1997
SuperplasticAdvancedManifolds3	VOC	Double-wall +manifold offers the potential for substantial reductions in cold-start emissions by allowing the inner tube to heat quickly, resulting in a quicker "light-off" of the catalytic converter, thereby reducing hydrocarbon emissions.		Regulatory Impact Analysis - 1997
Supportcetanedieselfueladditive				EACs - 2004
Surfacecoatingofmetalfurniture	VOC	Low solvent coatings	Stationary	EPA Measures - 1999
SurfaceCoatingofPlasticParts	VOC	HVLP spray or other techniques achieving a minimum transfer efficiency of 65 percent + VOC-content limits	Stationary	EPA Measures - 1999
SurfaceCoatingOperation;CoatingOvenHeater;Nat uralGas	NOx	Low NOx Burners	Stationary	EPA Measures - 1999
Switchvehiclestobio-diesel				EACs - 2004
Syntheticfibermanufacture	VOC	Carbon Adsorber	Stationary	EPA Measures - 1999
SyntheticFiberProduction	VOC	Solvent recovery systems including carbon adsorption	Stationary	EPA Measures - 1999

Appendix B - Initial List of Control Medsures			Tuge B-73		
Measure	Pollutant	Description	Source	Source Code	
SyntheticOrganicChemicalManufacturing	VOC	See Website - http://www.epa.gov/ttn/uatw/hon/honpg.html	Stationary	EPA Measures - 1999	
SyntheticOrganicChemicalManufacturingIndustry(SOCMI)ReactorandDistillationProcesses	VOC	98-percent reduction in emissions from SOCMI sources + exemptions based on EPA's CTG with a more stringent total resource effectiveness (TRE) cutoff for exemptions	Stationary	EPA Measures - 1999	
TD-4100On-LineHydrocarbonMonitor		Emissions Monitoring	Monitoring	NEET Database - ongoing	
TerephthalicAcidManufacture	VOC	Incineration	Stationary	EPA Measures - 1999	
Testo350		Emissions Monitoring	Monitoring	NEET Database - ongoing	
TextileFinishing	VOC	Add-on controls of 95 percent or better control efficiency + capture efficiency based on best engineering practices + possible exemption of low-solvent inks	Stationary	EPA Measures - 1999	
thecaptureandcontrolofVOCemissionsfromlivestoc kwaste	VOC		Stationary	SAQMD Clean Air Plan - 2003	
TheExpertFurnaceSystemOptimizationProcess(EF SOP)forEAFs		Combustion	Pollution Prevention	NEET Database - ongoing	
Thegraphicartsindustry; Publication rotogravure printing	VOC	Carbon adsorption	Stationary	EPA Measures - 1999	
ThermalOxidizers		Emission capture systems	Stationary	NEET Database - ongoing	
ThermalOxidizerwithEnergyRecovery		Process vent gas treatment	Stationary	NEET Database - ongoing	
ThermoPV(TPV)	NOx/VOC	Using superconducting materials to turn solar energy into heat to creates steam to then generate electricity.		Regulatory Impact Analysis - 1997	
Thin-layercrystallinesilicon	NOx/VOC	A solar film on which research effort is focused because it is likely to blend the production ease of other film technologies with the efficiency of silicon crystals.		Regulatory Impact Analysis - 1997	
Tightenstandardsforbulkterminalgasolinestoragean dtransferin 7.24(2)	VOC			MA Strategies - 2004	

Measure	Pollutant	Description	Source	Source Code
suchthatthevaporrecoveryunitsarerequiredtooperat eatloweremissionrates.				
Tighteremissionstandardsforpleasurecraft/State/Fe deral	VOC		Offroad	SAQMD Clean Air Plan - 2003
TORBEDTM-ProcessReactorTechnologies		Other	Stationary	NEET Database - ongoing
Trafficmarkings	VOC	South Coast Phase III	Stationary	EPA Measures - 1999
Trafficmarkings	VOC	South Coast Phase I	Stationary	EPA Measures - 1999
Trafficmarkings	VOC	South Coast Phase II	Stationary	EPA Measures - 1999
Trafficmarkings	VOC	AIM Coating Federal Rule	Stationary	EPA Measures - 1999
TransitPrioritizationQueueJumps		Provide queue jumps for buses at over-capacity signalized intersections throughout the region. Queue jumps allow buses to use a shoulder or other designated lane to bypass intersection queues and move forward towards the stop line.	Mobile	DC RACM - 2003
Transitprograms				EACs - 2004
TransportRefrigerationUnits(TRUs)	PM2.5		Mobile	CT Memo - 2005
TreatmentStorageandDisposalFacilities	VOC	Expedited process for upgrading permits + air pollution control regulations for TSDFs modeled after EPA's hazardous waste rules	Stationary	EPA Measures - 1999
Treeplantingprogram				EACs - 2004
Truckstopelectrification	PM2.5		Mobile	CT Memo - 2005
Truckstopelectrification				EACs - 2004
TSDFs	VOC	Phase I & II rules	Stationary	EPA Measures - 1999
UltraFiltration24	VOC	Decorative Coatings' technology center at Montataire, France is developing new technologies to improve waterborne paint waste reuse, thereby reducing new paint production and associated emissions. One of its initiatives is wastewater treatment by Ultra Filtration (UF). This is a major project, because up to 12 European sites may be		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		involved. UF is a nonchemical membrane separation process, which separates the effluent into two streams: permeate (the treated water) and concentrate (UF sludge). The pollution level of the permeate is equivalent to that obtained after conventional treatment, but it is completely free of paint solids, which are held in the concentrate. So far, UF has proved to be an efficient solution for treating effluent from waterborne paint production. Industrial application of UF is economical provided that the concentrate is reused in making paint.		
UndergroundStorageTankVents	VOC	Pressure-vacuum valves on open vent pipes of storage tanks equipped with Stage I vapor recovery	Stationary	EPA Measures - 1999
Updatedevelopmentregulations				EACs - 2004
UpgradeVOCRACT	NOx/VOC		Stationary	CT Memo - 2005
UreaResins-General	VOC	RACT Extended to Other Areas	Stationary	EPA Measures - 1999
usage;restrictvehicleidletimes				EACs - 2004
Uselandfillgas;supportNCGreenPower				EACs - 2004
Useremotesensorsandlicenseplatephotostoidentifys mokingvehicles	NOx		On-Road Mobile	SAQMD Clean Air Plan - 2003
UtilityBoilers	NOx	Selective Catalytic Reduction	Stationary	EPA Measures - 1999
UtilityBoilers	NOx	T-fired and wall-fired coal units emissions of 0.15 lb/mmBtu or below + oil and gas units emissions of 0.05 lb/mmBtu + emission rates based on energy output	Stationary	EPA Measures - 1999
Utilityboilers	NOx	Gas / oil - SCR 0.08 lb/mmBtu	Stationary	EPA Measures - 1999
UtilityBoilers	NOx	Natural Gas- 0.2lb/mmBtu; Liquid Fossil Fuel - 0.3 lb/mmBtu; Subituminous Coal - 0.5 lb/mmBtu; Lignite- 0.8 lb/mmBtu; Bituminous Coal- 0.6 lb/mmBtu	Stationary	EPA Measures - 1999
UV/ozoneoxidationtechnique23	VOC	Technology development and demonstration		Regulatory Impact Analysis - 1997

Appendix B - Initial List of Control Measures				Tuge D-70
Measure	Pollutant	Description	Source	Source Code
		activity targeted for Department of Defense painting operations to validate the recirculation/partitioning concept used with a novel UV/ozone oxidation technique to eliminate HAP and VOC discharges from paint spray booths and other booth designs. Preliminary results suggest that booth discharge flow reductions of up to 75% can be achieved.		
VacuumInsulatedCatalyticConverter29	NOx/VOC	Using a form of vacuum insulation and phase- change heat storage technology, the converter remains at operating temperatures for more than 24 hours after the engine has been turned off. Potential exists to reduce automotive emissions to ultra-low emission vehicle (ULEV) levels, or even to equivalent zero emission vehicle (EZEV) standards in some cases.		Regulatory Impact Analysis - 1997
VariousMiscellaneousPolymerChemicalsProductio n	VOC	Pending	Stationary	EPA Measures - 1999
VegetableOilProduction	VOC	Pending	Stationary	EPA Measures - 1999
VehicleI/Mprogram				EACs - 2004
Vehicleinspectionincludingdiesel				EACs - 2004
VinylChlorideEmissions	VOC	Emission control system with continuous stack monitor	Stationary	EPA Measures - 1999
VOCemissionlimitsformarinecoatings	VOC		Stationary/Are	SAQMD Clean Air Plan - 2003
VOCemissionlmitsforCommercialCookingsuchasc harbroilersanddeepfatfryers	VOC		Area	SAQMD Clean Air Plan - 2003
VOCemissionsformthepolymermanufacturingindu stry	VOC	Incineration of emissions in boiler or flare	Stationary	EPA Measures - 1999
VOClimitsforMetalPartsandProductsinDistrictswh ererulesarenotadopted	VOC		Stationary/Are	SAQMD Clean Air Plan - 2003

Measure	Pollutant	Description	Source	Source Code
			a	
VOClimitsforunregulatedcoatings	VOC		Stationary/Are	SAQMD Clean Air Plan - 2003
VOCRACTpursuanttosections182(a)(2)(A)and182 (b)(2)(B)ofCleanAirAct				CT RACM - 2001
VolatileOrganicLiquidsStorage	VOC	Volatile organic liquid storage CTG + enhanced test methods, monitoring specifications and equipment specifications based on HON rule + lower vapor pressure limits for exemptions in current rules	Stationary	EPA Measures - 1999
Volatileorganicliquidstorage	VOC	Floating roof tops for tanks	Stationary	EPA Measures - 1999
Volatileorganicliquidstorage	VOC	Floating roofs	Stationary	EPA Measures - 1999
VoluntaryMobileEmissionsReductionProgram(V MEP)				TX SIP - 2000-2004
W15-590DieselFuelAdditive		Fund trial of the fuel additive W15-590 to reduce NOX emissions. The additive can be mixed with the fuel before or after delivery from the distribution center.	Mobile	DC RACM - 2003
WasteBurning AgriculturalorOpenBurning(defined:p804ofCAFIP)	VOC	Agricultural and open burning are prohibited on a "no-burn day" which is a day declared by EPA, CARB, or local air district if an ozone exceedance (0.09 ppm) is predicted	Stationary	EPA Measures - 1999
Water-based, solvent-free and ultrahigh- solids coatings 12	VOC	Water-based, solvent free and ultrahigh-solids coatings are being considered for development for the metal office furniture industry.		Regulatory Impact Analysis - 1997
Water-basedaerosoladhesive11	VOC	Based on new technology, a water-based low VOC spray adhesive has been developed that offers bonding strength and heat resistance comparable to many typical solvent-based aerosol products. This adhesive can be used to bonds a range of substrates, including paper, fabrics, plastics, wood, and		Regulatory Impact Analysis - 1997

Measure	Pollutant	Description	Source	Source Code
		aluminum.		
Water-basedcoatings13	VOC	Morton's Water-Based Polymers Technology Group is involved in developing new and improving on existing Morton waterborne products such as: a new water-based, lead-free highway paint; a zero-VOC, waterborne color dispersion paint component; and water-based automotive plastic coatings.		Regulatory Impact Analysis - 1997
Water-basedsoldermasks26	VOC	Probimer7 water-based solder masks can help cut down on the use of solvents; these water-based coatings are used on printed wiring boards in the computer industry. In addition, the division's powder coating systems are applied to buildings and cars using electrostatic charge - avoiding the need for a solvent.		Regulatory Impact Analysis - 1997
Waterborneclearcoats19	VOC	Water-based clearcoats are under investigation at Ford.		Regulatory Impact Analysis - 1997
Waterborneprimers18	VOC	Waterborne primers will be studied at three Ford truck plants and a BMW plant.		Regulatory Impact Analysis - 1997
WebOffsetLithography	VOC	New CTG	Stationary	EPA Measures - 1999
WetESP		Emission capture systems	Stationary	NEET Database - ongoing
WMATAB us Information D is plays with Maps		Install additional information boxes with maps and schedule information. Would include schedules in languages other than English in neighborhoods where most residents speak another language	Mobile	DC RACM - 2003
WoodFlatStockCoatingOperations	VOC	VOC content limits for coatings, inks, and adhesives + Applicator requirements + Emission collection and control system for non-compliant coatings	Stationary	EPA Measures - 1999
WoodFurniture(SurfaceCoating)	VOC	See Website - http://www.epa.gov/ttn/uatw/wood/riwood.html	Stationary	EPA Measures - 1999
WoodFurnitureCoating	VOC	Incineration	Stationary	EPA Measures - 1999

Measure	Pollutant	Description	Source	Source Code
WoodFurnitureCoating	VOC	Negotiated regulatory rules	Stationary	EPA Measures - 1999
WoodFurnitureProducts(SurfaceCoating)	VOC	Pending	Stationary	EPA Measures - 1999
Woodfurnituresurfacecoating	VOC	New CTG	Stationary	EPA Measures - 1999
Woodfurnituresurfacecoating	VOC	MACT	Stationary	EPA Measures - 1999
Woodfurnituresurfacecoating	VOC	Add-On Controls	Stationary	EPA Measures - 1999
WoodProductsCoatings	VOC	VOC content limits of coatings and strippers + Coating applicator transfer efficiency + Approved emission control system for non-compliant coatings	Stationary	EPA Measures - 1999
Woodproductsurfacecoating	VOC	MACT	Stationary	EPA Measures - 1999
Woodproductsurfacecoating	VOC	SCAQMD Rule 1104	Stationary	EPA Measures - 1999
Woodproductsurfacecoating	VOC	Incineration	Stationary	EPA Measures - 1999
WorkwithSEQLproject				EACs - 2004
XactMulti-MetalsCEM		Emissions Monitoring	Monitoring	NEET Database - ongoing
XononCoolCombustion®		Combustion	Pollution Prevention	NEET Database - ongoing
ZeroI/Mwaiversandexemptions		Eliminate all waivers and exemptions in the I/M program	Mobile	DC RACM - 2003
Zero-VOCIndustrialMaintenanceMetalCoating31	VOC	This zero-VOC coating technology is intended for use as a topcoat on metal furniture. The resin formulation for the coating will be adjusted to provide acceptable drying times, flexibility and hardness, and ultraviolet, chemical and salt spray resistance.		Regulatory Impact Analysis - 1997
ZEVbusdemonstrationandpurchase	NOx		TCM	SAQMD Clean Air Plan - 2003
ZEVprogram		Adopt California ZEV program	Mobile	DC RACM - 2003
Zoningordinance-landscapebuffers				EACs - 2004