Proposed Plan Amendments

Staff's Recommendation

The following Table 1-3 contains a summary of the proposed new regional and local control measures and expected VOC and NOx emission reductions for the Sacramento nonattainment area for the 2018 attainment demonstration year. Emission benefits from these new committal measures are estimated to provide reductions of 3 tons per day of VOC and 3 tons per day of NOx in 2018. Some of these new local measures will be adopted by the end of 2008, and emission benefits from just these adopted new measures are estimated to provide reductions of 1 ton per day of VOC in 2018.

Table 1-3
Summary of New Regional and Local Proposed Control Measures
Sacramento Nonattainment Area

Control Measure Name	2018 Emission Reductions (TPD)	
	VOC	NO <sub>x</sub>
Regional Non-regulatory Measures		
Regional Mobile Incentive Program - On-road	<0.1	0.9
Regional Mobile Incentive Program – Off-road	<0.1	<0.1
Spare The Air Program	<0.1	<0.1
SACOG Transportation Control Measures	-	-
Urban Forest Development Program	0 - 0.2	-
Total Regional Non-regulatory Measures	0.1	0.9
Local Regulatory Measures		
Indirect Source Rule - Operational	<del>0-&lt;0.1</del>	<del>0-0.1</del>
Architectural Coating	1.5	-
Automotive Refinishing	0.2	-
Degreasing/Solvent Cleaning	1.4	-
Graphic Arts	na	-
Miscellaneous Metal Parts and Products	<0.1	-
Natural Gas Production and Processing	0.1	-
Boilers, Steam Generator, and Process Heaters	-	0.2
IC Engines	-	0.0
Large Water Heaters and Small Boilers	-	0.9
Total Local Regulatory Measures	3.2	1.2
Total Reductions*	3.4	2.2

Notes: Numbers are truncated to one decimal place. na = not

na = not available

<sup>\*</sup>Total reductions are summed from untruncated values. See summary table in Appendix C – Proposed Control Measures.

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the implementation date needed, or achievement of the emission reductions by that date is not cost-effective or technologically feasible because of local circumstances.

## 7.6 SIP Emission Reduction Tracking

For purposes of tracking progress in emission reductions, the baseline emissions for the year 2002 and for milestone years in this plan will be used, regardless of any subsequent new inventory information that reflects more recent knowledge. This is to ensure that the same "currency" is used in measuring progress as was used in designing the ozone attainment and RFP plan. This will provide a fair and equitable measurement of progress.

## 7.7 Non-regulatory Control Measures

The non-regulatory control measures proposed in this 8-hour ozone plan are regional programs that will achieve emission reductions throughout the Sacramento nonattainment area. The following non-regulatory measures are proposed:

- Mobile Source Incentive Measures On-road and Off-road
- Spare The Air Program
- SACOG Transportation Control Measures
- Urban Forest Development Program

#### 7.8 Mobile Source Incentive Measures

Mobile sources such as trucks, automobiles, trains, boats, construction and farm equipment are by far the largest sources of ozone precursors in the Sacramento nonattainment area. Included under this major source category are all non-stationary sources from lawn mowers to jumbo jets. The air districts do not have authority to directly regulate mobile source emissions through emission standards; however, the air district incentive programs (and indirect source rules) may complement state and federal regulatory efforts in reducing mobile source emissions. These regional mobile source incentive measures are implemented in all or parts of the Sacramento nonattainment area by the air districts.

The estimated emission reductions from the proposed regional mobile incentive measures are summarized, followed by descriptions of the individual on-road mobile and off-road mobile control measures. Because many of the incentive measures in the mobile source categories target the same vehicles or engines, it is difficult to predict in advance what portion of the benefits should be assigned to each of the individual strategies. Therefore, the benefits from the collection of measures have been estimated, and all or any portion of the measures may be implemented to achieve those benefits. Some measures noted may likewise not be implemented if cost effective reductions are not available. However, for purposes of transportation conformity, an

awareness throughout the rest of the year. It is designed to protect public health by informing people when air quality is unhealthy and achieving voluntary emission reductions by encouraging them to reduce vehicle trips. This program is implemented by the SMAQMD staff on behalf of the region. Funding for this program has historically been federal Congestion Management and Air Quality (CMAQ) funds, with local matching funding provided by each air district's DMV and/or Sacramento County's Measure A funding. CMAQ funding (\$600,000 per year) has been included in the SACOG MTP2035 through 2018.

Since transportation control measures (TCMs) are strategies for reducing vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions, the Spare The Air program is proposed as a TCM in this SIP. The estimated emission reductions from this program are provided in the following table.

			Emission Reduction (TPD)		
Control Measure		loption Implement Year Year	2018		
	i cai		VOC	NO <sub>x</sub>	
Spare The Air Program (TCM-ONMS-ED-1)	2009	2008-2018	<0.1	<0.1	

# 7.10 SACOG Transportation Control Measures

Transportation control measures (TCMs) are strategies for reducing vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. The Sacramento Area Council of Governments (SACOG) is the Metropolitan Planning Organization (MPO) for the greater Sacramento region (includes Sacramento, Yolo, Placer, El Dorado, Sutter, and Yuba counties). SACOG provides transportation planning and funding for the region. SACOG, local governments, and the air districts have worked together over the years to develop and implement TCMs. They have included public transit, carpooling and vanpooling, bicycling and pedestrian enhancement, and land use programs. Many of the existing TCM efforts may be used in part to comply with the proposed operational indirect source rule. The Spare The Air program is also a TCM.

TCMs are included in the "smart growth" assumptions for the Blueprint program used in the SACOG transportation model to forecast future vehicle activity. Federal MTP guidelines require that the land use allocations represent what is most likely to be built. Therefore, the specific Blueprint smart growth policies affect land use allocations only to the extent that the local jurisdictions and SACOG are able to demonstrate that the policies will actually be implemented. These updated activity data were used in setting the baseline projections for the motor vehicle inventory. While the Blueprint principles affect these baseline projections, Blueprint is not included in this plan as a transportation control measure.

consistent with the EPA policy<sup>71</sup> for incorporating emerging and voluntary measures in a SIP that limits the amount of emission reductions allowed due to the uncertainty and untested nature of the control mechanisms. For total emerging and voluntary measures, EPA has adopted a presumptive<sup>72</sup> limit of 6 percent of the total amount of emission reductions necessary to demonstrate attainment.

				Emission Reduction* (TPD)	
Emerging/Voluntary Measures	Adoption Implement Year Year	nplement 2018			
Medsures	Teal Teal		VOC	NO <sub>x</sub>	
Urban Forest Development Program (SMAQMD-1)	2012	2008-2018	0 - 0.2		

<sup>\*</sup>Reductions within 6% limitation of VOC emission reduction needed to achieve attainment and result from lower BVOC emitting trees. More detailed documentation of the credited emission reductions is included in Appendix C – Proposed Control Measures.

## 7.14 Regulatory Control Measures

The regulatory control measures proposed in this 8-hour ozone plan are local programs that will achieve emission reductions from:

- Indirect Source Rules
- Stationary/Area Source Control Measures.

# 7.15 Indirect Source Rules (ISR)

#### [Section 7.15 has been removed due to SIP revisions on 10/27/2011]

Indirect source rules mitigate emissions from construction projects and the operational emission effects of new land development projects. With off-road equipment (typically used for construction) contributing about 10% and on-road vehicles contributing about 50% of the Sacramento region's VOC and NOx emissions, mitigation efforts to reduce emissions from construction projects and the effects of new land development projects may provide reductions that may be essential for the Sacramento region to reach the ozone standard.

#### IS-2: Operational Indirect Source Rule

This control measure will reduce emissions generated during the operational phase of indirect sources. An indirect source is defined as any facility, building, structure or installation, or combination thereof, which generates or attracts mobile source activity that results in emissions of any pollutant for which there is a state ambient air quality standard. The rule will require indirect sources to mitigate a portion of their emissions

"Incorporating Emerging and Voluntary Measures in a State Implementation Plan (SIP)" (OAQPS, EPA, September 2004, p. 9).
 The limit is presumptive in that EPA believes it may approve measures into a SIP in excess of the

The limit is presumptive in that EPA believes it may approve measures into a SIP in excess of the presumptive 6 percent where a clear and convincing justification is made by the State for a higher limit.

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through a combination of on-site mitigation measures and/or, if onsite measures are insufficient, a contribution to an off-site mitigation fund that will invest in emission reduction projects.

On-site mitigation could include strategies that reduce vehicle trips or vehicle miles traveled (VMT). Other on-site mitigation measures could be considered, such as improved energy efficiency resulting in fewer power plant emissions or reductions in on-site combustion emissions. Off-site mitigation fees will be calculated based on the amount of required emission reductions that can not be achieved through on-site measures. This control measure will integrate with SACOG's Blueprint Metropolitan Transportation Plan<sup>73</sup> and look for synergistic opportunities from AB 32 (Nunez) – California Global Warming Solutions Act of 2006<sup>74</sup> and SB 375 (Steinberg) – legislation to reduce greenhouse gases through land-use planning<sup>75</sup>.

The proposed control measure commits to a framework that includes quantification of emissions before and after mitigation measures are applied, establishes appropriate levels to define who is subject to the rule and emission reduction requirements for affected sources. The proposed emission reduction requirements will include a fee option to achieve offsite reductions when onsite reductions are unavailable. The proposed control measure will be evaluated for adoption by districts noted in the table below.

The estimated emission reductions from the operational indirect source rule are provided in the following table.

Operational Indirect Source Rule			Emission Reduction (TPD)	
District	Adoption Implement 2		2018	
District Year Year	<del>VOC</del>	NO <sub>*</sub>		
SMAQMD	<del>2012</del>	<del>2014</del>	<del>0-&lt;0.1</del>	<del>0-&lt;0.1</del>
Total			<del>0-&lt;0.1</del>	<del>0-0.1</del>

# 7.16 Stationary and Area-wide Source Control Measures

Historically, local air district regulatory control measures have been implemented to control emissions from stationary and area-wide type sources. In general, stationary sources include non-mobile sources such as power plants, cement plants, and manufacturing facilities. Area-wide sources of pollution are those where the emissions

<sup>&</sup>lt;sup>73</sup>-Metropolitan Transportation Plan for 2035 (MTP2035), approved by SACOG Board of Directors March 20, 2008

<sup>&</sup>lt;sup>74</sup> California Health and Safety Code, Section 38500-38599.

<sup>&</sup>lt;sup>75</sup>-Signed by Governor 9-30-08, and amends California Government Code and Division 13 of the Public Resources Code.

The following Table 7-4 summarizes the list of new regional and local proposed control measures and their expected 2018 emission reductions for the Sacramento nonattainment area. Emission benefits from these new committal measures are estimated to provide reductions of 3 tons per day of VOC and 3 tons per day of NOx in 2018. Some of these new local measures will be adopted by the end of 2008 and are listed separately in Table 7-4A. Emission benefits from just these adopted new local measures are estimated to provide reductions of 1 ton per day of VOC in 2018.

Table 7-4
Summary of New Regional and Local Proposed Control Measures
Sacramento Nonattainment Area

Control Measure Name	2018 Emission Reductions (TPD)	
	VOC	$NO_x$
Regional Non-regulatory Measures		
Regional Mobile Incentive Program – On-road	<0.1	0.9
Regional Mobile Incentive Program – Off-road	<0.1	<0.1
Spare The Air Program	<0.1	<0.1
SACOG Transportation Control Measures		
Urban Forest Development Program	0 - 0.2	
Total Regional Non-regulatory Measures	0.1	0.9
Local Regulatory Measures  Indirect Source Rule - Operational	0-<0.1	<del>0-0.1</del>
Architectural Coating	1.5	<del></del>
Automotive Refinishing	0.2	
Degreasing/Solvent Cleaning	1.4	
Graphic Arts	na	
Miscellaneous Metal Parts and Products	<0.1	
Natural Gas Production and Processing	0.1	
Boilers, Steam Generator, and Process Heaters		0.2
IC Engines		<0.1
Large Water Heaters and Small Boilers		0.9
Total Local Regulatory Measures	3.2	1.2
Total Reductions*	3.4	2.2

Notes: Numbers are truncated to one decimal place. na = not available

<sup>\*</sup>Total reductions are summed from untruncated values. See summary table in Appendix C – Proposed Control Measures.

The following Table 14-1 contains a summary of the proposed new regional and local control measures and expected VOC and NOx emission reductions for the Sacramento nonattainment area for the 2018 attainment demonstration year. Emission benefits from these new committal measures are estimated to provide reductions of 3 tons per day of VOC and 3 tons per day of NOx in 2018. Some of these new local measures will be adopted by the end of 2008, and emission benefits from just these adopted new measures are estimated to provide reductions of 1 ton per day of VOC in 2018.

Table 14-1
Summary of New Regional and Local Proposed Control Measures
Sacramento Nonattainment Area

Control Measure Name	2018 Emission Reductions (TPD)	
	VOC	NO <sub>x</sub>
Regional Non-regulatory Measures		
Regional Mobile Incentive Program – On-road	<0.1	0.9
Regional Mobile Incentive Program – Off-road	<0.1	<0.1
Spare The Air Program	<0.1	<0.1
SACOG Transportation Control Measures	-	-
Urban Forest Development Program	0 - 0.2	-
Total Regional Non-regulatory Measures	0.1	0.9
Local Regulatory Measures		
Indirect Source Rule - Operational	<del>0-&lt;0.1</del>	<del>0-0.1</del>
Architectural Coating	1.5	-
Automotive Refinishing	0.2	-
Degreasing/Solvent Cleaning	1.4	-
Graphic Arts	na	-
Miscellaneous Metal Parts and Products	<0.1	-
Natural Gas Production and Processing	0.1	-
Boilers, Steam Generator, and Process Heaters	-	0.2
IC Engines	-	<0.1
Large Water Heaters and Small Boilers	-	0.9
Total Local Regulatory Measures	3.2	1.2
Total Reductions*	3.4	2.2

Note: Numbers are truncated to one decimal place.

na = not available

The following Table 14-2 contains a summary of SACOG transportation control measures (TCMs) that are included in the Sacramento region's federal 8-hour ozone plan. The TCMs include new and continuing projects and funding programs.

<sup>\*</sup>Total reductions are summed from untruncated values. See summary table in Appendix C - Proposed Control Measures.

## **Appendix C: Proposed Control Measures**

Appendix C contains a summary table of emission reductions by control measure and a summary table of emission reductions by air district. This appendix also includes more detailed information on the individual proposed control measures. The non-regulatory control measures are listed first and include various regional measures (on-road and off-road mobile incentive programs, and an emerging/voluntary urban forest development program). These are followed by the regulatory control measures, which include indirect source rules and a variety of stationary and area-wide source control measures. The stationary and area-wide source measures include write-ups for individual air districts in the Sacramento nonattainment area. The final section includes a description of further study measures. Information on transportation control measures is included in Appendix D.

Summary Table of Emission Reductions by Control Measure	C-5
Summary Table of Emission Reductions by Air District	C-7
Summary Table of Emission Reductions for Adopted New Local Control	l
Measures	C-8
NON-REGULATORY CONTROL MEASURES	
Regional Mobile Measures	
All Mobile Source Incentive Programs	C-10
Regional Urban Forest Control Measures	
SMAQMD-1 Urban Forest Air Quality Development Program	C-16
REGULATORY CONTROL MEASURES	
Indirect Source Rules	
IS-2: Operational Indirect Source	C-62

# **Summary Table of Emission Reductions by Control Measure**

Measure Name	Emission Reductions (TPD) 2018		
	VOC	NO <sub>x</sub>	
Non-regulatory Measures	VOC	NOx	
Non-regulatory measures			
Regional Mobile Incentive Program – On-road	0.060	0.910	
Regional Mobile Incentive Program – Off-road	0.005	0.013	
Spare The Air Program	0.059	0.046	
SACOG Transportation Control Measures	tbd	tbd	
Urban Forest Development Program	0 - 0.18	-	
Total Non-regulatory Measures	0.12	0.97	
Regulatory Measures			
Indirect Source Rule - Operational ISR	0-0.04	0-0.13	
Stationary and Area-wide Source Measures			
Architectural Coating			
SMAQMD-442	0.913	-	
EDCAQMD-215	0.186	-	
FRAQMD-3.15	0.004	-	
PCAPCD-218	0.201	-	
YSAQMD-2.14	0.214	-	
Total Architectural Coating	1.52		
Automotive Refinishing			
SMAQMD-459	0.113	-	
FRAQMD-3.19	0.001	-	
PCAPCD-234	0.045	-	
YSAQMD-2.26	0.058	-	
Total Automotive Refinishing	0.22		
Dograpsing/Salvant Cleaning			
Degreasing/Solvent Cleaning SMAQMD-454/466	0.593	_	
EDCAQMD-225/235	0.076	-	
FRAQMD-3.14	0.001	-	
YSAQMD-2.24/2.31	0.762	_	
Total Degreasing/Solvent Cleaning	1.43		
Graphic Arts			
YSAQMD-2.29		-	
Total Graphic Arts			
Miscellaneous Metal Parts and Products			
EDCAQMD-246	0.002	-	
PCAPCD-CM3	0.014	-	
Total Miscellaneous Metal Parts and Products	0.02		

**CONTROL MEASURE NUMBER: Regional Mobile Measures** 

Control Measure Title: All Mobile Source Incentive Programs

Evaluation Date: July 29, 2008

#### **Control Measure Description**

Mobile sources such as trucks, automobiles, trains, boats, construction and farm equipment are by far the largest sources of ozone precursors in the Sacramento nonattainment area. Included under this major source category are all non-stationary sources from lawn mowers to jumbo jets. The air districts do not have authority to directly regulate mobile source emissions through emission standards; however, the air district incentive programs (and indirect source rules) may complement state and federal regulatory efforts in reducing mobile source emissions. These regional mobile source incentive measures are implemented in all or parts of the Sacramento nonattainment area by the air districts.

The estimated emission reductions from these proposed regional mobile incentive measures are summarized for all mobile source incentive programs and disaggregated by reductions for the on-road mobile and off-road mobile control measures.

Because many of the incentive measures in the categories below target the same vehicles or engines, it is difficult to predict in advance what portion of the benefits should be assigned to each of the individual strategies. Therefore, the benefits from the collection of measures have been estimated, and all or any portion of the measures may be implemented to achieve those benefits. Some measures noted may likewise not be implemented if cost effective reductions are not available. However, for purposes of establishing motor vehicle emission budgets in each of the milestone years for transportation conformity, an explicit commitment is made to the reductions associated with the on-road mobile source incentive program.

The incentive program measures noted below rely on funding provided according to existing laws and policies. The funding sources for 2008-2018 include SECAT program (\$33.0M), local district Department of Motor Vehicle fees (\$13.0M), and local district revenues for Mowdown (\$0.35M).

#### **Individual Measure Descriptions**

Implement a variety of incentive programs for on-road vehicles and off-road equipment. The programs include:

**ONMS-LD-1 (ONMS-LD-2).** Light Duty Early Retirement - Implement an incentive based light-duty vehicle early retirement program. The program is focused on accelerating retirement of non-OBD-II vehicles.

**ONMS-HD-1 (ONMS-HD-5). SECAT-Like Program** - The measure implements an incentive program for NOx reduction in heavy-duty vehicles similar to that created by the Sacramento Emergency Clean Air Transportation (SECAT) program.

# **Indirect Source Rules**

#### **CONTROL MEASURE NUMBER: IS-2**

Control Measure Title: Operational Indirect Source Rule (ISR)

Date: June 10, 2008

# **Control Measure Description**

This control measure will reduce emissions generated during the operational phase of indirect sources. An indirect source is defined as any facility, building, structure or installation, or combination thereof, which generates or attracts mobile source activity that results in emissions of any pollutant for which there is a state ambient air quality standard. The rule will require indirect sources to mitigate a portion of their emissions through a combination of on-site mitigation measures and, if onsite measures are insufficient, a contribution to an off-site mitigation fund that will invest in emission reduction projects.

On-site mitigation could include strategies that reduce vehicle trips or vehicle miles traveled (VMT). Other on-site mitigation measures could be considered, such as improved energy efficiency resulting in fewer power plant emissions or reductions in on-site combustion emissions. Off-site mitigation fees will be calculated based on the amount of required emission reductions that can not be achieved through on-site measures. This control measure will integrate with SACOG's Blueprint Metropolitan Transportation Plan<sup>17</sup> and look for synergistic opportunities from AB 32 (Nunez) – California Global Warming Solutions Act of 2006<sup>18</sup> and SB 375 (Steinberg) – legislation to reduce greenhouse gases through land-use planning<sup>19</sup>.

The proposed control measure commits to a framework that includes quantification of emissions before and after mitigation measures are applied, establishes appropriate levels to define who is subject to the rule and emission reduction requirements for affected sources. The proposed emission reduction requirements will include a fee option to achieve offsite reductions when onsite reductions are insufficient. The proposed control measure will be evaluated for adoption by districts noted in the following tables.

The District will develop guidelines that describe the quantification methodology used to evaluate the emission reductions from proposed off-site mitigation projects. The guidelines will be made available for public review through a public notice in a newspaper of general circulation, followed by District Board adoption (including responses to comments), and a request for CARB/EPA approval. The District will

Operational Indirect Source Rule

<sup>&</sup>lt;sup>47</sup>-Metropolitan Transportation Plan for 2035 (MTP2035), approved by SACOG Board of Directors March 20, 2008

<sup>&</sup>lt;sup>48</sup> California Health and Safety Code, Section 38500-38599.

<sup>&</sup>lt;sup>19</sup>-Signed by Governor 9-30-08, and amends California Government Code and Division 13 of the Public Resources Code.

evaluate and select off-site mitigation projects for funding with ISR revenue through a public process and ultimately District Board approval.

Emissions impacts of indirect sources are commonly modeled with the URBEMIS emissions model. URBEMIS calculates emissions based on trip generation rates for user specified land uses along with EMFAC mobile emission factors. URBEMIS also calculates area source emissions from sources such as on-site natural gas combustion, landscaping, and consumer products.

SACOG is currently developing a new modeling tool that integrates the iPLACES parcel-level land use scenario planning tool with the SACMET travel model. The new model will provide the ability to evaluate regional changes in vehicle trips and VMT based on proposed land uses.

#### **Emission Inventory – 2018**

The Operational ISR will apply to residential and non-residential development projects that generate indirect emissions from on-road mobile sources such as passenger cars, light trucks, and motorcycles. The table below presents the summer planning inventory for categories expected to be affected by the rule (note: other inventory categories may be affected to the extent that the rule affects them, or as part of selected mitigation strategies).

			2018 Inventory* (tpd)	
District	EIC Code	<b>EIC Description</b>	NOx	ROG
SMAQMD	<del>710</del>	LDA	<del>2.53</del>	4.90
_	<del>722</del>	LDT1	0.76	<del>1.32</del>
_	<del>723</del>	LDT2	<del>2.60</del>	<del>3.75</del>
	<del>72</del> 4	MDV	1.74	<del>1.92</del>
	<del>732</del>	LHDT1	<del>2.08</del>	0.99
	<del>733</del>	LHDT2	0.90	0.26
	<del>73</del> 4	MHDV	3.39	0.44
	<del>736</del>	HHDV	<del>6.76</del>	<del>0.65</del>
	<del>750</del>	Motorcycle	0.40	<del>1.57</del>
	<del>762</del>	<del>Urban Bus</del>	0.42	0.03
	<del>770</del>	School Bus	0.41	0.03
_	<del>780</del>	Motor Home	0.17	0.02
		Electric Utilities -		
	010-045-0110-0000	Natural Gas Turbine	0.709	<del>0.191</del>
		Residential Fuel		
		Combustion - Natural		
	<del>610-610-0110-0000</del>	Gas Cooking	<del>0.082</del>	0.004
		Residential Fuel		
		Combustion - Natural		
	610-608-0110-0000	Gas Water Heating	<del>1.585</del>	<del>0.079</del>
<b>SMAQMD Total 24.54 16.15</b>				

\* all on-road emissions are based on EMFAC2007 with Feb. 08 SACOG activity data. Area source emissions are based on ARB CEFS O3SIP data.

## **Emission Reductions**

In 2006, the existing California Environmental Quality Act mitigation program achieved 0.033 TPD of NOx and 0.035 TPD of ROG in the Sacramento district. These reductions represent 0.061% and 0.115% of the Sacramento 2005 affected NOx and ROG inventory, respectively.

The South Coast AQMD 2007 Air Quality Management Plan proposes an indirect source rule (2007EGM-01) with a commitment to achieve 1.0 TPD and 0.5 TPD of NOx and ROG, respectively, in 2020. This represents 0.17% of the ROG inventory and 0.36% of the NOx inventory. The San Joaquin Valley Unified APCD 2007 ozone plan includes a commitment to achieve 0.2 TPD reduction in on-road NOx in 2017 from their existing indirect source rule which represents 0.12% of the NOx inventory. (Note: South Coast inventory is based on ARB CEFS\_O3SIP data. San Joaquin inventory is based on 2007 Ozone Plan Appendix B.)

Sufficient data is not currently available to precisely quantify expected reductions. For example, the integrated iPlaces land use model and SACMET travel model expected to be used for emission reduction quantification is not yet available in final form. However, based on the ranges of reductions discussed above as applied to the affected inventory for SMAQMD in 2018 results in the following expected emission reduction range:

-	2018 Reduction (tpd)		
District	NOx ROG		
SMAQMD	<del>0 - 0.09</del>	<del>0 - 0.03</del>	
<del>Total</del>	<del>0 – 0.09</del>	<del>0 – 0.03</del>	

Emission reductions from this rule will result from a combination of on-site mitigation implemented by project proponents and off-site mitigation projects. Depending on the type of mitigation strategies funded through the off-site mitigation program, emission reductions could apply to mobile, stationary, or area-wide source inventory categories.

## **SMAQMD**

Adoption year: 2012

Implementation year: 2014

#### **Cost Effectiveness**

The cost effectiveness of this rule is dependent on the type of on-site mitigation implemented by a developer, and whether or not the off-site mitigation fee option is chosen for some or all of the required emission reductions. Some on-site mitigation may result in a cost savings.

# **Authority and Resources**

The districts are authorized to adopt and implement regulations to reduce or mitigate emissions from indirect and area-wide sources of air pollution by Health and Safety Code Section 40716. In addition, SMAQMD is specifically authorized to adopt indirect or area-wide source regulations by Health and Safety Code Section 41013.

Districts are authorized to recover costs associated with regulation of area-wide and indirect sources by Health and Safety Code Section 42311(g).

# **Implementation**

This control measure will be implemented by SMAQMD.

March 26, 2009

engines

Revised: October 27, 2011

March 26, 2009