

**Request for Proposals (P2018-06)
Air Pollution Control Projects that Reduce/
Mitigate Emissions / Toxic Exposure**

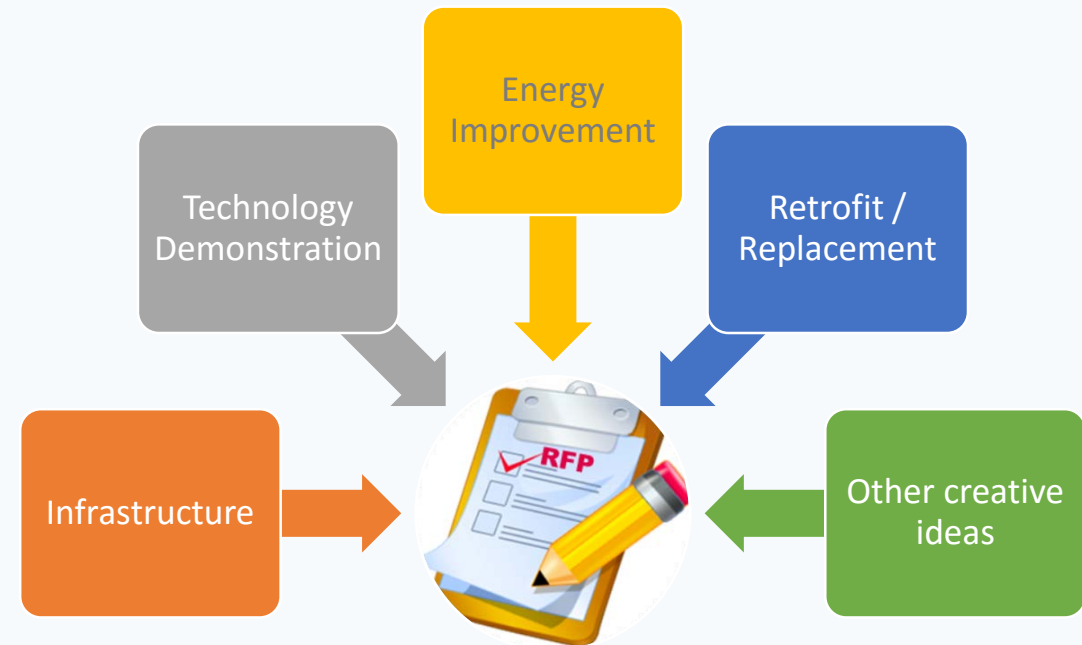
Voluntary Incentive Program

Bidders Conference

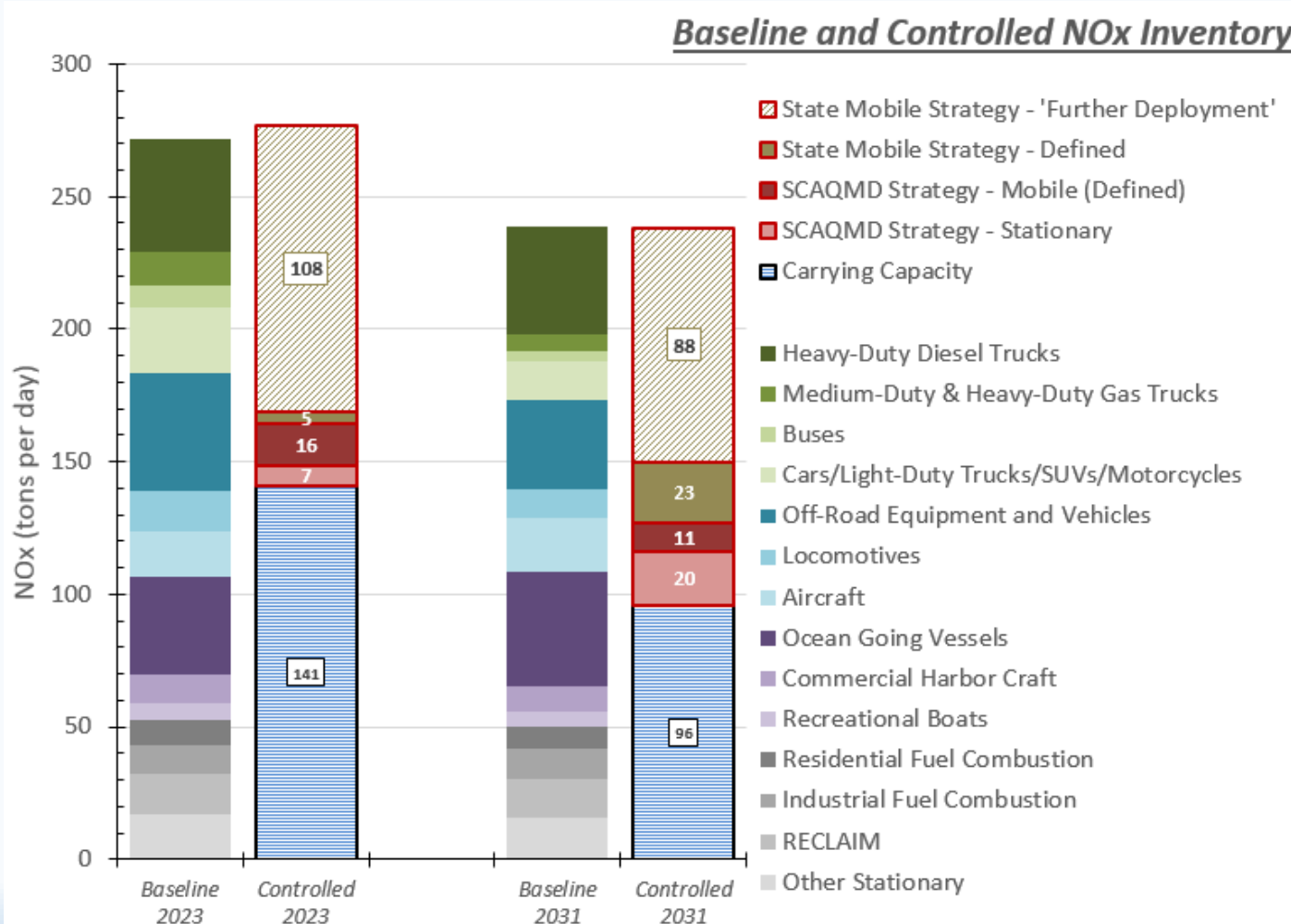
January 24, 2018

Request for Proposals (RFP)

- SCAQMD Governing Board approved public release of RFP on January 5, 2018 (Bid number P2018-06)
 - A broad-based RFP for incentive projects that provide NO_x, PM, and VOC emission reductions
 - Current funding estimated to be up to \$61 million (subject to change)



2016 AQMP - Overall Control Strategy (NOx)



SCAQMD Mobile Source Measures with Incentives Components (Carl Moyer, Prop 1B, SOON, Extended Exchange Program, etc.)

- 15.9 tpd by 2023
- 10.8 tpd by 2031

Stationary Source Measures with Incentives Components (CMB-01, CMB-02, ECC-03, etc.)

- 4.8 tpd by 2023
- 10.9 tpd by 2031

Examples of Incentive Projects for Stationary Sources



CMB-01

Replace older equipment with zero and near-zero emission technologies



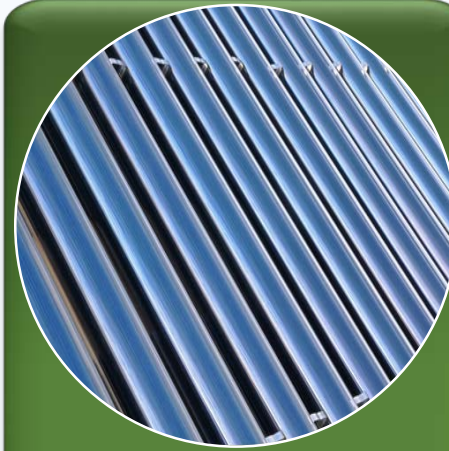
CMB-02

Replace older commercial and residential appliances with zero and near-zero emission appliances



CMB-04

Replace older restaurant burners and residential cooking appliances with zero and near-zero emission technologies



ECC-03

Improve residential and commercial building energy efficiency



BCM-01

Replace older commercial under-fired char broilers with add-on control equipment

Examples of Incentive Projects for Mobile Sources



School Bus



Lawn & Garden
Equipment



Locomotive



Heavy-duty Truck

Award Evaluation Criteria

Project Evaluation Criteria		
✓	Aids in achievement of SCAQMD's regional air quality goals (e.g., emission reduction, new technology, and infrastructure projects)	35
✓	Experience and expertise to complete the project	20
✓	Effective use of funds (e.g., cost effectiveness and/ or funding partnerships)	15
✓	Co-benefits (e.g., control/mitigation of toxics or GHGs)	10
✓	EJ Area benefits	10
✓	Job creation within the jurisdiction of the SCAQMD	5
✓	Community/government support	5
	Total	100

Evaluation Criteria – Aids in Achievement of SCAQMD's Regional Air Quality Goals

	Ozone		PM2.5	
	1997 8-hr ozone standard (80 ppb)	2008 8-hr ozone standard (75 ppb)	2006 24-hr PM2.5 standard (35 ug/m3)	2012 annual PM2.5 standard (12 ug/m3)
Attainment Year	2023	2031	2019	2025

- Calculate emission reductions of NO_x, VOC or PM
- Seeking potential for SIP creditability
 - Emission reductions to be surplus, quantifiable, permanent and enforceable
 - Enforceable commitments and annual demonstration reports
 - Database with project life, usage, emission reduction equations, emission factors, etc. (public accessibility)
- Seeking demonstration and deployment of clean technologies

Evaluation Criteria – Experience and Expertise

- Successful implementation key to ensuring project goals are achieved
- Provide past experience of completing relevant projects
 - Provide examples & references
- Demonstrate expertise
 - Special qualifications
 - Unique skills
 - Patent(s)
 - Market share
 - New technology
- Partnerships

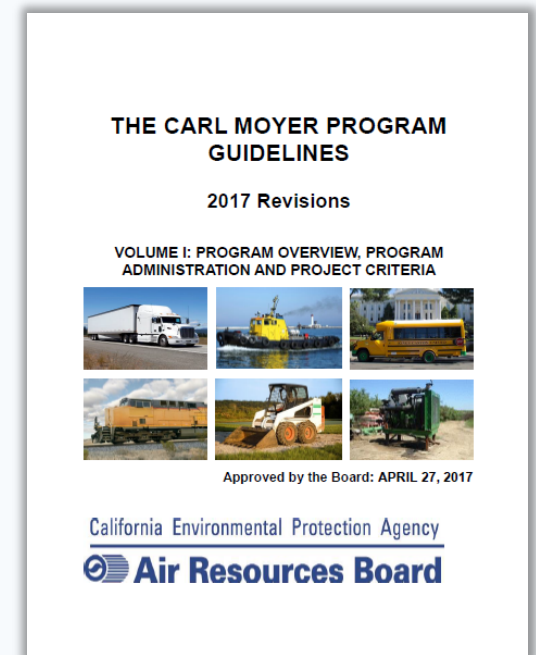


Evaluation Criteria – Effective Use of Funds

- Calculate and provide cost effectiveness (cost per ton of NOx, PM and VOCs reduced)
 - Represents the reasonableness of the requested funds relative to project goals and objectives
 - Capital Recovery Factor should use 1% discount rate
 - Co-funding, funding partnerships, and in-kind contributions
 - List all awarded funding
 - Total funding received not to exceed total project cost
 - No double counting for SIP credit
 - Cost effectiveness based on SCAQMD funds *only* for overall project reductions

Evaluation Criteria – Effective Use of Funds (cont.)

- Methodology for cost effectiveness
 - Mobile Sources
 - Follow Carl Moyer Guidelines when applicable, or
 - List applicable rules, emission factors, and assumptions
 - Stationary Sources
 - List applicable rules, emission factors, and assumptions
- SCAQMD staff available for further information



Evaluation Criteria – Effective Use of Funds (cont.)

- Stationary Source Example 1 - Replacing 100 Tier 1 Diesel IC Engines with Tier 4 Engines

	Assumptions	References
Tier-4 ICE Unit Cost	\$155,000 with no additional operational or maintenance cost	2016 AQMP Appendix IV-A-44
Reduction (NOx)	96%	CARB Emission Factors https://www.arb.ca.gov/msprog/ordiesel/documents/emissionfactorsfaq.pdf
Equipment Life	25 years	2016 AQMP Socioeconomic Report Appendix 2-A-6
Baseline Emission (Tier 1)	0.0920 tpy of NOx per unit	For illustration purposes here; proposals need to provide estimates based on activity levels
Capital Recovery Factor	1% discount rate	2016 AQMP Socioeconomic Report Appendix 2-A-1
Incentive Amount	\$30,000 per unit	

Evaluation Criteria – Effective Use of Funds

- Stationary Source Example 1 - Calculation:

A	Baseline Emissions	0.0920	NOx tpy per unit
B	Controlled Emissions	0.00368	NOx tpy per unit
C	Emission Reduction (C = A-B)	0.0883	NOx tpy per unit
D	Number of Units to be Installed	100	units
E	Annual Emission Reduction for 100 units (E = C*D)	8.83	NOx tpy
F	SCAQMD Incentive Amount	\$30,000	per unit
G	Total SCAQMD Incentive Amount (G = F*D)	\$3,000,000	
H	Total Project Cost (<i>including administrative costs, etc.</i>)	\$3,500,000	
I	Capital Recovery Factor = 1% interest rate and 25 years project life	0.045	
J	Annual Cost of Project (J = H*I)	\$157,500	
K	Cost Effectiveness (K=J/E)	\$17,837	per ton of NOx

Evaluation Criteria – Effective Use of Funds (cont.)

- Stationary Source Example 2 – Incentivizing pool covers in recreational facilities (including public schools, YMCAs, etc.)
 - Use of pool cover results in reduction of pool heater use and lowers NOx emissions

	Assumption	References
Unit Cost	\$500 (16'x32')	http://www.backyardcitypools.com/pool-covers-winter/In-Ground-16ftx32ft-Pool-Winter-Cover.htm
Reduction (NOx)	70%	https://energy.gov/energysaver/swimming-pool-covers
Lifetime	6 year warranty	http://www.backyardcitypools.com/pool-covers-winter/In-Ground-16ftx32ft-Pool-Winter-Cover.htm
Emission Factor for Residential N. Gas Combustion	0.094 lb/MMBTU average	https://www3.epa.gov/ttnchie1/ap42/ch01/final/c01s04.pdf
Capital Recovery Factor	1% discount rate	2016 AQMP Socioeconomic Report Appendix 2-A-1
Incentive Amount	Total = \$200 SCAQMD = \$100 Co-funding from other = \$100	

Evaluation Criteria – Effective Use of Funds (cont.)

- Stationary Source Example 2 – Calculation:

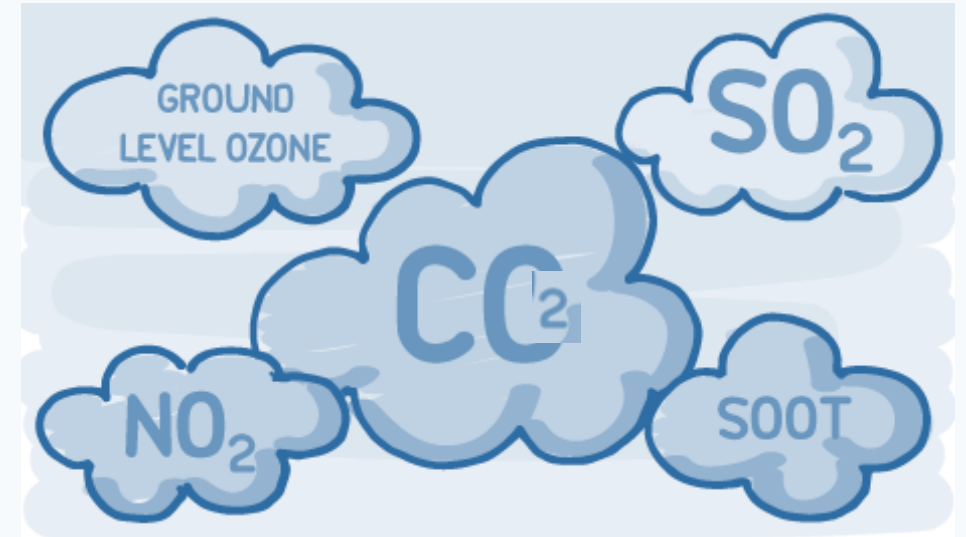
A	Baseline Emissions = Average Gas Pool Heater	0.0009	NOx tpy per unit
B	Controlled Emissions = Average Gas Pool Heater w/Cover	0.0003	NOx tpy per unit
C	Emission Reduction (C=A-B)	0.0007	NOx tpy per unit
D	Number of Units to be Installed	10,000	units
E	Annual Emission Reduction for 10,000 units (E=C*D)	6.6	NOx tpy
F	SCAQMD Incentive Amount	\$100	per unit
G	Total SCAQMD Incentive Amount (G=F*D)	\$1,000,000	
H	Total Project Cost (<i>including administrative costs, etc.</i>)	\$1,050,000	
I	Capital Recovery Factor = 1% interest rate and 6 year project lifetime	0.17	
J	Annual cost of project (J=H*I)	\$181,176	
K	Cost Effectiveness (K=J/E)	\$27,472	\$/NOx ton

Evaluation Criteria – Co-Benefits

- Co-Benefits of Emission Reductions

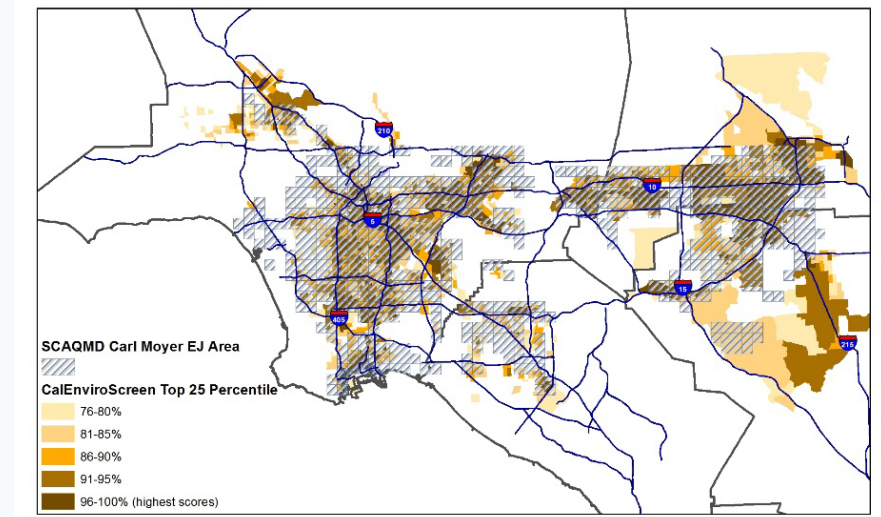
- Provide quantification

- Greenhouse gases (MT/year CO₂e)
- Air toxics (pounds per year)
 - List of toxic air contaminants can be found in SCAQMD Rule 1404 – Table I
<http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf>

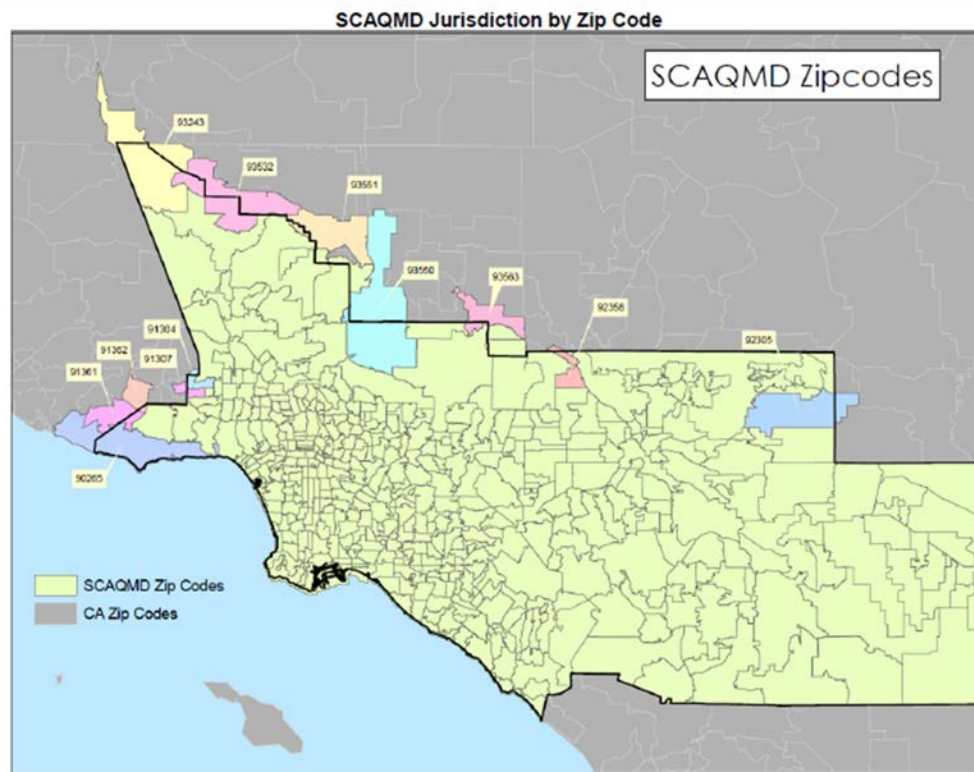


Evaluation Criteria – EJ Area Benefits

- Identify potential air quality benefits in EJ areas (CalEnviroScreen or SCAQMD Moyer definition)
 - Mobile Source Projects
 - Based on home address of equipment / vehicle
 - Provide fraction of project committed to be in EJ areas
 - Stationary Source Projects
 - Provide fraction of project committed to be in EJ areas



Evaluation Criteria – Job Creation within SCAQMD



- Identify project's job creation potential within the jurisdiction of the SCAQMD
 - Provide estimates of the number of new jobs created with supporting documentation (e.g., job title, role in implementation, etc.)

Evaluation Criteria – Community/Government Support

- Support for the project from community or government entity (if any)
 - For example, letter(s) of support from community or government impacted/benefiting from/or within the project area
- Letter(s) of support may also be provided from project partners to support project implementation
 - Describe interest or involvement in project
 - Would *not* count toward this criteria, but would support other evaluation criteria



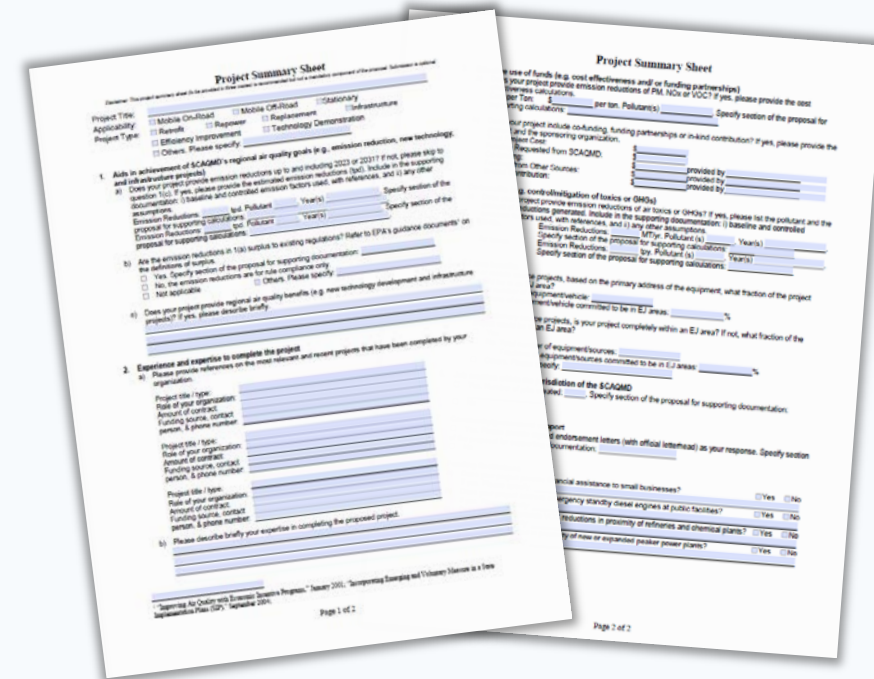
Fund Restrictions

- Projects to be matched with appropriate funds and restrictions (refer to RFP Table 1 for details)
- Examples of restrictions:
 - NOx mitigation
 - Small business assistance
 - Offsetting PM₁₀ or refinery flare emissions
 - Vicinity of new or expanded Peaker plant
 - Proximity of refineries and chemical plants

Webpage

- Voluntary Incentive Program

- RFP
- Project summary sheet (recommended)
- Bidders conference
- Community meetings
- Webpage:
<http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/voluntary-incentive-program>



Schedule for the RFP



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