Carl Moyer Program Statistics

2017 Reporting Cycle

This document provides information on Carl Moyer Program (Moyer Program) expenditures as reported by local air districts through the 2017 reporting cycle (September 9, 2017). Data are provided on the types of projects funded, the number of engines replaced or retrofitted, the calculated emission reductions and average cost-effectiveness.

<u>Background</u>: The Moyer Program provides incentive grants to fund the incremental cost of cleaner-than-required engines, equipment, and other sources. The core principle of the program is to achieve cost-effective¹ emission reductions that are permanent, surplus, quantifiable, enforceable and creditable to the State Implementation Plan (SIP). Covered pollutants include oxides of nitrogen (NOx), reactive organic gases (ROG), and particulate matter (PM).

The program was authorized at \$69 million for Fiscal Year (FY) 2017-18, which was allocated according to statutes that take into account population, air quality and other factors. Air districts are allowed a minimum allocation of \$200,000 and districts that accept a larger allocation must provide matching funds. Regular Moyer funds come from smog abatement fees and tire fees. Air districts use local funds, often including motor vehicle registration fees under Assembly Bill (AB) 923, as matching funds.

The Moyer Program is implemented as a partnership between the California Air Resources Board (CARB) and local air districts. Air districts administer Moyer Program grants and select the projects to fund. CARB works collaboratively with the districts and other stakeholders to establish Guidelines² and ensure the Program reduces pollution and provides cleaner air for Californians.

<u>Improvements from last year</u>: For the 2017 Moyer Program Statistics CARB staff has added a column to Table 7 below showing the average cost-effectiveness by source category by air district.

<u>Funding Timeline</u>: The Moyer Program began in 1998 and funds were first allocated in FY 1998-99, called "funding year 1." The most current funding year being expended is funding year 19 (FY2016-17), which is not complete yet. Air districts have four years to liquidate each year of funds received. See the table below for examples:

Fiscal Year Allocation	Funding Year	Liquidation Year
2011-12	14	2016
2012-13	15	2017
2013-14	16	2018

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<u>Emission Reductions</u>: Emission reductions are calculated for the life of each project. The project life is the number of years the project achieves surplus emission reductions; it is also the contract period.

<u>Source Categories</u>: The data in the tables below provide program information by general source category and detailed source category. For example, the general source category data group "Off-Road - Other" includes off-road construction, off-road cargo handling, off-road ground support equipment, transportation refrigeration units (TRU) and forklifts. The detailed source category table disaggregates this information by these specific equipment types and provides additional information related to whether the project involves equipment repower or replacement. Data are also displayed by funding year and air district.

<u>Funds Executed vs. Total Allocated Funds</u>: In Table 1 below, the Total Funds Allocation represents project and administration dollars granted to air districts; administration funds are used by districts to support program implementation and outreach and are not spent on projects. Funds Executed represents the reported funds spent or dedicated to projects via contract or voucher. Funding sources include regular Moyer funds, Match, Non-Match, Multi-District, Rural Assistance Program (RAP), State Reserve and Moyer Interest. Note that funds reported as executed have not necessarily been liquidated yet. Please also note that air districts may report Non-Match AB 923 funded projects to CARB for SIP credit; however, there is no Non-Match allocation or target for air districts to meet. For that reason, funds executed may be greater than the allocation. (Please note that summation of funds may slightly vary due to rounding).

<u>Data Sources</u>: Moyer Program data are compiled from two primary sources: the CARL database, which provides very detailed project information for funding year 8 and subsequent years, and the Carl Moyer 2006 Status Report⁴, which provides a summary of data for the earlier funding years; these data were reported by Excel Spreadsheet.

- Data for funding years 8-19 were generated from the CARL database. At the time of air district reporting:
 - Funding years 8-15 were fully liquidated. All funds were paid-in-full and the projects they funded were made operational.
 - Funding years 16-19 were at various stages of implementation, from contracted to liquidated.
 - Project life is based on reported information for each piece of equipment. Emission reductions are calculated over the full project life, shown in the tables as life emission reductions.
- Data for Funding years 1-7 were gathered from the Carl Moyer 2006 Status Report.
 - The 2006 Status Report provided results for funding years 1-6. Incomplete data for funding year 7 were extrapolated based on an average of the funding years 1-6 data, for the purpose of estimating a complete total.
 - Project life for years 1-7 is an average 9.7 years per table IV-2 on page 2 of the 2006
 Status Report, for the purpose of calculations.

Footnotes:

- 1. Infrastructure projects are exempt from cost-effectiveness requirements.
- 2. Carl Moyer Guidelines: http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm
- 3. Clean Air Reporting Log (CARL) database: http://www.arb.ca.gov/app/cmp/index.php
- 4. Carl Moyer 2006 Status Report: http://www.arb.ca.gov/msprog/moyer/status/status.htm

Table 1: Moyer Program Summary for Funding Years 1-19¹

	Engine Count ⁴	Life NOx+ROG (tons) ³	Life PM Funds (tons) ³ Executed ⁵		Total Funds Allocation ²
Totals	61,708	186,156	6,801	\$1,019,557,989	\$1,211,397,942

Footnotes Referenced in Table 1:

- 1. Table includes reported project information for funding years 1-19. Funding years 8-19 reflect total funded engines for all source categories with an executed contract in CARL. Off-Road Other includes construction, cargo handling, ground support, transportation refrigeration units, and forklifts. Funding years 1-6 data are from the 2006 Status Report Table IV-1. Funding year 7 data were extrapolated based on an average of funding years 1-6 data and factored to account for incomplete data see 2006 Status Report page 9 text.
- 2. Total Funds Allocated includes project and district administration funds for years 1-19 including regular Moyer, Match, Multi-district and State Reserve, Rural Assistance Program, and Moyer interest. Not all of these funds have been fully liquidated. Non-match funds do not have an allocation target.
- 3. Emission reductions are for the life of the project. For funding years 8-19 "life reductions" are derived by multiplying the annual emission reductions by the project life for each equipment. Project life for funding years 1-7 is 9.7 years, an average of the project lives published in the 2006 Status Report table IV-2 page 12.
- 4. Engine count includes repowers, retrofits, scrap, new purchases, and vehicle/equipment replacements.
- 5. Funds Executed includes funding and payments reported on projects including regular Moyer, Match, Nonmatch, Multi-district and State Reserve, Rural Assistance Program, and Moyer Interest.

Table 2: Moyer Funding Years 1-19 by General Source Category - Since Inception in 1998

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General Source Category	Engine Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed
On-Road	7,408	24,649	671	\$186,189,821
Off-Road Other	3,056	40,046	1,391	\$240,718,050
Off-Road Agricultural	3,394	17,953	723	\$199,144,083
Stationary and Portable Agricultural Engines	7,760	61,313	2,359	\$111,818,437
Marine Vessels	2,026	30,551	1,414	\$145,171,127
Locomotives	220	8,236	216	\$83,674,551
Car Scrap	26,806	2,881	15	\$28,678,716
Lawn and Garden Equipment	11,035	67	3	\$1,600,075
Shore Power	4	462	11	\$8,875,880
Infrastructure	N/A	N/A	N/A	\$13,687,249

61,708 186,156 6,801 \$1,019,557,989

Table 3: Moyer Funding Years 1-7 by General Source Category - from Status Report

		Life		
	Engine	NOx+ROG	Life PM	Funds
General Source Category	Count	(tons)	(tons)	Executed
On-Road	2,782	15,426	418	\$46,990,021
Off-Road Other	662	13,649	654	\$25,165,414
Off-Road Agricultural	157	628	26	\$1,778,700
Stationary and Portable Agricultural Engines	4,326	39,834	1,778	\$49,852,783
Marine Vessels	606	16,629	954	\$34,926,693
Locomotives	35	1,268	26	\$3,184,149
Car Scrap	0	0	0	0
Lawn and Garden Equipment	0	0	0	0
Shore Power	0	0	0	0
Infrastructure	N/A	N/A	N/A	0

8,567 87,434 3,857 \$161,897,759

Table 4: Moyer Funding Years 8-19 by General Source Category - from CARL

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		Life		
	Engine	NOx+ROG	Life PM	Funds
General Source Category	Count	(tons)	(tons)	Executed
On-Road	4,626	9,222	252	\$139,199,800
Off-Road Other	2,394	26,397	737	\$215,552,636
Off-Road Agriculture	3,237	17,325	696	\$197,365,384
Stationary and Portable Agricultural Engines	3,434	21,478	581	\$61,965,654
Marine Vessels	1,420	13,921	459	\$110,244,434
Locomotive	185	6,968	190	\$80,490,402
Car Scrap	26,806	2,881	15	\$28,678,716
Lawn and Garden Equipment	11,035	67	3	\$1,600,075
Shore Power	4	462	11	\$8,875,880
Infrastructure	N/A	N/A	N/A	\$13,687,249
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53,141 98,722 2,945 857,660,230

Table 5: Program Statistics by Funding Years 8-19

		Life			Project
	Engine	NOx+ROG	Life PM		Allocation
Funding Year	Count	(tons)	(tons)	Funds Executed	Funds ¹
8	4,204	28,285	867	\$100,075,642	\$94,977,599
9	5,625	14,525	468	\$96,482,345	\$91,599,870
10	3,374	10,731	249	\$93,829,973	\$91,695,316
11	9,547	10,048	265	\$84,272,798	\$80,461,822
12	2,598	5,719	141	\$72,135,788	\$70,381,770
13	5,570	6,793	216	\$79,594,617	\$72,234,034
14	11,745	5,448	169	\$74,776,219	\$72,129,676
15	3,840	4,877	175	\$67,587,015	\$64,812,283
16	2,832	4,980	156	\$72,728,010	\$66,774,215
17	2,251	4,663	138	\$70,111,139	\$69,789,858
18	1,326	2,167	78	\$35,633,263	\$69,682,575
19	229	486	23	\$10,433,420	\$69,930,670
	53,141	98,722	2,945	\$857,660,230	\$914,469,688

1. Project Allocation Funds are the total annual project allocations, including regular Moyer, Match, Multi-district and State Reserve, Rural Assistance Program, and reported Moyer interest, but not including administration funds.

^{2.} Funding years highlighted in green are in progress and are subject to change. Data for fully liquidated funding years, in gray, represent complete paid and operational projects for each year, whereas progress year data are not yet final.

Table 6: Program Statistics by Source Category and Project Type for Funding Years 8-19

Table 6: Program Statistics by Source Category and Project Type for	runung rea	Life	Life	
	Engine	NOx+ROG	PM	Funds
Detailed Source Category	Count	(tons)	(tons)	Executed
Auxiliary Power Unit - New Purchase	1	10	5	\$39,033
Car Scrap (VAVR) - Scrap	26,806	2,881	15	\$28,678,716
Infrastructure - Infrastructure	N/A	N/A	N/A	\$13,687,249
Lawn and Garden Equipment - Scrap	11,035	67	3	\$1,600,075
Locomotives - Idle Limiting Device	61	485	14	\$770,598
Locomotives - New Purchase	69	4,540	126	\$54,671,196
Locomotives - Remanufacture Kit	3	175	5	\$575,163
Locomotives - Repower	52	1,768	44	\$24,473,446
Marine Vessels - Repower	1,417	13,820	457	\$108,181,535
Marine Vessels - Retrofit	3	102	3	\$2,062,899
Marine Vessels - Shore Power	3	230	5	\$4,097,105
Off-Road Equipment - Airport Ground Support - Replacement	95	93	5	\$2,780,358
Off-Road Equipment - Cargo Handling - Replacement	11	60	2	\$876,732
Off-Road Equipment - Cargo Handling - Repower	25	137	1	\$3,026,966
Off-Road Equipment - Cargo Handling - Retrofit	1	0	0	\$13,249
Off-Road Equipment - Construction - Replacement	325	1,811	66	\$46,223,098
Off-Road Equipment - Construction - Repower	1,617	23,118	625	\$153,560,048
Off-Road Equipment - Construction - Retrofit	46	0	3	\$809,112
Off-Road Equipment - Forklift Engines - Retrofit	13	10	0	\$58,259
Off-Road Equipment - Mobile Agricultural - Replacement	2,821	14,808	607	\$175,971,010
Off-Road Equipment - Mobile Agricultural - Repower	376	2,435	83	\$20,270,868
Off-Road Equipment - Mobile Agricultural - Retrofit	1	0	0	\$5,005
Off-Road Equipment - Other - New Purchase	27	251	9	\$330,569
Off-Road Equipment - Other - Replacement	101	170	8	\$5,269,474
Off-Road Equipment - Other - Repower	40	700	15	\$2,087,700
Off-Road Equipment - Other - Retrofit	25	13	2	\$238,390
Off-Road Equipment - Other - Shore Power	1	232	6	\$4,778,775
Off-Road VIP Agriculture - Replacement	39	83	6	\$1,118,500
Off-Road VIP Construction - Replacement	2	4	0	\$45,500
On-Road Fleet Modernization - Replacement	245	759	51	\$22,370,053
On-Road Heavy-Duty Vehicles - New Purchase	612	1,475	6	\$14,627,367
On-Road Heavy-Duty Vehicles - Repower	970	2,108	56	\$19,884,188
On-Road Heavy-Duty Vehicles - Retrofit	845	795	89	\$14,610,164
On-Road TIMBER - Replacement	169	422	11	\$8,382,500
On-Road Voucher Incentive Program - Replacement	1,783	3,654	34	\$59,276,496
On-Road Voucher Incentive Program - Retrofit	1	0	0	\$10,000
Stationary and Portable Agricultural Engines - New Purchase	31	191	8	\$177,698
Stationary and Portable Agricultural Engines - Replacement	1	3	3	\$58,105
Stationary and Portable Agricultural Engines - Repower	3,400	21,272	570	\$61,684,943
Stationary and Portable Agricultural Engines - Tiered Reductions	1	10	1	\$23,108

Table 6 Continues...

		Life	Life	
	Engine	NOx+ROG	PM	Funds
Detailed Source Category	Count	(tons)	(tons)	Executed
Stationary and Portable Agricultural Engines - Variable Frequency	1	3	0	\$21,800
Transport Refrigeration Unit - New Purchase	20	8	0	\$118,916
Transport Refrigeration Unit - Retrofit	46	21	2	\$114,264

53,141 98,722 2,945 \$857,660,230

Table 7: Program Statistics by Air District and Source Category for Funding Years 8-19

,	Engine	Life NOx+ROG	Life PM	Funds	Average Cost-
Air District and Source Category	Count	(tons)	(tons)	Executed	Effectiveness
Amador County APCD		(12 1)	(/		
On-Road	1	2	0.1	\$45,000	\$15,309
Off-Road Other	3	16	0.3	\$95,798	\$11,361
	4	18	0	\$140,798	
Antelope Valley AQMD					
Off-Road Agriculture	30	173	6.6	\$3,352,190	\$13,787
Off-Road Other	24	93	4.4	\$2,176,761	\$14,726
Infrastructure	N/A	N/A	N/A	\$410,806	
Stationary and Portable Agricultural Engines	5	49	1.5	\$302,816	\$6,570
Car Scrap	720	72	0.4	\$720,000	\$10,520
	779	386	13	\$6,962,572	
Bay Area AQMD					
On-Road	375	645	13.1	\$10,977,454	\$13,394
Marine Vessels	334	8,013	245.4	\$29,879,843	\$9,720
Off-Road Agriculture	489	810	40.9	\$23,744,011	\$15,630
Off-Road Other	323	2,160	82.5	\$22,936,118	\$13,086
Locomotive	28	1,207	33.3	\$13,997,454	\$7,969
Stationary and Portable Agricultural Engines	6	18	0.6	\$64,438	\$4,089
Car Scrap	23,158	2,462	13.0	\$24,787,479	\$10,771
	24,713	15,314	429	\$126,386,797	
Butte County AQMD					
Stationary and Portable Agricultural Engines	89	239	8.7	\$1,540,467	\$6,129
Off-Road Agriculture	77	281	13.3	\$2,176,300	\$6,670
On-Road	14	35	1.1	\$792,062	\$16,735
Off-Road Other	12	42	1.1	\$555,659	\$9,941
	192	597	24	\$5,064,488	
Calaveras County APCD					
On-Road	9	29	1.8	\$831,552	\$27,571
Off-Road Other	2	45	1.6	\$189,839	\$4,094
Lawn and Garden Equipment	11	0	0.0	\$1,595	\$13,941
	22	73	3	\$1,022,986	
	Engine	Life NOx+ROG	Life PM	Funds	Average Cost-
Air District and Source Category	Count	(tons)	(tons)	Executed	Effectiveness

Colusa County APCD					
Stationary and Portable Agricultural Engines	161	1,460	51.2	\$3,219,533	\$2,849
Off-Road Agriculture	15	85	22.5	\$579,648	\$5,369
	176	1,545	74	\$3,799,182	
Eastern Kern APCD					
On-Road	4	7	0.3	\$344,490	\$47,583
Off-Road Other	12	59	1.9	\$905,636	\$11,521
Stationary and Portable Agricultural Engines	23	49	1.0	\$571,263	\$10,791
	39	114	3	\$1,821,388	
Feather River AQMD					
Stationary and Portable Agricultural Engines	91	217	8.8	\$1,081,952	\$5,891
Off-Road Agriculture	108	429	21.5	\$3,753,761	\$7,526
Off-Road Other	2	4	0.2	\$97,600	\$14,925
	201	650	30	\$4,933,313	
Glenn County APCD					
Off-Road Other	2	9	0.3	\$144,665	\$11,647
On-Road	6	0	0.5	\$77,556	\$8,433
Stationary and Portable Agricultural Engines	155	495	17.3	\$1,775,345	\$3,957
Off-Road Agriculture	33	106	5.1	\$1,146,674	\$6,745
	196	610	23	\$3,144,240	
Imperial County APCD					
Stationary and Portable Agricultural Engines	92	151	4.9	\$1,780,752	\$9,465
Off-Road Agriculture	55	121	5.6	\$1,455,662	\$8,061
Infrastructure	N/A	N/A	N/A	\$229,559	
	147	272	11	\$3,465,973	
Lake County AQMD					
Stationary and Portable Agricultural Engines	3	3	0.1	\$37,437	\$7,937
Off-Road Other	2	4	0.1	\$91,976	\$14,023
On-Road	3	7	0.8	\$197,852	\$10,214
	8	15	1	\$327,265	
Lassen County APCD					
Stationary and Portable Agricultural Engines	25	152	5.7	\$493,496	\$4,760
Off-Road Agriculture	30	73	3.2	\$1,105,227	\$11,403
On-Road	2	4	0.1	\$75,000	\$15,072
Off-Road Other	5	16	0.4	\$303,483	\$13,511
	62	244	9	\$1,977,205	

Air District and Source Category	Engine Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Mendocino County AQMD		, ,			
On-Road	16	5	1.1	\$283,245	\$11,454
Off-Road Agriculture	4	24	0.7	\$342,582	\$9,660
Marine Vessels	12	144	4.9	\$690,337	\$5,647
Stationary and Portable Agricultural Engines	12	45	1.6	\$380,372	\$10,244
Off-Road Other	8	47	1.7	\$627,965	\$11,154
	52	266	10	\$2,324,501	
Modoc County APCD			_	, , , , , , , , , , , , , , , , , , , ,	
Off-Road Other	4	41	1.4	\$155,914	\$5,413
Stationary and Portable Agricultural Engines	4	6	0.2	\$74,032	\$8,793
Off-Road Agriculture	1	5	0.1	\$46,180	\$6,992
	9	51	2	\$276,126	
Mojave Desert AQMD				7 3/2 3	
Car Scrap	1,014	102	0.5	\$1,202,021	\$12,393
Infrastructure	N/A	N/A	N/A	\$1,740,520	, ,
Off-Road Other	15	91	3.3	\$1,289,175	\$11,526
On-Road	3	12	5.1	\$98,441	\$10,845
Off-Road Agriculture	4	14	0.7	\$290,817	\$13,148
	1,036	220	10	\$4,620,976	
Monterey Bay Unified APCD	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1 /2 2/2 2	
Stationary and Portable Agricultural Engines	42	147	4.5	\$1,003,535	\$6,520
Off-Road Other	19	130	5.1	\$3,099,520	\$13,298
Marine Vessels	73	333	10.7	\$4,089,487	\$10,133
Off-Road Agriculture	41	148	7.6	\$2,042,386	\$6,548
Infrastructure	N/A	N/A	N/A	\$298,143	
	175	758	28	\$10,533,071	
North Coast Unified AQMD	1				
Off-Road Agriculture	56	151	12.6	\$2,536,542	\$10,477
On-Road	76	180	6.4	\$3,214,637	\$13,246
Off-Road Other	10	91	3.0	\$652,532	\$7,130
Marine Vessels	35	386	12.9	\$2,271,237	\$4,719
	177	807	35	\$8,674,947	
Northern Sierra AQMD				, , , , , , , , , , , , , , , , , , , ,	
Infrastructure	N/A	N/A	N/A	\$95,642	
Off-Road Agriculture	8	37	1.4	\$589,045	\$11,791
On-Road	11	17	1.5	\$589,384	\$14,091
Off-Road Other	14	55	1.9	\$1,131,258	\$15,120
	33	108	5	\$2,405,329	

Northern Sonoma County APCD		Freine	Life	Life	Francis	Average
Northern Sonoma County APCD A	Air District and Source Category	Engine	NOx+ROG	PM (tops)	Funds	Cost-
Off-Road Agriculture 43 44 2.8 \$1,441,459 \$15,87 Stationary and Portable Agricultural Engines 21 24 0.7 \$448,042 \$12,96 On-Road 5 14 0.4 \$265,000 \$13,56 Off-Road Other 3 10 0.4 \$122,100 \$10,88 Marine Vessels 3 12 0.4 \$194,100 \$10,68 Infrastructure N/A N/A N/A N/A \$150,000 Sacramento Metropolitan AQMD* Off-Road Agriculture 565 2,476 87.9 \$46,918,919 \$12,53 Off-Road Other 125 811 26.8 \$9,357,891 \$12,53 Off-Road Other 125 811 26.9 \$9,349,451 \$9,59 Off-Road Other 125 811 26.9 \$9,394,510 \$6,01 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,7		Count	(tons)	(tons)	Executed	Effectiveness
Stationary and Portable Agricultural Engines 21	•	12	1.1	20	¢1 441 4E0	¢1E 970
On-Road 5 14 0.4 \$265,000 \$13,56 Off-Road Other 3 10 0.4 \$122,100 \$10,84 Marine Vessels 3 12 0.4 \$194,100 \$10,88 Infrastructure N/A N/A N/A \$150,000 \$10,68 Infrastructure N/A N/A N/A \$150,000 \$10,68 Off-Road Agriculture 565 2,476 87.9 \$46,918,919 \$12,53 Off-Road Other 125 811 26.8 \$9,357,891 \$9,79 On-Road 174 246 16.9 \$4,117,176 \$9,58 Stationary and Portable Agricultural Engines 635 2,303 69.2 \$9,394,510 \$6,01 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Other		+				
Off-Road Other 3 10 0.4 \$122,100 \$10,84 Marine Vessels 3 12 0.4 \$194,100 \$10,68 Infrastructure N/A N/A N/A \$150,000 \$10,68 Infrastructure 75 104 \$5 \$2,620,701 \$2,620,701 Sacramento Metropolitan AQMD* Off-Road Agriculture 565 2,476 87.9 \$46,918,919 \$12,53 Off-Road Other 125 811 26.8 \$9,357,891 \$9,78 Stationary and Portable Agricultural Engines 635 2,303 69.2 \$9,394,510 \$6,01 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 San Diego County APCD Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49		+			•	
Marine Vessels 3 12 0.4 \$194,100 \$10,68 Infrastructure N/A N/A N/A \$150,000 \$150,000 Sacramento Metropolitan AQMD* Off-Road Agriculture 565 2,476 87.9 \$46,918,919 \$12,53 Off-Road Other 125 811 26.8 \$9,357,891 \$9,79 On-Road 174 246 16.9 \$4,117,176 \$9,58 Stationary and Portable Agricultural Engines 663 2,303 692 \$9,394,510 \$6,01 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 San Diego County APCD Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,889,938 \$14,20		1 1			. ,	·
Infrastructure		-			•	
Sacramento Metropolitan AQMD*						\$10,684
Sacramento Metropolitan AQMD* Off-Road Agriculture 565 2,476 87.9 \$46,918,919 \$12,53 Off-Road Other 125 811 26.8 \$9,357,891 \$9,79 On-Road 174 246 16.9 \$4,117,176 \$9,58 Stationary and Portable Agricultural Engines 635 2,303 69.2 \$9,394,510 \$6,01 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 San Diego County APCD Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomoti	Intrastructure					
Off-Road Agriculture 565 2,476 87.9 \$46,918,919 \$12,53 Off-Road Other 125 811 26.8 \$9,357,891 \$9,79 On-Road 174 246 16.9 \$4,117,176 \$9,58 Stationary and Portable Agricultural Engines 635 2,303 69.2 \$9,394,510 \$6,61 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 Experimental Engines 1,549 7,068 237 \$80,728,045 San Diego County APCD USTAGO Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Other 47 181 8.3 \$3,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111		75	104	5	\$2,620,701	
Off-Road Other 125 811 26.8 \$9,357,891 \$9,79 On-Road 174 246 16.9 \$4,117,176 \$9,58 Stationary and Portable Agricultural Engines 635 2,303 69.2 \$9,394,510 \$6,01 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 Examples 1,549 7,068 237 \$80,728,045 \$5,14 San Diego County APCD Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,859,098 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,890,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265	•	1 1				
On-Road 174 246 16.9 \$4,117,176 \$9,58 Stationary and Portable Agricultural Engines 635 2,303 69.2 \$9,394,510 \$6,01 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locmotive 40 1,193 35.2 \$10,703,763 \$5,14 San Diego County APCD Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Shore Power 2 156 2.9 \$2,497,105 \$14,32 Stationary and Portable Agricultural Engines 752 3,566 106 \$49,857,269 Stationary and Portable Agricultural E		+	·			\$12,538
Stationary and Portable Agricultural Engines 635 2,303 69.2 \$9,394,510 \$6,01 Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 San Diego County APCD Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 33,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265 3.7 \$3,027,309 \$9,91 Shore Power 2 156 2.9 \$2,497,105 \$14,32 Off-Road Agriculture 921		+				\$9,799
Marine Vessels 10 39 1.0 \$235,786 \$6,15 Locomotive 40 1,193 35.2 \$10,703,763 \$5,14 Topical County APCD Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265 3.7 \$3,027,309 \$9,91 Shore Power 2 156 2.9 \$2,497,105 \$14,32 **Comotive 5 265 3.7 \$3,027,309 \$9,91 **San Joaquin Valley APCD** **Stationary and Portable Agricultural Engines 1,676 14,984 364.1 332,152,638 \$3,61		+				\$9,583
Locomotive	Stationary and Portable Agricultural Engines	635	2,303	69.2	\$9,394,510	\$6,016
1,549	Marine Vessels	10	39	1.0	\$235,786	\$6,150
San Diego County APCD Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265 3.7 \$3,027,309 \$9,91 Shore Power 2 156 2.9 \$2,497,105 \$14,32 San Joaquin Valley APCD* 752 3,566 106 \$49,857,269 San Joaquin Valley APCD* Off-Road Agricultural Engines 1,676 14,984 362.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 362.1 \$32,152,638 \$3,61 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 <t< td=""><td>Locomotive</td><td>40</td><td>1,193</td><td>35.2</td><td>\$10,703,763</td><td>\$5,143</td></t<>	Locomotive	40	1,193	35.2	\$10,703,763	\$5,143
Off-Road Other 188 1,275 44.2 \$19,211,373 \$13,10 Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265 3.7 \$3,027,309 \$9,91 Shore Power 2 156 2.9 \$2,497,105 \$14,32 The Power of the Power of Stationary and Portable Agricultural Engines 1,676 106 \$49,857,269 San Joaquin Valley APCD* Off-Road Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29		1,549	7,068	237	\$80,728,045	
Marine Vessels 166 1,036 34.9 \$11,736,589 \$11,49 Off-Road Agriculture 47 181 8.3 \$3,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265 3.7 \$3,027,309 \$9,91 Shore Power 2 156 2.9 \$2,497,105 \$14,32 **San Joaquin Valley APCD** **Off-Road Agriculture 921 9,364 32.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 **San Luis Obispo County APCD	San Diego County APCD					
Off-Road Agriculture 47 181 8.3 \$3,859,964 \$12,57 On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265 3.7 \$3,027,309 \$9,91 Shore Power 2 156 2.9 \$2,497,105 \$14,32 Total Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricul	Off-Road Other	188	1,275	44.2	\$19,211,373	\$13,107
On-Road 324 542 9.1 \$8,980,938 \$14,20 Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265 3.7 \$3,027,309 \$9,91 Shore Power 2 156 2.9 \$2,497,105 \$14,32 **San Joaquin Valley APCD*** **Off-Road Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 **San Joaquin Valley APCD** **Off-Road Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 **San Luis Obispo County APCD Off-Road Agriculture	Marine Vessels	166	1,036	34.9	\$11,736,589	\$11,496
Stationary and Portable Agricultural Engines 20 111 3.5 \$543,990 \$7,77 Locomotive 5 265 3.7 \$3,027,309 \$9,91 Shore Power 2 156 2.9 \$2,497,105 \$14,32 To Flow Power 2 156 2.9 \$2,497,105 \$14,32 San Joaquin Valley APCD* Off-Road Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 <td>Off-Road Agriculture</td> <td>47</td> <td>181</td> <td>8.3</td> <td>\$3,859,964</td> <td>\$12,577</td>	Off-Road Agriculture	47	181	8.3	\$3,859,964	\$12,577
San Joaquin Valley APCD* San Joaquin Valley APCD S	On-Road	324	542	9.1	\$8,980,938	\$14,207
Shore Power 2 156 2.9 \$2,497,105 \$14,32 San Joaquin Valley APCD* Off-Road Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 <td>Stationary and Portable Agricultural Engines</td> <td>20</td> <td>111</td> <td>3.5</td> <td>\$543,990</td> <td>\$7,774</td>	Stationary and Portable Agricultural Engines	20	111	3.5	\$543,990	\$7,774
752 3,566 106 \$49,857,269 San Joaquin Valley APCD* Off-Road Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessel	Locomotive	5	265	3.7	\$3,027,309	\$9,917
752 3,566 106 \$49,857,269 San Joaquin Valley APCD* Off-Road Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessel	Shore Power	2	156	2.9	\$2,497,105	\$14,320
San Joaquin Valley APCD* Off-Road Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46		752	3.566	106		
Off-Road Agriculture 921 9,364 327.7 \$65,030,236 \$5,59 Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46	San Joaquin Valley APCD*		3,000		+ 10,001,000	
Stationary and Portable Agricultural Engines 1,676 14,984 364.1 \$32,152,638 \$3,61 On-Road 479 823 39.3 \$13,302,135 \$11,90 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46		921	9.364	327.7	\$65.030.236	\$5,599
On-Road 479 823 39.3 \$13,302,135 \$11,900 Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46		+				\$3,614
Off-Road Other 69 1,101 37.2 \$7,320,057 \$6,03 Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 3,174 28,021 818 \$137,009,541 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46		1				\$11,902
Locomotive 29 1,749 49.5 \$19,204,476 \$8,59 3,174 28,021 818 \$137,009,541 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46						\$6,037
3,174 28,021 818 \$137,009,541 San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46						\$8,590
San Luis Obispo County APCD Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46						1 - 7
Off-Road Agriculture 41 67 3.2 \$1,732,520 \$15,17 Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46	San Luis Ohisno County APCD	3,174	20,021	010	7137,003,341	
Stationary and Portable Agricultural Engines 38 121 3.4 \$752,399 \$6,22 Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46	, ,	Δ1	67	3 2	\$1 732 520	\$15 176
Off-Road Other 19 73 2.4 \$1,265,062 \$12,54 On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46	· ·					·
On-Road 27 66 1.5 \$1,203,138 \$19,92 Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46		1				
Car Scrap 421 43 0.2 \$456,800 \$10,88 Marine Vessels 3 5 0.2 \$89,563 \$12,46		+				
Marine Vessels 3 5 0.2 \$89,563 \$12,46						
	•	+ +				
549 374 11 \$5,499,482	WIGHTING VC33CI3					712,403

	Engine	Life NOx+ROG	Life PM	Funds	Average Cost-
Air District and Source Category	Count	(tons)	(tons)	Executed	Effectiveness
Santa Barbara County APCD	26	100	4.1	¢2 025 595	612.741
Off-Road Agriculture Marine Vessels	26 36	100 71	4.1 2.4	\$2,025,585	\$12,741
Off-Road Other	+		3.5	\$1,306,812	\$13,239
	14	76		\$824,992	\$10,105
On-Road	13	8	0.3	\$167,980	\$13,819
Stationary and Portable Agricultural Engines	24	118	3.6	\$516,771	\$5,221
Car Scrap	1,493	202	0.8	\$1,512,416	\$9,921
Shasta County AQMD	1,606	576	15	\$6,354,555	
On-Road	67	173	3.7	\$3,251,657	\$14,290
Off-Road Other	24	88	4.0	\$1,292,363	\$9,288
Off-Road Agriculture	57	206	8.3	\$2,260,380	\$7,098
Stationary and Portable Agricultural Engines	13	43	1.6	\$2,200,380	\$4,861
Stationary and Fortable Agricultural Engines	161	510	18	\$7,033,423	74,001
Siskiyou County APCD	101	310	10	\$7,033,423	
On-Road	23	49	1.8	\$1,345,000	\$34,086
Off-Road Other	9	49	1.7	\$564,000	\$11,062
Off-Road Agriculture	3	30	1.1	\$241,822	\$5,414
Stationary and Portable Agricultural Engines	1	12	0.4	\$9,394	\$552
Stationary and Fortable Agricultural Engines	36	140	5	\$2,160,216	7332
South Coast AQMD	30	140	<u> </u>	\$2,100,210	
On-Road	2,954	6,265	145.3	\$87,373,480	\$11,612
Off-Road Other	1,458	19,485	489.3	\$139,194,780	\$10,812
Off-Road Agriculture	139	780	33.7	\$13,797,002	\$11,864
Marine Vessels	661	3,468	131.8	\$54,612,532	\$11,891
Stationary and Portable Agricultural Engines	6	67	1.0	\$279,922	\$6,006
Infrastructure	N/A	N/A	N/A	\$10,762,579	
Shore Power	2	306	8.1	\$6,378,775	\$14,958
Lawn and Garden Equipment	11,024	67	2.6	\$1,598,480	\$14,850
Locomotive	83	2,555	68.6	\$33,557,401	\$9,593
	16,327	32,992	880	\$347,554,951	
Tehama County APCD					
On-Road	7	18	0.5	\$357,194	\$13,331
Stationary and Portable Agricultural Engines	44	132	7.4	\$902,075	\$6,498
Off-Road Agriculture	53	163	8.9	\$1,825,969	\$10,053
	104	313	17	\$3,085,238	
Tuolumne County APCD					
On-Road	14	20	1.3	\$743,799	\$26,342
Off-Road Other	5	23	1.0	\$220,107	\$12,087
Off-Road Agriculture	15	60	2.2	\$950,348	\$13,678
	34	104	4	\$1,914,254	

Air District and Source Category	Engine Count	Life NOx+ROG (tons)	Life PM (tons)	Funds Executed	Average Cost- Effectiveness
Ventura County APCD					
Stationary and Portable Agricultural Engines	248	533	19.8	\$4,411,453	\$6,576
Marine Vessels	87	414	14.7	\$5,138,148	\$9,331
Off-Road Agriculture	376	1,401	66.7	\$14,120,155	\$6,201
On-Road	19	55	0.5	\$565,630	\$12,378
Off-Road Other	23	502	17.1	\$1,726,012	\$3,824
	753	2,905	119	\$25,961,398	
Total	53,141	98,722	2,945	\$857,660,230	

^{*}Sacramento District figures include projects in surrounding districts for which it has administered funds, including El Dorado, Placer and Yolo-Solano. San Joaquin Valley figures include similar projects in the Great Basin District.