

Mobile Source Certification and Compliance Fee Workshop

Aftermarket Parts, Evaporative Components, and Retrofits

July 30, 2020

1 PM

Agenda

- Recap
 - Legislation
 - California's Mobile Sources Categories
 - Mobile Source Certification and Compliance Program cost calculations
 - Considerations and Information used to develop fees
- Information review by EO Series Category
 - CARB Total Costs
 - Proposed Fees and Discounts
 - Other SRIA Data inputs
- Next Steps
 - SRIA comments by August 14th; other September 11th

HSC 43019.1

New Off-Road, Aftermarket Parts, Components Fees

- Authority provided by SB 854 in 2018
- CARB may adopt a schedule of fees to cover all or a portion of the state board's reasonable costs associated with the certification, audit, and compliance as authorized pursuant to HSC 38560*, 43013 and 43018, and subdivision (h) of Section 27156 of the Vehicle Code.

*Fee authority applies to both criteria and GHG Executive Orders.

HSC 43019.1

New Off-Road, Aftermarket Parts, Components Fees (continued)

- Includes categories not covered by current mobile source fees (HSC 43019: on-road vehicles and engines)
- Such categories may include:
 - Off-road engines and equipment
 - Non-vehicular engines and equipment
 - Aftermarket parts
 - Emissions control components

HSC 43019.1

New Off-Road, Aftermarket Parts, Components Fees (continued)

- Fee assessment considers:
 - impacts on manufacturers
 - company size
 - number of certifications requested and consistency with prior-year certifications
 - category complexity
 - product's potential impact on emissions
 - potential change in number of certifications issued
 - impacts on processing time, etc., if fee doesn't cover CARB's costs

CARB Mobile Source Certification and Compliance Program Costs

Mobile Source (MS) Program Executive Order (EO) Categories

EO Number Series	Topic	EO Number Series	Topic
	On-Road Vehicles and Engines		Off-Road Vehicles and Engines (Cont'd)
A	New Cars, Light/Medium/Heavy-Duty Vehicles/Engine	U-U	New Small Off-Road Spark - Ignition Engines/Equipment
M	New Street-Use Motorcycles	U-W	New Spark - Ignition Marine Engines/Watercraft
N	New On-Road Heavy-Duty Exempt Engines		Evaporative Components
P	New Federal AB965 Cars & Light-Duty Trucks	G	Portable Fuel Containers (PFCs) Certified For Use In California
	GHG Phase 2	RM	Evaporative components for Spark-ignited Marine Water Craft
A	P2 GHG Vehicle /ZEP	Q	Small Off-Road Engines - Evaporative Components
AT	GHG Trailer		Aftermarket Parts
AD	GHG Aerodynamic Components	B	Alternative Fuel Retrofit Certification
	Off-Road Vehicles and Engines	C	Experimental Permits
U-G	Electric Golf Carts	D	Aftermarket Part Exemptions
U-L	New Off-Road Large Spark-Ignition (LSI) Engines/Equipment	K	Aftermarket Critical Emission Control Parts for Highway Motorcycles.
U-M	New Emission Compliant ("Green Sticker") Off-Road Motorcycles, All-Terrain/Utility/Sport Vehicles, Sandcars		Retrofits
U-N	New Emission Non—Compliant ("Red Sticker") Off-Road Motorcycles & All-Terrain Vehicles	DE	Verification of Diesel Emission Control Strategies (On/Off Road, SS, Harbor Craft, TRU, RTG) for In-Use Diesel Engine Regulations
U-R	New Off-Road Compression - Ignition Engines	AB	Alternative Control Technologies (e.g. Bonnets) verification/approval for At-Berth regulation

Types of Activities Used to Determine Costs for the Purposes of This Fee Regulation

- Staff labor, operational cost, and equipment to conduct certification activities and audits
 - Review and approval of applications with the issuance of an Executive Order or authorization letter
 - Testing and confirming product in production or before, includes testing for defeat devices
- Staff labor, operational cost, and equipment to conduct compliance activities
 - Warranty and in-use manufacturer reporting requirement
 - In-use and defeat device testing product after sale to meet durability and emission criteria

Does not include costs for regulatory development, research, or enforcement activities

CARB's Costs Calculation

- Labor
 - FY labor values times the percentage of staff time working in program by classification
 - Surveyed first line managers and staff conducting certification and compliance activities
 - Plus 26% of labor cost for management, administrative, legal and IT overhead
- Operating Costs
- Equipment Costs
 - Annual value = 10 year amortization of cost
- Facility Costs (utilities, rent, housekeeping, etc)
Based on square footage of laboratory space

CARB MS Fee Program Costs (all categories)

Costs	2018*	2022**
Total	\$38.6 M	\$48.5 M
Direct Labor	\$25.8 M	\$29.1 M
Indirect Labor	\$6.7 M	\$7.6 M
Operational Costs	\$3.5 M	\$5.7 M
Equipment Costs	\$1.7 M	\$5.1 M
Facility Costs	\$0.9 M	\$1.1M
PYs	150	163

* 2018 labor costs based on 18/19 FY mid range labor costs and does not include additional PYs for program growth received in 18/19 FY through 21/22 FY funding cycles.

** 2021-2022 labor costs based on 19/20 mid range labor costs and includes additional PYs for program growth. In addition, the increase in operational and equipment costs for the expanded services provided by the Riverside laboratory.



Considerations and Information Requests for Developing Fees and Discounts

Considerations

- Number of certifications requested, consistency with prior year certifications and anticipated change in number annually
- Complexity of the regulated category
- A product's potential impact on emissions
- The complexity of the evaluation required
- Size of the manufacturer
- Potential impacts for CARB if costs not fully covered
- Potential impacts on manufacturers

Fee Cost Impacts on Manufacturers

- February Workshop Request/Website posted/
Several follow-up e-mails
- Using CARB costs per application, what impact will these costs have on:
 - the number of applications
 - California production
 - vehicle/equipment pricing
 - impact your business model
 - type of financial hardship (if any) for your business
 - any factors that are not currently being considered, but you believe should be considered when establishing new certification fees



CARB Costs Proposed Fees SRIA Inputs

Aftermarket Parts Program (B, C, D, and K E.O. Series)

CARB Aftermarket Parts Program Costs*

(B,C,D and K E.O. Series)

	2018	2022
Total Costs:	\$3,254,000	\$4,805,000
Labor Costs (All)	\$2,959,000	\$4,361,000
Direct Labor	\$2,349,000	\$3,461,000
Indirect Labor Cost (26%)	\$611,000	\$900,000
Operational Costs	\$149,000	\$150,000
Equipment Costs	\$102,000	\$249,000
Facility Costs	\$44,000	\$46,000
# EOs issued	277	277
Average \$/EO	\$11,747	\$17,348
Total PYs	14.1	19.4

*Cost numbers rounded to the nearest \$1000

2022 Costs by E.O. Series

Program Costs* (B, C, D and K)

	B	C	D	D _{fuel tank}	D _{cat} /D _{dpf} /K
Total Costs:	\$576,000	\$112,000	\$3,091,000	\$305,000	\$722,000
Labor (All)	\$465,000	\$112,000	\$2,980,000	\$194,000	\$611,000
Direct	\$369,000	\$89,000	\$2,365,000	\$154,000	\$485,000
Indirect	\$96,000	\$23,000	\$615,000	\$40,000	\$126,000
Operational	\$38,000	-	\$38,000	\$38,000	\$38,000
Equipment	\$62,000	-	\$62,000	\$62,000	\$62,000
Facility	\$11,000	-	\$11,000	\$11,000	\$11,000
# EOs issued	24	53	131	50	19
Average \$/EO	\$23,978	\$2,114	\$23,597	\$6,099	\$43,826
PYs	1.8	0.5	14	0.7	2.2

*Cost numbers rounded to the nearest \$1000

Proposed Fees

Aftermarket Parts E.O. Series

EO Series Category	Application Fee Type			
	New	Small Biz	Electric	Carry over
Alternative Fuel/Tech (B)	\$23,978	\$17,984	\$5,995	-
Experimental Permit (C)	\$195	-	-	-
Performance/General (D)	\$2000	\$1000	-	\$500
Fuel Tanks ($D_{\text{fuel tank}}$)	\$2000	\$1000	-	\$500
Catalytic, DPF, MC ($D_{\text{cat}}/D_{\text{dpf}}/K$)	\$10,000	\$5,000	-	\$2,500

Fee Phase-in for B Series New and Small Business Applications*

Fee	21/22	22/23	23/24	24/25	202? **
Alternative Fuel Retrofits B series	No Current Fee Reqs	50% of Proposed fee	75% of Proposed fee	100% of Proposed fee	100% of B Series Cost Recovery
% of Cost recovery (all AM series)	none	11%	14%	16%	19%
Total \$ Recovery*	none	\$522,158	\$661,531	\$776,926	\$890,882

*C,D and K series fees fixed and not phase in.

** Other actions will be sought to balance out full cost recovery

Slide Updated 9/30/20

Aftermarket Parts California Production/Sales Trends used for SRIA

SRIA Input Category	Source				Input Value			
	B	D	D _{FT}	D _{cat} /K	B	D	D _{FT}	D _{cat} /K
2018 CA Production/Sales	Survey	SEMA	Survey	MECA/ Survey	87	1.2 M	1,771	316,796/ 649
2018-2031 Trends					0%	0%	15%	0%
Sales Split								
Individual					-	100%	74%	95%/100%
Business					100%	-	18%	5%/-
Local Government					-	-	5%	-
State Government					-	-	2%	-

Evaporative Component Program (G, Q and RM E.O. Series)

CARB Evaporative Component Program Costs*

(G, Q and RM EO Series)

	2018	2022
Total Costs:	\$426,000	\$441,000
Labor Costs (All)	\$417,000	\$431,000
Direct Labor	\$331,000	\$342,000
Indirect Labor Cost (26%)	\$86,000	\$89,000
Operational Costs	\$3,000	\$3,000
Equipment Costs	\$4,000	\$4,000
Facility Costs	\$2,000	\$2,000
# EOs issued	121	121
Average \$/EO	\$11,138	\$11,516
Total PYs	1.9	1.9

*Cost numbers rounded to the nearest \$1000

2022 Costs by E.O. Series

Program Costs* (G, Q and RM)

	G	Q	RM
Total Costs:	\$61,000	\$366,000	\$14,000
Labor (All)	\$55,000	\$363,000	\$14,000
Direct	\$44,000	\$288,000	\$11,000
Indirect	\$11,000	\$75,000	\$3,000
Operational	\$2,000	\$1,000	-
Equipment	\$3,000	\$1,000	-
Facility	\$1,000	\$1,000	-
# EOs issued	9	97	15
Average \$/EO	\$6,827	\$3,771	\$917
PYs	0.2	1.6	0.1

*Cost numbers rounded to the nearest \$1000

Proposed Fees

Evaporative Component E.O. Series

EO Series	Application Fee Type	
	New	No change renewal or adding models
Portable Containers (G) -	\$6,827 (4 year)	\$1,707
Small Off-road Engines (Q)	\$3,771 (4 year)	\$1,188
Marine Watercraft (RM)	\$917 (one time)	\$229

Fee Phase-in for New Applications*

Fee	21/22	22/23	23/24	24/25	202?
Evap Components G, Q, RM series	No Current Fee Reqs	50% of Proposed fee	75% of Proposed fee	100% of Proposed fee	100% of Cost Recovery
% of Cost recovery	none	43%	61%	78%	100%
Total \$ Recovery	none	\$229,554	\$325,052	\$420,549	\$536,228

- Proposed adding engine family and minor change fees start in 22/23 and are not phased in.
- ** Other actions will be sought to balance out full cost recovery

Slide Updated 9/30/20

Evaporative Component California Production/Sales Trends used for SRIA

SRIA Input Category	Source			Input Value		
	G	Q	RM	G	Q	RM
2018 CA Production/Sales	Survey	Reg Dev*	Reg Dev*	1,336,536	9,703,665	75,081
2018-2031 Trends	Survey	Reg Dev*	Reg Dev*	0%	1.6%	0%
Sales Split						
Individual				87%	67%	100%
Business				13%	33%	-
Local Government				<.01%	-	-
State Government				<.01%	-	-

* Estimate made by multiplying the average number of components per final product times product category (Q=2.5 X U-U series: RM=3 x U-W series)



Retrofit Program (Locomotive, DE and AB E.O. Series)

CARB Retrofit Program Costs*

(Locomotive, DE and AB E.O. Series)

	2018	2022
Total Costs:	\$2,166,000	\$1,482,000
Labor Costs (All)	\$2,151,000	\$1,467,000
Direct Labor	\$1,707,000	\$1,165,000
Indirect Labor Cost (26%)	\$444,000	\$303,000
Operational Costs	\$15,000	\$15,000
Equipment Costs	\$0	\$0
Facility Costs	\$0	\$0
# EOs issued	34	34
Average \$/EO	\$64,000	\$44,000
Total PYs	10.7	6.6

*Cost numbers rounded to the nearest \$1000

2022 Program Costs*

Locomotive, DE and Ships At Berth

	DE	Locomotive	Ships At-Berth
Total Costs:	\$901,000	\$369,000	\$212,000
Labor (All)	\$896,000	\$364,000	\$207,000
Direct	\$711,000	\$289,000	\$165,000
Indirect	\$185,000	\$75,000	\$43,000
Operational	\$5,000	\$5,000	\$5,000
Equipment	\$0	\$0	\$0
Facility	\$0	\$0	\$0
	Actions	EOs	EOs
# issued	29	4	1
Average \$/EO-Action	\$31,083	\$92,173	\$212,000
PYs	4.1	1.6	0.9

*Cost numbers rounded to the nearest \$1000

Proposed Fees DE (i.e. retrofit DPFs) and Locomotive

	Application Type				
	Application		EO Fee, Implementation and Warranty	In-Use [1/3@100 units-2/3@ 300 units]	Extensions (non-ECG or major modifications)
	Initial	Final			
DE	\$48,075	\$24,038	\$24,038	\$36,056	\$24,038
Small Business	\$36,056	\$18,028	\$18,028	\$27,042	\$18,028
Locomotive	\$18,434	-	\$73,738*	-	-
Small Business	\$13,826	-	\$55,304*	-	-

*For Locomotive, fee upon issuance of verification letter

Fee Phase-in for New and related Small Business Applications*

Fee	21/22	22/23	23/24	24/25	202?***
Retrofit DE and Locomotive series	No Current Fee Reqs	50% of Proposed fee	75% of Proposed fee	100% of Proposed fee	100% of Cost Recovery
% of Cost recovery	none	64%	79%	95%	100%
Total \$ Recovery	none	\$817,000	\$1,009,000	\$1,201,000	\$1,270,000

*Proposed extension fee starts in 22/23 and is not phased in.

** Other means will be sought to balance out full cost recovery

Slide Updated 9/30/20

Retrofit California Production/Sales Trends used for SRIA

SRIA Input Category	Source			Input Value		
	DE ¹	DE	Loco	DE ¹	DE	Loco
2018 CA Production/Sales	Reported	Reported	Reported	1,535	561	15
2018-2031 Trends	Reg	Reg	Incentive Prog.	Sunset	5.2%	0%
Sales Split						
Individual				3%	-	-
Business				91%	92%	100%
Local Government				4%	5%	-
State Government				1%	1%	<1%

1. Sales cease due to regulation between 2023 -2028 for on-road, off-road, TRU and RTG retrofits.

Proposed Fees - Ships At Berth

CARB Approved Emission Control Strategies (CAECS)

AB Series – CAECS (Bonnetts)	Base Fee	Small Business Fee
Test Plan review	\$10,156	\$7,617
Application Fee	\$25,390	\$19,043
CEMS Review (per vessel visit)	\$254	\$191
Design Change Fee	\$10,156	\$7,617
Minor Amendment	\$2,031	\$1,523

Fee Phase-in for New and related Small Business At-Berth (Bonnetts) Applications*

Fee	21/22	22/23	23/24	24/25	202?
At Berth AB series	No Current Fee Reqs	50% of Proposed fee	75% of Proposed fee	100% of Proposed fee	100% of Cost Recovery
% of Cost recovery	none	50%	75%	100%	100%
Total \$ Recovery	none	\$106,135	\$159,203	\$212,000	\$212,000

- Proposed fees for AB CEMS, Design Change, and Minor Amendment applications start in 22/23 and are not phased in. New fees for Innovative Concepts not included.

Slide Updated 9/30/20

At-Berth Alt. Control Technology California Production/Sales Trends used for SRIA

SRIA Input Category	Source	Input Value
2018 CA Production/Sales	Reg Dev	85
2018-2031 Trends	Reg Dev	28.8% increase per year
Sales Split		
Individual		-
Business		95%
Local Government		5%
State Government		-

Next Steps

Information Requests

Please provide your feedback by August 14th

- Regulatory cost
 - Fee schedule: For any changes, please include business information which can be handled as confidential if requested. Subject to limitation under the California Public Records Act.
 - Model cost inputs

Please provide your feedback by September 11th

- Regulatory alternatives
 - Definitions for small business
 - Phase in process
 - Other Fee information for regulation development

Timeline

- First Workshop (April 30, 2019)
- Second Workshop (November 21, 2019)
- Third Workshop (February 21, 2020)
- Fourth Workshop (July 31, 2020)
- Fifth Workshop (3rd Quarter, 2020)
- Additional work groups or meetings, as needed
- Board Hearing date (Spring, 2021)

Stay Informed

GovDelivery (List serve)

Sign on, search for name of topic “Mobile Source Certification and Compliance Fee Regulation,” check box, and hit the submit button (at bottom of page)

<https://public.govdelivery.com/accounts/CARB/subscriber/new>

Workshop notices and information

<https://ww2.arb.ca.gov/mobile-source-certification-and-compliance-fee-regulation-meetings-workshops>

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Questions?