

Carl Moyer Memorial Air Quality Standards Attainment Program

Marine Project Fact Sheet

The Bay Area Air Quality Management District (Air District) is accepting applications for the Carl Moyer Memorial Air Quality Standards Attainment Program (CMP) beginning **July 14**, **2014.** Marine projects eligible for funding include main or auxiliary engine replacement, engine remanufacture kits, engine retrofit and new vessel purchase.

Apply on-line at: www.baaqmd.gov/moyer

Before starting your application:

• Read this Fact Sheet.

questions.

- Understand any state fleet rules that may apply to your fleet. Information is available at ARB's website: http://www.arb.ca.gov/ports/marinevess/harborcraft.htm
- Start collecting information needed for your application.
- Contact your engine or equipment dealer to discuss possibilities for your equipment.
- Review Chapter 12 "Marine Vessels" of the current California Air Resources Board (ARB) 2011 Carl Moyer Program Guidelines
 at: http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm
- Contact Geraldina Grünbaum at (415) 749-4956 or ggrunbaum@baaqmd.gov with any

CMP Marine Project Quick-Reference Guide

Eligible Projects		
Eligible Projects Eligible marine projects	 Repower: Replace an in-use engine with a new, lower-emission engine Remanufacture Kit: Installation of engine remanufacture kit that reduces the engine's emissions New Vessel Purchase: Purchase of a new marine vessel with propulsion and auxiliary engines certified to be at least 30% cleaner than the applicable oxides of nitrogen (NO_x) emission standard; funding for a new purchase is very limited and must be considered on a case-by-case basis. 	
	 Retrofit: Installation of an CARB-verified diesel emission control strategy; funding for a retrofit device is very limited and must be considered on a case-by-case basis. 	
Eligible marine engines and vessels	 Propulsion or auxiliary engines 25 horsepower or greater All new replacement engines must be certified to meet the appropriate EPA engine emission standard and provide at least a 15% NOx reduction compared to the old engine. Engines less than or equal to 100 horsepower are required to meet Tier 3 EPA standards, unless it can be demonstrated that the technology is technically infeasible or unavailable. Commercial vessels including, barge, crew, supply, dredge, excursion (tour), ferries, tugboats, towboats, commercial or charter fishing, pilot, work boats, and other vessels not subject to the Harbor Craft Regulation (HCR) in-use compliance requirements 	
Area of activity	The vessel must operate within California Costal Water Boundaries AND within the Air District jurisdiction (Alameda, Contra Costa, Marin, San Mateo, San Francisco, Santa Clara, and Napa counties, and the southern portions of Solano and Sonoma counties). See Chapter 12 Page 4 in the CMP guidelines for coordinates of California Costal boundaries. District boundaries range south of Bodega Bay through San Mateo County. http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm The Air District will prioritize projects that reduce emissions in the following impacted	

communities: 1) Concord, 2) Richmond/San Pablo, 3) Western Alameda County, 4) San Jose, 5) Livermore, 6) Eastern San Francisco, 7) San Rafael, 8) Vallejo, and 9) Antioch/ Pittsburg. For a Priority Community Map, visit: http://www.baaqmd.gov/moyer.

Eligible Funding	Eligible Funding and Project Costs				
	Project Type		Maximum Eligible Funding		
	Barge, crew, supply, dredge,	Engine repower or	50%		
	excursion, ferry, towboat, tugboat	remanufacture kit	3070		
		Engine repower or			
Maximum	Fishing, pilot, work boat, other vessels	remanufacture kit compliant to Tier 2	80%		
reimbursement	not subject to Harbor Craft Regulation	emission standards			
percentage of	in-use compliance requirements	Compliant to EPA	0.704		
total project		Tier 3 emission level	85%		
costs eligible	Any vessel propulsion engine repower			ĺ	
for Carl Moyer	with an off-road Tier 2 or cleaner				
Program	engine				
funding	CARB-verified marine retrofit device	Case-by-ca			
	New vessel purchase	Case-by-ca			
	Shore power shore side: 50% of transforter transformer	rmer and other equipment	between vessel and		
	Shore power ship side: 100% of retrofit	costs: parcent of transfer	mor costs	1	
	Shore power ship side. 100% of retrofit	costs, percent of transfor	inci costs	J	
	The capital cost of the new engine	ne or remanufacture kit			
	 Purchase of or modifications to the cooling system; fuel and exhaust system; wiring, 				
	panel, and harness system; power take-offs; propulsion control system; gauges and				
	alarms; and radiator and ventilat				
	funded engine				
	 Gears / transmissions may be of 			clude	
Eligible marine	a written statement from the e				
costs	transmission are required and why the current equipment will not work.				
	- Frames needed to be extended or other parts needed to be cut or modified in order to				
	accommodate the new engine, as well as paint or coating needed to protect those				
	specific areas that were cut or modified - Tax and transport for eligible parts or costs				
	 Labor for installation of or modi 		for funding		
	 Retrofit device and installation 	reaction to parts engine i	or randing		
	 Retrofit device and instantation Dry docking fees, engine destruction for repower, bid work, etc. 				
	 Rudders or propellers 	1 ,	,		
	- Steering system				
	 Sea trials and dry docking 				
	- Paint, coatings, or hull work not directly related to the engine repower				
Ineligible	- Tax and transport for ineligible p		. C C 1'		
marine costs	Labor for installation of or modification to parts ineligible for funding Any parts or labor typically included as part of routine vessel or engine overhault.				
	 Any parts or labor typically included as part of routine vessel or engine overhaul, maintenance, repair, or upkeep 				
	 These and other items may be eligible for funding on a case-by-case basis if it can be 				
	proven that they are not part of the				
	maintenance and are a necessary				
Attachments Rec	quired for the Application				
	Quotes must include:				
Quote(s) for	 Itemized list of eligible project c 	osts			
the equipment	- EPA Engine Family Number	0 11 1			
to be funded:	Hourly rate and number of hours	s for labor charges			
EPA					
Certificate of	(For engine replacement projects only)				
Conformity	You must provide the EPA Certificate of	Conformity for the engin	e being requested.		
	l .				

Usage documentation	You must provide records documenting usage from the previous two continuous years. These records must show the usage of each engine for which funds are being requested. Acceptable usage documentation includes hour logs taken from a functional hour meter.	
Initial ARB Harbor Craft Report	You must provide a copy of the initial ARB Harbor Craft Report required by the State of California: http://www.arb.ca.gov/ports/marinevess/harborcraft/reporting.htm . As of February 28, 2009 all commercial harbor craft owner/operators were required to keep records for each vessel, and to install (if not already installed) a non-resettable hour meter on each engine. Vessel owner/operators will need to keep a copy of their initial report and yearly records on the vessel or in a central dockside location to be made available upon request by ARB staff. If you haven't completed a report, contact ARB to get started: • Kirk Rosenkranz – Phone: (916) 327-7843 / E-mail: krosenkr@arb.ca.gov For more information about record keeping: http://www.arb.ca.gov/ports/marinevess/harborcraft.htm	
Proof of Insurance	You must provide documentation of general liability and workers compensation insurance and machinery insurance equal to the full replacement value of the equipment. Owner-operator fishing vessels are not required to carry insurance.	
Project Requirer	ments	
Project life & equipment usage requirements	 Minimum of three (3) years. Equipment must remain in service for the project life. The project must be completed (engine installed and operational) three (3) years prior to the associated Harbor Craft Regulation Compliance date. (See the ARB Harbor Craft Regulation Compliance Schedule shown below) 	
Cost- effectiveness	Projects must meet a cost-effectiveness of \$17,720 per weighted ton of NOx, ROG and PM10 reduced to be eligible.	
Application Insti	ructions	
Complete an application	Apply on-line at www.baaqmd.gov/moyer	
After you apply	Applications that are determined to be complete will be evaluated on a first-come, first-served basis. All applicants will receive application completeness notifications within 5 business days via email. If you do not hear from the District within 5 business days, please contact the District immediately.	
Questions?	For questions or more information, please contact Geraldina Grünbaum at (415) 749-4956 or ggrunbaum@baaqmd.gov	

ARB Commercial Harbor Craft Regulation Information

Webpage: http://www.arb.ca.gov/ports/marinevess/harborcraft.htm

	al Harbor Craft Regulation All owners/operators of commercial	l harbor craft that operate in Cali	fornia Regulated Waters
What qualifies as harbor craft?	All owners/operators of commercial harbor craft that operate in California Regulated Waters are required to comply with the reporting requirement of the regulation. Commercial harbor craft include, but are not limited to, ferries, excursion vessels, tugboats (including ocean-going tugboats), towboats, crew and supply vessels, work boats, pilot vessels, barges, and commercial and charter fishing boats. EXEMPT: Harbor craft engines between 25 and 50 horsepower are exempt from and are not required to be repowered three years prior to the compliance deadlines in the tables below to be eligible for Carl Moyer Program funding.		
Who is exempt?			
What types of vessels are required to replace engines?	Ferries, excursion vessels, tugboats (including ocean-going tugboats), towboats, crew and supply vessels and barges / dredges. Compliance dates for these engines are listed below. For more information about the HCR, please visit: http://www.arb.ca.gov/ports/marinevess/harborcraft.htm#background		
	Compliance Dates for Engines on Push Boats located outside the So Engine Model Year	uth Coast AQMD Total Annual Hours of	gboats, Towboats, and Compliance Date
		Operation	
	1075 1 1		12/21/2000
	1975 and earlier	≥ 1500	12/31/2009
	1975 and earlier	≥ 1500 $\geq 300 \text{ and } < 1500$	12/31/2010
	1975 and earlier 1976 - 1985	≥ 1500 $\geq 300 \text{ and } < 1500$ ≥ 1500	12/31/2010 12/31/2011
Regulation	1975 and earlier 1976 - 1985 1976 - 1985	≥ 1500 $\geq 300 \text{ and} < 1500$ ≥ 1500 $\geq 300 \text{ and} < 1500$	12/31/2010 12/31/2011 12/31/2012
compliance	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995	≥ 1500 $\geq 300 \text{ and } < 1500$ ≥ 1500 $\geq 300 \text{ and } < 1500$ $\geq 300 \text{ and } < 1500$ ≥ 1500	12/31/2010 12/31/2011 12/31/2012 12/31/2013
compliance schedule for	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995	≥ 1500 $\geq 300 \text{ and } < 1500$ ≥ 1500 $\geq 300 \text{ and } < 1500$ ≥ 1500 ≥ 1500 $\geq 300 \text{ and } < 1500$	12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014
compliance schedule for engine	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only	≥ 1500 $\geq 300 \text{ and } < 1500$ ≥ 1500 $\geq 300 \text{ and } < 1500$ $\geq 300 \text{ and } < 1500$ ≥ 1500	12/31/2010 12/31/2011 12/31/2012 12/31/2013
compliance schedule for engine replacement	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries	≥ 1500 $\geq 300 \text{ and } < 1500$ ≥ 1500 $\geq 300 \text{ and } < 1500$ ≥ 1500 ≥ 1500 $\geq 300 \text{ and } < 1500$	12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014
compliance schedule for engine replacement must meet EPA Tier 2 or Tier 3 emission	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999		12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014
compliance schedule for engine replacement nust meet EPA Tier 2 or Tier 3 emission standards—	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 Vessels Other Than Ferries	≥ 1500 ≥300 and < 1500 ≥1500 ≥ 300 and < 1500 ≥ 1500 ≥ 300 and < 1500 ≥ 300 ≥ 300 ≥ 1500 ≥ 300 and < 1500 ≥ 1500	12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014 12/31/2015
compliance schedule for engine replacement nust meet EPA Tier 2 or Tier 3 emission standards— cleanest	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 Vessels Other Than Ferries 1996 - 1999		12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014 12/31/2015 12/31/2016
compliance schedule for engine replacement nust meet EPA Tier 2 or Tier 3 emission standards—	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 2000	≥ 1500 ≥300 and < 1500 ≥1500 ≥ 300 and < 1500 ≥ 1500 ≥ 300 and < 1500 ≥ 300 ≥ 300 ≥ 1500 ≥ 300 and < 1500 ≥ 1500	12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014 12/31/2015 12/31/2016
compliance schedule for engine replacement nust meet EPA Tier 2 or Tier 3 emission standards— cleanest	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 2000 2000		12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014 12/31/2015 12/31/2016 12/31/2016
compliance schedule for engine replacement nust meet EPA Tier 2 or Tier 3 emission standards— cleanest	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 2000 2000 2001 - 2002		12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014 12/31/2015 12/31/2016 12/31/2016 12/31/2017
compliance schedule for engine replacement nust meet EPA Tier 2 or Tier 3 emission standards— cleanest	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 2000 2000 2000 2001 - 2002 2003		12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014 12/31/2015 12/31/2016 12/31/2016 12/31/2017 12/31/2018
compliance schedule for engine replacement nust meet EPA Tier 2 or Tier 3 emission standards— cleanest	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 2000 2000 2000 2000 2001 - 2002 2003 2004		12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014 12/31/2015 12/31/2016 12/31/2016 12/31/2016 12/31/2017 12/31/2018 12/31/2019
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compliance schedule for engine replacement must meet EPA Tier 2 or Tier 3 emission standards— cleanest	1975 and earlier 1976 - 1985 1976 - 1985 1986 - 1995 1986 - 1995 Ferries Only 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 Vessels Other Than Ferries 1996 - 1999 2000 2000 2000 2001 - 2002 2003 2004 2005 2006	≥ 1500 ≥300 and < 1500 ≥1500 ≥ 300 and < 1500 ≥ 1500 ≥ 300 and < 300 ≥ 300 ≥ 300 ≥ 300 ≥ 300 ≥ 300 ≥ 300 ≥ 300 ≥ 300 ≥ 300	12/31/2010 12/31/2011 12/31/2012 12/31/2013 12/31/2014 12/31/2014 12/31/2015 12/31/2016 12/31/2016 12/31/2016 12/31/2017 12/31/2018 12/31/2019 12/31/2020 12/31/2021

ARB Commercial Harbor Craft Regulation

Compliance Dates for Engines on Crew and Supply Vessels Statewide

Regulation compliance schedule for engine replacement

must meet EPA Tier 2 or Tier 3 emission standards cleanest available

Engine Model Year	Total Annual Hours of Operation	Compliance Date
1985 and earlier	> 1500	12/31/2011
1985 and earlier	> 300 and < 1500	12/31/2012
1986 – 1995	> 1500	12/31/2013
1986 – 1995	> 300 and < 1500	12/31/2014
1996 – 2000	> 1500	12/31/2015
1996 – 2000	> 300 and < 1500	12/31/2016
2001 – 2002	> 300	12/31/2017
2003	> 300	12/31/2018
2004	> 300	12/31/2019
2005	> 300	12/31/2020
2006	> 300	12/31/2021
2007	> 300	12/31/2022

Compliance Dates for pre-Tier 1 and Tier 1 Engines on Dredge and Barge Vessels Statewide

Regulation compliance schedule for engine replacement

must meet EPA
Tier 2 or Tier 3
emission
standards—
cleanest
available

Engine Model Year	Total Annual Hours of	Compliance Date
	Operation	
1975 and earlier	>80	12/31/2011
1976 -1980	>80	12/31/2012
1981 - 1985	>80	12/31/2013
1986-1990	>80	12/31/2014
1991-1995	>80	12/31/2015
1996-1999	>80	12/31/2016
2000 -2001	>80	12/31/2017
2002	>80	12/31/2018
2003	>80	12/31/2019
2004	>80	12/31/2020
2005	>80	12/31/2021
2006	>80	12/31/2022

Questions?

Kirk Rosenkranz – Phone: (916) 327-7843 / E-mail: krosenkr@arb.ca.gov

Website: http://www.arb.ca.gov/ports/marinevess/harborcraft.htm