

PORT OF LOS ANGELES DRAFT EMISSIONS CONTROL MEASURE DESCRIPTIONS

Revised No.	Previous* No.	Title	Lead Agency**	Measure Category	Measure Focus	Page No.
SOURCE CATEGORY: OCEAN-GOING VESSELS						
Adopted Ocean-Going Vessel Measures						
<u>OGV1</u>	OGV1	New Engine Standards for Ships	IMO/EPA	Adopted	Engine Standards	1
<u>OGV2</u>	OGV2A	Vessel Speed Reduction (VSR) Memorandum of Understanding (MOU)	Port of Los Angeles	Adopted	Operational Efficiencies or Improvements	4
<u>OGV3</u>	OGV5A	Alternative Maritime Power (AMP)	Port of Los Angeles	Adopted	Operational Efficiencies or Improvements	6
<u>OGV4</u>	OGV7	Auxiliary Engine Fuel Improvement Program	Port of Los Angeles	Adopted	Fuel Requirements	8
Measure Focus: Engine Standards						
<u>OGV5</u>	OGV3	New Engine Standards for Category 3 Marine Engines	EPA	Additional	Engine Standards	10
<u>OGV6</u>	OGV9	Reroute Cleaner Ships	Port of Los Angeles	Additional	Engine Standards	13
<u>OGV7</u>	OGV11	Low Emission Main Propulsion Engines	Port of Los Angeles	Additional	Engine Standards	15
Measure Focus: Fuel Requirements						
<u>OGV8</u>	OGV4A	Cleaner Fuels for Ship Auxiliary Engines	ARB	Proposed	Fuel Requirements	17

* As documented in handouts from Stakeholder Meeting, January 25-26, 2005.

** Lead Agency means the entity that is responsible for development, implementation and enforcement of the control measure shown.

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<u>OGV9</u>	N/A	Main Engine Fuel Improvement Program	Port of Los Angeles	Proposed	Fuel Requirements	19
<u>OGV10</u>	OGV6	Creation of a Sulfur Emission Control Area (SECA)	EPA and ARB	Additional	Fuel Requirements	21
<u>OGV11</u>	OGV8	Expanded Auxiliary Engine Fuel Improvement Program	Port of Los Angeles	Additional	Fuel Requirements	22
<u>OGV12</u>	N/A	Expanded Main Engine Fuel Improvement Program	Port of Los Angeles	Additional	Fuel Requirements	24

Measure Focus: Retrofit/Repower

<u>OGV13</u>	OGV4B	Additional Auxiliary Engine Reductions for Frequent Callers	ARB	Proposed	Retrofit/Repower	26
<u>OGV14</u>	OGV10	Retrofit/Repower Requirements for Infrequent Callers	Port of Los Angeles	Additional	Retrofit/Repower	28

Measure Focus: Operational Efficiencies or Improvements

<u>OGV15</u>	OGV2B	Expanded VSR Program	Port of Los Angeles	Additional	Operational Efficiencies or Improvements	30
<u>OGV16</u>	OGV5B	Expanded AMP	Port of Los Angeles	Additional	Operational Efficiencies or Improvements	32
<u>OGV17</u>	OGV12	Additional In-Use Measures for Ships	EPA and ARB	Additional	Operational Efficiencies or Improvements	35

SOURCE CATEGORY: HARBOR CRAFT

Adopted Harbor Craft Measures

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<u>HC2</u>	HC2A	Clean Fuels for Harbor Craft	ARB	Adopted	Fuel Requirements	39
<u>HC3</u>	HC6	Early Implementation of ULSD	Port of Los Angeles	Adopted	Fuel Requirements	40
<u>HC4</u>	HC8	Dredging Activities	ARB/Local Districts	Adopted	Engine Standards	41
<u>HC5</u>	HC9	Technical Advisory Committee (TAC) Harbor Craft Measures	Port of Los Angeles	Adopted	Retrofit/Repower	42
Measure Focus: Engine Standards						
<u>HC6</u>	HC3	New Engine Standards for Category 1 and 2 Marine Engines	EPA	Additional	Engine Standards	43
Measure Focus: Fuel Requirements						
<u>HC7</u>	HC5	Emulsified Fuels	Port of Los Angeles	Additional	Fuel Requirements	45
Measure Focus: Retrofit/Repower						
<u>HC8</u>	HC2B	In-Use Harbor Craft Emission Reduction Measure/Airborne Toxic Control Measure (ATCM)	ARB	Proposed	Retrofit/Repower	47
<u>HC9</u>	HC4	Repower Existing Harbor Craft	Port of Los Angeles	Additional	Retrofit/Repower	48
<u>HC10</u>	HC7	Retrofit Existing Harbor Craft	Port of Los Angeles	Additional	Retrofit/Repower	50
Measure Focus: Operational Efficiencies or Improvements						
<u>HC11</u>	N/A	AMP-Ready Staging Areas	Port of Los Angeles	Proposed	Operational Efficiencies or Improvements	52

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SOURCE CATEGORY: CARGO HANDLING EQUIPMENT

Adopted Cargo Handling Equipment Measures

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<u>CHE2</u>	CHE5A	Yard Tractor Modernization and ULSD Programs	Port of Los Angeles	Adopted	Engine Standards	55
<u>CHE3</u>	CHE7	Early Implementation of ULSD for CHE (Other than Yard Tractors)	Port of Los Angeles	Adopted	Fuel Requirements	57
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<u>CHE5</u>	CHE9	Technical Advisory Committee (TAC) CHE Measures	Port of Los Angeles	Adopted	Fuel Requirements/ Retrofit/Repower	59

Measure Focus: Engine Standards

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<u>CHE7</u>	CHE6	Enhanced CHE Modernization	Port of Los Angeles/ ARB	Additional	Engine Standards/ Retrofit/Repower	62

Measure Focus: Retrofit/Repower

<u>CHE8</u>	CHE4	Cargo Handling Equipment at Ports and Intermodal Rail Yards	ARB	Proposed	Retrofit/Repower	64
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SOURCE CATEGORY: RAIL

Adopted Rail Measures

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<u>R2</u>	R3	ARB Diesel Fuel Used by Intrastate Locomotives	ARB	Adopted	Fuel Requirements	69
<u>R3</u>	R5	Federal Standards for Nonroad Diesel Fuel	EPA	Adopted	Fuel Requirements	71
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Measure Focus: Engine Standards

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Measure Focus: Fuel Requirements

R9		ARB Diesel Fuel for Class 1 Railroad Locomotives	Port of Los Angeles	Additional	Fuel Requirements	85
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Measure Focus: Retrofit/Repower

R10	R8	Idling Controls for Switcher and Line Haul Locomotives	Port of Los Angeles	Additional	Retrofit/Repower	87
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Measure Focus: Operational Efficiencies or Improvements

R11	N/A	Efficiency Improvements on In-Use Class 1 Rail Equipment	Port of Los Angeles	Additional	Operational Efficiencies or Improvements	89
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R12	R13, R14	Electrification of Alameda Corridor and Alameda Corridor East	Port of Los Angeles	Additional	Operational Efficiencies or Improvements	91
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SOURCE CATEGORY: HEAVY-DUTY DIESEL VEHICLES

Adopted Heavy-Duty Diesel Vehicle Measures

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HDV2	HDV2	2007 On-Road Standards for Heavy-Duty Diesel Vehicles	EPA	Adopted	Engine Standards	94
HDV3	HDV21	Gateway Cities Truck Modernization Program	Port of Los Angeles	Adopted	Engine Standards	96

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<u>HDV5</u>	HDV3	Ultra Low Sulfur Diesel Fuel (15 ppm)	ARB	Adopted	Fuel Requirements	99
<u>HDV6</u>	HDV6	Heavy-Duty Vehicle Inspection	ARB	Adopted	Operational Efficiencies or Improvements	100
<u>HDV7</u>	HDV7	Periodic Smoke Inspection Program (PSIP)	ARB	Adopted	Operational Efficiencies or Improvements	101
<u>HDV8</u>	HDV8	Augment Truck and Bus Highway Inspections with Community-Based Inspections	ARB	Adopted	Operational Efficiencies or Improvements	102
<u>HDV9</u>	HDV4	Reduced Truck Idling	ARB	Adopted	Operational Efficiencies or Improvements	103
Measure Focus: Engine Standards						
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<u>HDV11</u>	HDV18, HDV19	California Heavy-Duty Diesel Vehicle Standards and Fleet Modernization for Mexican Trucks	ARB	Additional	Engine Standards	106
Measure Focus: Fuel Requirements						
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Measure Focus: Retrofit/Repower						
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<u>HDV14</u>	HDV12	Retrofit Heavy-Duty Diesel Vehicles with Diesel Particulate Filters (DPF)	Port of Los Angeles	Additional	Retrofit/Repower	109
<u>HDV15</u>	HDV9	PM In-Use Emission Control	ARB	Additional	Retrofit/Repower	111
Measure Focus: Operational Efficiencies and Improvements						
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<u>HDV17</u>	HDV25	Transportation Refrigeration Units (TRU)	ARB	Additional	Operational Efficiencies or Improvements	113
<u>HDV18</u>	HDV17	Truck Stop Electrification	Port of Los Angeles	Additional	Operational Efficiencies or Improvements	114
<u>HDV19</u>	HDV24	Idling Reduction Measures	Port of Los Angeles	Additional	Operational Efficiencies or Improvements	115
SOURCE CATEGORY: OTHER						
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