

APPENDIX E

CALIFORNIA AIR RESOURCES BOARD CALIFORNIA HARBORCRAFT EMISSIONS INVENTORY

Methodology to Calculate California Harborcraft Emissions

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Methodology to Calculate California Harborcraft Emissions from ARB 2003 Emissions Inventory

Assumptions:

- ? Harbor Craft Emissions from ARB’s 2003 Emissions Inventory of “ships and commercial boats” as shown in tables below
- ? Total emissions for commercial harbor craft derived by summing the following subcategories: “commercial boats,” “crew and supply boats,” “ships maneuvering – tugboats,” and “other.”
- ? Some of these categories have “unspecified fuel.” However, the proportions of the different pollutants for these categories indicates diesel fuel was. In addition, most commercial vessels are diesel.

NOx Emissions (TPD)

Vessel Type	Total	South Coast	North Coast	Bay Area	All Other
“Commercial Boats”	19.87	8.00	2.55	5.56	3.76
“Crew and Supply Boats”	0.80	--	--	--	0.8
“Ships Maneuv.-Tugboats”	2.22	1.66	--	0.22	0.34
“Other”	1.08	0.94	--	--	0.14
Total Commercial HC	23.97	10.6	2.55	5.78	5.04
Recreational Diesel	2.79	1.01	0.04	0.23	1.51
Total Harbor Craft	26.8	11.6	2.59	6.00	6.55

PM Emissions (TPD)

Vessel Type	Total	South Coast	North Coast	Bay Area	All Other
“Commercial Boats”	1.06	0.1	0.27	0.32	0.37
“Crew and Supply Boats”	0.08	--	--	--	0.08
“Ships Maneuv.-Tugboats”	0.06	--	--	0.02	0.04
“Other”	0.15	0.13	--	--	0.02
Total Commercial HC	1.35	0.23	0.27	0.34	0.51
Recreational Diesel	0.08	0.03	0	0.01	0.04
Total Harbor Craft	1.43	0.26	0.27	0.35	0.55