

UPDATE TO THE COMMERCIAL MARINE INVENTORY FOR TEXAS TO REVIEW EMISSIONS FACTORS, CONSIDER A TON-MILE EI METHOD, AND REVISE EMISSIONS FOR THE BEAUMONT-PORT ARTHUR NON-ATTAINMENT AREA

Final Report

Submitted to the Houston Advanced Research Center
Prepared by Eastern Research Group and Starcrest Consulting Group, LLC

January 15, 2004



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Executive Summary

Air emissions estimates were prepared for commercial marine vessels in the vicinity of Beaumont and Port Arthur, Texas. Only in-port emissions were included; the furthest seaward waypoint was approximately 14 nautical miles offshore. The evaluation year was 2000, which is consistent with the requirements of the base photochemical modeling efforts for the Houston/Beaumont region currently underway at the Texas Commission on Environmental Quality. The estimates were based on further research into emission factors as well as an improved suite of engine load factors.

Table ES-1: Report Findings, Tons per Day, 2000

All Vessels - TPD	NOX	CO	HC	PM-10	SO2
Ships	5.45	0.63	0.24	0.42	2.62
Towboats	3.73	0.56	0.10	0.11	0.41
Harbor Vessels	1.57	0.19	0.06	0.07	0.13
	10.75	1.38	0.40	0.61	3.15