

MEMORANDUM OF AGREEMENT
HOUSTON/GALVESTON OZONE NONATTAINMENT AREA TUGBOAT AND
TOWING VESSEL PROGRAM

I. Participants

1. The following member companies of the Texas Waterway Operators Association (TWOA), American Commercial Barge Lines, LLC, Bay-Houston Towing Co., Buffalo Marine Service, Inc., Capital Towing Corporation, Coastal Towing, Inc., Delaware Marine Operators, Eckstein Marine Service, Inc., Higman Marine Services, Inc., Houston Marine Services, Inc., Intracoastal Towing & Transportation Corp., Kirby Corporation, Marine Fueling Service, Inc., Martin Gas Marine, Inc., McDonough Marine Service, Megafleet Towing Co., Inc., Port Neches Towing, Inc., SeaRiver Maritime, Inc., Signet Maritime Corporation, Southern Towing Co., Stapp Towing Co., Inc., Suderman & Young Towing Co., Inc., Tug Josephine, Inc., Vessel Repair, Inc., (“Participating Companies”) which are tugboat, tank barge or towing vessel operating companies engaged in waterborne transportation within the boundaries of the Houston/Galveston Ozone Nonattainment Area (“HGA Area”), the United States Environmental Protection Agency (“EPA”), the Texas Natural Resource Conservation Commission (“TNRCC”) and the Houston-Galveston Area Council (“HGAC”) [Collectively referred to as “the signatories” or “the parties”] recognize the need to balance preservation of the environment with maintaining the economic health of the tug and barge industry. The parties further recognize that barge transportation may offer potential benefits in the HGA Area by relieving congestion and pollution caused by on-road transportation.
2. The Participating Companies voluntarily join the TNRCC, EPA and HGAC in a cooperative effort to improve air quality in the HGA Area. This Memorandum of Agreement (“MOA”) describes the joint understanding of the signatories and the future activities that are intended to be undertaken by the parties.

II. Background

3. The HGA Area has exceptional and unique emissions reductions needs. The area’s level of ozone pollution is the result of emissions generated in the HGA Area combined with the area’s unique meteorology. The HGA Area is classified under the CAA as “Severe” nonattainment area for ozone. Solutions to the HGA Area’s air pollution problems require creative and exceptional efforts.
4. The TNRCC’s State Implementation Plan (“SIP”) for the HGA Area anticipates that the state can satisfy up to three percent of the required reductions by the VMEP portion of the plan. The SIP for the HGA Area includes as part of the VMEP portion of the SIP, up to 3% of the required reductions. As part of the VMEP portion of the SIP, the total reductions that are expected from the

Participating Companies in the aggregate under this MOA, are a total of approximately 1.1 tons per day from the SIP inventory baseline level in emissions of NO_x in the HGA Area for 2007 and are in addition to the NO_x reductions expected to result from EPA's emissions standards and other reductions which have been relied upon in the SIP.

5. Towing vessels and barges engage in interstate commerce, moving cargo along the Gulf Coast and deep into the heartland of America. Towing vessels are an environmentally attractive alternative to other modes of transportation, producing 95% less oxides of nitrogen than trucks and 82% less oxides of nitrogen emissions than trains per ton mile of freight transported. (1996 U.S. Department of Transportation Study "Environmental Benefits of Marine Transportation") Industry estimates indicate tug and barge traffic in the HGA Area carried the equivalent amount of cargo that, if transported on shore, would have to be moved in more than four million trucks a year. Industry estimates that by utilizing towing vessel, tug and barge transportation approximately 6.2 tons per day of NO_x emissions are prevented in the HGA Area by diverting cargo transported from trucks to tank barge transit.
6. The parties recognize the environmental benefits of tugboat and towing vessel operations and affirm that this MOA is not intended and shall not be interpreted in a manner that would serve to cap or limit future industry growth.
7. The EPA finalized emission standards for new engines used in commercial marine vessels on December 29, 1999 pursuant to Sections 223(a)(3) of the Clean Air Act ("CAA" or "the Act") [See 64 Fed. Reg. 73300 (Dec. 29, 1999)]. These standards will go into effect on specified dates during the years 2004 to 2007, depending on engine size. EPA estimates that in 2030, when the affected fleet of vessels is expected to fully employ complying engines, emissions from commercial marine diesel engines will be reduced nationally by a 24 percent reduction for oxides of nitrogen and a 12 percent reduction in particulate matter emissions. (Final Regulatory Impact Analysis: Control of Emissions from Marine Diesel Engines, Document EPA 420-R-99-026, November 1999). The requirements for compliance with these emission standards are described in 40 CFR Parts 89, 92 and 94.

This MOA outlines further efforts that the Participating Companies will voluntarily make in the HGA Area to achieve an additional reduction of emissions that will be granted as a SIP credit under the Voluntary Mobile Source Emission Reduction Program ("VMEP").

III. TNRCC, HGAC and the Participating Companies Actions

8. Because of the exceptional and unique air quality problems in the 8-county area, the Participating Companies have volunteered to implement measures to achieve the additional reductions mentioned in the previous paragraph. Examples of measures under consideration include but are not limited to: a) Operating practices and measures, including application of methods to reduce tug and towing vessel main engine and barge pump engine idling time, b) Local fleet management measures, including assignment of specific tugs, towing vessels and barges to the HGA Area, c) Modifications to the tug, towing vessel and barge engines and support equipment, early integration of new marine diesel engines or the retrofit of existing marine diesel engines, d) Early use of regulated fuels as they are made available, and/or e) Other maintenance measures consistent with the tug, towing vessel and barge support operations.
9. The parties understand and acknowledge that implementation of the measures under consideration will have substantial operational and financial impacts on the Participating Companies over and above the cost of compliance with EPA's emissions standards for new tugs, towing vessels and barges and new tug, towing vessel and barge engines. Because of this increased cost, the parties agree that the Participating Companies have the flexibility to utilize new technology or other methods not included in the previous paragraph to achieve the targeted emission reductions consistent with applicable federal and State laws and regulations.
10. The Participating Companies, HGAC, TNRCC, and EPA intend to consult and reasonably share information concerning implementation of this portion of the VMEP, and concerning the status of the Participating Companies' emissions reduction measures.

IV. EPA Action

11. The parties expect that the means necessary to achieve the targeted reductions are or will become available. The parties fully expect that the Participating Companies will achieve the emissions reductions as expeditiously as practicable but not later than 2007. The EPA, TNRCC and HGAC also believe that to fully satisfy their respective obligations pursuant to EPA's approval of the attainment demonstration for the HGA Area, the reductions identified must be submitted by the State as part of the VMEP program and approved by EPA.

V. Additional Provisions

12. The parties understand and acknowledge that the joint understandings and future actions described in this MOA will contribute to efforts in the HGA Area attain the national ambient air quality standard for ozone.
13. The Participating Companies, EPA, TNRCC, and the HGAC are committed to working together to ensure that the emission reduction measures described in this document are implemented.
14. The Participating Companies may terminate the voluntary commitments under this MOA upon thirty days written notice in the event the TNRCC or the EPA (a) proposes or adopts diesel emulsion rules or NOx reduction system rules which would apply to the Participating Companies or (b) proposes or adopts rules imposing requirements on the Participating Companies that are inconsistent with, or which specifically require the voluntary measures adopted by Participating Companies in accordance with this MOA or which are in addition to or inconsistent with the current SIP. While nothing in this MOA shall prohibit the TNRCC from proposing or adopting such rules in the future, the Participating Companies reserve, in such event, all of their rights and defenses to the promulgation and validity of such rules.
15. The parties agree to reasonably coordinate with one another concerning any communication or publicity regarding the contents of this MOA.
16. To the extent emissions reduction strategies are eventually used by Participating Companies to meet the 1.1 tpd reductions described in this MOA, those strategies shall be considered ineligible for grant or incentive funding, as may become available under legislation adopted creating the Texas Emissions Reduction Plan or for emission reduction credits for use in the TNRCC Emission Trading Program (30 Tex. Admin. Code Subchapter H). The parties acknowledge and agree that this prohibition does not apply to emission reductions in excess of the Participating Companies' achievement of the 1.1 tpd reductions described in this MOA.
17. The parties acknowledge and agree that this MOA shall be signed in multiple counterparts and that each counterpart shall evidence executed originals for the purposes of this MOA.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Agreement
as of _____ day of June, 2001.

**UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY,
an agency of the United States of America**


Gregg A. Cooke
Regional Administrator, Region 6

**THE TEXAS NATURAL RESOURCE
CONSERVATION COMMISSION,
an agency of the State of Texas**


Jeffrey A. Saltas, P.E.
Executive Director

**HOUSTON-GALVESTON AREA
COUNCIL,
a political subdivision of the State of Texas**


Jack Steele
Executive Director

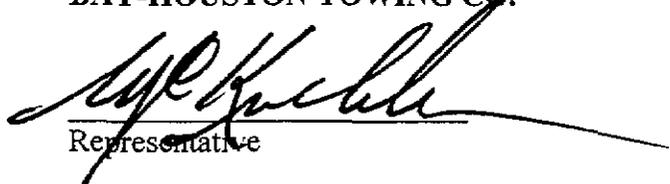
**AMERICAN COMMERCIAL
BARGE LINES, LLC**

Representative

ECKSTEIN MARINE SERVICE, INC.

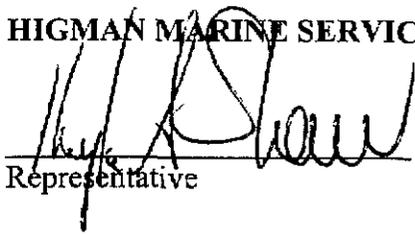
Representative

BAY-HOUSTON TOWING CO.



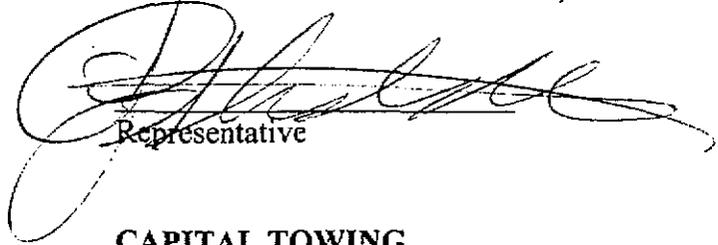
Representative

HIGMAN MARINE SERVICES, INC.



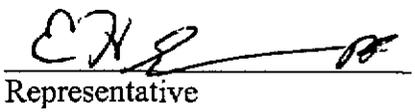
Representative

BUFFALO MARINE SERVICE, INC.



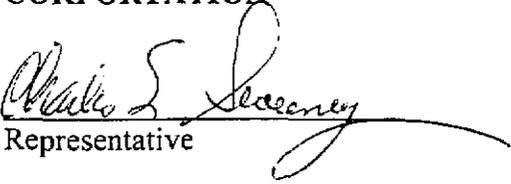
Representative

**HOUSTON MARINE SERVICES,
INC.**



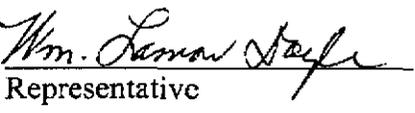
Representative

**CAPITAL TOWING
CORPORATION**



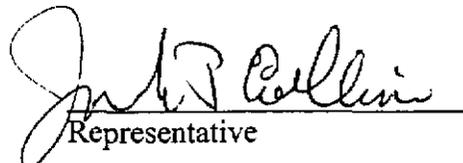
Representative

**INTRACOASTAL TOWING &
TRANSPORTATION CORP.**



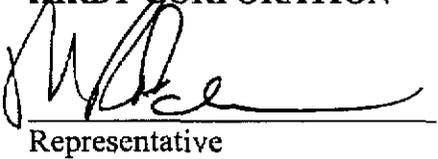
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COASTAL TOWING, INC.



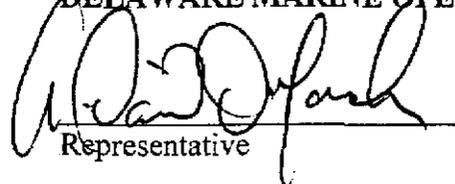
Representative

KIRBY CORPORATION



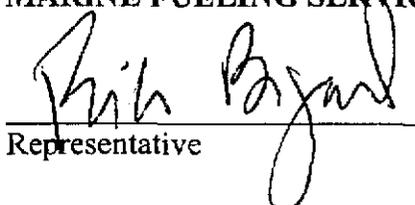
Representative

DELAWARE MARINE OPERATORS



Representative

MARINE FUELING SERVICE, INC.



Representative

MARTIN GAS MARINE, INC.

Steve Math
Representative

SOUTHERN TOWING CO.

William D. Stegner
Representative

McDONOUGH MARINE SERVICE

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Representative

STAPP TOWING CO., INC.

Bruce Barr Stapp
Representative

MEGAFLEET TOWING CO., INC.

Robert A. Syfer
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SUDERMAN & YOUNG TOWING CO., INC.

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PORT NECHES TOWING, INC.

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TUG JOSEPHINE, INC.

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SEARIVER MARITIME, INC.

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Representative

VESSEL REPAIR, INC.
BLUDWORTH MARINE LLC

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Representative

SIGNET MARITIME CORPORATION

Representative