425 S. Palos Verdes Street

Post Office Box 151

San Pedro, CA 90733-0151

Tel/TDD 310 SEA-PORT

www.portoflosangeles.org

Richard J. Riordan, Mayor
City of Los Angeles

Board of Harbor Commissioners

John Wentworth, *President*

Jonathan Y. Thomas, *Vice President*

Carol L. Rowen

John M. Wilson

Fernando Torres-Gil

Larry A. Keller
Executive Director

May 1, 2001

Mr. Michael P. Kenny
Executive Director
California Air Resource Board
2020 L Street
Sacramento, CA 95812

SUBJECT: AGREEMENT NO. 2133 AMONG THE CITY OF LOS ANGELES, U.S. ENVIRONMENTAL PROTECTION AGENCY, THE CALIFORNIA AIR RESOURCES BOARD, THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, THE CITY OF LONG BEACH, THE STEAMSHIP ASSOCIATION OF SOUTHERN CALIFORNIA, THE PACIFIC MERCHANT SHIPPING ASSOCIATION AND THE MARINE EXCHANGE OF LA/LB HARBOR

At the meeting held on Wednesday, November 22, 2000, the Los Angeles Board of Harbor Commissioners resolved that Memorandum of Understanding (assigned Harbor Department Agreement No. 2133) with U.S. Environmental Protection Agency, the California Air Resources Board, the South Coast Air Quality Management District, the City of Long Beach, the Steamship Association of Southern California, the Pacific Merchant Shipping Association, and the Marine Exchange of LA/LB Harbor, be approved and authorized for execution.

Your executed copy of Agreement No. 2133 is enclosed for your files.

Very truly yours,

Audrey H. Yamaki

AUDREY H. YAMAKI
Commission Secretary

AHY:sax
Enclosures

An Affirmative Action/
Equal Opportunity Employer

Recycled and Recyclable

HARBOR DEPARTMENT
AGREEMENT 2133
CITY OF LOS ANGELES

MEMORANDUM OF UNDERSTANDING FOR THE USE OF EMISSION REDUCTIONS FROM VOLUNTARY COMMERCIAL CARGO SHIP SPEED REDUCTIONS TO MEET THE GOALS OF THE 1994 STATE IMPLEMENTATION PLAN AND THE 1997 SOUTH COAST AIR QUALITY MANAGEMENT PLAN FOR MARINE VESSEL EMISSIONS CONTROL STRATEGIES

This Memorandum of Understanding made the 22nd day of Nov; 2000, is entered into by the UNITED STATES OF AMERICA, acting by and through the ENVIRONMENTAL PROTECTION AGENCY (EPA), the STATE OF CALIFORNIA, acting by and through the CALIFORNIA AIR RESOURCES BOARD (CARB), the SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) (hereinafter collectively called "Regulatory Agencies") and the CITY OF LONG BEACH, acting by and through the Long Beach Board of Harbor Commissioners, the CITY OF LOS ANGELES, acting by and through the Los Angeles Board of Harbor Commissioners (hereinafter collectively called "Cities"), the STEAMSHIP ASSOCIATION OF SOUTHERN CALIFORNIA (SASC), and the PACIFIC MERCHANT SHIPPING ASSOCIATION (PMSA) (hereinafter collectively called "Shipping Industry") and the MARINE EXCHANGE OF LA/LB HARBOR (Marine Exchange).

I. This Memorandum of Understanding (MOU) is made with the reference to the following recitals:

1. Air pollution remains a significant public health concern in many parts of California, and specifically in the South Coast Air Basin (SCAB).

2. The EPA, CARB and SCAQMD, are the federal, state, and regional regulatory agencies, respectively, with jurisdiction over air quality in the SCAB which have developed and approved the 1994 California State Implementation Plan (SIP) for ozone.

3. The CARB and SCAQMD are the stately and regional regulatory agencies which developed and adopted the 1994 Air Quality Management Plan and subsequent approved SIP revisions for the SCAB (AQMP).

4. As limited by international law and as described under Title II of the Clean Air Act Amendments of 1990, the EPA is the federal authority having the jurisdiction and responsibility for developing federal engine standards to control federal sources of air pollution, including marine vessel engines.

5. The 1994 AQMP for the SCAB, establishes goals for emissions reductions and identifies the potential means by which the Regulatory Agencies will achieve those reductions to meet national ambient air quality standards (NAAQS) for ozone in the SCAB by the year 2010.

6. Control of marine vessel emissions is one component of the attainment strategy and is specifically identified in control measure M13 of the 1994 ozone SIP and subsequent SIP revisions adopted by the SCAQMD/CARB. In the U.S. EPA's approved ozone SIP for the South Coast Air Basin, the anticipated reductions for operational controls in measure M13 is a 29% reduction from the cruising emissions from the ocean going fleet in the SCAB.

7. Pursuant to EPA's approval of the 1994 ozone SIP for SCAB, the EPA initiated a marine vessel consultative process to work with the interested parties in a effort to identify strategies to reduce emissions from international and domestic marine vessel sources that may adversely affect air quality in the SCAB.

8. The Cities are mandated to encourage and promote domestic and international trade and commerce consistent with the public trust for navigation, commerce, recreation, and fisheries.

9. It is the responsibility of all public agencies, including the Cities, to work to improve the air quality in the SCAB.

10. The Cities and shipping industry, in conjunction with the State of California Office of Spill Prevention and Response and the U.S. Coast Guard in March of 1994, initiated a vessel speed reduction program by implementing a "precautionary area" on the approach to the Ports of Los Angeles and Long Beach. The purpose of the "precautionary area" is for vessel traffic safety, but it also results in air quality benefits. The air quality benefits of this program, as well as an expansion of the precautionary area on September 1, 2000, were not accounted for in the 1994 ozone SIP.

11. Emissions reductions associated with further vessel speed reduction, excluding the benefit from the "precautionary area" as it existed prior to September 1, 2000, have been estimated as high as 3.4 tons/day of NO_x in one tracer episode scenario which extends the 12-knot speed limit to 20 miles offshore. Attachment A is a map of the proposed speed reduction zone.

12. The emissions reduction benefits from speed reduction are set forth in the report, "Air Quality Impacts from NO_x Emissions of Two Potential Marine Vessel Control Strategies in the South Coast Air Basin" (Technical Working Group Report). Cities and shipping industry desire to voluntarily implement identified strategies to contribute to achieving the emission reduction targets established in control measure M13 of the EPA approved 1994 AQMP for SCAB.

II. NOW, THEREFORE, in consideration of the mutual interests and benefits to be derived from the emissions reductions resulting from vessel speed reduction to contribute to achieving national ambient air quality standards for ozone in the South Coast Air Basin by 2010, the parties hereto agree as follows:

1. The purpose of this Memorandum of Understanding is to recognize the reduction of emissions in the South Coast Air Basin (SCAB) through the implementation of voluntary vessel speed reduction for vessels transiting to and from the Ports of Los Angeles and Long Beach, and to apply those resultant emissions reduction benefits to the emission reduction goals of the EPA approved 1994 AQMP for the SCAB.

2. The Regulatory Agencies, Cities, Shipping Industry, and the Marine Exchange agree to cooperate to implement and monitor emission reductions resulting from voluntary vessel speed/power reduction for vessels transiting to and from the Ports of Los Angeles and Long Beach. The vessel speed/power reduction to be implemented is 12-knot speed limit to 20 miles offshore from the Point Fermin Light (scenario #1 in TWG Report), or a vessel power (RPM) reduction on the vessel's main engine that attains an acceptable reduction in NOx emissions. To be eligible for the latter alternative, the vessel owner must file for approval with CARB a NOx reduction plan provided by the engine manufacturer for the specific engine in a specific vessel. This NOx reduction plan must be approved by CARB and a copy placed on board the vessel and an additional copy provided to the Marine Exchange. The Regulatory Agencies agree that alternative compliance plans that demonstrate comparable reductions in air emissions will be considered for approval, subject to all other conditions of this MOU.

3. Emission reduction benefits realized from the 1994 implementation of the "precautionary zone" and from the September 1, 2000, extension of the "precautionary zone" are to be quantified by the parties to his MOU. The parties agree that these emission reductions will be additionally applied to emission reduction targets established in control measure M13 of those plans. Emission reductions credited under any provision of this MOU will be based on percentage compliance of vessels transiting to or from the Ports of Los Angeles and Long Beach.

4. The Regulatory Agencies, Cities, and Shipping Industry agree that this MOU does not preclude the development and implementation of additional measures (e.g., extension of the 20 mile, 12-knot speed limit) necessary to reduce emissions from marine vessels.

5. All parties to this MOU recognize that the proposed speed reduction program is voluntary and not regulatory in nature. The Regulatory Agencies agree that, pursuant to the obligations of the Cities to promote domestic and international trade and commerce, nothing herein constitutes or shall be interpreted to constitute any restriction or limit on the operation or activity of the Ports of Los Angeles or Long Beach or any restriction or limit on total emissions at the Ports of Los Angeles or Long Beach. The Regulatory Agencies further agree that the Cities do not have any liability or regulatory authority for marine vessel emissions, which may occur in the shipping lanes off the Ports of Los Angeles and Long Beach. Adoption of this MOU by the Regulatory Agencies and the Cities does not create a regulatory mandate.

6. The Marine Exchange is the appropriate independent organization to monitor compliance with the proposed vessel speed reductions. The Cities agree to monitor vessel speeds in the speed reduction zone to the extent feasible by the existing technology at the Marine Exchange, to prepare periodic reports based on Marine Exchange data documenting those speeds, and to educate vessel owners and masters about the speed reduction program.

7. The Cities agree to equally share initial program startup and monitoring costs of the Marine Exchange in the amount of $1,000 per month, for six months, for a total not-to-exceed amount of $6,000. Each City to be billed separately, in the amount of $500 per month. City of Los Angeles to be billed as follows: Executive Director, Port of Los Angeles, 425 South Palos Verdes Street, San Pedro, CA 90731. City of Long Beach to be billed as follows: Executive Director, Port of Long Beach, 925 Harbor Plaza, Long Beach, CA 90802.

8. The Regulatory Agencies agree that vessel speed reduction requirements will be waived under any circumstances where vessel safety may be compromised.

9. The Regulatory Agencies agree that the Cities have an important role under this MOU in providing administrative support and customer education program, necessary to the success of vessel speed reductions at the Ports of Los Angeles and Long Beach.

10. This MOU shall be in full force and in effect when signed by all eight parties. The initial term of this agreement is for two years following the latest execution date. Prior to the expiration of this Agreement all parties agree to meet to evaluate the need for continuing participation. If deemed successful in reducing emissions, all parties agree to negotiate a continuation of the terms of this agreement.

11. If any party to this Agreement determines that they wish to no longer be a party to this MOU, they will notify the other parties in writing.

12. The signature page of this Agreement is being executed in counterparts. When all parties have signed, all executed counterparts taken together shall constitute one and the same instrument. The Director of Environmental Management of the Port of Los Angeles shall be responsible for receiving and retaining the originally executed signature pages of each party, for dating the Agreement as of the latest date upon which it is executed as among the signatories thereto, and for providing a copy of the dated executed agreement to each of the parties.

May 1, 2001

425 S. Palos Verdes Street

Post Office Box 151

San Pedro, CA 90733-0151

Tel/TDD 310 SEA-PORT

www.portoflosangeles.org

Richard J. Riordan, Mayor
City of Los Angeles

Board of Harbor Commissioners

John Wentworth, *President*

Jonathan Y. Thomas, *Vice President*

Carol L. Rowen

John M. Wilson

Fernando Torres-Gil

Larry A. Keller
Executive Director

Mr. Michael P. Kenny
Executive Director
California Air Resource Board
2020 L Street
Sacramento, CA 95812

SUBJECT: ADDENDUM TO VOLUNTARY COMMERCIAL CARGO SHIP SPEED REDUCTIONS MEMORANDUM OF UNDERSTANDING

At the meeting held on Wednesday, April 11, 2001, the Los Angeles Board of Harbor Commissioners resolved that Addendum to Voluntary Commercial Cargo Ship Speed Reductions Memorandum of Understanding (assigned Harbor Department Agreement No. 2133-A) with U.S. Environmental Protection Agency, the California Air Resources Board, the South Coast Air Quality Management District, the City of Long Beach, the Steamship Association of Southern California, the Pacific Merchant Shipping Associations, and the Marine Exchange of LA/LB Harbor, be approved and authorized for execution.

Your executed copy of Agreement No. 2133-A is enclosed for your files.

Very truly yours,

Audrey H. Yamaki

AUDREY H. YAMAKI
Commission Secretary

AHY:sax
Enclosures

An Affirmative Action/
Equal Opportunity Employer

Recycled and Recyclable

HARBOR DEPARTMENT
AGREEMENT 2133-A
CITY OF LOS ANGELES

Addendum to Voluntary Commercial Cargo Ship Speed Reductions Memorandum of Understanding

I. Purpose

The purpose of this addendum is to provide clarification of certain issues related to quantifiability, permanence, enforceability, and emission reduction crediting contained in the Voluntary Commercial Cargo Ship Speed Reduction Memorandum of Understanding (Vessel Speed MOU). These clarifications along with action items are intended to provide the framework and timeframe to develop accessory documents that will support the Vessel Speed MOU. These clarifications will also allow for the implementation of the MOU so that the emission benefits can begin to accrue immediately. By implementing the Vessel Speed MOU, and using it as a Demonstration Project, the MOU can serve as the basis for a future permanent measure which ensures operational procedures that will provide the air quality benefits indefinitely into the future. For the voluntary emission reductions to be recognized for State Implementation Plan (SIP) credit in a future attainment demonstration, the reductions must be quantifiable, surplus, permanent, and enforceable. With this goal in mind, the signatories agree that the following clarifications and action items will be addressed.

II. Alternative Compliance Plans

The signatories recognize that there must be a guidance document that establishes the minimum criteria necessary for individual ships to demonstrate equivalent compliance with the vessel speed reduction measure, while providing flexibility for creative and technologically sound approaches to be used. Essential to any alternative compliance plan is a demonstration, by the applicant, of equal or greater emission reductions compared to the ship specific emission reductions of slowing that vessel to 12 knots, 20 miles out, and the identification of monitoring and reporting procedures to allow for an on-going demonstration of compliance.

III. Permanence

The signatories recognize the need to credit emission reductions obtained from the Vessel Speed MOU to SIP measure M-13 by December 2001. The signatories understand that implementation of the current MOU as a demonstration project will provide important clean air benefits and experience useful in creating a permanent operational guidance document. The signatories further understand that, by fall of 2001, parties need to extend the current MOU indefinitely and complete an enforceable instrument that will provide adequate assurance of

continued compliance with the terms of the MOU, and that can be submitted into the California ozone SIP to implement a portion of control measure M-13.

IV. Development of Enforceability Provisions

The signatories concur that the Marine Exchange is the entity with the capability to monitor and record data relative to compliance with the Vessel Speed MOU. The parties further agree that the data and format required for reporting on compliance must be developed. Accordingly the signatories agree to develop a guidance document for the monitoring and reporting prior to incorporation into the SIP.

The parties recognize that in the event the Vessel Speed MOU does not result in the emission reductions claimed in the SIP, alternative emission reduction strategies must be identified and implemented to meet interim year milestones as well as 2010 attainment emission targets. All parties agree that the final MOU must provide enforceability provisions to ensure the emission reductions claimed in the SIP are realized. The U.S. EPA and ARB have previously agreed (January 8, 1997 Federal Register Volume 62, No. 5, 1149 et. seq.) to adopt control measures needed to achieve any additional emission reductions which are determined to be appropriate for each agency and with this addendum are reconfirming this commitment. Because the emission reductions will be applied against Measure M13, all parties further agree that the South Coast Air Quality Management District will not be responsible for providing such additional emission reductions.

V. Methodology for Estimating SIP Credits

The parties agree that guidance needs to be developed for the estimation of SIP credits. This guidance will outline how the SIP credits will be estimated and applied to the SIP, taking into consideration several factors including, but not limited to: baseline emissions; M-13 SIP commitments; extent of compliance with the MOU; factors affecting compliance rates, such as weather and safety issues; the effect of speed reduction on emission rates; variability in compliance rates; and the need for uncertainty discount factors. The methodology to determine SIP credits will be used to estimate SIP credits prior to the incorporation of the enforceable instrument as a SIP revision.

VI. State Implementation Plan Crediting

The U.S. Environmental Protection Agency and Air Resources Board agree that, following completion of an enforceable instrument to provide the basis for granting the SIP credit for the emission reductions created by the Vessel Speed

MOU, the U.S. EPA will request the Air Resources Board's concurrence that the MOU should be incorporated into the SIP for emission reductions. After the ARB provides their concurrence and agreement to participate in any public hearing, the U.S. EPA will propose approval of the MOU into the California SIP, conduct a public hearing if necessary, and finalize the action by December 31, 2001.