

Voluntary Commercial Cargo Ship Speed Reduction Program

*Maritime Air Quality Technical
Working Group*

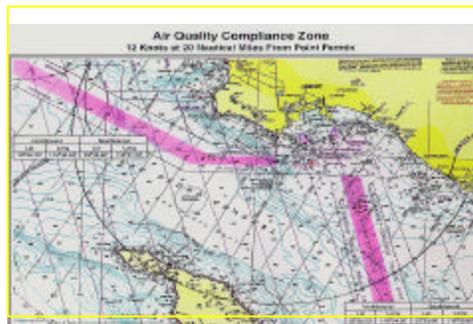
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Program Purpose

- Voluntary
- NO_x reduction
- Air Quality Compliance Zone



Memorandum of Understanding

- 1st MOU implemented May 01-April 03
- Demonstrated emission reductions
- 2nd MOU implemented Oct 03-Oct 04

MOU Action Items

- SIP credit
- Formalize quantification
- Automate collection/transfer of speed data
- In-use source testing: NO_x & PM
- Outreach to improve compliance

Program Highlights

May 01-Oct 03

- 1.1 tpd
- 50% compliance
- Compliance declined since inception

Quantification

- Implemented ARB's "Proposal for Data and Format for Monitoring and Reporting on Compliance" (April 25, 2002)
- Emission reduction = Baseline - Actual

Quantification

- Initially Excel
- Reviewed by ARB, SCAQMD, POLB
- Now MS SQL Server database
 - Reduces processing time
 - Improves data quality
 - Provides reporting
 - Creates platform for automated interfaces

Next Steps

- Address MOU action items
- Modify based on Port-wide Emission Inventory