

**Commissioner Mario Cordero
Federal Maritime Commission
Remarks at Panama Week 2012
Washington, DC – March 15, 2012**

Thank you for inviting me to speak at Panama Week and for the kind introduction.

The Federal Maritime Commission is responsible for regulating ocean borne transportation in the foreign commerce in the United States. My remarks today are my personal views and do not necessarily represent the views of the FMC. My association on environmental policy issues stems from my eight years as a Commissioner at the Port of Long Beach. FMC Chairman Richard Lidinsky shared with the Congressional Committee on Transportation and Infrastructure last week on the Commission's active role in cultivating a regulatory system that protects competition, commerce, and U.S. exporters and importers while minimizing government intervention and regulatory costs. Presently, the Commission's primary focus is on supporting U.S. exports and economic growth, reducing regulatory burdens, and monitoring foreign shipping practices.

In our role as a regulator of marine terminal operators and ocean carriers, the FMC has seen environmental issues become increasingly central to the agreements and shipping practices we monitor and regulate. As ports and ocean carriers adjust to reduce their environmental footprint, the FMC intends to serve as a helpful partner. One of the Chairman's top priorities for the FMC is helping advance the Obama Administration's goals of creating green jobs and seeking a more sustainable approach to maritime issues.

First, let me congratulate Panama as it is on schedule to complete a 21st century monumental infrastructure project – expansion of the Panama Canal. It is a grand engineering accomplishment and like the Canal's initial opening in 1914, will again facilitate expansion of international commerce in the region. On this note, I also congratulate Alberto Aleman Zubieta who played a key role in ensuring the success of the project. Furthermore, congratulations are in order to his named successor, Jorge Luise Quijano.

By all accounts, Panama is one of the fastest growing economies in Latin America and as you may be aware President Obama signed into law the Free Trade Agreement with Panama in October 2011. Panama is an important market for U.S. farmers and ranchers. In 2010, the United States exported over \$450 million in agricultural products to Panama, more than double the U.S. agricultural exports to Panama in 2005. The Free Trade Agreement is certain to expand trade opportunities of mutual benefit to the United States and Panama.

The Panama Canal's expansion project is scheduled to be completed in 2014, coinciding with the 100th year celebration of the Canal. August 1914 was the grand opening of the Canal and on a historical note, marked the beginning of the United States as a world leader and one may argue the commencement of globalization. The following year, 1915, the Panama-Pacific International Exposition was held in San Francisco, California. The exposition highlighted American Industrialization and 20th century engineering technology. Soon after the

implementation of the Canal in 1914, the State of California formulated plans to develop its ports in preparation to accommodate U.S. Naval vessels, and in addition, expanded its involvement in international commerce. It is interesting to note that the U.S. west coast ports were in fact beneficiaries post the 1914 grand opening of the Panama Canal.

As we have discussed earlier today, the U.S. and Panama Free Trade Agreement will support American jobs, expand markets, and enhance U.S. competitiveness. This will have a positive impact on many sectors of the industry and the Panama Canal expansion is expected to affect global transportation trade routes, particularly, the Southeast Asia–U.S. East Coast route. However, the reliability of ports and railroads frequently is compromised by capacity expansion challenges. To remain competitive in the face of the Panama Canal expansion, further investment is needed in U.S. infrastructure to include our nation’s ports, not only with respect to east coast ports, but the west and gulf ports as well.

One area to address is that of environmental reform, advocating for the use and development of alternative fuels to reduce the carbon footprint. Furthermore, mitigate harmful emissions and address water quality issues.

To place things in perspective, the international ocean shipping industry accounts for approximately 3% of global greenhouse emissions. This percentage would translate in the industry, if it were a country, to rank 7th in world emissions. From a policy perspective, I believe maritime industry leaders are sensitive to their commitment to address carbon emissions. This mindset has been accelerated by the concern of many in the industry as to the escalating cost of diesel/bunker fuel, and in decades to come, perhaps a scarce commodity. It should be noted that 90% of global trade is carried by sea thus furthering a policy for the use of LNG fuel by international carriers is not only paramount in reducing the carbon footprint by the industry, but clearly would have a global impact that requires present day commitment by various global stakeholders.

I remain optimistic with the present scope of the environmental agenda. In January of this year, it was reported that Kawasaki Heavy Industries completed the development of a large 9,000 TEU container ship to be fuelled by LNG. It was also noted that the industry expectations are high for LNG as a clean fuel alternative to reduce reliance on the current usage of fuel oil. According to DNV, the new container ship design features optimization for safety and fuel efficiency and satisfies the International Maritime Organization’s requirements for voyages in North American and European Emission Control Areas.

As innovation pushes to achieve the International Maritime Organization’s standards to control harmful exhaust emissions from ships engines pursuant Annex VI to the International Convention on the Prevention of Pollution from Ships (MARPOL), the program consists of two sets of standards to control emissions from ships. First, global standards for the sulfur content of fuel and nitrogen oxides (NOX) emissions from engines apply to ships at all times. Second, as some areas may require further control, Annex VI contains geographic-based standards where ships operating in certain designated Emission Control Areas are required to comply with more stringent fuel sulfur and engine NOX limits.

In regard to the specific issue of fuel usage by international transport carriers, LNG continues to make progress as a credible fuel alternative. In addition to what I have discussed earlier, the international vessel classification society Bureau Veritas has approved, in principle, a design for a 14,000 TEU containership to be powered by LNG. Bureau Veritas' Deputy Technical Director, Jean-Francois Segretain, remarked that the market will be the driver for ships being ordered and built, but the real industry milestone is the fact that there is a fully worked and approved design for a main line ultra-large containership running on LNG. As for the development, Segretain shared that in addition to major operational savings being delivered and combining that with lower air emissions, a notable point is that these vessels can also run on heavy fuel oil if required, increasing flexibility in the period before LNG bunkering is widely available.

It should not be overlooked that LNG marine fuel has been discussed for a number of years. In 2000, the Langsten shipyard in Norway produced the *Glutra* as the first ferry to use LNG as a fuel. According to Marine Log, since that time, more than two dozen dual-fuel ferries and Platform Supply Vessels have been built. Specifically, Harvey Gulf International Marine has ordered vessels as part of its "Going Green Vision." Additionally, the U.S. Government has continued its research of LNG feasibility and engineering/design study for the Great Lakes, which is expected to be released this fall.

Use of LNG as a ship fuel was discussed last year at a maritime conference in Hamburg, Germany. Sweden's Wallenius Marine is one company that is presently studying the use of LNG as a maritime fuel. Again, there are challenges in balancing the cost effectiveness of LNG fuel and the positive impact on the environment. To that end, LNG usage as a fuel is not just a dialogue; it is a technology being placed into practice in the maritime industry. As reported in *Pacific Maritime Magazine* (August 2010), Per Tunell, the head of environmental management for Wallenius, opined as to the use of LNG fuel by Wallenius as a step closer to its vision of having emission-free vessels and that LNG is a stepping stone to running ships on biogas in the future.

The above illustrations of leadership and stewardship on the environmental agenda will translate to the use and availability of LNG fuel in the maritime industry in the years to come. There are many more examples available regarding the present day commitments in the maritime community, even including port authorities in the United States.

At present, the major drawbacks center on availability and cost of LNG as a fuel source for the maritime industry. Despite these challenges, there is a vision that many have embraced to LNG. This vision includes making this a better world by promoting technology and fuel usage to lower the carbon footprint, not only to reduce harmful emissions, but to strive toward zero emissions. On this note, the Federal Maritime Commission can be a partner in the recognition of best practices and enhancing carbon emissions transparency as well as be an advocate for the use of sustainable shipping practices.

Panama has a great future; however, with economic growth, there is an increasing environmental impact. In 1998, Panama created the General Environmental Law which resulted in the creation of the National Environmental Authority. I would ask that Panama continue with

its consideration of global protocols to address environmental impacts. The success of the environmental agenda depends on global partnerships and on this note, I encourage that we continue with these partnerships to address the question of reducing the carbon footprint in the maritime industry.

Lastly, I am very appreciative of the opportunity to address you here at Panama Week. History reflects periods of technological advancement in the furtherance of both public and commercial interest. I suggest we are now experiencing such an era. I thank you for your anticipated collaboration in securing a cleaner and more sustainable maritime community.

Thank you for your time and interest in this area of discussion. I would be happy to answer any questions that you have at this time.