May 31, 2012

BY EMAIL AND US MAIL TRANSMISSION

The Honorable Lisa Jackson
Administrator
USEPA Headquarters
Ariel Rios Building
Mail Code: 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
jackson.lisa@epa.gov

Dear Administrator Jackson:

Our organizations are writing to reiterate our strong support for the full and timely implementation of the 2008 amendments to MARPOL Annex VI and the designation of the North American and U.S. Caribbean Emission Control Areas (ECAs), as adopted by the International Maritime Organization (IMO). Together, these clean air protections are critical to providing healthy air to Americans – EPA estimates the reductions from using cleaner marine fuels and engines will prevent up to 14,000 premature deaths every year by 2020, and up to 31,000 premature deaths annually by 2030. We strongly request the Agency work diligently to uphold these important clean air measures.

We are also writing to oppose the cruise industry's flawed proposal to claim equivalency under Regulation 4 of MARPOL Annex VI to comply with the ECA fuel requirements in the North American ECA through measures that impose a heavy and disparate burden on human health by exposing some communities to high levels of harmful air pollution. The proposed population weighted approach would allow cruise ships to use fuel with a sulfur content in excess of the minimum ECA protections in coastal areas, while using cleaner low sulfur fuels at berth – more rigorous clean air standards that should be provided without exposing others to pollution levels in excess of basic protections guaranteed by the ECA. This proposal fails to comply with Annex VI Regulation 4 and the Clean Air Act, and will significantly jeopardize the fundamental clean air benefits of the North American ECA for all communities impacted by these emissions.

Cruise industry equivalency proposal fails to comply with IMO regulations and does not provide equivalent health protections

Regulation 4 of MARPOL Annex VI allows for "compliance methods used as an alternative to that required by this Annex," but specifies that any alternative compliance method must be, "at least as effective *in terms of emissions reductions* as that required by this Annex, including any of the standards set forth in regulations 13 and 14."[1] Emphasis supplied. EPA analysis shows that the cruise industry's proposed alternative would not provide emissions reductions equivalent to those required under Regulation 14.[2]

The cruise line proposal also fundamentally contravenes the promise of the Clean Air Act to provide bedrock clean air protections under law for all Americans, regardless of where they choose to live, work or raise their families. Allowing a compliance method that imposes a heavier burden on certain segments of the population from harmful air pollution is unjust and clearly circumvents the intention of the Clean Air Act. Any proposed alternative must provide the fundamental health protections accorded by law and fairness to all Americans.

MARPOL Annex VI Regulation 4 also requires that nations that adopt alternative compliance methods "shall endeavour not to impair or damage its environment, human health, property, or resources or those of other States."[3] In addition to giving priority to the health of citizens in select areas, the cruise industry proposal would prevent necessary emissions reductions in sensitive ecosystems along North American coasts and inland.[4]

CLIA economic analysis is flawed and does not consider overwhelming benefits

The Cruise Lines International Association (CLIA) recently prepared an economic analysis claiming that the 2015 fuel requirement under the ECA would significantly reduce cruise itineraries in North America, resulting in reduced passenger visits and cruise line expenditures at ports, and job losses in the U.S. and Canada. EPA estimates that the benefits of the ECA will outweigh the costs by up to 34 to 1, with estimated monetized health benefits in 2020 reaching up to $110 billion.[5] These benefits are vital in protecting human health and are cost-effective.

Moreover, a closer review of the CLIA economic analysis shows that it fails to adequately assess the costs of implementing the ECA regulation, oversimplifies market impacts, and ignores the program's significant benefits.

The CLIA analysis of the purported costs of compliance is based on a historical incremental fuel price in niche market that is on average almost two times higher than more authoritative estimates accounting for global fuel market trends[6]. In addition, the report does not take into account the significant improvement in the cruise fleet fuel efficiency reflected in the 11% decline in per available passenger cruise day (APCD) fuel use between 2007 and 2011 as well as the commitments made for further reductions.[7] The use of scrubbers, a proven technology that is widely recognized as an equivalent to lower sulfur fuel use is not explored. Several studies have shown that for vessels that operate primarily in an ECA, the payback time can be as low as less than a year.[8] Taken together these assumptions and omissions lead to significantly overstated costs of compliance with the ECA fuel requirement.

To estimate the regional impacts of these increased costs, the report assumes redeployment of ships to itineraries primarily outside the ECA. This is done without clearly establishing the underlying market mechanisms (i.e. elasticity of demand) and assuming that increasing the supply of ships for other routes in the North American market would have no price and revenue impacts. A more comprehensive assessment of the regional economic impacts of the ECA would take those market effects into account,

would consider options for increasing revenues through ticket prices increase and explore the potential for growth in other competing modes.

CLIA participated in IMO negotiations leading to the adoption of the standards and has had ample time to prepare for them

The current proposal by the cruise lines is a tardy effort to make an end-run around the multi-year process at the International Maritime Organization that produced the historic health-protecting emission standards required under the ECAs. Those standards are contained in amendments to MARPOL Annex VI and made applicable to U.S. waters via the adoption of the North American ECA. In 2005, a number of nations, including the United States, recognizing that shipping emissions were essentially uncontrolled and causing substantial damage to human health and the environment, submitted a formal request to the IMO to begin negotiations on appropriate emission standards for the industry. Those negotiations culminated in 2008 in amendments to MARPOL Annex VI that include the sulfur fuel standards. The North American ECA was proposed by the United States and Canada in 2009 and approved unanimously in 2010. The U.S. Caribbean ECA was approved in 2011.

CLIA was present at IMO throughout this process and participated in those negotiations. CLIA and the cruise industry have known about, and had time to prepare for, the impending standards since they were finalized in 2008. Furthermore, the United States Government (during both the Bush and Obama administrations) was a major proponent of the adoption of these emission standards, and should work to uphold them to their intended efficacy in protecting human health.

Ocean-going ships burn extremely dirty fuel and must clean up to protect public health

The cruise ships, tankers, cargo ships and other large ocean-going vessels that dock at more than 100 U.S. port cities currently burn low grade bunker fuel, greatly impacting air quality in U.S. coastal cities and ports and even sending pollution hundreds of miles inland.[9] This residual fuel contains sulfur levels averaging about 27,000 ppm of sulfur, *1,800 times* greater than U.S. law allows for most other diesel engines. The EPA estimated that in 2009, ocean-going ships emitted:

- ✓ Over 71,000 tons of fine particulate matter – comparable to the particulate pollution from 75% of the nation's coal-fired power plants[10]
- ✓ Nearly 913,000 tons of smog-forming oxides of nitrogen (NO_x) pollution—**comparable to the NO_x emissions from more than 1 billion of today's new cars**[11]
- ✓ Almost 597,000 tons of sulfur dioxide (SO_2) – 80% of the total SO_2 from the entire U.S. transportation sector.[12]

Addressing the staggering emissions from these ships is imperative to protect the health of all Americans.

Timing and stringency of ECAs are important to realize important health and environmental benefits

The North American and U.S. Caribbean ECAs will have far-reaching health and environmental benefits. EPA estimates the reductions from using cleaner marine fuels and engines will prevent up to 14,000 premature deaths every year by 2020, and up to

31,000 premature deaths annually by 2030. EPA emissions models estimate the annual PM2.5 reductions from the North American ECA in 2020, showing that the health benefits are not restricted to the coastal areas where ocean-going vessels travel. In fact, benefits will be realized in every state in the nation.[13]

The emissions reductions afforded by the ECAs are needed to help all Americans breathe easier. They are also important to states working hard to meet national health-based air quality standards. Many states have already integrated the projected ECA emissions reductions into their state plans and would need to look to other, possibly more costly, alternatives to find comparable reductions.

Timely implementation of the ECA standards, as they were adopted, is essential to realize the full suite of health protections offered by the program. Any delay, weakening or exemption to these important clean air standards puts all Americans at risk.

There is an urgent need for our nation to strengthen protections for the communities afflicted by the extensive pollution associated with port-based and coastal shipping activities while ensuring full compliance with the ECA. America has the know-how, working together, to clean up the dangerous air pollution addressed by the ECA and to protect human health and the environment from the serious impacts associated with shipping pollution.

Sincerely,

Air Alliance Houston
Center for Biological Diversity
Charlestowne Neighborhood Association Cruise Ship Task Force
Clean Air Task Force
Clean Air Watch
Coastal Conservation League
Earthjustice
Environmental Defense Fund
Friends of the Earth
Natural Resources Defense Council
Pacific Environment
Union of Concerned Scientists

cc:
Jeffrey Lantz, U.S. Coast Guard, Director, Commercial Regulations and Standards
Gina McCarthy, EPA, Assistant Administrator, Office of Air and Radiation
Margo Oge, EPA, Director, Office of Transportation and Air Quality
Michael Goo, EPA, Associate Administrator, Office of Policy

[1] Amendments to MARPOL Annex VI: Annexes 13 and 14 to the Report of the 58th Session of the Marine Environment Protection Committee (MEPC 58/23/Add.1, October 17, 2008).
[2] Letter from EPA Director of OTAQ, Margo Oge, and U.S. Coast Guard Director of Commercial Regulations and Standards, Jeffrey Lantz, to IMO Secretary Koji Sekimizu, March 12, 2012.
[3] Amendments to MARPOL Annex VI: Annexes 13 and 14 to the Report of the 58th Session of the Marine Environment Protection Committee (MEPC 58/23/Add.1, October 17, 2008).
[4] For example the Tongass Forrest in Alaska. EPA, Proposal to Designate an Emission Control Area for Nitrogen Oxides, Sulfur Oxides and Particulate Matter: Technical Support Document, EPA-420-R-09-007 (April 2009), page 3-57.
[5] EPA, "Fact Sheet: Designation of North American Emission Control Area to Reduce Emissions from Ships," EPA-420-F-10-015, March 2010.
[6] The World Oil Refining Logistics and Demand (WORLD), an industry-developed and accepted bottom-up model of global refining was updated with a focus on marine fuels for the International Maritime Organization (IMO) and the US EPA. The results of the North American ECA analysis show a 45% differential between residual and distillate fuel costs accounting for incremental investment in desulfurization capacity and impacts on global supply and demand (EPA, Proposal to Designate an Emission Control Area for Nitrogen Oxides, Sulfur Oxides and Particulate Matter Technical Support Document, 2009, United States Environmental Protection Agency: Washington, DC.)
[7] Carnival Corp. & PLC has targeted a shipboard CO_2 reduction of 20% by 2015 from a 2005 baseline (Carnival Corp. & PLC, Annual Report, 2009.)
[8] EMSA. The 0.1% sulphur in fuel requirements as of 1 January 2015 in SECAs- An Assessment of available impact studies and alternative means of compliance. 2010.
[9] EPA, Proposal to Designate an Emission Control Area for Nitrogen Oxides, Sulfur Oxides and Particulate Matter: Technical Support Document, EPA-420-R-09-007 (April 2009), page 3-23, Figure 3.2-5.
[10] National Emissions Inventory data (2008). Fuel comb- Electric Generation- Coal, PM2.5 Primary Filterable, 94,848 tons. Available online: http://www.epa.gov/ttn/chief/net/2008inventory.html (last accessed May 7, 2010).
[11] Calculations based on Tier 2 NOx emissions standard (0.07g NOx/mile) for highway vehicles and 11,300 VMT. Transportation Energy Data Book, Ed 30 (2011), Page 1.
[12] "Control of Emissions From New Marine Compression-Ignition Engines at or Above 30 Liters per Cylinder; Proposed Rule" 74 Fed. Reg. 44,442 (Aug 28, 2009) at 44459.
[13] EPA, Proposal to Designate an Emission Control Area for Nitrogen Oxides, Sulfur Oxides and Particulate Matter: Technical Support Document, EPA-420-R-09-007 (April 2009), page 3-23, Figure 3.2-5. Recreated by EDF.

FIGURE 3
Estimated reductions in annual PM concentrations from U.S. ECA in 2020 (ug/m^3)