April 15, 2013

California Air Resources Board
Stationary Source Division
Emissions Assessment Branch
Control Strategies Section, Commercial Harbor Craft
P.O. Box 2815
Sacramento, California 95812-2815
Attn: Zhenlei Wang

Re: Support ARB Proposal to Disapprove ACE Plan by Hornblower Cruise and Events - Commercial Harborcraft Regulation

Dear Mr. Wang and ARB Staff and Board,

Turtle Island Restoration Network and Friends of the Earth are writing to support the California Air Resource's Board (ARB) proposed disapproval of the Alternative Control of Emissions (ACE) plan submitted by Hornblower Cruises and Events for its California Hornblower vessel under the state Commercial Harborcraft Regulation.

Our organizations are concerned that approving the ACE would directly undermine the state's strong emissions standards for commercial harborcraft and other marine emissions, which serve to protect public health and the environment from air pollution. The proposed ACE should also be disapproved as proposed by ARB because it conflicts with the mandates of the Carl Moyer Program.

Marine diesel emissions are known to have a direct connection to asthma, lung cancer, bronchitis, heart disease and diabetes, with heavier impacts on low income communities already suffering from multiple sources of pollution.

As stated by ARB staff, the Hornblower ACE plan seeks credits for emissions reductions achieved by early compliance from repowering four marine diesel engines on its vessel California Hornblower. As pointed out by the Bay Area Air Quality Management District in its comment letter, the Carl Moyer Program funded the repower of those engines. Emissions reductions from repowering diesel engines that are funded by the Carl Moyer Program cannot be used to generate credits to offset any emission reduction obligation under state regulations. Therefore, the Hornblower ACE plan is invalid and should not be approved.

Hornblower makes various claims its comment letter requesting it be allowed it to utilize portions of the emissions reduction from the repower in its ACE plan to delay its obligations to meet the Commercial Harborcraft Regulation. These approaches should also be disapproved due to the precedent such exceptions would set for past, present or future grantees of the Carl Moyer program. Allowing Hornblower to modify the

Moyer agreement after the fact and more than four years after the repower would undermine the intent and implementation of the Carl Moyer diesel emissions reduction program.

Therefore, we urge the ARB to disapprove Hornblower's ACE as submitted and not to allow any of the exceptions, explanations or "compromises" that Hornblower proposed in its appeal of ARB's proposal to disapprove the ACE.

Instead, Hornblower should be required to fully meet the harborcraft regulation on time without delay on all its vessels as all other commercial harborcraft are required to do. Of course, an alternative ACE not reliant on the Moyer funded emissions that meet the legal requirements of the regulation could also be considered.

In addition, we would like to bring to your attention several possible omissions in the list of Hornblower's harborcraft fleet. In reviewing Hornblower's vessel fleet and emissions profiles that were submitted to ARB, we noticed that the Hornblower Hybrid and several other commerical harborcraft that the ferry company operates were not listed, particularly those vessels operating on the Alcatraz route.

Please help us clarify the status of Hornblower's ferry fleet under the state harborcraft regulations. Perhaps the vessel names were changed recently, or maybe those vessels already comply with state harborcraft regulations?

In particular, the Hornblower Hybrid vessel is highly touted on Hornblower's and its companion Alcatraz Cruises website as the "greenest vessel to sail Bay area waters."[1] According to Hornblower, the vessel operates on Tier 2 engines with some additional power generated by solar panels and wind turbines.[2] The Hornblower Hybrid vessel is a 64-foot long recycled catamaran, originally built in the Gulf for use as a commercial diving vessel.[3] In early 2008 Alcatraz Cruises purchased the vessel and began a massive overhaul, retrofitting nearly 90% of the vessel's interior machinery and furnishings.

We urge the ARB to request that Hornblower, which also operates as Alcatraz Cruises, to provide the exact emissions profile of the Hornblower Hybrid vessel and to explain whether it meets current state harborcraft regulations. See attached fact sheet and press release on the vessel.

FYI, as you may know, Hornblowers showcased the hybrid vessel and claims of environmental benefits to help win the federal Alcatraz ferry concession, one of the most prized ferry routes in the nation in terms of revenues. According to Hornblower's press release, "as part of the contract with the National Park Service, Alcatraz Cruises is required to provide another hybrid vessel in the next three years. That vessel will use a similar system, but one that reflects the lessons that will be learned while this one is in operation."[4]

Is ARB aware of whether this second "hybrid" vessel was ever built or its emissions profile? We urge ARB to request this information from Hornblower and Alcatraz Cruises. For while these vessels may be operating under a federal contract, we understand that state harborcraft regulations would apply. An inquiry by ARB into the status of the second "hybrid" could also be valuable to staff in evaluating new technologies for marine vessels.

In addition, we request that ARB also seek the emissions profiles and regulatory compliance for the Alcatraz Clipper and Alcatraz Flyer featured on Hornblower's websites that don't seem to appear on the fleet emissions data sheet provided to ARB by Hornblower. Hornblower claims on its Alcatraz Cruises website that these are "two of the greenest diesel-powered ferryboats on the Bay."[5] Hornblower states that the two vessels were "repowered with the most fuel efficient Tier 2 marine engines available and use selective catalytic reduction units."[6]

Can ARB verify whether in fact these vessels are currently "two of the greenest diesel-powered ferry boats" on the Bay? This request is relevant to the state's commitment to reducing marine engine emissions. An objective analysis by ARB of Hornblower's marketing claims about "green" ferries would benefit the public and entities that may be contemplating hiring or chartering ferry vessels on San Francisco Bay.

In conclusion, Turtle Island Restoration Network and Friends of the Earth support the ARB's disapproval of Hornblower's ACE plan and urges ARB to require full regulatory compliance by Hornblower for California Hornblower vessel, as well as its entire fleet, with the state commercial harborcraft rule.

Thank you so much for your review and consideration.

Sincerely yours,

Teri Shore, Program Director
Turtle Island Restoration Network
P. O. Box 370
Forest Knolls, CA 94933
415 663 8590, ext. 108
tshore@tirn.net
www.seaturtles.org

Marcie Keever
Oceans & Vessels Project Director
Friends of the Earth
David Brower Center
2150 Allston Way, Ste. 240
Berkeley, CA 94704
510-900-3144 phones
mkeever@foe.org
www.foe.org

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[1] See http://www.hornblower.com/port/fleet/sf
[2] See attached factsheet
[3] See attached factsheet
[4] Hornblower December 2008 press release, attached
[5] Hornblower December 2008 press release, attached
[6] Same as above.

December 12, 2008

CONTACT: Tegan Firth
415-983-8208
tfirth@hornblower.com

ALCATRAZ CRUISES LAUNCHES NATION'S FIRST HYBRID FERRY BOAT

Hornblower Hybrid is Model of Alternative Energy Innovation

San Francisco – A boat unlike any ever seen will soon have a permanent home in the San Francisco Bay. Alcatraz Cruises, the National Park Service concessioner of ferry service to Alcatraz Island introduced the Hornblower Hybrid, the first multi-hulled hybrid passenger vessel in the United States.

The Hornblower Hybrid is a model of the potential power of alternative energies and creative engineering solutions. The Hornblower Hybrid is a platform from which the general public will realize first-hand knowledge of the capabilities of solar power, wind power and other hybrid technological advancements.

"The Hornblower Hybrid is not only the next step in Alcatraz Cruises' goal of becoming the greenest concessioner in the National Park Service; with this vessel we hope to become a model of environmental innovation for the city of San Francisco and state of California," said Terry MacRae, CEO of Alcatraz Cruises and Hornblower Cruises & Events.

The Hornblower Hybrid uses power generated by two ten-foot-tall wind turbines and a photovoltaic solar array covering the awning on the top deck. That power is converted and stored in battery banks that then power the navigation tools, lighting and other electronics on board the vessel. Excess power is stored in the main propulsion battery banks.

In addition to solar panels and wind turbines, the Hornblower Hybrid also has Tier 2 marine diesel engines. These cleaner, fuel-efficient engines reduce the amount of diesel fuel used, emissions and overall carbon footprint. The customized drive system allows the captain to monitor the energy needs of the vessel and select the most efficient power sources. For example, when the boat is idle at the dock the engines will shut off and the motors will run off of energy stored in the battery banks.

The vessel also contains a number of other environmentally friendly materials. The carpeting contains post consumer recycled materials, is recyclable and meets the US Green Building Council LEED criteria for recycled content. A significant portion of the interior signage is printed on Plyboo, a composite material made from sustainable sources and

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containing no harmful chemicals. The countertops throughout the vessel are made from pieces of recycled vodka bottles. The lighting throughout the vessel is LED, which requires a fraction of the energy of standard bulbs and provide an equal or greater amount of illumination.

The vessel will provide educational opportunities through signage and interactive displays. Starting in early 2009 school classes and other groups can experience an educational ride aboard the Hybrid by writing in to gohybrid@alcatrazcruises.com explaining why their class or group would like to participate in this unique opportunity.

It will be a multipurpose vessel within the Alcatraz Cruises fleet, ferrying visitors to Alcatraz Island and Angel Island, as well as taking school groups and other passengers on cruises around the Bay. The vessel will also be available for private events. Information on chartering the vessel is available at www.alcatrazcruises.com/hybrid.

The Hornblower Hybrid is a 64-foot long catamaran, with a fully enclosed main deck, and covered roof deck. The vessel, which was previously a commercial diving boat, has undergone a retrofit, repower and refurbishment over the last several months in a shipyard in Sausalito. This vessel was designed and created in house and no grant or public money was used.

Alcatraz Cruises considered several different designs before selecting this particular system. Of greatest importance was the need to build a system that maximized the weather patterns in the San Francisco Bay. While there are other hybrid vessel systems in other countries, this system was customized to maximize the potential alternative energy sources in San Francisco Bay. This vessel system has also been designed to be modified as technologies are improved or refined.

As part of the contract with the National Park Service, Alcatraz Cruises is required to provide another hybrid vessel in the next three years. That vessel will use a similar system, but one that reflects the lessons that will be learned while this one is in operations.

Alcatraz Cruises' fleet already contains two of the greenest diesel-powered ferryboats on the Bay. *Alcatraz Clipper* and *Alcatraz Flyer* were recently repowered with the most fuel-efficient Tier 2 Marine engines available and use selective catalytic reduction units. This same technology will be used on two new commuter ferryboats in the Bay Area, scheduled to be in use in 2009.

Alcatraz Cruises offers daily round trips to Alcatraz Island as the concessioner of ferry service for the National Park Service. The contract for this service began in September 2006. Alcatraz Landing, the departure and return location, is located at Pier 33 on the Embarcadero, between Bay and Chestnut streets. Tickets can be purchased online at www.alcatrazcruises.com or by calling 415-981-ROCK (7625).

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HORNBLOWER HYBRID
FACT SHEET

Contact: Tegan Firth
tfirth@hornblower.com
415-983-8208

Background: Alcatraz Cruises took over as the concessioner of ferry services to Alcatraz Island on September 25, 2006. Since that day the company has carried nearly 3 million passengers to the island; upgraded the Alcatraz Landing area to provide a departure and arrival point that is filled with educational and interpretive messages, as well as souvenir photos, food and beverages and merchandise; added the two greenest vessels on San Francisco Bay, the *Alcatraz Clipper* and the *Alcatraz Flyer*, as the two primary vessels for the service; and became the first National Park Service concessioner and the first service company in the United States to be compliant with ISO 9001: 2000(Quality), ISO 14001:2004(Environmental) and OHSAS 18001:1999(Health & Safety).

Alcatraz Cruises is now introducing the Hornblower Hybrid, which will use a combination of diesel-powered Tier 2 generators, electric motors, wind turbines and photovoltaic solar panels to charge batteries that will power all the functions of the vessel, including navigation systems, lighting, monitors and the variable frequency drive that controls the motors. The vessel has an advanced power management system that regulates when and how the different power sources are used. For example, when the vessel is at idle at the dock it can be operated with no diesel engine running. The motors will use energy that has been stored in batteries. The system that allows this flexibility is what allows us to drastically reduce the amount of fuel used and reduce our carbon footprint.

The Hornblower Hybrid vessel is a 64-foot long recycled catamaran, originally built in the Gulf for use as a commercial diving vessel. In early 2008 Alcatraz Cruises purchased the vessel and began a massive overhaul, retrofitting nearly 90% of the vessel's interior machinery and furnishings. Hornblower's in house engineering department did the planning and engineering for this vessel. Two respected naval architects participated in the design and USCG approval process. Many of the technological advancements are visible on the vessel, creating an enhanced educational experience. The vessel was funded entirely by Hornblower. The vessel will enter continuous service to Alcatraz in 2009. Alternative technology demonstrations will be scheduled over the next year.

Vessel Facts:

Capacity: 149 passengers

Length: 64 feet

Beam: 30 feet

Draft: 5 feet

Height from water (without turbines): 25 feet

Propulsion system: Two Series 60 MTU Tier 2 diesel engines powering two Marathon 320 KW generators providing power to two Yoskawa variable frequency drives, which control the output of two 400 HP electric motors connected directly to conventional propellers. 380V DC Battery bank allowing zero emission mode.

Wind Turbines: Two 1.2 KW normal output wind turbines (2.0 KW max.)

Solar array: 1.2 KW solar array

Operating speed: 10 knots

Environmentally-friendly components:

Carpet – Carpeting contains post consumer recycled materials and is recyclable.

Counter tops – Vetrazzo counter tops throughout the vessel are made from pieces of recycled vodka bottles.

Lights – LED fixtures light the main deck and pilothouse of the vessel. These fixtures require a fraction of the energy of standard bulbs and provide an equal or greater amount of illumination.

Interior signage – A significant portion of the interior signage is printed on Plyboo, a composite material made from sustainable sources and contains no harmful chemicals.

All the interior modifications meet the US Green Building Council LEED criteria for recycled content.