JACOBSEN PILOT SERVICE, INC.
LOS ANGELES AND LONG BEACH HARBORS

PILOT SERVICE
U.S. FEDERAL LICENSED PILOTS

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Hello again Melissa,

I'd first like to thank you again for responding to all my questions. I sincerely appreciate the help and guidance you've taken the time to provide. I am now writing to you directly to explain the unique operation of our Pilot Vessel fleet and that of the other Pilot organizations in California. I'm hoping that a direct communication with you might give you and the board a better understanding of our situation. I did submit a brief comment on the public comment docket so thank you for that recommendation.

Jacobsen Pilot Service is a privately owned company that has been in business for nearly 100 years serving the Ports of Long Beach and portions of the Port of Los Angeles. Two of the busiest ports in the world. We have 2, Tier 3, diesel powered Pilot Vessels and 1 gasoline outboard powered Pilot vessel.

While preparing our comments to the proposed regulations, we realized that based upon the reality of what actually happens on the water, Jacobsen Pilot Service is a first responder. We therefore ask that our Pilot Boats be classified as First Responders. The USCG has characterized Jacobsen Pilot Service as the first line of defense, because Jacobsen pilot boats are essentially constantly on the water. Moreover, Jacobsen operates the Vessel Traffic Service inside the Port of Long Beach breakwater in partnership with the Marine Exchange and on behalf of and under USCG supervision. Consequently, Jacobsen is typically the first entity to learn of dangerous situations and often the first to respond. We have a written MOA from the USCG outlining our partnership in assisting the USCG in times of emergencies. After 9/11, we delivered Sea-Marshals and USCG personnel out to ships. We operate 24/7 in all weather conditions every day of the year. We train with LB Fire and Rescue, USCG, LB Lifeguards and LB Police Marine Division. We train for man overboard scenarios, medical emergencies, towing disabled vessels out of the shipping lanes to eliminate the possibility of getting run down by a slow maneuvering container ship, moving vessels in storm conditions, and observing and reporting suspicious activity to the USCG or LB Police Boat. Additionally, Jacobsen Pilot Service is contracted by the US Navy to Pilot Naval Warships inbound and outbound from Seal Beach Naval Weapons Station.

We have literally saved lives because we were on the water at the right time and had the greatest ability to respond first. A few months ago one of our pilot boat operators noticed an overturned catamaran about a mile away from his location. It was in the early afternoon hours and the wind was blowing 15-20 knots. Without hesitation, and using his training, he concluded something was wrong and diverted to the scene. Upon arrival he noticed 3 individuals. 2 were swept away from the overturned Hobie Cat, not wearing PFD's, and barely treading water. The 3rd was clinging to the overturned vessel. The operator

quickly and instinctively retrieved the 2 drifting individuals. They had no strength left and he had to physically lift the individuals onto the Pilot Boat where they laid down completely exhausted. After rescuing the victims he was then able to call LB Lifeguards to hand off the victims for medical treatment. If the Pilot Boat Operator did not react or notice these individuals, I truly believe it would've turned into a recovery mission. On another occasion, a crew member from a ship fell overboard in the middle of the night. The ship made a Mayday call and our Pilot Boat was first on scene and rescued the hypothermic man from the water. The USCG gave the Pilot Boat operator and our Dispatcher a Commendation letter.

Our dispatchers monitor VHF CH-16, the hailing and distress frequency, 24/7. We've had countless rescue jobs of vessels breaking down, and if it wasn't for our Pilot Boats, they would've ended up on the rocks. We take them in tow and call the assisting agency to take over the tow. This comes at the expense of slowing down or delaying ship traffic, but as mariners, safety is our utmost concern. We are not only delivering Pilots, but we're initiating rescues quite frequently. When designing our new Pilot Boats (described in more detail below), we created a Man Overboard System that can safely retrieve an individual from the water in any weather conditions precisely because we frequently are the First Responder on scene. We are partners with the USCG and Vessel Traffic Service. We believe that the USCG and Marine Exchange would both confirm that Jacobsen Pilot Service acts as a first responder and could properly be classified as such.

We hope the board will strongly consider that classification. The exemption for our pilot boats would in no way undermine the goals and purpose of the proposed regulations, which we respect and support. There are only 11 pilot boats operating along the entire coast of California. Moreover, we have gone to great lengths, and at considerable expense, to build new pilot boats that are as fuel efficient and eco-friendly as possible while still capable of performing the essential functions we require.

I'd like to describe the history of our thorough thought process when we designed and built our new Pilot Boats. Over the years we've evolved from 50' fiberglass over wood construction with single diesel engine propulsion powering fixed propellers, to heavier 65' aluminum construction with dual diesel engine propulsion powering fixed propellers, to our current, carbon fiber, Glass Reinforced Plastic (GRP) over Airex core construction with dual diesel engine propulsion powering water jets.

We began the process of designing a modern Pilot Vessel in 2016. Our goals were to build a high tech, light weight yet durable, reliable and cleaner (low emission) Pilot Boat. We met with naval architects, other Pilot agencies and boat yards to gather all the information we could find to create the most modern, efficient Pilot Boat possible. The 65' Pilot Boat that we replaced 4 years ago, was built with durable yet heavy weight aluminum that required larger engines which in turn burned a substantial amount of fuel. We needed to improve on this yet to stay within the same Vessel LOA to match up with our existing infrastructure. With a $9 million dollar investment, we decided to build a Pilot Boat that incorporated a GRP infusion process which requires less resin,(lighter), over an Airex core for the hull, and lightweight, durable, carbon fiber for everything from the deck up to create the lightest Pilot Boat possible. The main reason for going strong and light is that we wanted to use as small of an engine as possible, thus burning substantially less fuel with lower emissions. During the design timeframe, and following CARB's requirements, we decided to install Caterpillar Marine Tier 3 C-18 <600kw marine engines. A few of the reasons we decided on the C-18's were familiarity, we've used Caterpillar engines in the past, but more importantly, efficiency. We would be burning close to 50% less fuel with the Tier 3 engine then what we were burning in the vessel being replaced while maintaining the same service

speed. As for the running gear (propellers, rudders etc), we decided to go with Hamilton Jet/Waterjet propulsion systems. This WaterJet application crossed off two crucial boxes. Safety, there would be no propellers or rudders to injure an individual who fell in the water, and efficiency. The efficiency aspect of waterjets is the idling factor. Many vessels of similar size in the CHC guidelines and the CMA case study are propelled with the more common direct drive shaft and propeller system. This requires quite a bit of engaging and disengaging of the gearbox which creates an idling scenario. With Waterjets, we can continuously run the engines with the gears engaged, (Load), which in turn results in a close to zero time in idling mode which creates an even greater reduction in emissions and fuel consumption.

"The roughly $3,000,000 (or more) required to retrofit the diesel engines in our two new pilot boats to comply with the proposed standards would be a significant financial hardship for Jacobsen Pilot Service, a private company not a governmental or quasi-governmental entity as virtually all other piloting services are. We saved for years to create the capital fund needed to build these new pilot boats, which replaced one boat with 40 years of service."

In conclusion, Jacobsen Pilot Service is committed to assisting CARB in reaching a Zero Emission goal in the foreseeable future. We have been researching Zero Emission applications and believe that this will be a reality with how fast technology is improving. With our line of work, reliability and safety is paramount. We need to have a reliable operation to continue moving cargo in one of the busiest Ports in the world. We believe the Tier 4 technology, at our rating, is not a proven entity yet. If the board or its representatives would like to discuss this in further detail, we would love the opportunity to sit down and talk this through. We sincerely appreciate your time and consideration.

Respectfully,

Dan Kennedy

Pilot Boat Operations Manager