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RONALD J. FOREST
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Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, California 95814

RE: PROPOSED REGULATION FOR FUEL SULFUR AND OTHER OPERATIONAL REQUIREMENTS FOR OCEAN-GOING VESSELS

Dear Sir or Madam:

On behalf of Matson Navigation Company, Inc., I would like submit comments concerning the California Air Resources Board (CARB)'s proposed regulation for fuel sulfur and other operational requirements for ocean-going vessels. Matson is a United States flag ocean carrier and currently operates eleven vessels carrying cargo between Long Beach, Oakland and Seattle and Hawaii with five vessels that continue on to Guam and China. Matson has been headquartered in California for all of its 126 year history. Matson staff has been working closely with CARB staff on the proposed regulation and have attended all of the public workshops. We fully support the need to reduce diesel particulate matter emissions in CA port communities and have been voluntarily complying with the auxiliary engine provisions of the proposed regulation. Many of our vessels also use low and ultra low sulfur fuels in their auxiliary boilers. In addition, Matson has made a commitment to use cold ironing in the Port of Long Beach and implementation is scheduled to begin later next year. As described below, our primary concern is with the main engine provisions of the proposed regulation.

Matson has not received satisfactory assurances from our main engine manufacturers and fuel oil suppliers that such fuel can be safely used in our existing vessel engines for any specific period of time. In fact, many operating manuals include strong cautionary language regarding use of distillate fuels (see Attachment 1). Use of non-recommended fuels could void our warranties and lead to significant potential liabilities. We are continuing to investigate technical issues with the engine manufacturers and fuel oil and lubricating oil suppliers as we examine the impact of this proposed regulation, but there is an absence of adequate data regarding the consequences of burning low and ultra low sulfur fuel in marine engines. Recently a Shell Marine product specialist stated that in response to mandates for vessels to use 0.1% sulfur fuels, "Lubricants suppliers need to respond to this in turn with a completely new cylinder oil." We understand that CARB is sponsoring research and bench-scale tests in cooperation with engine manufacturers to confirm the feasibility and safety of burning low or ultra low sulfur fuel in marine engines for extended periods, and we believe that adoption of this proposed regulation should be delayed until these studies are completed.

If extended usage of low sulfur fuel is mandated, in addition to any required modification of the main engines, modification of our ships for increased capacity of MGO tanks would be required. This could involve separation of current heavy fuel tanks and lay out and installation of new piping, vents, sounding pipes and various valves. As indicated in our survey responses, these would be both extensive and expensive modifications. Our ships are engaged in the domestic (Jones Act) trade with frequent CA port

calls and often in extended coastwise navigation within 24nm. Matson supports the position of the Pacific Merchant Shipping Association that the lawful reach of the regulation should not extend beyond the state's 3 nm limits. Imposition of the rule to the 24nm limit would make it more likely that costly vessel modifications will be required.

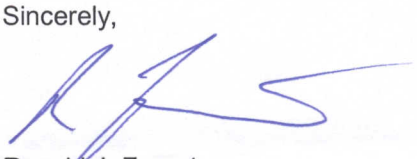
We view the 0.5 and 0.1% sulfur limits as arbitrary standards that are not associated with current fuel specifications. CARB's definition of MDO in section (d) is "fuel that meets all the specifications for DMB grades as defined in Table I of International Standard ISO 8217, as revised in 2005." However in section (e) of the proposed regulation, "Fuel sulfur content limits", CARB is ignoring ISO 8217 specifications for MDO by reducing the sulfur content to 0.5 % (July 2009) and 0.1 % (2012). The maximum sulfur content specified by ISO 8217 is 2 %.

Although the Fuel Availability Study indicates sufficient quantities of this fuel are available, Matson's experience has been that most of the MGO sold in California is actually on road diesel containing no more than 15ppm sulfur. Likewise, MGO supplied in Hawaii contains 50 ppm sulfur. This fuel cannot be mixed with any other fuels and therefore requires dedicated tanks. With increased demand for additional quantities related to burning low sulfur fuel in the main engines and boilers, due to the logistic and capacity issues, it is very unlikely that the ships will be able to bunker large quantities of MGO from tanker trucks. Matson believes that dedicated barges will be required to deliver MGO on board, and we are concerned that suppliers are not taking action to meet this anticipated demand.

Ultra low sulfur fuel has significantly different chemical properties than marine MGO and MDO fuels which lead to even greater concerns regarding its use in main engines. We strongly urge CARB to re-evaluate their fuel availability study to consider which portion of available fuels is actually ultra low sulfur fuel. It should also be noted that there are currently no marine specifications for ultra low sulfur fuels so the properties can be highly variable.

In conclusion, we support the use of low sulfur fuels in auxiliary engines and auxiliary boilers as an effective way to reduce diesel particulate matter emissions in port communities. We also encourage additional research and studies on the use of low sulfur fuels in main engines. We believe that there could be potentially very serious safety and financial implications from using low sulfur fuels in main engines before adequate studies have been completed, and we support the more realistic phase in schedule being proposed by the International Maritime Organization.

Sincerely,



Ronald J. Forest

Attachment

Attachment

MV RJ PFEIFFER
Main Engine, Kawasaki MAN, 8L80 MC
FROM ENGINE OPERATING MANUAL: RECOMMENDATIONS FOR THE FUEL CHANGE OVER

4.3 Fuel change-over

(See also "Pressurized fuel oil system" earlier in this Chapter).

The engine is equipped with uncooled, "all-symmetrical", light weight fuel valves - with built-in fuel circulation. This automatic circulation of the preheated fuel (through the high-pressure pipes and the fuel valves) during engine standstill, is the background for our recommending constant operation on heavy fuel.

In addition, there is a latent risk of diesel oils and heavy fuels of marginal quality forming incompatible blends during fuel change over.

Such blends, as well as too rapid temperature changes, can evoke problems such as:

- fuel pump and injector sticking/ scuffing,
- poor combustion,
- fouling of the gasways.

Therefore, apart from the exceptions mentioned below, we strongly advise not to use diesel oil for the operation of the engine - this applies to all loads.

Consequently, the engine should at all times be operated on heavy fuel oil, thus benefitting from the much more attractive prices of these fuels.